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Author

Goddard, R, Creed, P, Patton, W

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case managers?**

Authors:

Richard Goddard
School of Learning and Development
Queensland University of Technology
Kelvin Grove Campus 4059

Peter Creed, PhD
School of Applied Psychology
Griffith University
Gold Coast Campus

Wendy Patton, PhD
School of Learning and Development
Queensland University of Technology
Kelvin Grove Campus 4059

Contact:

Richard Goddard
School of Learning and Development
Queensland University of Technology
Kelvin Grove Campus 4059
e-mail: r.goddard@qut.edu.au

The impact of skills training on the burnout and distress of employment service case managers?

Abstract

This study investigated the impact of formal skills training on levels of burnout and psychological distress in a representative sample of Australian case managers who work with long-term unemployed people. Eighty-six case managers responded to a mail survey that included the Maslach Burnout Inventory (MBI: Maslach, Jackson, & Leiter, 1996), the 12-item General Health Questionnaire (GHQ-12: Goldberg, 1978), and the short form of the revised Eysenck Personality Questionnaire (EPQ-R/s: Eysenck & Eysenck, 1991). Case managers were also asked a series of demographic questions including details of skills training undertaken. Two thirds of respondents indicated they had not undertaken any formal program of skills training relevant to their current duties. A between-subjects MANOVA indicated that those case managers who had received formal skills training reported significantly lower levels of burnout on all MBI subscales, and reported significantly lower levels of distress on the GHQ-12 than those who had not received formal skills training. When the influence of the personality variable Neuroticism, was partialled out, much of the hypothesised effect of formal skills training disappeared, indicating the importance of personality when investigating forms of burnout and psychological distress.

The general focus of this study is on the state of burnout and psychological well-being of Australian personnel who deliver employment services to the unemployed. In particular, the question of whether participation in formal skills training influences either burnout or well-being being reported by case managers was considered. The investigation reported here was part of a program of field research investigating burnout and well-being in case managers delivering intensive assistance to unemployed Australians in 1999. Like much research which is required to evaluate program effectiveness it was conducted in situ and did not have the opportunity to manipulate variables experimentally.

Burnout and its Consequences

Building on Hans Selye's (1967) three stage general adaptation response to stressful stimuli, that is the alarm, resistance, and exhaustion trilogy, burnout is usually equated to the last phase of exhaustion, and the consequential depletion of physiological and psychological resources that occurs when an organism continually fails to adapt positively to chronic stress. Thus, the commonly held view is that burnout is a unique and tragic end point in a long-term response to ongoing stressors, viz job stress, resulting from frequent and usually intense interactions between staff and their clients (Cordes & Dougherty, 1993; Lee & Ashforth, 1996; Maslach & Goldberg, 1998). Today, the most widely accepted definition of burnout stems from Maslach's assertion that burnout is "...a three dimensional syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that occurs among individuals who work with people in some helping capacity" (Maslach, 1982, p. 3).

Based on a substantial research history spanning the past three decades, several major conclusions about burnout have been accepted. Firstly, it is well accepted that the experience of burnout is associated with debilitating physical symptoms which, over time, lead to significant reductions in health and well-being (see Cordes &

Dougherty, 1993, and Kahill, 1988 for comprehensive reports of the health consequences of burnout). Secondly, it is also increasingly accepted that burnout has a detrimental impact on the quality of service that is delivered by the organisations employing workers who are burnt out (Cherniss, 1995; Maslach & Leiter, 1997; Maslach & Goldberg, 1998). Indeed, research into burnout has long been recognised as being particularly germane to the principles of both effective personnel management and evaluations of the efficiency and quality of service delivery in organisations employing human service workers (Beehr & Newman, 1978; Maslach & Goldberg, 1998; Spector, Dwyer, & Jex, 1988).

Australia's Job Network

This research was conducted following a time of great change in the way employment services were delivered in Australia. Historically, employment services in this country had been delivered directly by the Australian Federal Government through a national employment agency, the Commonwealth Employment Service (CES). In response to high unemployment rates and the prevailing mood of economic rationalisation of public expenditures, successive Australian Federal Governments progressively privatised the delivery of services to the unemployed last decade.

