IJW
McCann, C. M., Beddoe, E., McCormick, K., Huggard, P., Kedge, S., Adamson, C., & Huggard, J. (2013). Resilience in the health professions: A review of recent literature. *International Journal of Wellbeing*, *3*(1), 60-81. doi:10.5502/ijw.v3i1.4

ARTICLE

Resilience in the health professions: A review of recent literature

Clare M. McCann · Elizabeth Beddoe · Katie McCormick · Peter Huggard
Sally Kedge · Carole Adamson · Jayne Huggard

Abstract: All health professions face numerous stressors within their clinical practice, including time pressures, workload, multiple roles and emotional issues. Frequent workplace stress can impact on the physical and mental wellbeing of health professionals and result in burnout and, in some cases, traumatic stress-like symptoms. These outcomes can impact not only on the wellbeing of health professionals but also on their ability to practise effectively. It is therefore imperative that a preventive approach is adopted. Developing resilience-promoting environments within the health professions can be explored as a means to reduce negative, and increase positive, outcomes of stress in health professionals.

This literature review seeks to elucidate the processes and characteristics (both individual and contextual) that enhance resilience in the health professions. It explores relevant literature from five health professions (nursing, social work, psychology, counselling and medicine) to identify the individual and contextual resilience-enhancing qualities of each profession.

Commonalities and differences between the disciplines are identified in order to arrive at a definitive explanation of resilience across health professions. Implications for clinical practice and recommendations for further research are also discussed.

Keywords: resilience, health professionals, literature review

1. Introduction

A number of stressors are associated with the health and helping professions, including time pressures, workload, having multiple roles, and emotional issues (Lambert et al., 2004; Lim, Hepworth, & Bogossian, 2011). Frequent environmental stress associated with human pain and distress in the workplace can impact on the physical and mental wellbeing of health professionals and result in burnout and, in some cases, traumatic stress-like symptoms (Stamm, 2010). These negative stress outcomes can impact not only on the wellbeing of health professionals, but also on their ability to care effectively for others (Barnett, Baker, Elman, & Schoener, 2007). It is therefore imperative that a preventive approach is adopted. Developing and fostering resilient environments and individuals within the health profession is emerging as a way to reduce negative, and increase positive, outcomes of stress in health professionals. As part of a larger project exploring aspects of resilience in health professionals and in order to gain an understanding of how resilience and associated terms had been discussed in the health professional literature, a structured literature review was conducted. For the purpose of this review the definition of 'resilience' has been adapted from the developmental psychology literature, which dominates the field (Luthar, Cicchetti, & Becker, 2000). We define 'resilience'

Clare M. McCann
University of Auckland
c.mccann@auckland.ac.nz

as the ability to maintain personal and professional wellbeing in the face of on-going work stress and adversity

2. Article search strategy

The articles for this literature review were found by searching the databases MedLine (Ovid), PsychINFO (Ovid), Google Scholar, Social Work Abstracts Plus, CINAHL Plus and ProQuest Dissertations and Theses. The search terms included combinations of the following keywords: *coping, self-care, well-functioning, hardiness, resilience, health professional/worker/practitioner, nurses, social workers, psychologists, counsellors, doctors, speech-language therapists/pathologists, audiologists* and *optometrists.* The search was limited to English-language peer-reviewed journals and dissertations published in the last 12 years (2000 to 2012). The initial search identified 159 articles in total.

The following criteria were applied:

1) An article was *included* if it had a focus on coping, self-care, well-functioning, hardiness or resilience of health professionals; not students or patients.

2) An article was *excluded* if samples or discussions were exclusively about students or patients and/or were poorly generalisable to an identified health profession.

3) An article was *excluded* if results or discussions focused on the negative outcomes of stress with limited consideration of coping, self-care, well-functioning, wellbeing, hardiness or resilience.

The criteria imposed on the search process resulted in 61 articles being found for inclusion. Of these articles, 18 related to the nursing profession, 12 to the social work profession (three of which used the same sample), 11 to the psychology profession, eight to the counselling profession, seven to the medical profession (including psychiatrists and physicians) and five related to more than one health discipline. No articles were found that related to speech-language therapists, audiologists or optometrists so they will not be discussed any further. The following discussion considers each health discipline separately. We will review the studies on coping as a means to improve wellbeing, resilience and hardiness and any components of resilience specific to each health discipline. Coping is the set of cognitive and behavioural strategies that individuals engage in when faced with stress (Lararus & Folkman, 1984). Coping can involve positive methods such as problem-focused behaviours, support seeking or maintaining a work-life balance and/or maladaptive emotional-focused coping such as denial, avoidance and suppression. Resilience and hardiness are constructs involving cognitive appraisals of challenge, control and commitment (Kobasa, Maddi, & Kahn, 1982).

3. Nurses

Of the health disciplines, nurses featured prominently in the articles related to resilience.

3.1 Coping

Lambert et al. (2004) examined work stressors, ways of coping and demographic characteristics as predictors of physical and mental health among 1554 hospital nurses from Japan, South Korea, Thailand and the USA (Hawaii). While there were some differences across countries regarding predictors of physical and mental health (e.g., number of family living with them or nearby), several predictors were similar. Regardless of culture, self-control, seeking social support, problem solving and positive reappraisal were the four most utilised ways of coping.

The findings suggest that cross-culturally nurses have similar ways of coping in the context of workplace stress.

In a sample of 328 New South Wales (NSW) and 190 New Zealand (NZ) acute care hospital nurses, Chang et al. (2007) found that problem-focused coping was only mildly related to better mental health. However, high levels of emotion-focused coping were strongly related to low mental health. Chang et al. (2007) examined the workplace stressors, coping mechanisms, and demographic characteristics which were the best predictors of physical and mental health. Escape-avoidance (e.g., sleeping, drinking, smoking, using drugs), distancing (e.g., not taking things too seriously), and self-control (e.g., keeping feelings to oneself) emerged as the best coping predictors of mental health. Mental health scores were higher for nurses with more years of experience and for those who used distancing as a way of coping but lower for those who used escape-avoidance and self-control coping, lacked workplace support and had a high workload.

By investigating the coping strategies and experiences that bring joy and happiness ('uplifts') to the personal and professional lives of 23 Singaporean nurses, Lim et al. (2011) found that professional uplifts were related to being appreciated, having reliable working relationships, and health improvements of patients. Personal uplifts were related to leisure activities, having disposable income, laughing with friends, and spending time with friends and family. Coping strategies included taking time out (short breaks at work, rest and relaxing activities), seeking emotional support (from family or colleagues) and belief systems (luck, fatalistic thinking, spirituality).

Through a systematic literature review, Zander, Hutton, and King (2010) investigated coping and its relationship with resilience in assisting paediatric oncology nurses. The three themes identified were, (1) coping factors, (social, team and organisational support, personal views, attitudes, and circumstances, experience and types of stressors) (2) coping processes, (the contribution to effective adaptation), and (3) overcoming negative circumstances, (how effective adaptation and coping are combined when professionals are dealing with workplace stressors).

3.2 Resilience and hardiness

Only nursing research used existing measures to examine resilience and hardiness. In a sample of Quebec nursing assistants (NAs) and registered nurses (RNs), Harrisson, Loiselle, Duquette, and Semenic (2002) found that hardiness and work support were negatively related to psychological distress. Hardiness positively correlated with work support. Further analysis demonstrated hardiness to be a significant mediator between the effects of work support on psychological distress. Judkins and Rind (2005) examined the relationship between hardiness, job satisfaction, and stress among Texan home health nurses. In this study there was a significant negative relationship between stress and hardiness, with those high in commitment experiencing less stress. A significant positive relationship between job satisfaction and hardiness (particularly for commitment and control) was found. No significant correlation was found between stress and job satisfaction. Similar results have been found using qualitative techniques.

