Online CBT for individuals with Christian beliefs: a pilot randomised controlled trial

AND

Clinical Research Portfolio

Volume 1

(Volume 2 bound separately)

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MA, PhD

September 2014

Mental Health and Wellbeing

Institute of Health and Wellbeing

University of Glasgow

Submitted in partial fulfilment of the requirements for the degree of Doctorate in Clinical Psychology (DClinPsy)

University of Glasgow

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Acknowledgments

I would like to thank my research supervisor Professor Chris Williams for the opportunity to work on this project, and the participants who took the time to be involved. Thanks also to Dr Caroline Haig for statistical guidance and my classmates for the fun times over the course of training. Finally, I would like to thank my parents for always encouraging me to persevere and work hard, and Ali for her love and support throughout the process.

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Chapter 1 – Systematic Review

The Efficacy of Spiritually Integrated Cognitive Behavioural Therapy for Depression and Anxiety: A Systematic Review

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Prepared in accordance with guidelines for submission to *Journal of Clinical Psychology* (see appendix 1).

Submitted in part fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology

Abstract

Context: Although there is a strong evidence base for Cognitive Behavioural Therapy, difficulties exist in some groups being able to access it. One such group may be people with religious beliefs.
Objective: To assess the evidence for efficacy of Spiritually Integrated Cognitive Behavioural Therapy in reducing depression and anxiety in people with religious beliefs.
Method: A systematic review of published literature was conducted. Relevant electronic databases were searched, supplemented by informal search strategies and including both English and non-English language papers. Data were extracted from 8 included papers, and results combined by method of narrative synthesis. Quality of studies was also rated.
Results: All included papers found Spiritually Integrated CBT to be effective in reducing depression and anxiety, however no significant differences were found when it was compared with a secular equivalent therapy. The majority of studies to date had methodological flaws with only two studies rated as being of acceptable quality.
Conclusions: Spiritually Integrated CBT is as effective as secular CBT in reducing depression and anxiety, with the possible added effect of reducing barriers to therapy amongst religious people.

Short Title: Review of Spiritually Integrated CBT
Keywords: CBT, review, depression, anxiety, religion, spirituality, spiritually integrated therapy

Introduction

Cognitive Behavioural Therapy (CBT) has been shown to be an effective intervention for many common mental health problems (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012). Despite its clear efficacy, the majority of people with diagnosable mental health problems do not seek help for their problems (Kohn, Saxena, Levav, & Saraceno, 2004).

People with religious beliefs may be one group who are reluctant to use health services (Crosby & Bossley, 2012), and may miss out on evidence-based interventions for their mental health problems (Koenig, 2005). There may be a number of factors contributing to this. Historically, there has been a perceived conflict between psychology and religion, with many historically prominent psychologists criticising religious belief. For example, Freud believed religion expressed underlying neuroses and distress (Freud, 1961). This may lead to some reluctance amongst believers towards interacting with mental health services. Mayers et al. (2007) found that there may be a perception amongst believers that a therapist would not understand or see the importance of faith, or may see faith as harmful and to be challenged (Winell, 2011). Furthermore, religious people believed receiving secular services might be seen by themselves, by God or by other people as a rejection of God's healing. Indeed, there is evidence that there is a gap between the level of religious beliefs amongst mental health professionals and the general population (Dein, 2004). Furthermore, people with religious beliefs and health professionals differ in the degree to which they would like spiritual beliefs to be incorporated in mental health care (Cook, 2011).

Religious beliefs are very common, with the latest UK census stating that 59% of the population reported their religion as Christian (Office for National Statistics, 2012). A significant proportion of these people may value religious beliefs highly, and may wish for these to be taken into account in their mental health care. This is demonstrated in the large amount of time clergy spend in dealing with psychological problems (Wood, Watson, & Hayter, 2011).

Given the prevalence of religious beliefs, and religious people's desires for their beliefs to be incorporated in mental health care, a number of therapeutic interventions have attempted to integrate religious beliefs into therapy, from a range of religious traditions and therapeutic approaches. Many of these have not used a specific therapeutic modality, but rather have drawn on religious principles and general

psychotherapeutic approaches. Furthermore, they have catered for a large range of psychological problems. Previous related reviews and meta-analyses (Hook et al., 2010; McCullough, 1999; Smith, Bartz, & Richards, 2007) have found that Spiritually Integrated Therapy (SIT) is as effective, and sometimes more effective for religious clients, than other psychological approaches. These studies have tended to treat the wide range of SITs similarly, rather than addressing specific types of psychological interventions. This may have led to a lack of clarity regarding whether the religious component or the therapeutic approach was responsible for effects. Furthermore, previous reviews have not explicitly assessed the quality of the studies involved. Finally, the most recent reviews contain data only as far as 2009, so there have now been 5 years of possible new research.

A distinction can be drawn between 'religion' and 'spirituality'. Religion describes adherence to a belief system and actions associated with those beliefs, with agreement about what is practised, whereas spirituality describes a more general and experiential closeness and connectedness to the sacred, but with limited agreement about the nature of those beliefs (Hill et al., 2000). Whilst previous research has looked at both of these, the present review will focus on 'religious spirituality' as practiced in major world religions, where a sense of personal spirituality is expressed in the context of defined religious beliefs. Such beliefs may be a barrier to seeking mental health care (Mayers et al., 2007).

The present review focuses on a specific therapeutic approach, CBT, as it is the most widely evaluated and recommended psychological therapy, for use within UK health services (National Institute for Health and Care Excellence, 2009; NHS Education for Scotland, 2011). The review also specifically looks at studies of low mood and anxiety, as these are the most common mental health conditions presenting in the general population (McManus, Meltzer, Brugha, Bebbington, & Jenkins, 2009). Given the range of interventions and research using mindfulness, meditation and Buddhist approaches (Hofmann, Sawyer, Witt, & Oh, 2010), these studies will not be included in the present review. They reflect a separate type of intervention (i.e. drawing from religious and spiritual concepts in secular therapies, rather than secular therapies modified for people with religious beliefs).

Review Questions

This systematic review will use a narrative synthesis, taking a textual approach to analyse the relationships between studies, and assess the overall robustness of the evidence, to investigate the following questions:

-What is the evidence for the efficacy of Cognitive Behavioural Therapy-based psychological interventions for low mood or anxiety that have been modified to incorporate religious beliefs?

-How effective are such interventions in comparison with secular alternatives and with other control groups?

-What is the quality of the studies investigating such interventions?

Inclusion and Exclusion criteria

Studies were eligible for inclusion if they met the following criteria:

-Used a therapy incorporating religious beliefs with either CBT or a therapy closely related to CBT (e.g. Behavioural Therapy, Rational Emotive Behavioural Therapy, etc.)

-The intervention was aimed at improving symptoms of low mood or anxiety.

-The study compared the SIT either with another treatment or a non-active control group.

-Participants were aged 18+.

Studies were excluded if they met the following criteria:

-Not fulfilling the inclusion criteria.

-The therapy was specifically aimed at people defined by experiencing physical health problems (e.g. depression in terminally ill patients).

-The intervention was modified to incorporate just 'spirituality' without being applicable to major world religions.

-The intervention was based on mindfulness and/or meditation.

-No quantitative outcome data related to mood or anxiety were reported.

Methods

Search Strategy

The following databases were searched for relevant published research from the start of each database to 6th June 2014: EMBASE (1947-2014), CINAHL (1979-2014), Web of Knowledge (1864-2014), MEDLINE (1946-2014) and PsycINFO (1644-2014). All languages were included in the search.

