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REVIEW ARTICLE

An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers

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Abstract K-12 teaching is a profession characterized by high levels of burnout and emotional exhaustion. Teacher burnout has been widely reviewed and studied; however, only limited literature examines the emotional aspects of teachers' lives and its connection with teacher burnout. The purpose of this article is to review the literature on teacher burnout and teachers' emotions and to examine the role of teachers' appraisal of their emotional exhaustion. Through reviewing the literature on teacher burnout and emotions, I argue that the habitual patterns in teachers' judgments about student behavior and other teaching tasks may contribute significantly to teachers' repeated experience of unpleasant emotions and those emotions may eventually lead to burnout. In order to ease teacher burnout, I argue that more studies on the antecedent appraisals that teachers make are necessary to help teachers better understand how their emotions were triggered and then learn how to regulate those emotions.

Keywords Teacher burnout · Teacher emotions · Appraisals · Emotion regulation · Coping

Teaching is a profession characterized by high levels of burnout and emotional exhaustion (Hakanen *et al*. 2006; Maslach *et al*. 2001). For teachers in K-12 schools, teaching is often marked by a myopic focus on day-to-day events, separation from other adults, and limited opportunities for reflection (Fullan 2001). Due to the isolated culture, teachers may become frustrated, bored, and depleted as they privately struggle with their anxieties (Fullan 2001; Dussault and Deaudelin 1999). Further, teachers often feel drained intellectually and emotionally when they deal with student misbehaviors (Chang and Davis 2009). To successfully connect with their students and help students connect with the subject matter, teachers need a variety of intellectual and emotional resources on which they can draw (Woolfolk Hoy and Davis 2005).

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Teacher burnout affects the teacher workforce externally as well as internally. Externally, the harm to the teacher workforce is traceable and measurable, through teacher attrition and teacher shortage. In the USA, up to 25% of beginning teachers leave the teaching field before their third year, and almost 40% leave the profession within the first 5 years of teaching (Milner and Woolfolk Hoy 2003; National Center for Education Statistics 2004; National Commission on Teaching and America's Future 2003; Smith and Ingersoll 2004). Internally, for some teachers who remain in the profession, fatigue may lead to ineffectiveness and burnout that inadvertently harms classrooms and the school (Olivier and Venter 2003). International surveys conducted by International Labor Organization–United Nations Educational Scientific and Cultural Organization Joint Committee revealed that 25–33% of teachers suffer significantly from stress (Macdonald 1999). In Germany, fewer than 10% of the teachers remain until retirement; in Britain, the number of teachers who leave the profession is also more than the number of teachers who stay until retirement (Macdonald 1999). The resulting shortage of teachers has not only caused a staffing problem in schools but also may degrade the quality of instruction in the classroom due to high turnover.

The emotional needs, labor, and work required for a teacher are significant compared to other professions. Although burnout symptoms among teachers have been studied for decades, few scholars have examined teacher burnout through the lens of emotion regulation and the antecedent appraisals. In this article, I argue that the habitual patterns in teachers' judgments about student behavior and other teaching tasks may contribute significantly to teachers' repeated experience of distinct unpleasant emotions and may eventually lead to certain degrees of burnout, as depicted by Fig. 1. In addition, teachers who experience higher levels of burnout tend to withdraw from student–teacher relationships and tend to feel inefficacious about their teaching tasks (Burke *et al*. 1996). As a result, they may face more problems in classroom management with regard to students' behaviors (as depicted by the dotted line in Fig. 1). I argue that by helping teachers become aware of and interpret and question the judgments that underlie their emotions, we may help teachers better understand how their judgments triggered their unpleasant emotions and help them learn how to regulate those emotions effectively.

Purpose

The purpose of this article is to review the existing literature on teacher burnout and related unpleasant emotions. I explore the existing literature focused on why some teachers feel burnout, while others do not. Historically, the work on burnout has been focused on individual characteristics and organizational factors. I look beyond these factors to examine inter- and intrapersonal factors that may contribute to burnout. Specifically, I examine how the judgments teachers make may lead to their experience of emotional exhaustion.

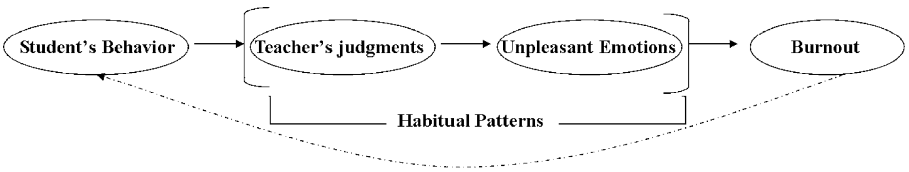

Fig. 1 Concept model for reviewing teacher emotions and teacher burnout

Procedure

Review procedures included a directed search for articles written over the past 30 years specifically on teacher burnout and teacher emotions in the following databases: Academic Search Complete, Education Resources Information Center, Education Research Complete, and the Psychology and Behavioral Science Collection. Across the literature, findings reveal that our current understanding of teacher burnout is limited to teachers' feelings of emotional exhaustion, but not connected with teachers' discrete emotions and how their appraisals of events contribute to the emotions or emotional exhaustion. Although emotional exhaustion has been the most prominent dimension for defining teacher burnout, few studies have examined the emotional aspects of teachers' lives in the field (see review by Sutton and Wheatley 2003). Particularly, there is no existing review of studies on teachers' discrete emotions involved in teaching and their relation to burnout.

The central thesis in this article is that there is a notable disconnect between teacher burnout studies and teacher emotion studies. Therefore, this article aims to synthesize and bridge the literature on teacher burnout and the unpleasant emotions involved in teaching. In the first section, the sources contributing to teacher burnout are organized into three factors: individual, social and organizational, and transactional factors. In the second section, I reviewed studies on discrete emotions that may bridge our understandings of teacher burnout with the relationship to emotional aspects of teaching. As Sutton and Wheatley (2003) suggested, it is necessary to understand how teachers' appraisals contribute to classroom management or discipline issues. In the third section, I further reviewed appraisal theories as the antecedents of emotions. Lastly, I reviewed studies on teacher emotion regulation and effective coping that may contribute to ease teacher burnout. I then proposed implications and future research agenda based upon the reviews of the above four sections.

Review of Teacher Burnout Studies

Burnout is a syndrome that initially appeared in articles through descriptive and qualitative observations by early researchers in human services and healthcare in the mid-1970s. It was examined using an empirical approach in 1980 (see Maslach *et al*. 2001). Freudenberger (1974), a psychiatrist, observed the wear-out symptoms among staff working in free clinics and defined burnout as a symptom of emotional depletion and a loss of motivation and commitment. Maslach (1976), a social psychologist, interviewed human service workers about their emotional stress at work. Maslach found that the burnout phenomenon commonly exists in the care-giving and service occupations, in which the emotions, motives, and values between provider and recipient are the underlying interpersonal context for burnout.

Before the Maslach Burnout Inventory (MBI) developed by Maslach and Jackson (1981), burnout was a "slippery" concept and was not systematically studied (as cited in Maslach *et al*. 2001, p. 402). Maslach and Leiter (1997) defined burnout as "an erosion of engagement that what started out as important, meaningful, and challenging work becomes unpleasant, unfulfilling, and meaningless" (see Maslach *et al*. 2001, p. 416). Accordingly, burnout happens when exhaustion replaces feeling energized, cynicism replaces being hopeful and being involved, and ineffectiveness replaces feeling efficacious.

