

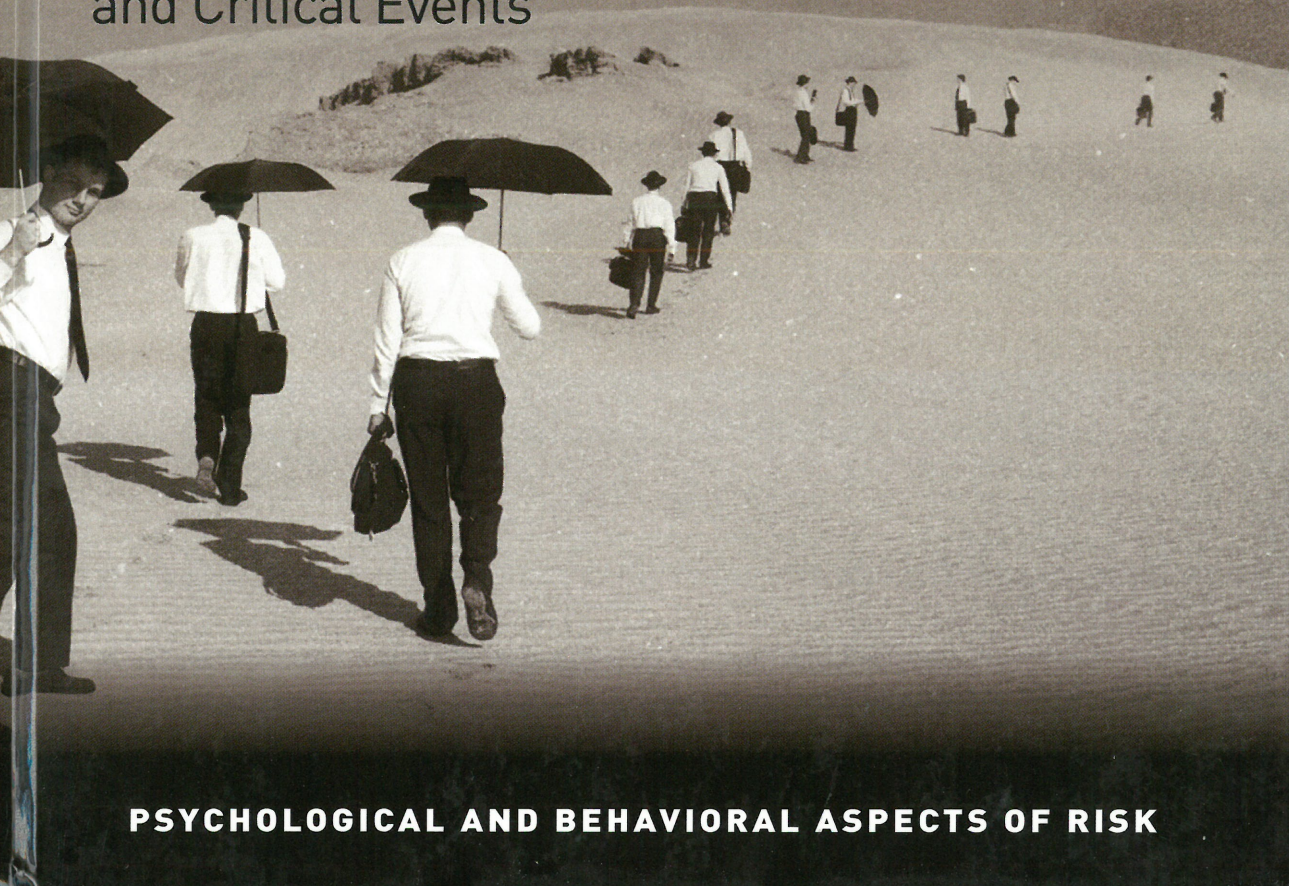
EDITED BY

ALEXANDER-STAMATIOS ANTONIOU
CARY L. COOPER, CBE



Coping, Personality and the Workplace

Responding to Psychological Crisis
and Critical Events



PSYCHOLOGICAL AND BEHAVIORAL ASPECTS OF RISK

Coping, Personality and the Workplace

Responding to Psychological Crisis and Critical Events

Edited by

ALEXANDER-STAMATIOS ANTONIOU

University of Athens, Greece

CARY L. COOPER, CBE

Manchester Business School, University of Manchester, UK

GOWER

Investigating Teachers' Well-Being and the Role of Resilience

Maria Armaou and Alexander-Stamatios Antoniou

Introduction

Teaching is long known to be an occupation with high demands for teachers. For this reason teachers' stress and coping has attracted a lot of attention from researchers in the last decades. Sources of teachers' stress are well-documented and are relatively the same across different educational systems and countries. However, they vary in nature and involve both external causes of stress and individual processes. External sources of stress include student motivation and behavioural problems, role conflicts, time pressures and excessive workload, evaluative environments, managing change, the way the teaching profession is perceived by members of the public, poor work relationships and career obstacles (Howard and Johnson 2004; Kyriacou 2001; Paulik 2012; Roache 2008).

Internal processes involve teacher motivation and coping patterns within the context of the school and classroom, explaining individual differences on responses to external sources of stress (Parker et al. 2012; Vandenberghe and Huberman 1999). Most of the research on teachers' responses to external sources of stress is based on Lazarus and Folkman's (1984) transactional model of stress and coping in order to highlight how situations that are perceived as threatening give rise to coping behaviours that impact on teachers' well-being at work. As there is a 'stable hierarchy of preferred coping strategies' (Frydenberg 1997, p. 40), understanding those processes is paramount for improving teachers' work conditions and ultimately keeping them in the profession.

On the other hand, research into the notion of resilience has its origins in psychiatry and developmental psychology. Masten et al. (1990, p. 425) define resilience as 'the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances'. Early studies within the field of resilience (Benard 1991; Silva and Stanton 1996; Werner and Smith 1982) focused on characteristics and personality traits that enabled some children among 'groups of at risk children and adolescents' that had suffered negative life events, to thrive and adapt positively