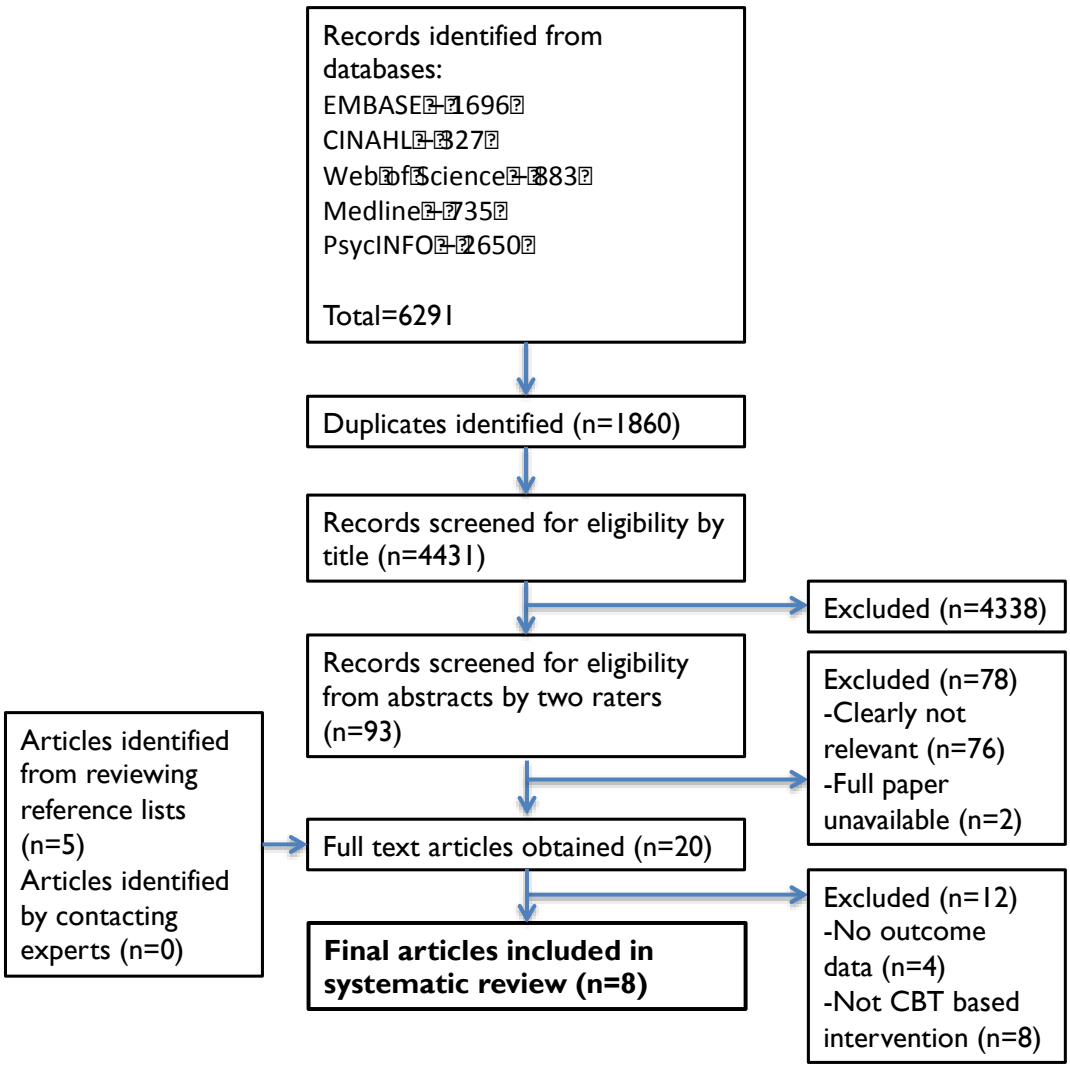
After studying previous reviews, considering current papers and following discussion with librarians, the following keyword search terms were used, linked with the Boolean operators 'AND' and 'OR'. Asterisk indicates truncation of words, whereby any word ending following the truncation would be picked up:

religio* or spirit* or faith or church* or pray* or worship or christ* or jew* or muslim or islam* or sikh or hindu
AND counsel* or therap* or CBT or psychotherap* or cognitive or behavio*
AND outcome or effect* or efficacy or compar* or trial or evaluat* or impact
AND depress* or anxiety

Duplicate abstracts from different databases were identified and excluded. Titles were then screened, and those that clearly did not meet inclusion criteria were excluded. Abstracts were then assessed independently by the author and a co-rater (Professor Chris Williams). Raters then met to compare included papers. Where eligibility was unclear based on the abstract, full articles were retrieved and assessed jointly by raters to make a decision. One paper could not be accessed due to appearing in a non-English journal that could not be obtained by University library services, and the author failed to respond to contact requesting a copy. One abstract reported statistical significance testing but no outcome data, and the author did not respond to contact regarding further information. Reference lists of included papers were searched for further papers, as well as previous reviews on related topics. Furthermore, articles citing included articles were also reviewed. Two experts in the field were also contacted regarding any other papers, although no new articles were found through this mentod. Five articles were identified by these means based on titles and abstracts, however on review of full papers, none were eligible. Consequently, eight papers were included in the final review. A narrative synthesis method will be used to discuss and integrate the findings.

Figure 1 is a flow chart that details the search process.

Figure 1 – Flow diagram showing details of systematic search process



Quality Rating

Included research was rated for quality using the Clinical Trials Assessment Measure (CTAM; Tarrier & Wykes, 2004). This is a measure used to describe the quality of clinical trials, based on relevant features extracted from the CONSORT (Consolidated Standards Of Reporting Trials) guidelines, with good levels of validity and reliability (Tarrier & Wykes, 2004; Wykes, Steel, Everitt, & Tarrier, 2008). A score out of 100 is calculated based on the sample, group allocation, assessments used, control, analysis performed and the active treatment. Rating on the CTAM was completed for all

studies by the author. Five of the studies were randomly selected for review by a second rater, a Trainee Clinical Psychologist, to assess inter-rater reliability. Chronbach's Alpha for these ratings was 0.94, indicating a high level of inter-rater reliability. Discrepancies were discussed to reach consensus.

Results

Interventions are described in Table 1. Details of the studies are shown in Table 2. The mean (SD) score on the CTAM was 54.5 (14.0) with a range of 30 to 74, suggesting that most papers had significant methodological issues. Two studies met the arbitrary quality cut-off used by Wykes et al. (2008) of 65, and were thus judged to be of acceptable quality.

