

Faculty subjective well-being: an achievement goal approach

Raven Rinas, Markus Dresel, Martin Daumiller

Angaben zur Veröffentlichung / Publication details:

Rinas, Raven, Markus Dresel, and Martin Daumiller. 2022. "Faculty subjective well-being: an achievement goal approach." *International Journal of Educational Research* 115: 101942. <https://doi.org/10.1016/j.ijer.2022.101942>.

Faculty subjective well-being: An achievement goal approach

Raven Rinas^{*}, Markus Dresel, Martin Daumiller

Department of Psychology, University of Augsburg, Augsburg, Germany

Research indicates that faculty members struggle with compromised subjective well-being (SWB). Although motivation is considered central to SWB, little research has investigated this connection in faculty using comprehensive, multifaceted frameworks. To address this, the present study took an achievement goal approach to examining multifaceted SWB (positive and negative emotions, career and life satisfaction) in 1,335 faculty members from Germany, the USA, and India. Structural equation modelling revealed that, invariant across countries and institutions, achievement goals were meaningfully and differentially associated with SWB. Mastery (task) approach goals were particularly conducive to SWB, while work avoidance goals were detrimental. Moreover, mixed results emerged for performance and relational goals. These findings highlight the centrality of goals for understanding and supporting faculty development.

1. Introduction

Higher education faculty are a critical population who have a marked influence on education and society. When it comes to students, they promote outcomes such as increased learning (McKeachie, 2007), engagement (Zepke & Leach, 2010), as well as motivation and achievement (Komarraju et al., 2010). At a societal level, they generate knowledgeable citizens, train future academics, and support the overall functioning of higher education systems (Watt & Richardson, 2020). Given their important role, it is concerning that faculty members struggle with stress (Gillespie et al., 2001), burnout (Sabagh et al., 2018; Watts & Robertson, 2011), lack of work-life balance (Fontinha et al., 2019), and mental health problems (Guthrie et al., 2017), among other adversities (see Kinman & Johnson, 2019). These findings collectively illustrate faculty to be facing compromised subjective well-being (SWB)—conceptualized as individuals' cognitive and affective evaluations of their lives (Diener et al., 2009). This is not only detrimental for faculty members' own flourishing and happiness, but also for the students and institutions who depend on them—making it crucial for research efforts to focus on identifying factors that can help explain differences in faculty members' SWB.

To this end, aside from institutional demands, it is also important to examine the role that psychological factors play in faculty members' SWB (see Sabagh et al., 2018; Salimzadeh et al., 2017). With respect to motivational factors, achievement goals in particular have been highlighted as being central to faculty members' professional lives, including their attitudes towards help-seeking, professional development experiences, and emotions (Daumiller et al., 2019; Hein et al., 2019; Hein et al., 2021; Rinas et al., 2020). Following an achievement goal approach, the different goals that faculty members strive for are posited to underlie their perceptions of and reactions to work experiences and stressors, including different cognitive, behavioural, and coping processes that are closely intertwined with SWB (see Dweck & Leggett, 1988; Elliot & Harackiewicz, 1996; Kaplan & Maehr, 1999; Payne et al., 2007). Based on this, examining faculty members' achievement goals can be considered a compelling research avenue for better understanding their

^{*} Corresponding author: Department of Psychology, University of Augsburg, Universitätsstraße 10, 86159 Augsburg, Germany.
E-mail address: raven.rinas@phil.uni-augsburg.de (R. Rinas).

SWB. However, such links have yet to be comprehensively investigated in this population, and little is known in general about how achievement goals are tied to how individuals feel in terms of their well-being. Adding to this, research examining faculty members' achievement goals has strongly concentrated on German faculty employed in universities, emphasizing a need for a more international and diverse narrative that incorporates different countries (see King et al., 2017) and types of higher education institutions.

In the present study, we aimed to address these research gaps by examining the associations between faculty members' achievement goals and multifaceted SWB to capture fine-grained insights into the motivational underpinnings of their emotional and cognitive functioning. Moreover, to examine generalizability of our findings, we surveyed faculty employed in different countries (Germany, the USA, and India) and different types of higher education institutions (research- and teaching-oriented institutions). While Germany and the USA constitute individualistic countries with distinct higher education systems where most research on faculty motivation has been conducted, India represents a large, non-western higher education system characterized by a more collectivistic culture—providing further information into potential similarities and differences regarding how goals matter for faculty SWB.

1.1. Faculty subjective well-being

Many studies have examined aspects of faculty SWB and collectively illustrate concerning trends (see Kinman & Johnson, 2019). These trends are frequently recognized as a wide-spread phenomenon stemming from ramifications of the massification and internationalisation of the higher education sector (Kinman, 2014; Kinman & Johnson, 2019; Sabagh et al., 2018). Despite considerable progress in faculty well-being research, central gaps still exist, including a need for more studies that examine the role of psychological (motivational) factors, as well as those that incorporate multifaceted and theoretically grounded conceptualisations of SWB, which are often lacking (Larson et al., 2017; Mudrak et al., 2017).

In terms of conceptualizing SWB, most researchers agree on the importance of acknowledging the multifaceted nature of this construct (Diener et al., 2009; Dodge et al., 2012; Forgeard et al., 2011). Following this perspective, Diener (1984) proposed that SWB is composed of self-evaluations of emotional and cognitive facets, namely: (1) positive emotional experiences, (2) negative emotional experiences, (3) global life satisfaction, and (4) domain satisfaction (Diener et al., 1999; Diener et al., 2009). These facets are conceptually and statistically related to one another, yet also distinctly separate—each lending unique details about an individual's SWB (Diener et al., 2009). To elaborate, the positive emotion facet refers to experiencing pleasant emotions and moods (e.g., joy), while the negative emotion facet refers to experiencing unpleasant emotions and moods (e.g., anxiety). The global life satisfaction facet describes cognitive evaluations of one's life as a whole, and lastly, the domain satisfaction facet describes cognitive evaluations of a particular area of one's life (e.g., career, health). This multifaceted conceptualization of SWB has ignited considerable research around the world and has been widely adopted in well-being literature (see Larsen & Eid, 2008), including studies set in educational contexts with similar topics as the present research (see Chen, 2015; Elliot et al., 2011). We thereby also integrated this conceptualization of SWB in the present study as a well-established framework that can be used to systematically derive readily comparable and multifaceted insights into how faculty members are feeling.

Adding to this conceptualization, for researchers interested in gathering finer details about SWB in specific populations, measures can be integrated that are tailored to the context and research questions of interest (Diener, 2009; Diener et al., 2003). For example, when considering the positive and negative emotion facets of faculty members' SWB, the discrete emotions of joy, anger, and anxiety can be considered particularly relevant for examining their role as a teacher. These emotions represent a varied spectrum of positive and negative activating emotions (see Pekrun et al., 2011) and have also been found to be frequently and prominently experienced both by school and higher education teachers (see Frenzel et al., 2016; Stupnisky et al., 2016; Thies & Kordts-Freudinger, 2019). Moreover, for the domain satisfaction facet, faculty members' feelings of personal accomplishment regarding their role as a teacher can also be considered important. From a human relations perspective, personal accomplishment constitutes a key indicator of career satisfaction (see Abele et al., 2011; Dyke & Duxbury, 2011). Transferred to the population of higher education faculty, personal accomplishment taps into faculty members' feelings of competence and successful achievement as a teacher including the feeling that they are accomplishing worthwhile things and have a positive influence on others (Maslach et al., 1996). Taken together, in the present study, a faculty member with "high SWB" can be interpreted as having high levels of positive emotions in teaching, low levels of negative emotions in teaching, high personal accomplishment in their role as a teacher, and high overall life satisfaction.

1.2. An achievement goal approach to faculty motivations

Achievement goal theory is a prominent, theoretically and empirically sound motivational framework used to assess the quality of individuals' motivations in achievement contexts by means of different achievement goals. Achievement goals constitute cognitive representations of end states that individuals are committed to approach or avoid (Hulleman et al., 2010). This framework has been used to investigate the motivational underpinnings of important outcomes in students (Daniels et al., 2008; Daniels et al., 2014; Lüftenegger et al., 2016; Pekrun et al., 2006, 2009), school teachers (Butler, 2007; Butler & Shibaz, 2008; Wang et al., 2017), and more recently, also higher education faculty (see special issue of Daumiller et al., 2020; Daumiller et al., 2021).

Within achievement goal theory, two fundamental types of achievement goals were initially emphasized—mastery and performance goals (Dweck, 1986; Nicholls, 1984)—which were later revised to include an approach valence oriented towards attaining success or a desirable state, and an avoidance valence oriented towards avoiding failure or an aversive state (see Elliot, 1999; Elliot & Harackiewicz, 1996). This was articulated in the 2×2 achievement goal model (Elliot, 1999; Elliot and McGregor, 2001) that posits four types of goals: mastery-approach goals, which entail strivings to develop knowledge and competence; mastery-avoidance goals, which entail strivings to avoid losing or not developing knowledge and competence; performance-approach goals, which entail

strivings to outperform others; and performance-avoidance goals, which entail strivings to avoid demonstrating incompetence relative to others.

Building on the 2×2 achievement goal model, additional goal differentiations have since been proposed (see Daumiller et al., 2019, for an overview). Specifically, mastery-based goals can be further differentiated into a learning component focused on gaining knowledge and competencies, and a task component focused on completing professional tasks well. Performance-based goals can also be differentiated into an appearance component focused on appearing competent in front of others, and a normative component focused on outperforming others. Adding to this, two further goals have been found to constitute highly relevant motivations in the teaching profession: relational goals, which are oriented towards building close and caring relationships with others (see Butler, 2012), and work-avoidance goals, which are centred around getting by with little effort (see King & McInerney, 2014).

The structure and usefulness of the aforementioned achievement goals have been supported in research on faculty members, including their relevance for explaining differences in important work-related variables (e.g., Daumiller et al., 2019; Hein et al., 2019; Rinas et al., 2020). This line of faculty achievement goal research has primarily utilized the overview model developed by Daumiller et al. (2019), which was consequently also incorporated in the present study (see Table 1 for a summary of the overview model including sample items for each goal type).