Ablett and Jones (2007) aimed to describe 10 English hospice nurses' experiences of work and compared the experiences with the personality constructs of hardiness and sense of coherence (belief in the comprehensibility, manageability and meaningfulness of the world). The results yielded 10 themes that hospice nurses used to describe their work, including spirituality, personal work attitudes, job satisfaction, coping and personal/professional

boundary issues. When comparing the 10 themes to hardiness, they all indicated a high level of commitment to and control over the workload of the hospice nurses. When the themes were compared with sense of coherence the nurses perceived their work as manageable and comprehensible. Only some nurses viewed change as an opportunity for growth. Ablett and Jones (2007) suggest that the determining factor in nurses' resilience might be the individual's attitude towards change.

In a sample of 98 Portuguese nurses, Garrosa, Rainho, Moreno-Jimenez, and Monteiro (2010) assessed the relationships between job stressors, hardiness and coping resources on burnout dimensions at two time points. At the cross-sectional level, personal resources, control and social support were negatively related to emotional exhaustion and challenge. Unlike the findings of Judkins and Rind (2005), commitment was not found to affect any of the burnout dimensions. Active coping was found to have more influence than hardiness in that it had main effects, both at the cross-sectional and temporal level, on depersonalisation and lack of personal accomplishment. Specifically, active coping had an inverse temporal effect on depersonalisation and on lack of personal accomplishment.

Mixed results have been found in research that has used direct measures of an individual's resilience. In a sample of 753 Australian theatre nurses, Gillespie, Chaboyer, and Wallis (2009) investigated whether the personal characteristics of age, experience and education contribute to resilience. The resilience measure included elements of personal competence, trust in intuition, change and control appraisals, and spiritual influences. Results demonstrated modest but statistically significant associations between age, years of experience and resilience. No relationship was found between education and resilience. Multiple regression analysis revealed that only years of experience predicted resilience and explained only 3.1% of the variance. The authors acknowledge that resilience may be influenced and developed by other contextual factors, not measured in the study.

In a sample of 464 West Virginia nurses, Larrabee et al. (2010) used a measure of stress resilience that included three interpretive styles, namely deficiency focusing (assigning self as cause for failures, overemphasizing barriers, and negatively influencing motivation), necessitating (caution and judgment of tasks as inflexible) and skill recognition (acknowledgment of one's own competence). They found that high psychological empowerment was predicted by more years' experience, and the three stress resiliency subscales. Psychological empowerment and low job stress were found to predict greater job satisfaction. High job satisfaction was the strongest predictor of intent to stay.

3.3 Specific resilient qualities found in nurses

In a sample of 772 Australia theatre nurses, Gillespie, Chaboyer, Wallis, and Grimbeek (2007) found highly significant associations between hope and resilience, self-efficacy and resilience, and control and resilience. Moderately significant relationships were found between coping (problem-focused approaches) and resilience, and competence and resilience. While these results depict resilience as being found within the individual, the authors suggest that hopefulness may only be possible in a supportive work environment and the development of self-efficacy may be influenced by the work culture. In a sample of nine Queensland nurses, Cameron and Brownie (2010) identified eight themes that impact their resilience: (1) experience, (2) amount of satisfaction attained, (3) positive attitude or a sense of faith, (4) making a difference, close intimate relationships and sharing experiences with residents, (5) using strategies such as debriefing, validating and self-reflection, (6) support from colleagues,

mentors and teams, (7) insight into their ability to recognise stressors and put strategies in place, and (8) maintaining work-life balance.

3.4 Summary of coping and resilience in nurses

The above studies indicate that nurses use a number of positive coping strategies including problem-focused coping, taking time out and giving and receiving support from co-workers. The results suggest that positive coping might not be enough to reduce the negative effects of stress, whereas maladaptive coping (suppression and denial) might significantly increase the negative effects of stress. In terms of resilience, there are a number of individual and contextual factors that contribute to levels of resilience in nurses. These include work-life balance, hope, control, support, professional identity and clinical supervision. What remains unknown is whether resilience can be strengthened in nurses. Following a review of personal resilience in the nursing literature, Jackson, Firtko, and Edenborough (2007) recommended that resilience can be strengthened in nurses through strategies and mentorship programmes. These programmes should aim to develop positive and nurturing professional relationships, and encourage positivity, emotional insight, life balance, spirituality and personal reflection.

4. Social Workers

4.1 Coping

The research on the positive effects of coping in social workers has found mixed results. In a study of 591 social workers practising in New York State, Acker (2010) found that coping strategies, age, experience and perceptions of competence all play a part in managing stress levels. Social workers in a managed care work environment who felt competent in mastering organisational and clinical demands did not rely on problem-focused coping; but those who struggled, relied on emotion-focused coping and used escape-avoidance behaviours. Multiple regressions indicated that coping had the greatest influence on social workers' psychological and somatic reactions associated with burnout and perceived competence. The results also indicated that demographic characteristics impacted on stress. Older social workers with more job experience were at lower risk for burnout and non-white social workers had lower levels of burnout.

Coping with the effects of suicide and suicidal behaviour has also been found to be important in two studies of social workers. In a sample of 285 mental health social workers who experienced either fatal or nonfatal client suicidal behaviour, Ting, Jacobson, and Sanders (2008) found that increased levels of secondary traumatic stress, the availability of family and friends, group therapy, religion, older age, and male gender were all predictors of positive coping. Over one-third of the sample used some form of negative coping. Furthermore, although clinical supervision and support from family and friends were readily available as sources of support, respondents did not indicate they were the most effective. Instead, peer supervision was less readily available but more frequently reported as effective. Ting et al. (2008) suggest that rather than availability, *quality* of supervision support may be more important.

In regards to family and friend support, the authors suggest that professionals may not want to burden close others with the emotional pain related to their work or are constrained by confidentiality issues. In a sample of 515 social workers, Sanders, Jacobson, and Ting (2008) utilised both qualitative and quantitative data collected from a national study on client suicide. Over half the sample (55%) had experienced at least one client suicide attempt, 31% had

experienced a client suicide completion and 30% had experienced both. Five themes were identified as important to include in professional training programmes, namely (1) coping with the personal and professional reactions that resulted from client suicidal behaviour, (2) the provision of information on suicide assessment, (3) how to debrief after a completed suicide and how to interact with the clients' surviving family members and friends, (4) examination of the power and control that clients have when they are considering suicide and feelings of powerlessness the social worker may experience, and (5) provision of information about treatment and interventions for suicidal clients. Of the themes, learning to cope with suicide was considered the most important.

4.2 Specific resilient qualities found in social workers

By asking social workers to define resilience, researchers have identified a number of resilient qualities specific to social work. In a sample of 73 Michigan social workers, Greifer (2005) used both quantitative and qualitative techniques to identify personal and organisational protective characteristics of resilient social workers. Resilience was defined as job engagement (the opposite of burnout). High social support, perceived fairness and low workload were found to relate to high job engagement. Qualitative findings reveal that resilient workers attributed their job engagement to a number of cognitive and behavioural individual factors and organisational factors such as problem-focused coping, relaxation coping, optimism, conscientiousness, internal locus of control, humour, spirituality, gender, age, maturity, and job-meaning, skill match and job variety.

