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# Witnessing well-being in action: Observing teacher well-being during field experiences predicts student teacher well-being

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Social cognitive theory posits that observing others' behavior can influence our thinking, behavior, and learning. The present study examines whether this principle also applies to teacher well-being. It investigates whether student teachers' well-being is linked to the well-being of in-service teachers they closely observe during field experiences. For that purpose, 222 student teachers were assigned to conduct three classroom observations of three different teachers using a dedicated observation tool that focused on in-service teachers' positive emotions and positive student interactions. Longitudinal data from 666 classroom observations and student teachers' well-being data were analyzed. It was hypothesized that the mean scores from all three independent classroom observations are most predictive of student teacher well-being. The results revealed significant associations between seven indicators of student teacher well-being and the observed well-being of in-service teachers. Interestingly, it was not the mean of all three observation scores but only the score of the third and final observation that contributed significantly to student teacher wellbeing. This brief research report seeks to inspire discourse about the benefits and challenges of observational learning in teachers' well-being education.

#### KEYWORDS

teacher well-being, student teacher, field experience, observational learning, recency bias, classroom observation

# 1. Introduction

Teacher well-being is highly relevant for teachers' work and students' outcomes (Carroll et al., 2021). According to Viac and Fraser (2020) it can be defined as "teachers' responses to the cognitive, emotional, health and social conditions pertaining to their work and their profession" (p. 18). The occupational well-being of teaching professionals requires good working conditions and the individual's active involvement (Toropova et al., 2020; Dreer, 2022). The latter is dependent on knowledge, skills, and self-efficacy beliefs which can develop through training, intervention, and experience (McCallum and Price, 2016). There is widespread scholarly agreement that practical phases during initial teacher education involve experiences relevant to future teachers' well-being and well-being education (e.g., Price and McCallum, 2015; Cherkowski and Walker, 2018; McCallum, 2020; Dreer, 2021). Because such phases enrich classroom learning by providing authentic experiences and learning opportunities, teacher education programs worldwide mandate field experience in their curricula (Zeichner, 2012). Prospective teachers are expected to develop their competencies by observing lessons and important processes in school. Often, they are supposed to engage in intensive job shadowing

and to systematically observe professionals in core areas of teaching before their own teaching trials. Among other forms like problembased or reflective learning, observational learning plays an important role in teacher education (Chernikova, 2018). In terms of teacher wellbeing, this could include observing how teachers deal with daily stressors like unforeseen situations, obstacles, and classroom disruptions. Furthermore, observations could target teacher behavior that elicits positive reactions among colleagues and in the classroom and thus supports teacher well-being. Recent studies from personality research indicate that individuals who experience higher rates of happiness exhibit several positive behaviors that can be easily observed by others, even in brief social exchanges. For example, research suggests that happier people tend to smile more, engage in more eye contact, use more positive language, and display open and approachable body language. These behaviors can not only create a positive impression on others, but they can also foster more positive social interactions and relationships (e.g., Gardiner et al., 2022).

Observational learning regarding well-being should therefore follow the basic principles posited by social cognitive theory, holding that skills and behavioral patterns can be acquired by watching others (Bandura, 1977). Research has substantiated that observations have a moderate positive effect on cognitive skill acquisition (Crissman, 2006), while Van Tongeren et al. (2018) reported that powerful models can help bolster prosociality and perceived meaning in life among university students. In teacher education, observational learning was established to contribute effectively to the development of student teachers' lesson planning and teaching competencies (Chernikova, 2018). Further evidence suggests that observational learning is effective in real-life situations (Gettinger and Stoiber, 2014). In addition, research on teacher self-efficacy indicates that watching in-service teachers at work can help strengthen the beliefs of future teachers in their ability to succeed in mastering certain requirements (e.g., Clark and Newberry, 2019).

Observing the excellence and skills of others can also elicit emotional responses. Algoe and Haidt (2009) distinguished three emotional reactions when witnessing excellent others: (1) elevation (response to moral excellence), (2) gratitude (response to generosity and thoughtfulness), and (3) admiration (response to skill, talent, and achievement). While gratitude and elevation drew people out of themselves and inspired them to do good for others, admiration inspired people to emulate the admired person and work harder on their own development. The authors' experiments led them to conclude that when watching others, participants experienced strong positive emotions that inspired them to improve themselves, their behavior, and their relationships. Accordingly, research on mentoring showed that mentor well-being and emotional support are connected to student teacher wellbeing (Hobson et al., 2009; Squires, 2019; Hobson, 2020). In addition, studies conducted in classrooms indicate that emotional contagion makes non-verbal and verbal teacher behavior influence the emotions and behavior of recipients (Mottet and Beebe, 2000; Becker et al., 2014; Houser and Waldbuesser, 2017).

