Examining Academics' Strategies for Coping With Stress and Emotions: A Review of Research

Raheleh Salimzadeh*, Nathan C. Hall and Alenoush Saroyan

Department of Educational and Counselling Psychology, McGill University, Montreal, QC, Canada

Existing research suggests that numerous aspects of the modern academic career are stressful and trigger emotional responses, with evidence further showing job-related stress and emotions to impact well-being and productivity of post-secondary faculty (i.e., university or college research and teaching staff). The current paper provides a comprehensive and descriptive review of the empirical research on coping and emotion regulation strategies among faculty members, identifies adaptive stress management and emotion regulation strategies for coping with emotional demands of the academic profession, synthesizes findings on the association between such strategies and faculty well-being, and provides directions for future research on this topic.

Keywords: post-secondary faculty, stress, coping, emotions, emotion regulation

INTRODUCTION

Not unlike other professionals, post-secondary faculty (i.e., university or college research and teaching staff across ranks and tenure status) have consistently been found to report high levels of job-related stress (Winefield et al., 2003). In the last few decades, higher education institutions worldwide have undergone fundamental changes. Major educational reforms, exponential expansion in student enrollment, escalating workloads, greater control by managers with respect to teaching quality and research productivity, and the movement towards commercialization have shifted the landscape of higher education into a competitive business (Ogbonna and Harris, 2004; Biron et al., 2008; Rothmann and Barkhuizen, 2008; McAlpine and Akerlind, 2010). Subsequently, there is substantial pressure on academics to maintain high academic performance and productivity (Catano et al., 2010; McAlpine and Akerlind, 2010).

Surveys carried out in the U.K. (Tytherleigh et al., 2005; Kinman, 2014), Australia (Winefield et al., 2003), and Canada (Biron et al., 2008; Catano et al., 2010) suggest that these increased demands have contributed to high levels of job-related stress amongst academics. Most notably, a recent comparison of U.K. and Australian academics revealed that faculty suffered from higher levels of stress-related caseness (i.e., when some intervention is required) as compared with other university groups (e.g., post-secondary staff, support professonals; Kinman, 2014), with reported burnout by academics being comparable to that of school teachers and medical professionals for whom burnout levels are particularly high (Watts and Robertson, 2012). Empirical evidence strongly supports the detrimental impact of stress on post-secondary faculty members' physical (e.g., sleep problems, nausea, heart pounding) and psychological well-being (e.g., anxiety, depression, burnout, psychological distress)and professional competencies, as well as student attainment and institutional productivity (Blix et al., 1994; Stevenson and Harper, 2006; Catano et al., 2010; Watts and Robertson, 2012; Barkhuizen et al., 2014; Kataoka et al., 2014; Shen et al., 2014; Salimzadeh et al., 2017).

A parallel line of research suggests that the academic profession elicits a wide variety of positive and negative emotions resulting from interactions with students, teaching and research-related activities, as well as organizational factors (e.g., Martin and Lueckenhausen, 2005; Postareff and Lindblom-Ylänne, 2011; Hagenauer and Volet, 2014a). The emotion literature further underscores implications of emotions on our cognition, behavior, physical health, and psychological well-being (for meta-analytical summaries, see Houben et al., 2015; Lench et al., 2011). Importantly, these findings have been replicated in emergent research conducted with post-secondary faculty. For instance, a study of 175 Australian university teachers documented the impact of teaching-related emotions on instructional behavior: positive emotions concerning teaching was associated with student-focused teaching approaches and negative emotions instead linked to information transmission approaches (Trigwell, 2012).

Similarly, a mixed-methods study of 18 U.S. faculty members showed that emotions predict faculty success in teaching and research as well as mediate the impact of perceived task value on teaching success and perceptions of academic control on research success (Stupnisky et al., 2014). More precisely, faculty members who placed higher value on their teaching felt more enjoyment and pride in teaching and, in turn, experienced greater teaching success. As for research, the more faculty felt in control of their research, the more adaptive emotions they felt regarding research (e.g., enjoyment, pride) that, in turn, predicted greater research success. In the same vein, a study of 362 U.S. and Chinese college students found that students' perceptions of university teachers' positive emotions were significantly and positively correlated with students' own positive emotions, behavioral and cognitive engagement, and critical thinking (Zhang and Zhang, 2013).

As emotion and stress share overlapping dimensions, it is necessary to consider both their common and distinguishing features. Psychological stress is defined as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus and Folkman, 1984, p. 19). While both stress and emotions are subject to appraisals of the personal significance of an emotional encounter, emotion is operationalized as a broader construct that encompasses negative experiences such as stress (Lazarus, 1993). As such and as a subset of emotion, stress is more limited in scope and depth. While negative emotions are elicited when our goals are thwarted, perceived stress represents the belief that the challenges exceed one's capabilities to cope with them (Lazarus, 1993; Lazarus, 1998). In light of the above-mentioned common features, emotions and stress are reviewed together in the present paper.

Emotion regulation is defined as an everyday psychological process "by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross, 1998b, p. 275). In contrast, coping refers to individuals' efforts to manage stronger and more persistent negative emotions (i.e., stress) that involve "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). Emotional labor, on the other hand, involves the "process of regulating both the internal and expressive components of emotions according to an organization's display rules" (Grandey, 2000, p. 97). As such, whereas emotion regulation involves managing both positive and negative emotions on a daily basis, and coping pertains to sustained efforts to combat strong negative emotions in response to significant stressors, emotional labor pertains specifically to the emotions one is expected to convey to others in occupational settings regardless of what one is internally experiencing.

Empirical evidence indicates that the ability to effectively manage stress and emotions has important consequences for health and adaptive functioning (e.g., Folkman and Moskowitz, 2004; Gross, 2002; Gross and Levenson, 1997; John and Gross, 2004; for meta-analytical summaries, Skinner et al., 2003; Aldao et al., 2010; Webb et al., 2012). However, although existing research highlights the relevance of coping and emotion regulation for functional and dysfunctional outcomes within work contexts in general (e.g., Murphy, 1996; Lawrence et al., 2011), the nature and significance of post-secondary academics' coping and emotion regulation strategies is underexplored. Furthermore, the existing literature on coping and emotion regulation in post-secondary faculty is scattered with no reviews of empirical findings on the topic having been carried out to date. Given the stressful and emotion-laden nature of the academic profession as well as the increasingly problematic nature of stress and the impact of emotions in post-secondary faculty, a comprehensive review of empirical findings is required.

As such, the present review addresses this research gap by providing a comprehensive and descriptive review of quantitative and qualitative research findings on coping and emotion-regulation strategies as reported by post-secondary faculty. It is anticipated that findings from this review will generate insight into academics' coping and emotion management strategies as well as the consequences of these strategies for well-being and productivity. Furthermore, the findings should shed light on the design and implementation of optimal faculty interventions for post-secondary institutions to equip their academic teaching and research staff with adaptive psychological strategies and maintain their well-being levels (*Implications of Faculty Emotion Regulation and Emotional Labor* section for examples of potential interventions). Prior to presenting the method of the review and the main findings, a brief overview of relevant constructs and their corresponding theoretical frameworks are presented.

CONSTRUCTS UNDER REVIEW: COPING AND EMOTION REGULATION

Coping strategies. A variety of conceptualizations have been utilized to describe the structure of individuals' psychological strategies for coping with negative emotions, with models typically distinguishing between problem- and emotion-focused coping (Folkman and Lazarus, 1980, Folkman and Lazarus, 1985), engagement (active, approach) versus

disengagement (avoidance, passive) coping (Roth and Cohen, 1986; Tobin et al., 1989), and primary (assimilative) versus secondary (accomodative) control coping (Weisz et al., 1994; Weisz et al., 1984; for detailed reviews, see; Skinner et al., 2003; Skinner and Zimmer-Gembeck, 2016). Problem-focused coping (e.g., strategizing for the purpose of goal attainment) consists of efforts to solve the problem through modifying or eliminating the source of stress whereas emotion-focused coping (e.g., wishful thinking) seeks to regulate distressing emotions in the face of adversity so as to manage the psychological impact of stress. Similarly, engagement coping (e.g., support-seeking) entails active attempts to directly deal with the stressful situation or related feelings whereas disengagement coping (e.g., social withdrawal) refers to efforts to physically and cognitively distance oneself from the stressor and associated emotions.

Whereas perceiving a situation as a challenge may induce positive emotions such as eagerness or excitement, interpreting it instead as personally threatening generates negative emotions such as anxiety or fear (Folkman, 2008). This concept of cognitive appraisals is consistently highlighted in the coping literature due to one's interpretations regarding the significance and meaning of a stressful encounter mediating the impact of such events on subsequent emotions (Lazarus and Folkman, 1984; Lazarus, 2000; Folkman, 2008). Importantly, cognitive appraisals are also assumed to determine the types of coping strategies individuals adopt to manage their emotions in stressful situations. Specifically, appraisals of a stressful encounter being controllable tend to trigger problem-solving responses such as planning and strategizing, whereas perceiving the situation as uncontrollable provokes accomodating or emotion-focused strategis such as acceptance or positive thinking (Aldwin, 2007; Skinner and Zimmer-Gembeck, 2016).

However, it is also important to note that the assumed emotional consequences of a coping strategy may not in fact be the same as the actual effects of that strategy in response to a specific stressor. As postulated by Lazarus and Folkman (1987), although coping could be mainly classified as problem-focused or emotion-focused, "in reality any coping thought or act can serve both or many other functions" (p. 152). Coping strategies are thus not universally adaptive or maladaptive for emotional well-being and can be judged as such only after considering the context and the social and personal resources available to the individual, as well as how they influence one's actions (Aldwin, 2007; Skinner and Zimmer-Gembeck, 2016). Nonetheless, research attempting to identify adaptive and maladaptive strategies has found problem-focused coping, engagement coping, as well as primary and secondary control coping to be typically adaptive in that they are consistently found to be linked with better emotional well-being and functioning. In contrast, disengagement and emotion-focused coping are shown to be associated with more maladaptive emotions and behavioral outcomes (Compas et al., 2001).

Given the overlap between coping and emotion regulation frameworks, it is necessary to consider both their convergences and differences. Compared with emotion regulation, coping is a broader construct. Although both coping and emotion regulation are regulatory processes that include controlled and purposeful (i.e., goal-directed) efforts to improve emotional well-being that change over time (i.e., are temporal processes), coping focuses on much larger periods of time (e.g., coping with bereavement over months). However, whereas coping includes only controlled processes, emotion regulation reflects a continuum of processes from conscious, effortful, and controlled regulation of emotions to automatic regulation that takes place without conscious awareness. Accordingly, coping is commonly understood as a form of emotion regulation in which one engages in response to prolonged stress. More precisely, whereas coping primarily focuses on decreasing negative emotions in stressful encounters, emotion regulation targets both expression and experience of positive and negative emotions in stressful situations as well as non-stressful situations. Finally, although coping is performed by the person encountering stress, emotion regulation could be either intrinsic (individuals regulate their own emotions) or extrinsic in nature (emotions are regulated by others; Compas et al., 2014; Gross, 1998b, Gross, 2013; Gross and Thompson, 2007; Koole, 2009; Skinner and Zimmer-Gembeck, 2007).