In the field of teacher education, early researchers studied teacher burnout through the lens of teacher stress (Smylie 1999). Their findings suggest that special education teachers

are the most prone to high stress and burnout (McIntyre 1983). In the early 1980s, researchers in teacher education identified the underlying factors in teacher stress and burnout from demographic information such as sex, age, marital status, years of teaching experience, and level of education. In the late 1980s, researchers began to examine the work-related factors, such as teacher–pupil ratio, grade level taught, types of exceptional children taught, and workload. In the early research, workload appeared to be the most salient element that contributed to burnout. Therefore, some models were proposed to examine teacher burnout in relation to workload. For example, the demand–control model (DCM; Karasek 1979) explains that job stress is caused by a combination of high job demands and low job control. DCM was later expanded to the job demands–resources (JD-R) model in a study of a large sample of Finnish teachers that included resources as a mediator between demands and control (Demorouti *et al*. 2001). The job–demand variables include the physical, psychological, social, or organizational aspects of the jobs that require sustained physical and/or psychological efforts or costs, such as disruptive pupil behaviors, work overload, and poor physical work environment. The job–resources variables include the physical, psychological, social, or organizational aspects of the job that may reduce job demands and the associated psychological efforts or costs. They are functional in achieving goals and stimulate personal growth, such as job control, access to information, supervisory support, innovative school climate, and social climate. In the JD-R model, job–demands variables predict health problems through burnout; the job–resources variables predict organizational commitment through work engagement.

In the 1990s, researchers used theoretical models to examine the interaction of teacher burnout and the work environment. For example, Blasé (1982) interviewed 43 high school teachers and proposed the teacher performance–motivation theory. Blasé utilized a dynamic and reciprocal student–teacher relationship model to study teacher performance. This model includes the following variables: coping sources, rewards, work satisfaction, work involvement, work motivation, and work effort. Blasé concluded that teacher burnout is mainly a function of "prolonged job strain that results from the inadequacy of coping resources and the absence of equitable rewards in relation to the demands of work-related stressors" (p. 109). Early studies of burnout suggested that burnout is a syndrome caused by prolonged stress and is related to the work environment.

In recent decades, Maslach's work on burnout has emerged as the dominant framework for studying burnout because of the defining psychological constructs she developed. Particularly, scholars have adopted the MBI scale developed by Maslach and Jackson (1981) which measures the psychological syndrome of burnout in three dimensions: emotional exhaustion, cynicism, and inefficacy.

Emotional exhaustion This is the core element of burnout and the most obvious manifestation of this complex syndrome. Maslach *et al*. (2001) noted that when people describe themselves or others as experiencing burnout, they most often refer to the experience of exhaustion. Evers *et al*. (2004) referred to emotional exhaustion as feelings of being emotionally overextended and having depleted one's emotional resources. Schwarzer *et al*. (2000) described fatigue, debilitation, loss of energy, and wearing out as characteristics of this component. However, emotional exhaustion is a personal psychological status which cannot capture other behaviors that relate to burnout. Maslach *et al*. argued that "the emotional demands of the work can exhaust a service provider's capacity to be involved with, and responsive to, the needs of service recipients" (p. 403). Therefore, Maslach *et al*. (2001) further proposed depersonalization as another relevant dimension of burnout.

Cynicism/depersonalization According to Maslach (1976), besides experiencing emotional exhaustion, human service providers or teachers who burn out tend to become more indifferent to the people they serve or to their colleagues. Maslach described this syndrome as cynicism or depersonalization. Cynicism refers to an attitude of scornful or jaded negativity, especially a general distrust of the integrity or professed motives of others. Depersonalization is to actively ignore the service recipients in an attempt to put distance between them and oneself (Maslach *et al*., 2001). Evers *et al*. (2004) define depersonalization as "a negative callous and detached attitude towards the people who one works with, i.e. patients, students" (p. 132).

Inefficacy/reduced personal accomplishment Exhaustion or depersonalization might interfere with effectiveness. When a person feels exhausted or indifferent toward serving or helping people, it is difficult to gain a sense of accomplishment. According to Bandura (1997), self-efficacy reflects an individual's beliefs in his or her own capabilities to pursue a course of action to meet given situational demands. Therefore, a teacher who is inefficacious may have lower competence in his or her own capabilities in instructional activities. Maslach *et al*. (2001) suggested that "the lack of efficacy seems to arise more clearly from a lack of relevant resources, whereas exhaustion and cynicism emerge from the presence of work overload and social conflict (p. 403)."

The psychological properties of burnout in teaching career

In reviewing the studies of teacher burnout, the psychological property of burnout seems to be a temporary state on a continuum rather than just an end-product. From a study of teacher career development, Fessler and Christensen (1992, as cited in Fullan 2001) interviewed 160 teachers across the career span and found that career frustration and burnout are typical for midcareer teachers. They also found that teachers at career frustration might return to enthusiastic and growing state if they engaged in professional development that was revitalizing. Thus, burnout may be an end-product for teachers who leave the profession with cynicism. It also may be a temporary state if someone overcomes it through the career.

In addition, the most widely used scales to capture burnout are the MBI scale by Maslach and Jackson (1981) and the Burnout Measure by Pines and Aronson (1988, as cited in Schaufeli *et al*. 1993). These two scales use either a six or seven-point measure burnout by frequency. Given the nature of the scale, the feelings of burnout are typically captured as a continuum.

Furthermore, existing studies on burnout typically involved one-time survey data. Thus, when teacher burnouts were reported, it is difficult to claim that teachers were actually experiencing an erosion of engagement and burned out or were just experiencing "feelings" of burnout when burnout were reported. For example, Carson (2006) found that burnout feelings were captured from teachers' daily report through personal digital assistance (PDA). In his study, teachers were having either low, moderate, or high levels of burnout. Carson's study suggests that burnout could be an emotional state for teachers.

Friedman and Farber (1992) found that teachers often report that even they are worn out, they still feel satisfied with teaching and believe they would choose teaching again if they were to start their professional lives over. In other words, teachers may have "feelings" of burnout in which they feel emotional exhausted, fatigue, or weaning out but they may still feel satisfied or efficacious about teaching tasks.

Moreover, although Maslach's three-dimensional model is widely accepted, scholars in this body of research continuously seek to improve the scale or to refine the constructs for a better understanding of burnout (Schaufeli and Salanova 2007; Salanova *et al*. 2005). For instance, Maslach (1976) stated that people use cognitive distancing by developing indifference or a cynical attitude when they are exhausted and discouraged. Salanova *et al*. (2005) proposed a four-dimensional model of burnout by considering depersonalization and cynicism, targeting two different mental distances (people vs. work). In other words, it is possible that a teacher feels the need to distant from the people but not necessary the work. This four-dimensional model, which separates depersonalization and cynicism as distinct components to measure burnout, has been tested and validated. In a related study of psychological constructs, Taris and colleagues claimed that depersonalization toward colleagues or the recipients of service can be considered as a psychological withdrawal as well as a coping behavior (Taris *et al*. 2004). It is then a motivational outcome directed at restoring a disturbed exchange relationship with colleagues or recipients of one's service (Lazarus and Folkman 1987). In the teaching profession, teachers face multiple relationships (students, administrators, colleagues, parents, social relationships) and teachers may feel the need to distant from colleagues or other relationships but still engaged in teacher–student relationships.

In a teacher collaboration study, Tschannen-Moran and colleagues noted that isolation may be necessary for teachers to maintain autonomy (Tschannen-Moran *et al*. 2000). In other words, for teachers who already sense that they are emotionally exhausted, putting some distance from the relationship with their students may help prevent themselves from burnout. As a result, depersonalization might be a psychological mechanism of coping in teaching career. Therefore, we need to further examine the nature of the psychological property of depersonalization: Shall we consider depersonalization as a symptom of burnout or a regulation mechanism of preventing burnout?

In sum, early studies pointed out that teacher burnout is generally caused by prolong stressors from the work environment. Maslach's three-dimensional model of burnout laid significant foundation for researchers to examine this issue. Some teachers may "feel" burnout in a daily basis, while some teachers experience burned out in the career. With Maslach's model and MBI measurement, researchers were able to capture burnout symptoms among teachers and to further examine the sources contributing to teacher burnout. Studies identifying sources of teacher burnout are reviewed in the following section.

Sources of burnout

The sources of teacher burnout are believed to have multifaceted factors (Maslach *et al*. 2001). I categorized the studies on teacher burnout into three groups along the sources of burnout they identify: individual factors, organizational factors, and transactional factors (see Fig. 2). Individual factors include demographic variables or personality variables (e.g., age, gender, years of teaching experience, personality, etc.; Friedman and Farber 1992; Greenglass and Burke 1988; Maslach and Jackson 1981). Organizational factors include institutional and job characteristics, e.g., inappropriate work demands, socioeconomic status of school, and administrative support, etc. (Brissie *et al*. 1988; Evers *et al*. 2004; Farber 1984; Maslach *et al*. 2001). Studies identifying sources of burnout as individual factors provided the answers to "who" experiences burnout, while studies identifying sources of burnout as social and organizational factors provided the answers to "what" makes teachers burn out.

