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Changes in quality of life following group CBT for anxiety and depression in a psychiatric outpatient clinic

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ABSTRACT

The present study examined the relationship between quality of life and symptom change following group CBT treatment for anxiety or depression in a psychiatric hospital outpatient setting. One hundred seventy seven outpatients undergoing eight sessions of group CBT for anxiety ($n=124$) or mood disorders ($n=53$) participated. The Beck Anxiety Inventory (BAI), Zung Self-Rating Depression Scale (Zung-SRDS), Quality of Life Inventory (QOLI), and Satisfaction with Life Scale (SWLS) were administered at baseline and post-treatment. Additionally, the QOLI and SWLS scores of those who achieved reliable improvement or clinically significant symptom change were compared to those who experienced no reliable symptom improvement. There were significant changes across the QOLI, SWLS, BAI and Zung-SRDS outcome measures between baseline and post-treatment, with moderate to very large effect sizes observed. Patients with reliable or clinically significant change in their symptoms experienced significant increases in QOLI and SWLS scores when compared to those whose symptoms did not change reliably. Overall, in a psychiatric hospital outpatient setting, group CBT appeared to be successful in increasing quality of life and satisfaction with life in addition to reducing anxiety and depression symptoms.

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1. Introduction

Empirical evidence indicates that individual and group CBT are efficacious and effective treatments for depression and anxiety (Barlow et al., 2000; Butler et al., 2006; DeRubeis and Crits-Christoph, 1998; Dwyer et al., 2013; Hofmann and Smits, 2008; Oei and Dingle, 2008; Oei and Boschen, 2009; Oei et al., 1999; Stanley and Novy, 2000; Tucker and Oei, 2006; Vittengl et al., 2007). While the efficacy of individual and group CBT is clear, it is also the case that highly controlled research outcomes, such as those from randomized controlled trials (RCTs) with stringent inclusion criteria for participants, may not easily translate to real world settings (Chambless and Hollon, 1998; Westbrook and Kirk, 2005). This is potentially due to systematic differences between controlled research trials and routine clinical practice, with respect to patient characteristics (e.g., comorbidity, severity of symptoms, and motivation), concurrent treatment with medication, therapist characteristics (e.g., workload and integrative approaches to treatment), and adherence to therapy protocols. Thus, some assert the need for further effectiveness studies, particularly in relation to group CBT, to

demonstrate the generalizability of efficacious interventions to routine clinical settings (Dwyer et al., 2013; Oei and Boschen, 2009).

To date, meta-analytic findings suggest that outcomes in routine clinical settings are comparable to the effects observed in research trials. With regard to group CBT for various psychological problems, large effect sizes were reported in a meta-analysis of both published and unpublished group CBT evaluations (Petrocelli, 2002). More recently, in a meta-analysis of 56 effectiveness studies, the authors reported that CBT reduced anxiety and depression symptoms within real-world clinical settings with large effect sizes (but not as consistent and as large effect sizes as the RCTs) (Stewart and Chambless, 2009). Similarly, large treatment effects were found in a large-scale CBT effectiveness study involving patients with various mental health conditions, in which comorbid disorders, adjunct pharmacotherapy interventions, and treatment protocols were permitted to vary (Westbrook and Kirk, 2005). When data were analyzed using clinical significance approach, it was found that approximately 50% of patients experienced a reliable improvement in their anxiety and depression symptoms and 30% of these patients recovered post-treatment (Westbrook and Kirk, 2005).

While many previous efficacy and effectiveness studies have used symptom reduction as the main outcome variable, using symptom reduction as the main variable to support treatment efficacy has been questioned recently. There has been a renewed emphasis on Quality of Life (QOL) and Satisfaction with Life (SWL) as important outcomes

in addition to symptom reduction (Quilty et al., 2003; Safren et al., 1996; Vittengl et al., 2007). Researchers have suggested that efficacious therapies should improve subjective well-being along with reducing symptoms (Gladis et al., 1999). It has been proposed that variables such as subjective quality of life, occupational functioning, and general health should be included when assessing treatment outcome to identify interventions that provide holistic benefits (Quilty et al., 2003). However, to date, there has been limited effectiveness research investigating changes in these outcome variables over the course of group CBT treatment.

Research into the effects of emotional disorders on QOL suggests that emotional disorders are detrimental to one's life satisfaction and functioning. A meta-analysis by Olatunji et al. (2007) found a large effect size when comparing the QOL of patients with anxiety disorders and controls, such that the former group reported a significantly poorer QOL. Similarly, individuals with depression have reported significantly lower QOL than control groups (Hansson, 2002; Katschnig et al., 2006; Papakostas et al., 2004), lower QOL than patients with other mental illnesses (Hansson, 2002) and similar QOL to those with chronic medical problems or illnesses, such as chronic pain, diabetes mellitus, HIV/AIDS, cancer and coronary heart disease (Baune et al., 2006; Sherbourne et al., 1996). Furthermore, the high prevalence of emotional disorders in the population (McLennan, 1997), the fact that they are regularly comorbid with other medical and psychiatric problems (Schneier, 1997; Schneier and Pantol, 2006), and the high costs associated with treatment and lost productivity in the workplace (DuPont et al., 1996), provide strong reasons for identifying the effects of these disorders and designing treatments that will be effective in improving QOL.