to their environment (e.g. Howard et al. 1999; Waller 2001). Over the last two decades, resilience research has progressed to address positive qualities and strengths (Henderson and Milstein 2003) and underlying protective processes (Luthar et al. 2000). However, researchers also noted that resilience studies still lacked a strong theoretical base (Howard et al. 1999; Luthar et al. 2000) and only some isolated studies had tried to adapt key ideas and language of childhood

resilience to describe the adaptive behaviours of various professional groups which experience work-related stress (Gordon and Coscarelli 1996), including teachers (Bobek 2002).

Gu and Day (2007) in discussing their longitudinal findings of teachers' professional lives in relation to teachers' resilience, mention that at the time they were not able to find research on teachers resilience which examined the impact of environmental and life factors upon teacher effectiveness. For this reason, they approach resilience as a psychological construct focusing on the role of positive emotions (Fredrickson 2001, 2004) for teaching (Fried 2001; Nias 1989, 1999; Palmer 1998), and as a multidimensional, socially constructed concept (e.g. Benard 1991, 1995; Gordon 1995; Henderson and Milstein 2003; Luthar et al. 2000). Their research findings are in line with the developing literature in teachers' resilience and constitute a key source of information about the role of supportive factors in teachers' work-lives. Within the area of teacher education, researchers began paying attention to teacher resilience in order to better understand teachers' identity development (e.g. Kirk and Wall 2010), job satisfaction and motivation (e.g. Brunetti 2006; Kitching et al. 2009), teacher burnout and stress (e.g. Howard and Johnson 2004), career decision-making (e.g. Bobek 2002; Tait 2008) and teaching effectiveness (e.g. Day 2008; Gu and Day 2007).

Similar to resilience research conducted by VanBreda (2001) and Masten et al. (1990), Bobek (2002) defined teacher resilience as the ability to adjust to a variety of situations and to increase one's competence in the face of adversity. Tait (2008) argued that self-efficacy is a characteristic of a resilient teacher in that efficacious teachers see stressors as challenges rather than threats; while Pretsch et al. (2012) found that among 170 teachers and 183 non-teaching employees resilience contributed more than neuroticism to the prediction of general perception only for the group of teachers. Finally, Howard and Johnson (2004) noted in their studies that resilient teachers are those that can resist stress through the use of protective factors and learned strategies.

