A Meta-analysis for Exploring the Diverse Causes and Effects of Stress in Teachers

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Abstract

This study provides a correlative meta-analysis of 78 independently written or published studies on teacher stress between 1998 and 2003. We measured the relationships between teacher stress and numerous other constructs including coping, burnout, emotional responses, personality mediators, personal support, environmental structure, and background characteristics. A theoretical-empirical model of construct relationships investigated across studies was developed and \( n = 2,527 \) marginal effect sizes were used to estimate the empirical relationships between the operationalized theoretical constructs. Results showed that the strongest association of teacher stressors exist with negatively-oriented emotional responses and confirmed their central role in teachers’ responses to stressful situations alongside active coping mechanisms, personality mediators, and burnout.
Introduction

Over the past ten years educational research has established that high stress is associated with psychological distress, which may be mediated through different coping mechanisms and personality traits (Chan, 1998). Specifically, poor active coping abilities or an over-reliance of passive coping strategies may lead to negative emotional responses and, consequently, teacher burnout. However, although a plethora of research on the different sources of stress and their eventual consequences in teachers and student teachers exists, researchers have generally used varying methods in explaining the intricate relationships between psychological stress and other intricately related constructs such as coping mechanisms, personality traits, emotional responses, environmental effects, and burnout.

In order to tackle the problem of methodological variability in the current research literature on teacher stress and to conceptually represent a model of teacher stress based on this literature, this study investigates and summarizes the correlational evidence of the relationships between stress and related constructs through a meta-analytic lens. Specifically, this study focuses on the recent research literature on teacher and student teacher stress between 1998 and 2003. In doing so, this study updates recent international research data on teacher stress and constitutes an effective way to respond to Guglielmi and Tatrow’s (1998) paramount call for a shift toward more theory-based investigations that test causal models of teacher stress and health-related outcomes with more sophisticated research designs and measurement strategies.

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1 We will use the term teacher stress and not student teacher stress since most of the studies found concerned the former.
Toward Developing a Theoretical-empirical Model of Stress

There are numerous constructs that have been identified as causes and effects of stress in different populations over the years. There are numerous mediating factors that may influence the relationships between variables in the nomological networks in which researchers place constructs. In preparation for developing a meta-analysis framework, we began by synthesizing existing theoretical stress models in order to map the empirical relationships and represent these studies into the new framework. Since our meta-analysis focuses on a variety of relationships among numerous constructs rather than on a few isolated relationships between few constructs within a larger framework, we wanted to have a conceptual model of teacher stress that we could augment and refine based on the empirical relationships studied in the research we surveyed. Before presenting this model, we will define stress and some of its related inherent constructs.

Definitions and Sources of Stress.

Our understanding of stress originated in empirical research conducted by Derogatis (1987), who, based his research on Lazarus’ (1966) social interaction theory. Globally, stress is defined as a particular interaction between the person and the environment, appraised by the person as being taxing or exceeding his or her personal resources, and, as a consequence, disrupting daily routines (Lazarus & Folkman, 1984). According to this theory, stress is defined as a state of psychological pressure influenced by three main sources, (1) personality mediators (comprised of time pressure, driven behaviour, attitude posture, relaxation potential, and role definition), (2) environmental factors (comprised of vocational satisfaction, domestic satisfaction, and health posture), and (3) emotional responses (comprised of hostility, anxiety,
and depression). According to Lazarus & Folkman’s theory, these three sources must be studied interactively to develop a comprehensive account of stress.

It is clear that teachers can be exposed to a number of sources of stress. Kyriacou (2001), reports that the main sources of teacher stress are teaching students who lack motivation, maintaining discipline in the classroom, confronting general time pressures and workload demands, being exposed to a large amount of change, being evaluated by others, having challenging relationships with colleagues, administration, and management, and being exposed to generally poor working conditions. The author appropriately warns that the main sources of stress experienced by a particular teacher will be unique to him or her and will depend on the precise complex interaction between his or her personality, values, skills, and circumstances. Moreover, coping mechanisms, personality mediators, and the environmental structure can interactively influence the degree to which stressful situations are being perceived and influence the teacher’s emotional and cognitive well-being.

Stress and Coping.