Using two samples of New Zealand social workers (self-defined resilient practitioners and supervisors of student social workers), Beddoe, Davys, and Adamson (2011) explored social workers' understanding of resilience in the face of workplace demands and stressors. Resilience-maintaining themes included the importance of self-care, strong professional values, exposure to positive role models and realistic professional expectations, maintaining learning and professional identity, awareness of 'the big picture', and the vital role of on-going supervision and holding on to personal and professional goals.

Through qualitative analysis, Graham and Shier (2010) and Shier and Graham (2011a, 2011b) identified personal factors that positively influence levels of subjective wellbeing (SWB), workplace SWB and the impact of mindfulness on SWB in social workers. The sample consisted of 13 (11 female) social work practitioners who had the highest level of SWB from a 2006 Canadian survey. Three themes that influenced their overall SWB (either positively or negatively) were identified, namely (1) personal behaviours (spirituality, establishing routines, participating in activities, and seeking help), (2) interpersonal relationships (the impact of spouses, children, extended family, and friends), and (3) a clear self-identity beyond work (relations to groups, culture, and personal identity). A further three themes that influenced workplace SWB were identified. These were (1) the work environment (physical, cultural and systemic), (2) the types and characteristics of relationships at work (connection with clients, relationships with colleagues and interactions with supervisors), and (3) the nature of the job (workload, type of work, personal fit and meaningfulness of the work; Shier & Graham, 2011b). The participants also confirmed that mindfulness influenced their overall SWB and indicated five aspects of their life where they needed to be mindful (Shier & Graham, 2011a). These were (1) reflecting on and developing a personal identity, (2) considering issues related to control and openness, (3) being internally and externally aware of oneself, (4) reflecting on important moments in one's life, and (5) maintaining work-life balance.

4.3 Summary of coping and resilience in social workers

These results from social work studies suggest that a number of individual and contextual factors impact on social workers' resilience. These include age, gender, work-life balance, personal and professional identity and quality of supervision support. However, what remains uncertain is whether these factors can be changed and resilience in social workers increased. Following a review of the literature, Carson, King, and Papatraianou (2011) suggested that the ability to be resilient is linked to professional values and identity. Collins' research (2007, 2008) highlights the interaction of structural, organisational and individual differences in resilience. He recommends that education and training in resilience, the management of positive emotions and optimism might benefit both students and qualified social workers, enabling them to cope more readily with work-related demands. In addition, the provision of on-going professional development, peer support, sensitive supervision and rest and recreation activities may enhance coping strategies.

5. Psychologists

5.1 Coping

Coping, career-sustaining behaviours and self-care are all strategies psychologists undertake in response to stress. However, while coping can involve both positive and negative strategies, career-sustaining behaviours and self-care generally refer to positive strategies only. Two studies were identified that considered coping in psychologists. In a sample of 580 Latino counselling and clinical psychologists, Maldonado Feliciano (2006) investigated the degree to which coping behaviours, social support, biculturalism (co-existence of two or more distinct cultures) and positive religious coping (prayer, faith, pastoral support) moderate the relationship between occupational stress and depressive affect. The results suggest that, overall, psychologists use more problem-focused coping strategies than emotional-focused coping strategies. Frequently mentioned coping strategies included social support, planning and active problem solving, work support, recreational or disengagement activities, and sports and exercise. The least endorsed coping strategies were acceptance, humour, and personal counselling. When controlling for occupational stress levels, coping behaviours, work and non-work social support, and biculturalism were found to negatively correlate with depressive affect. Biculturalism was found to negatively correlate to occupational stress and depressive affect, and positively correlate to positive religious coping, importance of religion or spirituality, and degree of bicultural work environment, indicating biculturalism may contribute to resilience and merits further investigation.

Hannigan, Edwards, and Burnard (2004) systematically reviewed seven studies that focused on stressors, moderators and stress outcomes in UK psychologists. The review found that almost four out of ten UK clinical psychologists had worrying levels of distress and the results indicated that organisational and professional factors might inhibit psychologists' ability to seek and obtain effective support for stress at work. For example, a fear of ''becoming a client'', or being seen to fail to manage work stressors, may inhibit practitioners' seeking of support.

Coping following client suicide has also been investigated in psychologists. In a sample of 437 counselling and clinical psychologists, Trimble, Jackson, and Harvey (2000) separated participants into three groups: (1) those who had a client commit suicide, (2) those whose clients had attempted but not succeeded in suicide, and (3) those for whom the most serious indicators were ideation or threats or gestures. Of the psychologists who had experienced a

client suicide, 90% reported that they had coped with the situation by talking with colleagues, and nearly a third sought consultation with peers. Other helpful strategies included recognising they were not responsible, accepting suicide as a possible outcome and talking with their supervisor.

Career-sustaining behaviours (CSBs) and sources of satisfaction have recently been investigated in psychologists. In a sample of 286 Illinois psychologists, Stevanovic and Rupert (2004) found that promoting growth in clients, helping others, satisfaction with professional autonomy, intellectual stimulation, and enjoyment of work were the most highly rated sources of satisfaction. Gender differences were observed, with female respondents endorsing more sources of satisfaction. Females also differed from males on three specific sources of satisfaction, namely intellectual stimulation, self-growth and flexible hours. The two top-rated CSBs were spending time with spouse/partner/family and maintaining a balance between professional and personal lives. Females reported using more CSBs and were more likely than males to report using strategies that were relational, including spending time with friends, discussing work frustration with colleagues and participating in personal therapy. In a sample of 190 psychologists from Pennsylvania, Ganey (2005) found that those with high levels of CSBs reported lower levels of burnout and emotional depletion than their low-CSBs peers.

In a survey of 595 American psychologists, Rupert and Kent (2007) found differences in satisfaction between those who worked in the private and those who worked in the public arenas. Private practitioners had higher levels of personal accomplishment, more sources of satisfaction, and fewer sources of stress than those who worked in public settings. Results, however, also indicated that private solo practitioners had less support than either private group practitioners or public respondents and greater over-involvement with clients than public respondents. A gender difference was also observed:, females in public settings experienced higher levels of emotional exhaustion than females in private settings, but this difference was not observed for males. Unlike Stevanovic and Rupert, (2004) who asked only what CSBs the psychologists utilised, Rupert and Kent (2007) also assessed CSBs and their relationship to wellbeing. Those rated as the most important to maintaining the psychologists' wellbeing were both cognitive (maintaining a sense of humour, professional identity/values, and self-awareness/self-monitoring), and behaviourally focused (maintaining a balance between personal and professional lives, spending time with spouse or partner, engaging in hobbies).

Benler (2011) examined the effects of self-care and other contributing factors on rates of secondary traumatic stress among a sample of 175 American psychologists. High stress and more trauma work per week related to more negative symptoms. Furthermore, clinicians who experienced personal trauma were also more likely to report negative symptoms. The self-care results indicated that regardless of trauma exposure psychologists who believed in and used leisure activities had higher job satisfaction and fewer negative symptoms, and psychologists who felt prepared for sessions with clients had fewer negative symptoms. A gender difference was also observed, with females being more likely than males to believe in and engage in self-care activities. Older participants were found to have higher levels of job satisfaction, but were less likely to think supervision was useful.