Teachers' Coping Strategies and Well-Being

Coping refers to cognitive and behavioural efforts aiming to reduce the intensity of stressful events and recover one's resources. These can be differentiated into two main categories: problem-focused and emotion-focused (Cooper et al. 2001; Frydenberg and Lewis 2004). The former refers to behaviours geared towards resolving directly challenges or threats, whereas the latter refers to strategies whereby the purpose is to reinterpret or change the meaning of the existing challenges or threats (Folkman et al. 1986). These categories have also been examined among teachers and defined as 'active' and 'palliative' strategies. Active strategies are considered to be problem-oriented, seeking to eliminate the source of stress such as searching for solutions, social support, and time management. On the other hand, 'palliative' strategies are more avoidant in nature as they do not target directly the sources of stress but rather aim to reduce its negative effects (Austin, Shah and Muncer 2005; Chan 1998; Kyriacou 2001). For example, Chan (1998) demonstrated the mediating role of coping strategies on the effects of stressors in that these direct effects are sizably reduced when coping strategies such as problem solving and seeking support are involved. Researchers have often addressed the relationship between teachers' coping strategies and their well-being as burnout and engagement are phenomena that are considered to be the outcome of individuals' appraisal and coping processes (Maslach et al. 2001; Schaufeli et al. 2008; Vandenberghe and Huberman 1999).

Overall, research findings suggest that active coping strategies tend to lead to more positive outcomes than 'palliative' coping strategies (Cooper et al. 2001; Kyriacou 2001). Such positive outcomes may include higher levels of resilience which in turn leads to greater well-being

(e.g. Campbell-Sills et al. 2006; Coifman et al. 2007; Martin and Marsh 2008). For example, the strategy of social support has been associated with greater work satisfaction and lower levels of absenteeism (Brown and Ralph 1998; Cohen and Wills 1985; Pisanti et al. 2003); while avoidance is not favourable to the restoration of a positive psychological state (Austin et al. 2005; Chan 1998). However, what makes a difference to teachers' well-being is the long-term use of active coping strategies over the course of one's career (Martin and Marsh 2003; Sharplin et al. 2011).

Lewis (1999) examined the relationship between discipline and coping among teachers. He examined teachers' estimations of the stress that arises when they are unable to discipline students as they would ideally prefer, and the way in which teachers cope with any stress that arises. Results indicated that teachers who report more stress were those most interested in empowering their students in the decision-making process. Associated with increased concern is a greater use of coping responses such as worry, self-blame, tension reduction, wishful thinking, and keeping concerns to yourself. The most concerned teachers also expressed a greater tendency to get sick as a result of stress. According to Lewis, these findings suggested the need for professional development curricula for teachers, to assist them in effectively sharing power with students and in reflecting upon a range of more productive coping strategies.

In a sample of 515 Australian secondary school teachers, Lewis et al. (2011) examined the relationship between the stress teachers feel as a result of student misbehaviour, the generic coping strategies they use and six classroom management techniques (punishment, reward, involvement, hinting, discussion and aggression). Their results showed that the most common and effective form of coping used by the participants was Social Problem Solving and they sometimes turn to relaxing activities and less frequently engage in passive, emotion-focused, avoidant strategies. Furthermore, their results showed that teachers who are more concerned about student misbehaviour and classroom management use slightly more aggressive classroom management. However, regardless of teachers' levels of concern about misbehaviour, those who perceive their classes to contain more badly behaved students make more use of punishment and aggression. Moreover, teachers who use Avoidant and Passive coping strategies, also, employ more coercions and aggression towards students.

Griffith et al. (1999), in a sample of 780 primary and secondary school teachers in South London, examined the associations between teacher stress (measured by the Teacher Stress Inventory, Borg et al. 1991), dispositional coping (measured by COPE, Carver et al. 1989) and work social support (Uden et al. 1991) taking into consideration negative affectivity (measured using PANAS, Watson et al. 1988). Their results showed that teacher stress levels were greater for respondents who reported low social support at work and higher levels of coping by cognitive and behavioural disengagement, although the measure of social support was not correlated with coping by seeking social support.

