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Promoting adult resilience in the workplace: Synthesizing mental health and work-life balance approaches

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Abstract

Mental health in the workplace is a major concern, with rising rates of depression and stress impacting productivity and well-being. Resilient adults are adaptable and able to manage their working and personal lives, as well as the demands of the workplace and technological change. The pilot for an innovative, prevention program, the Promoting Adult Resilience (PAR) program, was conducted in a resource-sector company over 11 weeks. 20 employees took part and a comparison group was drawn from a parallel on-line study on adult well-being. The sessions synthesized cognitive behavioural and mental health promotion strategies with work-life balance to promote mental health and well-being amongst working adults. Participant outcomes and treatment integrity were assessed throughout the duration of the program. Process evaluation assessed the manualised program, the facilitator, the volunteers as participants and diary notes from the facilitator on each session, and found that treatment integrity was maintained throughout the program. Pre and post testing of the participants of the PAR program showed significantly reduced levels of depression and stress and improved levels of coping self-efficacy, in relation to the comparison group.

As mental health problems are predicted to increase in the future, mental health researchers and professionals, as well as governments, are challenged to find ways to lessen the impact and prevalence of these problems. Depression is the most significant cause of non-permanent disability, associated with almost 12% of

disability and increasing to around 20% by 2020 (World Health Organization, 2001). In recognition of these considerations, National Action Plans on Mental Health have identified universal prevention programs as necessary components in mental health planning and that programs located in the workplace would be valuable arena in which to promote positive mental health in working adults (Commonwealth of Australia, 2000). The cost of lost working time from mental health problems extends from costs on family, to employers, through lost productivity, and to the community. As such, a mentally healthy workforce has benefits for individuals, employers and the community alike (World Health Organization, 2001).

Research has linked occupational stressors, such as long working hours, inflexible work practices and ambiguity in work roles, and conflict between work and family lives to depression, stress, and burnout (Frone, 2000; Frone, Yardley, & Markel, 1997; Goh, Cameron, & Mark, 1999; Karasek & Theorell, 1990). In addition, parents who experience work-family and family-work conflict have significantly greater likelihood of experiencing depression, anxiety and substance dependence disorders than non-parents in the workforce (Frone, 2000). However, the workplace can also provide resources that increase well-being and mental health, through greater autonomy on the job, social support from colleagues and greater income (Karasek & Theorell, 1990).

Previous research with children and older adults has identified the risk and protective factors for resilience,

with some also finding that personal resources and processes may form part of the basis for resilience (Masten, 2001; Ryff, Singer, Love, & Essex, 1998). Resilience forms a continuum of adaptive functioning at high levels of risk or adversity, to being competent, when individuals face the reduced risks or levels of adversity found in everyday life (Masten & Reed, 2002). As resilience is a multi-dimensional process however, the efforts to be resilient, such as adaptive strategies to manage demands, should be considered separately to resilient outcomes, such as better mental health or relationships. In this way, the efforts of working adults to be resilient can be targeted and normative adaptive processes can be enhanced through promoting competence in appropriate contexts (Kumpfer, 1999; Yates & Masten, 2004). When individuals have a positive and flexible perspective of themselves and their abilities, they will also have more positive perceptions of their work and increased job and life satisfaction (Judge, Locke, Durham, & Kluger, 1998).

Numerous dispositional factors have been shown to promote resilience. Self-efficacy is effective in reducing the effect of workplace stressors, reducing anxiety and depression as well as intentions to seek other employment. By moderating the impact of long work hours and high work overload (Jex & Bliese, 1999) and reducing the perception of job demands (Schaubroeck, Lam, & Xie, 2000), self-efficacy has been shown to be central to how stress is appraised and handled (Karademas & Kalantzi-Azizi, 2004). Employees who feel more competent will take steps to solve their problems and find ways to manage higher workloads without adding to their feelings of distress (Jex, Bliese, Buzzell, & Primeau, 2001).

Optimism for the future and belief in the likely success of behaviours and activities are strong influences on persistence toward outcomes or goals (Armor & Taylor, 1998). Along with self-esteem, high dispositional optimism moderates the influence of time pressures at work, job insecurity and poor organizational climate on the mental distress and emotional exhaustion, a component of burnout (Makikangas & Kinnunen, 2003).

Implicit in resilience research is positive psychology's focus on psychological strengths, positive emotions and outcomes. Actively using skills and resources to control and manage daily life increases the individual's well-being and mental health (Seligman & Csikszentmihalyi, 2000). In addition to research within the workplace, personal resources are important to managing life situations in general. Specifically, coping self-efficacy has been shown to be beneficial in coping with bereavement (Chesney, Chambers, Taylor, Johnson, & Folkman, 2003) and being resilient in the face of terminal illness (Bonanno, Moskowitz, Papa, &

Folkman, 2005). Humour has also been shown to be an effective coping skill in relationships and in stressful situations (Nezlek & Derks, 2001) and to decrease rumination and depression (Olsen, Hugelshofer, Kwon, & Reff, 2005).

Whilst dispositional factors are important to mental health and well-being, interpersonal skills and relationships are equally important. For example, being connected to the community (Donald & Dower, 2002) and to school (Shochet, Dadds, Ham, & Montague, 2006) are important protective factors in preventing adolescent depression. Similarly, group processes and relationships are an integral part of successful group therapy for depression (Kwon & Oei, 2003) and form an important component in the design of the PAR program. In the workplace where organizational support and recognition of effort was low, employees with better social skills were rated more highly on job performance by their supervisors as they had the skills to make use of the limited resources available to them (Hochwarter, Witt, Treadway, & Ferris, 2006).

Design and development of the work-based resiliency program reported in this paper was based on the principles of CBT, positive psychology and existing programs that promote resilience. To date in Australia, programs designed to promote resilience have focused on children and adolescents. One successful approach for building teenage resilience has been the Resourceful Adolescent Program (RAP) (Shochet et al., 2001). RAP is a school-based prevention program that uses CBT and inter-personal skills to significantly reduce levels of depression among adolescents. The program teaches affect regulation, positive cognitive and attribution styles and skills for improving interpersonal connectedness. It also focuses on broader ecological factors, such as enhancing the sense of school connectedness (Shochet et al., 2006; Shochet et al., 2001).

Few programs focus specifically on adult resilience. The Promoting Adult Resilience (PAR) program represents an extension of the RAP, with a strong basis on the workplace and work-life balance issues. The PAR program has been designed to recognise strengths and bolster the personal resources manage challenges within the workplace and home life. The PAR program aims to enhance and encourage the further development of self-efficacy, optimism, internal locus of control, interpersonal skills and ultimately to reduce mental health problems and improve well-being. The trial of the PAR program is designed to evaluate the program as a practical, sustainable, and easily delivered universal prevention program for the workplace.

Methods

Participants

Employees aged over 18 years of a Brisbane-based resource sector company, WorleyParsons, were invited to take part in the PAR program. Despite strong managerial support for the program, including delivery of the program during work hours, only a small cohort (N=20) volunteered to take part. To provide a comparison group for the PAR program, a small subsample were selected from QUT alumni taking part in a parallel, on-line study of well-being in working adults (N=51). Identical measures, ordering of questions and similar timing of data collection were instigated to minimise differences between the groups. Analysis showed no significant differences in the groups based on gender, age, marital status, or hours worked per week.

Research Design

At Time 1, all participants completed the measures, with the treatment group then taking part in the PAR program. At Time 2, 3 months after Time 1, both groups completed the surveys post-test to the intervention. Participant evaluation of the PAR program assessed the perceived merit of each component of the program and used both quantitative and qualitative methods. Examples were also sought for how the skills taught by the program had been put into use in the workplace, at home life and in relationships. The facilitator completed checklists and a diary concerning treatment integrity for each session.

Promoting Adult Resilience (PAR) Program

The PAR program was delivered in a manualised format by a trained psychologist in weekly 1 hour sessions at the employees' workplace. Each participant had their own workbook which contained the exercises for each session. Between the end of the program and the follow-up, participants will receive email 'boosters' to reinforce the skills taught in the program. The length of the PAR program and the email boosters are designed to reinforce the program over time.

Measures

Mental health was measured by the three subscales of the Depression, Anxiety and Stress Scale (DASS-21), (Lovibond & Lovibond, 1995), with 7 items each for depression (alpha = 0.91), anxiety, (alpha = 0.81) and stress (alpha = 0.89). Well-being was measured by the Satisfaction with Life Scale (SWLS), 5 items, (Diener, Emmons, Larsen, & Griffin, 1985), alpha = 0.89 and the 18 item version of Ryff's Scales of Psychological Well-Being (SPWB), alpha = 0.87 (Ryff, 1989). The dispositional factors were measured by self-efficacy, as the Coping Self-Efficacy (CSE) scale, 26 items, alpha = 0.95 (Chesney et al., 2003), dispositional optimism, as the Life Orientation Test-Revised (LOT-R), 6 items, alpha = 0.78 (Scheier, Carver, & Bridges, 1994), and humour, as the Coping Humor Scale (CHS), 7 items, alpha = 0.78 (Martin & Lefcourt, 1983). All scales used

1 (strongly disagree) to 5 (strongly agree) ratings, with the exceptions of the CSE, which was rated 1 (I can't do this at all) to 7 (I am certain I can do this) scale and the DASS-21, which was scored from 0 (not at all), 2, 4 and 6 (applied all the time), and follows the scoring convention for that scale. All alphas are from the current study. Qualitative analysis of the participant evaluation was based on the frequency of the themes that emerged from participants' comments on each component and session of the PAR program.