Table 1 – Description of interventions used in reviewed studies

Study	***Intervention description***
Armento et al. (2012)	*Behavioural Activation of Religious Behaviours* – One session providing depression psycho-education, assisting better conceptualisation of religious beliefs, and increasing religious behaviours. Participants brainstormed how to become more active in faith-based activities, and collaboratively listed 'Religious Activity Goals', with homework based on these. Monitoring activity was encouraged.
Ebrahimi et al. (2012)	*Spirituality Integrated Psychotherapy* – Individual intervention drawn from interviews with experts in psychology and Islam. The protocol included a religious explanation of depression aetiology, and cognitive, emotional and spiritual therapeutic methods with religious content and behavioural activation of Islamic activities.
Hawkins et al. (1999)	*Christian Inpatient CBT* – Individual and group CBT, incorporating Christian beliefs and prayer. Group topics included managing emotions, healthy thinking, relaxation and communication, but with Christian views on each topic. Both individual sessions and groups explicitly incorporated Christian resources such as prayer and scripture.
Johnson & Ridley (1992)	*Christian Rational Emotive Therapy* – Individual therapy following standard Rational Emotive Therapy focusing on identifying and replacing different depressive irrational beliefs. Explicitly Christian components were integrated, including using the Bible as 'ultimate truth' to dispute irrational beliefs, emphasizing prayer and Christian content in homework. Prayer was included at conclusion of sessions.
Johnson et al. (1994)	*Christian Rational Emotive Therapy* – As Johnson & Ridley (1992), following a published protocol (Johnson, 1993).
Pecheur & Edwards	*Religious Cognitive Behavioural Modification* – Individual therapy sessions following Beck et al.'s (1979) treatment protocol, with integrated

(1984)	Biblical teaching regarding the self, world and future. This involved, for example, taking Bible verses describing God's love for his people to demonstrate that self-concept should be higher than typically the case in depression.
Propst et al. (1992)	*Religious Cognitive Behavioural Therapy* – Individual intervention focused on cognitive restructuring techniques and behavioural assignments, with religious rationale, religious arguments to thoughts, and religious imagery procedures. Treatment manual published by Propst (1988).
Zhang et al. (2002)	*Chinese Taoist Cognitive Psychotherapy* – Individual treatment using principles of cognitive therapy and elements of Taoism applied to coping styles. These include principles of benefiting without hurting others and acting without striving, restricting selfish desires, learning to be content, knowing how to let go and being in harmony with others.

Study Design and Methodology

Sample – Three studies used a convenience sample of people referred to a particular service or admitted to an inpatient unit (Ebrahimi et al., 2012; Hawkins et al., 1999; Zhang et al., 2002). Five studies used a sample of volunteers (Armento et al., 2012; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992).

Allocation – Seven of eight studies (Armento et al., 2012; Ebrahimi et al., 2012; Hawkins et al., 1999; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992; Zhang et al., 2002) used randomisation. Three used a blocked or stratified randomisation design to ensure equal distribution based on sex or symptom severity (Johnson & Ridley, 1992; Pecheur & Edwards, 1984; Propst et al., 1992). One study (Hawkins et al., 1999) offered participants a choice of Christian or secular intervention. No studies specifically described the process by which randomisation was carried out.

Assessment – All of the studies used at least one standardised, self-report assessment measure for the primary outcome. The Beck Depression Inventory (BDI) (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) or BDI-II (Beck, Steer, Ball, & Ranieri, 1996), was used in 7 of 8 studies. The two studies rated as acceptable on the CTAM (Pecheur &

Edwards, 1984; Propst et al., 1992) used a clinical interview schedule in addition, where the rater was blind to treatment group allocation. A range of other standardised measures were also used (see table 3).

Control groups – Three studies used a waiting-list control (WLC) along with another active control group (Ebrahimi et al., 2012; Pecheur & Edwards, 1984; Propst et al., 1992). All studies used at least one alternative treatment (six used a secular version of same intervention (Ebrahimi et al., 2012; Hawkins et al., 1999; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992), two used other talking therapies (Armento et al., 2012; Propst et al., 1992), two used medication (Armento et al., 2012; Zhang et al., 2002).

Analysis – Various analytic strategies were used across the studies. All were deemed statistically acceptable. Whilst no study specifically mentioned 'Intention to Treat' analysis, methodology for including data was sufficiently explained in the majority. One study reported 41% of participants being excluded due to incomplete data (Hawkins et al., 1999) and one used a per protocol design (Propst, 1992).

Active Treatment – Six studies used a specific treatment protocol to standardise the intervention (Armento et al., 2012; Ebrahimi et al., 2012; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992), three of which reported that adherence of delivery was assessed (Armento et al., 2012; Johnson et al., 1994; Propst et al., 1992). Seven studies provided adequate information about the intervention given, or a reference to detailed description(Armento et al., 2012; Hawkins et al., 1999; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992; Zhang et al., 2002). Seven studies were delivered in traditional one-to-one format with weekly sessions, often described as 'High Intensity' (Ebrahimi et al., 2012; Hawkins et al., 1999; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992; Zhang et al., 2002). Only Armento et al. (2011) used a comparatively 'Low Intensity' format, where participants received sessions just at the beginning and end of treatment period, with one telephone call from the therapist in between.

The majority of studies (Armento et al., 2012; Johnson & Ridley, 1992; Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992) used experienced graduate clinical psychology students as therapists. Of the remaining studies, one used experienced pastors and Christian therapists (Hawkins et al., 1999), one used experienced psychiatrists (Zhang et al., 2002), and the remaining one used unspecified therapists (Ebrahimi et al., 2012). No studies used Low Intensity interventions such as Computerised CBT or bibliotherapy.

Drop out rates were low, with five studies reporting no drop out at end of treatment (Armento et al., 2012; Ebrahimi et al., 2012; Hawkins et al., 1999; Johnson & Ridley, 1992; Pecheur & Edwards, 1984), and the others (Johnson et al., 1994; Propst et al., 1992; Zhang et al., 2002) reporting drop out rates between 9% and 11%. The CTAM uses 15% as a cut-off for acceptable drop out rate. No significant differences in completion rate were found between groups, though this may relate to small sample sizes.

Table 2 – Table showing details of studies included in review

Authors (date)	***N***	***Mean age***	***% Male***	***Population/Clinical issue***	***Study type***	***Quality (CTAM)***	***Intervention Groups***	***Number and format of sessions***	***Drop out rate (%)***
Armento et al. (2012)	50	20.0	38.0	Students with BDI score indicating mild to moderate depression	RCT	52	1-Behavioural Activation of Religious Behaviours; 2-Supportive therapy	1x60 minute session	0 (4% after 1 month follow up)
Ebrahimi et al. 2013	62	31.1	45.0	Individuals with dysthymic disorder in community	RCT	52	1-Spiritually Integrated Psychotherapy; 2-CBT; 3-Medication; 4-Waiting list control	8x45 minute sessions	0
Hawkins et al. (1999)	29	40.7	28.0	Patients in an inpatient anxiety and depression program	Non-randomised Trial	30	1-Christian CBT; 2-Non-Christian CBT	Daily group (50 minutes) and individual therapy during admission.	0 (42% data unused)
Johnson & Ridley (1992)	10	34.2	60.0	Volunteers with intrinsic religiosity and depressed mood (BDI>14)	RCT	47	1-Christian REBT; 2-Rational Emotive Therapy	6x50 minute sessions twice weekly	0
Johnson et al. (1994)	32	37.0	40.1	Volunteers responding to advert offering brief therapy to depressed Christians	RCT	52	1-Christian Rational Emotive Therapy; 2-Rational Emotive Therapy	8x60 minute sessions	9.4
Pecheur & Edwards (1994)	21	24.0	9.5	Christian students with depression diagnosed depression, BDI>14 and HRSD>19	RCT	74**	1-Religious CBT; 2-Secular CBT; 3-WLC.	8x50 minute sessions twice weekly	0
Propst et al. (1992)	59	40.0	17.0	Highly religious, clinically depressed patients (HRSD>14)	RCT	72**	1-Religious CBT; 2-Non-religious CBT; 3-Pastoral	18x50 minute sessions	10.6