Moreover, coping by active planning, suppression of competing activities and seeking support were positively interrelated, and were negatively associated with disengagement; while the results of a multiple regressions analysis showed that workplace social support and psychological coping were associated with ratings of teacher stress independently of negative affect and demographic and school factors. Parker and Martin (2009) in a sample of 515 teachers from 18 schools in Australia explored a model of teacher well-being and engagement (measuring work satisfaction, participation and positive career aspirations (Martin 2007; Martin and Marsh 2008)). Their results confirmed their hypotheses as the 'direct' coping strategies (planning and mastery orientation) positively predicted buoyancy, which in turn was a strong predictor of engagement and well-being, while the opposite was the case with 'palliative' coping strategies (self-handicapping and failure avoidance). Furthermore, the cognitive strategies of mastery orientation and failure avoidance were much stronger predictors of teachers' engagement and well-being.

More recently, Parker et al. (2012), based on the transactional model of stress (Lazarus and Folkman 1984), tested a process model of teachers' goal-orientation, coping behaviour and well-being in a longitudinal sample of 430 Australian teachers, using structural equation modelling (SEM). Their model consisted of three core elements: (1) teachers' goal orientations which underlie the appraisal of threatening obstacles, (2) coping strategies emanating from these orientations, and (3) teacher well-being emanating from the relevant coping strategy. Overall, to a large extent, their results confirmed their hypothesized model and were consistent across the two time waves. In particular, mastery goal orientation was a strong predictor of problem-focused coping, failure avoidance was a strong predictor of both emotion-focused and problem-focused coping, and coping was a strong predictor of teacher engagement. Unexpectedly, though, problem-focused coping negatively predicted burnout at Time 2 and the relationship was weaker than expected perhaps due to the nature of teaching work and the requirement of a high minimum standard of problem-focused copings (e.g. creation and submission of lesson and classroom plans) irrespective of individual coping preferences.

Differences on Stress Appraisal based on Personality Traits, Types of Schools and Subject Experience

Sources of stress in the teaching profession may be similar across diverse educational contexts but not all teachers are equally affected. Some tend to be more susceptible to workplace stressors experiencing higher levels of stress, whereas others are much more resilient. Individual characteristics are often the key to understanding such individual differences on stress appraisal (Burns and Machin 2013; Jepson and Forrest 2006). Furthermore, as we move down the educational ladder there is a greater chance for teachers to perceive higher levels of stress followed by a significant drop in the levels of job satisfaction for more experienced teachers (Borg et al. 1991; Chaplain 1995; Cooper and Kelly 1993).

Carton and Fruchart (2014) examined the degree to which the level of experience affected sources of stress, coping responses and emotional experience in a sample of 125 teachers, working in 11 primary schools, in France. Their research participants were all asked to choose a recent professional stressful situation and to then complete the French version of the Way of Coping Checklist-revised (WCC-R) (Graziani et al. 1998) and the French version of the Differential Emotions Scales (St. Aubin et al. 2010). Their results showed that teachers' sources of stress and coping responses differ significantly depending on their level of experience. In particular, novice teachers are mainly stressed by student behaviour doubting their own ability to handle pupils' misbehaviour, while they seek more often social support. After the first seven years they become more concerned about relations with their pupils' parents, but still they seek again the support and expertise from their colleagues although slightly less often than novice teachers. After 26 years in service teachers tend to become more stressed by the direction of the teaching profession. These teachers still often turn to social support but the use of escape, reappraisal and acceptance as coping strategies are on the increase.

Finally, at the end of their career (36–40 years of experience) their pervasive sources of stress are again their students' behaviour and their reflections on the teaching profession. They more often utilize the strategy of confrontation, and less frequently the strategies of self-control and diplomacy when dealing with stressful events. Even in spontaneous discussions carried out after these teachers had complete their questionnaires, they revealed that they indulged in avoidance behaviours such as sleeping, smoking or eating more when they were stressed. Their results correspond with earlier research findings acknowledging student misbehaviour as the main source of stress (e.g. Gevin 2007; Martin 2006; Pithers 1995), the importance of social

support in the beginning of one's career as a teacher (Greenberg 2002; Hayes 2003; Hoy and Spero 2005; Viswesvaran et al. 1999) and the concerns about the teaching profession for more experienced teachers that may feel less in control (Compas et al. 1991; Forsythe and Compas 1987; Huberman 1989).