Using qualitative methods in a sample of 10 American female psychologists, Martin (2010) identified seven themes that may impact on the wellbeing of those in the early stages of their career. These were: (1) challenges associated with the early-career phase, including insecurities about transition from trainee to professional and mixed messages from other professionals regarding the importance of self-care, (2) emotional self-care, including balancing professional

and personal life, reaching out for help when in distress, being supported, maintaining boundaries, and managing intense emotions, (3) physical self-care, including maintaining a physically active lifestyle and obtaining sufficient sleep, (4) self-care through "play," including engaging in activities that foster creativity and travelling , (5) cognitive self-care, including undergoing psychotherapy, consulting with peers, and attending psychology conferences, (6) spiritual self-care, including participation in organised religion, and (7) recommendations to other early-career psychologists, including how to prioritise self-care, seek support from colleagues, and continue to learn.

5.2 Specific resilient qualities found in psychologists

Two reviews were found that related specifically to psychologists' wellbeing. The first focuses on individual practices and the second highlights the role professional culture plays in maintaining wellbeing in the psychology profession. Following a review of stress and self-care practices, Barnett et al. (2007) concluded that a focus on self-care is essential for the prevention of burnout and for maintaining psychological wellness. They recommend that psychologists attend to CSBs (such as balancing personal and professional demands, taking regular breaks and having a balanced and healthy diet) and see them as essential to maintaining a well-functioning professional role.

5.3 Summary of coping and resilience in psychologists

The above studies indicate that psychologists rely on a number of factors to maintain resilience. These include age, gender, work-life balance, recreational activities (exercise, hobbies, vacations), personal and professional values and having a sense of purpose. What is not yet known is how to change these factors so that resilience in psychologists can be strengthened. Barnett and Cooper (2009) discuss self-care and the culture of psychology. They recommend that a culture that aims to emphasise efforts to maintain psychological wellness be created within the profession. To do this they suggest that positive self-care strategies such as personal psychotherapy are emphasised as an important element of on-going self-care. Furthermore, such self-care activities should not be stigmatised, avoided or utilised only when one is unwell. They recommend that staff and experienced professionals act as role models for students and speak openly about their own struggles with maintaining a healthy work-life balance, about their own distress and how they address this distress, and the value of on-going self-care activities in their lives.

6. Counsellors

6.1 Coping

Like the research on psychologists, the research on counsellors has focused on coping career-sustaining behaviours and self-care, with mixed results. In a sample of 414 North Carolina school counsellors, Stephan (2006) found that perceptions of the school environment (climate of support, role conflict, and role ambiguity) predicted emotional exhaustion and depersonalisation. Coping resources (self-efficacy, social support, and behavioural problem-solving) were not, however, found to play a significant role in the relationship between school environment and burnout.

In a sample of 501 American counsellors, Lawson (2007) found that four of the five CSBs endorsed by counsellors were the same as those for psychologists namely, (1) spending time with partner/family, (2) maintaining balance between professional and personal lives, (3) self-

awareness and a sense of control over work responsibilities and (4) maintaining a sense of humour. A number of support strategies highly endorsed by psychologists were strategies counsellors endorsed the least, including clinical supervision and peer support, discussing work frustrations with spouse/partner/family, participating in personal therapy, participating in peer support groups and discussing work frustrations with friends. Surprisingly, the results indicated that counsellors who received more group supervision or more case consultation scored higher on burnout and vicarious traumatisation scales than those who received less. Lawson (2007) hypothesises that these counsellors may be more aware of the stresses from their work and are therefore seeking more support. Counsellors in this sample rated their own levels of wellness as higher than normal but rated the wellness of their colleagues significantly lower. Lawson (2007) suggests that the sample may have consisted of a greater number of 'well' counsellors or that the counsellors surveyed were more likely to see stress, distress, and impairment in others than in themselves.

In a sample of 506 American professional counsellors, Lawson and Myers (2011) found that the participants had higher positive professional quality-of-life factors (compassion satisfaction) and lower negative factors (compassion fatigue and burnout) than the norms. Compared to the results from Stephan (2006), counsellors who engage in more CSBs were found to have higher professional quality of life scores. However, as in Lawson (2007), they reported CSBs that differed to those practised by psychologists (Stevanovic & Rupert, 2004). The top CSBs shared by both counsellors and psychologists were spending time with partner/family, maintaining a sense of humour, maintaining balance between professional and personal lives, and having a sense of professional identity. The top CSBs mentioned by counsellors only were maintaining self-awareness, reflecting on positive experiences, engaging in quiet leisure activities, and trying to maintain objectivity about clients. In comparison, psychologists rated using positive self-talk, taking regular vacations, participating in continuing education programmes, reading literature to keep up to date, turning to spiritual beliefs, and maintaining a sense of control over work responsibilities higher than the counsellors in this sample.

Similar to the findings of Rupert and Kent (2007), counsellors in school or community agency settings scored lower on professional wellness measures than those in private practice. Using qualitative analysis, Evans and Payne (2008) explored support and self-care in a sample of six New Zealand high school counsellors. Six themes were identified, namely (1) self-care on the job (establishing a resilient mind-set for emotional demands, and recognising the 'privilege' of working with young people), (2) collegial support-schools (having someone else to empathise with, keep things in perspective, and wind down at the end of a difficult day), (3) collegial support-supervision, (4) the home-work interface (leaving the identity of 'counsellor' at the school gate and the positive contribution of professional training and experience on personal issues), (5) the influence of home on work life (the contribution of support from family and bringing personal lives into sessions to facilitate 'connections' with students), and (6) holistic self-care (maintaining balance and having a holistic regime that would both enrich personal lives and keep them prepared for school demands). Gender differences were observed, with males speaking only minimally about holistic self-care.

The results indicate that counsellors, like psychologists, engage in a wide range of behaviours that influence their wellbeing. What remains unknown from this research is the individual and contextual characteristics that enable counsellors to effectively engage in these behaviours.

6.2 Specific resilient qualities found in counsellors

Two studies were identified that aimed to ascertain the characteristic associated with resilience in counsellors. This characteristic was self-compassion. This construct is relatively new to western thinking and involves the ability to understand one's own suffering, experience feelings of caring, kindness non-judgment toward oneself, and recognise that struggles and triumphs are part of normal human experiences (Neff, 2003). In a sample of 164 counsellors in America, Ringenbach (2009) found that when controlling for burnout, self-compassion was significantly, negatively, associated with compassion fatigue and, when controlling for compassion fatigue, self-compassion had a significant, positive, relationship with compassion satisfaction and a significant, negative, relationship with burnout. Furthermore, those who reported practising on-going meditation had statistically higher scores of compassion satisfaction.

Patsiopoulos and Buchanan (2011) used qualitative analysis to investigate how 15 Canadian counsellors practise self-compassion. Three main themes were identified namely, (1) counsellors' stance in a session, including acceptance, not knowing, attending compassionately to inner dialogue, mindfulness of present experience, and being genuine, (2) workplace relational ways of being, such as participating on a compassionate and caring work team, and speaking the truth to self and others, and (3) finding a balance through self-care strategies. Participants also reported a number of benefits in relation to the practice of self-compassion, including an improved overall sense of wellbeing, job satisfaction, creativity, balance, openness, 'groundedness' and a deepened existential and/or spiritual sense of connectedness. Additionally, self-compassion was reported to positively impact on the participant's ability to work effectively with clients by helping them lower unrealistic self-expectations, develop more effective boundaries, find balance between client needs and counsellor need, self-correct when necessary and engage in more proactive, preventative self-care.