Emotion regulation and emotional labor. Regulation of emotions has been studied under two distinct, yet overlapping, research traditions: emotion regulation and emotional labor. The two constructs are comparable in that both focus on modifying feelings and expressions through the use of different strategies (Gross, 2013; Grandey, 2015). As mentioned above, emotion regulation encompasses a heterogeneous set of processes whereby people seek to influence the types of emotions they experience, when these emotions are experienced, and how they are expressed (Gross et al., 2006). Emotional labor, on the other hand, represents a subtype of emotion regulation that takes place within a given work context where "display rules" prescribe specific emotions that may or may not be publicly expressed (Ashforth and Humphrey, 1993; Grandey, 2000; Gross, 2013; Grandey and Gabriel, 2015).

Regarding existing proposed frameworks concerning emotion regulation, Gross' process model (Gross, 1998a; Gross, 1998b) is the most commonly used (for a meta-analysis, Webb et al., 2012) and is used in the present review as the organizing structure to synthesize empirical evidence on faculty coping and emotion regulation. The model differentiates between two major forms of emotion regulation in terms of their timing during the unfolding of an emotion: antecedent-focused (i.e., preventative) and response-focused (i.e., responsive). The former strategies are activated before our appraisals initiate emotion response tendencies, and encompass four main strategy types. *Situation selection* (e.g., confrontation and avoidance) involves choosing or avoiding people, activities, or places that will lead to a situation that can generate the desired emotions. *Situation modification* pertains to efforts to alter the emotion-inducing situation in order to change its emotional impact, and includes strategies such as direct situation modification, help/support-seeking, and conflict resolution. *Attentional deployment* (e.g., distraction, rumination, mindfulness) entails managing emotions without modifying the situation by choosing which aspects of a situation to attend to. *Cognitive change* (e.g., self-efficacy appraisal, challenge and threat appraisals, and positive reappraisal) involves re-evaluating a

situation and altering one's appraisals of it (Gross, 1998a; Gross, 1998b; Gross and Thompson, 2007; Peña-Sarrionandia et al., 2015). In contrast, response-focused strategies (e.g., emotion sharing, verbal/physical aggression, substance use, and expressive suppression) are activated after emotional responses have been developed and attempt to influence experiential, behavioral, and physiological emotional response tendencies (Gross, 1998a; Gross, 1998b; Gross and Thompson, 2007; Peña-Sarrionandia et al., 2015).

Existing empirical evidence further indicates that different forms of emotion regulation are associated with notably different affective, cognitive, and social outcomes (for meta-analytical reviews, Aldao et al., 2010; Webb et al., 2012). For instance, expressive suppression has been shown to maintain or intensify the internal experience of the negative emotion, and also lead to lower positive emotions, higher physiological arousal, feelings of inauthenticity, depressive symptoms, pessimism, as well as decreased memory and negative social consequences. Suppression is additionally linked to job dissatisfaction and quitting intentions within occupational settings. In contrast, reappraisal has generally been found to lead to more positive and fewer negative emotional experiences and expressions, having few social costs and either no impact or positive effects on subsequent memory processes (Gross and Levenson, 1997; Richards and Gross, 2000; Côté and Morgan, 2002; Gross, 2002; Gross, 2015; Gross and John, 2003; Sutton, 2004; Peña-Sarrionandia et al., 2015). Overall, emotion regulation processes that target early stages of emotion generation are more effective than the strategies that target emotional responses (Sutton, 2007).

Concerning the construct of emotional labor, different conceptualizations have been proposed. Seminal work by Hochschild (1983) categorized emotional labor into two major forms: surface-acting and deep-acting. *Surface-acting* entails displaying emotions that one does not actually feel by revising one's external expression of an emotion without modifying actual internal feelings. In contrast, *deep-acting* refers to consciously modifying feelings so as to express the desired emotions. Both types of emotional labor are aimed at displaying required emotions with different motives. Specifically, surface-acting involves modifying emotional expressions, whereas deep-acting entails internalizing the desired emotion to appear authentic. Building on Hochschild (1983) classification, subsequent research by Ashforth and Humphrey (1993) added a third form of emotional labor: *genuine or natural* emotional labor that involves the expression of naturally felt emotions such that the employees do not have to deliberately manage their emotions.

Based on the conceptualizations presented, emotion regulation can thus be understood as encompassing a broader and more pervasive set of behaviors as compared to emotional labor. Also, despite the similarities in the strategies proposed in the two conceptual frameworks, they can be differentiated in that emotion regulation addresses an individuals' general dispositional approach to dealing with emotions and focuses on internal processes and individual differences, whereas emotional labor reflects a more specific examination of emotion regulatory processes in the context of displaying

expected emotions in employment settings (Wang et al., 2019). The two traditions could also be differentiated in their concentration on positive and negative emotions. Specifically, emotion regulation research has largely focused on response-focused processes (i.e., suppression) to inhibit the expression of undesired negative emotional responses. In contrast, emotional labor researchers have mainly concentrated on amplifying the expression of desired positive emotions (i.e., surface-acting; Taxer and Frenzel, 2015).

Overall, research findings suggest that emotional inauthenticity (i.e., faking or hiding emotions) and surface-acting are associated with adverse individual and organizational outcomes in the form of impaired well-being, job attitudes, and performance outcomes. However, deep-acting has been shown to be desirable in that it is positively associated with organizational attachment, emotional performance, and customer satisfaction (for meta-analytic findings, see Hülsheger and Schewe, 2011; Kammeyer-Mueller et al., 2013). Further, existing research has yielded mixed results regarding the impact of emotional labor on specific well-being indicators such as job satisfaction, with some studies reporting positive effects (e.g., Zapf, 2002) and others demonstrating negative relations (e.g., Kinman et al., 2011). Given the significance of coping and emotion regulatory processes for job performance and productivity, in general, and psychological well-being in particular, existing research on the ways in which post-secondary faculty cope with stress and emotions as well as the ways in which academics are affected by the strategies they adopt needs to be synthesized to shed light on how to promote their performance and protect psychological health.

METHODS

Existing empirical research on the strategies used by post-secondary faculty to manage work-related stress and emotions were located through a comprehensive search of English language, peer-reviewed empirical investigations via four electronic databases (Educational Research Information Center (ERIC), Psychological Information (PsycINFO), Web of Science, and Scopus). The search terms used included: 1) population: "college" or "university" + "faculty" or "professors" or "academics" or "instructor" or "research staff" or "teaching staff" or "lecturer" or "educator", 2) stress and emotion: "stress" + "emotion" or "affect" or "mood", 3) emotion regulation and coping: "coping" or "stress management" or "coping behavior" + "emotion regulation" or "emotion management" or "emotion control", and 4) emotional labor: "emotion labor" or "emotional labor" or "emotional dissonance" or "emotional authenticity." Since coping and emotion regulation among faculty are relatively under-researched and no review to date has examined these topics in post-secondary faculty, we did not limit the search to a specific time span. Further, the current review excluded studies of medical academics (e.g., physicians, nurses) as well as faculty who were also social workers due to the unique demands and pressures

associated with their non-academic, service-oriented work conditions (Le Blanc et al., 2001; Watts and Robertson, 2012). In addition to the database searches, snowball searches of references of the retrieved studies were conducted. As per the inclusion and exclusion criteria specific to the aim of the present review, 25 empirical publications were included, with six drawing on two datasets (Amatea and Fong-Beyette, 1987; Amatea and Fong, 1991; Gates, 2000a; Gates, 2000b; Hagenauer and Volet, 2014a, Hagenauer and Volet, 2014b), in which the stress management and emotion regulation strategies in post-secondary faculty were examined. All studies reviewed are included in **Supplementary Appendix SA** and identified with an asterisk in the reference list.

RESULTS

Prevalence and Outcomes of Coping and Emotion Regulation Strategies

The present section synthesizes and critically examines published empirical findings ($n = 22$) concerning the coping and emotion regulation strategies (i.e., behaviors, cognitions, and perceptions) in which academics engage when facing stress and emotional encounters, as informed by the process model of emotion regulation proposed by Gross (1998a). The studies examining academics' coping with stress reviewed for this paper ($n = 13$; **Supplementary Table S1**) can be categorized into three main groups according to their foci: 1) those primarily assessing the specific coping strategies faculty members employ to deal with stress ($n = 5$; Abouserie, 1996; Brown and Speth, 1988; Devonport et al., 2008; Kataoka et al., 2014; Perlberg and Keinan, 1986), 2) those that report findings on coping styles among academics combined with general university staff and other occupational groups ($n = 3$; Amatea and Fong-Beyette, 1987; Amatea and Fong, 1991; Gillespie et al., 2001; Narayanan et al., 1999), and finally, 3) those that explore the association between academics' coping strategies and well-being outcomes ($n = 6$; Dunn et al., 2006; Kataoka et al., 2014; Lease, 1999; Mark and Smith, 2012; Ramsey et al., 2011; Tümkaya, 2007). The review identified five empirical publications (Gates, 2000a; Gates, 2000b; Hagenauer and Volet, 2014a, Hagenauer and Volet, 2014b; Regan et al., 2012; **Supplementary Table S2**) that examined academics' strategies in dealing with emotions, with four of the studies referencing two datasets (Gates, 2000a; Gates, 2000b; Hagenauer and Volet, 2014a, Hagenauer and Volet, 2014b). As for emotional labor and its consequences, six studies were identified (Berry and Cassidy, 2013; Constanti and Gibbs, 2004; Mahoney et al., 2011; Ogbonna and Harris, 2004; Pugliesi, 1999; Zhang and Zhu, 2008; **Supplementary Table S2**).

As stress is a subset of emotion (Lazarus, 1993), the research findings on both coping and emotion regulation strategies are synthesized using process model of emotion regulation (Gross, 1998a; Gross, 1998b) as the guiding framework. Based on the evidence presented in the studies reviewed, faculty members apply a variety of coping and emotional management strategies, either before or after emotional events. The findings from the present review further align with the evidence from the broader emotion management research in showing different strategy types to yield significantly different outcomes for academics' psychological adjustment (Skinner et al., 2003; Folkman and Moskowitz, 2004; Compas et al., 2014). For instance, academics' perceived ability to handle job stress, and appraisals of personal resources, were shown to significantly and negatively correlate with the level of stress and strain experienced (Amatea and Fong, 1991; Blix et al., 1994). The strategies identified in the present review align directly with the afore-mentioned guiding framework, namely the process model of emotion regulation proposed by Gross (1998a) and can be categorized into antecedent- or response-focused according to Gross's categorization. Although the primary objective of the current review is to synthesize the findings on the strategies academics use, the outcomes associated with those strategies are also considered to help put the proposed implications in context.

Antecedent-focused strategies. The antecedent-focused strategies academics use to regulate their emotions in order to minimize the aversive nature of potential stressors (as opposed to modulating behavioral or physiological responses to a given stressor) can be further categorized into situation selection, situation modification, attention deployment, and cognitive change.

