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Chapter 21

STRESS AND STRESS RESILIENCE, EMOTIONAL INTELLIGENCE, AND PERFECTIONISM IN AN AUSTRALIAN WORKPLACE SAMPLE

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ABSTRACT

As part of the ongoing psychological and sociological investigation with respect to wellbeing in the workplace and stress management, exploring the combination of the variables of resilience, emotional intelligence and perfectionism adds a different perspective to our understanding of wellbeing on the job. Clarifying predictors of occupational stress and identifying correlates of resilience to stress are instrumental as bases for increasing personal and organizational well-being and reducing costs. This study surveyed 80 employees in an Australian workforce sample via convenience and snowball sampling, using the Occupational Stress Inventory Revised, the Frost Multidimensional Perfectionism Scale, The Emotional Intelligence Questionnaire, and the Stress Resilience scale from the Apollo Profile. Results showed that lower scores on the Emotional Intelligence (EI) trait independently accounted for 11% of perceived stress in Occupational Role and 10% in Personal Resources.

Keywords: Occupational Stress, Neuroticism, Perfectionism, Emotional Intelligence, Resilience

INTRODUCTION

Why is the study of stress at work, and how to manage it, of importance and why should we be studying the area? Research by Ongori and Agolla (2008) indicated that people who are stressed fail to perform to their highest levels, and that good performers in organisations tend to terminate their employment, if they experience continuous, or perceived unreasonable,

levels of occupational stress. Further, the cost of occupational stress has been reported from the International Labour Organisation as being up to 10% of Gross National Production (ILO; as cited in Ongori and Agolla, 2008). It seems important, therefore, to identify predictors of occupational stress, in order to have a base from which to help improve employee welfare, performance, and retention of valued staff. Once predictors are identified, effective interventions can target key areas of improvement in the organisation including occupational roles, stressors, and support programs.

As Lambert and Hogan (2009) have also identified, occupational stress is a key contributor to employee absenteeism, mental health problems, lower productivity and turnover, and is costly in termination payouts, subsequent recruitment processes and training of new employees. Personality attributes that contribute to resilience or its reverse, disenchantment in the workplace, have focused on the “five factor” or “Big Five” model of personality (Costa and McCrae, 1992; Digman, 1990; McCrae, 2005) which sets out the five factors as conscientiousness, neuroticism, extraversion, openness to experience and agreeableness; it is important then that we consider the significance of these personality factors in many occupations. The research has shown that people are most satisfied at work (and therefore less stressed) when their personalities and the workplace match (Holland, 1992; Tokar, Fisher, and Subich, 1998) and they perform better (Barrick and Mount, 1991; Tokar, et al., 1998).

A review of recent research is available in Judge, Heller, and Mount, 2008. However, high scorers on Neuroticism, one of the Big Five, have been identified as likely to over-react to stress, in comparison with most people (Mroczek and Almeida, 2004) and therefore to compromise their performance. High scorers on Conscientiousness (being dependable and hardworking) and Extraversion (being sociable and active) have been among the most successful performers in the workplace (Barrick and Mount, 1991; Judge, et al., 2008). Probably mental health (including low neuroticism) is one of the most important factors in the workplace, as it is in personal life. Colling and Hicks (2007) identified relationships between health and well-being and the Big Five in their research, highlighting more than 20 personality attributes and mental health variables. Among the variables that differentiated between those who scored high and low on general mental health were resilience, extraversion, openness/innovativeness, and achievement orientation.

However, recent research has added to the studies of personality and stress in the workplace, placing a focus on relationships between ‘new’ attributes, such as perfectionism and emotional intelligence, and stress (Christopoulos and Hicks, 2008; Jackson and Hicks, 2008; Petrides and Furnham, 2006; Slaney, Pincus, Uliaszek, and Wang, 2006; Zeidner, Matthews, and Roberts, 2009). The ability to adapt under stress (stress resilience) seems pivotal in creating positive changes and improved performance in the workplace. However, there have been few studies examining these variables (stress resilience, perfectionism, and emotional intelligence) along with personality variables, with regard to how people handle or experience stress at work.

