

# Classroom Disruptions in Digital Settings

Pierre Meinokat & Ingo Wagner



# Introduction



## Disruptions

- Occur every 42 seconds on average  
(Wettstein & Scherzinger, 2018)
- 1,2 times per minute in physical education  
(Maddeh et al., 2015)

# Introduction



## Teacher

- Health is at risk  
(Rajendran et al., 2020)
- Part of their classroom management  
(Durak & Saritepeci, 2017)

# Introduction



## Students

- Academic success is denied  
(Marquez et al., 2016)
- Prioritize goals different from teachers  
(Jordan et al., 2017)

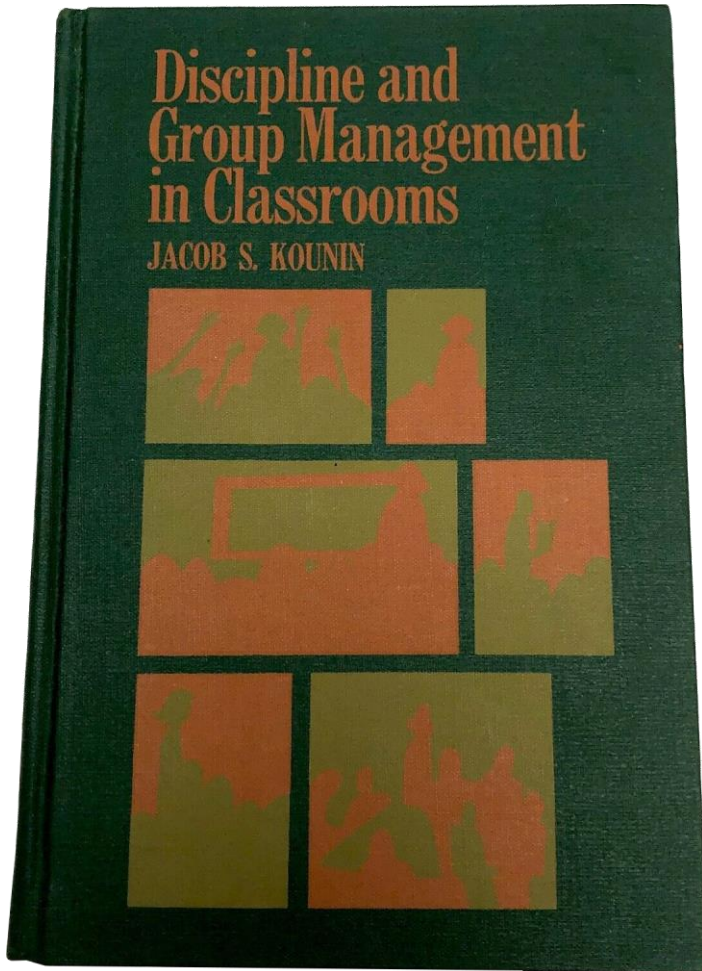
# Introduction



## Digital

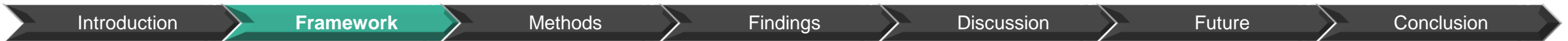
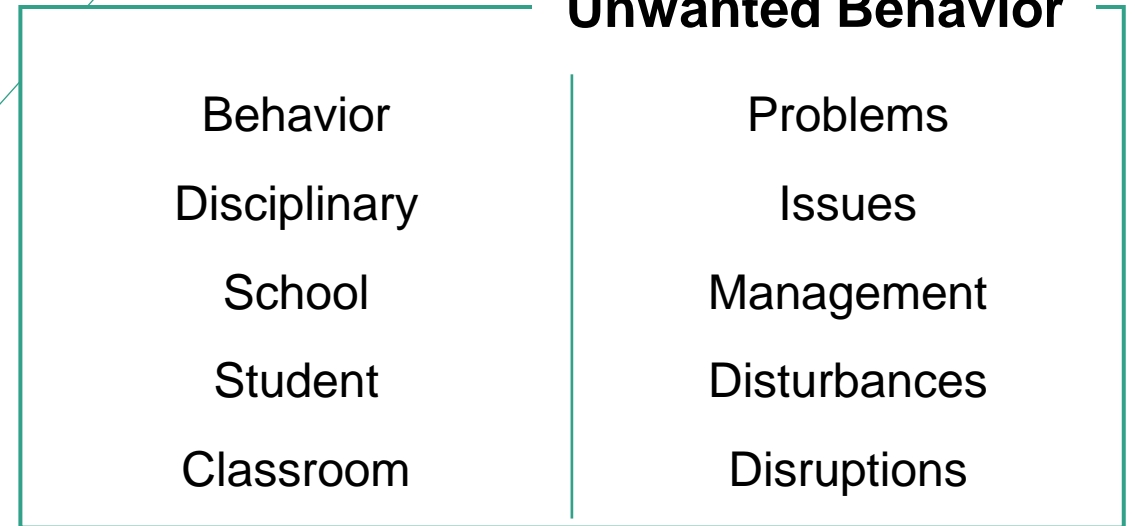
- Increased use over the last years  
(Cho et al., 2020)
- Research needed  
(Meinokat & Wagner, 2022)

# Framework



<https://i.ebayimg.com/images/g/LzoAAOSwjSJj-DXz/s-11600.jpg>

→ Classroom Management  
(Kounin, 1970)



# Framework – Classroom Disruptions

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Anything that interrupts or could interrupt the process or the relationship structure of teaching situations.

Biller, 1979

b

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Behavior a reasonable person would view as being likely to substantially or repeatedly interfere with conduct of a class.

Stockton University, 2001

b

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General issues hindering students' and teachers' classroom work.

Belt & Belt, 2017

bb

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# Framework – Digital Settings

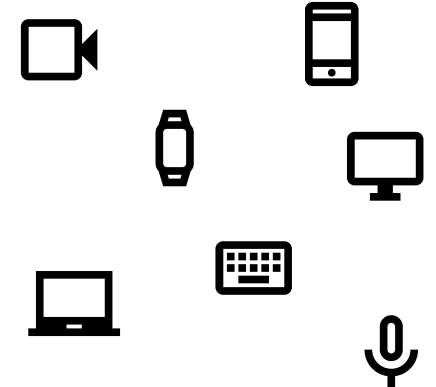
## Digitization

Converting analog data into a digital format



## Digitalization

Integration of digital technology into a setting



(Gradillas & Thomas, 2023)

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# Framework – Research Gap

## Demand & Foster



(European Union, 2022)



(Kultusministerkonferenz, 2021)

Research Gap: No connection between Digitalization and Classroom Disruptions yet.

Research Question: How does the Digitalization affect Classroom Disruptions?