Selecting the situation. The studies reviewed suggest that faculty choose or avoid some people, activities and places to generate desired emotional impact. For instance, focus group interviews from a sample of 178 faculty and general staff from 15 Australian universities identified situation selection by establishing tight role boundaries by avoiding non-essential student and staff contact or saying no to unnecessary demands to handle stressful experiences (Gillespie et al., 2001). The review findings further suggest that some academic work experiences, such as interactions with students, provoke negative emotions of anger, irritation, and disappointment. Additionally, being anxious, apprehensive, helpless, inadequate, and overwhelmed were reported with respect to online teaching experiences (Regan et al., 2012; Hagenauer and Volet, 2014a). As such, university teachers reported adopting strategies to make it less likely that their negative emotions would be provoked. The six U.S. university teachers in Regan et al. (2012) focus group interviews reported a number of strategies to regulate the negative emotions of feeling stressed, restricted, and devalued while teaching online, including adequate technology training and support from the educational institution, synchronous office hours, and face-to-face or telephone interactions with students. Additionally, interview findings from the 15 Australian university teachers indicated that faculty reported making attempts not to get involved in the emotional issues of their students (Hagenauer and Volet, 2014b). Also, adopting student-centered teaching approaches to maintain productive and positive interactions with students, to create positive energy and to help circumvent the occurrence of negative emotions were reported. Furthermore, the 337 Japanese university teachers in (Kataoka et al., 2014) survey study reported using behavioral disengaement as an effective stress mangemnet technique (Kataoka et al., 2014).

As for the consequences associated with situation selection, regulating emotions through strategies such as behavioral disengagement was linked to lower psychological adjustment

in the form of severe depression, anxiety, social dysfunction, somatic symptoms and insomnia (Kataoka et al., 2014). Additionally, escape-avoidance (i.e., ignoring or avoiding problem) was found to be associated with higher levels of anxiety and depression and lower job satisfaction (Mark and Smith, 2012), predict greater strain (Lease, 1999), and partially mediate the association between maladaptive perfectionism and psychological distress (Dunn et al., 2006). Moreover, proactive coping, defined as anticipating potential stressors as challenges and generating the psycholcglical resources necessary to prepare for future stressors (Scwarzer and Taubert, 2002), was found to be correlated with better physical and psychological health (Amatea and Fong, 1991; Kataoka et al., 2014).

Modifying the situation. Examples of situation modification were reported by 135 female U.S. faculty, researchers, and university administrators in Amatea and Fong-Beyette (1987) study who opted to manage stress primarily by adopting strategies such as planning and strategizing across different types of work-life conflict situations. Similar findings were observed by the participants in Gillespie et al. (2001) study who identified planning and prioritizing as key stress management techniques. More recently, the sample of 10 U.K. faculty interviewed by Devenport et al. (2008) also unanimously reported strategies such as prioritizing, proactive planning, and time-management to avoid potentially stressful encounters to be invaluable in managing and controlling stress. Whereas proactive coping, such as planning, reduces the need for reactive coping, faculty reported that some circumstances of organizational constraints such as lack of control necessitate reactive coping (Devonport et al., 2008; Kataoka et al., 2014). This finding supports the observation that coping is primarily determined by environmental factors (Lazarus and Folkman, 1984).

A survey of 150 U.S. faculty members further identified strategies such as identifying the cause of the problem or finding more about the situation, as the most frequently used stress management responses (Brown and Speth, 1988). This finding is consistent with a U.S. study that qualitatively compared coping strategies across three occupations (i.e., clerical workers, sales associates, and university professors; Narayanan et al., 1999). The study found that, compared to other professions, academics were more likely to engage in situation modification strategies such as taking direct action or discussing the problem with their chair or head of the department. Additionally, a qualitative field study of nine tenured U.S. university teachers (using observations, field notes and interview data) found that faculty reported using language and labels, such as telling students that it is OK to become confused while learning, and communicating their personal expectations to students about how the students should behave (Gates, 2000b). This was aimed at influencing students' behavior and thereby reducing the possibility of triggering negative emotions in teachers. Strategies such as learning to recognize and understand stress were also identified to be effective in coping with stress (Gillespie et al., 2001).

The findings from this review are consistent with the broader coping research (e.g., Lazarus, 1993; Aldwin, 2007; Skinner and Zimmer-Gembeck, 2016) in showing problem-focused coping to

be an effective stress response among post-secondary faculty. For instance, the studies reviewed reported utilization of problem-focused coping to be linked to better psychological adjustment in the form of lower levels of stress, depression, and psychological distress as well as better job satisfaction (Brown and Speth, 1988; Dunn et al., 2006; Mark and Smith, 2012). Similarly, active coping was negatively associated with social dysfunction and severe depression, whereas instrumental support was negatively associated with depression (Kataoka et al., 2014).

Attention deployment. Faculty also reported selectively attending to the stimuli to cope with their emotional experiences. For instance, a quantitative study of 100 Israeli faculty memebrs (Perlberg and Keinan, 1986) identified intellectual stimulation such as reading journals, magazines, and attending conferences as one of the most effective ways of coping with stress in that it helps faculty divert attention from daily stressors. Likewise, the university teachers in the Kataoka et al. (2014) study reported employing self-distraction to be effective in managing stress (e.g., engaging in other work or leisure activities in order to think about stressors less; Carver 1997). The findings from this review are consistent with the health impairment risks of self-distraction in linking the use of this strategy to severe depression, anxiety, social dysfunction, somatic symptoms and insomnia among academics (Kataoka et al., 2014).

Cognitive change. Consistent with the empirical findings that advocate cognitive-restructuring (i.e., reappraisal) due to its commonly observed beneficial impact on negative emotional experiences (Lazarus, 2000; Folkman and Moskowitz, 2004), academics reported applying reappraisal of specific situations to make it less likely for negative emotions to be triggered. For instance, the faculty members in Brown and Speth (1988) study reported reappraisal as a key coping strategy. It also appears that cognitive techniques that involve positive reappraisal of work situations may reduce faculty members' stress and negative emotions. For instance, examples of cognitive change were reported by participants in (Gates, 2000a; Gates, 2000b) studies who opted to positively reappraise stimuli, for instance by remembering positive interactions, to down-regulate negative emotions. A quotation from a university teacher, who helped a student adopt an effective learning strategy after failing on an exam, is illustrative: "He (the student) graduated with honors. When he walked away, for me that was a tremendous reward because, according to him, I had an impact. And that's what I try to focus on" (Gates, 2000b, p. 483). The participating university teachers further indicated that they try to redefine disruptive students as young and impressionable, or to think of a student who is doing poorly as developing, in order to manage feelings of anger, anxiety, frustration, and disappointment (Gates, 2000a; Gates, 2000b).

Similarly, the faculty members in Regan et al. (2012) study reported changing their view of the instructor as transmitter of information to facilitator of knowledge to avoid the negative emotion of feeling devalued in online learning environments. Furthermore, faculty reported using cognitive strategies such as rationalization or acceptance by adapting their expectations. For instance, acceptance was the most commonly reported stress

management strategy (58%) among the 414 academics, including faculty and research assistants, surveyed in Abouserie (1996) study. Faculty also used rational arguments in the form of self-talk to down-regulate negative emotions such as feeling annoyed: "They are still in that kind of school-girl, school-boy mode, which is pretty normal at this … this stage" (Hagenauer and Volet, 2014b, p. 271). Also, acceptance of the specific situation by lowering their self-expectations and work standards helped teachers to reduce disappointment, frustration and stress (Gillespie et al., 2001; Hagenauer and Volet, 2014b). The participants in Abouserie (1996) study also reported lowering their expectations to decrease strain by trying to think that "I am only human being," though it was not reported as a frequent way of coping. Similar findings were observed by the participants in Gillespie et al. (2001) study who identified practicing stress management techniques such as lowering their standards and self-expectations by withdrawing from voluntary service activities (e.g., leaving committees) as key stress management techniques. Furthermore, the teachers interviewed by Hagnauer and Volet (2014a) reported sharing humor and jokes to facilitate good rapport with students and thereby a relaxed classroom atmosphere.

Evidence from the studies reviewed suggests that cognitive change can yield significantly different outcomes for academics' well-being depending on how adaptively this strategy is used. For instance, studies of 102 U.S. teaching faculty and 283 Turkish faculty members found utilization of humor to be significantly and negatively associated with burnout (Tümkaya, 2007; Ramsey et al., 2011). In contrast, wishful thinking and denial were shown to be maladaptive in predicting lower psychological adjustment in the form of anxiety, depression, somatic symptoms and job dissatisfaction (Mark and Smith, 2012; Kataoka et al., 2014). However, contrary to their expectations, they did not find positve reappraisal to be significantly linked to well-being among acadeimics. This finding seems to run counter to the existing empirical findings showing that coping via positive restructuring is related to better psychological health.

Response-focused strategies. According to (Gross, 1998a; Gross, 1998b) model of emotion regulation, academics can also apply a variety of strategies intended not to change their exposure or perceptions of a given stressors (antecedent-focused strategies) but rather to alter the experiential, physiological, and behavioral reactions following from their emotional responses to a stressor (response-focused strategies).

Social support. One such strategy targeted at experiential facets is sharing emotions. For instance, the participants in Hagenauer and Volet (2014b) study indicated that, being aware of the effectiveness of emotion sharing, they expressed their positive and negative emotions with family members and departmental colleagues. However, they believed there were not many opportunities to share and discuss negative emotions and their triggers due to the lonely nature of university teaching profession. Abouserie (1996) also identified using emotion expression strategies such as trying to bring their feeling into the open to deal with stress (e.g., sharing their feelings with friends and others).

The current review also highlights support seeking as an effective stress management strategy among faculty. For instance, the faculty members in Perlberg and Keinan (1986) study reported seeking social support (i.e., talking with a friend or telling jokes) as one of the most effective ways of coping with stress. Similarly, the faculty in Devenport et al. (2008) study unanimously reported managing stress *via* emotional support as well as professional counseling or psychological services. Abouserie (1996) also identified support seeking through talking with colleagues, involving oneself with friends, and talking about the problem with colleagues as effective coping responses. Their findings support the assertion by Rimé (2007) who contends that emotion sharing is beneficial to psychological well-being due to the social bonds it fosters as well as transference of affection and warmth.

Additionally, the study by Gillespie et al. (2001) reported that the participants relied on social support from family or friends, as well as attending scholarly conferences, as a means of coping with stress. It appears that while preparing manuscripts and presenting in conferences can be stressful, it enables faculty to discuss work-related problems with collaborators and others. Interestingly, the effectiveness of social support has also been found to be linked to the level of stress faculty experience. For instance, in a survey of 131 tenure-track U.S. faculty members, Lease (1999) found perceptions of social and environmental support from colleagues, administrators, and departmental support staff to be beneficial for psychological adjustment when work-role stressors (i.e., role ambiguity and role insufficiency) were perceived as low in magnitude.

In contrast, the beneficial effect of social support was not evident when faculty perceived high levels of stress resulting from the demands placed on them by their academic roles (e.g., role ambiguity, role conflict, role overload; see Rizzo et al., 1970). This finding thus indicates that social support may not be sufficient to address the psychological challenges posed by lack of clarity over academic roles and responsibilities. Perceived social support was also found to be correlated with better physical and psychological health (Amatea and Fong, 1991; Kataoka et al., 2014) as well as negatively associated with maladaptive perfectionism and psychological distress (Dunn et al., 2006).

Physiological strategies. Other emotion management strategies used to reduce stress included modifying one's physiological state through practices such as deep breathing or expressive gestures aimed at dissipating (vs. internalizing) the emotional experience (e.g., glaring at disruptive students; Gates, 2000a; Gates, 2000b). Taking deep breaths allowed teachers to monitor their feelings and assess the consequences of their emotions (Gates, 2000a). Faculty also reported taking regular breaks from their work, regularly exercising, and seeking alternative therapies for stress relief (e.g., yoga, massage relaxing; Abouserie 1996; Gillespie et al., 2001). Such physiologically-oriented strategies are generally found to be beneficial for reducing stress, improving psychological well-being and sleep quality, as well as relieving physical symptoms in other populations (e.g., government employees, school teachers, general university staff; Hartfiel et al., 2012, Klatt et al., 2009; Lin et al., 2015).

Other maladaptive strategies. The findings from this review further reveal that to handle stressful experiences some faculty resort to alcohol, substance use and self-blame (e.g., Gillespie et al., 2001; Kataoka et al., 2014). Consistent with the findings in the broader well-being literature (Aldwin and Revenson, 1987; Single et al., 2000; Teesson et al., 2000; Skinner and Zimmer-Gembeck, 2016), use of these strategies by post-secondary faculty was linked to lower psychological adjustment in the form of severe depression, anxiety, social dysfunction, somatic symptoms and insomnia (Kataoka et al., 2014). Additionally, 19.1% of the 414 academics in Abouserie (1996) study reported that they often retreated to their office, or opted not to go to work at all (10.7%); behaviors implying social withdrawal and stress-related job absenteeism, respectively.

Prevalence and Consequences of Emotional Labor Strategies

As mentioned above, Grandey (2000) likened Gross (2006) antecedent and response-focused types of emotion regulation to (Hochschild, 1983) concepts of deep and surface-acting, respectively. However, Grandey did assert that emotion regulation processes cannot be directly equated with emotional labor strategies because surface-acting encompasses not only suppression but also amplification and faking of emotions. Furthermore, although deep-acting requires cognitive appraisal, the ultimate goal is not to improve personal well-being but to facilitate their efforts to better convey feelings that appear genuine to others. As such, the findings on faculty emotional labor are presented separately in the section below.

The studies reviewed suggest that academics view emotional labor as an intrinsic aspect of their work. Indeed, emotional labor is so inextricably linked to academics' profession that for some, it equals professionalism—and to a greater degree than in many other professions (Berry and Cassidy, 2013). Gates (2000a) asserted that faculty emotional management was essential for job satisfaction and effective teaching, and ultimately, student attainment. There are times when faculty express their genuinely felt emotions as well as times when they regulate (i.e., hide, fake, or minimize) their emotions to conform to contextually mandated display rules. As such, whether an emotion is appropriate for a given situation is determined by the tacit display rules of post-secondary institution. Research findings further indicate that academics' engagement in emotional labor partly derives from the aforementioned changes in higher education organizations and the subsequent ever-intensifying expectations associated with those changes (Gates, 2000a; Ogbonna and Harris, 2004; Biron et al., 2008; McAlpine and Akerlind, 2010). Indeed, marketization of higher education has led some scholars to conceptualize students as customers (Constanti and Gibbs, 2004), with academics being increasingly required to perform emotional labor to satisfy their job requirements and support student needs (Ogbonna and Harris, 2004). For example, the following comment from one U.K. university teacher vividly describes the experience of conveying expected positive emotions to students despite internally feeling strong negative emotions: "Sometimes I feel like shouting at them (students) but I know what this will do to my teaching evaluations. I just stand there and pretend to be laughing even though I am fuming inside" (Ogbonna and Harris, 2004, p. 1197).

The studies reviewed further reveal that post-secondary faculty are particularly concerned with negative emotions and seek to down-regulate or suppress them (e.g., anger) to stay within the emotional boundaries of their profession. In contrast, faculty are more likely to openly express positive emotions such as enjoyment, humor, and happiness, as long as the display does not include intense emotional reactions (Gates, 2000a; Gates, 2000b; Hagenauer and Volet, 2014b). For instance, a national sample of 598 U.S. college and university faculty members (Mahoney et al., 2011) consistently reported emotional suppression as a surface-acting emotional labor strategy. Similarly, a later mixed-methods study of 61 U.S. university teachers (Berry and Cassidy, 2013) exploring use of emotional display, suppression, and faking strategies of emotional labor found that suppression was the most frequently used emotional labor strategy, followed by faking. Faculty also reported engaging in suppression of negative emotions, for example, masking or hiding negative emotions such as anger and disappointment during interactions with students, and instead expressing positive emotions (e.g., enthusiasm) or specific negative emotions (e.g., disappointment) that conveyed a belief in students' potential (Gates, 2000a; Gates, 2000b). Likewise, all participants in Hagenauer and Volet (2014b) study believed that negative emotions needed to be controlled in the classroom, either suppressed or expressed in a norm-accordant manner, in order to appear professional. They also reported suppressing negative emotions resulting from out of classroom issues such as high workload. These findings echo those of studies of school teachers (Sutton, 2004; Aultman et al., 2009; Sutton et al., 2009).

Interestingly, although studies show academics to consistently report engaging in suppression of emotions, the reported reasons for this behavior vary considerably. While some academics do so for moral reasons, such as caring for their students (Hagenauer and Volet, 2014b) or fostering students' social and emotional development (Gates, 2000a), for others emotion suppression is motivated by the belief that students are customers who need to be satisfied (Constanti and Gibbs, 2004). In a qualitative study of 54 U.K. university lecturers, Ogbonna and Harris (2004) found that the participants performed surface-acting emotional labor more commonly than deep-acting, with interactions with students or one's superiors being particularly likely to elicit surface-acting behavior. The authors further observed the most commonly reported form of deep-acting by faculty to involve the active and conscious attempt to arouse a given emotion. By contrast, Zhang and Zhu (2008) in a survey of 164 Chinese university lecturers found that, of the three dimensions of emotional labor, participants engaged the most in deep-acting and the least in surface-acting. The authors assert that this finding could be due to a prominent Chinese mentality of thinking through emotions and viewing teachers as parents who care for and nurture their students by trying to display appropriate emotions. The findings from the present review suggest that

academics consistently engage in emotional labor aimed at 1) constructing an optimal learning environment, 2) nurturing positive student–teacher relationships, 3) serving as role models for their students, or 4) satisfying students and benefitting their post-secondary institutional expectations (Gates, 2000a; Gates, 2000b; Constanti and Gibbs, 2004; Hagenauer and Volet, 2014b).

Studies have further examined the empirical links between emotional labor and well-being as well as employment outcomes in academics (Pugliesi, 1999; Ogbonna and Harris, 2004; Mahoney et al., 2011; Berry and Cassidy, 2013) including personal well-being outcomes such as work stress, psychological distress, and burnout as well as job-related outcomes such as job satisfaction, affective commitment, and career advancement. As for personal well-being consequences, research on post-secondary faculty has found faking of emotions to lead to greater job stress and psychological distress (Ogbonna and Harris, 2004). Additionally, the requirement to suppress job-related stress and negative emotions has been linked to the experience of frustration (Constanti and Gibbs, 2004). Similarly, a study of 2,069 U.S. academics (i.e., faculty and general university staff; Pugliesi, 1999) found self-focused emotional labor (e.g., deep-acting) to be less detrimental for job stress and psychological distress than other-focused forms of emotional labor (e.g., attempting to help coworkers feel better about themselves).

Similarly, Mahoney et al. (2011) found genuine expression of negative emotions, faking positive emotions, and suppressing negative emotions to predict greater emotional exhaustion, whereas genuine expression of positive emotions, faking negative emotions, and suppressing positive emotions predicted lower emotional exhaustion. Likewise, Zhang and Zhu (2008) compared the effects of deep-acting and surface-acting strategies in a sample of 164 Chinese university teachers and found that deep-acting predicted lower burnout, whereas surface-acting predicted greater burnout. These findings are aligned with studies of school teachers showing comparable links between emotional labor and burnout (e.g., Näring et al., 2006; Lorente Prieto et al., 2008) and underscore the potential consequences of emotional labor for personal well-being in faculty.

Additionally, research indicates that emotional labor may correspond with job satisfaction in faculty members, with the relations varying depending on the context and type of labor involved. For instance, Berry and Cassidy (2013) found that although university lecturers reported high levels of emotional labor, they nevertheless felt satisfied with their jobs. A possible explanation for this contradictory finding is that the sample of university lecturers reported that they felt they had some job autonomy. As feelings of job autonomy and control tend to predict better job satisfaction (e.g., Thompson and Prottas, 2006), it is possible that this aspect of faculty members' occupational environment may have mitigated the otherwise negative effects of high emotional labor levels. In contrast, Pugliesi (1999) found that performing self-focused and other-focused emotional labor negatively predicted job satisfaction. Similarly, Mahoney et al. (2011) found genuine expression of

negative emotions to predict lower job satisfaction, with genuine expression of positive emotions instead contributing to greater job satisfaction and affective commitment. These authors also found that faking positive emotions and suppressing negative emotions were negatively linked to job satisfaction, whereas faking negative emotions was positively related to job satisfaction.

Additionally, greater emotional labor was reported to benefit faculty with respect to organizational rewards such as career progression (Ogbonna and Harris, 2004). A quotation from a university teacher is illustrative: "It's about image—creating a brand of "me." In my place careers are built on teaching portfolios. If you can create an image of yourself as a brilliant teacher—you've got it made. I have no problem with faking concern about students if it gets me another increment (point)" (Ogbonna and Harris, 2004, p. 1197). Although career growth has generally been linked to higher levels of job satisfaction and commitment (e.g., Maia et al., 2016), the sample of U.K. lecturers assessed by Ogbonna and Harris (2004) found high levels of emotional labor due to occupational expectations to correspond with low levels of job satisfaction. Ogbonna and Harris (2004) further found academics to report engaging in emotional labor to contribute to feeling a lack of collegiality and teamwork due to diminished social interaction and a corresponding lack of emotional support from colleagues. These findings are, in general, consistent with studies of school teachers that link higher levels of emotional labor to greater burnout, job dissatisfaction, and health problems (e.g., Kinman et al., 2011; Wrobel, 2013).

DISCUSSION

Summary of Review Findings

Post-secondary academic employment poses various stressors for faculty members who are expected to ensure high quality teaching, research, and service in an evolving occupational context. However, despite the emotion laden nature of academic work, there is remarkably little research on the emotional experiences of post-secondary faculty with respect to coping, emotion regulation, and emotional labor processes. Given the significance of these topics for well-being and academic performance, efforts to improve workplace quality in post-secondary institutions should not only emphasize academics' teaching, research, and service behaviors, but also how they deal with their emotions. As such, the topics of coping, emotion regulation, and emotional labor merit a more prominent niche in studies of academics. To address this research gap, the present paper reviewed the fragmented empirical literature pertaining to the strategies used by post-secondary faculty to cope with stress and regulate their emotions as organized according to the process model of emotion regulation (Gross, 1998a; Gross, 1998b) and emotional labor theories (Hochschild, 1983; Ashforth and Humphrey, 1993; Grandey, 2000).

There is growing evidence that the academic work has been intensified as a result of the substantial changes to the context of higher education (e.g., Biron et al., 2008; McAlpine and Akerlind,

2010). Consequently, in order to adequately meet the multiplicity of organizational and occupational demands, faculty are required to show or exaggerate some emotions as well as minimize or suppress the expression of other emotions (Ogbonna and Harris, 2004). Findings from these few studies suggest that academics regularly attempt to not only control their emotions in stressful educational settings, but also to display appropriate emotional responses even if the response is inauthentic. In other words, although published research has consistently established the link between greater emotional inauthenticity (i.e., surface-acting) and lower employee well-being, post-secondary faculty nonetheless regularly perform this type of emotional labor as part of their emotion-related job expectations and their potential benefits for student development and learning.

The findings of the present review, albeit from a limited empirical basis, reveal that post-secondary faculty adopt a variety of coping and emotion regulation strategies. This scant evidence further indicates that the coping and regulatory strategies academics employ have implications for their well-being as well as performance. More specifically, cognitive reappraisal, problem-solving, and social support were found to be adaptive in helping academics reduce stress and maintain their well-being. Conversely, study findings revealed emotion suppression to be prevalent yet have mixed effects among post-secondary faculty, with suppression showing both benefits (e.g., achieving teaching and learning goals, fostering positive interactions with students; Constanti and Gibbs, 2004; Gates, 2000b; Hagenauer and Volet, 2014b) as well as negative effects for academics (e.g., maintaining and intensifying negative emotions; Hagenauer and Volet, 2014b). As an illustration, the university teachers interviewed in Hagenauer and Volet (2014b) study indicated that they "boil underneath" if they tried to completely conceal their emotions. Similarly, maladaptive coping responses such as escape, social isolation, and submission were found to be detrimental for psychological and behavioral outcomes in post-secondary faculty (Brown and Speth, 1988; Lease, 1999; Dunn et al., 2006; Mark and Smith, 2012; Kataoka et al., 2014).

Additionally, the evidence from limited studies shows emotional labor in post-secondary faculty to have potentially negative consequences for their psychological and occupational well-being. Specifically, when engaging in surface-acting emotional labor, the disparity between truly experienced emotions and external expressions corresponds with higher psychological strain. Further, faculty who reported performing more emotional labor experienced higher levels of job stress, were at a greater risk of developing burnout, and were less satisfied with their work (Pugliesi, 1999; Constanti and Gibbs, 2004; Ogbonna and Harris, 2004; Mahoney et al., 2011). Nevertheless, post-secondary faculty do report viewing emotional labor as an intrinsic element of their academic work (Berry and Cassidy, 2013), suggesting positive links between emotional labor and job satisfaction. Additionally, some evidence suggests that emotional labor may not be entirely detrimental for faculty as it can be perceived by students and others as conveying professionalism and objectivity in the classroom, potentially resulting in career benefits (e.g., better

teaching evaluations; Ogbonna and Harris, 2004). Furthermore, evidence of job satisfaction despite high levels of emotional labor (Berry and Cassidy, 2013) suggests that fulfilling the emotional demands of faculty position does not necessarily come at the expense of job satisfaction. In conclusion, given the pivotal role of academics in knowledge creation and instruction (e.g., Atkins et al., 2002), impaired well-being and performance among faculty has clear implications for quality of academic work, student development, and institutional efficacy (Lease, 1999; Gillespie et al., 2001).

Implications of Faculty Emotion Regulation and Emotional Labor

In sum, the findings presented underscore the importance of continued research on the varied types of coping strategies, emotion regulation behaviors, and emotional labor approaches used by faculty in response to academic challenges given clear links to both personal well-being and employment outcomes. Moreover, these findings suggest that post-secondary administrators and support personnel (e.g., department heads, faculty workshop coordinators) are well-advised to raise faculty awareness of the implications of their emotion regulation strategies, and highlight the need for further investigation into avenues for enhancing faculty coping and regulatory skills. Indeed, promoting adaptive emotion regulation is necessary for successful job performance and can help academics deal more effectively with stress and emotions, and thus directly decrease the level of job stress and indirectly protect their well-being and productivity. By implication, stress reduction and health protection in post-secondary faculty could be achieved not only by decreasing work demands, but also by developing their personal resources such as coping and emotion regulation skills (Gates, 2000b; Zhang and Zhu, 2008; Regan et al., 2012; Kataoka et al., 2014). University administrators aiming to equip faculty with effective regulatory skills and promote well-being are encouraged to develop related orientation content for new faculty, developing counselling and mental health support for faculty in general, as well as improving training for administrators to better identify and respond to mental health concerns in faculty.

Additionally, university administrators, policy makers, and faculty development programs are ideally positioned to understand the emotional aspects of their primary institutional resources' work (Gmelch et al., 1984). These stakeholders are thus especially encouraged to take active steps in developing and implementing interventions to raise academics' awareness regarding coping and emotion regulation strategies and their associated consequences, to promote coping and emotion regulation skills, and to foster academics' use of effective strategies for improving faculty well-being and performance. Despite the lack of research on academics, research evidence from other occupational groups (e.g., teachers) raises the possibility that training post-secondary faculty to develop more adaptive coping and emotion management skills might result in favorable outcomes that will, by extension, benefit the academic institutions (Kotsou et al., 2011). For example,

empirical evidence across occupational settings consistently demonstrates the efficacy of cognitive reappraisal stress management interventions such as cognitive behavioral therapy (CBT; for meta-analytical summaries, see Kim, 2007; Richardson and Rothstein, 2008; Van der Klink et al., 2001). Additionally, mindfulness-based stress reduction (MBSR) programs show a range of cognitive (e.g., enhanced working memory and attention), psychological (i.e., improvements in emotion regulation skills and self-efficacy, decrease in stress, anxiety, emotional exhaustion, and depression as well as increase in positive emotions) and physiological benefits (i.e., improved immune function) among K-12 students and teachers (e.g., Napoli et al., 2005; Poulin et al., 2008; Roeser et al., 2012), university students (Freeman et al., 2015; Ford et al., 2018), other occupational groups (e.g., Janssen et al., 2018), as well as general population (e.g., Davidson et al., 2003; Hölzel et al., 2011).

As such, post-secondary administrators are recommended to consider integrating CBT and MBSR interventions into faculty development programs to facilitate adaptive emotion regulation, well-being, and performance in faculty members. Increased health and well-being among post-secondary faculty should, in turn, lead to greater occupational engagement and satisfaction as well as lower levels of faculty burnout and attrition. Increased faculty well-being should also support the formation of positive relationships with students that, in turn, promote students' sense of belonging, engagement, learning, and achievement. Nonetheless, given research findings showing mindfulness training to be inappropriate for chronically stressed individuals due to negative effects of chronic stress on sustained attention and complex thought processes (e.g., Sapolsky, 1994; Arnsten, 1998), it is possible that CBT or MBSR may be ineffective for the chronically stressed faculty they are intended to serve. Hence, it is incumbent on administrators to also focus on long-term improvements to academic work environments to make them less emotionally demanding by reducing workloads (e.g., excessive teaching responsibilities faced by non-tenure-track faculty; Baldwin and Wawrzynski, 2011), facilitating balance between academic responsibilities (e.g., teaching releases to offset research or administrative demands; Stupnisky et al., 2015), clarifying role expectations (e.g., tenure expectations), as well as providing effective physical and mental health resources (e.g., gym memberships, vacation time) and stress management workshops (Gillespie et al., 2001).

With respect to the present findings concerning emotional labor strategies, this review further suggests that higher education institutions are well-advised to encourage deep-acting strategies and discourage surface-acting as part of existing professional development initiatives aimed at improving teaching effectiveness. Moreover, given that social support was consistently found to protect faculty against job stress, institutional efforts to promote faculty collegiality (e.g., regular social events, departmental lecture series) as well as develop collaborative work spaces, team teaching initiatives, and faculty mentorship programs should contribute to greater connectedness, enhanced well-being, and improved teaching and research productivity.

Empirical evidence demonstrates the beneficial effects of such initiatives. For instance, studies of faculty members have shown implementation of mentorship programs to result in favorable outcomes such as higher retention rates, improvement in self-perceived abilities, and higher academic success rates as measured by number of peer-reviewed publications, leadership and professional activities, honors, and awards (Zeind et al., 2005; Ries et al., 2012; Jackevicius et al., 2014). Additionally, existing studies highlight the potential benefits of team teaching initiatives for faculty members, including deepened pedagogical knowledge, improvements in teaching skills and effectiveness, higher motivation to teach, overcoming feelings of isolation by creating a sense of community, and enhanced conflict management skills (Robinson and Schaible, 1995; Cohen and DeLoise, 2002; Kluth and Straut, 2003; Lester and Evans, 2008). Furthermore, social activities have been shown to foster integration and social cohesion in faculty members (Lindholm, 2003) and particularly among pre-tenure faculty (Fleming et al., 2016).

Limitations and Future Directions

The methodologies of the studies reveiwed had multiple limitations, many of which were recognized by authors of the respective studies. Firstly, 12 of the 22 studies employed only quantitative analyses and thus failed to capture the full complexity of academics' lived experiences concerning their challenges and emotion regulation otherwise afforded by qualitative protocols (Creswell and Creswell, 2017). Second, the few studies that investigated emotion regulation among faculty focused largely on negative emotions such as anger, burnout, and stress, thus neglecting the potential benefits of upregulation of positive emotions on well-being and performance (Fredrickson, 2000; Fredrickson, 2001; Folkman, 2008; Fredrickson, 2013; Quoidbach et al., 2015). Third, the majority of the studies focused on how academics regulate their teaching-related emotions, thereby neglecting various other domains of academic work such as research, service, or administration. Considering recent empirical evidence regarding the domain specificity of emotional experiences in post-secondary faculty (e.g., teaching vs. research; Stupnisky et al., 2014), future studies are encouraged to explore the strategies academics employ to regulate their emotions in domains other than teaching.

Fourth, a majority of the studies reviewed drew on populations from single organizations thus raising concerns of generalizability to academics at large. Hence, future studies are encouraged to draw on larger numbers of academics from varied institution types (e.g., colleges, trade schools, universities; teaching vs. research intensive schools) to better ascertain the external validity of the study findings. Relatedly, although the studies reviewed were conducted across several countries (e.g., U.K., U.S., Canada, Australia, Japan), there are to date insufficient studies conducted within a given cultural context or geographical setting to allow for generalizations as to how cultural or geographic differences may moderate the prevalence and effects of emotion regulation and coping in faculty. Fifth, all but two studies (Constanti and Gibbs, 2004; Gates, 2000a; Gates, 2000b)

employed exclusively self-report measures that are susceptible to response biases warranting that future research also investigate academics' coping and emotion regulation strategies using more objective assessments such as observations, experience sampling, and physiological markers (Spector, 2006; Paulhus and Vazire, 2007; Pekrun and Bühner, 2014).

Finally, given that multiple studies reported data from aggregate samples that included both faculty and non-faculty participants (e.g., researchers, administrators, see Amatea and Fong-Beyette, 1987; Gillespie et al., 2001), it was not possible in these studies to more closely examine factors that pertain specifically to post-secondary faculty (e.g., thesis supervision, tenure pressures). Accordingly, further research on stress management and emotion regulation in post-secondary faculty specifically, as well as further differentiation between disparate types of faculty employment (e.g., non-tenure-track vs. tenure-track employment; Hall, 2019), are needed to better examine the role of coping, emotion regulation, and emotional labor among faculty in the context of modern academic employment.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/feduc.2021.660676/full#supplementary-material

REFERENCES

Abouserie, R. (1996). Stress, Coping Strategies and Job Satisfaction in University Academic Staff. *Educ. Psychol.* 16, 49–56. doi:10.1080/0144341960160104

Aldao, A., Nolen-Hoeksema, S., and Schweizer, S. (2010). Emotion-Regulation Strategies Across Psychopathology: AMeta-Analytic Review. *Clin. Psychol. Rev.* 30, 217–237. doi:10.1016/j.cpr.2009.11.004

Aldwin, C. M., and Revenson, T. A. (1987). Does Coping Help? A Reexamination of the Relation Between Coping and Mental Health. *J. Pers Soc. Psychol.* 53, 337–348. doi:10.1037/0022-3514.53.2.33710.1037//0022-3514.53.2.337

Aldwin, C. M. (2007). *Stress, Coping, and Development: An Integrative Perspective*. New York, NY: Guilford Press.

Amatea, E. S., and Fong, M. L. (1991). The Impact of Role Stressors and Personal Resources on the Stress Experience of Professional Women. *Psychol. Women Q.* 15, 419–430. doi:10.1111/j.1471-6402.1991.tb00418.x

Amatea, E. S., and Fong-Beyette, M. L. (1987). Through a Different Lens: Examining Professional Women's Interrole Coping by Focus and Mode. *Sex Roles.* 17, 237–252. doi:10.1007/BF00288451

Arnsten, A. F. (1998). The Biology of Being Frazzled. *Science.* 280, 1711–1712. doi:10.1126/science.280.5370.1711

Ashforth, B. E., and Humphrey, R. H. (1993). Emotional Labor in Service Roles: The Influence of Identity. *Amr.* 18, 88–115. doi:10.5465/amr.1993.3997508

Atkins, M., Brown, G. A., and Brown, G. (2002). *Effective Teaching in Higher Education*. New York, NY: Routledge.

Aultman, L. P., Williams-Johnson, M. R., and Schutz, P. A. (2009). Boundary Dilemmas in Teacher-Student Relationships: Struggling with "the Line". *Teach. Teach. Education.* 25, 636–646. doi:10.1016/j.tate.2008.10.002

Baldwin, R. G., and Wawrzynski, M. R. (2011). Contingent Faculty as Teachers. *Am. Behav. Scientist.* 55, 1485–1509. doi:10.1177/0002764211409194

Barkhuizen, N., Rothmann, S., and Van De Vijver, F. J. (2014). Burnout and Work Engagement of Academics in Higher Education Institutions: Effects of Dispositional Optimism. *Stress Health.* 30, 322–332. doi:10.1002/smi.2520

Berry, K., and Cassidy, S. (2013). Emotional Labour in University Lecturers: Considerations for Higher Education Institutions. *Jct.* 2, 22–36. doi:10.5430/jct.v2n2p22

Biron, C., Brun, J. P., and Ivers, H. (2008). Extent and Sources of Occupational Stress in University Staff. *Work.* 30, 511–522.

Blix, A. G., Cruise, R. J., Mitchell, B. M., and Blix, G. G. (1994). Occupational Stress Among University Teachers. *Educ. Res.* 36, 157–169. doi:10.1080/0013188940360205

Brown, R. D., and Speth, C. (1988). Professorial Responses to Stress: A Self-Assessment Scale. *Rev. Higher Education.* 11, 285–296. doi:10.1353/rhe.1988.0021

Carver, C. S. (1997). YouWant to Measure Coping but Your Protocol's Too Long: Consider the Brief COPE. *Int. J. Behav. Med.* 4, 92–100. doi:10.1207/s15327558ijbm0401_6

Catano, V., Francis, L., Haines, T., Kirpalani, H., Shannon, H., Stringer, B., et al. (2010). Occupational Stress in Canadian Universities: A National Survey. *Int. J. Stress Management.* 17, 232–258. doi:10.1037/a0018582

Cohen, M. B., and DeLois, K. (2002). Training in Tandem: Co-facilitation and Role Modeling in a Group Work Course. *Social Work Groups.* 24, 21–36. doi:10.1300/J009v24n01_03

Compas, B. E., Jaser, S. S., Dunbar, J. P., Watson, K. H., Bettis, A. H., Gruhn, M. A., et al. (2014). Coping and Emotion Regulation From Childhood to Early Adulthood: Points of Convergence and Divergence. *Aust. J. Psychol.* 66, 71–81. doi:10.1111/ajpy.12043

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., and Wadsworth, M. E. (2001). Coping With Stress During Childhood and Adolescence: Problems, Progress, and Potential in Theory and Research. *Psychol. Bull.* 127, 87–127. doi:10.1037/0033-2909.127.1.87

Constanti, P., and Gibbs, P. (2004). Higher Education Teachers and Emotional Labour. *Intl Jnl Educ. Mgt.* 18 (4), 243–249. doi:10.1108/09513540410538822

Côté, S., and Morgan, L. M. (2002). A Longitudinal Analysis of the Association Between Emotion Regulation, Job Satisfaction, and Intentions to Quit. *J. Organiz. Behav.* 23, 947–962. doi:10.1002/job.174

Creswell, J. W., and Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. London, England: Sage publications.

Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. F., et al. (2003). Alterations in Brain and Immune Function Produced by Mindfulness Meditation. *Psychosom Med.* 65, 564–570. doi:10.1097/00006842-200401000-00022

Devonport, T., Biscomb, K., and Lane, A. M. (2008). Sources of Stress and Use of Anticipatory, Preventative and Proactive Coping Strategies by Higher Education Lecturers. *JoHLSTE.* 7, 70–81. doi:10.3794/johlste.71.177

Dunn, J. C., Whelton, W. J., and Sharpe, D. (2006). Maladaptive Perfectionism, Hassles, Coping, and Psychological Distress in university Professors. *J. Couns. Psychol.* 53, 511–523. doi:10.1037/0022-0167.53.4.511

Fleming, S. S., Goldman, A. W., Correli, S. J., and Taylor, C. J. (2016). Settling in: The Role of Individual and Departmental Tactics in the Development of New Faculty Networks. *J. Higher Education.* 87, 544–572. doi:10.1080/00221546.2016.11777413

Folkman, S., and Lazarus, R. S. (1980). An Analysis of Coping in a Middle-Aged Community Sample. *J. Health Soc. Behav.* 21, 219–239. doi:10.2307/2136617

Folkman, S., and Lazarus, R. S. (1985). If it Changes it Must be a Process: Study of Emotion and Coping during Three Stages of a College Examination. *J. Pers Soc. Psychol.* 48, 150–170. doi:10.1037/0022-3514.48.1.150

Folkman, S., and Moskowitz, J. T. (2004). Coping: Pitfalls and Promise. *Annu. Rev. Psychol.* 55, 745–774. doi:10.1146/annurev.psych.55.090902.141456

Folkman, S. (2008). The Case for Positive Emotions in the Stress Process. *Anxiety Stress Coping.* 21, 3–14. doi:10.1080/10615800701740457

Ford, J. D., Grasso, D. J., Levine, J., and Tennen, H. (2018). Emotion Regulation Enhancement of Cognitive Behavior Therapy for College Student Problem Drinkers: A Pilot Randomized Controlled Trial. *J. Child. Adolesc. Subst. Abuse.* 27, 47–58. doi:10.1080/1067828X.2017.1400484

Fredrickson, B. L. (2001). The Role of Positive Emotions in Positive Psychology. The Broaden-And-Build Theory of Positive Emotions. *Am. Psychol.* 56, 218–226. doi:10.1037//0003-066X.56.3.218

Fredrickson, B. L. (2000). Cultivating Positive Emotions to Optimize Health and Well-Being. *Prev. Treat.* 3, 1a. doi:10.1037/1522-3736.3.1.31a

Fredrickson, B. L. (2013). Positive Emotions Broaden and Build. *Adv. Exp. Soc. Psychol.* 47, 1–53. doi:10.1016/B978-0-12-407236-7.00001-2

Freeman, D., Sheaves, B., Goodwin, G. M., Yu, L. M., Harrison, P. J., Emsley, R., et al. (2015). Effects of Cognitive Behavioural Therapy for Insomnia on the Mental Health of university Students: Study Protocol for a Randomized Controlled Trial. *Trials.* 16, 236. doi:10.1186/s13063-015-0756-4

Gates, G. S. (2000a). The Socialization of Feelings in Undergraduate Education: A Study of Emotional Management. *Coll. Student J.* 34, 485–504.

Gates, G. S. (2000b). Teaching-Related Stress: The Emotional Management of Faculty. *Rev. Higher Education.* 23 (4), 469–490. doi:10.1353/rhe.2000.0016

Gillespie, N. A., Walsh, M., Winefield, A. H., Dua, J., and Stough, C. (2001). Occupational Stress in Universities: Staff Perceptions of the Causes, Consequences and Moderators of Stress. *Work & Stress.* 15, 53–72. doi:10.1080/02678370117944

Gmelch, W. H., Lovrich, N. P., and Wilke, P. K. (1984). Sources of Stress in Academe: A National Perspective. *Res. High Educ.* 20, 477–490. doi:10.1007/BF00974924

Grandey, A. A. (2000). Emotion Regulation in the Workplace: a New Way to Conceptualize Emotional Labor. *J. Occup. Health Psychol.* 5, 95–110. doi:10.1037/1076-8998.5.1.9510.1037//1076-8998.5.1.95

Grandey, A. A., and Gabriel, A. S. (2015). Emotional Labor at a Crossroads: Where Do We Go from Here? *Annu. Rev. Organ. Psychol. Organ. Behav.* 2, 323–349. doi:10.1146/annurev-orgpsych-032414-111400

Grandey, A. A. (2015). Smiling for a Wage: What Emotional Labor Teaches Us about Emotion Regulation. *Psychol. Inq.* 26, 54–60. doi:10.1080/1047840X.2015.962444

Gross, J. J. (1998a). Antecedent- and Response-Focused Emotion Regulation: Divergent Consequences for Experience, Expression, and Physiology. *J. Pers Soc. Psychol.* 74, 224–237. doi:10.1037/0022-3514.74.1.22410.1037//0022-3514.74.1.224

Gross, J. J. (1998b). The Emerging Field of Emotion Regulation: an Integrative Review. *Rev. Gen. Psychol.* 2, 271–299. doi:10.1037/1089-2680.2.3.271

Gross, J. J. (2002). Emotion Regulation: Affective, Cognitive, and Social Consequences. *Psychophysiology.* 39, 281–291. doi:10.1017.S004857720139319810.1017/s0048577201393198

Gross, J. J. (2013). "Conceptualizing Emotional Labor: An Emotion Regulation Perspective," in *Emotional Labor in the 21st century: Diverse Perspectives on the Psychology of Emotion Regulation at Work.* Editors A. A. Grandey, J. M. Diefendorff, and D. E. Rupp (New York, NY: Routledge), 288–294.

Gross, J. J. (2015). Emotion Regulation: Current Status and Future Prospects. *Psychol. Inq.* 26, 1–26. doi:10.1080/1047840X.2014.940781

Gross, J. J., and John, O. P. (2003). Individual Differences in Two Emotion Regulation Processes: Implications for Affect, Relationships, and Well-Being. *J. Pers Soc. Psychol.* 85, 348–362. doi:10.1037/0022-3514.85.2.348

Gross, J. J., and Levenson, R. W. (1997). Hiding Feelings: the Acute Effects of Inhibiting Negative and Positive Emotion. *J. Abnorm Psychol.* 106, 95–103. doi:10.1037//0021-843X.106.1.95

Gross, J. J., Richards, J. M., and John, O. P. (2006). "Emotion Regulation in Everyday Life," in *Emotion Regulation in Couples and Families: Pathways to Dysfunction and Health.* Editors D. K. Snyder, J. Simpson, and J. N. Hughes (Washington, DC: American Psychological Association), 13–35.

Gross, J. J., and Thompson, R. A. (2007). "Emotion Regulation: Conceptual Foundations," in *Handbook of Emotion Regulation.* Editor J Gross (New York, NY: Guilford Press), 3–24.

