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Shorter communication

Behavioural activation: A pilot trial of transdiagnostic treatment for excessive worry

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ABSTRACT

Transdiagnostic interventions present pragmatic benefits in treatment dissemination and training of mental health professionals when faced with emotional disorders such as anxiety and depression. Excessive worry is a common feature across emotional disorders and represents an ideal candidate target for transdiagnostic intervention. The current pilot trial examined the efficacy of a behavioural activation treatment for worry (BAW) in a community population. 49 individuals experiencing excessive worry were randomised to waitlist or BAW receiving an 8 week group based intervention. Results demonstrated that BAW was successful in reducing excessive worry, depressive symptoms, cognitive avoidance, Intolerance of Uncertainty and improving problem solving orientation. Twice as many individuals showed clinically significant reductions in excessive worry after treatment compared to the waitlist control. Despite limitations to sample size and power, this study presents promising support for BAW as a practical transdiagnostic treatment for worry.

Introduction

Recent research has begun to place emphasis on the commonalities rather than the differences across the anxiety and mood disorders (Barlow, Allen, & Choate, 2004). Transdiagnostic treatment approaches target common features underlying symptoms in emotional disorders (Barlow et al., 2004). One such feature is worry, a repetitive negative valanced thinking process that may reflect an unsuccessful attempt to prevent the occurrence of negative events or to devise coping strategies in case such events occur (Borkovec & Roemer, 1995). Worry functions as a cognitive avoidance response suppressing images and somatic activation and preventing the individual from emotional processing of fear that is important for successful habituation and extinction (Foa, Huppert, & Cahill, 2006; Stapinski, Abbott, & Rapee, 2010). Such avoidance brings initial relief but results in the maintenance of anxiety.

Some evidence has supported the avoidance function of worry (Borkovec & Roemer, 1995) or has demonstrated that worry helps to maintain core processes involved in anxiety (Stapinski et al., 2010). Although it shares conceptual similarity to rumination, worry tends to focus more on potential threats in the future rather than going over the meaning of the past events that is characteristic of rumination (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). The repetitive negative thoughts involving anticipating future threat in worriers may disrupt the implementation of effective strategies to solve problems, resulting in maintained or exacerbated levels of distress (Hong, 2007). Some research has also highlighted the importance of behavioural avoidance in worry. Individuals diagnosed with GAD engage in a range of behaviours, including reassurance seeking, checking, and overt avoidance, that are aimed at reducing distress in the short term but contribute to the long term maintenance of their symptoms (Beesdo-Baum et al., 2012). Based on these suggestions, a transdiagnostic approach targeting such avoidance strategies in worriers appears warranted.

Behavioural Activation (BA), an intervention which addresses avoidance in depression (Addis & Martell, 2004; Lejuez, Hopko, & Hopko, 2001), has demonstrated adequate conceptual fit as a possible transdiagnostic treatment for depression and anxiety disorders (Chu, Colognori, Weissman, & Bannon, 2009; Turner & Leach, 2010). In depression, BA targets dysfunctional patterns of avoidance, withdrawal and inactivity which serve to maintain depressive symptoms, especially rumination, and prevent effective problem solving (Martell, Addis, & Jacobson, 2001). Compared to more complex treatment packages, two key advantages of BA include that it is: 1) simpler to deliver (Hopko, Lejuez, Ruggiero, & Eifert, 2003), and 2) has demonstrated efficacy even when delivered by mental health professionals with minimal training (Ekers, Richards, McMillan, Bland, & Gilbody, 2011). Taking into account

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the efficacy of BA on mood disorders and its parsimony, a BA treatment targeting worry has potential cost effectiveness benefits in terms of training therapists and treatment dissemination. Although the efficacy of BA on depression has been supported in a number of studies (Cuijpers, van Straten, & Warmerdam, 2007; Mazzucchelli, Kane, & Rees, 2009), applying BA to the management of anxiety is still exploratory, relying heavily on case studies and small open-trial designs (Chu et al., 2009; Jakupcak, Wagner, Paulson, Varra, & McFall, 2010; Turner & Leach, 2010). It should be noted that treatments for depression using BA have also shown beneficial effects on comorbid anxiety (e.g., Hopko et al., 2011).

When applied to worry, BA is expected to break down patterns of anxious avoidance through repeated exposure to goal orientated behaviours (Chu et al., 2009). Viewing worry as a form of avoidance that is maintained by temporary reduction of distress, BA encourages clients to identify avoidance patterns and increase alternate behaviours in the face of worry-provoking situations (Martell et al., 2001). This reduced avoidance demonstrates the lack of value to worry and builds a sense of efficacy that is expected to reduce worrying, anxious symptomatology and life impairment (Turner & Leach, 2010).