1.3. Linking faculty achievement goals and subjective well-being

The types of goals that individuals strive for can be considered essential for SWB in that they give life meaning, structure, direction, and are tied to how they evaluate and feel about their lives (see Kaftan & Freund, 2018; Tamir & Diener, 2008). Achievement goals are thought to act as lenses for how individuals evaluate current and future achievement situations, where depending on the goal being pursued, differences can be expected in terms of cognitions, emotions, and behaviours, including self-evaluations and patterns of coping (Kaplan & Maehr, 1999; Tuominen-Soini et al., 2008). Despite strong theoretical premise that achievement goals matter for faculty SWB, goal-SWB linkages have yet to be investigated in this population from a comprehensive and multifaceted perspective. Nevertheless, first studies have investigated links between select achievement goals and certain aspects of SWB in school and higher education teachers, which can be used to guide the hypotheses of the present research, as outlined in the following sections¹.

1.3.1. Mastery-approach goals

Mastery-approach goals, including learning- and task-approach goals, encompass a positive drive to develop knowledge and competencies, as well as to conduct professional tasks well, respectively. The adoption of mastery-approach goals is posited to foster interest and perceived value in tasks, a positive affective stance toward learning, as well as a tendency to perceive setbacks and failures as controllable learning opportunities (see Elliot & Harackiewicz, 1996). Such consequences can be expected to go along with faculty interpreting stressors at work in a more positive light and coping better with obstacles, resulting in increased SWB. In line with this, studies have found school teachers with stronger mastery-approach goals to experience more enjoyment and job satisfaction regarding their role as a teacher (Janke et al., 2019; Papaioannou & Christodoulidis, 2007; Wang et al., 2017), as well as lower levels of occupational strain, burnout, and emotional exhaustion (Nitsche et al., 2013; Retelsdorf et al., 2010; Tönjes & Dickhäuser, 2010). Similar findings have also been documented in university faculty, where task-approach goals have been linked with more positive affect (Daumiller et al., 2019), and learning-approach goals with more enjoyment, as well as less anger and boredom (Rinas et al., 2020). These findings collectively emphasize the adaptive nature of mastery-approach goals and suggest that positive relations can be expected regarding faculty members' SWB.

1.3.2. Mastery-avoidance goals

Mastery-avoidance goals (learning- and task-avoidance goals) entail strivings focused on avoiding losing or not developing knowledge and competencies, as well as strivings focused on avoiding not conducting professional tasks well. On one hand, such goals can be perceived as beneficial given their positive focus on learning and task mastery, as argued in the previous section. On the other hand, the unfavourable avoidance valence involved in mastery-avoidance goals can potentially be harmful, as a negative outcome is being used as the hub of regulation, which may facilitate worries of regressing, reminders of the possibility of failure, and perfectionist tendencies (see Elliot & McGregor, 2001; Van Yperen et al., 2009). For example, a faculty member might embark on more learning opportunities than they have time for to avoid missing chances to expand their knowledge; or may feel worried about fulfilling different teaching requirements poorly, resulting in detrimental effects to their health. Indeed, meta-analytic evidence indicates that mastery-avoidance goals are positively associated with negative affect ($r = .30$; Baranik et al., 2010), and first research on mastery-avoidance goals in teaching populations has found learning-avoidance goals to be positively linked with faculty members' feelings of anger (Rinas et al., 2020). At the same time, Daumiller et al. (2019) did not identify significant findings for learning- nor task-avoidance goals with positive affect in faculty. Taken together, although there is a clear need for more research on this goal type, prior theorizing paired with existing empirical evidence indicates that negative associations with SWB are probable.

¹ It is important to note that contextual differences can emerge depending on whether one teaches at a school or higher education institution. Although basic theories of teacher motivation and emotion have been successfully transferred to higher education faculty, such findings should nonetheless be interpreted with caution.

Table 1
Overview of achievement goals and sample items.

Goal type	Goal content	Valence	Sample items
Mastery	Task	Approach	Item Stem: In my current teaching activities... '...my goal is to teach very well.'
		Avoidance	'...my goal is to avoid teaching poorly.'
Performance	Learning	Approach	'...it is important to me to learn something new.'
		Avoidance	'...I want to avoid not learning something new.'
	Appearance	Approach	'...I want to be perceived as competent.'
		Avoidance	'...I want to avoid being perceived as incompetent.'
Further goals	Normative	Approach	'...I want to be better than my colleagues.'
		Avoidance	'...I want to avoid being worse than my colleagues.'
	Work-avoidance		'...I want to have as little to do as possible.'
	Relational		'...one of my main goals is to develop a cooperative relationship with students.'

Note. The distinguished achievement goals are based on the overview framework by [Daumiller et al. \(2019\)](#).

1.3.3. Performance-approach goals

Performance-approach goals, which entail appearance- and normative-approach goals, are centred around appearing competent in front of others or outperforming others, respectively. Similar to mastery-avoidance goals, performance-approach goals encompass competing motivational forces. On one hand, performance-approach goals represent a method of obtaining competence information that is integral to well-being, as well as strivings aimed at positive and successful outcomes (see [Elliot & Moller, 2003](#)). On the other hand, this goal type can also entail maladaptive motivational concerns such as self-presentation, self-validation, and self-protection. Studies on school teachers have found performance-approach goals to be negatively linked with anxiety ([Janke et al., 2019](#)) and positively linked with perceived accomplishment ([Tönjes & Dickhäuser, 2010](#)). Other studies, however, have observed a lack of significant effects altogether, for example, regarding teacher burnout and job satisfaction (e.g., [Nitsche et al., 2013](#); [Papaioannou & Christodoulidis, 2007](#); [Retelsdorf et al., 2010](#)). In university faculty, [Rinas et al. \(2020\)](#) found appearance-approach goals to be positively linked with pride, while [Daumiller et al. \(2019\)](#) documented positive links between normative-approach goals and positive affect. While further studies are needed to clarify the role of performance-approach goals for SWB, based on these initial findings, such goals can be presumed to be beneficial for faculty members' SWB through positive directed efforts to achieve successful outcomes.

1.3.4. Performance-avoidance goals

Performance-avoidance goals (appearance- and normative-avoidance goals) encompass concerns about appearing incompetent in front of others or performing worse than others. As such, these goals are strongly tied to a focus on potential failure outcomes and low competence expectancy (see [Elliot & Church, 1997](#); [Elliot & McGregor, 2001](#); [Skaalvik, 1997](#)), thereby pointing to clear negative associations with SWB. In line with this theoretical expectation, performance-avoidance goals in school teachers have been linked with increased anxiety, occupational strain, burnout, and emotional exhaustion (see [Janke et al., 2019](#); [Nitsche et al., 2013](#); [Retelsdorf et al., 2010](#); [Tönjes & Dickhäuser, 2010](#)), as well as decreased enjoyment, perceived accomplishment, and job satisfaction ([Janke et al., 2019](#); [Tönjes & Dickhäuser, 2010](#); [Papaioannou & Christodoulidis, 2007](#)). These maladaptive patterns have also been found to persist in university faculty, where appearance-avoidance goals have been positively linked with anxiety and shame ([Rinas et al., 2020](#)), while normative-avoidance goals have been negatively linked with positive affect ([Daumiller et al., 2019](#)). Given these findings, performance-avoidance goals can be expected to have negative links with SWB in faculty.

1.3.5. Relational goals

Relational goals are centred around fostering close and caring relationships with others ([Butler, 2012](#)). Such goals can be posited to be beneficial for SWB in teacher populations, as the building and maintenance of tight-knit, positive relationships with students likely encompasses an enriching process that evokes positive perceptions of and emotions within teaching (see [Hagenauer et al., 2015](#)). Although little investigated, first studies have indeed found relational goals to be positively linked with positive affect in faculty, and enjoyment in school teachers ([Daumiller et al., 2019](#); [Wang et al., 2017](#)). Interestingly, relational goals have also been positively linked with shame and boredom in faculty, suggesting that contextual factors and characteristics of student-teacher interactions may also play a role. Nevertheless, based on the positive nature of relational goals, this goal type can be expected to foster more enjoyable and personally fulfilling teaching experiences for faculty members, as well as increased SWB.

1.3.6. Work-avoidance goals

Lastly, work-avoidance goals, which entail strivings to reduce work and get by with minimal effort, are connected to a lack of effort and perceived value and can in turn be expected to be negatively linked with SWB (see [King & McInerney, 2014](#)). Indeed, studies on school teachers have found work-avoidance goals to be associated with higher levels of anxiety, occupational strain, burnout, and anger, as well as less enjoyment ([Janke et al., 2019](#); [Nitsche et al., 2013](#); [Retelsdorf et al., 2010](#); [Wang et al., 2017](#)). Similar results have also been found in university faculty, including positive links with shame and boredom, and negative links with enjoyment and positive affect ([Daumiller et al., 2019](#); [Rinas et al., 2020](#)). These consistently detrimental findings in teaching populations suggest that work-avoidance goals are negatively linked with faculty members' SWB.

Taken together, the aforementioned works collectively illustrate theoretical and empirical grounds to expect achievement goals to differentially matter for faculty members' SWB. When considering these links, it should be noted that prior research has generally used less differentiated conceptualizations of achievement goals that, as also suggested by Pekrun et al. (2006, 2009) and Daniels et al. (2008), should be expanded on to allow for more in-depth findings. Moreover, the studies mentioned did not investigate the full scope of multifaceted SWB in faculty, but rather individual facets of it, potentially having omitted important insights. Our study thereby aims to build on these findings by incorporating more differentiated achievement goal and SWB perspectives to gather further information into how specific achievement goals assessed in faculty research are linked with multifaceted SWB.