The present study examines whether student teacher well-being is connected to the well-being of the in-service teachers they observe during practical phases. Based on social cognitive theory and prevailing knowledge on observational learning, it is hypothesized that (H1) student teacher well-being is positively linked to the observation of in-service teacher well-being. It was also hypothesized that (H2) when observing multiple teachers, it is the overall experience that is most strongly connected to student teacher well-being. H2 was formulated based on findings of studies investigating the mere exposure effect. It is a central finding of this research that frequently observed behavior is assumed to be familiar and influences personal preference, especially when there is a motivation for social connectedness (e.g., Kwan et al., 2015).

# 2. Method

## 2.1. Participants and procedure

To test the hypotheses, an exploratory study gathered data from a 15 week field experience among two subsamples of student teachers from two successive university semesters. The first subsample (summer semester 2022) contains 53 student teachers in their last year of Master of Education studies. This sample contained 43 women (81%) and 10 men (19%). The mean age was 25.5 years (SD = 3.39, Min = 23, Max = 39). Participants included student teachers at both primary (76%) and secondary (24%) levels. The second subsample (winter semester 2022/23) contained 169 student teachers in their last year of Master of Education studies. This subsample included 133 women (79%) and 36 men (21%). The mean age was 27.3 years (SD=3.29, Min = 23, Max = 42). Participants contained student teachers at both primary (87%) and secondary (13%) levels. Because data were collected as part of student coursework, there were no missing data in both subsamples. Gender and school type ratios were representative of the population of student teachers at the German university where the study was conducted. Moreover, both subsamples did not differ significantly in the well-being related variables, i.e., job satisfaction ( $M_{S1} = 3.90$ ,  $SD_{S1} = 0.68$ ,  $M_{s2} = 3.92$ ,  $SD_{s2} = 0.66$ , t = -0.21, p = 0.83), emotional exhaustion  $(M_{S1} = 1.89, SD_{S1} = 0.67, M_{S2} = 1.79, SD_{S2} = 0.62, t = 1.11, p = 0.34),$ positive emotions ( $M_{S1} = 3.69$ ,  $SD_{S1} = 0.47$ ,  $M_{S2} = 3.59$ ,  $SD_{S2} = 0.45$ , t = 1.24, p = 0.53), engagement (M<sub>S1</sub> = 3.78, SD<sub>S1</sub> = 0.49,  $M_{s2} = 3.88$ ,  $SD_{s2} = 0.52$ , t = 1.34, p = 0.43), relationships ( $M_{s1} = 3.88$ ,  $SD_{S1} = 0.51$ ,  $M_{S2} = 3.79$ ,  $SD_{S2} = 0.46$ , t = 1.84, p = 0.55), meaning  $(M_{S1} = 3.69, SD_{S1} = 0.51, M_{S2} = 3.70, SD_{S2} = 0.75, t = 0.99, p = 0.24)$ , and achievement ( $M_{S1} = 3.79$ ,  $SD_{S1} = 0.46$ ,  $M_{S2} = 3.79$ ,  $SD_{S2} = 0.42$ , t = 0.71, p = 0.64). Consequently, the two subsamples were merged into one data set which was then used to conduct the subsequent analyzes.

The observation assignment was part of a dedicated teacher wellbeing course. It aims to familiarize student teachers with the topic and to encourage them to explore and reflect their well-being during field experiences at schools. The course is divided into three phases. In the first phase, student teachers are provided with knowledge about teacher well-being. This includes concepts, theoretical frameworks and important results of research on the matter. In the second phase, student teachers are encouraged and enabled to observe teacher wellbeing and potential outcomes of teacher well-being at their schools. Furthermore, they are supported to engage in activities that potentially enhance their well-being within the professional context. In the third phase, student teachers are supported in reflecting their impressions and experiences and to seek ways of integrating their insights into their future professional practice (for more information see Dreer, 2021). As part of their course requirements, student teachers had to conduct three classroom observations with three different teachers at their internship school during the second phase of the course. Each observation was to last for a full school lesson (45 min), and all needed

