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Teacher well-being: Investigating the contributions of school climate and job crafting

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TEACHER EDUCATION & DEVELOPMENT | RESEARCH ARTICLE Teacher well-being: Investigating the contributions of school climate and job crafting Benjamin Dreer^{1*}

Abstract: Teachers' well-being is important for the optimal functioning of schools and educational systems. Contextual and individual factors influencing teachers' work-related well-being have been identified but rarely investigated concurrently. This study examined contributions of school climate and job crafting to teacher well-being. Time-lagged survey data from 564 German teachers was analysed. The hypothesised model whereby school climate and job crafting were separate predictors of well-being fitted the data well. Analyses further revealed that the effect of school climate and job crafting is additive. Teachers who reported the highest rates of school climate and the highest scores in job crafting experienced the highest well-being. Results of this study highlight the importance of both school climate and job crafting for supporting teacher well-being.

Subjects: Education Studies; School Psychology; Teachers & Teacher Education

Keywords: teacher well-being; school climate; job crafting; time-lagged study

1. Introduction

Over the past decades the study of teacher well-being has opened up to new frameworks and concepts. While first the job-related well-being of teachers was predominantly operationalised by negative constructs (such as stress, strain, negative emotions, emotional exhaustion), positive aspects (such as positive emotions, job satisfaction, engagement) are increasingly included (Collie et al., 2015). Today, teacher well-being is broadly understood as "teachers' responses to

ABOUT THE AUTHOR

The fact that people feel comfortable in their professional environment is of considerable importance for their health, their performance and their success at work. This is especially true for teachers because they work in a profession with high social demands and are of immense importance for the development of their students. In his research, Benjamin Dreer therefore investigate what constitutes the well-being of (prospective) teachers, and how it can be supported.

Benjamin Dreer holds a Master of Education degree in secondary education and a PhD degree in educational sciences. He is currently the scientific manager of the Erfurt School of Education, the centre for teacher education and educational research at the University of Erfurt, Germany.

PUBLIC INTEREST STATEMENT

Teacher well-being is an invaluable resource for our education systems. This research shows that teacher well-being is not only influenced by the conditions of the workplace. It is also the teachers' behaviour to craft their job according to their values, goals and preferences that impacts their work-related well-being. Hence, working towards schools with excellent work climate and preparing teachers for effective job crafting could be measures to increase teacher well-being and improve schools as well as educational systems.

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the cognitive, emotional, health and social conditions pertaining to their work and their profession" (Viac & Fraser, 2020, p. 18).

There is a variety of conceptual approaches that fit under this definition, however, no standard operationalisation of teacher well-being has emerged to date. There have been one-dimensional measurement approaches, such as operationalising teacher well-being by job-related satisfaction (e.g., Parker & Martin, 2009). Yet, such approaches have been deemed inappropriate due to the complex nature of the construct (Huppert & So, 2013). Some studies adopted concepts based in work psychology, such as workplace well-being (e.g., Parker et al., 2012), occupational well-being (e.g., Klusmann et al., 2008) or the job demands-resources framework (e.g., Granziera et al., 2020). Other studies implemented multi-dimensional concepts or frameworks adopted from positive psychology, such as subjective well-being (e.g., Chan, 2010, 2013) or the PERMA framework (e.g., Dreer, 2021). Furthermore, socio-ecological frameworks are applied to conceptualise teacher well-being (e.g., McCallum, 2020).

Despite these developments, the investigation of teachers' well-being is quite frequently based on the assessment of cognitive components such as job satisfaction and affective components such as positive and negative affect (e.g., Chan, 2010, 2013; Rahm & Heise, 2019). In accordance with this cluster of studies, the present investigation conceives teacher well-being from Warr's (1999) concept of workplace well-being, which has its roots in the concept of subjective well-being proposed by Diener (1984). Here, well-being is composed of a cognitive component (job satisfaction) and an affective component (positive and negative affect).