6.3 Summary of coping and resilience in counsellors

These results suggest that self-compassion may play a part in enhancing wellbeing in counsellors. They further suggest that the construct, whilst individual, may also impact on contextual factors such as perceptions of and involvement in teams and ability to work effectively and maintain boundaries with clients. Several reviews highlight the importance of individual and contextual factors in maintaining wellbeing. Cummins, Massey, and Jones (2007) found that in addition to personal factors, a supportive work environment that encourages regular self-care activities and offers manageable caseloads of clients dealing with trauma is critical in promoting wellness. Furthermore, Young and Lambie (2007) suggest organisations have a responsibility to maintain counsellor wellness and they make two recommendations. Organisations should promote healthy lifestyles by strategies such as subsidising gym memberships, paying for health risk assessments, improving food at work, allowing employees to take exercise breaks, and utilising time in group supervision to discuss stress management. They also suggest that organisations should directly reduce job stress through strategies such as reducing paperwork, allowing committees to deal with policy issues within financial parameters, to increase the counsellors' sense of control and to improve interpersonal relationships and teamwork.

7. Doctors

Of the health disciplines found, studies of medical practitioners were the least available.

7.1 Coping

Four studies were identified that investigated coping and wellness-promotion strategies among doctors. In a sample of 188 UK hospital doctors, Moores, Castle, Shaw, Stockton, and Bennett (2007) investigated the reactions experienced and coping strategies employed following a recent memorable patient death. Sadness was reported in moderate to severe intensity by 43% of doctors and between 5% and 17% of doctors also reported fatigue, problems in sleeping, changes in appetite, anger and relief. No gender differences were observed except that female doctors were more likely to have cried. The results indicated that 83% of respondents coped by talking with others, having time alone and socialising. Least-endorsed strategies were exercise and finding comfort in religious beliefs.

Fothergill, Edwards, and Burnard (2004) conducted a systematic review of 23 international studies on stress and stress management within the profession of psychiatry. They found that psychiatrists report high levels of personal and professional stressors. In particular, patient suicide was found to be a significant source of personal stress and an occupational hazard. Despite the high levels of distress reported, psychiatrists were found to have high levels of job satisfaction. Being valued, variety of tasks and having support in their role all contributed to high job satisfaction. Coping strategies that psychiatrists used include relaxation training, organisational problem solving, staff support groups, confidential counselling and staff sensitivity sessions.

Through a qualitative online survey of 30 American physicians practising hospice and palliative medicine, Swetz, Harrington, Matsuyama, Shanafelt, and Lyckholm (2009) found exercise and physical wellbeing, nurturing professional relationships, discussing feelings and valuing relationships with others to be the most common wellness-promoting strategies reported. Several of the commonly reported strategies included coping within and improving the work environment; namely, ensuring clinical variety, making time within the day for oneself and engaging in meditation, personal reflection and reflection with others.

In a sample of 161 Canadian physicians, Bergman, Ahmad, and Stewart (2003) found that females utilised different strategies than those favoured by males. Female physicians reported more social support when stressed than males did. Less-satisfied stressed female physicians had less support from work colleagues while less-satisfied stressed males reported less support from family or friends. Furthermore, the results indicated that, for females, 70% of the variance in physical symptoms was explained by workload and support from work colleagues; whereas, for males, healthy life style, mental health, support from work colleagues and workload were significant predictors, and explained 42% of the variance.

7.2 Specific resilient qualities found in doctors

Only one study was found that aimed to identify resilient qualities in doctors. Through qualitative and quantitative analysis, Wallace and Lemaire (2007) identify positive and negative factors associated with physician wellbeing in Canada. The authors first interviewed a sample of physicians to identify key factors. Based on the themes raised by interview participants the authors designed a questionnaire and surveyed 182 physicians and residents. The results indicated that the strongest relationship to high physician wellbeing was positive patient interactions, which buffered the negative relationship between high emotional demands and wellbeing. Support from co-workers and spouse, feeling one has a positive influence through one's work and not feeling overwhelmed by one's work were also positively related to wellbeing. The results indicate that individual and contextual characteristics may influence a doctor's ability to maintain wellbeing in the face of stress. However, further research into this

area is required. Moreover, as no intervention studies were identified it remains unknown as to whether these characteristics can be increased in doctors.

Shapiro, Astin, Shapiro, Robitshek, and Shapiro (2011) present an individualistic model for identifying strategies physicians employ to gain and regain a sense of control when caring for patients. The model had four modes of control. Positive assertive and positive yielding represent the positive modes of control, while negative assertive and negative yielding represent the negative modes of control. Shapiro et al. (2011) suggest that interventions that aim to increase self-awareness and reflective capacity and being mindful of emotion regulation might enable physicians to cope better with loss of control. Through self-awareness, physicians might learn to recognise their responses; and they might learn to interrupt negative behaviours and reactions through mindfulness emotion regulation. They might then recognise situations where they are attempting to regain a sense of control and, instead, engage in more positive responses, such as assertion and letting go. This model does not consider the impact of organisational factors on the physician's ability to cope with low control. Chittenden and Ritchie (2011), however, include both individual and contextual factors in recommendations for improving physician work-life balance and subsequent wellbeing. They suggest that to achieve work-life balance physicians should maximise job-fit by finding work that is flexible, consciously slow down, cultivate mindfulness, make personal and professional values and goals explicit, take care of physical, emotional, and spiritual needs, learn to ask for and accept help, and identify sources of emotional and practical support.

7.3 Summary of coping and resilience in doctors

As with research from other health disciplines, the research on doctors' coping is limited. However, the results indicate that doctors engage in a range of individual and relational coping strategies when faced with stress. Coping in response to client/patient death has been investigated in social workers, psychologists, physicians and psychiatrists, suggesting that this is an area of significant stress and warrants further investigation. The results of studies investigating resilience among doctors suggest that individual and contextual factors may influence wellbeing in the face of stress. Given that no intervention studies were identified it is not clear whether resilience can be increased in doctors.

8. Combinations of health disciplines

Very little research has been conducted on more than one health discipline and no research was identified that combined all the health disciplines considered in this review.

8.1 Coping

Two studies were identified that investigated coping in response to work-related stress in more than one health profession. While the results of the following studies demonstrate differences in coping between professions, a number of similarities are also found. In a sample of 168 social workers and 155 nurses, Gellis (2002) found differences between nurses and social workers on perceived job stress, job satisfaction and coping methods. Nurses who relied mainly on avoidance strategies reported higher job stress than social workers. In comparison, social workers reported greater use of positive coping strategies compared to nurses. However, for both nurses and social workers high problem-reappraisal coping contributed to higher levels of job satisfaction.

A qualitative study by Courvoisier, Agoritsas, Perneger, Schmidt, and Cullati (2011) aimed to explore feelings and coping strategies associated with regretted clinical decisions or interventions of 12 hospital-based physicians and 13 nurses. All participants reported at least one intense regret that led to feelings of guilt, anger, sadness, shame, helplessness, and a feeling of unfairness/injustice and occasionally to sleep problems, or sickness leave. Furthermore, an accumulation of small and large regrets occasionally resulted in quitting one's unit or moving to another specialty. Several ways of coping with regrets were reported by both physicians and nurses. These included (1) cognitive strategies (rumination, suppression, acceptance, and self-attacking), (2) action-oriented strategies (trying to take responsibility, becoming more vigilant and repeating check-up procedures more often, and creating guidelines to avoid similar future incidents), and (3) social strategies (from colleagues or relatives). Differences were found between physicians' and nurses' use of colleague social support. Due to a fear of losing credibility, physicians seemed to avoid sharing regrets with colleagues in their ward or service and instead turned to colleagues from other services. In contrast, nurses sought support from colleagues in the same service as themselves.

