Does basic need satisfaction mediate the link between stress exposure and well-being? A diary study among beginning teachers

Karen Aldrup a,*, Uta Klusmann a, Oliver Lüdtke a,b

* Corresponding author. Leibniz Institute for Science and Mathematics Education, University of Kiel, Olshausenstr. 62, 24118 Kiel, Germany.
E-mail address: aldrup@ipn.uni-kiel.de (K. Aldrup).

ARTICLE INFO
Article history:
Received 14 January 2016
Received in revised form
18 August 2016
Accepted 10 November 2016
Available online xxx

Keywords:
Self-determination theory
Need for relatedness
Emotional exhaustion
Work enthusiasm
Teacher stress

ABSTRACT
An imbalance between work-related stressors and resources, which we refer to as stress exposure, is often found to impair teachers’ occupational well-being. However, the psychological mechanisms that explain this relationship are mostly unknown. We assumed that satisfaction of the basic psychological needs for competence, relatedness with students, and relatedness with colleagues acts as a mediator. To test this assumption, we conducted a two-week diary study with 152 beginning teachers. A multilevel within-subject mediation analysis showed that teachers felt less work enthusiasm and more emotional exhaustion on days when stress exposure was high. Whereas the needs for competence and relatedness with students explained the association with work enthusiasm, the need for competence mediated the relationship with emotional exhaustion. Additionally, the least experienced teachers felt more emotional exhaustion when the need for relatedness with students was not satisfied. These findings add to our understanding of the daily intra-individual processes affecting beginning teachers’ occupational well-being.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

1. Introduction

Beginning teachers’ occupational well-being is a major concern. The transition from university to practice is often described as particularly stressful and is associated with high attrition rates (Dicke et al., 2015; Smith & Ingersoll, 2004). Moreover, teachers’ occupational well-being affects the quality of teaching, student motivation, and student achievement (Arens & Morin, 2016; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008b; Klusmann, Richter, & Lüdtke, 2016; Shen et al., 2015).

Theoretical models (e.g., job demands-resources model; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) suggest that an imbalance between work-related resources and stressors, which we refer to as stress exposure, strongly affects occupational well-being. A vast body of research supports this assumption. However, little is known about the psychological mechanisms underlying these relationships. Furthermore, the daily processes that explain intra-individual variations in well-being have not been investigated up until now. We suggest that daily stress exposure, e.g., a lack of student discipline or of social support from colleagues (Chaplain, 2008; Hakanen, Bakker, & Schaufeli, 2006), accounts for daily changes in beginning teachers’ occupational well-being because it inhibits fulfillment of the basic psychological needs for competence, relatedness with students, and relatedness with colleagues. Additionally, we explored whether there are inter-individual differences regarding these processes.

To test these assumptions, we conducted a two-week diary study with 152 teachers, in which they reported on daily stress exposure, basic need satisfaction, and well-being, as indicated by work enthusiasm and emotional exhaustion. Using a within-subject mediation analysis, we modeled the daily intra-individual processes affecting well-being. We also examined the extent to which each of the basic needs contributes to teachers’ occupational well-being. Finally, we explored whether teachers differ in these relations and whether these variations can be explained by years of job experience.

1.1. Teachers’ occupational well-being

Teachers’ occupational well-being can be described as their optimal psychological functioning and experience regarding their
work as a teacher (Ryan & Deci, 2001). On the one hand, this means that they are engaged and enthusiastic about teaching, which is accompanied by feelings of enjoyment, excitement, and pleasure (Kunter et al., 2008). These positive emotions are reflected in the quality of teachers' instruction and affect students' motivation and learning outcomes (Keller, Goetz, Becker, Morger, & Hensley, 2014; Kunter et al., 2013). On the other hand, well-being requires teachers to experience low levels of stress and burnout. In the present study, we focus on the central quality of burnout: emotional exhaustion, which refers to the stress dimension of burnout and includes feelings of strain and the depletion of one's emotional resources (Maslach, Schaufeli, & Leiter, 2001). This lack of resources impedes teachers in creating a stimulating learning environment and, consequently, students' school satisfaction, engagement, and achievement diminish (Arens & Morin, 2016; Klusmann et al., 2008b; Klusmann et al., 2016; Shen et al., 2015). Hence, identifying the sources of teachers' work enthusiasm and emotional exhaustion is an important task.

1.2. Stress exposure as a predictor of occupational well-being

The job demands-resources model (Demerouti et al., 2001) proposes that a variety of job resources and stressors interact to explain the positive as well as the negative dimension of occupational well-being. According to Demerouti et al. (2001), stressors are aspects of one's job that are associated with physiological and/or psychological costs because they require prolonged effort or skill; job resources, among other things, reduce stressors and the associated costs. The job demands-resources model differs from previous models (e.g., demand-control model, Karasek, 1979; transactional model of stress and coping, Lazarus & Folkman, 1984; effort-reward imbalance model, Siegrist, 1996) because it is not limited to the negative dimension of well-being or to specific stressors and resources. Similar to those previous models, stress is seen as a consequence of work-related stressors outweighing the employee's resources. In line with this, prior studies indicated that an imbalance of stressors and resources is central in predicting well-being, which suggests that it is reasonable to investigate them in combination (Siegrist et al., 2004; de Jonge, Bosma, Peter, & Siegrist, 2000). Drawing on this, we see stress exposure as an imbalance between work-related resources and stressors that, as depicted in our heuristic working model (see Fig. 1, Hypothesis 1), affects occupational well-being.