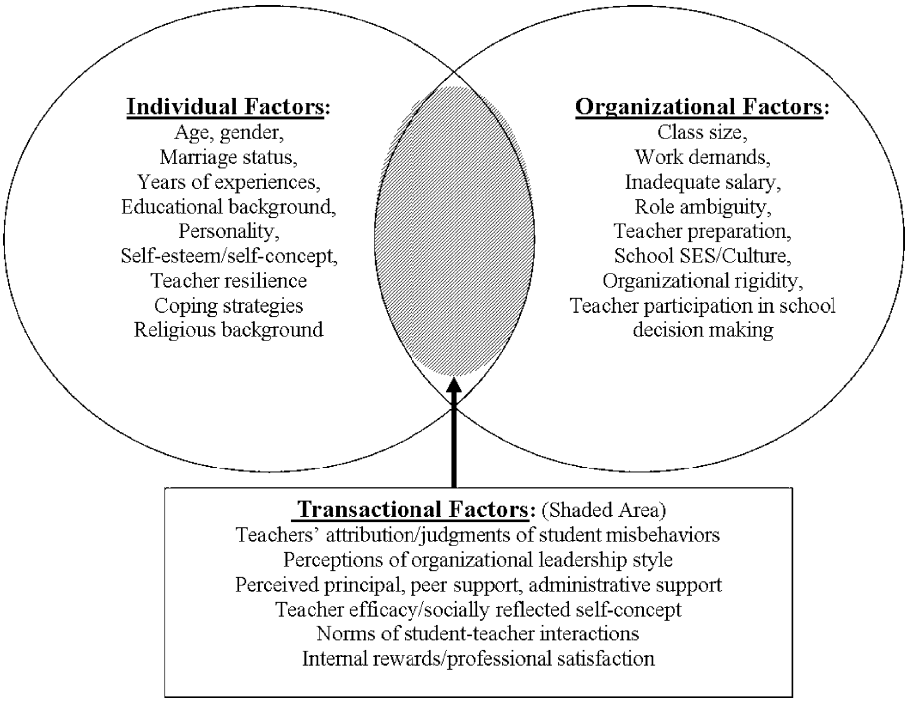

Fig. 2 Studying on sources of burnout: a movement from individual, organizational factors to transactional factors

While the paradigm of educational research has shifted to a more social constructive approach, more and more studies explore teacher burnout as the result of an interaction between individual and organizational factors. In this article, I categorized the interaction effects as transactional factors based on the transactional model proposed by Lazarus and colleagues (Lazarus and Folkman 1984). In examining job stress, Lazarus and colleagues identified the critical components in determining the intensity of stress as an individual's perceptions and beliefs to interpret the stressor and that individual's perceived resources of coping with the stress. Transactional factors include interactions of individual factors with organizational and/or social factors, such as an employee's perceptions of leadership style, teachers' attribution of student misbehaviors, and teachers' perceptions of exchange of investments and outcomes (Bibou-nakou *et al*. 1999; Evers *et al*. 2004; Friedman 1995; Van Horn *et al*. 1999). In Fig. 2, the overlapping area between individual factors and organizational factors indicates the transactional factors due to the interaction of these two factors.

Individual factors as sources of burnout: "who" gets burned out?

Studies that identify the individual factors as sources of burnout aimed to answer the question of "who" experiences higher levels of burned out. In an early study in clinical service, Freudenberger (1974) stated that people who are dedicated and committed are the ones prone to burnout. In teacher burnout studies, younger teachers between 20 and 30 years old have a higher propensity for burnout (Farber 1984; Friedman and Farber 1992) than teachers between the ages of 30 and 40, particularly in the dimensions of emotional

exhaustion and depersonalization. Teachers older than 45 reported significantly lower levels of personal accomplishments (Friedman and Farber 1992; Gold 1985). However, findings regarding age as a predictor of teacher burnout are not very consistent across the literature. For instance, some studies have found no evidence for age as a predictor of teacher burnout (Brissie *et al*. 1988; Zabel and Zabel 2001).

In terms of gender, mixed results also exist in the literature. Some studies have found no significant differences in teacher burnout in terms of gender (e.g., Farber 1984; Kahn *et al*. 2006), while some studies found male teachers reported higher levels of burnout than female teachers (e.g., Bibou-nakou *et al*. 1999; Burke and Greenglass 1993). Within studies in which gender differences were found, consistent findings revealed that female teachers reported higher levels of emotional exhaustion, while male teachers reported higher levels of depersonalization and inefficacy (Gold 1985; Burke and Greenglass 1993; Sari 2004).

Other demographic characteristics found to be related to teacher burnout include marital status, with single teachers more prone to burnout (Maslach and Jackson 1981; Gold 1985), marriage dissatisfaction for female teachers (Greenglass and Burke 1988), teaching experience less than 5 years (Capel 1991) or over 15 years (Friedman 1991), and higher level of education (Maslach and Jackson 1981). However, these results were not consistent across teacher burnout studies (Carson 2006).

While demographic variables provide limited and mixed results, studies that explore personality traits yield more consistent findings. Early studies of burnout research argued that the best and most idealistic workers would be prone to burnout because they are dedicated to their work and end up doing too much in support of their ideals. Maslach *et al*. (2001) asserted that those burned out workers may feel their sacrifice has not been sufficient to achieve their goals or they may simply have experienced long exposure to chronic job stressors.

Other personality traits found to predict burnout are low hardiness (e.g., involvement in activities, openness to change), type-A personality, lower self-esteem, and high expectations (Maslach *et al*. 2001). People who are feeling types rather than thinking types, people who have an external locus of control, and people who cope with passive and defensive ways are also identified as reaching burnout more easily (Semmer 1996, as cited in Maslach *et al*. 2001). Lastly, burnout is also found to be related to the Big Five personality dimensions (see Goldberg 1993): neuroticism which includes anxiety, hostility, depression, self-consciousness, and vulnerability (Maslach *et al*. 2001; Zellars *et al*. 2004).

The studies mentioned above focus on individual factors, individual characteristics, and personalities that lead to burnout. Demographic variables have been contradictory and thus provide only a limited explanation of the sources of burnout. Although personality characteristics seem to predict burnout more effectively than do the demographic variables, their ability to predict burnout is still questionable. Personalities are not necessarily fixed variables, and people may respond differently to stressors from situation to situation (Lazarus and Folkman 1987). Thus, another huge body of burnout research that focuses on social and organizational factors may provide a more holistic view of the sources of burnout.

Organizational factors as sources of burnout: "what" causes burnout?

Studies identifying organizational factors as sources of burnout explored "what" makes teachers develop burnout or in what kinds of institutional contexts do teachers become burned out. Factors believed to contribute to teacher burnout include lack of social support from colleagues and administrators (Burke and Greenglass 1993; Brissie *et al*. 1988;

Maslach *et al*. 2001), lower school social economic status, organizational rigidity (Brissie *et al*. 1988), excessive work demands, inadequate salary or resources (Milstein *et al*. 1984), insufficient teacher preparation or training in dealing with student discipline problems (Farber 1984; Gold and Bachelor 1988), lack of teacher participation in school decision making (Brissie *et al*. 1988), and other physical variables, such as overcrowded classrooms, poor workplaces, and poor work conditions (see Carson 2006).

Cross-cultural studies in the current literature examined teacher burnout by institutional factors on a national level (Maslach *et al*. 2001; Pines 2002; Schwarzer *et al*. 2000). Maslach *et al*. (2001) stated that compared to international samples, people in western Europe appear to have the lowest burnout, while people in Asia and eastern Europe demonstrate significantly higher levels of burnout. In particular, teachers in Japan and Taiwan have the highest levels of burnout among teachers in Asia. Schwarzer *et al*. (2000) found no significant difference between teachers in Germany and teachers in Hong Kong on their levels of burnout, although teachers in Hong Kong had a slightly lower perceived personal accomplishment. However, when compared with US norms, teachers in Hong Kong reported significantly lower scores on perceived personal accomplishment and depersonalization and higher scores on emotional exhaustion.