Concept	Scale/subscales; number of items (item example)	α			
Observed teacher well-being	Teacher well-being observer (see footnote 1); four observation items with several observational indicators (sample behavior)	0.73-0.81			
	Positive emotions The teacher utters credible statements with positive connotations that reflect positive emotions (verbal); e.g., "I am happy to work with you today" ( <i>happiness</i> ). The teacher shows positive emotions through body language (non-verbal); e.g., <i>the teacher smiles</i> .	0.77-0.80			
	Relationships The teacher expresses empathy toward the learners (verbal); e.g., "I can understand your situation." The teacher uses relationship-supportive body language (non-verbal); e.g., <i>the teacher mirrors the child's posture</i> .	0.79-0.82			
Student teacher well- being	Teaching satisfaction scale (Ho and Au, 2006), five items I am satisfied with being a teacher.				
	Emotional exhaustion subscale from the Maslach Burnout Inventory (Maslach et al., 1996), nine items: e.g., <i>I feel emotionally drained by my work</i> .	0.83			
	Adaptation of German version of PERMA Profiler, 15 items (Wammerl et al., 2019)	0.79			
	Positive emotions, three items How often do you feel joyful at work?	0.78			
	Engagement, three items How often do you become absorbed in what you are doing at work?	0.79			
	Relationships, three items To what extent do you receive help and support from others at work when you need it?	0.79			
	Meaning, three items To what extent do you perceive your work to be purposeful and meaningful?	0.83			
	Achievement, three items   How much of the time at work do you feel you are making progress toward accomplishing your goals?	0.83			

#### TABLE 1 Overview of applied measures.

to be completed within 2 weeks but with at least 1 day between each observation. Student teachers received a standardized observation tool and were briefed on using it in classrooms. After all three observations, 222 student teachers submitted their observation protocols for data digitalization: 666 observation protocols from 666 lessons. One week after the observation period, student teachers were asked to complete an online questionnaire assessing seven well-being related variables.

## 2.2. Measures

Teacher well-being is operationalized by the PERMA model of wellbeing (Seligman, 2011). It comprises the five dimensions (P) positive emotions, (E) engagement, (R) relationships, (M) meaning, and (A) achievement. To examine the hypotheses, two types of data were collected with regards to the theoretical model (Table 1). First, observational data were recorded by student teachers using the teacher well-being observer<sup>1</sup>, an observation tool based on the PERMA well-being model to assess in-service teachers' verbal and non-verbal behavior regarding positive emotions and interactions with students through classroom observation. The tool was provided with a briefing, a standardized rating scale ranging from one (*not observed*) to five (*extensively observed*), and rating rules.

Second, student teacher well-being was assessed using a complementary self-report approach featuring seven variables. On

one hand, student teacher well-being –based on Seligman's (2011) PERMA model – was assessed using the German version of the PERMA profiler (Wammerl et al., 2019). Survey scales assessing (P) positive emotions, (E) engagement, (R) relationships, (M) meaning, and (A) achievement were adapted to the teaching profession. On the other hand, student teacher well-being was assessed using Warr's (1999) concept of workplace well-being and operationalized by assessing teaching satisfaction (Ho and Au, 2006) and emotional exhaustion (Maslach et al., 1996). The items were translated into German, with quality assurance provided by a translation service. Items were assessed on a five-point Likert scale ranging from one (*does not apply*) to five (*applies fully*). The internal consistencies of the scales used in this study were adequate (Table 1).

## 3. Results

Prior to hypothesis testing, scales were tested for internal consistency, while means were computed for all student teacher wellbeing constructs. Observation scores were computed by summing the individual values from the four observation items of each of the three protocols. Additionally, a mean score was computed over all three observation scores (M = 11.06, SD = 2.32).

The mean observation scores for the three observations (observation 1: M = 10.39, SD = 3.13; observation 2: M = 9.77, SD = 3.26; observation 3: M = 9.74, SD = 3.21) are very similar, with only a slight decrease over time. The results of correlation analyzes (Table 2) revealed that the observation scores from the three separate

<sup>1</sup> Dreer, B. Observing teacher well-being in the classroom: a feasibility study.

	1	2	3	4	5	6	7	8	9	10	11
1. ITW –Mean O Scores	1	0.63**	0.65**	0.69**	0.10	-0.17	0.24*	0.25*	0.24*	0.33**	0.31**
2. ITW –Score O-1		1	0.01	0.04	-0.06	-0.09	0.03	0.12	-0.11	0.00	0.10
3. ITW –Score O-2			1	0.21	-0.11	-0.10	0.04	0.13	0.18	0.12	0.14
4. ITW–Score O-3				1	0.34**	-0.37**	0.35**	0.41**	0.27*	0.39**	0.36**
5. STW –Job satisfaction					1	-0.79**	0.70**	0.49**	0.49**	0.57**	0.56**
6. STW – Emotional exhaustion						1	-0.67**	-0.42**	-0.54**	-0.51**	-0.56**
7. STW –Positive emotions							1	0.56**	0.52**	0.68**	0.64**
8. Engagement								1	0.56**	0.63**	0.53**
9. STW – Relationships									1	0.57**	0.43**
10. STW – Meaning										1	0.66**
11. STW – Achievement											1

TABLE 2 Correlations between observed in-service teacher well-being and self-reported student teacher well-being.

\* *p* < 0.005, \*\* *p* < 0.001; ITW, in-service teacher wellbeing; O, observation score; STW, student teacher well-being variable.

observations were not significantly linked, indicating that each classroom observation was a separate incident and that observations were not systematically connected to a given observer.

## 4. Discussion

As an initial step in testing the two hypotheses, correlation analyzes were conducted (Table 2). The results indicated that the mean of all three observation scores was correlated with positive emotions (r = 0.24, p = 0.002), engagement (r = 0.25, p < 0.001), relationships (r = 0.24, p = 0.002), perceived meaning (r = 0.33, p < 0.001), and achievement (r = 0.31, p < 0.001). However, only the score from the third observation was significantly linked in the manner expected to student teacher well-being. This includes associations between observation three and teacher job satisfaction (r = 0.34, p < 0.001), emotional exhaustion (r = -0.37, p < 0.001), positive emotions (r = 0.35, p < 0.001), engagement (r = 0.41, p < 0.001), relationships (r = 0.27, p = 0.003), perceived meaning (r = 0.39, p < 0.001), and achievement (r = 0.36, p < 0.001). Notably, connections to student teacher well-being were not detected in observer scores from observations one and two.

In a second step, seven separate multiple regression analyzes were fitted to the data, each predicting one of the seven student teacher well-being variables by the three observation scores and the mean of all three. The results again showed that only the third observation was relevant in predicting student teacher well-being. It significantly predicted job satisfaction ( $\beta = 0.40, t = 3.28, p < 0.001$ ), emotional exhaustion ( $\beta = 0.35, t = -3.08, p < 0.001$ ), positive emotions ( $\beta = 0.27, t = 2.41, p = 0.001$ ), engagement ( $\beta = 0.41, t = 2.99, p < 0.001$ ), relationships ( $\beta = 0.24, t = 2.79, p < 0.002$ ), perceived meaning ( $\beta = 0.29, t = 2.42, p < 0.001$ ), and achievement ( $\beta = 0.27, t = 2.89, p < 0.001$ ). None of the first, second or overall observation scores were significantly predictive of any student teacher well-being variable.

The outcomes of the analyzes generally indicate that all of the PERMA domains of student teacher well-being are predicted by observing in-service teachers during school lessons, albeit with small effect sizes. This is congruent with H1, which is derived from social cognitive theory, and the general tenet that watching others can influence a person's emotion and cognition. The relationships discovered are of plausible direction: if student teachers witness teachers they attribute with higher rates of well-being, they report higher well-being rates across various domains one week after their observations. Conversely, if student teachers witness teachers they attribute with lower rates of well-being, they report lower well-being rates across various domains one week after their observations. This particularly applies to student teacher engagement, which showed the strongest association with observation score. These findings support recent research highlighting that work engagement increases when employees perceive their supervisors as warm, competent, and moral (Orlowski et al., 2020). Notably, the expected connection is only present for student teachers' third and final observation and was not indicated for the first, second, and overall observations. It appears that only the last of three observations was relevant for student teacher wellbeing; thus, H2 is not supported. Three possible explanations for this outcome are discussed below.