1.4. *Tying in different countries and higher education institutions*

Given that studies investigating faculty members' achievement goals have focused rather exclusively on German faculty members who teach at universities, it is crucial that this research be expanded to include diverse samples that allow for insights into generalizability. In the present study, we aimed to contribute to this line of research by sampling faculty members from different countries, namely Germany, the USA, and India. Germany and the USA constitute individualistic countries in which values such as individual autonomy and independence are highly encouraged (Hofstede, 2001; Schwartz, 2004). India, however, represents a more collectivist country outside of the western hemisphere that emphasizes the construal of the self in relation to others and belonging to in-groups that value loyalty (Mishra et al., 2006; Misra, 2001). Aside from examining faculty members from different countries, the types of higher education institutions that faculty members are employed in—such as teaching- or research-oriented institutions—are also important to consider. Teaching-oriented institutions are more geared towards providing students with practically relevant skills and knowledge that can be readily applied to the labour market. Research-oriented institutions, on the other hand, emphasize theoretical and empirical developments in different fields and focus more strongly on conducting research.

When researching psychological phenomena across different contexts (e.g., different countries and higher education institutions), it is important to consider whether the constructs being examined are perceived similarly by individuals, as well as potential similarities and differences in the associations between these constructs. To this end, the universalist approach has been identified as being particularly useful in guiding cross-contextual research in motivational science. This approach assumes that basic motivational processes are universal across cultures and contexts (see King et al., 2017; Pintrich, 2003; Zusho & Clayton, 2011). In terms of the present study, this would imply that the nature of the different achievement goals persists across faculty from different countries and institution types. Indeed, several studies have found individual motivations to be invariant and to have largely similar linkages with aspects of SWB across countries and contexts (e.g., Chen et al., 2014; Sheldon et al., 2004). Nevertheless, the universalist approach also acknowledges the possibility of uncovering potential differences in motivation-outcome links and emphasizes that it is crucial that this be empirically tested rather than merely assumed. For example, it could be the case that avoidance goals matter more strongly for SWB in collectivistic countries such as India compared to individualistic countries such as Germany or the USA. Similarly, teaching goals may matter more for SWB in faculty members employed in teaching-oriented institutions, where their identities and work may be more entrenched in teaching. Taken together, although goal-SWB linkages in faculty can be expected to be invariant across countries and institution types, potential differences cannot be ruled out unless empirically examined.

2. Current study and hypotheses

We sought to investigate the relations between faculty members' achievement goals and their multifaceted SWB, including positive emotions, negative emotions, personal accomplishment, and life satisfaction. Based on the theoretical nature of achievement goal pursuit, as well as the empirical evidence introduced above, we tested the following hypotheses:

- (H1) Mastery-approach goals (learning- and task-approach goals) are positively associated with SWB.
- (H2) Mastery-avoidance goals (learning- and task-avoidance goals) are negatively associated with SWB.
- (H3) Performance-approach goals (normative- and appearance-approach goals) are positively associated with SWB.
- (H4) Performance-avoidance goals (normative- and appearance-avoidance goals) are negatively associated with SWB.
- (H5) Relational goals are positively associated with SWB.
- (H6) Work-avoidance goals are negatively associated with SWB.

Research indicates that learning and task components of mastery goals and appearance and normative components of performance goals may have unique relations with faculty members' work experiences (e.g., Daumiller et al., 2019; Rinas et al., 2020). However, there is little empirical evidence indicating how they may differ in terms of SWB. We thereby examined differences between their associations without directed hypotheses.

Lastly, concerning generalizability of the effects of goals for SWB across the different countries and higher education institutions, we expected, based on the assumption that the underlying psychological mechanisms are general in nature, that:

- (H7) The associations between goals and SWB are invariant across the different countries and higher education institutions.

3. Method

3.1. Participants and procedure

In the fall of 2018, we invited faculty members from Germany, the USA, and India per email to participate in an online survey assessing their achievement goals and multifaceted SWB, as well as other variables of interest². The email invitation contained a description of the main aims of the study and details about survey duration and compensation. Participants were also informed that anonymity and confidentiality of their data would be guaranteed, that their participation was completely voluntary, and that they could stop the survey at any point without consequence. Vouchers were provided to the participants as incentive. This study was conducted in full accordance with the ethical principles of the German Psychological Society and the American Psychological Association regarding research involving human participants and the institutional requirements at the respective university.

Initially, 1775 participants began the survey, however, we ex-ante decided to exclude participants in the analyses who dropped out prior to having completed the dependent variables of interest, as there would have otherwise not been enough information to impute their missing answers. The final sample that our analyses are based on therefore included 1335 faculty members from Germany ($n = 598$; female = 35.3%; 53.0% employed at research-oriented institutions; 50.7% tenured), the USA ($n = 344$; female = 39.8%; 54.4% employed at research-oriented institutions; 68.0% tenured), and India ($n = 393$; female = 22.4%; 66.4% employed at research-oriented institutions; 58.8% tenured)³.

3.2. Measures

3.2.1. Achievement goals

Achievement goals for teaching were measured using the scale by Daumiller et al. (2019). Following the stem 'In my current teaching activities...' four questions were asked for each goal type. Sample items can be found in Table 1. Answers were recorded on a Likert-type scale ranging from 1 (*do not agree at all*) to 8 (*agree completely*). Reliability analyses indicated acceptable values (see McDonald's omega values in Table 2, with the lowest value being $\omega = .77$).

3.2.2. Multifaceted subjective well-being

Positive and negative emotions. Positive and negative discrete emotions, including joy, anger, and anxiety regarding teaching were measured with four items each using the Teacher Emotion Scales (TES; Frenzel et al., 2016). Participants indicated their agreement with statements on a Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Sample items include: 'I generally enjoy teaching' for joy ($\omega = .82$), 'I often feel annoyed while teaching' for anger ($\omega = .78$), and 'I feel uneasy when I think about teaching' for anxiety ($\omega = .85$).

Domain satisfaction. To assess participants' personal accomplishment regarding their role as a teacher (a key aspect of their career satisfaction), we used the 8-item personal accomplishment subscale (sample item: 'I have accomplished many worthwhile things in this job; $\omega = .74$) from the Maslach Burnout Inventory for Educators (MBI-E; Maslach et al., 1996). Responses were recorded on a Likert-type scale ranging from 1 (*never*) to 7 (*every day*).

Global life satisfaction. Life satisfaction was measured using the 5-item scale (sample item: 'In most ways my life is close to ideal', $\omega = .87$) by Diener et al. (1985). Participants indicated their agreement with the statements on a Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

4. Analyses

Data was analysed using R and R-Studio Statistical Computing Software Version 4.0.2. (R Core Team, 2020). Prior to conducting our main analyses, we verified that the data fulfilled important assumptions that underlie structural equation modelling. First, based on the conducted power analysis (see section 3.1), our sample can be considered sufficient for the proposed analyses. This is also reflected in the ratio of estimated parameters to sample size being 1:6, which falls within the recommended range of 1:5 and 1:10 suggested by Bentler and Chou (1987). Next, the distribution of the data was analysed, and the presence of outliers was inspected, which did not result in the removal of any cases. To yield adequate parameter estimates under the condition of non-normal data distribution, we used the maximum likelihood estimator with robust standard errors (MLR; see Gao et al., 2020). Missing data ($\leq 13\%$ for each item) was handled using full-information maximum likelihood estimation (FIML). To ensure that our findings were not biased due to multicollinearity problems, we examined the latent correlations followed by computing the variance inflation factor (VIF) of the predictor variables. The largest VIF value was 2.6, where values above 5 indicate a problematic amount of collinearity (James et al., 2013).

² As a separate research question, we assessed the interplay between participants' goals and need satisfaction for their positive affect, teaching quality, and professional learning based on the same dataset (see Daumiller et al., 2021).

³ We conducted an a priori power analysis which suggested a minimum sample size of 978 for the detection of a small to medium effect size of 0.15 with a power of 0.80.

Table 2*Descriptive statistics and correlations: achievement goals and SWB variables.*

	<i>M</i>	<i>SD</i>	Skew	ω_h	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Achievement goals																			
1 Task-approach	7.28	0.81	-1.60	.77															
2 Task-avoidance	6.79	1.48	-1.74	.82	.27														
3 Learning-approach	7.13	1.07	-1.72	.90	.51	.16													
4 Learning-avoidance	6.11	1.91	-1.00	.89	.27	.56	.38												
5 Appearance-approach	5.56	1.66	-0.65	.88	.25	.19	.23	.19											
6 Appearance-avoidance	5.60	1.98	-0.76	.91	.17	.48	.10	.39	.58										
7 Normative-approach	4.18	2.17	0.01	.95	.17	.11	.20	.10	.56	.40									
8 Normative-avoidance	5.45	2.16	-0.67	.92	.15	.35	.10	.27	.50	.67	.51								
9 Relational	5.97	1.51	-0.72	.82	.29	.13	.37	.19	.19	.16	.29	.18							
10 Work-avoidance	2.40	1.74	1.40	.93	-.21	-.01	-.14	-.04	.17	.15	.19	.20	-.04						
Subjective well-being																			
11 Joy	3.48	0.50	-0.94	.82	.42	.08	.29	.18	.07	.03	.06	.05	.21	-.23					
12 Anger	1.54	0.55	1.26	.78	-.12	-.04	-.04	-.02	.14	.07	.12	.09	.01	.33	-.31				
13 Anxiety	1.66	0.63	0.99	.85	-.17	-.03	-.10	-.09	.10	.13	.07	.10	.02	.29	-.37	.40			
14 Personal accomplishment	5.33	0.81	-0.42	.74	.36	.16	.29	.20	.10	.11	.12	.12	.26	-.20	.54	-.21	-.31		
15 Life satisfaction	5.38	1.12	-0.99	.87	.12	.04	.01	.02	.02	.03	.01	-.01	-.03	-.09	.26	-.20	-.22	.26	
Demographic Variables																			
16 Gender	.33	—	0.72	—	.06	.05	.04	.03	-.01	.02	-.12	.01	.01	-.12	.02	-.06	.02	.06	.01
17 Teaching experience	14.29	10.43	0.76	—	.02	-.04	-.03	-.02	-.07	-.10	.01	-.06	.07	-.24	.12	-.11	-.22	.10	.06
18 PhD	.80	—	-1.54	—	.03	-.08	.06	-.06	-.04	-.08	.06	-.03	.14	-.09	.02	-.06	-.09	.03	.05
19 Tenure	.59	—	-0.36	—	.01	.05	.03	.03	-.08	-.08	-.06	-.05	-.05	-.16	.02	-.13	-.14	.05	.08

Note. Theoretical range for achievement goals: 1–8; joy, anger, and anxiety: 1–4; personal accomplishment: 1–7; and life satisfaction: 1–7. Gender was coded as 1 = female, 0 = male; teaching experience refers to years of teaching; PhD status was coded as 1 = yes, 0 = no; tenure status was coded as 1 = yes, 0 = no. All statistically significant correlations (two-sided) are presented in bold ($p < .05$).