Burns and Machin (2013) examined the relationship between individual and workplace characteristics and their effects on teacher and school well-being outcomes among 250 Norwegian secondary school teachers from rural, urban and city locations. Their results showed that school location had strong relationships with many school well-being outcomes (measured using the School Organisational Health Questionnaire (Hart et al. 2000)) with rural teachers reporting higher levels of curriculum co-ordination, effective discipline policy, goal congruence, participative decision-making, student orientation, and supportive leadership as well as higher levels of professional interaction role clarity and more positive organizational climates than teachers in urban and city schools. On the other hand, personality characteristics (extraversion and neuroticism) were strongly related to positive and negative affect but had less strong effects on school well-being outcomes.

Jepson and Forrest (2006) performed a multiple regression analysis examining the predictive validity of a range of individual contributors on perceived workplace stress within the teaching profession in a sample of 95 primary and secondary school teachers from the UK. Their results showed occupational commitment, achievement striving, Type A behaviour and type of school were all significant predictors of work-related stress explaining overall 53.6% of the variance. Occupational commitment (defined as 'dedication and loyalty to the teaching profession' and measured by a six-item scale generated from a focus group) had the strongest negative relationship with perceived work-related stress, followed by achievement striving (defined as 'tendency to work hard to achieve goals' and measured by a 10-item scale, also generated from a focus group) and Type A behaviour (measured with Bortner's (1969) scale). Finally, the type of school also had a moderate significant relationship with teachers' levels of stress. This is in line with previous research that has indicated that individuals who exhibit low commitment, motivation to strive for high levels of achievement, and more physiological and emotional activity are in greater danger of experiencing higher levels of stress (Cooper and Kelly 1993; Jex et al. 2002; Siu and Cooper 1998).

Chan (2008) examined the degree to which the personal resources of emotional intelligence (intrapersonal and interpersonal; measured with the Emotional Intelligence Scale; Schutte et al. 1998) and general teacher self-efficacy (measured with General Teacher Self-Efficacy scale; Schwarzer et al. 1999) facilitated active and passive coping (measured with the Chinese Ways of Coping Questionnaire; Chan 1994) in a sample of 273 Chinese prospective and in-service teachers in Hong Kong. The findings of multiple regression analyses showed that only active coping could be significantly predicted by intrapersonal and interpersonal emotional intelligence, while teacher self-efficacy did not emerge as a significant predictor.

Paulik (2013/2014) examined the relation between dispositional optimism, self-confidence and work-related and non-work-related stress among 481 school teachers from primary schools at various locations in the Czech Republic. The results showed a significant relationship between those two personality traits and teachers' perception of both work-related and non-work-related load. Previous research by the same author (Paulik 2012) using samples from various levels of the Czech and Slovak educational systems also showed that personality variables such as hardiness, dispositional optimism, sense of coherence and neuropsychological stability have a positive relationship with stress resistance and mediate the negative relationship between increased workload and teachers' job satisfaction. In an overview of his research to date he concludes that for teachers who stay in the profession, such personality traits seem to counterbalance the negative effects of their profession.

Teachers' Coping and Resilience

Studies of teachers' coping strategies have provided useful insights for our understanding of teachers' resilience. However, the research focus on resilience has allowed researchers to address factors and processes that may count for teachers' resistance to stress and their optimal functioning using a broader range of research methods. Howard and Johnson (2004) conducted a qualitative enquiry using semi-structured interviews in order to examine 'resilient' teachers' strategies for coping with stress in day-to-day teaching among 10 teachers within the context of three very disadvantaged Australian schools. Their thematic analyses reflected the adult equivalents of protective factors found in the authors' earlier work with young people (Howard and Johnson 1999, 2000a, 2000b, 2000c, 2002). A consistent feature of 'resilient' teachers' talk was a strong belief in their ability to control what happens to them and, especially, respond to daily phenomena of aggression and violence towards them. The key strategy mentioned by all 10 teachers was to depersonalize the unpleasant or difficult events. They would do this in various ways such as not seeing the event as their fault, choosing to learn from this, trying to understand the offending parents' and students' motivation, or by using strategies that they have learnt from others. The second most common strategy employed by seven out of 10 participants was their 'moral purpose' which reflected their personal choice to teach in disadvantaged schools and their confidence of 'being able to make a difference' in children's lives. Furthermore, resilient individuals had strong support groups consisting of people that cared for them outside their schools, but they were also able to feel the support from their colleagues and leadership on a daily basis.