The resulting national employment service (the *Job Network*) is now comprised of several hundred welfare, community and private sector organisations operating in competition with each other to assist the unemployed into open employment. At the commencement of 1999, the *Job Network* included 150 different organisations offering intensive assistance case management across 842 separate sites to more than 240,000 long-term unemployed Australians seeking full-time employment (Australian Bureau of Statistics, 1999). At the time this survey was undertaken, the fully privatised national employment service described above had been operating for just eight months.

The present study

This study has focussed upon the influence that skills training might have on case manager reports of their well-being and burnout. Using a survey methodology, the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996), the 12 item General Health Questionnaire (GHQ-12; Goldberg, 1978), and the revised short form of the Eysenck Personality Questionnaire (EPG-R/s; Eysenck & Eysenck, 1991) were administered to Australian case managers operating from different locations throughout Australia. The skills training history of case managers involved in the present study was measured by asking case managers if they had, prior to the time they were surveyed, undertaken any formal skills training course which had any relevance to their current case manager duties. Given the multifaceted nature of the case manager role (Goddard & Patton, 1998), and the expected contribution that the resulting increased role competence and reduced role conflict could be expected to have on case manager well-being, it was hypothesised that case managers who had undertaken formal skill training would, on average, have significantly lower GHQ-12 likert scores, corresponding to a lower distress level, than the group of case managers who indicate that they have not undertaken such training. This was hypothesis 1.

Furthermore, as skills training may be conceptualised as the acquisition of skills and information which facilitates the optimal use of resources, both internal and external, a history of skills training could be expected to ameliorate burnout levels on all three subscales of the MBI. A lack of external resources has already been linked with higher burnout levels on the Personal Accomplishment (PA) subscale of the MBI (Maslach et al, 1996; Maslach & Goldberg, 1998; Maslach & Leiter, 1997), therefore this study predicted that case managers who reported having undertaken any relevant skills training would also report significantly higher mean Personal Accomplishment scores than case managers who had not had the benefit of formal skills training. This was hypothesis 2. Similarly a lack of internal resources has been linked with higher levels of burnout on the Emotional Exhaustion (EE) and Depersonalisation subscales

of the MBI (Maslach, et al., 1996). Therefore, as formal skills training may also positively influence the internal resources of case managers, for example by facilitating a sense confidence and competence within their interpersonal transactions, the present study predicted that case managers who reported having undertaken relevant skills training would also report significantly lower mean Emotional Exhaustion (hypothesis 3) and lower mean Depersonalisation (hypothesis 4) scores levels than mean scores for case managers who have not had the benefit of formal skills training.

Finally, as the personality trait Neuroticism has been repeatedly identified as either a potential source of bias in symptom reporting in self report surveys of well-being (Costa & McCrae, 1987; McCrae, 1990; Moyle, 1995) and burnout (Iverson, Olekalns, & Erwin, 1998; Piedmont, 1993), a well accepted measure of Neuroticism was included in the present investigation. Watson and Clarke (1984) have succinctly described this widely accepted stable personality trait as “the disposition to experience negative emotional states” (p.465). Therefore the inclusion of the Neuroticism subscale from the EPQ-R/s allowed the results of the present study to be re-analysed in a manner that systematically controlled for the potential influence that the disposition to view experiences negatively might have on the reporting patterns of case managers on the dependent variables investigated. It was hypothesised that when the effect of Neuroticism was controlled for, the amount of variance in each of the remaining dependent variables that could be explained by training history would be reduced.

Method

Participants

Participants were 86 case managers employed by job placement organisations that constituted the national employment service in Australian (the *Job Network*). The sample was drawn from a number of job placement agencies across every State of

Australia. The average age of participants was 38 years ($SD = 9.70$). They had been employed for approximately 29.4 months ($SD = 25.45$) as case managers, and had an average case load of 132 unemployed clients. Fifty-six (65%) of the case managers surveyed were female, which reflects the gender proportions typically found in this industry. Twenty-nine (35%) indicated that they had undertaken formal skills training pertinent to their case management duties, while 56 (65%) indicated that they had not received formal skills training. One respondent failed to answer this question.

