Too Much to Do – How Workload Moderates the Positive Association of Learning Goals and Learning Gains of University Scholars

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Introduction

University scholars' learning at work

What?

- Content and methodological knowledge
- Didactical skills for teaching

… to teach students

… to conduct research

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- Conferences
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Why?

**… to teach students**

… to conduct research

Theoretical Background

- **Students:** learning goals correlate positively with educational outcomes (Senko et al., 2011)

- **University scholars:** learning goals are predictors for teaching quality and students' learning gain (Daumiller et al., 2016)

- **Adults:** only learning goals are positively correlated with learning in this meta-analysis (Payne et al. 2007)

Learning goals —+→ Learning gain
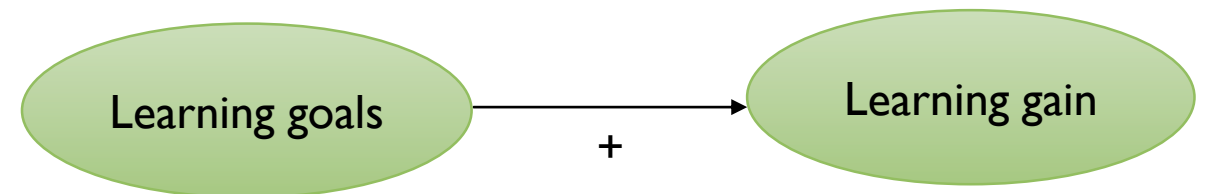
e.g. Dweck (1986); Nicholls (1984); Ranellucci, Hall & Goetz (2015)

Theoretical Background

- Process model of selfregulated learning (Schmitz & Wiese, 2006)

- Possible moderator: workload

  - University scholars pursue their (learning-) goals to a lesser extent, caused by a conflict of resources (e.g. limited time)
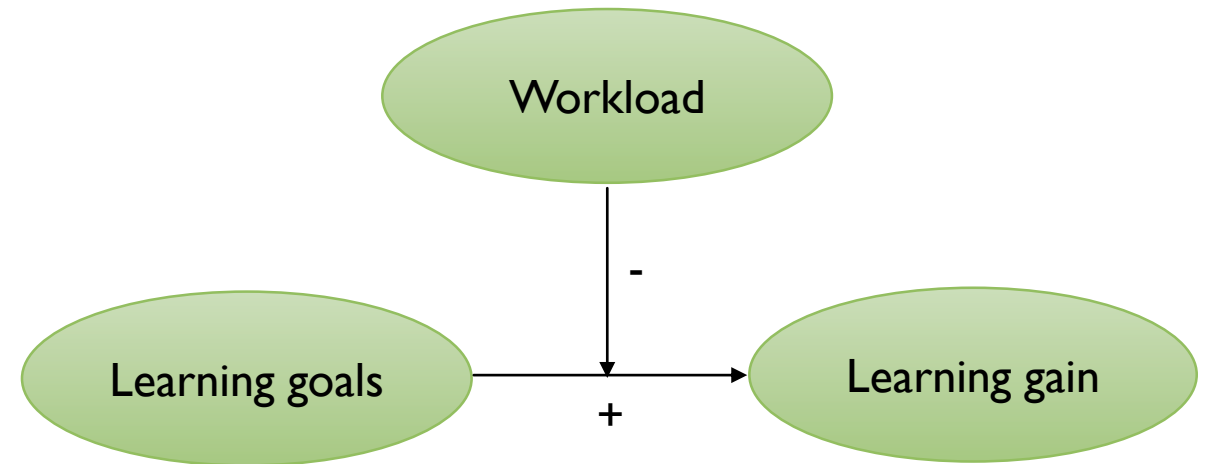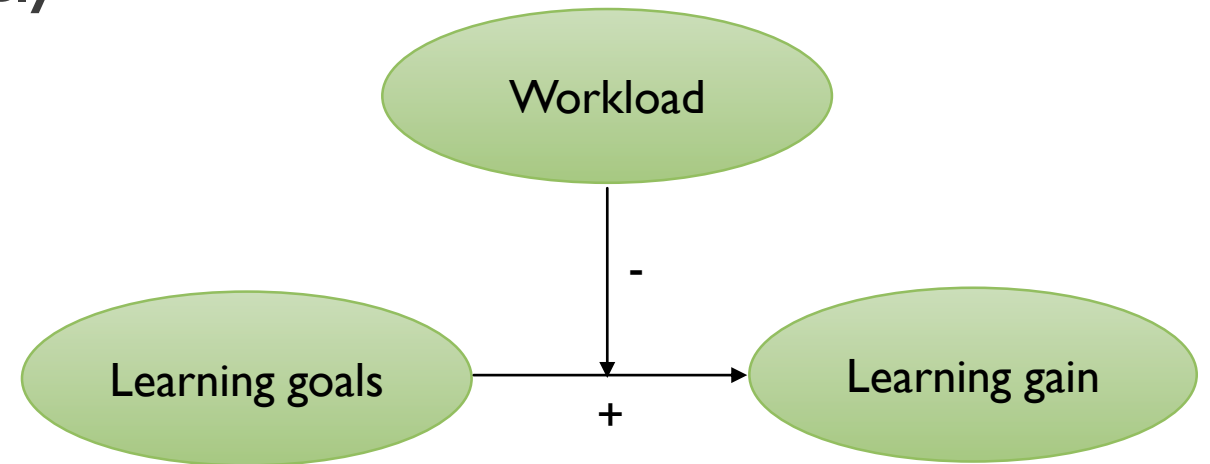
Hypotheses