							Counseling; 4-WLC		
Zhang et al. (2002)	143	34.8	55.9	Patients with GAD not in psychiatric treatment with diagnosis for more than 3 months.	RCT	57	1-Chinese Taoist Cognitive Psychotherapy; 2-Benzodiazepine only; 3-Combination treatment	4x60 minutes weekly, then 12x60 minutes twice monthly.	9.1

** Study deemed to have acceptable methodology on CTAM

Table 3 – Table showing outcomes of studies included in review

Authors (date)	***Relevant Outcome measures***	***Post-treatment Outcomes (Anxiety)***	***Post-treatment Outcomes (Depression)***	***Follow-up***	***Effect size***	***Other***
Armento et al. (2012)	BDI-II, BAI, STAI-T, EROS, QOLI	Significantly improved anxiety in BARB group compared with Supportive Therapy (ST).	Significantly improved depression in BARB compared with ST	All positive treatment effects were maintained at 1 month FU.	BARB>ST[a]: BDI: d=0.57*, BAI: d=0.67*, STAI-T: d=0.62*, QOLI: d=0.72*	Religious behaviour and attitudes were found to be significant mediators of treatment effect.
Ebrahimi et al. (2013)	BDI-II, DAS	N/A	Significantly more improvement in all active treatment conditions than WLC. CBT and SIT performed slightly better than medication, but not significantly different from each other.	Improvements were maintained 3m FU, except in medication only condition where there was non-significant deterioration.	SIT>WLC (BDI) d=3.13[b] *; SIT>CBT (BDI) =0.32[b]	Dysfunctional attitudes decrease with both CBT and SIT.
Hawkins et al (1999)	BDI	N/A	Trend (p=.08) towards significant difference in group between CCBT and CBT groups with large effect size, though both groups improved significantly.	None.	CCBT>CBT (BDI) d=1.50[a]	The more clients increased in spiritual well being, the more they were likely to decrease in depression. Treatment satisfaction was rated similarly in both groups.
Johnson & Ridley (1992)	BDI, ATQ-30, EIV	N/A	Both therapies have significant effect on mood. No significant differences between groups on mood, automatic thoughts or irrational values.	None	CRET>RET (BDI) d=0.32[b]	No difference between groups in ratings of expertise, trustworthiness and attractiveness of therapist.
Johnson et al.	BDI, ATQ-30,	N/A	No group differences in reduction in BDI and SCL-90 scores over time. At	Effects of treatment sustained at 3 month	Post treatment: RET>CRET	

(1994)	RBI, SCL-90		end of treatment, non-significantly better improvement in RET group.	follow up, with reversal of effects of treatment.	(BDI): d=0.53[b]. 3 month FU: CRET>RET: d=0.81[b].	
Pecheur & Edwards (1984)**	BDI, HRSD, VAS, BHS, TSS	N/A	Both treatment groups showed significant improvement compared with control group on all DVs. No significant differences between religious and secular CBT, however was consistent trend in favour of religious CBT.	Non-significant improvement in BDI scores at 1 months follow up in CBT and RCBT, reflecting maintenance of treatment effects.	SIT-WLC effect d=2.06[b]*; SIT-CBT effect d=0.57[b]	
Propst et al. (1992)**	BDI, HRSD, SCL, SAS	N/A	All active treatment groups improved significantly over time. Religious CBT was significantly different from WLC on BDI. No significant difference between Religious CBT and other active treatment. On HRSD, Religious CBT and Pastoral Counseling showed trends towards lower scores than WLC.	No change in any treatment groups between completion and either 3 month or 2 year follow up, suggesting that improvements are maintained.	RCBT>WLC (BDI): d=1.03[b]* *Insufficient data to calculate effect size between RCBT and CBT.*	Significantly better improvement in and global severity of SCL in RCBT than WLC. No significant difference from other groups. The effect of therapist religion also tested. Both Christian and non-Christian therapists could deliver either version of therapy with equal effects. Best results came from non-matching therapy/belief combinations (i.e. non-Christian doing Christian therapy, or Christian doing non-Christian therapy).
Zhang et al. (2002)	SCL-90, EPQ, TPS	After one month, drug-only and combined groups reported significantly lower	N/A	At six months, those in the combined or CTCP only groups scores significantly lower on SCL-90	CTCP> Medication at 6 months (SCL-90): d=0.86[b]*	Significant decrease in neuroticism and type-A behaviour in CTCP group compared with drug only group.

		SCL-90 scores than CTCP only group.	than medications only group, while medication only group returned to baseline level.

[a] Effect size shown in paper; [b] Effect size calculated based on data from paper; * Statistically significant ($p \leq 0.05$); ** Study deemed to have acceptable methodology on CTAM
BDI–Beck Depression Inventory, BAI–Beck Anxiety Inventory, EROS–Environmental Reward Observation Scale, QOLI–Quality Of Life Inventory, STAI-T–State-Trait Anxiety Inventory-Trait scale, DAS–Dysfunctional Attitudes Scale, SCID–Structured Clinical Interview for DSM Disorders, ATQ-30–Automatic Thoughts Questionnaire, EIV–Ellis Irrational Values Scale, SCL-90–Symptom Checklist, RBI–Rational Behaviour Inventory, HRSD–Hamilton Rating Scale for Depression, VAS–Visual Analogue Scale, BHS–Beck Hopelessness Scale, TSS–Tennessee Self-concept Scale, SAS-Social Adjustment Scale, EPQ–Eysenck Personality Questionnaire, TPS-Type-A Personality Scale.

Summary of Effects of SITs on Low Mood and Anxiety

BDI was the most common primary outcome measure of depression, so effect sizes were calculated for this measure where possible. Anxiety measures were also reported for two studies. A number of other outcome measures were also reported (see Table 2), which are beyond the specific focus of this review.

Studies comparing SIT with Waiting List Control

Table 3 reports findings of the studies. Three studies compared SIT with WLC, each showing SIT to lead to significantly greater improvement. Pecheur & Edwards (1984) (one of the two high quality studies) found that Religious CBT had a significantly greater effect on low mood than the WLC with an effect size of d=2.06. The second high quality study, Propst et al. (1992) found that Religious CBT led to significantly greater improvement in low mood than the WLC group with an effect size of d=1.03. Ebrahimi et al. (2013) found Spirituality Integrated Psychotherapy had a greater effect on low mood than the WLC with an effect size of d=3.13. These could be described as very large effect sizes based on Cohen's norms (Small=0.2, Medium=0.5, Large=0.8; Cohen, 1988).

Studies comparing SIT with equivalent secular therapy

Six studies compared a SIT with an active control group using a secular equivalent to the SIT. This allows investigation of any added therapeutic effect related specifically to the integrated religious content. Whilst all SITs reported decreased depression, none found statistically significant differences between SIT and equivalent secular therapy.

In the two high quality studies, Pecheur & Edwards (1984) compared religious and secular CBT in religious depressed clients. Whilst both groups performed better than the WLC group, there was no significant difference between the religious and secular CBT groups. However, there was a trend towards greater change on mood measures in the religious CBT group (d=0.57) on BDI scores after treatment).

Similarly, Propst et al. (1992) compared religious and secular CBT in depressed religious individuals. No significant differences were found at the end of treatment, at three-month or two-year follow up. However, only the religious CBT

group showed statistically significant improvement over the WLC group (N.B. data was not available to calculate effect size of this difference).