This current study examined these relationships, including how occupational stress was related to resilience, perfectionism and emotional intelligence. The aim was to identify which of these factors were predictors of occupational stress and personal strain, and how these were linked to personal coping resources.

Neuroticism, or non-resilience and non-adaptability, not being ‘Stress Resilient’ or demonstrating high levels of mental adjustment, is a strong predictor of experienced stress

both in personal life (Shafran and Mansell, 2000) and in the workplace (Judge, Heller, and Mount, 2008). Stress Resilience negatively correlated with Neuroticism in studies conducted by Smith (2005) and reported by Smith and Hicks (2007). These authors compared the Apollo Profile scales (including Stress Resilience) and the Costa and McCrae (1992) questionnaire measuring the 'Big Five' - the NEO-PI-R (including Neuroticism). The studies completed full comparisons of all Apollo Profile and all NEO-PI-R variables (Smith, 2005). Stress Resilience is considered a coping mechanism effective in modifying behaviour in the workplace (the Apollo Profile, Apollonean Institute, 2008). Neuroticism has a negative nature and results in people being quick to perceive possible threats in personal and work circumstances, and requires duties and responsibilities to be clear and structured to reduce threat - as a variety of procedures or flexible unclear arrangements may raise anxiety and affect performance (Costa and McCrae, 1992).

In addition to Neuroticism and Stress Resilience, perfectionism has also been identified as a predictor of stress (Christopoulos and Hicks, 2008; Mead and Hicks, 2010; Rice, Ashby, and Slaney, 2007). This factor of perfectionism was also studied in the currently reported project. Perfectionism has been defined as a trait that involves high personal standards and achievement with a focus on personal integrity (Dunn, Whelton, and Sharpe, 2006). Perfectionism has been correlated with personality pathology with the goal of achieving perfection in personal presentation, the expectations of others, as well as the need to conceal personal imperfections from others (Jackson and Hicks, 2008; Sherry, Hewitt, Flett, Lee-Baggley, and Hall, 2007). Research by Sherry et al. (2007) described perfectionism as a vulnerability factor, that is, the characteristic impacts negatively on workplace and personal quality of life, and appears to be directly related to increased occupational stress, as suggested also by Dunkley, Blankstein, Halsall, Williams, and Winkworth (2000) in their studies of perfectionism and hassles in the workplace.

The influence of perfectionism is related to how an individual appraises a perceived stressor, 'the threat', whether in personal health or workplace settings (Goubert, Crombez, and Damme, 2004; Wang, Yuen, and Slaney, 2009). When compared with the Big Five personality traits, including neuroticism, perfectionism revealed distinctly unique information (Hill, McIntyre, and Bacharach, 1997; Sherry et al., 2007), mostly relating directly to those who scored at the high end of the scale. This indicates a negative tenor to perfectionism overall, although perfectionism scores were also linked to high scores on conscientiousness and low scores on agreeableness and extraversion (see Stoeber and Otto, 2006, for a discussion of positive and negative aspects related to adaptive or healthy perfectionists and maladaptive or unhealthy perfectionists).

However in achieving goals, the desire to excel and the need for perfection are not the same as the desire to excel associated with adaptive perfectionists and the need for perfection with maladaptive perfectionists (cf., Khawaja and Armstrong, 2005).

Jackson and Hicks (2008) reported strong relationships between Maladaptive Perfectionism and high levels of stress, anxiety, and depression with implications for workplace mental health issues and therefore performance. This can be understood with Maladaptive Perfectionism being tied to a personal need for perfection (Sherry et al., 2007). Jackson and Hicks also reported a strong relationship between high need for perfectionism and low levels of emotional intelligence.