H1: University scholars learning goals positively predict self-reported learning gain

   a)   in the teaching domain

   b)   in the research domain

H2: The strength of perceived workload weakens this positive association.

   a)   in the teaching domain
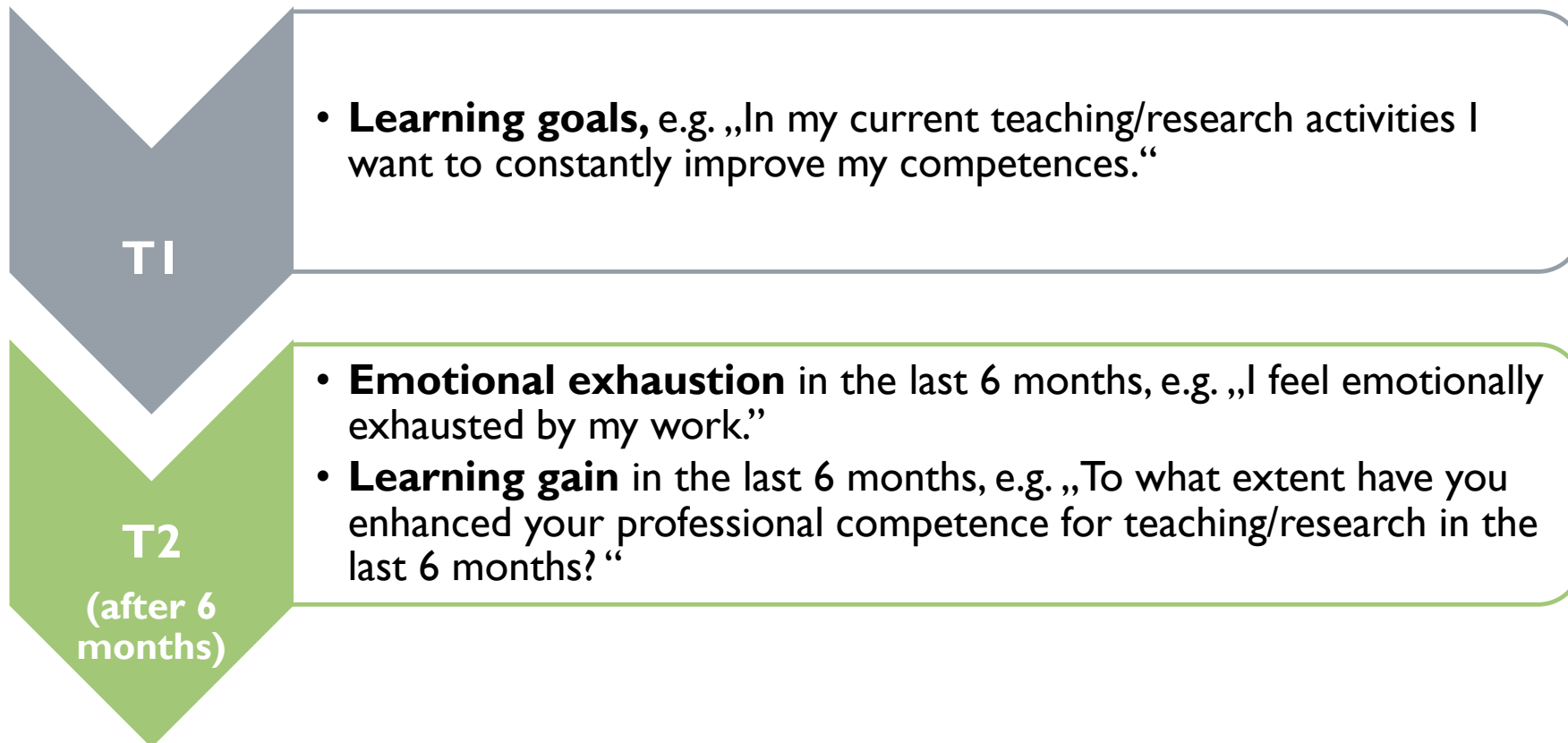
   b)   in the research domain