Our approach to investigating coping mechanisms was theoretically grounded in the well-known transactional model of stress and coping (Lazarus, 1966, 1993; Lazarus & Folkman, 1984). This model focuses on the manner in which problematic events act as triggers for stressful episodes. Lazarus and Folkman (1984) believe that, daily events predict changes in psychosomatic health better than major life events (Admiraal, Korthagen & Wubbels, 2000). When confronted by a given event, an individual engages in a process of primary appraisal whereby, according to the individual in the situation, the event may be seen as stressful whereas, for others, it may be seen as benign or vice versa. Next, the individual will engage in a process
of secondary appraisal. In this situation, the individual will engage in the cognitive evaluation of his personal and environmental resources in order to deal with the loss, threat, or challenge that is represented by the event. Both types of appraisals are cognitive processes where the first concerns events that are, to a large extent, independent of the appraising individual. Secondary appraisal is directly related to the perceptions that the individual has of his resources in order to confront a stressful situation, resources that come from within himself or from his environment. Primary appraisal allows the appraisal of the stressful character of the situation whereas secondary appraisal permits one to evaluate one’s capacity to confront the situation. Finally, the model predicts that the individual will use cognitive and behavioural strategies of adaptation to deal with a given stressful event.

A number of classifications of coping strategies have been proposed in the literature. For example, coping behaviour may be directed at managing or altering the problem that is causing the distress or at regulating the emotional response to the problem. The former is referred to as problem-focused coping and the latter as emotion-focused coping (Admiraal, Korthagen, & Wubbels, 2000). Accordingly, problem-focused coping behaviour consists of confrontational and problem-solving strategies such as defining the problem, generating alternative solutions, weighing alternatives in terms of their cost and benefits, selecting one of them, and taking action. Emotion-focused coping behaviour consists of positive reappraisal and positive comparison as well as of defensive strategies such as avoidance, minimisation, and distancing. Individuals will use emotion-focused coping behaviour when they believe that nothing can be done to modify environmental conditions. By contrast, problem-focused coping behaviour will be utilized when conditions may be seen as changeable. Kyriacou (2001) defines direct action techniques, on the one hand, as things that a teacher can do that eliminate the source of stress, and mental or
physical *palliative techniques*, on the other hand, are aimed at lessening the feeling of stress that occurs.

**Stress and Personality Mediators.**

Chan (1998) points out that evidence of stress reactions, including ill-health and psychological distress, are not solely the result of external stressors but are also determined, by a host of *mediating* variables. Many of these variables are generally collected under the umbrella term *coping* (Griffith, Steptoe & Cropley, 1999; Lazarus & Folkman, 1984; Scheier & Carver, 1985). The literature also provides support that an individual’s personality characteristics influences the degree to which he or she seeks social support (Houston & Vavak, 1991; Kobasa, Maddi, Ouccelli, & Zola, 1985; Watson & Clark, 1984). Guglielmi and Tatrow (1998) claim that personality traits, especially Type-A personality as well as demographic characteristics such as gender, age, and ethnicity, further mediate the ability to establish and maintain supportive social networks and facilitative cognitive appraisal of the stressor. Stress is not viewed as being due exclusively to situational or personal characteristics but rather to the *interaction* between them. These findings reveal that the seeking of social support and the engagement in successful coping strategies can create a virtuous circle whereby the same objective situation can begin to appear to be less demanding to the teacher.

**Stress and Burnout.**

Individuals may experience *burnout* as a result of: stress itself, a sudden break down of their mediating coping mechanisms or their mediating coping mechanisms not being effective over a long period of time (Guglielmi & Tatrow, 1998; Vandenberghe & Huberman, 1999). Burnout has traditionally been viewed as having three components, (1) *emotional exhaustion*, (2)
depersonalization, and (3) lack of personal accomplishment as is most frequently measured using Maslach’s Burnout Inventory (Maslach & Jackson, 1981). A feeling of burnout is not a direct effect of repeated exposures to stressful situations. Burnout mediated through various active and passive coping mechanisms, as discussed above, is a result of the accumulation of positively and negatively oriented emotional responses that have been mediated through coping mechanisms.

A Theoretical-empirical Model of Teacher Stress.

Based on an extensive review of theoretical teacher stress models including their related constructs and definitions found in the empirical articles for our meta-analysis, we developed a model of the construct relationships discussed in them, which includes, as its central component, a representation of the teachers’ intra-individual process of reacting to stressful events (see Figure 1).
The first premise of the model is that the teacher is present throughout the entire model. As for the other labels, the labelling process of the categories captures the general patterns of construct relationships and maps onto similarly signified latent variables in structural equation models (Chan, 1998). Specifically, the model was developed after reviewing and qualitatively categorizing individual variables and variable relationships in the empirical literature on teacher stress surveyed for this paper, which is why the stress sources in the diagram are semantically tied to an instructional environment. Apart from the sources of teacher stress, however, the remaining part of the model appears to display universally applicable relationships. The theoretical functioning of this model will be explained in the paragraphs that follow whereas, the
A Meta-analysis of Stress in Teachers

Coding of variables will be described in the methods’ section and the empirical relationships between variables will be discussed in the results’ section.