Johnson & Ridley (1992) and Johnson et al. (1994) compared Christian and secular Rational Emotive Behavioural Therapy (REBT). Johnson & Ridley (1992) found that whilst both groups showed significant improvement in depression after treatment, there were no significant differences between groups (d=0.32). It is notable that groups contained just five participants each, meaning the study was underpowered. Johnson et al. (1994) found no significant differences between Christian and secular REBT on BDI scores in a larger, yet still significantly underpowered sample to address this comparison (n=32). There was, however, an effect size of d=0.53 in favour of secular REBT at the end of treatment, and an effect size of d=0.81 in favour of Christian REBT at three-month follow up.

Hawkins et al. (1999) compared Christian and secular CBT inpatient programs. Both treatment groups showed significant improvement in depression scores, and there was a non-significant trend towards greater improvement in depression scores in the Christian CBT group (d=1.50). This study differed from the others firstly in its use of a sample of inpatients involved in a therapeutic milieu with Christian or secular orientation rather than regular therapy sessions. The average length of stay was just 7.5 days for the Christian program and 5.4 days for the secular program. Furthermore, participants were offered a choice of which therapeutic approach they received rather than randomised, adding an additional confound.

Ebrahimi et al. (2012) compared a CBT-based SIT with secular CBT. Whilst both therapies were significantly better than WLC, they were not significantly different from each other. The effect size between groups was d=0.32 in favour of the SIT. There was also no significant difference at three-month follow-up. Although the SIT and secular therapy are similar in this study, the SIT reported does not appear to be a purely CBT-based intervention, so the control condition of CBT may contain some differences from the SIT.

Studies comparing SIT with other talking therapy

Two studies compared SIT with an alternative talking therapy. Armento et al. (2012) compared Behavioural Activation for Religious Behaviours (BARB) with Supportive Treatment, which involved discussing thoughts and feelings with a

therapist, with the therapist focused on reflection, summaries and active listening, but providing no interpretations, feedback, direction or strategies. There were significant differences in favour of BARB in depression score (d=0.57) and anxiety score (d=0.67) after treatment.

Propst et al. (1992) compared religious and secular CBT with Pastoral Counseling Treatment (PCT). The treatment was developed from a survey of counseling procedures from clergy, and involved around 75% of the time in non-directive listening and 25% in discussing relevant religious texts. There were no significant differences between groups on changes in depression score, although the SIT was significantly different from WLC while the PCT only showed a non-significant trend in that direction. There were no differences at three-month or two-year follow up.

Studies comparing SIT with psychotropic medication

Two studies compared SIT with psychotropic medication. Ebrahimi et al. (2012) found that while both SIT and medication (prescribed by psychiatrist using standard medication protocol) had a significantly greater effect in reducing BDI scores than WLC, SIT performed significantly better than medication at the end of treatment (d=1.12). Furthermore, there was a trend towards effect of medication reducing by three-month follow up, increasing the effect size between SIT and medication.

Zhang et al. (2002) compared SIT for anxiety with medication only (Benzodiazepine administered according to patients' clinical condition), and a combined SIT and medication condition. Treatment took place over six months, with outcome measures recorded after one and six months. After one month, the medication only and combined treatment group had significantly lower levels of anxiety than the SIT group. However after six months (at completion of intervention), the combined treatment group and SIT group both had significantly less anxiety than the medication only group, in which anxiety had increased to its level at start of intervention. The effect size at this time point was d=0.86 in favour of SIT. This was interpreted to demonstrate that whilst medication was effective in reducing short-term anxiety, it had no long-term effect, whereas the SIT, though slower to have an effect, was more longstanding.

Discussion

This systematic review aimed to assess the efficacy of spiritually integrated Cognitive Behavioural Therapy for depression and anxiety, in comparison to secular psychological therapies, and non-active control groups. Furthermore the review aimed to assess the quality of the studies used to test such interventions. Based on the studies reviewed above, there are a number of clear conclusions, and some areas with less clarity.

Efficacy of Spiritually Integrated CBT

Spiritually Integrated CBT appears to be an effective intervention for reducing depression, and also appears to be effective for reducing anxiety. This applies across both long and short-term interventions, and with various methods of integrating religious and CBT content. It is less clear whether SIT provides any benefit beyond the effect of generic CBT, and this finding was seen both overall, and also in the two highest quality papers.

In answer to the review question comparing SITs to secular equivalents, none of the six studies comparing SIT and secular equivalent found a significant difference between the two groups, yet several found trends in that direction, and small to medium effect sizes. Given the predominantly small sample sizes, and lack of power calculations or justification of sample sizes, studies may have been insufficiently powered to detect differences that may be clinically significant. It is also important to note that this review suggests secular therapies are effective with religious participants with an effect size similar to psychological therapy studies, where a mean effect size has been found to be 0.67 (Cuijpers, Smit, Bohlmeijer, Hollon, & Andersson, 2010).

Given the service-level problem of people with religious beliefs sometimes being reluctant to attend mainstream mental health services, it is of primary importance not that SIT is necessarily more effective than secular CBT, but rather approximately as effective with reduced barriers to access. This may mean more people able to access an evidence-based therapy who would not have otherwise. Any improvement for religious versus secular CBT may therefore be unnecessary to justify its use. It is noteworthy that no differences were found between religious and secular CBT in terms of drop out rate, which may indicate that both interventions were equally acceptable. However, given small sample sizes, this is

difficult to determine. Furthermore, the barrier for secular CBT may be more related to perception rather than the actual nature of the intervention once it has been experienced.

The comparison of SIT with pastoral counseling is important, given the amount of psychological problems treated in that manner. Only one study investigated this and found no significant difference between them (Propst et al., 1992). Despite being a higher quality study, the number of participants per group was around 15, so it may have been underpowered to identify significant differences. One difficulty with interpreting this finding is that pastoral counseling in religious settings is likely to be varied. This study may have found it effective because the researchers provided an explicit treatment protocol based on surveys of many people involved pastoral counselling. Furthermore, experienced graduate psychology students performed the intervention. This may mean the pastoral counseling delivered may have been different from, and superior to, what is typically provided.

Quality of Included Studies

One important aspect of this review, with reference to the review question regarding the quality of studies testing SITs, is the use of a validated quality measure to assess the studies involved. The mean (SD) score on the CTAM was 54.5 (14.0) with a range of 30 to 74. An arbitrary cut-off used by Wykes et al. (2008) to indicate adequate methodology was 65. Only two studies attained this, suggesting that much work in this area is of inadequate quality.

Perhaps the most prominent methodological problem of these studies was small sample sizes (median N=41). Only one study had sample sizes in each group above the arbitrary cut-off size suggested in the CTAM of 27. Given the trends towards significant effects in a number of the studies, small sample sizes may have affected the possibility of detecting significant changes.

Methodology for controlling for the effects of SIT in control interventions may also have been problematic. In the majority of the studies using a secular alternative as a control group, control participants either knew that the therapist shared their religious beliefs or therapy took place in a religious setting. Participants are also likely to have been informed that the research was about a religiously-oriented therapy. This may have led to a religious 'halo effect' on the secular

therapies, such that the barriers or potential stigma surrounding secular therapy were removed, and this was deemed more acceptable than they may have been if delivered outside the research context. Furthermore, the majority of studies did not address adherence to the treatment protocol.