Emotional intelligence has been increasingly researched in relation to stress at work (Dunn, Whelton, and Sharpe, 2006; Mikolajczak, Lenil, and Luminet, 2007, Petrides and

Furnham, 2006; Zeidner, Matthews, and Roberts, 2009). In general, emotional intelligence is seen as a buffer in handling otherwise stressful circumstances (Extremera, Duran, and Rey, 2007; Salovey, Stroud, Woolery and Epel, 2002). This is because emotional intelligence abilities and competencies or awarenesses are largely about understanding our own emotions and those of others, and managing ourselves and our relationships with others (Lynn, 2001; Petrides and Furnham, 2004). While research studies have thus identified correlations between personality and stress, perfectionism and stress, and emotional intelligence and stress, two questions arise: are these aspects independent of one another? Moreover, how does each (resilience, perfectionism, emotional intelligence) contribute to stress and/or wellbeing at work?

Thus, trait Emotional Intelligence (EI) was included in this study as an element that might predict occupational stress in a sample of Australian employees. Lynn (2001) defined emotional intelligence as our ability to manage ourselves and our relationships with others. The theory of emotional intelligence as a trait, rather than an ability, has a controversial history, but developed from recognising emotional intelligence as being more like personality attributes or traits than ability (Petrides, Furnham, and Frederickson, 2006).

Relationships between trait EI and stress reactivity were found by Salovey, Stroud, Woolery and Epel (2002). The ability to attend to and regulate emotions, perceiving stressors as less threatening, helps lower stress arousal and requires fewer coping strategies (Salovey, et al., 2002). However, low levels of emotional intelligence activate high levels of physiological arousal and have a propensity to lead to stress (Salovey, et al.). In line with these suggestions, previous research has found that high emotional intelligence is a personal coping resource which can help in managing occupational stress (Extremera, Duran, and Rey, 2007; Paspaliaris and Hicks, 2010). Extremera et al. (2007) explained coping regulation as requiring reflection about one's thoughts, feelings and mood; consequential awareness would facilitate discrimination of feelings, and emotion regulation, thus becoming a coping resource.

Maladaptive Perfectionists disassociate from emotion as an avoidance coping mechanism (Sherry et al., 2007). Disassociating from emotions can interfere with the ability to attend to emotions, thus affecting one's ability to discriminate and regulate. Hence, low levels of emotional intelligence (EI is considered in the study to be a trait thus relatively stable) are likely to be present when Maladaptive Perfectionists are experiencing personal stress. This study examined the strength of these relationships.

The overall aim of the research was therefore to gain knowledge about Stress Resilience, Maladaptive Perfectionism, and trait EI and the ability of each separately and in combination, to predict occupational stress. The Results should be useful in helping to develop appropriate employment procedures and policies.

Hypotheses

Based on previous research, it was proposed as follows:

- Hypothesis 1A: that Stress Resilience (a personality attribute) would be associated with low levels of occupational stress in this workplace sample;

- Hypothesis 1B: that high levels of Maladaptive Perfectionism would be associated significantly with low levels of trait EI.
- Hypotheses 2A, 2B, 2C, that Stress Resilience, Maladaptive Perfectionism and trait EI would be significant predictors of occupational stress across each of the three domains being measured (A. Occupational Role; B. Personal Strain; and C. Personal Resources).

Regression analyses were used to determine relative contributions of stress resilience, maladaptive perfectionism and emotional intelligence to stress outcomes (2A, 2B) or resources (2C).

METHOD

Participants

The 80 participants consisted of 31 (39%) males and 49 (61%) females with a mean age of 40.16 (*SD* 11.17; range 19-65). It was a requirement for participants to be 18 years of age or older and currently working in the Australian workforce. The participants were recruited through personal contact initially with fellow workers in airport and travel industries and then through snowballing. They were all in full-time employment and 80 percent were 'white-collar' workers. The mean length of time in the workforce was 18 years, but the periods ranged from 3 to 45 years.