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# Methods - Overview

## Mixed-Methods

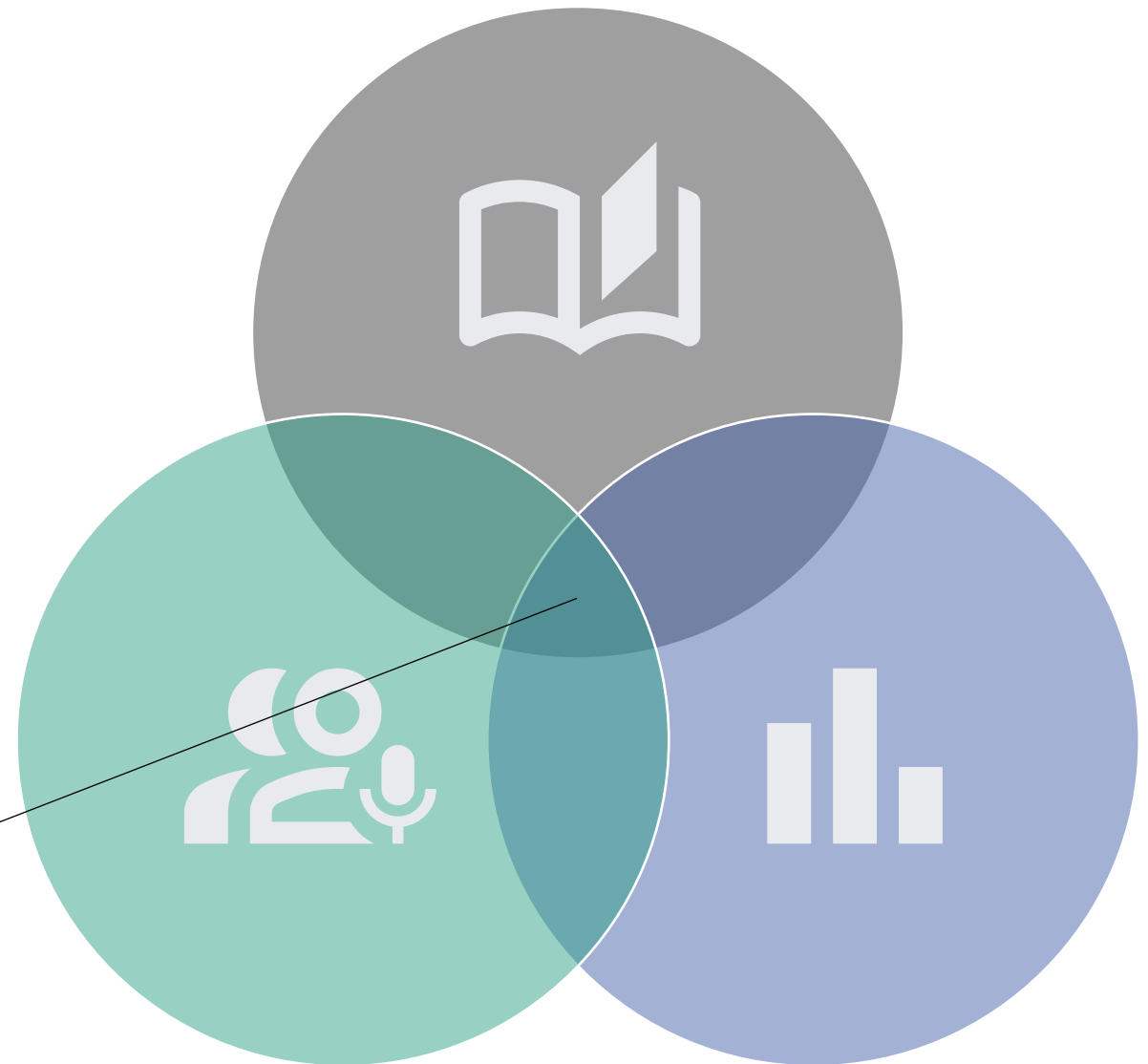
📖 Systematic Literature Review

🗣️ Qualitative Interviews

📊 Quantitative Questionnaire