Teacher well-being has been shown to affect teacher's mental and physical health, job engagement, and intention to leave their school or even the entire profession (Claeys, 2011; Keller, Frenzel, et al., 2014; O'Reilly, 2014). Furthermore, teacher well-being affects choices in relation to effective teaching styles and behaviour, as well as the transmission of positive emotions, enthusiasm and motivation in the classroom (e.g., Buonomo et al., 2019; Burić & Frenzel, 2020; Keller, Chang et al., 2014; Kunter et al., 2013; Moè et al., 2010). Consequently, teacher well-being impacts important student outcomes, such as student well-being, academic motivation, achievement and performance (Caprara et al., 2006; Collie et al., 2012; Fouché et al., 2017). Finally and correspondingly, there is evidence that teacher well-being contributes to the effectiveness of the school (Bajorek et al., 2014). As theory and evidence suggest that there is significant influence to teacher well-being by both contextual and individual factors (Nazari & Alizadeh Oghyanous, 2021; Viac & Fraser, 2020), the science of teacher well-being invites the study of factors that influence the well-being of school teachers.

1.1. Contextual factors: School climate

Certain contextual factors (i.e. factors that vary from school to school) have been identified as relevant to the well-being of teachers, including teacher collaboration, the quality of student-teacher relationships and work autonomy (Aloe et al., 2014; Collie & Martin, 2017; Klassen et al., 2012; Spilt et al., 2011; Weiland, 2021). These and further important factors can be summarised under the umbrella term "school climate", which is understood as the "psychosocial context in which teachers work and teach" (Johnson et al., 2007, p. 111). Furthermore, Johnson et al. (2007) identified five factors of school climate, which are: teachers' feelings of belonging to the school community (affiliation); the openness of the school towards new methods and development (innovation); adequate school equipment, such as teaching materials and media (resource adequacy); teachers' autonomy and participation in school decisions (participatory decision-making) and the quality of teacher-student relationships (student support). Through research reviews, it was established that such factors are relevant to teacher well-being (Gray et al., 2017; Thapa et al., 2013). However, it was also highlighted that contextual factors relating to school climate are relatively stable and require significant effort by school communities for them to develop beneficially (e.g., Rhodes et al., 2009).

The literature differentiates between individual and aggregated approaches when it comes to the assessment of school climate. Wang and Degol (2016) argue that for some research questions and designs it seems more appropriate to account for the nested nature of the data, while for others the individual perception is in focus. For the present study, school climate is assessed and processed on the individual level, as it may be perceived differently by different individuals. Consequently, data collection targets individual teachers and not entire school staffs.

1.2. Individual behaviour: Job crafting

In addition to the conditions of the work environment, individual behaviour is important for the well-being of teachers. This may include work-related behaviour patterns (e.g., Klusmann et al., 2008), strategies for coping with high workloads and stress (e.g., Aulén et al., 2021) and preventive habits, such as mindfulness or compassion (e.g., Tarrasch et al., 2020). The present study focuses on behaviour that increases person-job fit, because it is reported to be relevant for fostering wellbeing, while accounting for work conditions at an organisational level (Ellis et al., 2017).

Based on case studies from different occupations Wrzesniewski and Dutton (2001) observed that employees influence and shape their jobs in various ways to increase the fit between their personal preferences and the characteristics of their work environments. The authors, who referred to this behaviour as job crafting, identified three basic forms: task crafting (shaping the boundaries and processes of job tasks), relational crafting (shaping the qualities and quantities of relationships in the job context), and cognitive crafting (shaping the personal attitudes towards the job). This initial framework was developed further by Tims et al., 2012), who embedded the concept of job crafting within the job demands-resources model (Bakker et al., 2007). In this later concept, job crafting was defined as "self-initiated change behaviours that employees engage in with the aim to align their jobs with their own preferences, motives, and passions" (Tims et al., 2012, p. 173). Researchers suggest that job crafting is a process motivated by individual needs to cultivate a positive identification with job roles, to engage in meaningful work and to contribute to a work environment that fits with individual characteristics (Tims & Parker, 2019; Wrzesniewski & Dutton, 2001). It includes changes to work tasks and conditions, relationships at work and cognition concerning work. This approach distinguishes job crafting from other ways of changing work conditions, such as negotiation with employers or organisational development. A meta-analytic review of research outside the educational sector by Rudolph et al. (2017) showed that job crafting is associated with several desirable outcomes, such as job satisfaction, work engagement and employees' work performance. Furthermore, it was shown that job crafting positively predicts employee well-being (Slemp et al., 2015).