Measures

The general Bio-data questionnaire consisted of three areas of interest including Personal Details, Education History, and Occupation Details.

The Occupational Stress Inventory Revised (OSI-R; Osipow, 1998) is a 140 item questionnaire that measures occupational stress utilising three individually scored questionnaires for three inter-related stress domains. The three domains consist of four to six subscales, Occupational Role (role overload, role insufficiency, role ambiguity, role boundary, role responsibility, and physical environment), Personal Strain (vocational strain, psychological strain, interpersonal strain and physical strain); and Personal Resources (recreation, self-care, social support, and rational/cognitive coping).

The Apollo Profile Questionnaire (Hicks and Bowden, 2003; Apollonean Institute, 1996) was used to measure Stress Resilience; the scale comprised 13 items and showed a Cronbach Alpha coefficient of 0.70.

The Frost Multidimensional Perfectionism Scale (FMPS; Frost, Marten, Lahart and Rosenblate, 1990) was used to measure perfectionism functionality. Maladaptive Perfectionism was emphasized in the current study and was operationalised using four dimensions of the six-dimensional FMPS: being concern over mistakes, personal standards, parental expectations, and parental criticism. The four subscales concern for mistakes, personal standards, parental expectations and parental criticism comprised 25 items in total.

The subscales have each demonstrated sound levels of internal consistency and reliability (Frost et al., 1990).

The Trait Emotional Intelligence Questionnaire (TEIQue; Petrides and Furnham, 2004) is a 153 item scale that measures participants' understandings of their emotions and the emotions of others. Trait EI was operationalised for the current study by using the full version of the TEIQue. There are four domains (and 15 subscales): the domains measure emotional well being, the ability for self control, positive and negative emotionality, and sociability with others. Previous research (Mikolajczak, Olivier, Leroy, and Roy, 2007) had highlighted gender differences, in that males scored higher than females on self control and sociability and females scored higher than males on the domain of emotionality. The interest in the current study was in global or total emotional intelligence. The total score for Emotional Intelligence, as used in this current study, came from summing the four composite scales or domains: well being (including subscales of self esteem, trait happiness, and trait optimism); self control (emotion regulation, stress management, and low impulsiveness); emotionality (emotional perceptions of self and others, emotional expression, relationship skills, and empathy); and sociability (social competence, emotion management of others, assertiveness, adaptability, and self motivation). In this current study, only total EI was used, as the emphasis was on overall EI and its associations. Subsequent reports are planned on the possible differential aspects associated with the domains and the individual scales, but no attempt is made to examine this detail in the current chapter.

Procedure

Approval for this study was obtained through the Bond University Human Research Ethics Committee (BUHREC). Participants were recruited from the Australian workforce through working colleagues, convenience sampling and snowballing effect. Participants were administered a paper and pencil survey comprising an Explanatory Letter, Bio-data questionnaire, OSI-R, the Apollo Profile, the FMPS, and the TEIQue. Participation was voluntary and anonymous.

Design

This study used an Australian workforce sample to give results comparing stress resilience, personality, perfectionism and emotional intelligence as independent variables or predictors in an employee sample. The dependent variables were derived from the three questionnaires: the OSI-R Occupational Role stressors- ORQ; Personal Strain attributes - PSQ; and Personal Resources - PRQ. As described above, the specific independent variables were total trait EI; Maladaptive Perfectionism (MP); and Stress Resilience (SR). Correlational and regression analyses were the main statistical procedures used to analyse the data.

RESULTS

The data was screened for errors and analysed using the Statistical Package for Social Scientists version 17 (SPSS17). The assumptions of normality, linearity, and homoscedasticity were checked and all variables were deemed satisfactory (Tabachnick and Fidell, 2007). All scales and subscales in the current study showed moderate to strong internal consistency with Cronbach alpha coefficients equal to, or exceeding, the .70 cut off recommended by Tabachnick and Fidell (2007). The results were consistent with reported coefficients in the respective manuals and previous studies.

The means and standard deviations respectively of the scales under study were as follows: Occupational Role Questionnaire (91.1, 26.1), Personal Strain Questionnaire (99.3, 20.6), Personal Resources Questionnaire (132.9, 18.0), Stress Resilience (76.8, 10.3), Maladaptive Perfectionism (15.5, 4.1) and Trait EI (41.3, 2.5). These results are within the normal range of mean scores for these scales and indicate the sample was not significantly different in any scale from normal populations.

The Correlation Matrix in Table 1 reports relationships between variables. The results showed no problematic redundancy of scales with all coefficients below $r = .70$ in this instance, as recommended by Tabachnick and Fidell (2007) to avoid significantly overlapping scales.

In regard to hypothesis 1A, as predicted, there were moderate negative correlations found between Stress Resilience and the experience of Occupational Role pressures and Personal Strain ($-.29$ and $-.26$ respectively); and a positive, though moderate, correlation ($.25$) between Stress Resilience and Coping Resources used. Emotional Intelligence showed similar relationships with these occupational stress/resource variables, as did Maladaptive Perfectionism (although in the opposite directions consistent with the measurement).

In regard to hypothesis 1B, that high levels of Maladaptive Perfectionism would be associated significantly with low levels of trait EI, a significantly negative coefficient was found between Maladaptive Perfectionism and Emotional Intelligence ($r = -.30$).

Table 1. Pearson's Correlation Matrix for Occupational Role (ORQ), Personal Strain (PSQ), Personal Resources (PRQ), Stress Resilience (SR), Maladaptive Perfection (MP) and trait Emotional Intelligence (EI)

	ORQ	PSQ	PRQ	SR	MP	trait EI
ORQ	1	.68**	-.44**	-.29**	.31**	-.45**
PSQ		1	-.30**	-.26*	.34**	-.23*
PRQ			1	.25*	-.24*	.42**
SR				1	-.29*	.50**
MP					1	-.30**
trait EI						1

Note: **, Correlation significant at the 0.01 level (2-tailed); or: * - at the 0.05 level (2-tailed).

It can also be seen in Table 1, Maladaptive Perfectionism correlated significantly with each of the OSI-R stress questionnaire scores in the expected directions, as too did Emotional Intelligence. But how would each of these characteristics (MP and EI) combine with Stress

Resilience, to predict the occupational role stressors (ORQ), psychological strain (PSQ), and personal resources scales (PRQ): and what would be the relative weights applied?

Hypotheses 2A, 2B and 2C were examined using three separate standard regression equations, one for each of the predictor/criterion variables (ORQ, PSQ, PRQ). Before running the three standard multiple regressions, a Mahalanobis distance test was conducted to test for multivariate outliers (Tabachnick and Fidell, 2007). No outliers were found. Preliminary analyses were conducted and inspection of the standardised, residual plots, showed the assumptions of normality, linearity, multicollinearity, homoscedasticity, and independence of residuals were met. Due to the relatively small sample size adjusted R square was used when reporting variance to give a more conservative estimate of the population (Tabachnick and Fidell, 2007).

Hypothesis 2A, that Stress Resilience, Maladaptive Perfectionism, and Emotional Intelligence would combine to predict Occupational Role stress, was examined using a standard regression equation. The results are shown in Table 2.

Table 2. Prediction of Occupational Role Stress from Stress Resilience, Maladaptive Perfectionism and Emotional Intelligence: Regression Output

Variable	<i>B</i>	95% Confidence Interval for <i>B</i>		β	<i>Sig.</i>	<i>R</i>	<i>R</i> ²	Adj. <i>R</i> ²	<i>R</i> ² Δ
		Lower Bound	Upper Bound						
Stress	-0.16	-0.75	0.43	-.06	<i>ns</i>	.49	.24	.21	-.00
Resilience									
Maladaptive Perfectionism	1.22	-0.14	2.57	.19	<i>ns</i>				.03
Emotional Intelligence	-18.32	-30.27	-6.38	-.36	.003				-.11

Note: $p < .05$, $N = 80$.

The results in Table 2 revealed that ORQ was predicted by the combined set of data (adjusted $R^2 = .21$, $F(3, 79) = 7.90$; $p < .001$), with the combined variables accounting for 21% of the variance in ORQ. On further inspection of the standardised beta coefficients, trait EI ($\beta = .36$; $p < .05$) made the only significant contribution to predicting ORQ and accounted for 36% of the unique variance in ORQ scores when SR and MP were controlled for. On inspection of the semi-partial correlation coefficient score, trait EI uniquely explained 11% of the variance in ORQ with any overlap or shared variance removed.

Hypothesis 2A, regarding the correlations of Stress Resilience, Maladaptive Perfectionism and Emotional Intelligence with Occupational Role stress (ORQ), was supported (as indicated in the inter-correlations given in Table 1), but when combined, only Trait EI was a significant predictor of stress related to occupational roles.

Hypothesis 2B, that Stress Resilience, Maladaptive Perfectionism, and Emotional Intelligence would predict experienced Personal Strain (PSQ), was examined using a standard regression equation. The results were significant (adjusted $R^2 = .12$, $F(3, 79) = 4.49$; $p < .01$), with the combined variables accounting for 12% of the variance in PSQ. On further inspection of the standardised beta coefficients, Maladaptive Perfectionism ($\beta = .28$; $p < .05$) made the only significant contribution to predicting PSQ and accounted for 28% of the unique variance in PSQ scores when SR and EI were controlled for. On inspection of the semi-partial

correlation coefficient score, MP uniquely explained 7% of the variance in PSQ with any overlap or shared variance removed. This result is significant, but of moderate or low, effect only.

Hypothesis 2C, that Stress Resilience, Maladaptive Perfectionism, and Emotional Intelligence would combine to significantly predict Personal Coping Resources (PRQ), was examined using a standard regression equation. The results are shown in Table 3.

Table 3. Prediction of PRQ (Personal Resources) from Stress Resilience (SR), Maladaptive Perfectionism and Emotional Intelligence: Regression Output

Variable	<i>B</i>	95% Confidence Interval for <i>B</i>		β	<i>Sig.</i>	<i>R</i>	<i>R</i> ²	Adj. <i>R</i> ²	<i>R</i> ² Δ
		Lower Bound	Upper Bound						
Stress Resilience	0.07	-0.35	0.49	.04	<i>ns</i>	.43	.19	.16	.00
Maladaptive Perfectionism	-0.53	-1.50	0.43	-.53	<i>ns</i>				.02
Emotional Intelligence	12.67	4.18	21.17	.36	.004				.10

The results in Table 3 revealed PRQ scores were predicted by the combined set of independent variables (adjusted $R^2 = .16$, $F(3, 79) = 5.857$; $p < .001$), with the combined variables accounting for 16% of the variance in PRQ. On further inspection of the standardised beta coefficients, trait EI ($\beta = .36$; $p < .05$) made the only significant contribution to predicting PRQ and accounted for 36% of the unique variance in PRQ scores, when SR and MP were controlled for. On inspection of the semi-partial correlation coefficient score, trait EI uniquely explained 10% of the variance in PRQ with any overlap or shared variance removed.

The main hypothesis regarding the correlations of Stress Resilience, Maladaptive Perfectionism and Emotional Intelligence with Personal Resources was supported (as indicated in the inter-correlations given in Table 1), but when combined, there was only partial support. Trait EI alone was a significant, positive, and direct, predictor of Personal Resources; Trait EI's contribution (on the positive side) includes the contributions from Stress Resilience and from Maladaptive Perfectionism.

Further *t*-tests were conducted to explore gender differences; however, no significant gender differences were found for any of the variables reported in the current study (Stress Resilience, Maladaptive Perfectionism, Emotional Intelligence; and occupational role stress, personal strain, and coping resources).

DISCUSSION

The purpose of this study was to identify the relationships between measures of independent variables of stress resilience, maladaptive perfectionism and emotional intelligence and the three dependent variables: occupational role stressors, experienced psychological strain, and the personal resources available and used. Further, the effect of combining these independent variables to predict stress and coping was of interest.

The Hypothesis that stress resilience would be negatively associated with stress outcomes, was supported. This is in line with previous research linking Neuroticism (the low end of the Stress Resilience continuum) with different measures of stress (e.g., the depression, anxiety and stress scales, or other stress questionnaires).

Hypothesis 1B, in essence that maladaptive perfectionism and emotional intelligence would be negatively related, was also supported, confirming earlier studies in this area (cf., Jackson and Hicks, 2008). Since EI levels can be increased through training programs (implication: maladaptive perfectionist responses could be reduced), this is an important finding. That training can increase EI in practice suggests that EI is, at least in part, an ability, rather than a trait. The correlation between EI and MP in the current study was $-.30$, explaining 9 % of the variations obtained when considering EI as a personality attribute. This is a significant, although low relationship, leaving some 91% of variation not explained. Thus, there is room for further exploration.

The EI and occupational role stressors and personal strain were related negatively (more stress experienced among those with lower EI), while EI and personal resources were related positively (the higher the emotional intelligence scores, the more effectively the personal resources, available to the employees studied, were used). In addition, maladaptive perfectionism was associated directly with occupational role stressors and personal strain (the higher the maladaptive perfectionism scores, the more they experienced stress and strain), while maladaptive perfectionism and personal resources were negatively related (those scoring high on maladaptive perfectionism developed and used fewer personal resources for coping).

Hypothesis 2A, that occupational stress (as a combination mainly of role overload, role insufficiency, role ambiguity, role boundary, and role responsibility) would be predicted by a combination of scores on stress resilience, emotional intelligence and maladaptive perfectionism, was supported, but only (trait) emotional intelligence was a significant predictor in the combination. Neither the stress resilience nor the maladaptive perfectionism scales contributed additional significant predictive ability once emotional intelligence was included in the predictions. This study advances previous research by Christopoulos and Hicks (2008) who found that there was a significant relationship between perfectionism and occupational role stress scores. When emotional intelligence is included as a predictive variable, maladaptive perfectionism scores become redundant. Similarly, although there was a significant correlation between stress resilience and lower scores on occupational role stress, when emotional intelligence was included as a predictor in the current study, the stress resilience scores became redundant. Emotional intelligence is the overarching key, in these relationships, to the management of occupational role stress.

Hypothesis 2C also implicated emotional intelligence as the only significant predictor, this time of personal coping resources of the employees. The hypothesis, that personal resources (as a combination of scores on recreation, self care, social support, and rational cognitive coping) would be predicted by a combination of scores on stress resilience, emotional intelligence and maladaptive perfectionism, was supported; but only (trait) emotional intelligence was a significant predictor in the combination. Again, neither the stress resilience nor the maladaptive perfectionism scales contributed additional significant predictive ability, once emotional intelligence was included in the predictions. While all three correlate with coping resources and their use, it is emotional intelligence which is the key when all three are considered together. The relationship found between trait EI and coping

resources supports previous findings (cf., Extremera et al., 2007) that higher levels of emotional intelligence were associated with personal coping resources utilised in the management of occupational stress.