Several groups of researchers have extended the QOL literature by examining the effects of pharmacological and psychotherapeutic treatments for anxiety and depression on patients' QOL or functioning. However, the literature specifically examining the effects of CBT on anxiety and/or depression and subjective QOL is still developing (Eng et al., 2005; Grant et al., 1995; Heldt et al., 2006; Hirschfeld et al., 2002; Kuyken et al., 2008; McDonagh et al., 2005; Oei and Boschen, 2009; Öst et al., 2004; Papakostas et al., 2004; Safren et al., 1996; Stanley et al., 2003; Telch et al., 1995). Overall, the existing literature provides some consensus regarding the effects of CBT for anxiety and depression on QOL, suggesting that CBT not only reduces patients' anxiety and depression symptoms but also improves their SWL. However, with the exception of one study of patients with anxiety disorders (Oei and Boschen, 2009), there has been little attention paid to whether patients have experienced reliable and clinically significant improvements (CSI) in their symptoms. Furthermore, there remains a need to establish a direct link between symptom change and QOL change in routine clinical practice.

In order to address the aforementioned gaps in the literature and to provide a link between CBT effectiveness and QOL research, this study examined the outcomes of group CBT in a naturalistic sample. Outcome was defined in terms of mean differences in symptoms, QOL, and SWL over time, and in terms of effect sizes and clinical significance. It was hypothesized that QOL and SWL scores would increase significantly between baseline and post-treatment, and that patients who experienced reliable and clinically significant improvements in their symptoms would report more improvement in their QOL and SWL than those who did not experience a reliable improvement in their symptoms.

2. Method

2.1. Participants

One hundred seventy seven patients with anxiety ($n = 124$) and mood disorders ($n = 53$) were used. The anxiety group consisted of 71 Panic Disorder, 34 Generalized Anxiety Disorder, and 19 Post-Traumatic Stress Disorder patients and 53 patients were diagnosed with Major Depressive Disorder. All diagnoses were made by psychiatrists according to the DSM-IV-TR (American Psychiatric Association, 2000) before the patients were referred to the CBT Unit of a private psychiatric Hospital for group CBT treatment. Two hundred and twenty seven patients were recruited to the group CBT treatment program over 3 years. Of these, 177 completed the whole program with 50 patients (38 from anxiety and 12 from depression groups) who failed to complete the program. The anxiety group had a mean age of 43.25 years (S.D. = 11.72, range = 19–67 years) and included 81 (65.3%) females, while the depression group had a mean age of 44.27 years (S.D. = 11.56, range = 18–72 years) and included 35 (66.0%) females. Since these were patients referred by psychiatrists, 71.2% of these patients received medication. Participants were included in the study only if their current medication use was stable. The demographic characteristics and the attrition rate of the patients are presented in Table 1.

2.2. Measures

2.2.1. Quality of Life

Domain-based QOL was measured using the 17-item self-report Quality of Life Inventory (QOLI) (Frisch, 1994; Frisch et al., 1992; McAlinden and Oei, 2006), while SWL was assessed using the 5-item self-report Satisfaction with Life Scale (SWLS) (Diener et al., 1985). On the QOLI, overall weighted T-scores lower than 43 are regarded as indicating low perceived QOL. SWLS scores range between 5 and 35, with 5–9 indicating extreme dissatisfaction, 10–14 indicating dissatisfaction, 15–19 indicating below average satisfaction, 20–24 indicating average satisfaction, 25–29 indicating satisfaction, and 30–35 indicating high satisfaction.

Table 1
Demographic characteristics of participants.

Variable		Total sample ($n = 177$)		Anxiety group ($n = 124$)		Depression group ($n = 53$)	
Mean age (S.D.)		43.96 (11.58)		43.25 (11.72)		44.27 (11.56)	
		n	%	n	%	n	%
Gender	Male	61	34.5	43	34.7	18	34.0
	Female	116	65.5	81	65.3	35	66.0
Place of birth[a]	Australia	143	83.1	97	80.8	46	88.5
	Other	29	16.9	23	19.2	6	11.5
First language[a]	English	170	97.7	117	96.7	53	100.0
	Other	4	2.3	4	3.3	0	0.0
Indigenous Australian Status[a]	ATSI	4	2.3	2	1.7	2	3.8
	Non-ATSI	169	97.7	118	98.3	51	96.2
Education[a]	High school	69	39.9	52	43.3	17	32.1
	Vocational qualification	37	21.4	28	23.4	9	17.0
	Undergraduate degree	27	15.6	19	15.8	8	15.1
	Postgraduate degree	23	13.3	11	9.2	12	22.6
	Other	17	9.8	10	8.3	7	13.2
Program completion	Completers	177	78.0	124	76.5	53	81.5
	Non-completers	50	22.0	38	23.5	12	18.5

[a] Some data are missing (< 4% of total N). ATSI, Aboriginal or Torres Strait Islander.