Referring to the job demands-resources model (Bakker et al., 2007), Tims et al. (2012) propose three dimensions of job crafting. First, because job resources are considered important drivers of work engagement and satisfaction, job crafting activities are aimed to increase relevant resources accessible to the individual teacher (Tims et al., 2012). This includes social resources, such as feedback from colleagues and structural resources, such as the acquisition of new knowledge or skills. These types of resources were identified based on the job demands-resources model and its empirical validation (Bakker et al., 2007).

Second, challenging job demands are considered necessary to avoid boredom and dissatisfaction (Han & Yin, 2016), and provide opportunities for personal growth and development (Guskey, 2002). Accordingly, job crafting aims at increasing challenging demands. For instance, this may include the development of new ideas and involvements in innovative classroom projects.

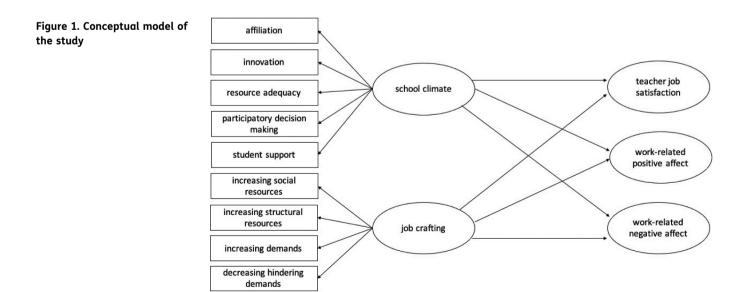
Third, overly challenging job demands can be overwhelming and may lead to negative health consequences (Travers, 2017), especially when these occur together with limited resources over longer periods (Tims et al., 2012). Hence, job crafting can be instrumental in controlling workload, which can help to reduce strain and stress. For example, this could include teachers avoiding negative contacts at work.

Findings from the educational sector underscore the suspected regulative behaviour among teachers. With regards to the first dimension of job crafting, it was shown that teachers gather job-relevant resources by acquiring skills (Dicke et al., 2015) or asking colleagues for help (Vangrieken et al., 2015). Regarding the second job crafting dimension, research suggests that teachers engage in active coping strategies to relieve boredom (such as increasing emotional engagement) when faced with phases of underchallenging work (Eren, 2013). When focusing on the third dimension, many studies show that the teaching profession is associated with high workloads, strain and stress (Travers, 2017), which demand and can be partially managed by regulative activities on the part of the individual (Jennings et al., 2019).

In addition to these first indications, some studies explicitly investigated the concept of job crafting with teacher samples. Results not only suggest that teachers engage in job crafting activities (Haneda & Sherman, 2018; Van Wingerden & Poell, 2019), but also that job crafting is beneficial with regards to their well-being. A mixed methods study by Leana et al. (2009) reported that teachers who engaged in job crafting demonstrated higher rates of job satisfaction, organisational commitment and lower turnover intention. In addition, Peral and Geldenhuys (2016) reported a positive relationship between job crafting and work engagement. Correspondingly, it was determined that job crafting supports the fulfilment of basic psychological needs, which leads to higher rates of work engagement (Van Wingerden et al., 2017a). In addition, reports from another study indicate statistically significant, medium-sized positive correlations between teachers' job crafting, job satisfaction and work engagement (Alonso et al., 2019).

2. Aims of the current study

The preceding appraisal reveals that teacher well-being is dependent on contextual factors of the workplace and on individual behaviour. However, to date these insights have been primarily established by research investigating one of the two influences separately. In focussing on five factors of school climate and four elements of job-crafting behaviour, the present study aims at investigating the impact of both factor sets on teacher well-being concurrently. Based on prior research from outside the educational sector, indicating separate contributions of contextual and individual factors to employees' well-being (Slemp et al., 2015), it is hypothesised that the factors of school climate and job crafting constitute separate contributors to teacher well-being. The



conceptual model presented in Figure 1 illustrates this assumption portraying two separate contributors.