According to this model, intra-individual processes consist primarily of the experience and appraisal of stressful events that have their sources in different aspects of a teacher’s vocational life such as students, administration, colleagues, general work demands, and characteristics of the school environment. In addition, stressful events in the teacher’s domestic life may also influence his or her overall emotional, cognitive, and behavioural state. Once these events are appraised, the individual engages in active coping or passive coping strategies, perhaps both, where the former can take the form of cognitive, behavioural, and emotional mechanisms, and is also manifested in the physical responses or health posture of the individual. In contrast, passive coping mechanisms such as resignation, wishful thinking, and avoidance are characterized by a lack of direct engagement with the stressful event toward its resolution. As a consequence of the application of these coping mechanisms or sometimes directly as a consequence of the stressful events, the individual experiences a host of emotional responses, which are either positively oriented such as hope, enjoyment, or passion, or are negatively oriented such as anxiety, frustration, or depression. In addition, the individual may experience strong feelings of satisfaction or dissatisfaction with his or her job and life situation more generally, which may influence the individual’s commitment level to his or her work. Finally, then, individuals may experience different levels of emotional exhaustion, depersonalization, or personal accomplishment as facets of burnout. It is, of course, debatable whether the degree of satisfaction is causally prior or posterior to experiences of burnout, and this will likely depend on the individual and the situation; we chose however to place satisfaction prior to burnout, because we viewed it predominantly as an emotional response.
The entire intra-individual situational process is further mediated by relatively stable personality traits or personality mediators, which influence the strength of the relationships depicted in the core. Moreover, the relationships are also mediated by the degree to which the individual feels supported, both in his vocational and his domestic environment; these sets of factors are depicted as outward circles around the core path diagram. Further outward in the model one can find the relatively stable structural characteristics of the environment such as the grade level a teacher is instructing, the average class size in his or her classes, or the type of school in which he or she is teaching. Similarly, background variables such as sex, educational qualifications, and years of experience are stable characteristics of the individual that may have some influence on the intra-individual process of dealing with stressful events.

The organization of the variable sets in Figure 1 represents partially our primary focus on the core relationships between the experience of stressful events, the engagement of coping mechanisms, the experience of emotional responses and satisfaction, and the experience of burnout, and partially the relative importance of each of the components. Thus, we hypothesize that the relationship between stress and coping mechanisms as well as between coping mechanisms, emotional responses, and burnout is stronger than the influences that background variables have on the coping process. Similarly, considering the outer rings, we believe that environmental structural variables would display weaker relationships with the intra-individual variables than the support structure or the personality mediators. At the same time, we do believe that personality mediators and support variables display strong influences on the intra-individual relationships depicted in the core but that they are, at the same time, less situation-dependent and more stable. This model is not able to account for the fluidity of individuals’ response to stressful events. Moreover, because the focus of this paper is the estimation of average effect sizes for
each of the displayed paths and hypothesized relationships, we are necessarily restricted to statements that aggregate effects over teacher groups and situations. At the same time, our study is an important empirical step toward investigating the systemic nature of construct relationships in a relatively comprehensive manner.

Method

The following section of the paper describes the methodological steps that were taken to code variables and to compute average effect size measures.

Collection of Articles

Relevant recent articles on stress were located though a computer search of a variety of international databases housed in North America such as Psyinfo, Eric, Sociofile, Canadian Periodical Index, Index-Cpi.Q, Infotrac, Digital Dissertations, Current Contents, Ontario Scholars Portal, Francis (international humanities and social sciences), and Merlot as well as through searches of the internet via Google, Metacrawler and Yahoo. We also located articles in data banks housed outside North America such as the Fis Bildung in Germany and Repère in Canada and France.