The current study aimed to examine the efficacy of a BA treatment for a community sample reporting high levels of worry. We conducted a pilot trial comparing Behavioural Activation for Worry (BAW) with waitlist. It was expected that at post-treatment, participants in the BAW condition would exhibit greater reduction in worry than the waitlist group and that those undergoing BAW would also show reductions in several secondary outcomes including distress, life impairment, cognitive and behavioural avoidance and intolerance of uncertainty and increases in problem-solving orientation.

Methods

Participants

Participants included 49 community adults who self-referred to the study following advertising for a free treatment study on excessive worry. Inclusion criteria included age (18–65 years), self-reported excessive and uncontrollable worry, a stated treatment goal to address worry, and raw scores of 55 or higher on the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990) (i.e. within 1 standard deviation of GAD means; Gillis, Haaga, & Ford, 1995). Participants were excluded if they reported current treatment for worry related issues, active suicidal ideation, psychosis, or alcohol and drug dependency, according to a brief clinical assessment. Antidepressant medication was not an exclusion criterion provided participants agreed to stay on constant dosage for at least two months prior to involvement and continue on the dosage until the end of the follow-up (1 month). Of the 49 participants, only three reported antidepressant medication use. Given this small sample, medication use was not examined further.

Fig. 1 presents a diagram of participant flow. Forty-nine participants (female: 77.6%) were randomly allocated to active treatment ($N = 25$) or waitlist ($N = 24$). There were no significant differences between groups on demographic descriptors (all p's $> .05$, see Table 1). All waitlist participants were offered treatment after eight weeks.

Behavioural Activation for Worry (BAW)

Treatment was conducted in groups of 5–7 participants. The treatment manual was largely based on the book *Overcoming Depression one step at a time* (Addis & Martell, 2004). Two modifications were made to the manual for application to worry. First, a more in-depth discussion of participants' values and activities relating to these valued life domains was included based on the manual developed by Lejuez et al. (2001) (Behavioural Activation Treatment for Depression: BATD). Second, treatment was delivered in eight consecutive sessions, which was more consistent with BATD.

The core goals of BAW were to help participants identify avoidant patterns and activate competing behaviours. These changes should attenuate worry through increased sources of positive reinforcement, reduced aversive experiences, and extinction of threat associations. The BAW program began with psychoeducation regarding functional impact of excessive and uncontrollable worry and the BA treatment model. Self-monitoring was introduced through a Daily Activity Record for the following week (Session 1). Based on the Daily Activity Record, functional assessment was introduced to create awareness of avoidant patterns related to worry and its consequences. It was emphasised that while avoidant responses provide short term relief, they also create long term negative consequences by preventing problem resolution and fear extinction. Participants were then guided to identify short term goals and life goals, which together with the functional assessments of their avoidance patterns, helped guide the development of alternative goal oriented behaviours. Homework was assigned to monitor worry occurrence throughout the week (Session 2). The monitoring homework was used to produce functional assessments of participants' own avoidance behaviours (Addis & Martell, 2004). This helped individuals identify specific worry situations and the sequence of events that triggered and maintained their worries. Participants were then encouraged to activate competing behaviours in accordance with their goals. Alternative coping strategies were discussed with the group and were practised using scenarios, role-plays and group discussions. Participants were taught to observe the results of their coping strategies and evaluate their own progress. Rewards were self-administered on a weekly basis for incremental behavioural change. During this process, participants were reminded that the aim was to start working on important tasks, increase activation and disrupt avoidance. Activity scheduling was incorporated in the form of weekly homework activities (Session 3–7). From Session 6 to the end of treatment, the importance of repetition and integrating change into daily routine was emphasized throughout. In order to help participants engage in effective interpersonal interactions, assertive communication was described as a form of non-avoidant behaviour and was practiced through group tasks. Finally, participants were encouraged to link the short-term goals set in Session 2 with long-term life goals and developed a hierarchy of steps based on selected activities towards achieving long-term goals. In the final session, relapse prevention strategies were discussed.

Training and supervision of therapists

In total, seven treatment groups were delivered. Treatment groups were led by the second author, a registered psychologist with two years' clinical experience and assisted by three co-therapists (two four year trained psychology interns and one registered psychologist). Regular supervision was provided by an experienced clinical psychologist.

Assessment measures

Clinical outcome measures

The Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990). The 16-item PSWQ is one of the most widely used questionnaires measuring pathological worry. Good psychometric properties have been demonstrated for anxiety disordered ($\alpha = .93$; Brown, Antony, & Barlow, 1992) and community populations ($\alpha = .95$; Olatunji,