First and most obviously, the last observation's prediction of student teacher well-being could result from recency bias, which is the human tendency to assign more weight to the most recent information or experiences. Recency bias has been found in observational learning (Warren and Loes, 2019); it affects university students when for example evaluating courses (Dickey and Pearson, 2005). Speaking against recency bias in the present case is the fact that student teachers documented their observations in writing using rating schemes and were able to review their documents at any time. Previous studies had shown that the documentation of impressions helped avoiding the recency bias (Dickey and Pearson, 2005). In addition, recency bias would not explain why the principles of observational learning and emotional contagion were not present in observations one and two. Significant associations between all three observations and student teacher well-being, which may increase in correlational strength over time, would be a more plausible finding in the event of recency bias.

Another possible explanation is a training effect because the quality of observations is related to the observers and their training for the task (O'Leary, 2020). As the observation assignment was primarily implemented to trigger observational learning, the preparation of student teachers focused on explaining the objectives and correct use of the observation tool. However, it did not include intense training in scientific observation. This could explain why student teachers who are rather inexperienced at systematically observing the well-being of others needed three observation passes to effectively observe and realistically assess wellbeing among in-service teachers. Inaccurate observations could explain why there were no statistical associations between student teacher wellbeing and teacher well-being at observations one and two, when social cognitive theory would expect them. To explore the substance of this explanation, student teachers could be prepared using video training sessions to help them to better focus on the crucial aspects of the observation and to compare and evaluate their initial rating decisions.

A third explanation could be an adaptive process in calibrating expectable behavior. Research on role models indicates that witnessing the academic excellence of others stimulates emotional responses and motivates self-improvement, provided that excellence is perceived as attainable (Lockwood and Kunda, 1997, 1999). This insight suggests that student teachers may need to develop a sense of what makes a suitable role model and calibrate the behavioral aspects of teachers they perceive as expectable and attainable. It is possible that during observations one and two, student teachers gathered information about attainable models and used it to calibrate their observation skill, which led to a more refined and impactful impression in the third pass.

Because of the provisional nature of the present study, no definitive interpretation of the results with respect to the unsupported second hypothesis (H2) is yet possible. More research is needed in this regard. The findings in support of the first hypothesis (H1) are useful in pointing out possible directions for future research. In general, they underline the potential of observation assignments to enhance student teachers' observational learning. This could encourage the development of observation tools and assignments and testing their effectiveness in eliciting specific learning processes and outcomes. In particular, the findings of this study highlight that observational learning might be a promising route in supporting student teacher well-being. In addition to other support measures like dedicated university courses, mentoring, and self-help interventions (e.g., Goodday et al., 2019; Hobson, 2020; Dreer, 2021), methods of observational learning, like targeted classroom observations, should therefore be considered in teacher well-being education. This might be particularly valuable if student teachers are able to observe in-service teachers with high rates of occupational well-being, which emphasizes the importance of choosing a quality school for conducting field experiences. The present study's preliminary findings indicate that it is worth further investigating this proposition. Such future research could help overcome the limitations of the explorational work presented in this brief research report.

This study was based on data from two separate subsamples of student teachers from two successive university semesters. While group

comparisons for the two subsamples showed no significant differences in the well-being related variables, cautious interpretation of the results is warranted, as the two groups might have differed in other relevant aspects not measured in this study. Future research should use larger student teacher samples from different locations, countries, and cultural backgrounds. Furthermore, conclusions about causal relationships cannot be drawn based on this longitudinal research design. The relatively short time lag of one week between data collections might have led to inflated correlations between the data of the last observation and of student teachers' self-reported well-being. To avoid such shortcomings, future research should implement experiments and make use of research designs with more frequent, strategically spaced measurement intervals (e.g., pre, post, follow-up). The data presented are also not informative about the long-term impact of classroom observations. It could be that emotional contagion means that student teacher well-being benefits from targeted observations only briefly after the observation. On the other hand, student teachers might be durably inspired by their observations of model in-service teachers (admiration) and strive to develop in this regard (selfimprovement, learning). To better understand the mechanisms of observational learning in well-being education, investigations into the four key stages of observational learning, i.e., attention, retention, reproduction and motivation (Bandura, 1977) are imperative. In addition to examining and differentiating such aspects, it would also be worth investigating the factors that might help prolong the potentially beneficial effects of such classroom observations.

## Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

## **Ethics statement**

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

# Author contributions

BD is the sole author of this work, including conception, data collection, data analysis, and preparation of the manuscript.

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# **Conflict of interest**

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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