Hagenauer, G., and Volet, S. (2014a). 'I Don't Think I Could, You Know, Just Teach Without Any Emotion': Exploring the Nature and Origin of University Teachers' Emotions. *Res. Pap. Education.* 29, 240–262. doi:10.1080/02671522.2012.754929

Hagenauer, G., and Volet, S. E. (2014b). "I Don't Hide My Feelings, Even Though I Try to": Insight into Teacher Educator Emotion Display. *Aust. Educ. Res.* 41, 261–281. doi:10.1007/s13384-013-0129-5

Hall, N. C. (2019). *The SAS Project: Motivation and Well-Being in Adjunct vs. Tenure-Track Faculty.* Toronto, ON: Paper presented at the annual meeting of the American Educational Research Association.

Hartfiel, N., Burton, C., Rycroft-Malone, J., Clarke, G., Havenhand, J., Khalsa, S. B., et al. (2012). Yoga for Reducing Perceived Stress and Back Pain at Work. *Occup. Med. (Lond).* 62, 606–612. doi:10.1093/occmed/kqs168

Hochschild, A. R. (1983). *The Managed Heart: Commercialization of Human Feeling.* Berkeley, California: University of California Press.

Hölzel, B. K., Carmody, J., Vangel, M., Congleton, C., Yerramsetti, S. M., Gard, T., et al. (2011). Mindfulness Practice Leads to Increases in Regional Brain gray Matter Density. *Psychiatry Res.* 191, 36–43. doi:10.1016/j.pscychresns.2010.08.006

Houben, M., Van Den Noortgate, W., and Kuppens, P. (2015). The Relation Between Short-Term Emotion Dynamics and Psychological Well-Being: A Meta-Analysis. *Psychol. Bull.* 141, 901–930. doi:10.1037/a0038822

Hülsheger, U. R., and Schewe, A. F. (2011). On the Costs and Benefits of Emotional Labor: AMeta-Analysis of Three Decades of Research. *J. Occup. Health Psychol.* 16, 361–389. doi:10.1037/a0022876

Jackevicius, C. A., Le, J., Nazer, L., Hess, K., Wang, J., and Law, A. V. (2014). A Formal Mentorship Program for Faculty Development. *Am. J. Pharm. Educ.* 78, 100. doi:10.5688/ajpe785100

Janssen, M., Heerkens, Y., Kuijer, W., Van Der Heijden, B., and Engels, J. (2018). Effects of Mindfulness-Based Stress Reduction on Employees' Mental Health: A Systematic Review. *PLoS One.* 13, e0191332. doi:10.1371/journal.pone.0191332

John, O. P., and Gross, J. J. (2004). Healthy and Unhealthy Emotion Regulation: Personality Processes, Individual Differences, and Life Span Development. *J. Pers.* 72, 1301–1333. doi:10.1371/journal.pone.019133210.1111/j.1467-6494.2004.00298.x

Kammeyer-Mueller, J. D., Rubenstein, A. L., Long, D. M., Odio, M. A., Buckman, B. R., Zhang, Y., et al. (2013). A Meta-Analytic Structural Model of Dispositonal Affectivity and Emotional Labor. *Personnel Psychol.* 66, 47–90. doi:10.1111/peps.12009

Kataoka, M., Ozawa, K., Tomotake, M., Tanioka, T., and King, B. (2014). Occupational Stress and its Related Factors Among university Teachers in Japan. *Health.* 06, 299–305. doi:10.4236/health.2014.65043

Kim, J. H. (2007). A Meta-Analysis of Effects of Job Stress Management Interventions (SMIs). *Taehan Kanho Hakhoe Chi.* 37 (4), 529–539. doi:10.4040/jkan.2007.37.4.529

Kinman, G. (2014). Doing More With Less? Work and Wellbeing in Academics. *Somatechnics.* 4, 219–235. doi:10.3366/soma.2014.0129

Kinman, G., Wray, S., and Strange, C. (2011). Emotional Labour, Burnout and Job Satisfaction in UK Teachers: the Role of Workplace Social Support. *Educ. Psychol.* 31, 843–856. doi:10.1080/01443410.2011.608650

Klatt, M. D., Buckworth, J., and Malarkey, W. B. (2009). Effects of Low-Dose Mindfulness-Based Stress Reduction (MBSR-Ld) on Working Adults. *Health Educ. Behav.* 36, 601–614. doi:10.1177/1090198108317627

Kluth, P., and Straut, D. (2003). Do as We Say and as We Do. *J. Teach. Education.* 54, 228–240. doi:10.1177/0022487103054003005

Koole, S. L. (2009). The Psychology of Emotion Regulation: An Integrative Review. *Cogn. Emot.* 23, 4–41. doi:10.1080/02699930802619031

Kotsou, I., Nelis, D., Grégoire, J., and Mikolajczak, M. (2011). Emotional Plasticity: Conditions and Effects of Improving Emotional Competence in Adulthood. *J. Appl. Psychol.* 96, 827–839. doi:10.1037/a0023047

Lawrence, S. A., Troth, A. C., Jordan, P. J., and Collins, A. L. (2011). "A Review of Emotion Regulation and Development of a Framework for Emotion Regulation in the Workplace," in *The Role of Individual Differences in Occupational Stress and Well-Being* (Emerald Group Publishing Limited), 197–263. doi:10.1108/S1479-3555(2011)0000009010

Lazarus, R. S. (1993). Coping Theory and Research: Past, Present, and Future. *Psychosom Med.* 55, 234–247. doi:10.1097/00006842-199305000-00002

Lazarus, R. S. (1998). From Psychological Stress to the Emotions: A History of Changing Outlooks. *Annu. Rev. Psychol.* 44, 1–21. doi:10.1146/annurev.ps.44.020193.000245

Lazarus, R. S. (2000). Toward Better Research on Stress and Coping. *Am. Psychol.* 55, 665–673. doi:10.1037//0003-066X.55.6.665

Lazarus, R. S., and Folkman, S. (1984). *Stress, Appraisal and Coping*. New York: Springer.

Lazarus, R. S., and Folkman, S. (1987). Transactional Theory and Research on Emotions and Coping. *Eur. J. Pers.* 1, 141–169. doi:10.1002/per.2410010304

Le Blanc, P. M., Bakker, A. B., Peeters, M. C. W., van Heesch, N. C. A., and Schaufeli, W. B. (2001). Emotional Job Demands and Burnout Among Oncology Care Providers. *Anxiety, Stress & Coping.* 14, 243–263. doi:10.1080/10615800108248356

Lease, S. H. (1999). Occupational Role Stressors, Coping, Support, and Hardiness as Predictors of Strain in Academic Faculty: An Emphasis on New and Female Faculty. *Res. Higher Education.* 40, 285–307. doi:10.1023/A:1018747000082

Lench, H. C., Flores, S. A., and Bench, S. W. (2011). Discrete Emotions Predict Changes in Cognition, Judgment, Experience, Behavior, and Physiology: a Meta-Analysis of Experimental Emotion Elicitations. *Psychol. Bull.* 137, 834–855. doi:10.1037/a0024244

Lester, J. N., and Evans, K. R. (2008). Instructors' Experiences of Collaboratively Teaching: Building Something Bigger. *Int. J. Teach. Learn. Higher Education.* 20, 373–382.

Lin, S. L., Huang, C. Y., Shiu, S. P., and Yeh, S. H. (2015). Effects of Yoga on Stress, Stress Adaption, and Heart Rate Variability Among Mental Health Professionals--A Randomized Controlled Trial. *Worldviews Evid. Based Nurs.* 12, 236–245. doi:10.1111/wvn.12097

Lindholm, J. A. (2003). Perceived Organizational Fit: Nurturing the Minds, Hearts, and Personal Ambitions of university Faculty. *Rev. Higher Education.* 27, 125–149. doi:10.1353/rhe.2003.0040

Lorente Prieto, L., Salanova Soria, M., Martínez Martínez, I., and Schaufeli, W. (2008). Extension of the Job Demands-Resources Model in the Prediction of Burnout and Engagement Among Teachers over Time. *Psicothema.* 20, 354–360.

Mahoney, K. T., Buboltz, W. C., Jr, Buckner, J. E. J. E., and Doverspike, D. (2011). Emotional Labor in American Professors. *J. Occup. Health Psychol.* 16, 406–423. doi:10.1037/a0025099

Maia, L. G., Bastos, A. V. B., and Solinger, O. N. (2016). Which Factors Make the Difference for Explaining Growth in Newcomer Organizational Commitment? A Latent Growth Modeling Approach. *J. Organiz. Behav.* 37, 537–557. doi:10.1002/job.2096

Mark, G., and Smith, A. P. (2012). Effects of Occupational Stress, Job Characteristics, Coping, and Attributional Style on the Mental Health and Job Satisfaction of University Employees. *Anxiety Stress Coping.* 25, 63–78. doi:10.1080/10615806.2010.548088

Martin, E., and Lueckenhausen, G. (2005). How University Teaching Changes Teachers: Affective as Well as Cognitive Challenges. *High Educ.* 49, 389–412. doi:10.1007/s10734-004-6782-x

McAlpine, L., and Akerlind, G. (2010). *Becoming An Academic: Universities Into the 21st century*. London, England: Palgrave Macmillan.

Murphy, L. R. (1996). Stress Management in Work Settings: a Critical Review of the Health Effects. *Am. J. Health Promot.* 11, 112–135. doi:10.4278/0890-1171-11.2.112

Napoli, M., Krech, P. R., and Holley, L. C. (2005). Mindfulness Training for Elementary School Students. *J. Appl. Sch. Psychol.* 21, 99–125. doi:10.1300/J370v21n01_05

Narayanan, L., Menon, S., and Spector, P. E. (1999). Stress in the Workplace: A Comparison of Gender and Occupations. *J. Organizational Behav.* 20, 63–73. doi:10.1002/(SICI)1099-1379(199901)20:1<63::AID-JOB873>3.0.CO;2-J

Näring, G., Briët, M., and Brouwers, A. (2006). Beyond Demand-Control: Emotional Labour and Symptoms of Burnout in Teachers. *Work & Stress.* 20, 303–315. doi:10.1080/02678370601065182

Ogbonna, E., and Harris, L. C. (2004). Work Intensification and Emotional Labour Among UK University Lecturers: An Exploratory Study. *Organ. Stud.* 25, 1185–1203. doi:10.1177/0170840604046315

Paulhus, D. L., and Vazire, S. (2007). "The Self-Report Method," in *Handbook of Research Methods in Personality*. Editors R. W. Robins, R. C. Fraley, and R. F. Krueger (London, England: Guilford), 224–239.

Pekrun, R., and Bühner, M. (2014). "Self-report Measures of Academic Emotions," in *International Handbook of Emotions in Education*. Editors R. Pekrun and L. Linnenbrink-Garcia (New York, NY: Routledge), 561–579.