Various permutations of keywords were employed to track down articles. Every search included the keywords “teachers” and “stress”, while other searches included keywords such as “student teacher”, “pre-service”, “burnout”, “coping”, “anxiety”, and “depression”. The reference lists in all primary articles were used to perform a search of additional references within the sampling frame of interest until no further new articles were found. We selected studies that investigated teacher stress in some form even though, in several cases, the title did
not necessarily indicate it (e.g., we included studies on teacher burnout, teacher coping, and teacher health if they were also investigating the relationship between these constructs and teacher stress). Finally, we selected only articles that contained quantitative research thus excluding conceptual overview and synthesis articles as well as qualitative research because it is impossible to use meta-analytic procedures for these studies. In addition, we also eliminated articles that employed complex multivariate measures such as cluster structures, because it was impossible to unambiguously define or assign effect sizes as measuring a single variable or a single relationship between pairs of variables.

Overall, we included research from refereed journal publications ($n = 59$), dissertations ($n = 17$), and refereed conference proceedings ($n = 2$) for a total of $n = 78$ independently written or published studies. Fifteen of the studies were published in a language other than English (3 were in French, 3 were in Japanese, and 9 were in German). The Japanese studies were translated by trained bilingual graduate students whereas the French and German studies were not translated as both authors are multilingual. The median sample size across studies was 184 ($M = 307.68$, $SD = 391.29$) based on 75 studies that reported it, the median percentage of males in the samples was 39.90% ($M = 36.73\%$, $SD = 19.19\%$) based on 41 studies that reported it, the median mean age of teachers in the samples was 41.3 years ($M = 36.72$ years, $SD = 11.19$ years) based on 30 studies that reported it, and the median mean number of years of experience was 16 years ($M = 14.89$ years, $SD = 12.23$ years) based on 27 studies that reported it.

**Coding of Studies**

Studies were coded according to characteristics of the sampling frame and stages, the experimental design structure, the population(s) sampled, and the statistical methodologies
utilized. The information from the studies was entered in three different ways. First, because of the variability in the measures employed across all studies, a data file that contained each bivariate relationship in each study as a separate entry was created. For each relationship, the two variables involved in it were entered as labelled in the study along with the statistical technique used to compare them, the effect size measure that was reported, and the degrees of freedom, sample size, and \( p \)-value for the associated test. For studies that did not report effect sizes but provided sufficient information to compute them by hand, this was done. The resulting data file contained \( k = 2,527 \) entries where, on the original metric, \( k = 2,061 \) effect sizes were Pearson product-moment correlation coefficients, \( k = 62 \) were Spearman correlation coefficients, \( k = 6 \) were Pearson point-biserial correlation coefficients, \( k = 134 \) were independent-samples \( t \)-test statistics, and \( k = 264 \) were \( F \)-test statistics largely representing independent-samples \( t \)-test statistics since they had 1 numerator degree of freedom. Since constructs involved in the bivariate relationships varied, it was necessary to develop more global coding categories that would allow us to summarize the effects of different relationships that represent a single path in the theoretical-empirical model depicted in Figure 1.

\textit{Creation of Variable Categories}

After having entered all explanatory and response variables from all studies within our sampling frame, we recoded the variables according to the theoretically-derived categories depicted in our model (see Figure 1). Hence, the highest-order categories corresponded to different sources of stress, different types of active and passive coping, different types of emotional responses, different facets of burnout, and different types of support, as well as personality mediators, environmental structure variables, and background variables. Most variables could be unambiguously classified into one of these categories while, in other cases
where disagreement over classifications existed, a final classification was obtained by going back to earlier studies that contained a theoretical model with these variables in them or by consulting other empirical research articles outside of our sampling frame.²

Statistical Analysis

We analyzed the correlational data using the methods outlined in Fern and Monroe (1996), Lipsey and Wilson (2001), Hedges & Olkin (1985), and Hunter and Schmidt (1990). For each study, the score reliabilities of the psychometric measures were recorded, because “interpreting the size of the observed effects requires an assessment of the reliability of the scores” (Wilkinson & APA [American Psychological Association] Task Force on Statistical Inference, 1999, p. 596). It was our original intention to correct the involved coefficients for range restrictions, but too many studies did not include the necessary information to do this meaningfully; therefore, this step was omitted. If one compares the result of correction for range restriction in other meta-analyses, however, one can safely assume that the difference between the uncorrected and the corrected correlation coefficients would generally be around .05 or .10 with corrected values being, of course, higher than the uncorrected ones.

The structure of effect-size statistics varies, of course, by the statistical model for which the effect size is reported as a measure. Nevertheless, most effect sizes can be readily transformed from one metric to another (e.g., Fern & Monroe, 1996). Since most of our effect sizes were Pearson product-moment correlation coefficient based on two variables measured on interval scales, we chose to transform the remaining effect sizes onto the correlation metric. This consequently eliminated a few effect sizes such as unstandardized and standardized regression

² At this point, it would be important to investigate the reliability of the classifications, because the current ones are based only on the expertise of the two principal researchers.
coefficients in multiple linear regression models or structural equation models, because they represent partial effects and are computed with other variables included in the model.