8.2 Resilience and hardiness

Ben-Zur and Michael (2007) compared hardiness, coping strategies, social resources, and burnout between 249 social workers, psychologists and nurses. Results showed no differences between the three professions on all psychological measures, except depersonalisation, which was significantly lower for psychologists than for nurses or social workers. As in the research on hardiness in nurses (Garrosa et al., 2010), these results indicated that challenge and control appraisals (not commitment) were negatively related with exhaustion, depersonalisation and emotion-focused coping and positively associated with accomplishment. Importantly, these associations remained when other variables were taken into account. Further analysis indicated that emotion-focused coping may moderate the association between challenge and control appraisals and depersonalisation; indicating that a combination of low maladaptive emotion-focused coping and high challenge/control appraisals is related to reduced depersonalisation for social workers, psychologists and nurses. This study indicates that there are strong similarities in resilience between the social work, psychology and nursing professions. It also suggests possible resilient pathways that involve challenge and control appraisals, emotional-coping and social resources. Furthermore, the results suggested that challenge and control appraisals were more effective at reducing the negative outcomes of stress than was problem-focused coping.

The only article that addressed recommendations to increase resilience in health professionals was a review of the resilience literature by McAllister and McKinnon (2009). They confirm that resilience in the health professions involves a combination of individual and contextual factors. They make three recommendations for building resilience in health professionals: (1) that the concept of resilience is introduced in all training programmes (including education on ways to strengthen one's own resilience, such as building a positive identity and increasing social support, coping skills and spiritual connection), (2) practitioners are given opportunities to reflect and learn from experience and other practitioners (exposure to role models who can share their experiences of being resilient and thriving in health workplaces), and (3) experienced health professionals demonstrate altruism, set good examples and share lessons from experiences, mentoring, leading, coaching and motivating others, so that a generative heath professional culture is developed.

9. Summary of the literature on resilience in health disciplines

The results of this literature are illustrated in the tables below. Tables 1 and 2 (below) indicate that only gender (more specifically, being female) and maintaining a work-life balance have been found to consistently relate to resilience across all *five* of the disciplines.

There were a further four factors that related to resilience in *four* of the five disciplines. These were: laughter/humour (which was inconsistent for psychologists and has not been investigated in doctors), self-reflection/insight (but this has not been investigated in social workers), beliefs/spirituality (which was inconsistent for psychologists and has not been investigated in counsellors), and professional identity (but this has not been investigated in doctors). Differences have been found between psychologists and counsellors and between doctors and nurses However, due to different factors being measured between studies, conclusive differences cannot yet be identified.

In addition, a large number of individual and contextual factors have been investigated in only one discipline. These have been presented in Tables 3 and 4 (below).

10. Questions arising from the literature review

This review highlights a number of questions about resilience in the health profession. Firstly the inconsistencies found between the studies regarding how they define and measure resilience has resulted in difficulty comparing health disciplines. Furthermore, it is difficult to generalise the results to speech-language therapists, audiologists and optometrists given that no articles were found that relate to these disciplines.

Further questions include: do cultural factors influence resilience in health professionals? Do factors such as self-compassion differ between professions? What types of relationships enable support to be accessed and used effectively? How can we match individuals with clinical supervisors so that a quality resilience-fostering relationship can be developed? Are there differences in the quality of professional relationships between disciplines? What types of environments and groups nurture resilience? How does indoctrination into, and the culture of, a chosen health profession influence an individual's ability to deal with stress and adversity? Before further research is conducted it is necessary to develop a clear definition of resilience within the health profession. The results of this review suggest that resilience involves the interactions of individual and contextual factors. These individual factors include demographic characteristics (age, gender, experience), personal characteristics (having a work-life balance, laughter, relaxation) and professional characteristics (continuing education, professional identity), and the contextual factors include partner or family support, clinical supervision and culture of the discipline. It is this interaction that enables the maintenance of personal and professional wellbeing in the face of on-going work stress and adversity. Future research would benefit from the development of a measure that captures all of these elements and processes of resilience. This would enable the identification of resilience in the health profession and foster the development of effective interventions.

Table 1: Factors within an individual that relate to resilience (identified for each discipline)

	Factors	Nurses	Social workers	Psychologists	Counsellors	Doctors
Demographic	Age	**X**	X	X	-	-
	Gender	X	**X**	**X**	X	X
	Experience	X	X	-	-	-
	Income	X	-	X	-	-
Behavioural (Personal)	Quiet leisure activities	X	-	O	X	-
	Laughter/Humour	X	X	±	X	-
	Work-life balance	**X**	X	**X**	**X**	X
	Relaxation	-	X	-	-	X
	Meditation	O	-	-	X	X
	Exercise	-	±	X	-	X
	Vacations	-	-	X	O	-
	Help seeking	-	X	X	-	X
Behavioural (Professional)	Continuing education	-	X	X	O	-
	Keeping up with literature	-	-	X	O	-
	Problem/Active coping	±	±	±	-	-
Cognitive (Personal)	Personal-identity	-	X	-	X	-
	Self-awareness	-	-	X	X	-
	Self-reflection/insight	X	-	X	X	X
	Self-efficacy	X	-	-	O	-
	Mindfulness	-	X	-	-	X
	Positive self-talk/attitude	X	-	X	O	-
	Positive reflection	-	-	O	X	-
	Hope/Optimism	X	X	-	-	-
	Beliefs/Spirituality	X	X	±	O	X
Cognitive (Professional)	Professional Identity	X	X	X	X	-
	Professional values	-	X	-	-	X
	Objectivity	-	-	O	X	-
	Commitment	±	O	O	X	-
	Challenge	±	X	X	-	-
	Control	X	X	X	O	-

X = support that this factor relates to resilience;
X = strong support that this factor relates to resilience;
± = contradicting findings regarding this factor's relationship to resilience;
X = has been recommended;
O = not highly endorsed/lack of evidence;
- = has not been researched/mentioned

Table 2: Contextual factors that relate to resilience (identified for each discipline)

	Factors	Nurses	Social workers	Psychologists	Counsellors	Doctors
Relational (Personal)	Partner support	X	-	-	±	X
	Family support	X	X	X	±	-
	Friend support	X	X	X	O	-
	Therapy/Counselling	-	-	±	O	X
Relational (Professional)	Validation/valued	X	-	-	-	X
	Colleague support	X	X	X	O	X
	Mentors/role models	X	X	X	-	-
	Client connection	-	X	X	-	X
	Client	-	X	X		X
	severity/suicidality	X	-	X	-	X
	Making a difference	**X**	X	X	O	-
	Clinical supervision	-	X	X	±	-
	Peer supervision					
Environmental	Low workload	-	**X**	-	X	-
	Job variety	-	X	-	-	X
	Skill match	-	X	-	-	X
	Private practice	-	-	**X**	X	-
	Culture	X	X	X	-	-

X = support for this factor has been found;
X = strong support that the factor relates to resilience;
± = contradicting findings regarding the factors relationship to resilience;
X = has been recommended;
O = not highly endorsed/lack of evidence;
- = has not been researched/mentioned

Table 3: Contextual Factors relating to resilience investigated in only one discipline