In examining organizational factors as the sources of burnout, I argue that we need to further examine the inherent cultural beliefs or economic development of different countries or cultures. For example, Pines (2002) examined burnout among teachers in Israel and in the USA. In the study, Pines interviewed 97 Israeli teachers and compared their burnout level with four American teachers and found that Israeli teachers are under higher stress than American teachers because of larger class sizes, longer work hours, less instructional support, and fewer resources; in addition, they were exposed to a dangerous environment. Despite these conditions, American teachers reported higher levels of burnout than Israeli teachers. Pines explained that this may be because Israeli teachers have a greater sense of significance in serving as a teacher. More cross-cultural studies are needed to explore how cultural beliefs and economic development such as teachers' social and economic status may impact the issue of teacher burnout.

Transactional factors as sources of burnout: "who" gets burned out in "which" situations?

Transactional factors suggest the relationship between individual factors with organizational factors. Studies that examined transactional factors provided answers to "who" experiences higher levels of burnout in "which" situations. Several studies have examined transactional factors as sources of teacher burnout, such as teachers' self-concept (Huges 1987), self-efficacy (Brouwers *et al*. 1999; Chan 2006), teachers' socially reflected self-concepts (Friedman and Farber 1992), teachers' attribution of student misbehaviors (Friedman 1995; Bibou-nakou *et al*. 1999), cycles of student–teacher interactions (Blasé 1982), and internal rewards or professional satisfaction (Farber 1984; Friedman and Farber 1992).

Bibou-nakou *et al*. (1999) examined teacher burnout with 200 elementary school teachers in Greece. Specifically, they examined teachers' causal attributions and their relationship with burnout. The results revealed that punitive actions were correlated with diminished personal achievement, whereas social–integrative coping was associated with reduced feelings of depersonalization. They further argued that teachers' personal accomplishment was higher in the group of teachers who attributed students' disobedience to internal student-related factors. That is to say, teachers who did not take students' disruptive behaviors personally reported higher personal accomplishment in teaching and thus less feelings of burnout. Moreover, Evers *et al*. (2004) examined burnout among

teachers in The Netherlands and suggested that teachers' competence to cope with disruptive classroom behaviors was significantly related to each dimension of burnout. Pines (2002) also suggested that disruptive student behaviors stress teachers because when students lack interest in learning and lack attention in class, teachers may feel they are insignificant or perceive themselves as failures.

Teachers' perceptions of social support appear to have a strong link with teacher burnout. Kahn *et al*. (2006) claimed that varied degrees of emotional and social support may predict burnout differently. Generally, social support provides opportunities for reappraisal and adaptive responses to work stress, thereby easing burnout. Positive support is associated with less degree of burnout because positive reappraisal and the formation of adaptive responses are reflected by positive communication. However, teachers' coping efforts may fail if the communications are focused on negative topics that reflect failed efforts to provide adaptive responses; thus, feelings of burnout may increase.

Teachers' perceptions of social relationships are also found to be related to feelings of burnout. When teachers perceive they invest more than what they get back from their schools, or when outcomes from students are lower than they had expected, they are prone to experience burnout (Van Horn *et al*. 1999). Similarly, Taris *et al*. (2004) found that the inequity teachers experience in three exchange relationships (with students, colleagues, and the schools) is related to teacher burnout, particularly in emotional exhaustion.

By examining transactional factors, scholars offered deep insight into why some teachers feel drained by problematic student behaviors. In the same situation of disruptive student behavior, one teacher may feel threatened, while another may not. Teachers are affected unequally by exposure to the same disruptive behaviors on the part of students. Some scholars believe that this is because teachers respond to the potential stressors of burnout based on their goals and beliefs (Friedman 1995). In other words, teachers do not necessarily feel burnout simply by dealing with the disruptive behaviors of students, but may feel so because of their perception, appraisal, attribution, and feelings about those behaviors.

In sum, the literature on teacher burnout indicates the shift from examining individual (internal) and organizational (external) factors in isolation from each other to examine teachers' individual experiences in the context of transactional factors. The emerging body of research on transactional factors offers deeper insight into teacher burnout. A synthesis of burnout studies in the last two decades indicates that student disruptive behavior is the top factor that contributes to teacher burnout (Bibou-nakou *et al*. 1999; Evers *et al*. 2004; Gold 1985; Pines 2002).

While it may be argued that student disruptive behaviors are the determinant factors of teacher burnout, I argue that they cannot be the sole factor contributing to teacher burnout and that understanding teachers' "beliefs" of student disruptive behaviors may provide us more insight. Teacher beliefs shape how teachers think and act in the classroom (Woolfolk Hoy *et al*. 2006, 2009). Consequently, it is important to inquire about teachers' beliefs and cognitive processes in influencing teachers' emotional reactions to the sources of burnout. If classroom disruptive behavior is identified as the prominent source of teacher burnout, how does one teacher manage to survive, while the other is depleted by it?

As proposed in Fig. 1, I believe we need to further examine teachers' emotional experiences and antecedent cognitive appraisals to answer this question. What is the emotion teachers generally experience that may contribute to their burnout? Is it anger? Is it frustration? Or is it the culmination of unpleasant emotions over time that leads teachers to repeatedly experience burnout? Next, I will review the literature on teacher emotions and how the emotional aspects of teaching potentially lead to burnout.

Understanding Emotional Work in Teaching

Why do teachers feel emotionally exhausted?

Although emotional exhaustion is the most recognized dimension on teacher burnout, teachers' emotions and emotional regulation of burnout have been surprisingly overlooked. Only a small body of burnout research has examined the emotional aspects of teaching within the context of teacher burnout (Carson 2006; Zellars *et al*. 2004). Teaching is intensely emotional work with experiences that range from joy to rage (Hargreaves 1998; Liljestrom *et al*. 2007; Zembylas 2003). These emotions, coupled with the huge capacity of mental energy needed to deal with complex social interactions, require teachers to draw on their intellectual and emotional resources (Day *et al*. 2007; Woolfolk Hoy and Davis 2005). I argue that understanding the emotional aspects of teaching may help us understand why teachers feel emotionally exhausted.

Existing studies have focused on teachers' emotions in terms of student behavior (Chang 2009), emotional labor (Isenbarger and Zembylas 2006; Winograd 2003), teacher identity (Schutz *et al*. 2007; van Veen and Lasky 2005), mentoring (Bullough and Draper 2004), emotional geographies of teaching (Hargreaves 2000), emotion regulation (Sutton 2004; Carson 2007; Chang 2009), discrete emotions (Sutton 2007; Zembylas 2003), and teachers' emotions in the context of school reforms (Zembylas and Barker 2007). In a recent article, Sutton and Wheatley (2003) reviewed teacher emotions by providing broad descriptions of existing studies on teacher emotions and discussed the impact of teacher emotions on students' cognition, motivation, and behaviors.

Unlike prior research, I focus on linking the unpleasant discrete emotions that potentially contribute to teacher burnout. To understand what roles emotions play in teacher burnout, I will discuss teachers' emotions in two scopes: First, why do teachers generally feel emotionally exhausted? And second, what triggers teachers' unpleasant emotions? The first step is to synthesize the intensity of emotions and the emotional burden that might lead to burnout, such as issues of emotional labor. The next step is to review the discrete unpleasant emotions and their antecedent appraisals including anxiety, frustration, anger, and guilt.

Emotional labor and emotional intensity in teaching: why are teachers exhausted?

"Teachers wear many hats such as friend, protector, mentor, disciplinarian, and gatekeeper to academic success" (Davis 2001, p. 431). Teaching offers opportunities to feel closeness and intimacy in student and colleague relationships which in turn offers opportunities for many pleasant emotional experiences such as passion, excitement, joy, pride, and hope. However, teaching also offers opportunities to feel worried, frustrated, guilty, angry, powerless, fearful, vulnerable, and disappointed. Teachers' emotions change day by day, class by class, sometimes even moment by moment. Due to the complexity of teacher–student relationships teachers need to engage in and maintain teaching requires an extensive degree of emotional work (Hargreaves 1998; Sutton 2007). Accordingly, teachers may feel exhausted from the emotional labor when they are engaged in student–teacher relationships.