4.1. Measurement invariance testing

As a fundamental first step in our analyses, we tested for measurement invariance regarding the different countries and higher education institutions using item parcels as indicators, which are used to reduce error in complex model estimations (Little et al., 2013). Specifically, we tested for configural, metric, and scalar invariance. Configural invariance is achieved by fitting the specified model onto each of the groups without equality constraints. Metric invariance involves constraining the factor loadings to be equivalent across groups. Lastly, scalar invariance is achieved by constraining both the factor loadings and intercepts to be equivalent across groups. If at any given step the difference in model fit becomes significantly worse, invariance is rejected. To determine if differences in model fit were significant, we followed Chen (2007) and considered a deterioration of $\Delta CFI \geq .010$ and $\Delta RMSEA \geq .015$ or $\Delta SRMR \geq .010$ as indicative of non-invariance. This process was carried out twice, once for the different countries, and once for the different institution types.

4.2. Structural equation modelling

To test the hypothesized associations between achievement goals and the facets of SWB, we conducted structural equation modelling using the lavaan package by Rosseel (2012). Specifically, we regressed all SWB variables on all achievement goals and allowed for correlations between the achievement goals and between the SWB variables. Similar to the measurement invariance testing, we modelled achievement goals and SWB variables as latent variables based on item parcels. We additionally controlled for teaching experience, gender, tenure status, and PhD status, as these variables could potentially impact the results. To determine goodness-of-fit of the model, we used the cut-off values proposed by Hu and Bentler (1999): Comparative Fit Index ($CFI \geq .95$), Tucker-Lewis Index ($TLI \geq .95$), Root-Mean-Square Error of Approximation ($RMSEA \leq .05$), and Standardized Root-Mean-Square Residual ($SRMR \leq .05$).

4.3. Generalizability across countries and higher education institutions

Lastly, we conducted invariance analyses with the full model to determine if the associations were robust across the countries and institution types. Regarding the latter point, we used the same steps and criteria as described for the measurement invariance analyses and in a final step, also restricted the regressions to be equal across groups.

5. Results

5.1. Descriptive results

Descriptive statistics (see Table 2) revealed moderate to high means for the achievement goals, apart from work-avoidance goals. This falls in line with mean values reported in other studies examining faculty members' achievement goals for teaching (e.g., Dautmiller et al., 2016, 2019). For the different aspects of SWB, moderate to high means were reported for joy, personal accomplishment, and life satisfaction, while lower means were reported for anger and anxiety. For both the achievement goals as well as the aspects of SWB, the entire theoretically possible range was used apart from task-approach goals, pointing to inter-individual differences. Looking at the magnitude of the correlations (see Table 2), primarily small to moderate correlations were observed. In terms of correlational trends, mastery-approach, mastery-avoidance, and relational goals were rather positively related to aspects of SWB, while correlations between performance-approach and -avoidance goals with aspects of SWB were mixed, and work-avoidance goals had clear negative correlations with aspects of SWB.

5.2. Measurement invariance

As displayed in Table 3, our results confirmed scalar invariance regarding the different countries and higher education institutions. Thus, it can be stated that participants from Germany, the USA, and India, as well as from research- and teaching-oriented higher

Table 3
Measurement invariance across countries and higher education institutions.

	df	χ^2	χ^2/df	CFI	TLI	RMSEA	SRMR	ΔCFI	$\Delta RMSEA$
Measurement Invariance across Countries									
Configural invariance	900	1549.79	1.72	.976	.965	.040	.026		
Metric invariance	930	1629.39	1.75	.974	.963	.041	.028	.002	.001
Scalar invariance	960	1890.56	1.97	.965	.953	.047	.030	.009	.006
Measurement Invariance across Institutions									
Configural invariance	600	1112.42	1.85	.981	.972	.036	.022		
Metric invariance	615	1134.23	1.84	.980	.972	.036	.023	.001	.000
Scalar invariance	630	1146.25	1.82	.980	.973	.035	.023	.000	.001

Note. For analyses concerning countries, $n_{(\text{German faculty})} = 598$, $n_{(\text{US-American faculty})} = 344$, and $n_{(\text{Indian faculty})} = 393$. For analyses concerning institution types, $n_{(\text{faculty employed in research-oriented institutions})} = 765$, $n_{(\text{faculty employed in teaching-oriented institutions})} = 570$

education institutions interpreted the achievement goal and SWB measures in the same way. Having confirmed this central methodological premise, we proceeded to investigate the hypothesized associations between achievement goals and aspects of SWB next.

5.3. Associations between achievement goals and subjective well-being

The results of the overall structural equation model examining the associations between faculty achievement goals and facets of SWB (joy, anger, anxiety, personal accomplishment, and life satisfaction) can be found in Table 4 and are also visualized in Fig. 1⁴. The model yielded a good fit to the data (RMSEA = .04, SRMR = .03, CFI = .98; TLI = .97; $\chi^2 = 975.28$; $df = 364$; $p < .01$) with achievement goals explaining up to 32% of the variance in the SWB variables.

Concerning the positive emotion facet, task-approach and learning-avoidance goals were positively associated with joy, while task-avoidance and work-avoidance goals were negatively associated with joy.

For the negative emotion facet, appearance-approach and work-avoidance goals were positively associated with anger, while task-approach goals were negatively associated with anger. Moreover, appearance-avoidance, work-avoidance, and relational goals had positive associations with anxiety, while task-approach and learning-avoidance goals had negative associations with anxiety.

Regarding the facet of domain (career) satisfaction, task-approach and relational goals were positively associated with personal accomplishment, while work-avoidance goals were negatively associated with personal accomplishment.

Lastly, for the global life satisfaction facet, task-approach goals were positively associated with life satisfaction, while learning-approach and relational goals were negatively associated with life satisfaction.

5.4. Generalizability of associations across countries and higher education institutions

Concerning the aforementioned associations between achievement goals and aspects of SWB, we conducted invariance analyses with the full structural equation model where in a final step, we restricted the regressions to be equal across the groups. As displayed in Table 5, this did not lead to a statistically significant deterioration of the model fit. It can thereby be inferred that the associations did not significantly differ between faculty from different countries or higher education institutions.

6. Discussion

Faculty well-being has become a growing research topic on an international level with the objective of understanding factors that can support happiness, health, and vitality in this critical population. The aim of the present study was to contribute to this line of research by expanding the sparse literature on how faculty members' individual motivations, specifically their achievement goals, are associated with their multifaceted SWB. As prior research on faculty well-being has often used less differentiated theoretical frameworks—or none at all—we provided a detailed overview of these associations using theoretically sound achievement goal and well-being frameworks. Other strengths of our study include investigating an important yet under-studied population, contributing findings towards the little investigated role of achievement goals for how individuals feel in terms of well-being, as well as the incorporation of a large, diverse sample of faculty members from different countries and higher education institutions, allowing for investigations into generalizability of the findings.

6.1. Insights into faculty members' goals and subjective well-being

6.1.1. Mastery-approach and -avoidance goals

Concerning mastery-approach goals, Hypothesis 1 was partially confirmed in that faculty members with strivings to complete their teaching tasks well (task-approach goals) experienced more joy, personal accomplishment at work, and life satisfaction, as well as less anger and anxiety. This corroborates the theoretical notion that such goals facilitate conscientious efforts in fulfilling task requirements, resulting in positive experiences that support SWB. Transferring this finding to the teaching context, faculty members may benefit from gearing their focus towards conducting high quality teaching. When it comes to learning-approach goals, no statistically significant associations were found apart from a negative association with life satisfaction. This may suggest that striving to conduct teaching-related tasks well and succeed in teaching (task-approach goals) may be more relevant for and closely linked to faculty SWB, while fostering knowledge and competencies (learning-approach goals) may be more relevant for professional learning and development (see also Daumiller & Dresel, 2020a for similar argumentation in researchers). Moreover, the lack of effects of learning-approach goals is not entirely surprising, as other studies that have simultaneously examined learning- and task-approach goals have also found statistically significant effects for one or the other. For example, Daumiller et al. (2019) found that only task-approach goals were statistically significantly associated with positive affect, while Rinas et al. (2020) noted that only learning-approach goals were associated with faculty emotions. Taken together, this speaks to the importance of disentangling mastery-approach goals into task and learning components to better understand their independent links with aspects of faculty SWB.

For mastery-avoidance goals, task-avoidance goals were negatively associated with SWB, albeit only concerning the positive emotion facet (partially corroborating Hypothesis 2). This implies that faculty who are primarily concerned with or worried about not

⁴ These associations remained robust while also controlling for relevant variables such as gender, teaching experience, PhD status, and tenure status.