Instruments

Burnout. Burnout was measured by using the Human Services Survey version of the Maslach Burnout Inventory (MBI; Maslach, et al., 1996). This is a 22 item self report instrument described in the literature as “the most widely used operationalization of burnout” (Lee & Ashforth, 1996; p. 124). The MBI consists of three subscales: Emotional Exhaustion (EE: sample item, “I feel emotionally drained from my work”), Depersonalisation (DP: “I feel I treat some of my clients as if they were impersonal objects”), and Personal Accomplishment (PA: “I feel I am positively influencing other people’s lives through my work”). Participants responded on a seven-point rating scale, ranging from “never” (0) to “every day” (6). High scores on the EE and DP subscales and low scores on the PA subscale are characteristic of burnout. Reliability coefficients published in the technical manual were .90 for EE, .79 for DP, and .71 for PA (Maslach et al., 1996). In the present study, the corresponding reliability coefficients were .88 for EE, .79 for DP, and .68 for PA.

Psychological well-being. Well-being was assessed using the 12 item General Health Questionnaire (GHQ-12; Goldberg, 1978). This is a self-administered, point in time, screening test designed to detect minor psychiatric disorders. The GHQ-12 has been recommended for use in occupational settings and has been used in a variety of occupational and community settings as a screening measure for psychological ill-health (see Banks et al., 1980). The GHQ-12 asks respondents to report how they felt recently on a range of variables, including cognitive processing, self esteem, anxiety

and depression, on a four-point scale, using endpoints of “better than usual” to “much more than usual”. A sample item is, “Have you recently been able to concentrate on whatever you’re doing?”. Two methods of scoring the GHQ-12 are possible, the binary method and the likert method. The likert method was utilised in this study. The likert method scores the four-point scale as 0-1-2-3, such that higher scores correspond to increasing psychological pathology. Goldberg and Williams (1988) have published an extensive presentation of the psychometric properties of the GHQ-12 which are more than satisfactory. Mean internal reliability consistency reported in the manual was 0.85. The internal reliability co-efficient calculated in the present study was 0.92.

Neuroticism. The personality dimension was measured by administering the 12-item short version of the neuroticism subscale of the revised Eysenck Personality Questionnaire (EPQ-R/s; Eysenck & Eysenck, 1991). This subscale of the EPQ-R/s requires respondents to make yes/no decisions on items describing behaviours or responses typical of this dimension. A sample item is, “Are your feelings easily hurt?”. The technical manual reports reliability coefficients for this subscale as .88 for males and .85 for females (Eysenck & Eysenck, 1991). The validity of this instrument is discussed in the manual (Eysenck & Eysenck, 1991) with reference to forty years of development and a large number of psychometric and experimental studies involving the Eysenck Personality Scales, and was considered satisfactory. In this study, an internal co-efficient of 0.78 was calculated for males and .82 for females.

Procedure

A representative sample of Job Network agencies was initially contacted via mail to secure participation in the project. Following this agreement, questionnaires containing the MBI, GHQ-12, EPQ-R/s (Neuroticism) and asking for demographic information were forwarded to be completed by individual staff members. Reply paid envelopes were included with the survey so that completed forms could be returned directly to the researchers.

Results

Summary Data

Summary scores for the total sample of case managers on the MBI, GHQ-12 and Neuroticism are presented in Table 1. Using one-sample *t*-tests, mean case manager MBI subscale scores were compared with normative data reported by Maslach, et al. (1996) developed from a large sample ($n = 11,067$) of human service workers encompassing several occupational groupings. The mean case manager Personal Accomplishment score was found to be significantly different from the norm, $t(85) = 4.37$, $p < .001$, indicating a lower burnout level. No differences were indicated for Emotional Exhaustion and Depersonalisation. For GHQ-12 scores, the mean for case managers (likert scoring method) did not differ from levels reported for hospital and community based mental health staff (Prosser et al., 1996) and the unemployed themselves (Winefield, Tiggemann, & Winefield, 1991). For EPQ-R/s (Neuroticism), case manager scores did not differ significantly from normative data supplied in the technical manual (Eysenck & Eysenck, 1991). The evidence here is that this sample of case managers differed little on the MBI to workers in comparable jobs, and did not differ in comparisons with other distressed samples for the GHQ-12. The sample as a whole did not vary on personality when contrasted with normative data.