For teachers, these stressors and resources may be located in class or outside class. The most prominent stressors in class are related to teacher-student interactions (Pyhältö, Pietarinen, & Salmela-Aro, 2011); primarily to student misbehavior and discipline problems (Fernet, Guay, Senecal, & Austin, 2012; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008a; Skaalvik & Skaalvik, 2010). A lack of student motivation or conflicting teacher-student relationships have also been found to negatively affect teachers' well-being (Gastaldi, Pasta, Longobardi, Prino, & Quaglia, 2014; Kyriacou, 2001). Outside class, interactions with colleagues are often perceived as stressful (Kyriacou, 2001; Pyhältö et al., 2011). However, social support from colleagues and a positive social climate are also considered to be key resources (van Droegenbroeck, Spruyt, & Vanroelen, 2014; Hakken et al., 2006; Pomaki, DeLongis, Frey, Short, & Wohrle, 2010; Skaalvik & Skaalvik, 2011). A lack of student motivation or conflicting teacher-student relationships have also been found to negatively affect teachers' well-being (Gastaldi, Pasta, Longobardi, Prino, & Quaglia, 2014; Kyriacou, 2001). Outside class, interactions with colleagues are often perceived as stressful (Kyriacou, 2001; Pyhältö et al., 2011). However, social support from colleagues and a positive social climate are also considered to be key resources (van Droegenbroeck, Spruyt, & Vanroelen, 2014; Hakken et al., 2006; Pomaki, DeLongis, Frey, Short, & Wohrle, 2010; Skaalvik & Skaalvik, 2011). As positive teacher-student relationships and student motivation (Jo, 2014; Kunter, Brenzel, Nagy, Baumert, & Pekrun, 2011; Veldman, van Tartwijk, Brekelmans, & Wubbels, 2013; van Droegenbroeck et al., 2014), one important shortcoming of these studies is the rather static perspective that interprets work-related stressors and resources as relatively stable characteristics of the work environment. Consequently, these studies tell us whether people who experience more stressors and have fewer resources also have lower levels of well-being, but we cannot infer how intra-individual variations in teachers' work-related experience are reflected in their daily well-being (Bolger & Laurenceau, 2013).

1.3. A daily perspective on teachers' occupational well-being

A growing number of researchers emphasizes that stressors and resources are prone to substantial variation and takes minor daily events into consideration (e.g., Bakker & Bal, 2010; Kitching, Morgan, & O'Leary, 2009; Simbula, 2010). Positive daily experiences that promote well-being are termed uplifts; negative daily experiences that threaten well-being are termed hassles (Lazarus, 1984). Consequently, uplifts and hassles correspond to work-related resources and stressors, respectively; the only difference is that they are fluctuating entities. In his stress model, Almeida (2005) picks up on these ideas. Moreover, he proposes that socio-demographic and psychosocial resilience and vulnerability factors moderate the strength of the relationship between daily experience and daily well-being. Drawing on Huberman's model of teacher development (Huberman, 1989), more job experience may be one moderator that reduces the impact of daily hassles (see Fig. 1, Hypothesis 3).

To capture the daily variations in uplifts and hassles, diary studies are frequently applied (for more information on their benefits and guidelines for their application see, e.g., Bolger & Laurenceau, 2013; Gunthert & Wenze, 2012; Zirkel, Garcia, & Murphy, 2015). They should include at least five measurement time points and usually last two weeks (Bolger & Laurenceau, 2013; Gunthert & Wenze, 2012). Daily diaries allow researchers to capture psychological processes as they unfold in everyday life, which also reduces retrospective bias (Zirkel et al., 2015). This is of particular interest as studies asking people about their current experience can yield largely different findings to studies asking about more general characteristics (Goetz, Bieg, Lüdtke, Pekrun, & Hall, 2013; Robinson & Clare, 2002).

The few existing diary studies show that the typical stressors and resources, such as colleague support, student motivation, and student behavior, also function as uplifts and hassles on the day-to-day level (Bakker & Bal, 2010; Kitching et al., 2009; Simbula, 2010; Tadić, Bakker, & Oerlemans, 2013). Additionally, they indicate that there is a lot of variance in the daily uplifts and hassles experienced by one teacher. Nonetheless, the question of which psychological mechanisms lie behind the effects caused by hassles and uplifts remains open. Recently, the concept of basic psychological needs from self-determination theory (SDT; Ryan & Deci, 2000) was proposed as an answer to this question (e.g., Bartholomew, Ntoumanis, Cuevas, & Lonsdale, 2014).

1.4. Basic need satisfaction as a mediator: theoretical foundations

The concept of basic psychological needs—the needs for autonomy, competence, and relatedness—is central to SDT, an organismic metatheory on human motivation and personality (Ryan & Deci, 2000). The theory implies that basic need satisfaction has a mediating role (see Fig. 1, Hypothesis 2). On the one hand, SDT proposes that basic need satisfaction not only fosters human motivation and personality development, but is also vital for well-being. A vast body of research underpins this assumption (Milyavskaya & Koestner, 2011; Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008; for an overview, see also Ryan & Deci, 2000). On the other hand, SDT states that basic need satisfaction largely...
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات