

Review

Self-efficacy as a stress-coping mechanism among teachers: A critical literature review

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Many studies have reported teacher stress as a complex phenomenon induced by various stressors. Among these, lack of self-efficacy remains one of the most significant stressor. Besides, self-efficacy plays a moderating role in controlling stress. Stress over a significant period of time leads to burnout, characterized by feelings of depersonalization, lack of accomplishment, and emotional exhaustion. This review encapsulates the major theoretical developments in the area of teacher stress and the concept of self-efficacy as a tool for coping with stress. In this review we found that literature within the sphere of teachers' self-efficacy and its relationship with stress-coping is still in its infancy, lacking good empirical support in terms of sound methodologies and measurement tools. This paper concludes with implications for future research in relation to the limitations of the existing studies.

Key words: Teacher stress, self-efficacy, prevalence of stress, stress-coping mechanisms.

INTRODUCTION

Stress among teachers is not territory-specific, rather, it is a universal issue reported by a large number of researchers (He et al., 2000; Ravichandran and Rajendran, 2007; Ling, 1995; Jamal and Baba, 2001; Jamal, 1999; Nhundu, 1998). There can be numerous sources of stress. People experiencing stress agree that stress seems to be increasing in today's society and is causing a massive amount of social, personal, and psychological problems. In this regard, teachers are no exception (Anderson, 1997).

Punch and Tuettemann (1990) and Colangelo (2004) argue that lack of self-belief or self-efficacy can be a potential source of stress. Fives (2003) defines teachers' self-efficacy as a motivational construct, that reflects teachers' perception and beliefs regarding teaching specific tasks. It has been argued in various studies that a strong sense of efficacy projects an optimistic vision regarding personal competence to deal with job demands or stress associated with job demands and expectations associated with every day work related responsibilities. Schwarzer and Schmitz (2004) designed a scale to gauge teachers' self-efficacy in a longitudinal field study. They found that teachers who were self-efficacious, were

motivated to spend more leisure time for the students, than those teachers who were low on the self-efficacy scale. Moreover, they established that job burnout is well related with an individual's self-efficacy over an extended time period. McLaughlin and Marsh (1978) stated that self-efficacy of a teacher enhances his/her students' achievement. Similarly, Midgley et al. (1989) argued a teacher's self-efficacy is related with students' motivation. Woolfolk et al. (1990) associated teachers' efficacy with teachers' class room management skills. Greenwood et al. (1990) associated it with the stress level of the teachers. And, on the association of self-efficacy and stress, Schafer (2000) stated that it is not stress that is responsible for killing mankind; rather, it is an individual's reaction to it.

As afore stated, some of these studies establish a direct link while others establish an indirect link between teachers' self-efficacy and stress levels. Teachers measure their successes in terms of their students' satisfaction, success, and motivation. A satisfied teacher is less likely to experience stress. In this way, a teacher's self-efficacy influences his/her students' motivation and success and indirectly reduces his/her stress. In line with these arguments, researchers such as Guglielmi and Tatrow (1998), Latack and Havlovic (1992), and Betoret and Artiga (2010) argued that a teacher's self-efficacy can be used as a tool to inhibit intensification of burnout

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because it helps the teacher to adopt positive stress-coping and stress-preventive strategies.

This study is an endeavor to explore the prevalence of teachers' stress and its relationship with teachers' self-efficacy which can be used as an effective coping-mechanism. This review intends to (i) provide literature review concerning prevalence and intensity of teachers' stress, (ii) present historical overview of teachers' self-efficacy as a theoretical construct, and (iii) identify linkages between teachers' stress and teachers' self-efficacy and stress coping mechanism.

An in-depth study of the problem might be helpful in propagating awareness and formulating strategies in order to uphold the quality of a significant mainstay of the academia, that is, a teacher. As, according to Aluede (2009), the teacher is the agent upon which the goal of educating any citizen or nation is achieved, therefore, the role of the teacher in achieving social change in any nation cannot be underestimated.

Thus, by resolving discrepancies in teachers' beliefs and devising sound stress-coping strategies and articulating healthy, stress free institutions, the dream of quality education, may be transformed into a fertile reality.

PREVALENCE AND INTENSITY OF STRESS

Stress has been researched for almost more than sixty years. Despite this long history, researchers have not been able to develop a consensus to define stress. Many dimensions of stress come to the front when the extant literature is consulted. Some researchers believe stress is synonymous to firm, hard, and something severe. According to this view, stress has been derived from a Latin word 'strictus' which means strict, or 'stringere' which means drawing tight (Younghusband et al., 2003). However, Luthans (1995) differentiated between dark and pleasant aspects of stress. He termed the dark side of stress as distress and pleasant side of stress as eu stress (a Greek terminology). From this point of view, we come to know that stress must not always be taken as a negative phenomenon; instead, there is also a positive aspect of it. The positive aspect is related to an individual's achievements that he/she accomplishes while being in stress. Within wide range of concepts and definitions of stress, Schafer (2004) encapsulated stress as a phenomenon made up of many connected responses, experiences and outcomes, influenced by various circumstances or events. It can be inferred from review of literature that stress is a provocation of body and mind responding to demands made upon them.

Stress is closely related with burnout. Schwab (1983) described burnout phenomenon by discussing its meaning, causes, management, and its control mechanisms. According to the author, burnout has three aspects. First, feelings of emotional exhaustion (drained emotional energies); second, depersonalization (a negative attitude towards job); and third aspect of burnout

is loss of feelings of accomplishment (teachers' feelings as if they do not make any contribution). Like stress, there is no single way to define burnout; however, comprehended by Hamman (1990), burnout is a negative individual experience that embraces distress, dysfunction, and negative consequences. Although, some stress is useful for remaining productive, but if prolonged and excessive stress remains unchecked, eventually it turns out in the form of burnout. Hence, the 'term stress' and 'burnout' are closely related and are sometimes used interchangeably.

There are a large number of research studies on stress levels among teachers that show how stress is prevalent (Thorsen, 1996; Gaziel, 1993; Hamman, 1990; Easthope and Easthope, 2000; Zingle and Anderson, 1990; Troman, 2000; Vigoda, 2002). These studies pointed out that the culprits behind teachers' stress include the demands made upon teachers including time and work overloads (Thorsen, 1996; Easthope and Easthope, 2000), collegial relationships (Troman, 2000), organizational politics (Vigoda, 2002), and poor efficacy or irrational beliefs (Zingle and Anderson, 1990). Most of these researches provide increasing evidence that teachers experience a great deal of stress that may have serious implications for their physical and mental health. Jackson and Maslach (1982) found that individuals in the helping professions such as social work, police work, or teaching are especially more vulnerable to this stress and burnout since they receive little in return with respect to what they invest. Also, those individuals who are the most productive, dedicated, and committed are likely to be affected by stress.

According to Hanif (2004), there has been an increasing interest during the last 25 years in issues relating to occupational health and stress. During the late 1960's, this interest deviated towards employed in the service sector, including those involved in education, health, and welfare, whereas after 1970's the researchers' well-liked target for stress studies was teachers. According to Allison (2004), studies have consistently concluded that teaching is a stressful occupation, and that a significant number of teachers, perhaps even a majority, are affected by work-related stress. According to Thorsen (1996), traditionally, professorate has not been viewed as a stressful occupation. Academic freedom seemed to provide working conditions that were free of common stress instigating factors. But now, what was recognized as stressful in other occupations has now become common in academe as well.

SELF-EFFICACY AS A MODERATOR OF TEACHERS' STRESS

The concept of self-efficacy can be traced back to the Bandura's (1986) social cognitive theory that emphasizes on social experience and observational learning in the process of development of an individual's personality.

According to this theory, the choice of a behavior of an individual in a given circumstance is provoked by the personal observation of an individual (actions or behaviors selected by others in the similar circumstances). These observed behaviors are kept in memories by an individual that later on help in shaping the individual's cognitive processes and social behaviors. As defined by Wood and Baundra (1989), self-efficacy is attributed to the beliefs of individuals over their capabilities to muster the motivation, the cognitive resources, and actions required to fulfill the demands of the given situation. Bandura (1986) defined self-efficacy as a belief one holds about the ability to perform a certain task. Individuals' thinking, beliefs and feelings have an impact on the way they behave.

According to Hanif (2004), the construct of self-efficacy carry a very brief history, since it remained a neglected area by the researchers for a long time, a serious attempt, however, emerged with a publication of "self-efficacy toward a unifying theory of behavioral change" by Bandura in 1977. Schwarzer and his colleagues (Jerusalem and Schwarzer, 1995; Schmitz and Schwarzer, 2000) have highlighted the importance of perceived self-efficacy and proactive attitude as stress resource factors in mitigating teachers' burnout. Pethe and Chaudhari (2000) postulated relationship between role efficacy as a correlate of occupational self-efficacy, and learned helplessness.

According to authors, every individual is expected to perform certain roles at the workplace. And the performance of those expected roles depends upon an individual's belief about his capacity to perform those roles effectively. Other than this, the environment of an organization does matter as well for directing effectively individuals' efforts to perform their organizational roles. Hence, self-efficacy can be a predictor of an individual's performance. Positive beliefs help in enhancing performance and negative beliefs causes decline in an individual's performance. The self-efficacy-performance link is further extendable to stress. People who are good performers are likely to experience less stress.

Traditionally, teachers' self-efficacy has been defined as a teacher's belief regarding his/her ability to perform in a way to inspire or influence student's motivation and learning. Schawarzer and Hallum (2008) define teachers' self-efficacy as perceived competence of the teacher to cope with all challenges and hassles accumulated with his/her career. Certain other researches confirmed the concept of teacher's self-efficacy in enhancing student's performance, motivation and learning (Tschannen-Moran et al., 1998). Hence, it is revealed by literature regarding teachers' self-efficacy that teachers' beliefs reflect their perception and class room practices (Hollingsworth, 1989; Sparks, 1988). Bandura (1977) reported four prime sources behind self-efficacy, including mastery experiences, vicarious experiences, verbal persuasion and psychological cues.

Within the realm of stress, literature personality dimensions - including self-efficacy, locus of control, and personality Types A/B - have not gained due recognition as stress predictors. Alarcon et al. (2009) examined various personality dimensions (for example locus of control, self-efficacy, self-esteem, optimism, negative and positive affectivity, extraversion, emotional stability, proactive personality and psychological hardiness) across the three dimensions of Maslach burnout inventory (emotional exhaustion, depersonalization and personal accomplishment). Analysis of the data yielded significant relationship of the personality dimensions with burnout. Hence, it was suggested that given the significance of occupational stress and burnout, personality variables must be taken in to account as significant predictors of job stress.

According to Schwarzer (1999), poor efficacy can be related with stress, anxiety, depression and helplessness. Learned helplessness is a term used by Seligman and Maier (1967) in describing the consequences of learning to the inability to control events. Which means that exposure to learning that introduces individuals to uncontrolled stimuli, reduces individual's motivation to cope with the said stimuli and also creates feelings of anxiety and depression. People carrying pessimistic thoughts regarding their performance and personal development often become victims of stress and depression (Schwarzer, 1999). Self-efficacy has been identified as a moderator in various contexts, like self-efficacy as a moderating variable stress and strain (Matsui and Lo Onglatco, 1997). According to Jex and Bliese (1999), efficacy works as a moderating variable between stressors like working hours, workload and accelerates stress. Pethe and Chaudhari (2000) analyzed data for determining correlation between role efficacy dimensions and occupational self-efficacy, and between role efficacy dimensions and learned helplessness. Results showed positive relationship between occupational self-efficacy and personal growth, as a person with high self-efficacy believes that his role has a potential of personal growth, which may in turn leads to higher self-efficacy. Also, an individual with higher self-efficacy believes that he has much ability to perform the organizational tasks. Low self-efficacy can be a cause behind the development of irrational beliefs among teachers (Zingle and Anderson, 1990). Whereas, due to the effects of physical and mental stress, low self-esteem, frustration, irritation and anger take over the person's spirit. And the efficacy declines to the level where person ultimately becomes a patient of Schizophrenia and depression (Schafer, 2000). Stress affecting the self-esteem of individuals makes them more prone to stress.

As Arora (2007) indicate, when individual compromise on self-esteem, the body go out of balance. Therefore, it may be computed that one leading cause behind stress or emotional exhaustion can be low efficacy or self-belief regarding being productive at work or successfully

accomplishing organizational tasks (Baker et al., 2007). It may therefore be inferred that perceived self-efficacy accredits to a wide and constant sense of personal competence to deal effectively with a variety of stressful situations. Individuals with a low sense of self-efficacy tend to have low self-esteem and have pessimistic thoughts about their accomplishments and personal development than self-efficacious counterparts.

Fives (2003) reports that teachers self-efficacy has been conceptualized in terms of locus of control, which demonstrates an extent to which an individual perceives that the consequences or outcomes in a given situation are within the control of an individual. Hence, with this focus teachers' efficacy was considered an extent to which teachers believed that those factors which are within the control of teachers, have a great impact over teaching outcomes, than believing that the environment held much influence over teaching outcomes. According to Colangelo (2004), locus of control play important role behind stress mitigating factors. Teachers experiencing stress and burnout tend to exhibit external locus hence believe all the negative events taking place in the class far away from their control either due to poor fate or people or consequences. As indicated by Tennat (2007), locus of control refers to people perception about influencing whatever happens to them. Lussier and Achua (2007) stated that "locus of control is a gamut flanked by external and internal beliefs in control over one's destiny. People having external locus of control deem their fate out of their possession and their behavior having little or no concern with their performance. Whereas people with internal locus of control believe that they control their fate and their behavior is directly related with their performance". According to this view, an individual having external locus of control, believe having a diminutive control over their lives, hence more likely to experience stress and burnout. Zingle and Anderson (1990) investigated the hypothesized relationship between irrational beliefs and stress. The hypothesis was based on assumption that teachers experiencing more stress would be holding irrational beliefs about teaching. The result of the study confirmed the hypothesis that level of stress experienced by teachers is linked to their possession of irrational beliefs. Ellis (1978) argued that stress and occupational mental health could be explained in terms of rational emotive therapy. According to him most social situations like (physical torture) are not stressful in their own rather the interpretations make them more or less stressful.

As stated by Schafer (2000), people carry irrational beliefs, and they are their personal doorways to stress. They can give rise to problems in themselves, and when problems assault from other sources, these beliefs can magnify their effects. This opens new avenues for further research like exploring that whether stress is the cause of irrational belief or irrational beliefs intensify feelings of stress and anxiety. With the detection of right causes

behind the irrational beliefs in teachers one can effectively device the effective coping strategies.

Hence, based on extensive literature support, it may be concluded that various personality characteristics like locus of control, self-efficacy and poor or low self-efficacy may intensify stress and burnout. Nevertheless, as a control mechanism for effectively managing individual self-efficacy, especially teachers' self-efficacy, the research seems to be at the stages of infancy.

Self-efficacy and stress coping

Researchers who are interested in investigating teachers' stress levels have devoted considerable attention to the subject of coping with stress (Kirmeyer and Dougherty, 1988; Latack, 1986). Traditionally, stress management interventions have targeted primarily individual-level coping (Ivancevich et al., 1990). Furthermore, these programs tend to be aimed at escape-oriented, emotion-focused coping (for example, relaxation, training) or at cognitive emotion-focused coping (for example, cognitive modification, and training). Stress researchers continue to be critical of organizational efforts aimed at symptoms rather than fostering individual control over the conditions in the workplace (Karasek and Theorell, 1990). Among all the coping mechanisms, such as time management, exercise, yoga and meditation, visualization (Arora, 2007), time management, and massage (Schafer, 2004) etc., the most important is an individual's belief or perception regarding his or her efficacy to control and manage effectively the event that are causing stress (Bandura, 2001). According to Benight and Bandura (2004), a sense of strong efficacy provides a foundation for keeping an individual motivated to produce desirable results, even in the least favorable situations. Hence, it can be inferred that self-efficacy plays a key role in coping and managing stress and burnout effectively. Jex et al. (2001) also supported Bandura's social cognitive theory (2001), which argues that individuals with high self-efficacy confidently believe in their abilities in order to effectively respond to the environment stimulus and to maintain self-control. Researchers have considered self-efficacy to be a dominant organizational catalyst that can help in developing actions and effective strategies (active coping strategies) for defeating or mitigating the issues caused by the pedagogic factors that affect teachers' performances (Salanova et al., 2005).