Effect of Skills Training on Burnout and Psychological Distress

Firstly, a series of independent *t*-tests and chi-square tests was used to determine whether the group with formal skills training differed from the group with no formal skills training on the demographic and workload variables of age, gender, length of employment, and case load. No significant differences were identified.

Table 1

Summary data for total sample on MBI, GHQ-12 and EPQ-R/s (Neuroticism)

	<i>N</i>	<i>M</i>	<i>SD</i>
Variables			
MBI – Emotional Exhaustion	86	22.31	10.03
MBI – Depersonalisation	86	8.05	5.56
MBI – Personal Accomplishment	86	37.35	5.88
GHQ-12 (likert scoring)	86	12.35	6.53
EPQ-R/s (Neuroticism)	85 [#]	4.23	2.96

Note. [#] = one participant failed to complete this scale.

Secondly, to test for the impact of formal skills training on levels of burnout and psychological distress, a 2 x 1 between-subjects multivariate analysis of variance was performed. The Maslach Burnout Inventory subscales scores (EE, DP and PA) and the GHQ-12 (likert scoring) acted as dependent variables, and the two levels of training (formal training and no formal training) acted as the independent variable.

A significant multivariate effect was identified for the different training histories, $F(4, 80) = 3.23, p < .05$. Univariate analyses of variance indicated significant main effects in the hypothesised direction for skills training for all dependent variables, indicating, as hypothesised, that those with formal training reported significantly less feelings of Emotional Exhaustion and Depersonalisation, significantly more feelings of Personal Accomplishment, and significantly less psychological distress (GHQ-12). Summary data are reported in Table 2.

Table 2

Summary data for Case Managers with and without Formal Skills Training (N = 85[#], 1-tail significance)

Variables	With Training (N = 29)		Without Training (N = 56)		Test of Difference
	M	SD	M	SD	F
	Emotional Exhaustion	19.66	9.43	23.82	10.16
Depersonalisation	6.03	5.29	9.11	5.49	6.13**
Pers. Accomplishment		39.72	4.36	35.96	6.12
		8.64**			
GHQ-12 (likert scoring)	10.38	5.23	13.57	6.78	4.90*

Note. [#] = one participant did not indicate training history; * $p < .05$. ** $p < .01$.

Impact of Neuroticism on Observations of Burnout and Psychological Distress

To test for the effects of Neuroticism on burnout and psychological distress for case managers with and without formal training, the above 2 x 1 between-subjects multivariate ANOVA was repeated with Neuroticism included as a covariate. In this analysis, a significant multivariate effect was not identified for the different training histories, $F(4, 78) = 1.76$, $p > .05$. As separate hypotheses had been specified, it was appropriate for univariate ANOVAs controlling for Neuroticism to be conducted for each dependent variable. These are presented in Table 3. Univariate analyses indicated significant main effects in the hypothesised direction for skills training on only one dependent variable, that of Personal Accomplishment. This analysis indicated that Neuroticism had acted to modify the relationship between formal skills training and the dependent variables to such an extent that at least three of the four significant

observations made earlier could be explained by the effect of Neuroticism on reported levels of MBI and GHQ-12.

Table 3

Summary data for Case Managers with and without Formal Skills Training after controlling for Neuroticism (N = 84[#], 1-tail significance)

Variables	With Training (N = 29)		Without Training (N = 55)		Test of Difference F
	M	SD	M	SD	
	Emotional Exhaustion	21.50 ^a	9.43	23.05 ^a	
Depersonalisation	6.69 ^a	5.29	8.82 ^a	5.53	2.77
Pers. Accomplishment	39.18 ^a	4.36	36.14 ^a	5.26*	6.12
GHQ-12 (likert scoring)	11.92 ^a	5.23	12.82 ^a	6.83	4.90
EPQ-R/s (Neuroticism)	3.28	2.71	5.29	3.04	9.00**

Note. [#] = two participants failed to complete all questions; a = estimated marginal means evaluated at mean for Neuroticism; * $p < .05$, ** = $p < .01$

Discussion

The Influence of Skills Training on Case Manager Burnout and Distress

While the investigation of the cause(s) for the levels of pathology observed in the present study was beyond the scope of this research program and is only properly dealt with by prospective methodologies, the relationship between a history of formal skills training and case manager distress levels was a major focus of this investigation. In

particular, this study had hypothesised that appropriate skills training would be empowering to case managers and, therefore, would be associated with lower burnout levels and greater levels of well-being. It was suggested that by imparting skills and knowledge directly relevant to the case management role in an employment service context, case manager access to resources, both internal and external, would be enhanced and consequently case manager burnout and well-being would be favourably influenced.