3. Methods

3.1. Design

To alleviate common method variance concerns when investigating the aforementioned propositions, a time-lagged design with two measurement intervals was implemented. Teachers were surveyed via two online questionnaires, which were administered with a 2-week interval. The first survey assessed the variables school climate and job crafting, while the second survey assessed teachers' well-being. The comparatively small interval was selected based on the recommendations of Dormann and Griffin (2015) for analysing causal relationships between work-related psychological concepts. The authors argue that "optimal time lags in panel studies are usually quite short" and suggest that "far shorter time lags than those frequently found in the literature are justifiable" (p. 489).

3.2. Participants

To invite participants, e-mails were sent out to schools within the large school network of the Erfurt School of Education. At the end of the survey period, the link had received 619 views. In total, 564 teachers (411 female, 153 male) participated in the study and provided data at both intervals. Participants were categorised in the following age groups: 25–29 years (10.5%), 30–39 years (23.2%), 40–49 years (10.3%), 50–50 years (40%) and 60+ years (16%). The participating teachers represented the following school types: grammar school (32.8%), secondary school (24.1%), primary school (30.3%), community school, including primary and secondary education (10.6%) and other school types (2.2%).

The study conformed to the principles of the German Data Forum (2017). All participants were treated in conformity with the code of ethics of the German Educational Research Association (https://www.dgfe.de/en/about-dgfe-gera/code-of-ethics). Teachers were informed about the objectives and provided their voluntary informed consent to participate in the study. Research data was treated confidentially, and the anonymity of the participants was preserved at all times.

3.3. Instruments

To test the hypothesised model, three concepts needed to be operationalised: (1) school climate, (2) job crafting, and (3) teacher well-being.

School climate was assessed by applying the School Level Environment Questionnaire (SLEQ), which is based on a 5-factor model including: (1) affiliation, (2) innovation, (3) resource adequacy, (4) participatory decision making and (5) student support (Johnson et al., 2007). These five subscales were used to compute a total school climate score.

To measure teachers' job crafting activities, the Job Crafting Scale (Tims et al., 2012) was utilised. This instrument consists of four subscales mirroring the three dimensions (increasing resources, increasing demands, decreasing hindering demands) of job crafting, and includes the two subdimensions within the first dimension; thus, increasing resources comprises social and structural resources. The four subscales were used to compute a total job crafting score.

Teachers' job-related well-being was measured in reference to Warr's (1999) concept of workplace well-being, which has its roots in the concept of subjective well-being proposed by Diener (1984). Here, well-being is composed of a cognitive component (job satisfaction) and an affective component (positive and negative affect). The cognitive component (job satisfaction) was assessed using the Teaching Satisfaction Scale (Ho & Au, 2006). The affective component (positive and negative affect) was assessed using the German version of the Positive and Negative Affect Schedule (PANAS; Breyer & Bluemke, 2016).

Concept	Instrument, subscales, item example	М	SD	α
t1 School climate	School Level Environment Questionnaire (SLEQ; Johnson et al., 2007), 5 subscales, 35 items	3.22	.71	.72
	Affiliation, 11 items: I feel accepted by the other teachers.	3.64	.81	.79
	Innovation, 4 Items: New and different ideas are always being tried out in this school.	3.43	.81	.81
	Participatory decision making, 8 Items: Teachers are frequently asked to participate in decisions concerning administrative policies and procedures.	3.17	1.01	.79
	Resource adequacy, 5 items: Equipment to support teaching with media is readily available and accessible.	2.66	1.14	.86
	Student support, 7 items: Most students are helpful and cooperative to teachers.	3.98	.68	.80
t1 Job crafting	Adaptation of the job crafting scale (Tims et al., 2012), 4 sub-scales, 25 items	3.65	.60	.76
	Increasing structural job resources, 5 Items: I try to develop myself professionally.	4.21	.60	.81
	Increasing social job resources, 5 Items: I ask colleagues for advice.	3.06	.79	.80
	Increasing challenging job demands, 5 Items: When an interesting project comes along, I offer myself proactively as project co- worker.	3.64	.79	.88
	Decreasing hindering job demands, 5 Items: I try to ensure that I do not have to make many difficult decisions at school.	3.38	.67	.79
t2 Job satisfaction	Teaching Satisfaction Scale (Ho & Au, 2006), 5 items I am satisfied with being a teacher.	3.72	.74	.87