Cumulative dissertation with mixed-methods-approach



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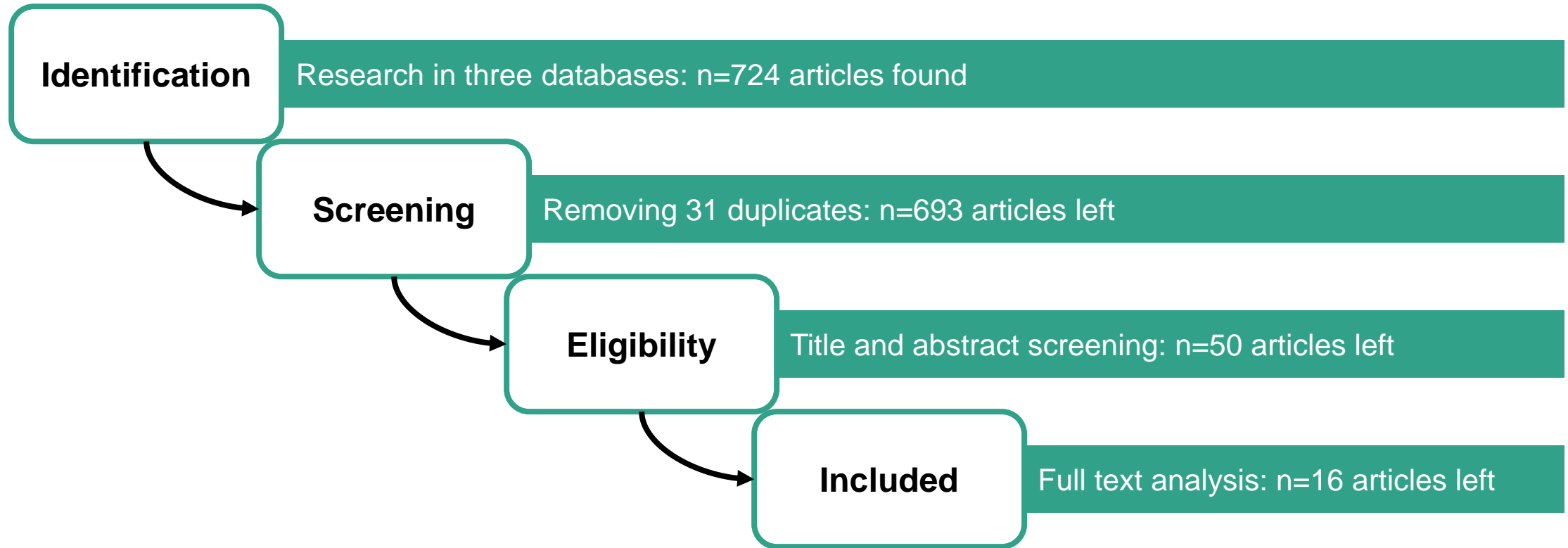
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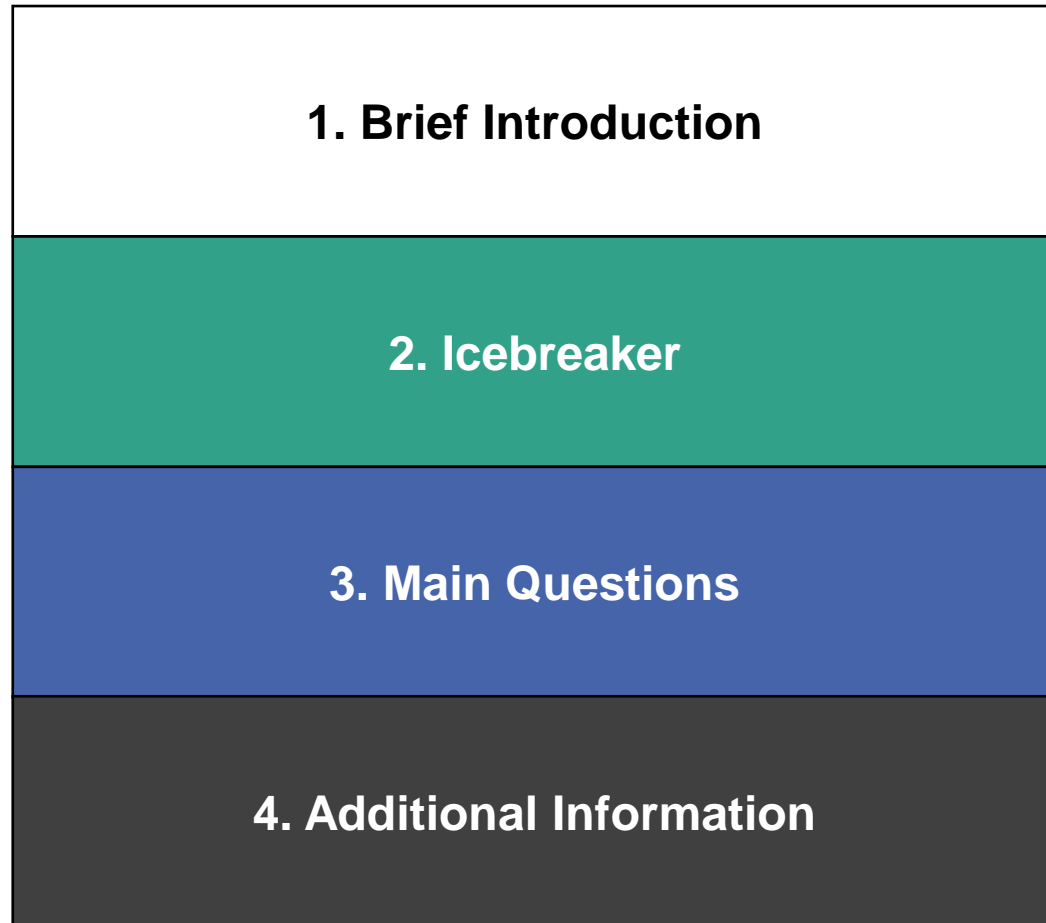
# Methods - Review



Procedure according to Moher et al. (2009)



# Methods - Interviews



Overall introduction, background information and data protection

Setting a friendly and trustworthy conversation climate

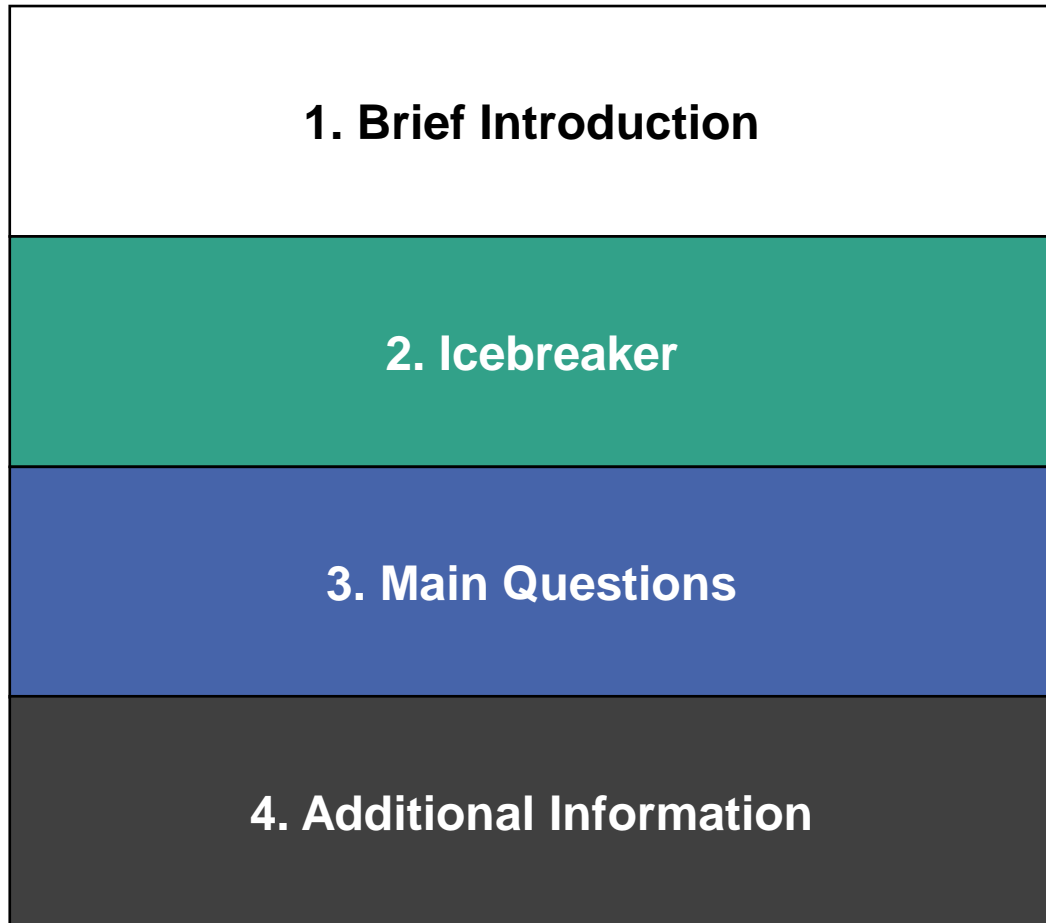
Supported by additional questions if necessary

Demographic information, future research

Procedure according to Misoch (2015)



# Methods - Interviews



## Interviews

- Study 1:
  - Participants:  $n = 13$
  - Topic: *Classroom disruptions in teaching during the pandemic*
- Study 2:
  - Participants:  $n = 7$
  - Topic: *Classroom disruptions in learning factories*
- Study 3:
  - Participants:  $n = 11$
  - Topic: *Physical education refusal*

Procedure according to Misoch (2015)

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# Findings



## Taxonomy

- Various Terms for digital settings synonymously used
- Three different models of teaching

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Online learning, digitally enhanced face-to-face learning, and blended learning, assuming that digital tools are used as technology to enable or support the respective form of teaching.

Meinokat & Wagner, 2022

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# Findings



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## Student Online Misbehavior scale (SOMs):

- Seeking Unallowed Assistance
- Internet Slacking
- Aggressiveness
- Lack of Communication

Li & Titsworth, 2005

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## Systemization

- Only one systemization with relation to a digital setting

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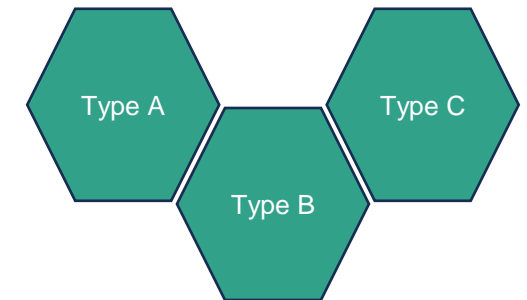
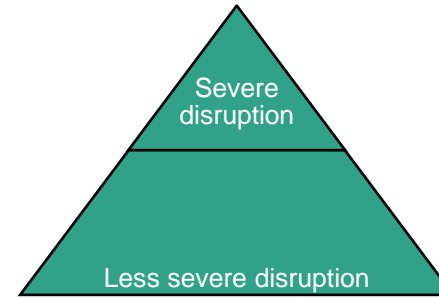
Conclusion

# Findings



## Systemization

- Existing systemizations of classroom disruptions either group severity/intentionality or separate categories





# Findings



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Li & Titsworth, 2005

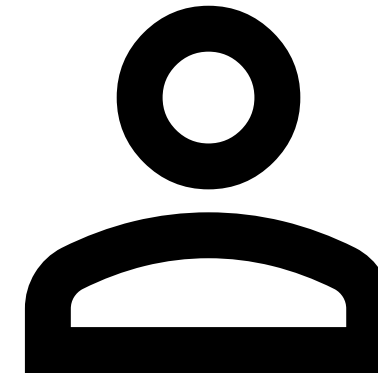
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- **Technical Errors**
- Operating Errors
- Illicit Social Behavior
- Infrastructure Problems

Meinokat & Wagner, 2024

If you're teaching online and the students only hear some static noises and can't hear you, [or] students say "my microphone isn't working"

Teacher BM2



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# Findings



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## Student Online Misbehavior scale (SOMs):

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Li & Titsworth, 2005

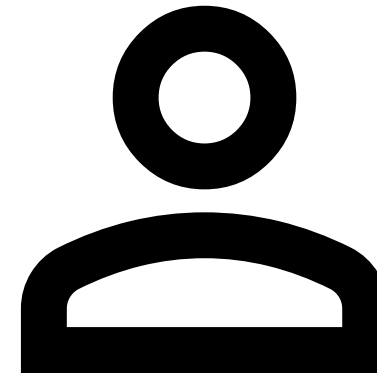
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- Technical Errors
- **Operating Errors**
- Illicit Social Behavior
- Infrastructure Problems

Meinokat & Wagner, 2024

Or if you said: “Open the folder”, they took out their [analog] notebooks and opened the [analog] folder instead of clicking on some file directory.