Support for the hypotheses proposed at the outset of the present study was found. The one third of case managers who reported having undertaken formal case manager skills training reported MBI scores corresponding to significantly lower burnout levels than the untrained case manager cohort. Furthermore, the observation that case managers who reported having undertaken skills training also had a significantly lower mean GHQ-12 likert score, corresponding to lower psychological distress, was also as hypothesised and could be interpreted as added support for the observations involving the MBI. In view of the considerable role complexity that is involved in delivering services to the long-term unemployed through a case management strategy (Goddard & Patton, 1998), this result was not surprising. Perhaps the most surprising element of the initial evaluation was the relative proportion of case managers who nominated that they were engaged in the complex role of case management without the benefit of formal skills training.

While the results appear to be highly consistent with the conclusion that skills training has a significant influence on case manager burnout and well-being, the methodology employed by the present study, although appropriate for field research, precludes drawing such a firm conclusion from this data alone. Indeed, the absence of a significant effect for training on any dependent variable after Neuroticism had been entered as a covariate in the MANOVA indicated that Neuroticism had indeed acted to modify the observed relationship between Training History and Burnout. The post-hoc finding that those who reported having undertaken relevant skills training also scored significantly lower on the Neuroticism subscale provides an alternative

explanation for the differences observed, that is they are potentially the result of differing Neuroticism levels rather than the result of differing training histories as hypothesised.

Therefore, while the hypotheses of the present study were supported, the subsequent evaluation of the influence of the personality trait Neuroticism suggests that only on the Personal Accomplishment subscale can the results be taken to suggest a relationship between skills training and burnout. While such a finding is consistent with current understanding of Personal Accomplishment as a dimension of burnout which is independent of Emotional Exhaustion and Depersonalisation (Maslach & Leiter, 1998), prudence demands that the hypothesised relationship is replicated in other studies, with perhaps the inclusion of other personality traits, before it is accepted.

Implications for Future Research

The present study makes clear the usefulness of including a measure of Neuroticism or the similar, if not identical measure, Negative Affectivity (Costa & McCrae, 1987) in cross-sectional studies seeking to investigate the potential benefits of skills training. Given the ability of Neuroticism to account for variance in MBI subscale and GHQ-12 likert scores in this study, there is a strong argument to include Neuroticism in all future studies which do not control for Neuroticism through a methodology that is both prospective and which includes the random allocation of participants to categories. Furthermore, given that these results are consistent with results presented by other burnout researchers (Iverson, Olekalns, & Erwin, 1998; Piedmont, 1993; Zellars, Perrewe, & Hochwarter, 1999) the present study not only adds to the literature demonstrating an association between MBI subscales and Neuroticism found in other occupational groups, it reinforces the call for Neuroticism to be routinely included in all investigations of burnout utilising a self-report survey methodology. The results presented here give every reason to extend to burnout researchers the warnings and advice published by Watson and Clarke (1984) and

Brief, Burke, George, Robinson, and Webster, (1988), and the later exhortation by McCrae (1990), to always include a measure of Neuroticism or Negative Affectivity in studies of job stress.

The finding that case manager respondents who had undertaken formal skills training also had significantly lower scores on the Neuroticism subscale than those respondents who indicated that they had not undertaken a formal skills training program is particularly intriguing, especially as respondents originated from more than 38 different Australian employment service organisations. This raises questions about the influence that this stable personality trait might have on how case managers are selected into training programs. Could it be that low Neuroticism levels influence a workers perceptions of formal training in a manner which results in the worker being more favourably disposed to and available for formal skills training programs?