(Continued)

Concept	Instrument, subscales, item example	М	SD	α
t2 Positive and negative affect	German version of the Positive and Negative Affect Schedule (PANAS; Breyer & Bluemke, 2016): Now we would like to know how you feel. The following words describe different kinds of feelings and perception. Read every word and mark the intensity on the scale. You have the choice between five gradations. Please indicate how you generally feel.	-	-	-
	Positive affect, 10 items: e.g., inspired, proud, enthusiastic,	3.10	.78	.80
	Negative affect, 10 items: e.g., alert, nervous, jittery	2.19	.81	.81

Note: Means for SLEQ are expressed out of 5 through item aggregations; Means for job crafting scale are expressed out of 4 through item aggregations; α = internal consistency expressed by Cronbach's alpha

Scales originally provided in English were translated into German and adapted to be applied to the teaching profession. Here, only minor adaptations to the wording of items were carried out, for example, substituting "at work" with "at school". The linguistic quality of the translated items was ensured by a professional proofreading and translation service. Items were assessed on a 5-point Likert scale 1 (*does not apply*) to 5 (*fully applies*) except for the PANAS, for which items were rated from 1 (*not at all*) to 5 (*extremely*). The internal consistency of all scales used in this study were found to be adequate (see, Table 1).

4. Results

4.1. Preliminary analyses

All analyses were conducted using R software (v.3.6.3). Prior to testing the model, the factors were screened for normal distribution and collinearity to ensure the requirements for the analyses were met. Missing data was present for approximately 3% of the data matrix and was handled using full-information maximum likelihood estimation (Enders, 2010). Results of the correlation analyses (see, Table 2) indicated that job crafting and school climate can be regarded as separate concepts, as most of their sub-factors were only slightly correlated or were uncorrelated. Conversely, the sub-factors belonging to each of the aforementioned concepts were interrelated at medium-to-high rates. Likewise, the components of teacher well-being (job satisfaction and positive and negative affect) demonstrated significant relationships.

4.2. Measurement models

To analyse the data with regards to the hypothesised model, structural equation modelling (SEM) was conducted. In reference to Anderson and Gerbing (1988), a two-step approach was applied. In the first step, confirmatory factor analyses (CFA) were conducted for each latent variable (i.e., school climate, job crafting, job satisfaction, positive affect, and negative affect). For school climate, CFA tested 35 items within a 5-sub-factor model, which in turn loaded on a higher order school climate factor. The data adequately fit the model [χ^2 /df = 1.39, CFI = 0.960, TLI = 0.961; RMSEA = 0.040 (CI 0.34–0.45); SRMR = 0.137]. A CFA for job crafting confirmed the theoretical structure of 20 items loading on a 4-sub-factor model, which in turn loaded on a higher order job crafting factor with adequate model fit [χ^2 /

Table 2. Variable inter-correlations						
	1	2	3	4	5	
1 SC–composite	1	.24**	.33**	.37**	34**	
2 JC—composite		1	.42**	.30**	28**	
3 TWB-job sat. (t2)			1	.46**	56**	
4 TWB-pos. affect (t2)				1	61**	
5 TWB–neg. affect (t2)					1	

Note: SC = School climate; JC = Job crafting; TWB = Teacher well-being; t2 = interval 2