Teachers often engage in emotional labor by performing emotional understandings to connect with students (Hargreaves 1998). Emotional labor is defined as what employees perform when they are required to feel, or at least project the appearance of feeling certain emotions as they engage in job-relevant interactions (Hochschild 1983). Hochschild claimed that in some occupations, employees are required to manage their emotions to

produce desired customer responses and thus engage in emotional labor. Among the emotional labor studies (Abraham 1999; Morris and Feldman 1997), emotional dissonance (inconsistency between the emotions employees feel and display) is found to be a predictor of emotional exhaustion. In studying emotional labor and burnout in teaching, Carson (2006) found that burnout was associated with emotional display rules (exhibiting positive emotions or suppressing negative emotions).

The beginning years of a teaching career usually evoke intense emotions for teachers (Bullough and Draper 2004; Chang 2009; Hargreaves 2005; Intrator 2006; Liljestrom *et al*. 2007). Bullough and Baughman (1997) found that many novice teachers do not realize the profound all-encompassing emotional work involved in teaching until their first year. Similarly, Intrator (2006) found that new teachers experience a dramatic range of intense emotions and passions evoked by the fear of not being liked or respected, the vulnerability that comes with awareness of judgment by others, the anxiety of not being familiar with the subject matter, and the discomfort that comes from having to make rapid-fire and uncertain decisions.

In addition, unpleasant emotions are usually caused by poor relationships (Oatley 1991). Hargreaves (2000) interviewed 53 teachers in 15 schools and concluded that teachers feel bad when they do not feel connected with their students, when they feel they are being misunderstood, when they are unjustly accused by others, or when they are treated as a stereotype. In later research, Hargreaves (2002) found that betrayal in relationships with colleagues or administrators served as another trigger of unpleasant emotions for many teachers.

School reform has also been found to be related to teachers' unpleasant emotions (Day and Leitch 2001; Hargreaves and Tucker 1991; Zembylas and Barker 2007). In particular, teachers feel bad when reforms are characterized by conflict, change, and ambiguity (Schmidt and Datnow 2005). Day and Leitch (2001) interviewed teachers in England and The Netherlands and found that many teachers share a common struggle with change and reform movements and thus are exhausted. Teachers and schools are given too little time to adopt the changes; therefore, teachers report feelings like "being on an escalator and not being able to get off until you have carried out the next change" (p. 409). Similarly, Calderhead (2001) believed that reform movements often cause uncertainty and anxiety for teachers. Some teachers may feel that they lose the reassurance of doing a good job because they can no longer evaluate their performance by the normal indicators. Reform also provokes anxiety and demotivates teachers due to the lack of identity, sense of purpose, and effectiveness during the reform. In addition, many teachers often feel burned out because of the extensive efforts needed to meet parents' or administrators' expectations due to reform.

In conclusion, teachers may become emotionally exhausted due to the intensive emotional work and emotional labor required in teaching. Reform efforts and poor relationships often drain teachers. Teachers also often feel burned out because of the extensive emotional labor they are engaged in to maintain student–teacher relationships.

Unpleasant emotions and their antecedents: the underlying appraisals behind emotions

As the theoretical model proposed in Fig. 1, in order to understand why teachers are emotionally exhausted, it is important to examine teachers' habitual patterns in judging students' behaviors, including the antecedents of teachers' emotions. Appraisal theory argues a cognitive view of emotions, meaning that emotions are elicited by judgments (i.e., appraisals) of events and situations (Smith and Lazarus 1990; Roseman and Smith 2001). From this perspective, emotions are a response to interpretations of events, rather than to

events themselves (Roseman and Smith 2001). For example, anger may be elicited by appraisals of unfair treatment or blaming another person for an undesired event. In addition, the judgments we make are based on meanings we assign to events (Smith and Kirby 2001). Accordingly, the judgments teachers make about the behaviors in the classroom may underlie the emotions that are aroused.

Lazarus (1993, 2000) stated that intensity of aroused emotions depends on the way in which we evaluate the significance of events through primary and secondary appraisals. The components of primary appraisals are relevance (importance of the events) and goal congruence. The components of the secondary appraisals are accountability/agency, coping potential, and future expectancy (Smith and Lazarus 1990).

In primary appraisal, relevance/importance and goal congruence of the event are believed to be the two most important factors in determining the significance of an emotional encounter (Lazarus 1991, 2000). The more relevant a teacher judges an incident or interaction, the more intense the emotional experience is. In the classroom context, student–teacher relationships can serve as a thermometer for relevance. As Ben-Ze've (2000) defined "emotional closeness" in terms of time, space, effect, or degree, teachers share a proximal space with students and interact with students intensively. Therefore, the more a teacher cares about students, the higher degree of relevance would be appraised in an emotional encounter. Teachers' judgments of relevance may also be a function of their perceived psychological proximity (Muller *et al*. 1999; Newberry and Davis 2008). In other words, relationships may be viewed as more relevant to a teacher's goals when the teacher perceives the students to be closer. For example, when a classroom incident occurs, the less a teacher cares about the student or the less she cares about the lesson, the less likely the incident would be judged to be important. Thus, emotions may not be elicited in this situation.

Goal congruence is another major component of primary appraisals (Lazarus 1991). In a classroom, a teacher may set several goals in teaching tasks: maintaining order, managing students' behaviors, following lesson plans, and helping students reach learning goals. As burnout literature suggests that students' disruptive behaviors are the major sources drain teachers, it is very likely that students' disruptive behaviors could be a threat to teachers' goal achievement. This goal incongruence might increase the intensity of emotions (Schutz *et al*. 2004).

In secondary appraisal, teachers make judgments regarding the nature of the event that forms the kind of emotion and its intensity. While the event is considered to be incongruent and relevant to the primary appraisal, the next process is to determine the accountability/agency of the events, the controllability over the events, the coping potential to deal with the events, and the future expectancy of the events (Ben-Ze've 2000).

Accountability refers to the nature of the agency generating the emotional encounter; the related major issues are degree of controllability, invested effort, and intent (Ben-Ze've 2000). In other words, one may ask questions like who is responsible for the event? How much control do I have over it? What can I do with it? Am I capable of doing it? What might be the consequences of acting or not acting? Evaluations from these questions may influence the types of emotions elicited. For example, when one views others as the ones to blame for the arousal event, anger may be elicited, while if the self is thought to be responsible for the arousal event, guilt may be elicited. Perceived coping potential and future expectancy would further determine the intensity of the emotions. When coping potential is perceived to be low, or when the events are perceived to be likely to occur again, the intensity of emotions may be higher.

In consistent with appraisal theories in the literature, Chang (2009) studied 554 teachers' emotional responses in self-reported classroom disruptive behavior and found that

the judgments teachers made regarding student behaviors influenced the unpleasant emotions teacher felt; particularly, goal incongruence and lower perceptions of coping potential significantly covariate with teachers' unpleasant emotions.

In sum, emotions are aroused by the appraisals we make about events. The judgments and evaluations about the causes of events influence the types of emotions we may have as well as the intensity of emotions we may feel. Different emotions are elicited by varied degrees of appraisals we make with regards to the goal congruence, importance/relevance of the events, agency, and control/coping potentials.

Table 1 outlines how teachers' judgments of misbehaviors may systematically vary to produce different unpleasant emotions (Lazarus 2001; Roseman and Smith 2001). The common underlying appraisals for anger, frustration, anxiety, and guilt are high motive incongruent and high relevance. In other words, these unpleasant emotions are aroused because of the perceived incongruence of one's goal in high importance situations, and yet, these emotions can be discerned by their unique appraisals. In terms of agency, anger is usually other-caused, guilt is self-caused, and frustration and anxiety are usually circumstance-caused emotions. While anger and guilt are aroused when events are perceived to have high control potential, frustration and anxiety are usually aroused when events are perceived to have low control potential.