Method

Representative sample: 705 German university scholars of 12 different divisions (46% female, 38.7 years on average, 27 % professors)

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T1

- **Learning goals,** e.g. „In my current teaching/research activities I want to constantly improve my competences.“

T2 (after 6 months)

- **Emotional exhaustion** in the last 6 months, e.g. „I feel emotionally exhausted by my work.”
- **Learning gain** in the last 6 months, e.g. „To what extent have you enhanced your professional competence for teaching/research in the last 6 months? “

Method

Time point	Construct	Scale	Authors	Items	α	*Min*	*Max*	*M*	*SD*
T1	Learning Goals - Teaching	Self-related Goals of university scholars in teaching and research	Daumiller, Dickhäuer & Dresel (2018); Daumiller (2018)	4	.90	1.25	8.00	6.70	1.20
T1	Learning Goals - Research			4	.91	3.50	8.00	7.32	0.83
T2	Emotional Exhaustion	German Version of the Maslach Burnout Inventory – General Survey	Büssing & Glaser (1998)	5	.88	1.00	8.00	3.54	1.65
T2	Learning Gain - Teaching	Self-developed self-report scale	Daumiller (2017)	4	.89	1.00	8.00	4.77	1.63
T2	Learning Gain - Research			4	.92	1.00	8.00	5.60	1.54

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Descriptive Data

Latent Correlations		1)	2)	3)	4)
Learning goals	1) in teaching (T1)				
	2) in research (T1)	**.46**			
Emotional exhaustion	3) at work (T2)	.03	-.07		
Learning gain	4) in teaching (T2)	**.33**	.11	-.01	
	5) in research (T2)	.09	**.26**	-.08	**.26**