Rosenbaum (1990) presented a theory of learned resourcefulness that suggested that individuals who are rich in resourcefulness can cope better with stress than those who are poor in resourcefulness and that they achieve this result by minimizing the negative consequences of stress. Rosenbaum and Jaffe (1983) defined learned resourcefulness as an individual's cognitive skills that can be used to generate internal response (most often emotional or cognitive) that intervenes and makes it

possible to achieve a smooth execution of the targeted behavior. The theory presented by Rosenbaum (1990), according to which the theory of learned resourcefulness was empirically tested with a sample of 225 respondents -was further supported by Akgun (2004). The study examined whether individuals who are either high or low in learned resourcefulness differed in their stress levels, self-beliefs and coping mechanisms. The findings suggested that highly resourceful respondents had high self-efficacy and that they tended to use more problem-focused coping strategies than escape or avoidance strategies. The respondents who were the most resourceful and high resourcefulness and self-efficacious had more positive self-appraisals and were likely to receive social support. Therefore highly resourceful individuals tend to have higher efficacy than those who are less resourceful, even when they encounter very most stressful situations.

Frydenberg (2004) highlighted how an individual conceptualizes coping as a response to stress and a medium to develop resilience. The study highlighted the importance of teaching young people cognitive skills for coping with stress to facilitate the use of interpersonal and intrapersonal resources. The study emphasized that for healthy social and emotional development of youngsters, it is important to change the language of hopelessness to the language of ability and optimism. The key to a promising future for youngsters is effective adaptation of the coping skills. Schwarzer and Hallum (2008) examined relationship between stress and self-efficacy and suggested a positive effect of high self-efficacy in coping with stress. It is stated that a positive belief about personal competence to deal with stressful situations results in adaptation of constructive coping strategies. Thus, self-efficacious teachers tend to deem their routine work demands as less threatening than those teachers who carry negative beliefs or doubts about their performance. Similarly, in another empirical study, Betoret (2009) examined an association among teachers' self-efficacy, institutional resources, and teachers' burnout. Results indicated that internal and external coping resources including instructional self-efficacy, class room management efficacy, and social support resources were significantly negatively related to job stressors. On the other hand, job stressors had a significant positive relationship with teachers' burnout.

Benight and Bandura (2004) integrated findings from various studies regarding the role of self-efficacy in retrieval from various types of traumatic experiences (terrorist attacks, natural disasters, military combat, technological catastrophes, criminal and sexual assaults). Analysis found perceived self-efficacy to be a mediator of post-traumatic retrieval. The contribution of perceived coping self-efficacy as the sole mediator for post traumatic retrieval indicates the effective functioning of an individual's belief in his or her capabilities to exercise control over traumatic and stressful encounters.

Hence, it can be inferred from the literature that coping with stress is closely linked with the self-efficacy, or the belief of an individual against the stressor encountered.

CONCLUSION AND FUTURE RESEARCH DIRECTIONS

Since the literature reviewed is based on studies that mostly used questionnaire and interviews as data collection devices, the shortcomings and limitations of these data collection instruments could not be discounted. These findings are subjective and not conclusive in nature. Most of the studies utilized self-rated scales to measure the teacher's self-efficacy phenomenon (Shaubroeck and Merritt, 1997; Frydenberg, 2004; Pethe and Chaudhari, 2000; Evans and Tribble, 1986). For a comprehensive validating self-rating system, external ratings such as ratings from heads of institutions, peers/colleagues of teachers, and from students must be obtained regarding teachers' efficacy, instead of relying solely on self-rating. Cross-validation would generate more robust findings regarding teachers' efficacy (Hanif, 2004).

As discussed earlier that teachers' self-efficacy within the domain of occupational stress is a nascent phenomenon, which lacks sound theoretical frameworks, education in the recent century is facing many challenges, out of which preventing and fighting with teachers stress and burnout is one of the most important challenges. In order to face the challenges of this century and the coming years, we need teachers who would maintain positive feelings about themselves as well as their profession and students. Although, the research in the area of teachers stress and burnout is not definitive, but the existing evidence acknowledge the fact that burnout and stress are the real problems in the helping professions, especially in teaching.

One shortcoming that can be highlighted in the existing body of literature regarding teachers' self-efficacy and stress is the lack of consensus on the direction of causality. Quite little attention has been given to determine whether the pathway from burnout to self-efficacy is more significant or from self-efficacy to burnout. Both theoretical and empirical research on this angle in future would be needed (Schwarzer and Hallum, 2008).

As highlighted in this review, self-efficacy is an important stress-copying tool, it will be of interest to find and highlight the determinants of teachers' self-efficacy. As existing literature familiarize us about the connection between teachers stress and self-efficacy, very limited evidence can be found about what determines self-efficacy in the first place.

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