Table 4*Structural equation modelling: associations between achievement goals and SWB.*

Achievement goals	Subjective well-being				
	Joy	Anger	Anxiety	Personal accomplishment	Life satisfaction
Task-approach	.54 (.05)	-.13 (.04)	-.22 (.05)	.37 (.07)	.25 (.10)
Task-avoidance	-.17 (.03)	-.02 (.02)	.01 (.03)	-.02 (.03)	-.03 (.05)
Learning-approach	-.06 (.03)	.04 (.03)	.02 (.03)	.01 (.04)	-.14 (.06)
Learning-avoidance	.16 (.01)	-.02 (.01)	-.13 (.02)	.09 (.02)	.04 (.03)
Appearance-approach	-.04 (.02)	.14 (.02)	.06 (.02)	-.07 (.02)	-.02 (.04)
Appearance-avoidance	-.04 (.02)	-.02 (.02)	.16 (.02)	-.01 (.02)	.05 (.03)
Normative-approach	-.01 (.01)	-.04 (.01)	-.03 (.01)	.06 (.02)	.05 (.02)
Normative-avoidance	.05 (.01)	.02 (.01)	-.02 (.01)	.06 (.02)	-.05 (.02)
Relational	.06 (.01)	.06 (.01)	.13 (.01)	.16 (.02)	-.10 (.03)
Work-avoidance	-.10 (.01)	.31 (.01)	.20 (.02)	-.13 (.02)	-.06 (.02)
Gender (female = 1, male = 0)	-.02 (.03)	-.01 (.03)	.05 (.03)	.01 (.05)	.01 (.07)
Teaching experience (in years)	.10 (.01)	.01 (.01)	-.17 (.01)	.06 (.01)	.01 (.01)
PhD (yes = 1, no = 0)	-.04 (.04)	-.02 (.04)	-.02 (.05)	-.04 (.05)	.04 (.09)
Tenure (yes = 1, no = 0)	-.03 (.03)	-.08 (.03)	-.03 (.04)	.02 (.05)	.07 (.08)
R ²	.32	.15	.18	.29	.05

Note. $N = 1335$. Reported are standardized coefficients with standard errors in brackets of the associations between achievement goals and SWB variables. All variables were estimated as latent variables using item parcels as indicators. The model yielded a good fit to the data (RMSEA = .04, SRMR = .03, CFI = .98; TLI = .97; $\chi^2 = 975.28$; $df = 364$; $p < .01$). Statistically significant coefficients ($p < .05$) are displayed in boldface.

conducting their teaching-related tasks well may experience less joy in teaching. In contrast, learning-avoidance goals were found to have positive associations with joy and negative associations with anxiety. Although there is minimal research on how learning-avoidance goals should be associated with facets of faculty SWB, the available empirical evidence suggests negative (e.g., [Rinas et al., 2020](#)) or no statistically significant associations ([Daumiller et al., 2019](#)). Nevertheless, it is not unreasonable to expect that faculty who engage in gathering or upkeeping skills and knowledge may perceive this as a positive experience tied to joy and reduced anxiety. Taken together, these findings contribute to the scarce literature on mastery-avoidance goals in general and suggest that learning-avoidance goals may also be relevant for faculty members' SWB.

6.1.2. Performance-approach and -avoidance goals

We predicted that faculty members' performance-approach goals (Hypothesis 3) would be positively associated with their SWB through positive efforts to achieve successful outcomes and through proactive tendencies. However, this hypothesis was not confirmed. Instead, faculty members' appearance-approach goals were linked with anger, while no significant relations were found for normative-approach goals. This stands in contrast to findings in school teacher populations (e.g., [Janke et al., 2019](#); [Tönjes & Dickhäuser, 2010](#)), as well as studies in faculty ([Daumiller et al., 2019](#); [Rinas et al., 2020](#)) that have documented protective or positive links with aspects of SWB. One explanation for this finding could be that faculty members with strong appearance-approach goals may require acknowledgment from others to experience increased SWB. For example, if a faculty member strives to conduct their teaching tasks well primarily because they want others to notice how good their teaching is, but receives no such recognition (e.g., from their students, supervisor, or colleagues), this may induce feelings of anger and frustration. Thus, examining perceived recognition may be an interesting moderator to explore in future research. Nevertheless, these findings should be interpreted with caution, especially paired with the theoretical complexity of performance-approach goals and the nascent stage of development in research examining links with aspects of SWB in teacher populations. Taken together, there is a clear need for more studies to gather a comprehensive overview of empirical patterns between performance-approach goals and SWB—especially regarding normative and appearance components, which have received little empirical attention thus far.

Regarding faculty members' performance-avoidance goals, Hypothesis 4 was only partially confirmed in that positive links were found between appearance-avoidance goals and anxiety, however, for normative-avoidance goals—similar to normative-approach goals—no statistically significant associations were found with aspects of SWB. The former finding stands in line with prior research on faculty as well as the general agreement within the literature that performance-avoidance goals are deleterious forms of regulation (see [Elliot & Moller, 2003](#)). Specifically, faculty members who are primarily worried about appearing incompetent in front of others as opposed to completing tasks for the sake of their own interest and development can be expected to be focused on negative performance evaluation and failure, resulting in negative emotions such as anxiety (see also [Elliot & McGregor 1999](#); [Pekrun & Stephens, 2009](#)). Thus, such goals can be considered problematic for faculty members, especially when paired with the highly competitive standards that characterize academia. Gathering a better understanding of potential antecedents of performance-avoidance goals in faculty members, such as fear of failure, worry-conducive climates, or need for achievement, may thereby be a promising step forward (see e.g., [Elliot & McGregor, 2001](#)).

6.1.3. Relational goals

We expected faculty members' relational goals to encompass an enriching process of developing close-knit relationships with students, thereby eliciting positive links SWB (Hypothesis 5). We found partial support for this hypothesis in that relational goals were indeed positively linked to faculty members' personal accomplishment at work. As teaching is often a central and valued component of

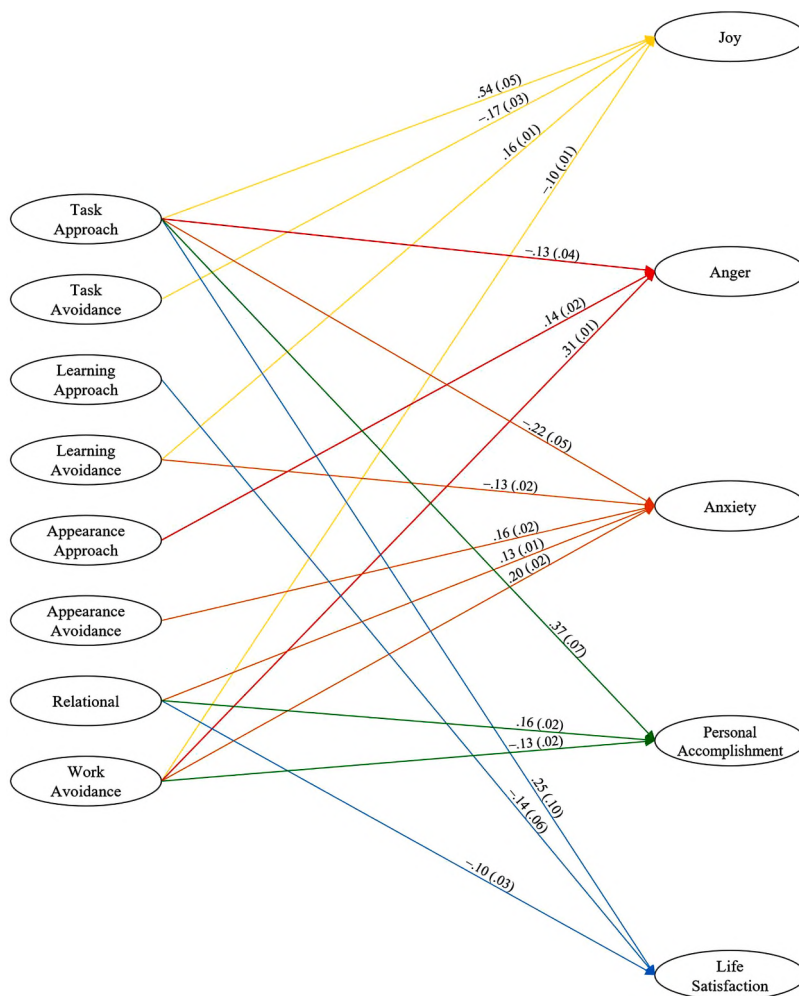


Fig. 1. Results of the Structural Equation Model on the Linkages Between Goals and Subjective Well-being

Note. Reported are only statistically significant ($p < .05$) standardized coefficients with standard errors in brackets. All variables were estimated as latent variables using item parcels as indicators. Normative-approach and normative-avoidance goals were also included in the model but are not depicted due to not having statistically significant associations with any SWB variables. The model yielded a good fit to the data (RMSEA = .04, SRMR = .03, CFI = .98; TLI = .97; $\chi^2 = 975.28$; $df = 364$; $p < .01$). Correlations between achievement goals and between facets of SWB were modelled but are not depicted for clarity. Likewise, indicators of the latent variables, loadings, and residuals are not visualized for clarity.

faculty members' work, it is sensible that striving to build relationships and have positive interactions with students can positively impact faculty members' sense of effectiveness and accomplishment. This coincides with prior research that has found relational goals to be positively linked with aspects of SWB in teaching populations (e.g., Daumiller et al., 2019; Wang et al., 2017), as well as the notion that student-teacher interactions can have a marked positive influence on faculty (see Hagenauer & Volet, 2014). However, relational goals were also positively linked to anxiety and negatively linked to life satisfaction. One potential explanation for this finding could entail the nature of the higher education teaching context (often involving larger class sizes, less personal contact, and stronger emphasis on teacher-focused instruction), which may make it difficult to foster close-knit relations with students, facilitating negative experiences for faculty with strong relational goals. In addition, and as recognized by Kiltz et al. (2020) in their interview study on university faculty, just as student-teacher interactions have the potential to be beneficial for faculty SWB, they can also be detrimental. Thus, research should follow up on this by more closely examining characteristics of student-teacher relations (e.g., closeness, conflict, dependency, humour) that facilitate positive linkages with relational goals.