For each correlation coefficient so obtained, we also recorded the number of samples that they were based on. Due to the variability in the measures we investigated, these samples are not, technically, statistically independent, because multiple correlation coefficients from the same study that index different bivariate relationships between different construct pairs were included in the computation of the same average. However, whether the violation of the statistical independence would lead to serious biases in the computation of the average effect size measures and their standard errors is debatable, because it depends on the amount of dependence. In order to ensure that sample sizes were non-inflated, we recorded only the total sample size for all independent samples across the studies. The correlation coefficients were transformed to the standard normal metric, which possesses superior statistical properties, and the standard errors, weights, and 95% confidence interval limits were computed on that metric. Finally, the confidence interval limits were transformed back to the original correlation metric.

Statistically (see, e.g., Lipsey & Wilson, 1996, p. 72), for $r$ denoting the correlational effect size of interest, the transformation to the standard normal scale is

$$z_r = .5 \log \left( \frac{1 + r}{1 - r} \right), \quad (1)$$

the standard error is

$$SE(z_r) = \frac{1}{\sqrt{n}}, \quad (2)$$
and the corresponding weight is

$$w(z_r) = n \cdot 3.$$  \hspace{1cm} (3)

Therefore, the average correlational effect size is computed as

$$\bar{z}_r = \frac{\sum_{k=1}^{K} (w(z_r))_k \cdot (z_r)_k}{\sum_{k=1}^{K} (w(z_r))_k}$$ \hspace{1cm} (4)

with a standard error of

$$SE(\bar{z}_r) = \frac{1}{\sqrt{\sum_{k=1}^{K} (w(z_r))_k}}$$ \hspace{1cm} (5)

so that a 95% confidence interval, based on the appropriateness of distributional assumptions, can be computed in the typical manner as

$$\bar{z}_r \pm 1.96 \cdot SE(\bar{z}_r).$$ \hspace{1cm} (6)

The confidence limits for the correlational scale were then obtained by using the simple back-transformation

$$\tilde{r} = \frac{\exp(2\bar{z}_r \cdot 1)}{\exp(2\bar{z}_r) + 1}.$$ \hspace{1cm} (7)

The following section now presents a summary of the major associations found between indicators of the constructs included in our model.
Results

Average correlation coefficients for all pairs of variables subsumed under the higher-order construct classification categories depicted in Figure 1 were computed; Table 1 shows the resulting average cor relational effect sizes.

[INSERT TABLE 1 HERE]

The upper off-diagonal of Table 1 shows the total sample size of all independent samples (N) and the number of effect sizes on which the averages were based (K) whereas the lower off-diagonal shows the average effect size statistics on a correlation metric with their respective 95% confidence intervals. The total number of correlations between variables from the 9 categories (i.e., stress, active coping, passive coping, emotional responses, burnout, personality mediators, support, environmental structure, background characteristics) utilized across the 78 studies was k = 2,023. The average absolute correlation size for the 525 utilized samples was .1913 with a standard deviation of .0877. All average correlations are significant at an individual \( \alpha = .05 \) level, because the corresponding 95% confidence intervals do not contain 0, with the exception of the two average correlations associated with active coping and emotional responses (\( \bar{r} = .05 \)) as well as with background characteristics and environmental structures (\( \bar{r} = .14 \)).

Results from Table 1 indicate that average correlations between external stressors and others constructs are, generally, moderate. External stressors are most highly correlated with burnout (\( \bar{r} = .26 \)), support variables ( \( \bar{r} = .26 \) ), personality mediators ( \( \bar{r} = .25 \) ), and emotional responses ( \( \bar{r} = .25 \) ) and less strongly correlated with active coping ( \( \bar{r} = .20 \) ), environmental structure ( \( \bar{r} = .19 \) ), and background variables ( \( \bar{r} = .11 \) ); the lowest average correlation was found
for passive coping ($r = .07$). In other words, external stressors may be moderately influencing burnout directly with support from family and other colleagues playing a mediating role with similarly moderate effects. Along the same lines, emotions such as anxiety, depression, and disappointment are also moderately directly affected by stress or moderately affected by active coping as a mediating variable; however, they are not strongly affected by passive coping mechanisms.