Finally, an important protective factor was individuals' pride in their own achievement and pride in areas of personal importance or significance (e.g. due to their competence in behaviour management their students learnt in orderly classrooms). The authors highlight that such protective factors can make a big difference in teachers' lives and as they are also easy to organize within a school they represent a number of policy suggestions towards teacher education faculties and policy-making regarding the training, care and management of practising teachers:

1. Depersonalizing stressful incidents is a simple strategy that senior staff and colleagues in any school can teach new teachers, and that students can be taught in their teacher education courses.
2. When principals are at liberty to choose their own staff, they can ensure that new staff actually want the challenge of a difficult school
3. Schools can organize strong and reliable whole-school behaviour management strategies that will support teachers both in everyday and emergency situations.
4. Leadership teams can make staff support a priority for both professional and personal issues.
5. Schools can be organized in such a way as to promote strong peer group support (e.g. work-teams, social activities, supportive rather than competitive school culture). Students in training can be alerted to the importance of developing strong peer support both within and outside of school.
6. Staff achievements should be celebrated and valued.
7. The critical importance of competence in the key areas of behaviour management, program organization, lesson preparation and the effective management of resources can be taught both in teacher education programmes and on the job.

Cole et al. (2013) explored the coping strategies that were used in seven cases by school staff after a crisis. Three measures were used: the WHO (Five) Wellbeing Index (WHO 1998, 2011), the Impact of Event Scale-Revised (Weiss and Marmar 1997), and the Ways of Coping-Revised

(Folkman and Lazarus 1985). Their findings showed that reactions of staff to critical events in school can last for years. For this reason, the authors highlight the importance of having in place mechanisms for social support at schools and making sure that all staff have opportunities to take part in future planning activities. In three of the cases where reactions were strong, intrusion was reported by all as their reaction towards a critical event. Furthermore, in those cases where a low level of well-being was reported, there was also a high level of reported reactions to a critical event. Finally, planful problem solving and seeking social support were the most commonly reported coping strategies; whereas distancing, escape or avoidance were the least common ones.

Maring and Koblinsky (2013), adopting an ecological risk and resilience framework (Bronfenbrenner 1986) examined, through semi-structured interviewing, the challenges, strategies and support needs of 20 teachers from three urban schools near the Washington, DC border that were affected by high levels of community violence. Their perspective allowed them to examine how risk and protective factors at various levels may influence teacher outcomes. The interpretations of their interviews described teachers' challenges, strategies and support needs on various levels of analysis (individual-level, family-level, school-level, community-level) (see Table 11.1).

Table 11.1 Maring and Koblinsky's multi-level framework of risk and protective factors for teachers' challenges, strategies and support needs

| Challenges | Strategies | Support needs |
|--|---|--|
| <i>Individual</i> | | |
| Lack of training Fears for personal safety Somatic stress symptoms | Praying Emotional withdrawal | Behaviour management training |
| <i>Family</i> | | |
| | Communication with family and friends | |
| <i>School</i> | | |
| Inadequate school security | Sharing stressful events with teachers Limiting involvement with difficult students Separating work and personal life | Effective school leadership Improved safety and security Peer mediation programmes Mental health services |
| <i>Community</i> | | |
| Neighbourhood violent crime | Professional counselling | Parental support and involvement |

These findings are in line with previous research among African American pupils, students and other community members (Bryant-Davis 2005; Farrell et al. 2001; Metlife 2008; Thompson et al. 2004) and also show the importance of developing programmes and policies that can help teachers cope effectively with community violence such as conflict resolution skills training, top-down, comprehensive initiatives to support violence prevention and provide a safe school environment (e.g. clear expectations for student behaviour, enforce disciplinary rules, and ensure adequate safety and security protections), peer mediation programmes and exploring use of professional counsellors to address students' and teachers' violence related trauma.