Hypothesis 2B, that personal strain experienced (as seen in the combination of scores on psychological strain, vocational strain, interpersonal strain, and physical strain, would be predicted by a combination of scores on stress resilience, emotional intelligence and maladaptive perfectionism, was supported; but this time, only *maladaptive perfectionism* was a significant predictor in the combination. Neither the stress resilience nor the (trait) emotional intelligence scales contributed additional significant predictive ability once maladaptive perfectionism was included in the predictions. While all three correlate with the personal strain experienced, it is the maladaptive perfectionism aspects that contributes most to the outcome strain experienced in the workplace. The implication is that belief systems and emotional involvement, and requirements for things to be perfect or nearly so, and to be done perfectly or nearly so, contribute most to the strains. While there are overlaps between maladaptive perfectionism and EI (and stress resilience), in terms of the strain experienced at work, the perfectionist attitudes override the contributions from the other two variables. The implication is that maladaptive perfectionist attitudes exacerbate any stress and strain experienced in the workplace and that therefore the (inappropriate or dysfunctional) attitudes and beliefs need to be dealt with in any personal development training or treatment programs.

In a separate additional gender analyses of the responses of the 80 employees in regard to Hypotheses 2A, 2B, and 2C, no significant gender differences were found across the three occupational stress domains or in the total and combined dependent variables (stress resilience, perfectionism, emotional intelligence) reported in this study.

Limitations. Despite the findings of the current study, there were distinct limitations. The first limitation was the method of sampling; the use of opportunity sampling via known individuals in the airport and travel industries, followed by snowball methods. The second limitation was the small number of participants in this study with just 80 workplace participants. The third limitation was the self-report nature of the measures. However, there is no reason to think that the respondents were any more or less accurate in their responses than respondents in many other studies using self-report inventories. Given these limitations, further studies with larger numbers of individuals, perhaps in targeted employment groups, would be needed to confirm the findings.

CONCLUSION

The study determined that Emotional Intelligence was most functional (useful) in helping individuals to anticipate and adapt to the demands of the occupational role, to lessen the personal strains experienced in the work setting, and to source and use the personal resources required in coping effectively. Perfectionist attitudes and beliefs (maladaptive perfectionism scores) were most dysfunctional and were associated directly with personal strain at work. These findings on maladaptive perfectionism at work are consistent with findings and suggestions from Rice et al. (2006) that maladaptive perfectionists in the workplace may show problematic task performance, and because they may demonstrate disagreeable and

egocentric characteristics at work, also have an impact on individual and group task performance.

Implications of these results, apart from the contribution to understanding the relationships in the workplace, include practical considerations. Employers could aim to recruit those people who have higher levels of emotional intelligence, lower levels of maladaptive perfectionist attitudes, strong skills and resources, and higher levels of stress resilience (Hicks and Bowden, 2008; Ongori and Agolla, 2008). However, current employees might also benefit from personal development and training in areas such as emotions management, interpersonal relationships, positive non-maladaptive thinking processes, and resource building skills. For example, to help with occupational role stress and the development of coping resources, the improvement of emotional intelligence awareness and skills should be given primary attention (see Lynn, 2001; Zeidner, et al, 2009). Such knowledge and skills should help reduce the incidences of role overload, role confusion and perceptions of excessive role responsibility and hassles evident in several management and professional and other positions (e.g., Dunkley, et al., 2000; Dunn, et al., 2006; Hicks, Fujiwara, and Bahr, 2006). To help with the experienced strain outcomes (psychological strain, interpersonal strain and related areas), specific attention to the attitude and belief systems that are dysfunctional should also be given attention (see Rice, et al., 2007; Shafraan and Mansell, 2001; Sherry et al., 2007). In addition, attention should also be given to building resilience through developing personal resources and strategies that include use of rational cognitive coping, effective self-care, appropriate recreation, and social support that make a difference in response to stressful situations (Osipow, 1998).

Moreover, the information provided from this study might assist organizations to develop appropriate stress selection and ongoing staff audit measures targeting key predictors (cf., Ongori and Agolla, 2008). The results in effective applications of the findings could help in building more positive relationships with employees, management groups, clients and customers.

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