Another area unclear from research to date is the active elements of SITs in treating psychological problems. First, although the majority of studies provided some information regarding treatment protocol, there is significant variety as to what modifications are made from traditional CBT. Consequently, the active components of SIT are difficult to ascertain. There are also clearly significant differences in protocols, quantity and type of religious content, length of interventions and styles of therapy present, thus making direct comparisons difficult. In addition, patients' experience of therapy, or perceptions of acceptability of treatment may have had an effect on outcome. Future work comparing different components of SITs, and seeking participants' ideas on what is helpful about them, may clarify how future SITs could best be designed.

The effect of researcher allegiance on the outcome of studies may also be relevant. Meta-analyses show a mean effect size of d=0.54 for researcher allegiance in psychotherapy research (Munder, Brütsch, Leonhart, Gerger, & Barth, 2013). This may be particularly pertinent when not only therapeutic, but religious beliefs are involved. Consequently, further work could assess the role of the therapist's belief on outcome. Propst et al. (1992) did address the effect of therapist belief and found that SIT was equally effective when administered by non-religious therapists, however, this involved small samples and a specific version of therapy, so wider-reaching research is required. This may have implications for the implementation of SIT in health services where therapists may not hold the same beliefs as patients.

Limitations of Review

The present review has a number of limitations. First, whilst attempts were made to access unpublished studies, none were successfully accessed. It is unclear whether relevant unpublished data exist, however this is likely to be the case. Two potentially relevant studies could not be included; one due to being inaccessible with the author not responding to contact, and the other being a conference abstract without data, and the author not responding to contact. These further studies may have benefited this review. There may have been a 'file-drawer effect'

whereby studies with significant results were more likely to be published. Given that all studies included in this review found some positive effects for SIT, it is possible that such a bias was present. There could also be benefit in future reviews supplementing a quantitative quality measure of studies such as the CTAM with a non-numeric alternative such as the Risk of Bias Tool recommended by the Cochrane Collaboration (Higgins, Altman & Sterne, 2011).

This review was restricted to interventions using CBT. However, other SITs may also be effective. Further research of SITs based on other evidence-based therapeutic modalities would be beneficial. Furthermore, this review was limited to depression and anxiety, as these are the most common mental health problems and targets of intervention. However, a review could helpfully investigate the efficacy of SITs on different psychological problems.

Implications

Given the evidence supporting spiritually integrated CBT for treatment of depression and anxiety, it is important to consider how this could be feasibly delivered. At present, such interventions are predominantly available only in areas where research is being carried out, or individual clinicians have a specialist interest. Seven of eight interventions were relatively high intensity. Just one study used a comparatively low intensity approach (a one-session intervention), and even then, an experienced psychology graduate student delivered this. Consequently, the majority of patients may be unable to access such therapy.

Increasingly, methods such as guided self-help, online CBT and therapy groups are being used to provide increased access to psychological therapies with good effects in wider healthcare settings (Gellatly et al., 2007). Low intensity SITs such as bibliotherapy or computerised CBT may be beneficial, as they could be provided with comparatively little therapist resources across wide geographical areas. Furthermore, non-religious therapists may more easily support them than a face-to-face therapy.

Research investigating how such a model of delivery could be implemented, its potential efficacy and cost-effectiveness could be beneficial. Promising results have been found using an online SIT not using a CBT framework (Rosmarin, Pargament, Pirutinsky, & Mahoney, 2010), demonstrating the possibility of using such an approach. As well as this, there may be therapeutic benefits in clinicians

adopting religious and spiritual beliefs into therapy where desired by the patient, which could enhance the collaborative and person-centred nature of therapy. Additionally, it could be beneficial for religious leaders to be given instruction and guidance on providing simple but evidence based psychological interventions in order to address the mental health needs of religious people in an environment in which they are comfortable.

Conclusion

Spiritually integrated CBT appears to have a small but significant evidence base suggesting it may reduce depression and anxiety in religious people when delivered face-to-face in traditional format. Whilst it seems there is no clinically significant therapeutic benefit beyond that provided by secular therapy, incorporating religious beliefs may reduce barriers to accessing psychological therapy without reducing therapeutic effectiveness. A meta-analytic approach may be useful in enabling a more definitive conclusion regarding the strength of the evidence for SITs. Qualitative and process research is needed to shed light on whether participants in SIT feel better engaged than in traditional secular CBT. No work to date has examined specifically low intensity spiritually integrated CBT delivery, such as bibliotherapy and computerised CBT. Future work should focus on producing high quality studies assessing how SIT can be effectively implemented into existing healthcare systems, and clarifying whether there are particular components of SIT which provide particular benefit in treating psychological problems.

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Chapter 2 – Major Research Project

Online CBT for individuals with Christian beliefs: a pilot randomised controlled trial

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Prepared in accordance with guidelines for submission to *Journal of Clinical Psychology* (see appendix 1).

Submitted in part fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology

Plain English Summary

Background - Some people with religious beliefs may not seek access to psychological interventions that could be beneficial for them. Consequently, therapies that incorporate religious beliefs could enable those people to access therapies that are known to be effective. There can be difficulties in providing access to such therapies to a wide range of people.

Aims and Questions - This study aimed to test an online psychological therapy that has been modified to appeal to people with Christian beliefs. It builds on an existing course with a strong evidence base, and incorporates explicitly Christian content. It aims to improve low mood, anxiety and ability to carry out normal activities.

Methods - Fifty-two adults who self-identified as Christians with low mood or anxiety were recruited via adverts in a newspaper and an interview on a Christian radio station. Those with regular suicidal thoughts or who were receiving psychological therapy already were excluded. Once they gave consent to take part, they were split into two groups. One group accessed the course straight away and the other could not access the course until after the research eight weeks later. They completed questionnaires about their mood and anxiety, as well as religious beliefs and opinions about the interaction between Christianity and mental health. Differences were compared in how scores on questionnaires changed in the two groups, to show what effect the course had.

Main Findings and Conclusions - Those with immediate access to the course showed greater improvement in mood, anxiety and ability to carry out normal activities than those who did not have access, though it was not clear whether this was down to chance, as the sample was relatively small. Most participants agreed that it was important to incorporate faith in their mental health care, and did not feel adequately supported at present. Those who accessed the online course were broadly positive about its content. The study suggested that this course may be beneficial for Christians with mental health problems, however the study was not intended to recruit a sufficiently large sample to answer the question of effectiveness. A future larger study is needed to be clear about this. Some lessons can be taken from the present research to inform such a future study.

Abstract

Objectives: To investigate proof of concept, feasibility and efficacy of an online Cognitive Behavioural Therapy (CBT) intervention, modified to appeal to Christians who may be reluctant to access secular mental health services.

Methods: 52 volunteers with Christian beliefs experiencing low mood or anxiety were recruited (median age=46.5, 25% male) to a pilot randomised waiting-list controlled trial of an online Spiritually-integrated CBT resource, with assessments at baseline, 8 weeks and 12 weeks. Primary outcome measures addressed mood, anxiety and general functioning.

Results: No significant differences were found between groups on improvement of primary outcome measures, however there were non-significant trends in favour of those who had access to the course compared with waiting list control on all primary outcome measures.

Conclusion: Online CBT targeted at religious groups may be an effective and practical means of promoting evidence-based psychological interventions to individuals who may not otherwise access them.