6.1.4. Work-avoidance goals

Lastly, our findings strongly supported Hypothesis 6, which presumed that work-avoidance goals would be detrimental for faculty members' SWB. This corroborates with prior research that has consistently found teachers who endorse work-avoidance goals to experience adverse linkages with their SWB (e.g., Janke et al., 2019; Nitsche et al., 2013; Retelsdorf et al., 2010; Wang et al., 2017). According to King & McInerney (2014), work-avoidance goals are characterized in terms of minimal work expenditure rather than

Table 5*Invariance testing goal-SWB links across countries and higher education institutions.*

	<i>df</i>	χ^2	χ^2/df	CFI	TLI	RMSEA	SRMR	Δ CFI	Δ RMSEA
Measurement Invariance across Countries									
Regression paths free	1228	3678.07	3.00	.911	.878	.067	.074		
Regression paths fixed	1368	3907.78	2.86	.908	.886	.065	.078	.003	.002
Measurement Invariance across Institutions									
Regression paths free	756	1391.45	1.84	.976	.967	.035	.023		
Regression paths fixed	939	1702.80	1.81	.971	.968	.035	.044	.005	.000

Note. For analyses concerning countries, $n_{(\text{German faculty})} = 598$, $n_{(\text{US-American faculty})} = 344$, and $n_{(\text{Indian faculty})} = 393$. For analyses concerning institution types, $n_{(\text{faculty employed in research-oriented institutions})} = 765$, $n_{(\text{faculty employed in teaching-oriented institutions})} = 570$.

striving for confidence. When individuals pursue such goals in contexts that constitute central areas of their lives (e.g., school, the workplace), they may feel particularly bad about themselves and experience corresponding negative associations with their SWB. At the same time, faculty members may also pursue work-avoidance goals as an adverse coping strategy to deal with the multitude of different tasks and responsibilities they face at work, potentially alleviating short-term occupational stress but exacerbating longer term negative consequences (see also [Daumiller & Dresel, 2020a](#)). Taken together, efforts should be made to understand factors that lead faculty to pursue work-avoidance goals in order to identify methods to reduce these strivings. For example, future researchers might focus on examining relevant individual-level factors that can impact work-avoidance goals, such as help-seeking behaviours or implicit theories of intelligence (see [King & McInerney, 2014](#); [Stockinger et al., 2021](#), respectively), as well as institution- and department-level factors that may be conducive to maladaptive goal strivings, such as leadership styles, feedback culture, and work climate (see [Dickhäuser et al., 2021](#)).

6.2. Integrating findings across countries and institution types

Studies examining goal-SWB links in faculty have not yet expanded to an international narrative that considers other higher education institutions aside from universities. As previously mentioned, research thus far has rather exclusively focused on German faculty working in universities. Although these German-centred findings constitute a pivotal catalyst to faculty motivation research, it is also important to gather a broader, more international understanding of these associations. To this end, aside from our measurement invariance findings indicating that participants perceived the achievement goal and SWB constructs similarly, we found, consistent with Hypothesis 7, that the associations between achievement goals and the SWB facets did not statistically significantly differ across contexts. This signifies that the underlying goal striving processes and their links with SWB may be considered more general in nature and may be transferrable to other higher education contexts. However, researchers should continue to investigate these associations in other countries to gather further information into potential similarities and differences of the psychological processes at work.

6.3. Limitations and future research

Several limitations should be acknowledged when interpreting our findings. First, given the cross-sectional design of our study, statements on temporal trends or causality cannot be made, highlighting a need for longitudinal research. Within this, it is important to mention that in the present study, we tested a hypothesized model that was consistent with dominant theoretical assumptions on the linkages between achievement goals and SWB. However, future researchers should also examine alternative theoretically grounded models, such as how aspects of SWB might predict achievement goals (see [Daniels et al., 2009](#); [Linnenbrink & Pintrich, 2002](#); [King & McInerney, 2016](#)). Additionally, more complex relationships should be examined to expand our findings, such as the inclusion of theoretically relevant mediators or moderators between goals and SWB (e.g., stress appraisals, coping strategies), or understanding how faculty SWB might impact other important variables, such as research productivity or achievement ([Stunpisky et al., 2019](#)). Adding to this, taking a more intensive look contextual factors (e.g., organisational climate, relations with co-workers, etc.) and their role in the predictive utility of achievement goals would be an important research step. As the current study investigated achievement goals for the domain of teaching, future research should also consider how these associations function within other relevant domains that have been found to be prominent for faculty, such as research or administration (see [Daumiller & Dresel, 2020b](#); [Ismayilova & Klassen, 2019](#); [Thies & Kordts-Freudinger, 2019](#)). Lastly, our findings speak to the importance of taking a differentiated approach to investigating goal-SWB relations in faculty, which can help to underpin which facets should be prioritized in terms of support. Against this background, it is crucial for future studies to take up multifaceted approaches to move towards unification in how faculty well-being is conceptualized, which is currently inconsistent within the literature, making understandability, generalization, and intervention development more challenging.

6.4. Practical implications

Although more research is required to further understand the links between faculty achievement goals and SWB, first practical implications can already be drawn. Following the interconnections found between goals and SWB, intervention research and professional development opportunities aimed at supporting faculty members should not only attend to aspects of SWB, but also to goal striving processes. To this end, a focus should be placed on educating faculty members about the relevance of achievement goals for

SWB—particularly emphasizing task-approach goals as being beneficial for SWB, and work-avoidance goals as being detrimental. Such an approach may be especially promising, as faculty members likely have more control over their personal goal striving processes (which have been found malleable; see e.g., Darnon et al., 2007; Daumiller & Janke, 2020; Dickhäuser et al., 2011) as opposed to other factors linked to their SWB, such as high workloads or job instability. Aside from professional development opportunities, department chairs and university administrators should also work to promote adaptive goal striving processes within the work climate. This could be achieved by encouraging faculty to conduct their teaching tasks well and by guiding them towards resources to learn how to do so (i. e., promoting task-approach goals), as well as acknowledging the high work load that faculty members face and providing them with methods to deal with stress and strain (i.e., discouraging work-avoidance goals). Such initiatives are not only important for supporting faculty to thrive, but also for the attainment of educational goals and institutional success on a broader level.

Funding details

This work was supported by the German Research Foundation (Deutsche Forschungsgemeinschaft - DFG) under Grant DR 454/8–1 awarded to Markus Dresel.

Data Availability Statement

The data, code, and documentation generated for this research are available upon request to the corresponding author.

Declaration of Competing Interest

The authors report no declarations of interest.

References

- Abele, A. E., Spurk, D., & Volmer, J. (2011). The construct of career success: Measurement issues and an empirical example. *Journal for Labour Market Research*, 43(3), 195–206. <https://doi.org/10.1007/s12651-010-0034-6>
- Baranik, L. E., Stanley, L. J., Bynum, B. H., & Lance, C. E. (2010). Examining the construct validity of mastery-avoidance achievement goals: A meta-analysis. *Human Performance*, 23(3), 265–282. <https://doi.org/10.1080/08959285.2010.488463>
- Bentler, P. M., & Chou, C-P. (1987). Practical Issues in Structural Modeling. *Sociological Methods & Research*, 16(1), 78–117. <https://doi.org/10.1177/0049124187016001004>
- Butler, R. (2007). Teachers' achievement goal orientations and associations with teachers' help seeking: Examination of a novel approach to teacher motivation. *Journal of Educational Psychology*, 99(2), 241–252. <https://doi.org/10.1037/0022-0663.99.2.241>
- Butler, R. (2012). Striving to connect: Extending an achievement goal approach to teacher motivation to include relational goals for teaching. *Journal of Educational Psychology*, 104(3), 726–742. <https://doi.org/10.1037/a0028613>
- Butler, R., & Shibaz, L. (2008). Achievement goals for teaching as predictors of students' perceptions of instructional practices and students' help seeking and cheating. *Learning and Instruction*, 18(5), 453–467. <https://doi.org/10.1016/j.learninstruc.2008.06.004>
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E., Van der Kaap-Deeder, J., et al. (2014). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion*, 39(2), 216–236. <https://doi.org/10.1007/s11031-014-9450-1>
- Chen, C. (2015). Incremental validity of achievement goals in predicting subjective well-being among university students. *Journal of Cognitive Education and Psychology*, 14(1), 38–62. <https://doi.org/10.1891/1945-8959.14.1.38>
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(3), 464–504. <https://doi.org/10.1080/10705510701301834>
- Daniels, L. M., Haynes, T. L., Stupnisky, R. H., Perry, R. P., Newall, N. E., & Pekrun, R. (2008). Individual differences in achievement goals: A longitudinal study of cognitive, emotional, and achievement outcomes. *Contemporary Educational Psychology*, 33(4), 584–608. <https://doi.org/10.1016/j.cedpsych.2007.08.002>
- Daniels, L. M., Perry, R. P., Stupnisky, R. H., Stewart, T. L., Newall, N. E. G., & Clifton, R. A. (2014). The longitudinal effects of achievement goals and perceived control on university student achievement. *European Journal of Psychology of Education*, 29(2), 175–194. <https://doi.org/10.1007/s10212-013-0193-2>
- Daniels, L. M., Stupnisky, R. H., Pekrun, R., Haynes, T. L., Perry, R. P., & Newall, N. E. (2009). A longitudinal analysis of achievement goals: From affective antecedents to emotional effects and achievement outcomes. *Journal of Educational Psychology*, 101(4), 948–963. <https://doi.org/10.1037/a0016096>
- Darnon, C., Butera, F., & Harackiewicz, J. M. (2007). Achievement goals in social interactions: Learning with mastery vs. performance goals. *Motivation and Emotion*, 31(1), 61–70. <https://doi.org/10.1007/s11031-006-9049-2>
- Daumiller, M., Dickhäuser, O., & Dresel, M. (2019). University instructors' achievement goals for teaching. *Journal of Educational Psychology*, 111(1), 131–148. <https://doi.org/10.1037/edu0000271>
- Daumiller, M., & Dresel, M. (2020a). Researchers' achievement goals, work stress, and professional development: Results of three studies. *Contemporary Educational Psychology*, 61, Article 101843. <https://doi.org/10.1016/j.cedpsych.2020.101843>
- Daumiller, M., & Dresel, M. (2020b). Teaching and research: Specificity and congruence of university faculty achievement goals. *International Journal of Educational Research*, 99, Article 101460. <https://doi.org/10.1016/j.ijer.2019.08.002>
- Daumiller, M., Grassinger, R., Dickhäuser, O., & Dresel, M. (2016). Structure and relationships of university instructors' achievement goals. *Frontiers in Psychology*, 7 (375), 1–14. <https://doi.org/10.3389/fpsyg.2016.00375>
- Daumiller, M., & Janke, S. (2020). Effects of performance goals and social norms on academic dishonesty in a test. *British Journal of Educational Psychology*, 90(2), 537–559. <https://doi.org/10.1111/bjep.12310>
- Daumiller, M., Janke, S., Rinas, R., Dickhäuser, O., & Dresel, M. (2021). Need satisfaction and achievement goals of university faculty: An international study of their interplay and relevance for positive affect, teaching quality, and professional learning. *Higher Education*. <https://doi.org/10.1007/s10734-021-00736-1>
- Daumiller, M., Stupnisky, R., & Janke, S. (2020). Motivation of higher education faculty: Theoretical approaches, empirical evidence, and future directions. *International Journal of Educational Research*, 99, Article 101502. <https://doi.org/10.1016/j.ijer.2019.101502>
- Dickhäuser, C., Buch, S. R., & Dickhäuser, O. (2011). Achievement after failure: The role of achievement goals and negative self-related thoughts. *Learning and Instruction*, 21(1), 152–162. <https://doi.org/10.1016/j.learninstruc.2010.01.002>
- Dickhäuser, O., Janke, S., Daumiller, M., & Dresel, M. (2021). Motivational school climate and teachers' achievement goal orientations: A hierarchical approach. *British Journal of Educational Psychology*, 91(1), 391–408. <https://doi.org/10.1111/bjep.12370>
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542–575. <https://doi.org/10.1037/0033-2909.95.3.542>
- Diener, E. (2009). Assessing subjective well-being: Progress and opportunities. In E. Diener (Ed.), *Assessing well-being. Social indicators research series* (Ed., pp. 25–65). Springer. https://doi.org/10.1007/978-90-481-2354-4_3

- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Scollon, C. N., & Lucas, R. E. (2003). The evolving concept of subjective well-being: The multifaceted nature of happiness. *Advances in cell aging and gerontology*, 15, 187–219. [https://doi.org/10.1016/S1566-3124\(03\)15007-9](https://doi.org/10.1016/S1566-3124(03)15007-9)
- Diener, E., Scollon, C. N., & Lucas, R. E. (2009). The evolving concept of subjective well-being: The multifaceted nature of happiness. In E. Diener (Ed.), *Assessing well-being: The collected works of Ed Diener* (Ed., pp. 67–100). Springer.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276–302. <https://doi.org/10.1037/0033-2909.125.2.276>
- Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), 222–235. <https://doi.org/10.5502/ijw.v2i3.4>
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040–1048. <https://doi.org/10.1037/0003-066X.41.10.1040>
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256–273. <https://doi.org/10.1037/0033-295X.95.2.256>
- Dyke, L., & Duxbury, L. (2011). The implications of subjective career success. *Zeitschrift für ArbeitsmarktForschung*, 43(3), 219–229. <https://doi.org/10.1007/s12651-010-0044-4>
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34(3), 169–189. https://doi.org/10.1207/s15326985ep3403_3
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72(1), 218–232. <https://doi.org/10.1037/0022-3514.72.1.218>
- Elliot, A. J., & Harackiewicz, J. M. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology*, 70(3), 461–475. <https://doi.org/10.1037/0022-3514.70.3.461>
- Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76(4), 628–644. <https://doi.org/10.1037/0022-3514.76.4.628>
- Elliot, A. J., & Moller, A. C. (2003). Performance-approach goals: Good or bad forms of regulation? *International Journal of Educational Research*, 39(4-5), 339–356. <https://doi.org/10.1016/j.ijer.2004.06.003>
- Elliot, A. J., Thrash, T. M., & Murayama, K. (2011). A longitudinal analysis of self-regulation and well-being: Avoidance personal goals, avoidance coping, stress generation, and subjective well-being. *Journal of Personality*, 79(3), 643–674. <https://doi.org/10.1111/j.1467-6494.2011.00694.x>
- Elliot, A., & McGregor, H. A. (2001). A 2x2 achievement goal framework. *Journal of Personality and Social Psychology*, 80(3), 501–519. <https://doi.org/10.1037/0022-3514.80.3.501>
- Fontinha, R., Easton, S., & Van Laar, D. (2019). Overtime and quality of working life in academics and non-academics: The role of perceived work-life balance. *International Journal of Stress Management*, 26(2), 173–183. <https://doi.org/10.1037/str0000067>
- Forgeard, M. J. C., Jayawickreme, E., Kern, M., & Seligman, M. E. P. (2011). Doing the right thing: Measuring wellbeing for public policy. *International Journal of Wellbeing*, 1(1), 79–106. <https://doi.org/10.5502/ijw.v1i1.15>
- Frenzel, A. C., Pekrun, R., Goetz, T., Daniels, L. M., Durksen, T. L., Becker-Kurz, B., & Klassen, R. M. (2016). Measuring teachers' joy, anger, and anxiety: The teacher emotions scales (TES). *Contemporary Educational Psychology*, 46, 148–163. <https://doi.org/10.1016/j.cedpsych.2016.05.003>
- Gao, C., Shi, D., & Maydeu-Olivares, A. (2020). Estimating the Maximum Likelihood Root Mean Square Error of Approximation (RMSEA) with Non-normal Data: A Monte-Carlo Study. *Structural Equation Modeling: A Multidisciplinary Journal*, 27(2), 192–201. <https://doi.org/10.1080/10705511.2019.1637741>
- Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., & Stough, C. (2001). Occupational stress in universities: Staff perceptions of the causes, consequences and moderators of stress. *Work & Stress*, 15(1), 53–72. <https://doi.org/10.1080/02678370117944>
- Guthrie, S., Lichten, C., van Belle, J., Ball, S., Knack, A., & Hofman, J. (2017). Understanding mental health in the research environment: A rapid evidence assessment. *Rand Health Quarterly*, 7(3). <https://doi.org/10.7249/r2022>
- Hagenauer, G., Hascher, T., & Volet, S. E. (2015). Teacher emotions in the classroom: associations with students' engagement, classroom discipline and the interpersonal teacher-student relationship. *European Journal of Psychology of Education*, 30(4), 385–403. <https://doi.org/10.1007/s10212-015-0250-0>
- Hagenauer, G., & Volet, S. E. (2014). Teacher-student relationship at university: An important yet under-researched field. *Oxford Review of Education*, 40(3), 370–388. <https://doi.org/10.1080/03054985.2014.921613>
- Hein, J., Janke, S., Rinas, R., Daumiller, M., Dresel, M., & Dickhäuser, O. (2021). Higher education instructors' usage of and learning from student evaluations of teaching – Do achievement goals matter? *Frontiers in Psychology*, 12(652093), 1–17. <https://doi.org/10.3389/fpsyg.2021.652093>
- Hein, J., Daumiller, M., Janke, S., Dresel, M., & Dickhäuser, O. (2019). How learning time mediates the impact of university scholars' learning goals on professional learning in research and teaching. *Learning and Individual Differences*, 72, 15–25. <https://doi.org/10.1016/j.lindif.2019.04.002>
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values* (2nd ed.). Sage, Thousand Oaks, CA: Behaviors, Institutions, and Organizations Across Nations.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Hulleman, C. S., Schragger, S. M., Bodmann, S. M., & Harackiewicz, J. M. (2010). A meta-analytic review of achievement goal measures: Different labels for the same constructs or different constructs with similar labels? *Psychological Bulletin*, 136(3), 422–449. <https://doi.org/10.1037/a0018947>
- Ismayilova, K., & Klassen, R. M. (2019). Research and teaching self-efficacy of university faculty: Relations with job satisfaction. *International Journal of Educational Research*, 98, 55–66. <https://doi.org/10.1016/j.ijer.2019.08.012>
- James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). Linear regression. In G. James, D. Witten, T. Hastie, & R. Tibshirani (Eds.), *An introduction to statistical learning* (Eds.). Springer. <https://doi.org/10.1007/978-1-4614-7138-7>
- Janke, S., Bardach, L., Oczlon, S., & Lüftenegger, M. (2019). Enhancing feasibility when measuring teachers' motivation: A brief scale for teachers' achievement goal orientations. *Teaching and Teacher Education*, 83, 1–11. <https://doi.org/10.1016/j.tate.2019.04.003>
- Kaftan, O. J., & Freund, A. M. (2018). The way is the goal: The role of goal focus for successful goal pursuit and subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being* (Eds.). DEF Publishers.
- Kaplan, A., & Maehr, M. L. (1999). Achievement goals and student well-being. *Contemporary Educational Psychology*, 24, 330–358. <https://doi.org/10.1006/ceps.1999.0993>
- Kiltz, L., Rinas, R., Daumiller, M., Fokkens-Bruinsma, M., & Jansen, E. P. W. A. (2020). When they struggle, I cannot sleep well either': Perceptions and interactions surrounding university student and teacher well-being. *Frontiers in Psychology*, 11(578378), 1–18. <https://doi.org/10.3389/fpsyg.2020.578378>
- King, R. B., & McInerney, D. M. (2014). The work-avoidance goal construct: Examining its structure, antecedents, and consequences. *Contemporary Educational Psychology*, 39(1), 42–58. <https://doi.org/10.1016/j.cedpsych.2013.12.002>
- King, R. B., & McInerney, D. M. (2016). Do goals lead to outcomes or can it be the other way around?: Causal ordering of mastery goals, metacognitive strategies, and achievement. *British Journal of Educational Psychology*, 86(2), 296–312. <https://doi.org/10.1111/bjep.12107>
- King, R. B., McInerney, D. M., & Nasser, R. (2017). Different goals for different folks: A cross-cultural study of achievement goals across nine cultures. *Social Psychology of Education*, 20(3), 619–642. <https://doi.org/10.1007/s11218-017-9381-2>
- Kinman, G. (2014). Doing more with less? Work and wellbeing in academics. *Somatechnics*, 4, 219–235. <https://doi.org/10.3366/soma.2014.0129>
- Kinman, G., & Johnson, S. (2019). Special section on well-being in academic employees. *International Journal of Stress Management*, 26(2), 159–161. <https://doi.org/10.1037/str0000131>
- Komaraju, M., Musulkin, S., & Bhattacharya, G. (2010). Role of student-faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of College Student Development*, 51(3), 332–342. <https://doi.org/10.1353/csd.0.0137>
- Larsen, R. J., & Eid, M. (2008). Ed Diener and the science of subjective well-being. In M. Eid, & E. J. Larsen (Eds.), *The science of subjective well-being* (Eds., pp. 1–13). Guilford Press.

