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Teachers' professional competence and wellbeing: Understanding the links between general pedagogical knowledge, self-efficacy and burnout

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ABSTRACT

Teachers' professional competence—their professional knowledge, skills, beliefs and motivation—is a critical predictor of teachers' professional wellbeing and success. In a sample of 119 in-service teachers, the present study examined the associations of two aspects of teachers' professional competence—their general pedagogical knowledge (GPK) and self-efficacy—with teachers' likelihood of experiencing burnout, as well as possible differences in these constructs as a function of gender and teaching experience. A path analysis revealed no systematic associations with gender, whereas teaching experience had a curvilinear association with GPK, a negative linear association with self-efficacy, and no significant association with burnout. Mediation analyses suggested that GPK negatively predicted teacher burnout both directly, as well as indirectly via its positive association with teaching self-efficacy. Only teaching-specific but not general self-efficacy functioned as a mediator in these analyses; the identified predictive effects are thus specific to teachers' professional competence. Possible implications for the prevention of burnout are discussed.

1. Introduction

Teacher burnout—teachers' experience of emotional exhaustion, depersonalization of students, and perceived lack of personal accomplishment—has profound implications for teachers' successful professional functioning (e.g., Butler & Shibaz, 2015; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008; Maslach, 2003; Maslach, Schaufeli, & Leiter, 2001). Job burnout, in and of itself, is an indicator of lacking professional wellbeing (e.g., Klusmann et al., 2008) and has been linked to such undesirable outcomes as job attrition, absenteeism, turnover, deficient job performance, depression, and other psychological and somatic problems (for a meta-analysis across occupations, see Swider & Zimmerman, 2010, for a review of teacher burnout research, with a special focus on Germany where the present study was conducted, see Action Council Education [Aktionsrat Bildung, ARB], 2014). Furthermore, individuals in human services occupations, including teachers, seem to be particularly prone to experiencing

burnout (ARB, 2014; Maslach, 2003). Aspects of teacher burnout have been linked not only to teachers' wellbeing, but also to lower quality instructional practices (Butler & Shibaz, 2015; Klusmann, Kunter, Trautwein, & Baumert, 2006), so that teacher burnout can potentially affect not only teachers but also their students (see also Klusmann et al., 2008).

A key contributor to job burnout is the chronic strain that results, for instance, from the mismatch between job demands and available resources to successfully cope with these demands (Maslach, 2003; Maslach et al., 2001). Accordingly, research on teacher burnout has focused both on characteristics of the school and classroom environment, such as students' disciplinary problems, as well as on individual characteristics of teachers, such as their self-efficacy beliefs (beliefs in their teaching capabilities) and professional knowledge, that may protect them from or put them at risk of experiencing stress, psychological strain, and burnout (Dicke et al., 2015; Durr, Chang, & Carson, 2014). In general, teachers with greater personal resources and competence (e.g., self-efficacy, adaptive coping strategies, and professional knowledge) are more likely to master the challenges of the teaching profession, and thus less likely to experience burnout (e.g., Dicke et al., 2014, 2015; Durr

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et al., 2014; Klusmann et al., 2008; Schwarzer & Hallum, 2008).

Drawing on this theoretical and empirical evidence, the main objective of the present study was to examine the interrelations between two aspects of teachers' professional competence (their general pedagogical knowledge [GPK] and sense of self-efficacy) and their experience of burnout (emotional exhaustion, depersonalization of students, and lack of personal accomplishment) in a sample of in-service teachers. Teachers' professional competence includes "cognitive aspects (e.g., professional knowledge), beliefs related to learning, and motivational and self-regulatory variables" (Kunter et al., 2013, p. 805; see also review in König, 2014). In our study, we focus on two aspects of teachers' professional competence: their GPK (as a cognitive aspect) and their self-efficacy (as a motivational aspect). Very few studies to date have examined the combined predictive effects of teachers' GPK and self-efficacy on the experience of burnout, and these studies are largely based on samples of student teachers, and have focused on only one particular aspect of burnout, namely emotional exhaustion (e.g., Dicke et al., 2014, 2015; Klusmann, Kunter, Voss, & Baumert, 2012). Analyses of in-service (in addition to pre-service) teachers' GPK, self-efficacy, and burnout are important, because these beliefs and competencies can vary substantially across teachers' professional lifespan (ARB, 2014; Klassen & Chiu, 2010; Klusmann et al., 2012; König et al., 2014; Schwarzer & Hallum, 2008). In addition, examining different dimensions of burnout is important, because they capture unique aspects of the burnout experience, such as individual stress (emotional exhaustion), a person's detachment from other people and aspects of the job (depersonalization and cynicism), and a sense of ineffectiveness and lack of personal accomplishment (Maslach, 2003). Indeed, based on her extensive work on this topic, Maslach (2003) proposed that emotional exhaustion is a necessary, but not a sufficient criterion for defining burnout, and argued for the use of her three-dimensional model capturing not only emotional exhaustion, but also depersonalization of others, and lack of personal accomplishment. A recent study by Butler and Shibaz (2015) demonstrated that critical instructional practices such as student-reported socio-emotional support by the teacher are uniquely negatively predicted by teachers' self-reported depersonalization of students, but not by teachers' emotional exhaustion, which highlights the value of examining multiple burnout dimensions. Due to the inherently interpersonal nature of teaching, a sense of detachment from and depersonalization of students is arguably a particularly problematic aspect of teacher burnout (Butler & Shibaz, 2015), and has been highlighted as a hallmark of the job burnout experience (Maslach, 2003).