References

- Australian Bureau of Statistics. (1999). *Labour force survey: June 1999*. Canberra: Australian Government Publishing Service.
- Banks, M. H., Clegg, C. W., Jackson, P. R., Kemp, N. J., Stafford, E. M., & Wall, T. D. (1980). The use of the General Health Questionnaire as an indicator of mental health in occupational studies. *Journal of Occupational Psychology*, *53*, 187-194.
- Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. *Personnel Psychology*, *31*, 665-699.
- Brief, A. P., Burke, M. J., George, J. M., Robinson, B. S., & Webster, J. (1988). Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology*, *73*, 193-198.
- Cherniss, C. (1995). *Beyond Burnout: Helping Teachers, Nurses, Therapists and Lawyers recover from stress and disillusionment*. New York: Routledge.
- Cordes, C. L., & Dougherty, T. W. (1993). A review and integration of research on job burnout. *Academy of Management Review*, *16*, 621-658.
- Costa, P. T., Jr., & McCrae, R. R. (1987). Neuroticism, somatic complaints, and disease: Is the bark worse than the bite? *Journal of Personality*, *55*, 299-316.
- Eysenck, H. J., & Eysenck, S. B. G. (1991). *Manual of the Eysenck Personality Scales (EPS Adult)*. London: Hodder & Stoughton.
- Goddard, R. C., & Patton, W. (1998). A comparison between burnout levels of case management staff and non-case management staff working directly with the unemployed. In E. Carson, A. Jamrozik, & T. Winefield, (Eds.), *Unemployment: Economic Promise and Political Will* (pp. 227-236). Brisbane: Australian Academic Press.
- Goldberg, D. P. (1978). *Manual of the General Health Questionnaire*. Slough, England: National Foundation for Education Research.

- Goldberg, D. P., & Williams, P. (1988). *A user's guide to the General Health Questionnaire*. Windsor, England: National Foundation for Education Research.
- Iverson, R. D., Olekalns, M., & Erwin, P. J. (1998). Affectivity, organizational stressors, and absenteeism: A causal model of burnout and its consequences. *Journal of Vocational Behavior, 52*, 1-23.
- Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology, 29*, 284-297.
- Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81*, 123-133.
- Leiter, M. P. (1993). Burnout as a developmental process: Consideration of models. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 237-250). Washington DC: Taylor & Francis.
- Maslach, C. (1982). *Burnout, the cost of caring*. Englewood Cliffs, N.J.: Prentice-Hall.
- Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology, 7*, 63-74.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory Manual, Third Edition*. Palo Alto, California: Consulting Psychologists Press.
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco, California: Jossey-Bass.
- McCrae, R. R. (1990). Controlling neuroticism in the measurement of stress. *Stress Medicine, 6*, 237-241.
- Moyle, P. (1995). The role of negative affectivity in the stress process: test of alternative models. *Journal of Organizational Behavior, 16*, 647-668.
- Piedmont, R. L. (1993). A longitudinal analysis of burnout in the health care setting: The role of personal dispositions. *Journal of Personality Assessment, 61*, 457-473.

Prosser, D., Johnson, S., Kuipers, E., Szmukler, G., Bebbington, P., & Thornicroft, G. (1996). Mental health, burnout and job satisfaction among hospital and community-based mental health staff. *British Journal of Psychiatry, 169*, 334-337.

Selye, H. (1967). *Stress in health and disease*. Boston: Butterworth.

Spector, P. E., Dwyer, D. J., Jex, S. M. (1988). Relation of job stressors to affective, health, and performance outcomes: A comparison of multiple data sources, *Journal of Applied Psychology, 73*, 11-19.

Watson, D., & Clarke, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin, 96*, 465-490.

Winefield, A.H., Tiggemann, M., & Winefield, H. R. (1991). The psychological impact of unemployment and unsatisfactory employment in young men and woman: Longitudinal and cross-sectional data. *British Journal of Psychology, 82*, 473-486.

Zellars, K. L., Perrewe, P. L., & Hochwarter, W. A. (1999). Mitigating burnout among high-NA employees in health care: What can organizations do? *Journal of Applied Social Psychology, 29*, 2250-2271.