Association of self-efficacy and achievement goals in university lecturers teaching

Hein, J., Janke, S., Daumiller, M., Dresel, M. & Dickhäuser, O.

Contact: julia.hein@uni-mannheim.de
Introduction

Achievement goals of university lecturers are predictive for important outcomes:

• work engagement (Janke & Dickhäuser, 2018)
• professional learning (Hein, Daumiller, Janke, Dresel, Dickhäuser, 2019)
• teaching quality (Daumiller, Dickhäuser & Dresel, 2018)

→ To date there is little knowledge on the antecedents of university lecturers’ achievement goals!
Theoretical Background

- Established associations of self-efficacy and achievement goals
  (Elliot, 1999; Payne et al., 2007)
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- Trait and state aspects of achievement goals can be distinguished in lecturers
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- Trait and state aspects of achievement goals can be distinguished in lecturers (Janke & Dickhäuser, 2018)
- Context- and situation-specific self-efficacy as predictors
Theoretical Background

- Established associations of self-efficacy and achievement goals
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- Trait and state aspects of achievement goals can be distinguished in lecturers
  (Janke & Dickhäuser, 2018)
- Context- and situation-specific self-efficacy as predictors
- According to construal-level theory associations of self-efficacy and achievement goals on the same level should be stronger
  (Trope, & Liberman, 2010)
Theoretical Background

Hexagon model  (Daumiller, Dickhäuser & Dresel, 2019)

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Hypotheses

1. **Positive** associations of self-efficacy and mastery goals
2. **Negative** associations of self-efficacy and performance avoidance goals
3. **Positive** associations of self-efficacy and performance approach goals
4. Situation-specific self-efficacy should be more predictive for situation-specific achievement goals than context-specific self-efficacy
Method
Sample and Design

N = 85 university lecturers (53% female, Ø40.5 years)
N = 390 weekly measurements (Ø3.45 (SD = 0.68) weekly measurements per participant)

Two weeks before start of semester:
• demographics
• context-specific self-efficacy

First five weeks of semester:
At start of a courses session:
• Situation-specific achievement goals
• Situation-specific self-efficacy
## Method

### Items of self-efficacy

<table>
<thead>
<tr>
<th>What do you think: How well do you succeed in teaching in today’s session ...</th>
<th>context-specific</th>
<th>situation-specific</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instruction</strong></td>
<td>... in presenting alternative explanations or examples if the students do not understand something immediately?</td>
<td></td>
</tr>
<tr>
<td><strong>Motivation</strong></td>
<td>... in motivating uninterested students?</td>
<td></td>
</tr>
<tr>
<td><strong>Classroom Management</strong></td>
<td>... to avoid students disturbing the session process through their behaviour?</td>
<td></td>
</tr>
</tbody>
</table>

**Scale:** 1 = „not at all“ to 8 = „very good“

(Adapted single items of the teacher efficacy scale by Nie, Lau, & Liau, 2012)

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Method
Single items of situation-specific achievement goals

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>M</th>
<th>SD</th>
<th>ICC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Goals</td>
<td>... to develop my own skills as much as possible.</td>
<td>5.20</td>
<td>2.05</td>
<td>.60</td>
</tr>
<tr>
<td>Task Goals</td>
<td>... to do my teaching as well as possible.</td>
<td>7.17</td>
<td>1.21</td>
<td>.58</td>
</tr>
<tr>
<td>Norm Avoidance Goals</td>
<td>... not to give a worse lesson than my colleagues.</td>
<td>4.88</td>
<td>2.55</td>
<td>.77</td>
</tr>
<tr>
<td>Appearance Avoidance Goals</td>
<td>... that others don't think my teaching is bad.</td>
<td>5.05</td>
<td>2.54</td>
<td>.77</td>
</tr>
<tr>
<td>Norm Approach Goals</td>
<td>... to do better teaching than my colleagues.</td>
<td>3.24</td>
<td>1.99</td>
<td>.75</td>
</tr>
<tr>
<td>Appearance Approach Goals</td>
<td>... that others will realize how good my teaching is.</td>
<td>4.39</td>
<td>2.15</td>
<td>.72</td>
</tr>
</tbody>
</table>

Scale: 1 = „do not agree at all“ bis 8 = „agree completely“  

(Adapted single items of the scale by Daumiller, Dickhäuser & Dresel, 2019)
## Results
### Correlations

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<tr>
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<td>0.38***</td>
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<td>2)</td>
<td>Task Goals</td>
<td>0.23*</td>
<td>0.77***</td>
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<td>Norm Avoidance Goals</td>
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<td>0.24*</td>
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<td>0.22*</td>
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<td>5)</td>
<td>Norm Approach Goals</td>
<td>0.26**</td>
<td>0.20*</td>
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<td>Appearance Approach Goals</td>
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<td>0.30**</td>
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Self-efficacy and achievement goals in university lecturers
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## Results

### Correlations

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### Results

#### Correlations

|                | Context-specific self-efficacy | Situation-specific self-efficacy | within  
|----------------|------------------------------|---------------------------------|--------
| 1) Learning Goals | 0.10                         | 0.38***                         | 0.14   
| 2) Task Goals    | 0.23*                        | 0.77***                         | 0.06   
| 3) Norm Avoidance Goals | -0.05                     | 0.24*                           | -0.04  
| 4) Appearance Avoidance Goals | -0.01                  | 0.22*                           | -0.01  
| 5) Norm Approach Goals    | 0.26**                      | 0.20*                           | -0.00  
| 6) Appearance Approach Goals | 0.23*                      | 0.30**                           | 0.03   

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## Results

### Multilevel SEM - Multivariate Associations

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<th>Appearance Approach Goals</th>
</tr>
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<td>Learning Goals</td>
<td>-0.14</td>
<td>0.45***</td>
<td>0.16</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>2)</td>
<td>Task Goals</td>
<td>-0.26**</td>
<td>0.91***</td>
<td>0.64</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>3)</td>
<td>Norm Avoidance Goals</td>
<td>-0.25*</td>
<td>0.37***</td>
<td>-0.04</td>
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<td></td>
</tr>
<tr>
<td>4)</td>
<td>Appearance Avoidance Goals</td>
<td>-0.17</td>
<td>0.32**</td>
<td>-0.01</td>
<td>-0.01</td>
<td></td>
</tr>
<tr>
<td>5)</td>
<td>Norm Approach Goals</td>
<td>0.21</td>
<td>0.09</td>
<td>-0.00</td>
<td>-0.00</td>
<td></td>
</tr>
<tr>
<td>6)</td>
<td>Appearance Approach Goals</td>
<td>0.11</td>
<td>0.24*</td>
<td>0.03</td>
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<td></td>
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Discussion
Summary of Results

1. **Positive** associations of self-efficacy and mastery goals (learning and task)

2. **Negative** associations of self-efficacy and performance avoidance goals

3. **Positive** associations of self-efficacy and performance approach goals (norm and appearance)

4. Situation-specific self-efficacy should be more predictive for situation-specific achievement goals than context-specific self-efficacy
Discussion
Strengths and Limitations

Limitations:
• Direction of effect is not clear
• Small sample → small power on the between level!

Strengths:
• Context- and situation-specific measure of self-efficacy
• First insight into antecedents of state achievement goals of university lecturers

→ Future research!
Discussion

• University lecturers self-efficacy in teaching and for single course sessions is positively associated with their striving
  – To do good teaching (task goals)
  – To develop their own competences (learning goals)
  – To do better teaching than colleagues (norm approach goals)
  – That others realize how good their teaching is (appearance approach goals)

• While the causal direction of these associations is not clear yet, university lecturers goals structure and especially their striving to do good teaching could profit from trainings enhancing their self-efficacy in teaching!