In the following sections, we discuss the associations between teacher burnout, self-efficacy, GPK, teaching experience, and gender, and outline the key hypotheses of the present study. We propose that teachers' GPK can be a resource that helps them to master occupational tasks and can thus potentially serve as a protective factor against burnout, both directly as well as possibly indirectly via its association with teachers' self-efficacy for mastering teaching-related challenges (cf. Dicke et al., 2015; Klusmann et al., 2008, 2012). We further propose that any associations between GPK and self-efficacy should be specific to the context of teaching, rather than related to a general sense of self-efficacy for mastering challenges across life domains (cf. Schwarzer & Hallum, 2008).

1.1. Teacher self-efficacy and burnout

Teacher self-efficacy refers to teachers' beliefs in their capability to produce desired educational outcomes (Schwarzer & Hallum, 2008; Tschannen-Moran & Woolfolk Hoy, 2001). Several theoretical frameworks conceptualize self-efficacy and other control-related beliefs as a key protective factor against stress and burnout. These theoretical perspectives include Maslach's conceptual framework of job burnout cited previously (Maslach et al., 2001), resource theories (Hobfoll & Freedy, 1993; Hobfoll, 2002; Schwarzer & Hallum, 2008), and socio-cognitive theory (Bandura, 1997; Schwarzer & Hallum, 2008). Maslach and her colleagues (Maslach, 2003; Maslach et al., 2001) proposed that the individual's sense of efficacy constitutes a core aspect of job engagement, which in turn represents the antithesis of burnout. The authors also argued that a mismatch between one's sense of control over work processes and work demands is a key reason why individuals experience stress and burnout in the workplace.

Resource theories make analogous predictions (see review in Hobfoll, 2002; as well as Hobfoll & Freedy, 1993). For instance, socio-cognitive theory (Bandura, 1997)—which is considered a key resource theory in Hobfoll's (2002) comprehensive review—suggests that not the experienced demands (or stressors) per se, but rather the perceived lack of self-efficacy to successfully manage these demands has negative stress-related consequences for the individual (Bandura, 1994, 1997). Compared to low efficacy individuals, high efficacy individuals are more likely to invest effort towards accomplishing challenging goals and to persist in the face of difficulty because they believe they have the capabilities to successfully master these challenges and difficulties (Bandura, 1994, 1997). Socio-cognitive theory also suggests that stress reactions and tension in performance situations can be interpreted as a vulnerability by the individual and may therefore undermine one's self-efficacy beliefs; however, high efficacy relative to low efficacy individuals are more likely to interpret their affective arousal as an energizing facilitator of performance, whereas low efficacy individuals are more likely to engage in self-doubts and to view their affective arousal as a debilitator (Bandura, 1994).[1] In sum, these theoretical perspectives converge on self-efficacy as an important negative predictor of stress and burnout.

A negative association between self-efficacy and aspects of burnout has been consistently found not only in studies across occupational fields, but also in research focusing specifically on teachers (e.g., Dicke et al., 2014; Durr et al., 2014; Fernet, Guay, Senecal, & Austin, 2012; Schwarzer & Hallum, 2008). For instance, in a longitudinal study with German teachers, Schwarzer and Hallum (2008) found that teachers' self-efficacy negatively predicted job stress, and also indirectly negatively predicted subsequent burnout (emotional exhaustion and depersonalization of students). This indirect effect was stronger among younger teachers, but was significant across all age groups. Dicke et al. (2014) found that German student teachers' self-efficacy for classroom management negatively predicted classroom disruptions, and also indirectly negatively predicted the experience of emotional exhaustion. This indirect effect was stronger at lower levels of self-efficacy, since highly efficacious student teachers were less likely to experience classroom disruptions that may contribute to emotional exhaustion. Klassen and Chiu (2011) found that Canadian pre-service and in-service teachers' self-efficacy negatively predicted their experience of stress (a precursor to burnout) and intentions to quit the profession. In addition, Fernet et al. (2012) found that the amount of intraindividual change in Canadian in-service teachers' self-efficacy over a school year predicted corresponding change in experiencing burnout across all three of Maslach's burnout dimensions. In sum, ample research corroborates a negative

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[1] Note that these considerations imply potentially cyclical associations between teachers' self-efficacy and stress/burnout over time. The available evidence regarding the directionality of these associations is not unequivocal (Brouwers & Tomic, 2000; Dicke et al., 2015; Schwarzer & Hallum, 2008).