Analysing narrative interviews of 12 secondary school teachers in England, Mujtaba and Reiss (2013) explored factors that contribute to the development of positive stress and distress based

on the quantitative findings of their earlier research (Mujtaba 2013). Eustress was identified as a positive influence that motivates teachers to aim for challenges in their professional life, aids personal and professional growth and pushes teachers to make the necessary changes to their environment in order to reap benefits. In this sense, positive stress is indicative of problem-solving actions and creative solutions to areas of their professional lives that require improvement. On the other hand, distress was characterized by events/stressors that create anxiety, ill-feeling and a negative impact on teachers. Overall, 10 themes emerged describing what constitutes eustress and distress for their interviewees (see Table 11.2).

Table 11.2 Mujtaba and Reiss' analysis of teachers' eustress and distress

| Eustress | Distress |
|---------------------------------------|---|
| Trust | Mistrust |
| High self-efficacy | Low self-efficacy |
| Social support | Social isolation |
| Teachers having their skills affirmed | Teachers having to prove their skills |
| Autonomy | Lack of autonomy |
| Reflection | Lack of reflection |
| Motivation | Lack of motivation |
| Good leadership and collegiality | Poor leadership and lack of collegiality |
| Good role model department and school | Lack of a good role model department and school |

The findings demonstrate that the use by teachers of appropriate coping mechanisms and seeing stressors as capable of being overcome, can help teachers throughout their career to view stress in a positive, healthy manner and lessen the likelihood of negative long-term effects associated with distress. For example, the way in which teachers appraised a situation was related to the kind of coping strategy that they adopt. The 12 teachers exhibited a mix of different types of coping strategies which helped them to regulate distress and produce positive affect. For all 12 teachers it appeared that many of the issues to do with trust or mistrust lay with senior management; while those teachers who had higher levels of self-efficacy were more resistant to distress and were able to work under stressful conditions. However, not all of the teachers were able to recognize eustress, but for those who did recognize it an indicator of positive stress was positive affect; while teachers of mathematics and science felt that they faced more pressures compared to teachers from other departments, highlighting the negative perceptions of many pupils towards their subject.

Teachers' Resilience and Retention

There has recently been a growing research focus on teachers' resilience and its importance for teachers' retention. This has been fuelled mainly by the increase in teacher shortages in many countries and the limitations of organizational models of attrition that focus on the external assessable result of loss of commitment, rather than upon the ways in which commitment is built (Day and Gu 2009; Doney 2013; Hong 2012).

Hong (2012) provided an insight into new teachers' needs and the challenges that they face by exploring the differences between seven leavers and seven stayers focusing on the transactional process of their resilience and decision-making through their psychological lenses of value, self-

efficacy, beliefs and emotions. The findings of this study showed that leavers perceived and interpreted challenges differently than stayers. In particular, when leavers faced the challenges of managing the classroom and handling students' misbehaviours, they often experienced diminished self-efficacy beliefs and they attributed the difficulty to their own personality or characteristics and experienced emotional burnout. Stayers, however, were able to maintain strong self-efficacy beliefs with the help and support of administrators. Additionally, they could strategically set emotional lines or boundaries between themselves and students, so that they would not take negative events personally or become burned out; while leavers held the belief that they were heavily responsible for students' learning, not realizing the students' own role and effort in the learning process.

Doney (2013) examined the resilience-building process of four female novice secondary science teachers in the United States and its links to teacher retention in a qualitative two-year study. For the purposes of this study, a resilience framework was established consisting of three factors: (1) stressors and protective factors in the lives of novice secondary science teachers and provided direction and goals for the research; (2) a case study was developed for each of the four teachers participating in the research in order to emphasize the detailed analysis of factors linked to resilience; (3) cross-case analysis was employed to identify similarities and differences and provide insight into issues concerning the resilience process. The study's results suggest that the interaction between stressors (e.g. personal life vs. career, inexperience, control of decision, extra-curricular activities, control of time, etc.) and protective factors (e.g. creating support systems, using individual skills to problem solving, maintaining self-efficacy and a sense of humour, use palliative and control techniques) act as a primary force in the resilience process and stimulate responses to help counteract negative effects of resulting stress. For this reason, the authors suggest that resilience can be fostered in novice teachers, by revising protective factors in order to address changing stressors as a means to encourage teacher retention.