Unpleasant emotions that lead to emotional exhaustion

Is emotional exhaustion accounted for by specific discrete emotions? Carson (2006) examined the issue of teacher burnout and emotion regulation by using personal digital assistants with 45 teachers who recorded their daily emotional experiences for 2 weeks. Carson found that burnout was a daily experience for some teachers and concluded the frequent accounts of the specific unpleasant emotions of unhappiness, anger, and frustration significantly contributed to teacher burnout. In addition, Chang (2009) also found that teacher's unpleasant emotions about self-reported student misbehavior in the classroom significantly contributed to teacher's overall feelings of burnout. To better understand the connections between emotional exhaustion and discrete emotions, the research on discrete unpleasant emotions in teaching that may potentially lead to emotional exhaustion will be reviewed in this section.

Existing studies have explored the following unpleasant emotions in teaching which could be the discrete emotions that cause emotional exhaustion: anxiety (Bullough *et al*. 2006; Calderhead 2001; Coates and Thoresen 1976; Hargreaves 2001), anger, frustration (Blasé 1986; Hargreaves 2004; Liljestrom *et al*. 2007; Sutton and Wheatley 2003; van Veen

Table 1 Underlying Appraisals for Unpleasant Emotions

	Anger	Frustration	Anxiety	Guilt
Relevance	High	High	High	High
Incongruence	High	High	High	High
Agency	Other	Self/circumstance	Circumstance	Self
Control potential	High	Low	Low	High
Core relation theme (Lazarus 2001)	An unjustified demeaning offense against me and mine	Having no control over an undesired situation caused by self or circumstance	Facing uncertain, existential threat	Having transgressed a moral imperative

and Sleegers 2006), guilt (Hargreaves and Tucker 1991; Prawat *et al*. 1983), shame (Bibby 2002; Carson 2006), and sadness (Sutton 2000, as cited in Sutton and Wheatley 2003). Above studies examined the sources that trigger teachers' unpleasant emotions.

Anxiety Teacher anxiety is usually triggered by feelings of lack of preparedness to teach, discipline issues in the classroom, relationships with other colleagues, administrators, and parents, and changes due to reform efforts (Bullough *et al*. 2006; Calderhead 2001; Hargreaves 2001; van Veen *et al*. 2005). Furthermore, for beginning teachers, students' liking of them and their knowledge of subject matter are also sources of anxiety (Coates and Thoresen 1976).

Bullough *et al*. (2006) interviewed 21 elementary teachers about their memorable teacher dreams to understand their anxiety. Results from the interviews revealed teachers frequently dreamed of themselves unprepared to teach in the forms of being late or having insufficient preparation of materials. Those dreams revealed that most teachers have the anxiety and worry of being unprepared. Being well prepared is essential for teachers to feel secure and comfortable; however, it is unreasonable to expect teachers to ever fully be prepared for teaching because a teacher cannot anticipate all possibilities. Therefore, the anxiety of lesson preparation is a frequently experienced emotion in teaching. Other dreams teachers reported in the study of Bullough *et al*. involved being judged by others, losing control of the class by yelling at students, or being behind schedule, which revealed that teachers fear their decisions will not be recognized by others. This result supports another study by Hargreaves (2001) in which the researcher claimed teachers are anxious about being questioned by parents on their expertise, judgment, status, and purpose.

Thus, anxiety occurs when one is facing uncertain existential threats (Lazarus 2001). For teachers, it is a circumstance-caused emotion triggered by situations when they feel uncertain or when they feel they have low control over situations. Anxiety is more common for beginning teachers because of their novelty and inexperience in curriculum and in classroom management.

Frustration and anger Frustration is the most frequently experienced unpleasant emotion reported by teachers (Chang 2009; Sutton 2007). The sources of frustration are mostly from factors outside the classroom: administrative work, externally mandated change or reformation, and conflicts between their teaching goals and the expectations from school administration (Golby 1996; Hargreaves 2004; Zembylas 2003).

Teacher anger may be caused by goal related incongruence, such as student misbehavior or student failure (Chang 2009). This is particularly true if teachers perceive the misbehaviors or failure as intentional or controllable on the part of the student (Brophy and McCaslin 1992; Graham 1994; Prawat *et al*. 1983), or if they perceive high-ability students failing due to lack of effort or if they believe misbehaviors are disrespectful (Prawat *et al*. 1983). Teacher anger also may be triggered by externally mandated change or by reforms they do not believe are beneficial to their instruction or students.

Frustration is usually circumstance-caused instead of specific-other caused. The core relation theme for frustration is usually feelings of no control over a repeatedly undesired situation. In other words, teachers feel frustrated when misbehaviors or difficulty in teaching are caused not by a specific student but by circumstances over which teachers often feel they have no control. However, according to Sutton (2007), the distinctions between frustration and anger were blurred in several areas in terms of bodily responses, intrusive thoughts, immediate actions, and coping strategies. In addition, most teachers perceived that being angry is not considered appropriate for a professional image in the

classroom and therefore tend to report or express frustration (Liljestrom *et al*. 2007; Sutton 2007). Because frustration sounds more socially acceptable, teachers tend to report frustration rather than anger. Moreover, anger may turn into frustration because teachers feel there is nothing they can do about repeated misbehaviors or situations. Therefore, the main distinction we can draw between frustration and anger is appraisals of agency/accountability of incidents. Teachers may feel frustrated when they appraise the incidents are caused by circumstances, and they may feel anger when the incidents are caused by specific students.

One more distinction between frustration and anger is the threatening component in anger. Different from frustration, anger is usually accompanied by threat and harm. Anger is aroused in the face of a specific, undeserved offense in which the action is believed to be unjustified and controllable (Ben-Ze've 2000; Lazarus 2001). For instance, teachers may feel anger toward disruptive students when they believe the behaviors are unjust and controllable by students. Teachers who feel anger often feel they are being depreciated or undermined by others, such as students, parents, and administrators, as if their dignity is being hurt or their authority is being threatened.

Guilt Guilt is another unpleasant emotion teachers commonly feel due to the nature of caring and feeling responsible for students (Hargreaves and Tuckers 1991; Prawat *et al*. 1983; van Veen *et al*. 2005; Zembylas 2003). Guilt is a self-caused emotion, which is common for teachers who perceive they are responsible for high importance and high incongruence situations. It often involves the moral purposes embedded in teachers' professional missions. The core relational theme for guilt is having transgressed a moral imperative or having violated an internalized social norm or value (Ben-Ze've 2000; Lazarus 2001). For example, teachers may feel guilty because they perceive they are responsible for the ignorance of students who have trouble at home or at school.

Hargreaves and Tuckers (1991) analyzed the nature of guilt in teaching and pointed out that teachers' guilt resulted from conflicts among several factors: teachers' commitment to nurture children, the ambiguity inherent in determining teachers' effects on their students, increasing demands of accountability, and personal perfectionism. In the study, the researchers discussed two kinds of guilt in teaching: persecutory and depressive guilt. Persecutory guilt comes with accountability demands and bureaucratic controls. Depressive guilt originates from early childhood and is called out in later life in situations where "individuals feel they have ignored, betrayed, or failed to protect the people or values that symbolize their good internal object" (p. 495). For instance, persecutory guilt leads teachers to concentrate on covering the required content without compromise. Depressive guilt appears when teachers find themselves having failed to recognize a child who is being abused at home. The researchers further concluded the consequences of guilt can be resentment, burnout, and cynicism.

Teacher guilt is also related to feelings of responsibility. Prawat *et al*. (1983) found teachers feel guilty when students give up on learning. According to Liljestrom and colleagues (2007), some teachers perceived it to be their responsibility, or moral duty, to help students and their family as part of their professional roles. Weiner (1995) indicates that teachers are likely to be aware of the low aptitude of a student and judge that they "should have" tried harder. When teachers attribute the responsibilities to students, does it reduce their feelings of responsibility? It might be true that attributing responsibilities to students reduces teachers' feeling of responsibility; however, to assign the responsibilities to students also implies that one believes students have control and should have done better, which in turn might generate emotions such as anger (Weiner 1995).