N = 702, *p* < .001

Results

In the teaching domain:
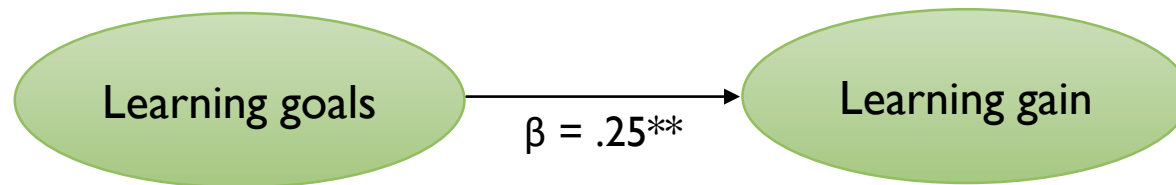
Bivariate model with standardized regression coefficients.
Model fit: AIC =9,387.76, BIC = 9,501.60; Estimator = MLR.
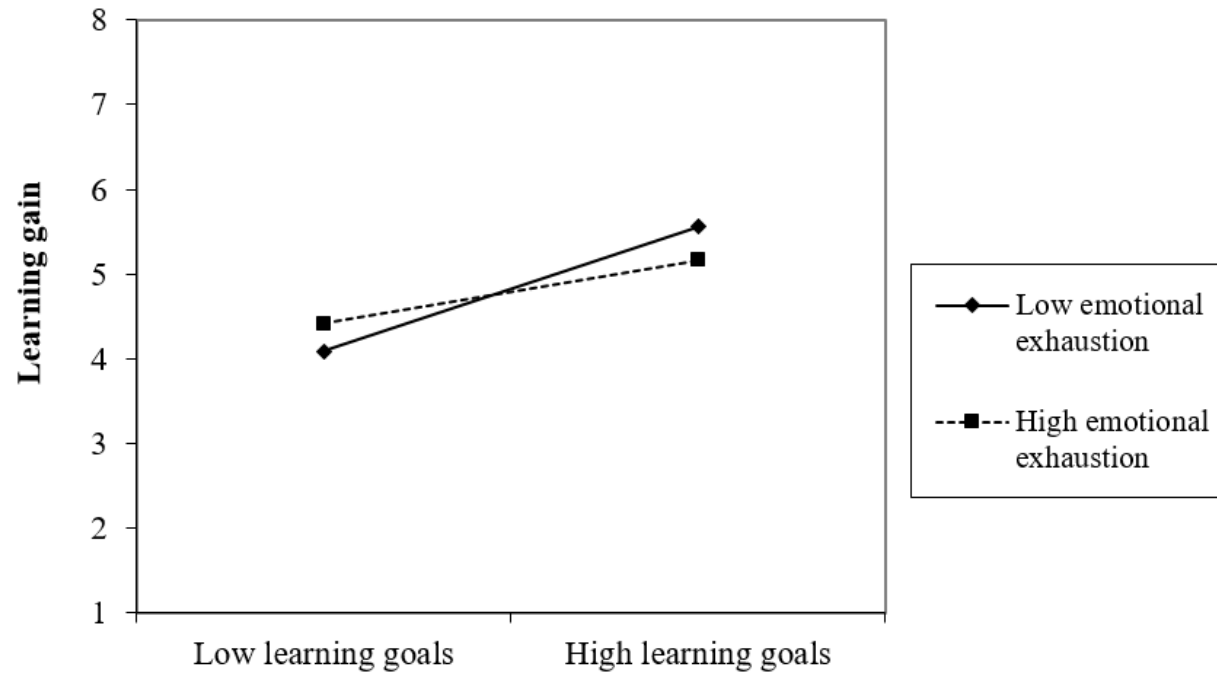
In the teaching domain:

$*$ $p < .05$

$**$ $p \le .01$

Estimated interaction model with standardized regression coefficients.
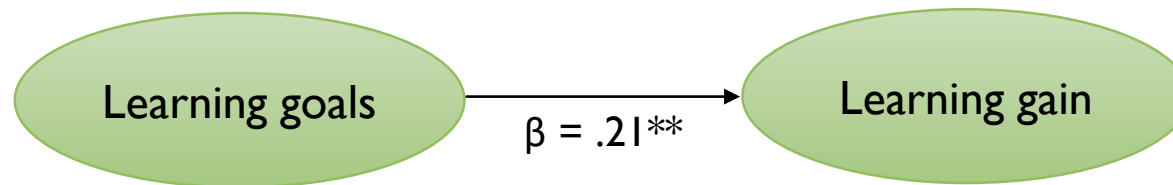Model fit: AIC = 14,871.78, BIC = 15,067.60; Estimator = MLR.