Sharplin et al. (2011) present the findings from a qualitative longitudinal collective case study of 29 teachers newly appointed to a rural or remote school in Western Australia. Their conceptual framework consisted of the quality of work-life which encompasses a model of person-environment (P-E) including personal attributes (self-efficacy, locus of control), teacher coping strategies, and structures for workplace socialization. The findings of this study showed that all participants experienced stress and responded with direct-action, palliative and avoidant strategies. However, where protective structures and processes existed in environments, teachers employed direct-action problem-solving strategies. Avoidant strategies were more common in young and mature-aged novices, rather than experienced teachers. These authors highlight three critical times that are important for teachers' retention as they support adaptation: first weeks of appointment for information, first semester for assistance, support, feedback for development of competence, and three months before the year-end for stability and certainty.

The VITAE research, 'Variations in Teachers' Work, Lives and Effectiveness' was a mixed method, four-year (2001–2006) study conducted in England with 300 teachers in 100 schools across seven local authorities (Day et al. 2007) through twice yearly semi-structured, face-to-face interviews with teachers. It investigated factors contributing to variations in teachers' effectiveness in different phases of their professional lives showing that teachers' capacities to sustain their commitment and resilience were influenced by their professional life phases and their identities which in turn were mediated by the contexts in which they lived and worked. Those mediating influences had three dimensions: the *personal* (related to their lives outside school); the *situated* (related to their lives in school); and the *professional* (related to their values, beliefs and the interaction between these and external policy agendas). Of the 300 teachers in the study, 76% were able to sustain relatively positive commitment trajectory identities across all professional life phases over the three-year period of the fieldwork.

However, in each phase there were a number who did not and that increased as the professional life phase progressed, especially for those with 24–30 years of experience and those with 31-plus years of experience. Day and Gu (2009) present the stories of three such veteran teachers highlighting the significance of the provision of appropriate and responsive leadership support. They also note that as long as such support is available, veteran teachers are more likely to sustain their commitment and effectiveness and their experiences, values for education and sense of vocation can serve as sources of wisdom and strength which enable them to bounce back from adverse circumstances.

Conclusions

The role of resilience for teachers' well-being is a multi-faceted phenomenon that incorporates diverse factors and processes that take place both inside and outside the school. Quantitative and qualitative research findings equally support the notion that individuals' coping strategies play a significant role for teachers' resilience and their overall well-being at work. However, the development and maintenance of resilience is also influenced by other supportive and non-supportive factors that need to be adequately addressed within the contexts of teachers' work and, when possible, within their teacher education programmes.

Overall, the use of active coping strategies (e.g. active planning, seeking social support, etc.) is associated with higher levels of resistance to stress and greater well-being throughout teachers' careers. On the other hand, employing 'palliative coping strategies' (e.g. worry, self-blame, failure avoidance) is related with low resistance to stress, disengagement and negative well-being outcomes such as getting sick due to stress. However, individual differences among teachers including differences in years of experience, school location and personality characteristics are equally important for our understanding of the role of resilience for teachers' well-being. For example, individual characteristics such as Type A behaviour, emotional intelligence and general self-efficacy are also related to teachers' stress-appraisal process and their resistance to stress.

However, the impact of teachers' sources of stress (e.g. pupil misbehaviour, direction of the teaching profession) varies across the span of their career and so does their choice of coping strategies. Research in teachers' resilience has offered a broader understanding of protective factors in teachers' work-lives that are important for their coping. Such factors can reflect either personal or organizational resources. Personal resources may include a strong belief in individual teachers' ability to control what is happening in their daily work-lives, a sense of 'moral purpose' in teaching, and their self-efficacy; while organizational resources may include school-wide mechanisms for social support, opportunities for staff to take part in future planning activities, behaviour management training, parental support and involvement. Understanding how such factors influence teachers' coping and resilience is imperative for teachers' well-being and their desire to stay in the profession.

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