- Larson, L. M., Seipel, M. T., Shelley, M. C., Gahn, S. W., Ko, S. Y., Schenkenfelder, M., & Heitmann, M. M. (2017). The academic environment and faculty well-being: The role of psychological needs. *Journal of Career Assessment*, 27(1), 167–182. <https://doi.org/10.1177/1069072717748667>
- Linnenbrink, E. A., & Pintrich, P. R. (2002). Achievement goal theory and affect: An asymmetrical bidirectional model. *Educational Psychologist*, 37, 69–78. https://doi.org/10.1207/S15326985EP3702_2
- Little, T. D., Rhemtulla, M., Gibson, K., & Schoemann, A. M. (2013). Why the items versus parcels controversy needn't be one. *Psychological Methods*, 18(3), 285–300. <https://doi.org/10.1037/a0033266>
- Lüftenegger, M., Klug, J., Harrer, K., Langer, M., Spiel, C., & Schober, B. (2016). Students' achievement goals, learning-related emotions and academic achievement. *Frontiers in Psychology*, 7(603), 1–10. <https://doi.org/10.3389/fpsyg.2016.00603>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual* (3rd ed.). Consulting Psychologists.
- McKeachie, W. J. (2007). Good teaching makes a difference—and we know what it is. In R. Perry, & J. Smart (Eds.), *Scholarship of teaching and learning in higher education: An evidence-based perspective* (Eds., pp. 457–474). Springer. https://doi.org/10.1007/1-4020-5742-3_11
- Misra, G. (2001). Culture and self: Implications for psychological inquiry. *Journal of Indian Psychology*, 19, 1–20.
- Misra, G., Srivastava, A. K., & Misra, I. (2006). Culture and Facets of Creativity: The Indian Experience. In J. C. Kaufman, & R. J. Sternberg (Eds.), *The international handbook of creativity* (Eds., pp. 421–455). Cambridge University Press. <https://doi.org/10.1017/CBO9780511818240.015>
- Mudrak, J., Zabrodská, K., Kvetný, P., Jelinek, M., Blatný, M., Solcova, I., & Machovcova, K. (2017). Occupational well-being among university faculty: A job demands-resources model. *Research in Higher Education*, 59(3), 325–348. <https://doi.org/10.1007/s11162-017-9467-x>
- Nicholls, J. G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review*, 91(3), 328–346. <https://doi.org/10.1037/0033-295X.91.3.328>
- Nitsche, S., Dickhäuser, O., Pasching, M. S., & Dresel, M. (2013). Teachers' professional goal orientations: Importance for further training and sick leave. *Learning and Individual Differences*, 23, 272–278. <https://doi.org/10.1016/j.lindif.2012.07.017>
- Papaioannou, A., & Christodoulidis, T. (2007). A measure of teachers' achievement goals. *Educational Psychology*, 27(3), 349–361. <https://doi.org/10.1080/01443410601104148>
- Payne, S. C., Youngcourt, S. S., & Beaubien, J. M. (2007). A meta-analytic examination of the goal orientation nomological net. *Journal of Applied Psychology*, 92(1), 128–150. <https://doi.org/10.1037/0021-9010.92.1.128>
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2006). Achievement goals and discrete achievement emotions: A theoretical model and prospective test. *Journal of Educational Psychology*, 98(3), 583–597. <https://doi.org/10.1037/0022-0663.98.3.583>
- Pekrun, R., Elliot, A. J., & Maier, M. A. (2009). Achievement goals and achievement emotions: Testing a model of their joint relations with academic performance. *Journal of Educational Psychology*, 101(1), 115–135. <https://doi.org/10.1037/a0013383>
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P., & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The Achievement Emotions Questionnaire (AEQ). *Contemporary Educational Psychology*, 36(1), 36–48. <https://doi.org/10.1016/j.cedpsych.2010.10.002>
- Pekrun, R., & Stephens, E. J. (2009). Goals, emotions, and emotion regulation: Perspectives of the control-value theory. Commentary on Tyson, Linnenbrink-Garcia, and Hill. *Human Development*, 52(6), 357–365. <https://doi.org/10.1159/000242349>
- Pintrich, P. R. (2003). A Motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology*, 95(4), 667–686. <https://doi.org/10.1037/0022-0663.95.4.667>
- R Core Team. (2020). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. URL <http://www.R-project.org/>.
- Retelsdorf, J., Butler, R., Streblow, L., & Schiefele, U. (2010). Teachers' goal orientations for teaching: Associations with instructional practices, interest in teaching, and burnout. *Learning and instruction*, 20(1), 30–46. <https://doi.org/10.1016/j.learninstruc.2009.01.001>
- Rinas, R., Dresel, M., Hein, J., Janke, S., Dickhäuser, O., & Daumiller, M. (2020). Exploring university instructors' achievement goals and discrete emotions. *Frontiers in Psychology*, 11(1484), 1–13. <https://doi.org/10.3389/fpsyg.2020.01484>
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of Statistical Software*, 48(2), 1–36.
- Sabagh, Z., Hall, N. C., & Saroyan, A. (2018). Antecedents, correlates and consequences of faculty burnout. *Educational Research*, 60(2), 131–156. <https://doi.org/10.1080/00131881.2018.1461573>
- Salimzadeh, R., Saroyan, A., & Hall, N. C. (2017). Examining the factors impacting academics' psychological well-being: A review of research. *International Education Research*, 5(1), 13–44. <https://doi.org/10.12735/ier.v5n1p13>
- Schwartz, S. H. (2004). Mapping and interpreting cultural differences around the world. In H. Vinken, J. Soeters, & P. Ester (Eds.), *Comparing cultures: Dimensions of culture in a comparative perspective* (Eds., pp. 43–73). Brill.
- Sheldon, K. M., Elliot, A. J., Ryan, R. M., Chirkov, V., Kim, Y., Wu, C., Demir, M., & Sun, Z. (2004). Self-concordance and subjective well-being in four cultures. *Journal of Cross-Cultural Psychology*, 35(2), 209–223. <https://doi.org/10.1177/0022022103262245>
- Skaalvik, E. M. (1997). Self-enhancing and self-defeating ego orientation: Relations with task and avoidance orientation, achievement, self-perceptions, and anxiety. *Journal of Educational Psychology*, 89(1), 71–81. <https://doi.org/10.1037/0022-0663.89.1.71>
- Stockinger, K., Dresel, M., Dickhäuser, O., & Daumiller, M. (2021). University instructors' implicit theories of intelligence, achievement goals for teaching, and teaching quality. *Educational Psychology*, 41(10), 1280–1299. <https://doi.org/10.1080/01443410.2021.1937575>
- Stupnisky, R. H., Brckalorenz, A., & Laird, T. F. N. (2019). How does faculty research motivation type relate to success? A test of self-determination theory. *International Journal of Educational Research*, 98, 25–35. <https://doi.org/10.1016/j.ijer.2019.08.007>
- Stupnisky, R. H., Pekrun, R., & Lichtenfeld, S. (2016). New faculty members' emotions: a mixed-method study. *Studies in Higher Education*, 41(7), 1167–1188. <https://doi.org/10.1080/03075079.2014.968546>
- Tamir, M., & Diener, E. (2008). Approach-avoidance goals and well-being: One size does not fit all. In A. J. Elliot (Ed.), *Handbook of approach and avoidance motivation* (Ed., pp. 415–428). Psychology Press.
- Thies, K., & Kordts-Freudinger, R. (2019). University academics' state emotions and appraisal antecedents: an intraindividual analysis. *Studies in Higher Education*, 1–11. <https://doi.org/10.1080/03075079.2019.1665311>
- Tönjes, B., & Dickhäuser, O. (2009). Längsschnittliche Effekte von Zielorientierungen auf Dimensionen des beruflichen Belastungserlebens im Lehrberuf. *Zeitschrift für Entwicklungspsychologie und pädagogische Psychologie*, 41, 79–86. <https://doi.org/10.1026/0049-8637.41.2.79>
- Tuominen-Soini, H., Salmela-Aro, K., & Niemivirta, M. (2008). Achievement goal orientations and subjective well-being: A person-centred analysis. *Learning and Instruction*, 18(3), 251–266. <https://doi.org/10.1016/j.learninstruc.2007.05.003>
- Van Yperen, N. W., Elliot, A. J., & Anseel, F. (2009). The influence of mastery-avoidance goals on performance improvement. *European Journal of Social Psychology*, 39(6), 932–943. <https://doi.org/10.1002/ejsp.590>
- Wang, H., Hall, N. C., Goetz, T., & Frenzel, A. C. (2017). Teachers' goal orientations: Effects on classroom goal structures and emotions. *British Journal of Educational Psychology*, 87(1), 90–107. <https://doi.org/10.1111/bjep.12137>
- Watt, H. M. G., & Richardson, P. W. (2020). Motivation of higher education faculty: (How) it matters! *International Journal of Educational Research*, 100, Article 101533. <https://doi.org/10.1016/j.ijer.2020.101533>
- Watts, J., & Robertson, N. (2011). Burnout in university teaching staff: A systematic literature review. *Educational Research*, 53(1), 33–50. <https://doi.org/10.1080/00131881.2011.552235>
- Zepke, N., & Leach, L. (2010). Improving student engagement: Ten proposals for action. *Active Learning in Higher Education*, 11(3), 167–177. <https://doi.org/10.1177/1469787410379680>
- Zusho, A., & Clayton, K. (2011). Culturalizing achievement goal theory and research. *Educational Psychologist*, 46(4), 239–260. <https://doi.org/10.1080/00461520.2011.614526>