Factors	Discipline
Team support	Nurses
Organisational support	Nurses
Debriefing	Nurses
Perceived fairness	Social Workers
Job meaning	Social Workers
Work setting/layout	Social Workers
Helping others	Psychologists
Promoting growth in clients	Psychologists
Biculturalism	Psychologists
Intellectual stimulation	Psychologists
Recognising the privilege of the work	Counsellors
Using personal disclosure with clients	Counsellors
Organisational problem solving	Doctors

Table 4: Individual Factors relating to resilience investigated in only one discipline

Factors	Discipline
Competence	Nurses
Positive reappraisal	Nurses
Creativity	Nurses
Empowerment	Nurses
Interpretive styles	Nurses
Sense of accomplishment	Nurses
Ethnicity	Social Workers
Routine	Social Workers
Conscientiousness	Social Workers
Positive emotions	Social Workers
Realistic expectations	Social Workers
Recreational activities	Psychologists
Hobbies	Psychologists
Preparing for sessions	Psychologists
Personal values	Psychologists
Self-growth	Psychologists
Autonomy	Psychologists
Sense of purpose	Psychologists
Self-compassion	Counsellors
Time alone	Doctors
Assertiveness	Doctors
Letting go of need for control	Doctors

Authors

Clare M. McCann
University of Auckland
c.mccann@auckland.ac.nz

Elizabeth Beddoe
University of Auckland

Katie McCormick
University of Auckland

Peter Huggard
University of Auckland

Sally Kedge
University of Auckland

Carole Adamson
University of Auckland

Jayne Huggard
Mercy Hospice Auckland

Publishing Timeline

Received 30 July 2012
Accepted 26 August 2012
Published 7 March 2013

References

Ablett, J. R. & Jones, R. S. P. (2007). Resilience and well-being in palliative care staff: A qualitative study of hospice nurses' experience of work. *Psycho-Oncology, 16*, 733-740. http://dx.doi.org/10.1002%2Fpon.1130

Acker, G. M. (2010). How social workers cope with managed care. *Administration in Social Work, 34*(5), 405-422. http://dx.doi.org/10.1080/03643107.2010.518125

Barnett, J. E., Baker, E. K., Elman, N. S., & Schoener, G. R. (2007). In pursuit of wellness: The self-care imperative. *Professional Psychology: Research and Practice, 38*(6), 603-612. http://dx.doi.org/10.1037/0735-7028.38.6.603

Barnett, J. E. & Cooper, N. (2009). Creating a culture of self-care. *Clinical Psychology: Science and Practice, 16*(1), 16-20. http://dx.doi.org/10.1111/j.1468-2850.2009.01138.x

Beddoe, L., Davys, A., & Adamson, C. (2011). Educating resilient practitioners. *Social Work Education*, 1-18. http://dx.doi.org/10.1080/02615479.2011.644532

Ben-Zur, H. & Michael, K. (2007). Burnout, social support, and coping at work among social workers, psychologists, and nurses: The role of challenge/control appraisals. *Social Work in Health Care, 45*(4), 63-82. http://dx.doi.org/10.1300/J010v45n04_04

Benler, C. M. (2011). Psychologists' rates of secondary traumatic stress: An examination of the impact of self-care and professional and personal variables. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 71*(12-B), 7716.

Bergman, B., Ahmad, F., & Stewart, D. (2003). Physician health, stress and gender at a university hospital. *Journal of Psychosomatic Research, 54*(2), 171-178. http://dx.doi.org/10.1016/S0022-3999(02)00484-1

Cameron, F. & Brownie, S. (2010). Enhancing resilience in registered aged care nurses. *Australasian Journal on Ageing, 29*(2), 66-71. http://dx.doi.org/10.1111/j.1741-6612.2009.00416.x

Carson, E., King, S., & Papatraianou, L. H. (2011). Resilience among social workers: The role of informal learning in the workplace. *Practice: Social Work in Action, 23*(5), 267-278.

Chang, E. M., Bidewell, J. W., Huntington, A. D., Daly, J., Johnson, A., Wilson, H., … Lambert, C. E. (2007). A survey of role stress, coping and health in Australian and New Zealand hospital nurses. *International Journal of Nursing Studies, 44*(8), 1354-1362. http://dx.doi.org/10.1016/j.ijnurstu.2006.06.003

Chittenden, E. H. & Ritchie, C. S. (2011). Work-life balancing: Challenges and strategies. *Journal of Palliative Medicine, 14*(7), 870-874. http://dx.doi.org/10.1089/jpm.2011.0095

Collins, S. (2007). Social workers, resilience, positive emotions and optimism. *Practice: Social Work in Action, 19*(4), 255-269.

Collins, S. (2008). Statutory social workers: Stress, job satisfaction, coping, social support and individual differences. *British Journal of Social Work, 38*(6), 1173-1193. http://dx.doi.org/10.1093/bjsw/bcm047

Courvoisier, D. S., Agoritsas, T., Perneger, T. V., Schmidt, R. E., & Cullati, S. (2011). Regrets associated with providing healthcare: Qualitative study of experiences of hospital-based physicians and nurses. *PLoS ONE, 6*(8). http://dx.doi.org/10.1371/journal.pone.0023138

Cummins, P.N., Massey, L., & Jones, A. (2007). Keeping ourselves well: Strategies for promoting and maintaining counselor wellness. *Journal of Humanistic Counseling, Education and Development, 46*, 35-49. http://dx.doi.org/10.1002/j.2161-1939.2007.tb00024.x

Evans, Y. A. & Payne, M. A. (2008). Support and self-care: Professional reflections of six New Zealand high school counsellors. *British Journal of Guidance & Counselling, 36*(3), 317-330. http://dx.doi.org/10.1080/03069880701729466

Fothergill, A., Edwards, D., & Burnard, P. (2004). Stress, burnout, coping and stress management in psychiatrists: Findings from a systematic review. *International Journal of Social Psychiatry, 50*(1), 54-65. http://dx.doi.org/10.1177/0020764004040953

Ganey, K. R. (2005). Resilience and emotional depletion as predictors of dyadic satisfaction of psychologists in Pennsylvania. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 65*(12-B), 6650.

Garrosa, E., Rainho, C., Moreno-Jimenez, B., & Monteiro, M. J. (2010). The relationship between job stressors, hardy personality, coping resources and burnout in a sample of nurses: A correlational study at two time points. *International Journal of Nursing Studies, 47*(2), 205-215. http://dx.doi.org/10.1016/j.ijnurstu.2009.05.014

Gellis, Z. D. (2002). Coping with occupational stress in healthcare: A comparison of social workers and nurses. *Administration in Social Work, 26*(3), 37-52. http://dx.doi.org/10.1300/J147v26n03_03

Gillespie, B. M., Chaboyer, W., & Wallis, M. (2009). The influence of personal characteristics on the resilience of operating room nurses: A predictor study. *International Journal of Nursing Studies, 46*(7), 968-976. http://dx.doi.org/10.1016/j.ijnurstu.2007.08.006

Gillespie, B. M., Chaboyer, W., Wallis, M., & Grimbeek, P. (2007). Resilience in the operating room: Developing and testing of a resilience model. *Journal of Advanced Nursing, 59*(4), 427-438. http://dx.doi.org/10.1111/j.1365-2648.2007.04340.x

Graham, J. R. & Shier, M. L. (2010). Social work practitioners and subjective well-being: Personal factors that contribute to high levels of subjective well-being. *International Social Work, 53*(6), 757-772. http://dx.doi.org/10.1177/0020872810368394

Greifer, A. N. (2005). Occupational resilience: Protective factors among clinical social workers. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 65*(12-A), 4721.