Teacher BF1



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# Findings



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## Student Online Misbehavior scale (SOMs):

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Li & Titsworth, 2005

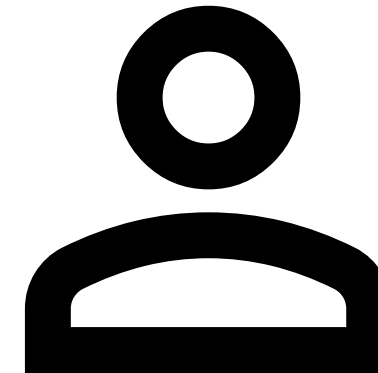
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- Technical Errors
- Operating Errors
- **Illicit Social Behavior**
- Infrastructure Problems

Meinokat & Wagner, 2024

[...] that many of those who really wanted to be noticed just sent an exclamation mark, two seconds later the next one and so on. [The] entire chat history was full of the one name.

Teacher BM8



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# Findings



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## Student Online Misbehavior scale (SOMs):

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Li & Titsworth, 2005

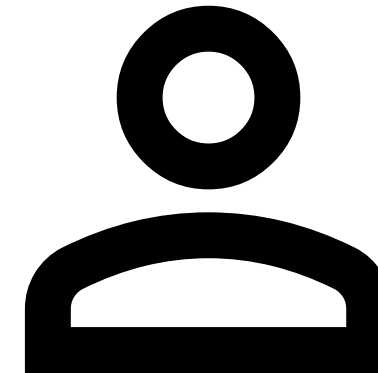
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- Technical Errors
- Operating Errors
- Illicit Social Behavior
- **Infrastructure Problems**

Meinokat & Wagner, 2024

[Because of our limited space] we had things where we said it would take us a quarter of an hour, and the students needed an hour and a half.

Teacher C7



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# Discussion



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## Student Online Misbehavior scale (SOMs):

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Li & Titsworth, 2005

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- Technical Errors
- Operating Errors
- Illicit Social Behavior
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Meinokat & Wagner, 2024

## Systemization

- Goal:  
Future teacher education and training
- Connection between dimensions possible
- Dependency on setting and or subject

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# Discussion



## New insights

- Teachers adapting their strategies
- Digitalization is already an integrational part of daily education
- Teachers felt restrained at first – now overwhelmed



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# Future

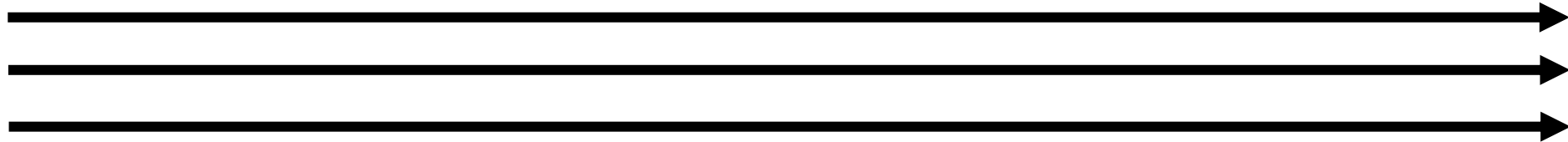


## Close future

Quantitative Questionnaire with students

## Far future

Long term research on the impact of digitalization



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# Conclusion

Classroom Disruptions are a threat for ...

... teacher health

... student academic success

... new challenges

... new opportunities

Digitalization brings ...





# Conclusion

This project gathers insights on **classroom disruptions** from **multiple perspectives** to generate a **systemization** that can be used to improve **future teacher** education and training.

# Classroom Disruptions in Digital Settings

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