In addition, guilt is an emotion sometimes accompanied by shame. Weiner (1995) distinguished guilt and shame by the attribution of internal locus of control. Guilt is elicited when one perceives the event was controllable, shame is elicited when one perceives the event was uncontrollable. Zembylas (2003) noted that shame may be a mark of powerlessness in a pervasive sense of personal inadequacy. Bibby (2002) stated that shame is significant in a teacher's experience because it is fundamental in the formation of a teacher's confidence, anxiety, and fear. Thus, shame is a common emotion beginning teachers might experience while they are less familiar with their subject matter knowledge.

To summarize, anxiety and guilt appear to contribute to burnout in terms of prolonged stressors while anger and frustration contribute to burnout in terms of the strength and intensity of the emotions. Anger and frustration are the emotions aroused by "people" or specific events and these emotions are usually intensive. Experiencing these emotions repeatedly may lead to higher degrees of burnout if teachers do not regulate their emotions appropriately or do not have enough resources to cope with these emotions. Next, I will review the literatures on coping and emotional regulation that may help us understand how teacher burnout may be eased.

Emotion Regulation and Coping Strategy in Easing Burnout

In order to adapt to the arousal they may feel while teaching, teachers need to be able to regulate their emotions with effective coping strategies. Emotion regulation refers to the heterogeneous set of processes by which emotions are themselves regulated (Gross 1998, 1999; Gross and John 2003). Gross and John defined emotion regulation as a theoretical conceptualization of physiological, behavioral, and cognitive processes that enable individuals to modulate the experience and expression of positive and negative emotions. Bullough and Baughman (1997) studied a teacher's life for 8 years and found that self-regulatory knowledge plays a critical role in emotion regulation. Self-regulatory knowledge refers to how experts know themselves and how they process the knowledge they own. Bullough suggests that "the determination of which levels of stress are productive and which levels are not is a matter of a teachers' self-regulatory knowledge (p. 104)." In other words, teachers need to be self-reflective in monitoring their own stress levels or emotions that are taking place while in the classroom.

Emotion regulation can be described as a continuum from conscious, effortful, and controlled regulation to unconscious, effortless, and automatic regulation, where context may make things better or worse (Gross and Thompson 2007). Gross (2002) proposed the framework of regulating emotion in two forms: reappraisal and suppression. Through reappraisal, one changes thinking about a situation in order to decrease its emotional impact. Reappraisal decreases unpleasant emotional experiences and expressions, while increasing pleasant emotional experiences and expressions. Unlike reappraisal, during suppression, one inhibits ongoing emotion-expressive behavior. Suppression not only has little impact on unpleasant emotions but also "consumes cognitive resources, impairing memory for information presented during the emotion regulation period" (Gross 2002, p. 289). For example, if a teacher in the face of arousal events in the classroom chooses to suppress emotions and pretends to be calm, it is likely the teacher will have limited cognitive capacity to carry out the lesson and the unpleasant emotion is not likely to go away.

Unfortunately, teachers often neglect or suppress their emotions because the work and the power structures in schools could pose serious threats to teachers' objectives and

therefore influence teachers' expressions of intense emotional distress and anger (see Liljestrom *et al*. 2007). Sutton and Wheatley (2003) asserted that suppression of emotions requires continuous self-monitoring and self-corrective actions for as long as emotion processes last thus reducing cognitive resources for other activities. Studies have found that emotional regulation strategies like suppressing, faking, or hiding of true emotions led to greater overall burnout (Carson 2007; Chang 2009). For example, Carson (2007) used surveys and PDA diaries to investigate the relations between teacher burnout, teachers' emotions, and emotional regulation. These results are consistent with Brotheridge and Grandey's (2002) study, which showed surface acting (e.g., hiding anger, and fear) is significantly related to emotional exhaustion (also see Grandey 2003). Previous research also noted that suppressing anger is costly to an individual's well-being. Therefore, it is imperative that teacher educators understand effective emotional regulation and coping strategies so that we can provide teachers with strategies to understand the emotional aspects of teaching and help teachers not to "neglect" their own emotions.

One way to help regulate emotion is through coping mechanisms. Coping involves identifying and labeling what you are feeling as well as selecting strategies to enhance or dampen what are you feeling (Davis *et al*. 2008; Lazarus 2000). In the literature, views about coping have shifted from perceiving coping as a reaction or a response to emotions to recognizing coping as an integral part of emotions (see Lazarus 2000). In accordance with a reciprocal dynamic view of coping with emotion, coping is defined as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (Lazarus and Folkman 1984, p. 141). In this view, coping is believed to be an integral part of the process of emotion instead of just a response. Specifically, Lazarus (2001) asserted that the evaluation of coping options is a major component in secondary appraisals in which one appraises what can be done in the troubled person–environment relationship.

Generally, types of coping include task-focused coping (i.e., problem-focused coping) and emotion-focused coping (Lazarus 2000). Problem-focused coping aims to obtain information about the troubled person–environment relationship and change the reality. Emotion-focused coping aims to regulate the emotions that were elicited by the events. Some scholars argue problem-focused coping is superior to emotion-focused coping in terms of managing the emotions with positive outcomes (Lazarus 2006). However, Lazarus argues these two functions are reciprocal to each other and therefore each function facilitates the other and should be considered as combined efforts of coping. Both emotion-focused coping (e.g., seeking social support) and problem-focused coping (e.g., making a plan to solve the situation) are found to be effective in easing burnout (see Lazarus 2006).

In terms of coping strategies, teachers who cope using an avoidance approach (e.g., suppression of emotion or disengagement from stressful situations) tend to report higher levels of stress or burnout (Chang 2009; Griffith *et al*. 1999; Mearns and Cain 2003). In addition, Schutz *et al*. (2004) proposed a third dimension of coping process: regaining-task-focused processing, which may be essential to bridge the coping process from emotion-focused to problem-focused. Regaining-task-focused processes include tension reduction and importance-reappraisal strategies (also see Schutz and Davis 2000). In this process, one attempts to get back on task and regain perspective on tasks by techniques such as tension reduction: slowing down breath, taking a minute to stop and stretch, or talking self through the steps (Schutz and Davis 2000). Further, importance reappraisal involves reevaluating the relative importance of the task to one's goal. As noted by Gross and John (2003), reappraisals not only decrease the unpleasant emotions but also increase pleasant emotions.

For example, while a teacher experiences intensive anger with a disruptive student, it may be necessary for teachers to cope with the emotions first by slowing breathing and self-talking to soothe emotions and then to deal with the actual problems by focusing on reevaluating the events and changing perspectives. This results in helping teachers focusing on solving the problem or implementing related tasks in order to deal with the disruptive issues.

In recent coping literature, Greenglass (2002) believes that proactive coping could be an effective tool in stress and emotion management. Proactive coping is a coping strategy that is oriented toward future expectancy. It emphasizes one's personal capacity in goal management (foresee the problems and seek challenges) rather than risk management (be responsive to the problems). Coping in traditional contexts is reactive and reflects the compensation for loss or harm. However, people who are proactive seek challenges and hold neutral views about challenges instead of viewing them as threats, harm, or loss. Therefore, proactive coping incorporates a positive approach to dealing with stressors and integrates the processes of self-regulatory goal attainment. In consistent with Greenglass' theory, Chang (2009) found that proactive coping is a significant latent factor that negatively covariates with teacher burnout.

The idea of proactive coping is similar to the concept of "Thriving with Social Process (TSP)" by Ford and Smith (2007). TSP has four components of human motivation—goals, capability beliefs, context beliefs, and emotions. The core of the TSP motivational patterns is "an active approach goal orientation informed by a fundamental concern of social purpose (p. 153)". According to Ford and Smith, the key to establishing a thriving motivational pattern is to cultivate strong leadership qualities in the personal goal component of system functioning:

> Such qualities include a clear understanding of one's core personal goals (current and emergent) and the ability to stay focused on those goals, a willingness to explore alternatives and take risks when change is needed to maintain progress toward that mission, and a persistent bias toward initiating action so as to minimize the possibility of becoming mired in evaluative thoughts and feelings or having external circumstances dictate options and opportunities. (p. 161)

Similar to the TSP theory, proactive coping also emphasizes the personal goal attainment and the capacity to overcome obstacles with an active approach. In other words, to prevent burnout, teachers need to foresee the challenges in the classroom, explore alternatives in facing the challenges, and be persistent in the actions when deal with the classroom problems.