* p < .005, ** p < .001

df = 2.39, CFI = 0.970, TLI = 0.967; RMSEA = 0.074 (CI 0.64–0.80); SRMR = 0.147]. With regards to job satisfaction, CFA confirmed a single latent variable with all 12 items with good model fit [χ^2 /df = 2.19, CFI = 0.946, TLI = 0.972; RMSEA = 0.069 (CI 0.06–0.08); SRMR = 0.048]. The same applied to negative affect [χ^2 /df = 2.54, CFI = 0.960, TLI = 0.927; RMSEA = 0.086 (CI 0.08–0.10); SRMR = 0.077] and positive affect [χ^2 /df = 2.34, CFI = 0.960, TLI = 0.982; RMSEA = 0.096 (CI 0.08–0.11); SRMR = 0.038], confirming two respective single latent variables each including 10 items. Finally, within this first step, composite scores for school climate (with the sub-factors affiliation, innovation, resource adequacy, participatory decision making, and student support), job crafting (with the sub-factors increasing social resources, increasing structural resources, increasing demands, and decreasing hindering demands), and for teachers' wellbeing (with job satisfaction, positive affect and negative affect) were computed.

4.3. Testing the hypothesised model

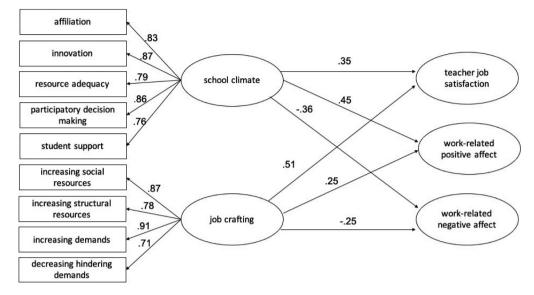
In the second step, the hypothesised model was tested. Fit indices demonstrated an adequate fit $[\chi^2/df = 2.34, CFI = 0.960, TLI = 0.982; RMSEA = 0.096 (CI 0.08-0.11); SRMR = 0.038]. Figure 2 displays the direct standardised paths between variables. School climate was positively related to teachers' job satisfaction (<math>\beta = .35$, p < .000) and positive affect ($\beta = .45$, p < .000) and was negatively related with negative affect ($\beta = -.36$, p < .000). Job crafting was positively related teacher job satisfaction ($\beta = .51$, p < .000) and positive affect ($\beta = .25$, p = .003), and was negatively related to negative affect ($\beta = -.25$, p = 004). In line with expectations, results of the analyses demonstrated that both contextual conditions and individual behaviour were predictive of teachers' well-being (recorded with a 2-week interval). Furthermore, it was observed that job crafting ($\beta = .51$) demonstrated a stronger connection to job satisfaction than to school climate ($\beta = .35$). Conversely, the connections of school climate with the affective (PA: $\beta = .45$, NA: $\beta = -.36$) variables were stronger than the connections of job crafting and the affective variables (PA: $\beta = .25$, NA: $\beta = .25$).

4.4. Supplementary analysis

Results of the SEM suggest that school climate and job crafting are both relevant factors for the well-being of teachers. However, as an additive association between environmental and individual factors was demonstrated in previous work from outside the educational sector (Slemp et al., 2015), it was suspected that the highest levels of well-being occur when both high rates of school climate and job crafting are present. To investigate this assumption, three separate linear regression analyses were conducted, each predicting one of three depended variables (i.e., job satisfaction, positive and negative affect) by job crafting, school climate and the interaction of both variables (interaction term computed from the product of the mean-centred composites for job crafting and school climate). The interaction was statistically significant for job satisfaction ($\beta = .14$, p = .003), positive affect ($\beta = .11$, p < .004) and negative affect ($\beta = -.12$, p = 002). This illustrates that the independent factors are additive regarding each dependent variable.

5. Discussion

The present paper argues that the well-being of teachers is not only dependent on the contextual conditions of the individual workplace, but also influenced by teachers' job crafting. The Figure 2. Standardised parameter estimates for the accepted model. All paths are significant. $\chi^2/df = 2.34$, CFI = 0.960, TLI = 0.982; RMSEA = 0.096 (CI 008–011); SRMR = 0.038