Short Title: Online CBT for Christians: Pilot RCT

Keywords: CBT; Christian; online CBT; computerised; RCT; Spiritually Integrated Therapy

Introduction

At any one time, one in six people in the UK struggle with a mental health problem (McManus, Meltzer, Brugha, Bebbington, & Jenkins, 2009). As well as causing distress, there is evidence demonstrating the wider effects of common mental health problems on sufferers' ability to function, with effects at a societal and economic level (Layard, 2006). Cognitive Behavioural Therapy (CBT) has been found to be an effective intervention for a range of mental health problems, including depression and anxiety (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012). CBT has become the treatment of choice in the UK for a number of these conditions (National Institute for Health and Care Excellence, 2009).

Whilst its effectiveness is relatively uncontested, difficulties are encountered in dissemination, given the significant number of individuals presenting to services with psychological problems and limited availability of qualified professionals to provide appropriate interventions. Indeed, while services often struggle to provide CBT in a timely manner with limited resources to those who are referred, Kohn et al. (2004) showed that over half of those with diagnosable mental health disorders do not seek treatment for their condition. This leaves many people not accessing an intervention that could significantly decrease distress, improve their quality of life and enhance their ability to function.

Consequently, there is an emphasis on finding ways to deliver effective CBT-based interventions in a cost-efficient and wide-reaching manner. As well as group approaches and bibliotherapy, online CBT is a cost-effective and efficacious means of delivering CBT. Treatment effects have been found to be equivalent to those achieved with CBT delivered in person (Hedman, Ljótsson, & Lindefors, 2012). Online CBT removes some barriers to treatment, including stigma surrounding mental health services, and practical difficulties of regularly attending therapy.

As well as focusing on effective dissemination of evidence-based therapies, there has been a service-level emphasis on reaching groups who may be less likely to access mental health services. Barriers to attending mainstream mental health services may exist for faith groups (Koenig, 2005). According to the last census, 59% of the population of England and Wales describe themselves as Christian (Office for National Statistics, 2012), with around 10% attending church weekly (Ashworth & Farthing, 2007), representing a significant proportion of the population.

Studies both in the UK (Wood, Watson, & Hayter, 2011), and the US (Weaver, 1995), show that Christian workers such as ministers spend significant time caring for people with mental health problems, and often feel inadequately prepared to do so, or feel unsupported by health services. Qualitative work in the UK with people from different faith backgrounds showed an uneasiness around seeking help from mainstream health services (Mayers, Leavey, Vallianatou, & Barker, 2007), citing fears that the therapist would not understand their faith, or that the therapist may see it as harmful. Participants also reported that receiving secular services might be perceived a rejection of God's healing. There is significant evidence of a 'religiosity gap' between the beliefs of patients and professionals, both as perceived by patients, and present amongst clinicians (Dein, 2004). For Christians, there may be a perceived internal pressure that the life of a Christian should be filled with joy and contentment, and that mental health problems are unacceptable (see Williams & Wiffen, 2014). Furthermore, personalizing and incorporating individual patients' preferences into treatment tends to lead to improved outcome (Swift & Callahan, 2009)

Given the evidence base for CBT and the need to reach people who may miss out on evidence-based interventions, there have been a number of attempts to integrate religious beliefs into CBT (e.g. Hawkins, Tan, & Turk, 1999; Johnson & Ridley, 1992; Pecheur & Edwards, 1984; Propst, Ostrom, Watkins, Dean, & Mashburn, 1992). Various spiritually integrated treatments (SITs) both using CBT, and with other therapeutic models have been tested for various religious groups including Judaism, Islam and Christianity. Previous reviews of SITs have found them to be as effective in reducing symptoms as traditional CBT, with the possible advantage of appealing to religious people (Hook et al., 2010). These have most commonly targeted depression and anxiety, but have also looked at disorders such as Obsessive-Compulsive Disorder (Gangdev, 1998) and schizophrenia (Wahass & Kent, 1997).

Whilst there has been some evidence for the efficacy of SITs, few high-quality studies have been undertaken. Furthermore, there has been little work investigating how SITs may be more widely disseminated, rather than being available solely during the initial research. Given the increasing use of online technology across many areas of life, and the increased computer literacy of the population, online CBT may be a means of disseminating SIT to a hard-to-reach group.

One previously published study compared an online SIT aimed at Jewish people experiencing anxiety with an online Progressive Muscular Relaxation (PMR) intervention and a waiting-list control (Rosmarin, Pargament, Pirutinsky, & Mahoney, 2010). This found that the SIT was more effective than waiting list control and as effective as PMR in reducing stress and worry, and more acceptable than PMR. The SIT used in this study did not utilize a pre-existing evidence-based approach, and no research to date has examined the impact of spiritually integrated low intensity approaches such as bibliotherapy or online CBT (see Chapter 1).

In the present study, a pre-existing online CBT resource was modified to incorporate important elements of the Christian faith, and was explicitly aimed at that group. The research took the form of a pilot Randomised Controlled Trial (RCT).

Aims

- Assess different methods of recruiting participants.
- Describe the demographics, religiosity and views on mental health and Christianity of those entering the study.
- Test the rate of completion of questionnaires at follow-up.
- Assess clinical effect of the intervention in order to inform a power calculation for a future substantive RCT.
- Assess use of, and satisfaction with the course.

Methods

Design

The study used a randomised waiting list controlled trial design, with assessments at baseline and 8 week follow-up (FU8). For those in the immediate access group, a 12-week follow-up (FU12) was also conducted. The study followed the PICO (Population, Intervention, Control & Outcome) Method to aid development of an appropriate research question. Additionally, the Medical Research Council's guidance (Craig, Dieppe, Macintyre, Michie et al., 2008) was used to identify appropriate methods to evaluate the intervention.

Participants

The intervention is targeted at individuals experiencing mild to moderate symptoms of depression or anxiety who have Christian beliefs that they wish to be incorporated into a psychological intervention. Participants were recruited from respondents to advertisements for a course aiming to help people experiencing symptoms of low mood, stress, anxiety or depression, who may want their faith recognised in the intervention they receive.

Recruitment

A range of recruitment methods were tested. Advertisements were placed in Metro newspaper (see Appendix 2) and an interview on a Christian radio station was conducted describing the study. Six large churches and eight university Christian Unions were contacted by email requesting that they publicise the project amongst their organisations. All advertisements were linked to a website containing the participant information sheet (see Appendix 3), course details and contact details. A link to an online consent form (see Appendix 4) was included on this website. Participants were offered the option to complete consent and questionnaires by post. Participants indicated as part of initial questionnaires how they had first heard of the study.

Consent

Informed consent was given either online, or by post where requested. Informed consent followed best practice (Varnhagen et al., 2005).

Inclusion and exclusion criteria

Inclusion criteria were broad and based on self-selection of those who choose to use the course.

Exclusion criteria were assessed through responses to initial online questionnaires. They were active suicidal ideation, triggering a suggestion to attend formal health services (information about how to access help was provided, e.g. NHS 24, Samaritans). Active suicidal ideation was defined for the purposes of the study as a score indicating 'more than half of the days' or 'nearly every day' on item indicating suicidal thoughts of the Patient Health Questionnaire-9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001). Those currently receiving psychological therapy were also excluded.

Measures

The primary outcome measures were depression and anxiety as measured by the PHQ-9 and the General Anxiety Disorder-7 (GAD-7; Spitzer, Kroenke, Williams, & Lowe, 2006). These tools are validated and widely used (Kroenke, Spitzer, Williams, & Löwe, 2010). A measure of social functioning with good validity and reliability (Mataix-Cols et al., 2005), the Work and Social Adjustment Scale (WSAS; Mundt, Marks, Shear, & Greist, 2002), was also used. These measures were completed before, immediately after the course (FU8) and at a follow-up (FU12). The waiting list control group completed measures at baseline and 8 weeks only.