Results

The unadjusted means and standard deviations for each measure are given in Table 1. A MANCOVA was conducted to test the effectiveness of the PAR program. Using Time 1 scores for the variables as covariates, Time 2 scores for each variable were compared between the treatment, or PAR, group and the alumni comparison group. There was a significant multivariate difference between the groups, Wilks' lambda = 0.676, $F(8,54) = 3.236$, $p = 0.004$, $\eta^2 = 0.324$. Despite the small cohort in the treatment group, the experiment showed considerable overall power of 0.948, indicating there is a robust effect of the PAR program. Pairwise comparisons found significant differences between the groups for coping self-efficacy DASS-depression, DASS-stress, whilst DASS-anxiety approached significance ($p = 0.068$). The F values and η^2 for all pairwise comparisons are shown in Table 1. Results of the qualitative analysis of the participants' program evaluation found that skills of recognising and challenging negative thoughts, using positive self-talk and managing stress were considered most useful by the participants. The responses were uniformly positive about the PAR program and the group dynamics of the program were noted as a consistent source of

Table 1: Results, with means and MANCOVA analyses, where Time 1 scores were used as covariates

Measure	Time 1 M (S.D.) ^a	Time 2 M (S.D.) ^a	F ^b (1,61)	η^2
DASS- depression	8.40 (7.75)	3.70 (3.92)	14.699 ***	0.194
CG ^c	6.67 (7.45)	5.92 (5.90)		
DASS- anxiety	7.70 (7.29)	4.05 (4.64)	3.456 †	0.054
CG	5.41 (7.66)	4.55 (7.25)		
DASS- stress	15.20 (9.16)	9.05 (5.43)	11.304 ***	0.156
CG	12.39 (9.36)	12.08 (7.76)		
SPWB	68.40 (10.15)	69.50 (8.61)	1.684	0.027

	CG	73.10 (9.50)	71.80 (9.03)		
SWLS	PAR	15.70 (5.03)	17.35 (4.60)	2.614	0.041
	CG	17.10 (5.47)	17.51 (5.19)		
CSE	PAR	106.50 (27.95)	122.45 (21.52)	11.529 ***	0.159
	CG	121.41 (28.64)	120.49 (30.29)		
LOT-R	PAR	20.15 (4.21)	21.00 (4.15)	0.196	0.003
	CG	23.22 (5.17)	23.18 (5.03)		
CHS	PAR	22.65 (5.17)	24.05 (4.57)	0.432	0.007
	CG	24.76 (5.75)	25.14 (4.89)		

† $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

^a unstandardised M, S.D.

^b using est. marginal means in MANCOVA analyses

^c 'PAR' - treatment group, 'CG' - comparison group

participant enjoyment. Participants considered that the benefits of the PAR program lead to greater understanding of themselves, their self-talk, an understanding and reduction of the effect of stress, and importantly, having the tools to control and take charge of their concerns. Participants also noted the usefulness of the program in their relationships with colleagues and family members. The high level of compliance with the manualised program, shown by checklists and diary notes, across all sessions also indicated good maintenance of treatment integrity.

Discussion

This trial of the PAR program has shown improvement in participants' belief that they can cope, and moreover has shown reductions in participant levels of depression and stress at least in the short term. Given the small cohort taking part in the PAR program and sound treatment integrity, these results were robust and provide the basis for further development and trials of the PAR program. Positive feedback reported by the participants suggests that the program format, including group interactions, a trained facilitator and the program content, holds promise to address mental health concerns in the workplace. The results of the trial have positive implications for developing resilience in working adults. As resilience is multi-dimensional (Kumpfer, 1999), it is useful that both the efforts to manage their situations, captured as coping self-efficacy, and the outcomes of those efforts, in reduced levels of stress and depression, have been influenced by the program. Coping self-efficacy reflects how the individual can manage difficult situations (Chesney et

al., 2003) and the current findings extend previous research that links increased competence and the ability to solve problems to a lessening of perceived job demands and reduced distress in employees (Jex & Bliese, 1999; Jex et al., 2001; Schaubroeck et al., 2000). As the participants of this trial are involved in the resource industry with constant and intense workloads, the skills are important to contain stressors and maintain feelings of mastery, which in turn, reduce any mental health problems (Karasek & Theorell, 1990). However, dispositional optimism, humour and the well-being measures were little, albeit positively, influenced by the PAR program. These results suggest that these factors may be slower to change, perhaps because they are expectations and overall life judgments, rather than the adaptive strategies reflected by coping self-efficacy. The reduction in anxiety nears significance, indicating that the effect of the program on anxiety may be more apparent in a larger population.

From the qualitative analysis, the group process was rated as the most enjoyable part of the PAR program by participants. Comments reflected a strong sense of connection to colleagues within the program setting, which reflects the strength of group dynamics (Kwon & Oei, 2003). Participants also commented on better relationships with family members and other work colleagues, reporting that they had used positive self-talk and empathy skills to be less reactive and more tolerant of differences with other people.

The high level of participant satisfaction with the format and content of the PAR program along with the reported improvements in resilient functioning and mental health indicate the program's potential for promoting mental health in the workplace. The findings from the current study have informed further developments of the program, with another trial of the PAR program now under way. Two key challenges for the PAR program remain. First, establishing an effective recruitment strategy, a process which will need to be undertaken in close collaboration with industry and second, the measurement of mental health outcomes in the longer term in order to establish whether improvement in mental health can be maintained over time.

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