empirical investigation scrutinised this proposition and found that the well-being of teachers is in fact separately predicted by school climate and teachers' job crafting. This is in line with the expectations generated by prior findings that highlighted the importance of job crafting for employee well-being in general (Rudolph et al., 2017) and teacher well-being in particular (Peral & Geldenhuys, 2016; Van Wingerden et al., 2017a; Van Wingerden & Poell, 2019). Likewise, this study asserted prior knowledge on the relevance of school climate with regards to teachers' well-being (Gray et al., 2017; Thapa et al., 2013). The results of this study extend this prior knowledge by demonstrating that school climate and job crafting together play important roles in the prediction of teacher well-being. Moreover, as both contextual and individual aspects were investigated within one approach, results enable the comparison of the predictive power of both factor sets. With regards to job satisfaction, coefficients demonstrate that the impact of job crafting appears to be larger than the impact of school climate. By contrast, for positive and negative affect, the impact of school climate appears to be larger than the impact of job crafting. This seems plausible, as job crafting includes the adaptation of cognition about work (Tims et al., 2012; Tims & Parker, 2019), while (the rather stable) work conditions appear causally related to employees' mood (Messer & White, 2006). More generally, these findings imply that contextual factors are more pertinent to how teachers feel at work, while individual behaviour is more closely related to the cognitive appraisal of work experiences.

Results further indicate an interaction of both school climate and job crafting. As shown in previous research from outside the educational sector (Slemp et al., 2015), high rates of beneficial contextual conditions and high rates of job crafting result in the highest rates of teacher wellbeing. Accordingly, this finding supports the notion that the well-being of teachers is the responsibility of the individual and of the community or system of which the individual is a part.

5.1. Limitations

These findings should not be interpreted without acknowledging the following limitations. The data for this study was collected via teachers' self-reports, which can only provide a limited picture. With regard to school climate variables in particular (which imply a school level measurement approach), individual self-reports might be of limited validity. Furthermore, the assessment of job crafting might be more valid within a mixed method approach. This is why in future studies, self-report data should be linked with more objective data collection approaches, such as whole-school assessments, and should include various other data sources, such as field observations, protocol data or diary assessment.

The teacher sample can be regarded as relatively small and was focused on a local area in central Germany. To scrutinize the presented findings, replication studies with larger samples from different areas inside and outside Germany, as well as from different cultural backgrounds are advisable.

Despite implementing a time-lagged design, great caution is warranted with regard to making causal interpretations from the data. Moreover, SEM is only one of several approaches to analysing data collected in a time-lagged design and comes with certain strengths and weaknesses (Guo et al., 2009). Hence, the findings and conclusions presented here should be further scrutinised with longitudinal designs involving larger time frames, experimental designs and respective data analysis approaches. In addition to harness the potential of more robust analyses in future quantitative investigations, qualitative studies should be conducted to provide more in-depth insights into the psychological mechanisms at play in relation to job crafting and well-being.

5.2. Implications

Despite limitations, the present study provides novel insights to inform both research and practice. In general, it was demonstrated that contextual as well as individual factors are of importance for teachers' well-being. This underlines the value of studying both aspects within a comprehensive approach and should inspire other researchers to do so. Results from testing comprehensive models will help to understand potential influences, limits and interactions of both forces on teachers' well-being more clearly.

In particular, the present findings highlight the potential merits of teachers' job crafting. To date, only a few studies have indicated the beneficial role of job crafting in this context. This study adds to this emerging field by synthesising important prior findings with the newly considered contextual conditions. Future research should scrutinise teachers' job crafting behaviour, its micro elements, psychological mechanisms, limits, and potential other benefits, such as job performance. Special emphasis should be directed to the investigation of the suggested relationship between changes in teachers' cognition about work and cognitive aspects of well-being.

In practice, the present findings support a two-way approach in securing teacher well-being. On the one hand, school systems and individual schools should be examined for potential ways of contributing to an excellent school climate (Thapa et al., 2013). On the other hand, teachers could be supported in their job crafting behaviour by introducing effective job crafting programmes (e.g., Van Wingerden et al., 2017b, 2017). In addition, initial teacher education should acquire this knowledge and implement strategies to educate future teachers about the possibilities and limits of their behaviour in designing and adapting their future workplace. Field experiences at schools may provide interesting loci for such application. With more teachers educated in this respect, it would also be of interest to investigate the effects of collective job crafting on the collective well-being, development, and leadership structure of school communities. Approaches from the study of community well-being (e.g., Cloutier et al., 2019) might be helpful in this regard.

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correction

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