In terms of active coping, average correlations were generally moderate, and it was found that active coping was most strongly correlated with burnout ($r = .26$). Weaker correlations were found between active coping and environmental structure ($r = .20$), personality mediators ($r = .16$), support ($r = .15$), and passive coping. Finally, extremely weak correlations exist between active coping and background variables ($r = .09$) as well as emotional responses ($r = .05$). Thus, how one actively copes through exercise (i.e., one’s health posture), concrete behavioral strategies, cognitive planning, and through using appropriate emotional responses in the face of various stressors may moderately determine if one will indeed feel emotionally exhausted, depersonalized, or not accomplished. Yet, at the same time, the degree to which one engages in active coping strategies does not vary systematically with background characteristics and does not systematically predict the emotional responses to stressful events, even though these are, in themselves, moderately correlated to stressful events as a cause and burnout as a result.

In terms of passive coping, average correlations were generally low. Interestingly, the construct that most strongly correlated with passive coping was background characteristics ($r = .12$) showing that, for example, there are differences in which people with different levels of
teaching experience cope passively even though that, in itself, does not strongly influence the manner in which they internally mediate the stressors.

In terms of emotional responses, average correlations were moderate to high in the frame of reference of the average correlations observed here. Specifically, a high average correlation was observed between emotional responses and burnout ($\bar{r} = .39$), showing that the degree in which teachers emotionally respond to stressful events and how satisfied they are as a consequence, either mediated through coping mechanisms or not, has a strong influence on the degree of burnout they experience. Moderate average correlations were observed between emotional responses and personality mediators ($\bar{r} = .30$), environmental structure ($\bar{r} = .27$), and support ($\bar{r} = .26$) indicating that these factors also influence quite strongly how people emotionally respond to stressful events, which, in turn, influences the degree of burnout they experience. As seen with active and passive coping, the average correlation between emotional responses and background variables ($\bar{r} = .06$) was low.

In terms of personality mediators, average correlations are similarly moderate as shown by, for example, the average correlations between personality mediators and burnout ($\bar{r} = .27$), support variables ($\bar{r} = .23$), and environmental structure variables ($\bar{r} = .22$). Moreover, the average correlation between personality mediators and background variables is low ($\bar{r} = .11$) showing that personality traits do not vary systematically with stable background characteristics such as sex.

In terms of support variables, average correlations varied by the construct they were related to. For example, while a moderate average correlation exists between support variables and environmental structure variables ($\bar{r} = .33$), there is only a low average correlation between
support and background characteristics (\(\bar{r} = .06\)) showing that the perception of available support for individual teachers does not vary systematically with background characteristics such as sex or educational level. Moreover, the average correlation between background characteristics and environmental structure variables is low (\(\bar{r} = .14\)), but is, at the same time, the highest correlation between background characteristics and other constructs.

**Conclusion**

To summarize some of the central average correlations discussed above, Figure 2 shows the theoretical-empirical model described earlier with selected effect sizes indicated.

*Figure 2. Theoretical-empirical model of construct relationships of teacher stress with selected average correlations shown.*
In summary, results showed that correlations between most constructs were only moderate with some expected patterns. Specifically, stronger moderate associations exist between external stressors and burnout, personality mediators, negatively- or positively-oriented emotional responses including satisfaction and dissatisfaction, and support variables as well as between emotional responses and burnout. One may gather from the above results that emotional responses, personality mediators, support variables, and burnout play, not surprisingly, a central role in the manner in which teachers respond to stressful situations.

Specifically, emotional responses and personality mediators are rather closely associated suggesting that the way teachers emotionally respond to a variety of stressful situations is closely tied to the relatively stable personality traits that mediate their responses. However, the majority of emotional responses that have been empirically investigated in the studies that were synthesized here are negatively orientated (e.g. distress, anxiety, depression), which implies that the average correlations between external stressors and these responses are primarily reflective of the fact that an exposure to stressful events leads to negative experiences for teachers, be they mediated through coping mechanisms or not, and that these responses, in turn, may lead to different types and magnitudes of burnout. Environmental structures and support systems also influence teachers’ emotional responses, which shows that the subjectively perceived quality of the environment and the support structures available to the individual teacher, both at home and at work, is important for dealing with stressful situations. Therefore, in conclusion, there is empirical evidence in the literature on teacher stress that primary importance should be given to the precise examination of emotional responses within the stress cycle.
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(* indicates that the study was used in the meta-analysis)


A Meta-analysis of Stress in Teachers


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