Hannigan, B., Edwards, D., & Burnard, P. (2004). Stress and stress management in clinical psychology: Findings from a systematic review. *Journal of Mental Health, 13*(3), 235-245. http://dx.doi.org/10.1080/09638230410001700871

Harrisson, M., Loiselle, C. G., Duquette, A., & Semenic, S. E. (2002). Hardiness, work support and psychological distress among nursing assistants and registered nurses in Quebec. *Journal of Advanced Nursing, 38*(6), 584-591. http://dx.doi.org/10.1046/j.1365-2648.2002.02225.x

Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing, 60*(1), 1-9. http://dx.doi.org/10.1111/j.1365-2648.2007.04412.x

Judkins, S. & Rind, R. (2005). Hardiness, job satisfaction, and stress among home health nurses. *Home Health Care Management & Practice, 17*(2), 113-118. http://dx.doi.org/10.1177/1084822304270020

Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology 42*(1), 168–177. http://dx.doi.org/10.1037/0022-3514.42.1.168

Lambert, V. A., Lambert, C. E., Itano, J., Inouye, J., Kim, S., Kuniviktikul, W., … Ito, M. (2004). Cross-cultural comparison of workplace stressors, ways of coping and demographic characteristics as predictors of physical and mental health among hospital nurses in Japan, Thailand, South Korea and the USA (Hawaii). *International Journal of Nursing Studies, 41*(6), 671-684. http://dx.doi.org/10.1016/j.ijnurstu.2004.02.003

Lararus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

Larrabee, J. H., Wu, Y., Persily, C. A., Simoni, P. S., Johnston, P. A., Marcischak, T. L., … Gladden, S. D. (2010). Influence of stress resiliency on RN job satisfaction and intent to stay. *Western Journal of Nursing Research, 32*(1), 81-102. http://dx.doi.org/10.1177/0193945909343293

Lawson, G. (2007). Counselor wellness and impariment: A national survey. *Journal of Humanistic Counseling, Education and Development, 46*, 20-34. http://dx.doi.org/10.1002/j.2161-1939.2007.tb00023.x

Lawson, G. & Myers, J. E. (2011). Wellness, professional quality of life, and career-sustaining behaviors: What keeps us well? *Journal of Counseling & Development, 89*(2), 163-171. http://dx.doi.org/10.1002/j.1556-6678.2011.tb00074.x

Lim, J., Hepworth, J., & Bogossian, F. (2011). A qualitative analysis of stress, uplifts and coping in the personal and professional lives of Singaporean nurses. *Journal of Advanced Nursing, 67*(5), 1022-1033. http://dx.doi.org/10.1111/j.1365-2648.2010.05572.x

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development 71*(3), 543–562. http://dx.doi.org/10.1111/1467-8624.00164

Maldonado Feliciano, L. E. (2006). Coping, social support, biculturalism, and religious coping as moderators of the relationship between occupational stress and depressive affect among Hispanic psychologists. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 66*(8-B), 4490.

Martin, A. H. (2010). An exploratory study of self-care and wellness in early career female psychologists. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 70*(11-B), 7234.

McAllister, M. & McKinnon, J. (2009). The importance of teaching and learning resilience in the health disciplines: A critical review of the literature. *Nurse Education Today, 29*, 371-379. http://dx.doi.org/10.1016/j.nedt.2008.10.011

Moores, T. S., Castle, K. L., Shaw, K. L., Stockton, M. R., & Bennett, M. I. (2007). 'Memorable patient deaths': Reactions of hospital doctors and their need for support. *Medical Education, 41*(10), 942-946. http://dx.doi.org/10.1111/j.1365-2923.2007.02836.x

Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223-250. http://dx.doi.org/10.1080/15298860309027

Patsiopoulos, A. T., & Buchanan, M. J. (2011). The practice of self-compassion in counseling: A narrative inquiry. *Professional Psychology: Research and Practice, 42*(4), 301-307. http://dx.doi.org/10.1037/a0024482

Ringenbach, R. (2009). A comparison between counselors who practice meditation and those who do not on compassion fatigue, compassion satisfaction, burnout and self-compassion. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 70*(6-B), 3820.

Rupert, P. A. & Kent, J. S. (2007). Gender and work setting differences in career-sustaining behaviors and burnout among professional psychologists. *Professional Psychology: Research and Practice, 38*(1), 88-96.

Sanders, S., Jacobson, J. M., & Ting, L. (2008). Preparing for the inevitable: Training social workers to cope with client suicide. *Journal of Teaching in Social Work, 26*(1-2), 1-18. http://dx.doi.org/10.1080/08841230802178821

Shapiro, J., Astin, J., Shapiro, S. L., Robitshek, D., & Shapiro, D. H. (2011). Coping with loss of control in the practice of medicine. *Families, Systems, & Health, 29*(1), 15-28. http://dx.doi.org/10.1037/a0022921

Shier, M. L. & Graham, J. R. (2011a). Mindfulness, subjective well-being, and social work: Insight into their interconnection from social work practitioners. *Social Work Education, 30*(1), 29-44. http://dx.doi.org/10.1080/02615471003763188

Shier, M. L. & Graham, J. R. (2011b). Work-related factors that impact social work practitioners' subjective well-being: Well-being in the workplace. *Journal of Social Work, 11*(4), 402-421. http://dx.doi.org/10.1177/1468017310380486

Stamm, B. H. (2010). The concise ProQOL manual. *Pocatello, ID: ProQOL.org, 2nd Ed*.

Stephan, J. B. (2006). School environment and coping resources: A predictive model of school counselor burnout. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 66*(8-A), 2846.

Stevanovic, P. & Rupert, P. A. (2004). Career-sustaining behaviors, satisfactions, and stresses of professional psychologists. *Psychotherapy: Theory, Research, Practice, Training, 41*(3), 301-309. http://dx.doi.org/10.1037/0033-3204.41.3.301

Swetz, K. M., Harrington, S. E., Matsuyama, R. K., Shanafelt, T. D., & Lyckholm, L. J. (2009). Strategies for avoiding burnout in hospice and palliative medicine: Peer advice for physicians on achieving longevity and fulfillment. *Journal of Palliative Medicine, 12*(9), 773-777. http://dx.doi.org/10.1089/jpm.2009.0050

Ting, L., Jacobson, J. M., & Sanders, S. (2008). Available supports and coping behaviors of mental health social workers following fatal and nonfatal client suicidal behavior. *Social Work, 53*(3), 211-221. http://dx.doi.org/10.1093/sw/53.3.211

Trimble, L., Jackson, K., & Harvey, D. (2000). Client suicidal behaviour: Impact, interventions, and implications for psychologists. *Australian Psychologist, 35*(3), 227-232. http://dx.doi.org/10.1080/00050060008257483

Wallace, J. E., & Lemaire, J. (2007). On physician well being--You'll get by with a little help from your friends. *Social Science & Medicine, 64*(12), 2565-2577. http://dx.doi.org/10.1016/j.socscimed.2007.03.016

Young, M. E. & Lambie, G. W. (2007). Wellness in school and mental health systems: Organizational influences. *Journal of Humanistic Counseling, Education and Development, 46*, 98-113. http://dx.doi.org/10.1002/j.2161-1939.2007.tb00028.x

Zander, M., Hutton, A., & King, L. (2010). Coping and resilience factors in pediatric oncology nurses. *Journal of Pediatric Oncology Nursing, 27*(2), 94-108. http://dx.doi.org/10.1177/1043454209350154