Further, TSP also addresses the potential of a thriving pattern in our motivational states in preventing burnout. Since one of the symptoms of burnout is the erosion of engagement, a thriving pattern suggests the cultivation of habits "of evaluative thinking and feeling that facilitate rather than inhibit engagement" (p. 162).

In conclusion, to be proactive to feelings of burnout, teachers need to understand how their appraisal processes are functioning in the classroom and how these may be habitual patterns that lead to unpleasant emotions as suggested in Fig. 1. In other words, teachers need to be reflective about the judgments they are making about students' behaviors. If there is a habitual pattern that leads teachers to feel emotionally drained by students' misbehaviors, it is possible to reduce the level of emotional stress if teachers learn to reevaluate and reappraise the situations. Moreover, being proactive and adopting a thriving pattern would help teachers to keep engaging in the teaching tasks and in the teacher–student relationships.

Implications for Teacher Education and Professional Development

Without effective emotion regulation and coping strategies, teachers are more likely to experience higher levels of burnout, especially on the dimension of emotional exhaustion. If burnout, as a syndrome, is related to the repeated experiences of anxiety, anger, frustration, and guilt, how can we prevent teacher burnout by helping teachers regulate their emotions? Teacher beliefs shape how teachers think and act in the classroom (Woolfolk Hoy *et al*. 2006, 2009). In order to help teachers in emotion management, teacher educators can focus on increasing four understandings: acknowledging that teaching is an emotional profession, identifying and reflecting on emotions and the underlying cognitive appraisals, regulating their emotions appropriately, and coping with emotions effectively.

First, teachers must understand that emotions are an integral part of teaching (Hargreaves 1998; Sutton and Wheatley 2003). The teaching profession is usually considered a caring job. However, as it is described in the above literature, teaching involves complex student–teacher relationships, as well as emotions; it is not just about caring. However, the more teachers care about students, the more likely they are to get angry or frustrated by students. For professions in which people work closely with people, like counseling or clinical psychology, professional training addresses the distinction between transference and empathy, which is designed to help counselors or clinical psychologists become detached from their emotions. Teachers work very closely with students every day and experience various emotions. Thus, teachers should be trained to carefully deal with affect or emotional domains in the student–teacher relationships.

In addition, beginning teachers should understand the dramatic range of intense emotions they will experience so they may enter the profession with a realistic view instead of an overoptimistic view of teaching. Liljestrom *et al*. (2007) modified the emotional politics framework by Hargreaves (1998) and proposed a framework for the emotions of teaching embedded within the social–cultural contexts of schooling. They argued that:

- Teaching is an emotional practice
- Teaching and learning involve emotional understanding
- Teaching is a form of emotional labor
- Teachers' emotions are inseparable from their moral purposes and their ability to achieve those purposes
- Teachers' emotions are rooted in and affect their selves, identities, and relationships with others
- Teachers' emotions are shaped by experiences of power and powerlessness
- Teachers' emotions vary with culture and context (p. 277)

With such a realistic view of emotion in mind, teachers then may be more accepting of their emotions and thus more neutral in labeling their emotional experiences.

Second, teachers must accurately label their emotional experiences, identify ineffective patterns of judgments of classroom events, and reflect on the emotions they feel and the judgments they make that underlie the emotions. Teachers need to have a realistic understanding of how emotions are embedded in teaching and should abandon the view that unpleasant emotions are irrational or wrong in the classroom. They need to understand affects are motivators of action (Graham 1994) and that emotions are functional in the processes of teaching and learning (Davis *et al*. 2008; Winograd 2003). To accurately label their emotional experiences, teachers are encouraged to holding a positive view of emotions

in the classroom instead of avoiding talking about unpleasant emotions, such as anger. For example, if a teacher is feeling angry, one should ask: what behavior is eliciting this emotion? Is it solely due to the student's disruptive behavior or is it caused by my judgments of being undermined or disrespected?

After labeling the emotions and identifying the judgments they are making about the events, teachers need to be reflective on how they feel and the judgments they are making (Chang and Davis 2009). Teacher educators need to assist teachers in reflecting on judgments of events in a detached and realistic manner. Following the previous example, if anger is elicited by judgments of being undermined or disrespected, the teacher then must ask if it is true that the student disrespected her. The central question for teachers to reflect on is, do we judge students as disrespectful because we are not familiar with the norms behind their behaviors?

Third, one way to effectively regulate emotions is by using reappraisal strategies to adjust goals and understandings of students' behaviors. After reflecting on the emotions and the judgments teachers are making about the events, teachers should use reappraisal strategies instead of suppression to regulate the unpleasant emotions they are feeling. Then, they need to adjust their goals and understandings of students' behaviors. Instead of judging students as disrespectful, teachers need to learn to understand how and why students behave. Following the previous example, the teacher needs to reflect on questions such as how does this child understand authority? What are his/her goals? Can those goals be attained in another way? If students are trying to gain power through aggressive behaviors, how can this dominance transformed into leadership? Teacher educators should train teachers to reflect on these productive questions.

Lastly, teachers need to adopt effective and multiple coping strategies to regain their composure and to be proactive toward classroom problems. Ideally, teachers need to effectively adopt both emotion-focused coping and task-focused coping strategies. Research has shown coping resources are essential to easing stress and burnout (Lazarus 2006). Solely relying on one method of coping does not necessarily lead to decreasing emotional intensity or decreasing stress. One thing teachers must be bear in mind is that avoidance (e.g., suppression, disengagement) is the worst way to cope with the troubled person–environment problem. Emotion-focused coping strategies allow teachers to label and acknowledge the actual emotions they are experiencing as well as to temporarily regulate emotions through social recognition. Task-focused coping strategies encourage teachers to focus on actual problems and direct actions to change the situations (Davis *et al*. 2008). There is no "right or wrong" way or "best" way in applying the coping strategies. Effective coping strategies depend on one's capacity to understand and regulate oneself in different situations. Therefore, a better way to ensure successful coping is to make multiple coping resources available. In addition, teachers need to be proactive in classroom management. One who foresees potential risk in the classroom will be more prepared to face problems and not feel threat or loss from classroom discipline issues.

Setting a Research Agenda for Teacher Emotions and Burnout

First, existing studies on teacher burnout have heavily relied on one-time survey data. To better understand how teachers may prevent burnout or revitalize from burnout, we need more longitudinal and qualitative data. With longitudinal and qualitative data, we may further investigate how feelings of burnout may vary depending on teachers' current states during academic year or during different stages of their career. We may also further

investigate and answer questions about the properties of burnout, such as can you know when you are burned out? Can you be wrong in thinking you are burned out?

Second, further studies can focus on teachers who are resilient and enthusiastic in their career. What are the traits of those teachers? How do those teachers make appropriate appraisals on students' behaviors? How do those teachers employ effective emotion regulation strategies and coping strategies in the face of challenging situations in the classroom?

Third, though many teachers experience burn out, there are some who stay engaged and revitalized. How do they keep themselves energized? What are the external strategies and internal coping mechanisms they manifest that allow them to deal with the same students as those who burn out, yet not be affected in the same way?

In addition, the subject between teacher emotions and teacher burnout is still an unexplored research area. The following questions still need to be further explored. How can reappraisal help teachers to rejuvenate and restore their energy? What are the appraisal processes in teachers' emotional arousals? What are the processes involved in emotion regulation? What are the different processes used when regulating different emotions, such as anger and frustration? What are the most effective coping strategies in dealing with anger and frustration?

Lastly, emotion studies should employ some technology devices to study in-the-moment emotions. Studies on teacher emotions have relied heavily on interviews. Interviewing data are usually based on recalling memories of participants; thus, they could be twisted based on postinterpretation of the events. To further understand teachers' in-the-moment appraisals and regulation strategies, it is necessary to study teacher emotions through some technology devices. For example, we may use some digital devices to record teachers' physiological responses to the disruptive events and then have teachers to reflect on the events after the class on the PDA or web tools. In addition, intervention may also be introduced to teachers through those digital devices, such as instant feedback on their appraisals of the events. With intervention, we may find better ways to help teachers cope with unpleasant emotions and potential burnout in teaching professions.

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