Results
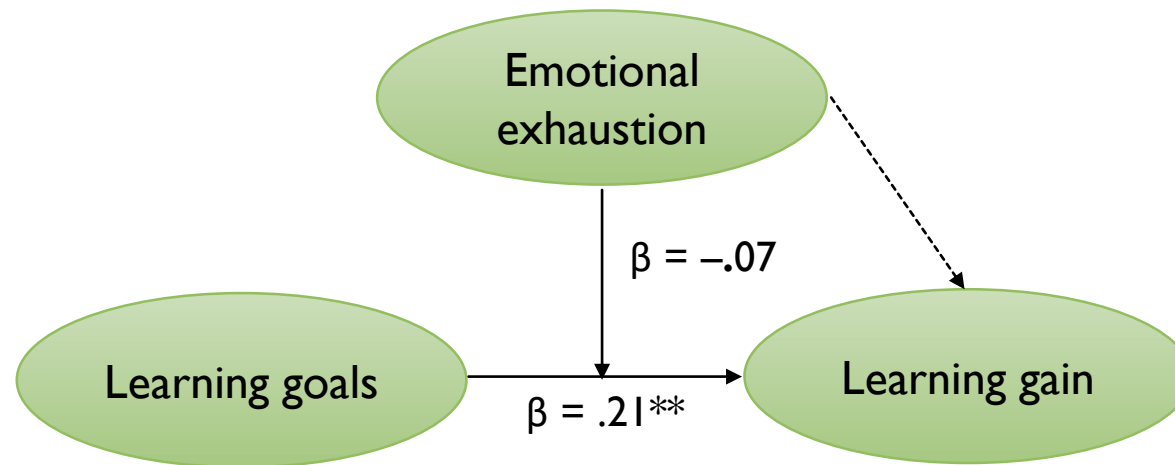
In the teaching domain:

In the research domain:

* $p < .05$

** $p \le .01$

Learning goals   β = .21**   Learning gain

Bivariate model with standardized regression coefficients.
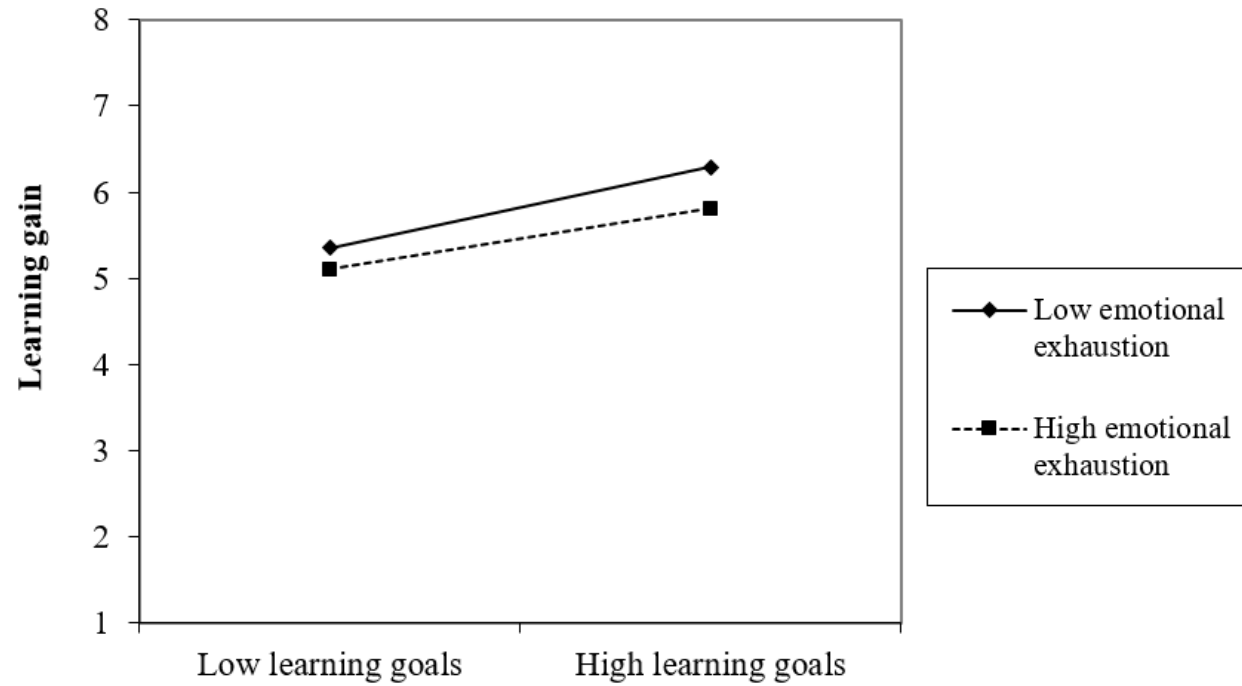Model fit: AIC = 9,079.48, BIC = 9,193.26; Estimator = MLR.

In the research domain:

$*$ $p < .05$

$**$ $p \leq .01$

Emotional exhaustion

$\beta = -.07$

Learning goals

$\beta = .21**$

Learning gain

Estimated interaction model with standardized regression coefficients.
Model fit: AIC = 14,569.29, BIC = 14,764.98; Estimator = MLR.

Results

In the research domain:

Discussion

Too much to do:

Does <u>workload</u> moderate the positive association of learning goals and learning gains of university scholars?

We need future research to answer this question:

- Use different indicators

- Replicate the moderation effect

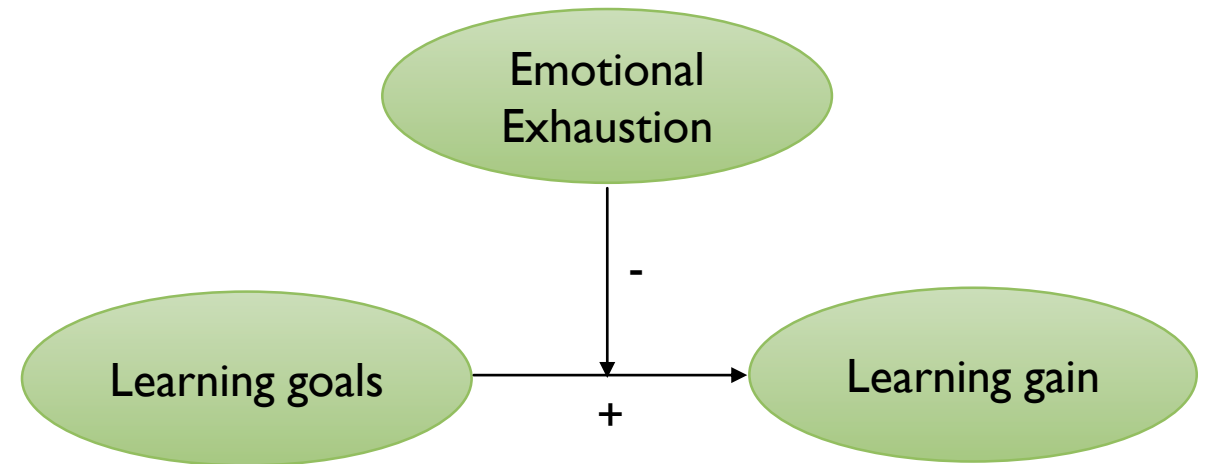- Explain the missing moderation effect in the research domain

Discussion

Summary:

- Learning goals → Self-reported learning gain (in teaching and research)

- Emotional exhaustion weakens the positive effect in the teaching domain

Implications:

- Emotional exhaustion and learning goals as possible starting points for future trainings?

Literature

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