Peña-Sarrionandia, A., Mikolajczak, M., and Gross, J. J. (2015). Integrating Emotion Regulation and Emotional Intelligence Traditions: a Meta-Analysis. *Front. Psychol.* 6, 160. doi:10.3389/fpsyg.2015.00160

Perlberg, A., and Keinan, G. (1986). Sources of Stress in Academe - the Israeli Case. *High Educ.* 15 (1-2), 73–88. doi:10.1007/BF00138093

Postareff, L., and Lindblom-Ylänne, S. (2011). Emotions and Confidence Within Teaching in Higher Education. *Stud. Higher Education.* 36, 799–813. doi:10.1080/03075079.2010.483279

Poulin, P. A., Mackenzie, C. S., Soloway, G., and Karayolas, E. (2008). Mindfulness Training as an Evidenced-Based Approach to Reducing Stress and Promoting Well-Being Among Human Services Professionals. *Int. J. Health Promot. Education.* 46, 72–80. doi:10.1080/14635240.2008.10708132s

Pugliesi, K. (1999). The Consequences of Emotional Labor: Effects on Work Stress, Job Satisfaction, and Well-Being. *Motiv. Emot.* 23, 125–154. doi:10.1023/A:1021329112679

Quoidbach, J., Mikolajczak, M., and Gross, J. J. (2015). Positive Interventions: An Emotion Regulation Perspective. *Psychol. Bull.* 141, 655–693. doi:10.1037/a0038648

Ramsey, M. C., Knight, R. A., Knight, M. L., and Verdón, T. (2011). Telic State Teaching: Understanding the Relationships Among Classroom Conflict Strategies, Humor, and Teacher Burnout of university Faculty. *Fla. Commun. J.* 39, 1–15.

Regan, K., Evmenova, A., Baker, P., Jerome, M. K., Spencer, V., Lawson, H., et al. (2012). Experiences of Instructors in Online Learning Environments: Identifying and Regulating Emotions. *Internet Higher Education.* 15, 204–212. doi:10.1016/j.iheduc.2011.12.001

Richards, J. M., and Gross, J. J. (2000). Emotion Regulation and Memory: the Cognitive Costs of Keeping One's Cool. *J. Pers Soc. Psychol.* 79, 410–424. doi:10.1037/0022-3514.79.3.410

Richardson, K. M., and Rothstein, H. R. (2008). Effects of Occupational Stress Management Intervention Programs: aMeta-Analysis. *J. Occup. Health Psychol.* 13, 69–93. doi:10.1037/1076-8998.13.1.69

Ries, A., Wingard, D., Gamst, A., Larsen, C., Farrell, E., and Reznik, V. (2012). Measuring Faculty Retention and success in Academic Medicine. *Acad. Med.* 87, 1046–1051. doi:10.1097/ACM.0b013e31825d0d31

Rimé, B. (2007). "Interpersonal Emotion Regulation," in *Handbook of Emotion Regulation*. Editor J. Gross (New York, NY: Guilford Press), 466–485.

Robinson, B., and Schaible, R. M. (1995). Collaborative Teaching. *Coll. Teach.* 43, 57–59. doi:10.1080/87567555.1995.9925515

Roeser, R. W., Skinner, E., Beers, J., and Jennings, P. A. (2012). Mindfulness Training and Teachers' Professional Development: An Emerging Area of Research and Practice. *Child. Development Perspect.* 6, 167–173. doi:10.1111/j.1750-8606.2012.00238.x

Roth, S., and Cohen, L. J. (1986). Approach, Avoidance, and Coping With Stress. *Am. Psychol.* 41, 813–819. doi:10.1037/0003-066X.41.7.813

Rothmann, S., and Barkhuizen, N. (2008). Burnout of Academic Staff in South African Higher Education Institutions. *South Afr. J. Higher Education.* 22, 439–456. doi:10.4314/sajhe.v22i2.25796

Salimzadeh, R., Saroyan, A., Saroyan, A., and Hall, N. C. (2017). Examining the Factors Impacting Academics' Psychological Well-Being: A Review of Research. *Ier.* 5, 13–44. doi:10.12735/ier.v5n1p13

Sapolsky, R. M. (1994). *Why Zebras Don't Get Ulcers: The Acclaimed Guide to Stress, Stress-Related Diseases and Coping*. New York, NY: W. H. Freeman.

Schwarzer, R., and Taubert, S. (2002). Tenacious Goal Pursuits and Striving toward Personal Growth: Proactive Coping. *Beyond Coping: Meeting Goals, Visions and Challenges*. New York: Oxford University Press, 19–36. doi:10.1093/med:psych/9780198508144.003.0002

Shen, X., Yang, Y. L., Wang, Y., Liu, L., Wang, S., and Wang, L. (2014). The Association Between Occupational Stress and Depressive Symptoms and the Mediating Role of Psychological Capital Among Chinese University Teachers: a Cross-Sectional Study. *BMC Psychiatry.* 14, 329. doi:10.1186/s12888-014-0329-1

Single, E., Rehm, J., Robson, L., and Truong, M. V. (2000). The Relative Risks and Etiologic Fractions of Different Causes of Death and Disease Attributable to Alcohol, Tobacco and Illicit Drug Use in Canada. *cmaj.* 162, 1669–1675.

Skinner, E. A., Edge, K., Altman, J., and Sherwood, H. (2003). Searching for the Structure of Coping: a Review and Critique of Category Systems for Classifying Ways of Coping. *Psychol. Bull.* 129, 216–269. doi:10.1037/0033-2909.129.2.216

Skinner, E. A., and Zimmer-Gembeck, M. J. (2007). The Development of Coping. *Annu. Rev. Psychol.* 58, 119–144. doi:10.1146/annurev.psych.58.110405.085705

Skinner, E. A., and Zimmer-Gembeck, M. J. (2016). *The Development of Coping: Stress, Neurophysiology, Social Relationships, and Resilience during Childhood and Adolescence*. New York, NY: Springer.

Spector, P. E. (2006). Method Variance in Organizational Research. *Organizational Res. Methods*. 9, 221–232. doi:10.1177/1094428105284955

Stevenson, A., and Harper, S. (2006). Workplace Stress and the Student Learning Experience. *Qual. Assur. Education*. 14, 167–178. doi:10.1108/09684880610662042

Stupnisky, R. H., Pekrun, R., and Lichtenfeld, S. (2014). New Faculty Members' Emotions: a Mixed-Method Study†. *Stud. Higher Education*. 41, 1167–1188. doi:10.1080/03075079.2014.968546

Stupnisky, R. H., Weaver-Hightower, M. B., and Kartoshkina, Y. (2015). Exploring and Testing the Predictors of New Faculty success: A Mixed Methods Study. *Stud. Higher Education*. 40, 368–390. doi:10.1080/03075079.2013.842220

Sutton, R. E. (2004). Emotional Regulation Goals and Strategies of Teachers. *Soc. Psychol. Educ*. 7, 379–398. doi:10.1007/s11218-004-4229-y

Sutton, R. E., Mudrey-Camino, R., and Knight, C. C. (2009). Teachers' Emotion Regulation and Classroom Management. *Theor. Into Pract*. 48, 130–137. doi:10.1080/00405840902776418

Sutton, R. E. (2007). "Teachers' Anger, Frustration, and Self-Regulation," in *Emotion in Eeducation*. Editors P. Schutz and R. Pekrun (San Diego, CA: Academic Press), 259–274. doi:10.1016/b978-012372545-5/50016-2

Taxer, J. L., and Frenzel, A. C. (2015). Facets of Teachers' Emotional Lives: A Quantitative Investigation of Teachers' Genuine, Faked, and Hidden Emotions. *Teach. Teach. Education*. 49, 78–88. doi:10.1016/j.tate.2015.03.003

Teesson, M., Hall, W., Lynskey, M., and Degenhardt, L. (2000). Alcohol- and Drug-Use Disorders in Australia: Implications of the National Survey of Mental Health and Wellbeing. *Aust. N. Z. J. Psychiatry*. 34, 206–213. doi:10.1080/j.1440-1614.2000.00715.x

Thompson, C. A., and Prottas, D. J. (2006). Relationships Among Organizational Family Support, Job Autonomy, Perceived Control, and Employee Well-Being. *J. Occup. Health Psychol*. 11, 100–118. doi:10.1037/1076-8998.10.4.100

Tobin, D. L., Holroyd, K. A., Reynolds, R. V., and Wigal, J. K. (1989). The Hierarchical Factor Structure of the Coping Strategies Inventory. *Cogn. Ther. Res*. 13, 343–361. doi:10.1007/BF01173478

Trigwell, K. (2012). Relations between Teachers' Emotions in Teaching and Their Approaches to Teaching in Higher Education. *Instr. Sci*. 40, 607–621. doi:10.1007/s11251-011-9192-3

Tümkaya, S. (2007). Burnout and Humor Relationship Among university Lecturers. *Int. J. Humor Res*. 20, 73–92. doi:10.1515/HUMOR.2007.004

Tytherleigh, M. Y., Webb, C., Cooper, C. L., and Ricketts, C. (2005). Occupational Stress in UK Higher Education Institutions: a Comparative Study of All Staff Categories. *Higher Education Res. Development*. 24, 41–61. doi:10.1080/0729436052000318569

Van der Klink, J. J., Blonk, R. W., Schene, A. H., and Van Dijk, F. J. (2001). The Benefits of Interventions for Work-Related Stress. *Am. J. Public Health*. 91, 270–276. doi:10.2105/ajph.91.2.270

Wang, H., Hall, N. C., and Taxer, J. L. (2019). Antecedents and Consequences of Teachers' Emotional Labor: A Systematic Review and Meta-Analytic Investigation. *Educ. Psychol. Rev*. 31, 663–698. doi:10.1007/s10648-019-09475-3

Watts, J., and Robertson, N. (2011). Burnout in University Teaching Staff: a Systematic Literature Review. *Educ. Res*. 53, 33–50. doi:10.1080/00131881.2011.552235

Webb, T. L., Miles, E., and Sheeran, P. (2012). Dealing With Feeling: a Meta-Analysis of the Effectiveness of Strategies Derived From the Process Model of Emotion Regulation. *Psychol. Bull*. 138, 775–808. doi:10.1037/a0027600

Weisz, J. R., McCabe, M. A., and Dennig, M. D. (1994). Primary and Secondary Control Among Children Undergoing Medical Procedures: Adjustment as a Function of Coping Style. *J. Consult Clin. Psychol*. 62, 324–332. doi:10.1037/0022-006X.62.2.32410.1037//0022-006x.62.2.324

Weisz, J. R., Rothbaum, F. M., and Blackburn, T. C. (1984). Standing Out and Standing in: The Psychology of Control in America and Japan. *Am. Psychol*. 39, 955–969. doi:10.1037//0003-066X.39.9.955

Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J., and Boyd, C. (2003). Occupational Stress in Australian University Staff: Results from a National Survey. *Int. J. Stress Management*. 10, 51–63. doi:10.1037/1072-5245.10.1.51

Wróbel, M. (2013). Can Empathy Lead to Emotional Exhaustion in Teachers? the Mediating Role of Emotional Labor. *Int. J. Occup. Med. Environ. Health*. 26, 581–592. doi:10.2478/s13382-013-0123-1

Zapf, D. (2002). Emotion Work and Psychological Well-Being. *Hum. Resource Management Rev*. 12, 237–268. doi:10.1016/S1053-4822(02)00048-7

Zeind, C. S., Zdanowicz, M., MacDonald, K., Parkhurst, C., King, C., and Wizwer, P. (2005). Developing a Sustainable Faculty Mentoring Program. *Am. J. Pharm. Educ*. 69, 100. doi:10.5688/aj6905100

Zhang, Q., and Zhang, J. (2013). Instructors' Positive Emotions: Effects on Student Engagement and Critical Thinking in U.S. And Chinese Classrooms. *Commun. Education*. 62, 395–411. doi:10.1080/03634523.2013.828842

Zhang, Q., and Zhu, W. (2008). Exploring Emotion in Teaching: Emotional Labor, Burnout, and Satisfaction in Chinese Higher Education. *Commun. Education*. 57, 105–122. doi:10.1080/03634520701586310