A brief measure of religiosity, the Duke University Religiosity Index (DUREL; Koenig & Büssing, 2010), encompassing religious activity and intrinsic religiosity was administered at baseline. This measure also has good validity and reliability. Individuals' views on: the interplay between mental health and Christianity; mental health services; and of the attitude of the church to mental health were assessed using a novel questionnaire (see Appendix 5). This was informally piloted to ensure readability and coherence. Demographic information about participants was recorded. Questionnaires took 10-15 minutes.

Procedures

After giving informed consent and completing initial questionnaires, eligible participants were randomised to either the immediate access (IA) or delayed access

(DA) group using a random number generator on Microsoft Excel. Those randomised to the IA group were informed of their allocation and instructed on course access and use. Those in the DA group were informed of their allocation and told they would be contacted in 8 weeks with the further questionnaires and access to the course. All participants were emailed after 4 weeks. The email thanked them for participating; encouraged course use; and offered to address any difficulties.

All participants were provided with emergency contact details (e.g. 999, NHS 24), and requested to contact these numbers in case of deterioration in their mental health.

After 8 weeks, all participants were invited to repeat primary outcome measures. The IA group completed further questions regarding course satisfaction and use. The IA participants were asked to complete primary outcome measures again at 12 weeks. After initial request to complete questionnaires, participants were contacted with 2 reminder emails if they did not complete questionnaires. If there was no response to these, they were deemed lost to follow-up.

Course content

The online course was modified from a pre-existing widely used and evaluated course called *Living Life to the Full* (Williams, 2009). The course teaches life skills in an accessible way to people with mild to moderate metal health problems. It contains 8 modules addressing various topics using a CBT framework. Each module includes a slideshow presentation with accompanying audio talk, downloadable worksheets, and linked e-books, as well as forums, and the option of weekly automated email support. The course is designed such that participants can work through the course systematically or choose specific sections in their preferred order at their own pace.

The modified course for this project, *Living Life to the Full with God* specifically targeted Christians who wished for their faith to be incorporated into their intervention. Changes included: videos discussing how each topic may be particularly affected by Christian faith; discussion of struggles specific to Christians; modules incorporating Christian content such as Bible verses; brief optional prayers; downloadable worksheets incorporating Christian examples; and,

introductory information and the welcome page were modified to appeal to Christians.

Ethical approval

Ethical approval for the study was obtained via the University of Glasgow Medical and Veterinary and Life Sciences ethics panel (Reference number 200130015; Approval date: 13th October 2013; see Appendix 6). The study was registered with the International Standard Randomised Controlled Trial Number Register (ISRCTN61518949).

Statistical Analysis

Descriptive statistics were used to describe sample demographics, as well as religiosity and participants' views on the interaction between their faith and mental health. An Intention To Treat protocol was used to investigate differences between groups on measures of mood and functioning. Descriptive statistics of primary outcome measures were assessed at baseline and eight week follow-up (FU8) between IA and DA group. Exploratory Analyses of Covariance tested group differences in primary outcome measures controlling for baseline scores. Effect sizes were calculated for within and between group change. Descriptive statistics were reported for change in primary outcome measures at 12-week follow-up (FU12) for IA group. Descriptive statistics were reported regarding use of the course. Finally, differences between completers and non-completers were assessed using descriptive statistics. Statistical analyses were carried out with advice from Dr. Caroline Haig, statistician at the Robertson Centre for Biostatistics.

Results

Sample Information

Informed consent was given and initial questionnaires completed by 58 participants. Of these, six were excluded based on their responses. Figure 5 details participant exclusions. All participants were recruited online. One participant requested postal consent forms, however these were not completed during recruitment phase. Table 1 presents demographic information of the whole sample and groups after randomisation. Given the relatively small sample size, no large differences between groups were evident, suggesting randomisation had been effective.

The majority of participants heard about the course in Metro Newspaper (N=15) or from a radio interview (N=17). Eight participants reported that they were personally recommended the course and seven saw adverts posted by friends on Facebook. Five further participants reported other online sources where they had seen the course.

Religiosity

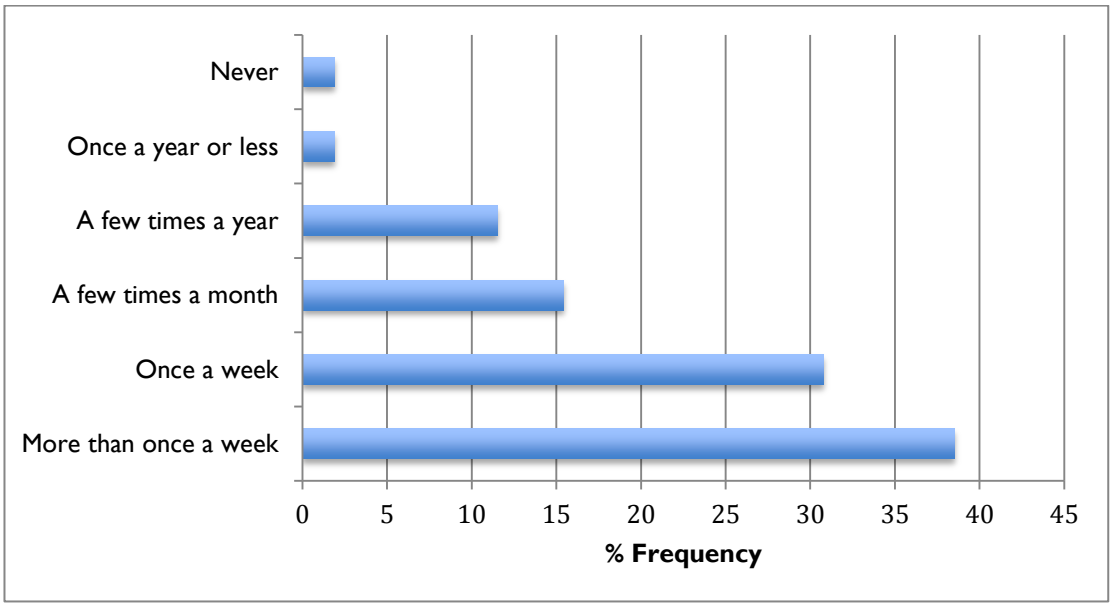
Religiosity was assessed with the DUREL. Frequency of church attendance is shown in Figure 1. Spending time in private religious activities at least once a week was reported by 41 participants. Forty participants agreed (i.e. definitely true of me or tends to be true of me) that they 'experience the presence of the Divine (i.e. God)'. Most (45/52) agreed that 'religious beliefs are what really lie behind my whole approach to life' and 44 agreed that they 'try to carry my religion over into all other dealings in life'. This confirms the sample's strong Christian beliefs, as anticipated based on recruitment strategy.

Table 1 – Demographics of sample at baseline

Variable/Level	***Total***	***Delayed Access***	***Immediate Access***
Number observed (missing)	***52 (0)***	***25 (0)***	***27 (0)***
Age - *Median (IQR)*	46.5 (38.5,53.8)	43 (32,53.5)	48 (43,56)
Gender – *N (of 52)*			
Female	39	20	19
Male	13	5	8
Marital Status – *N (of 52)*			
Single	10	3	7
In relationship living separately	3	3	0
Married/living as married	33	15	18
Separated/Divorced	5	4	1
Widowed	1	0	1
Education – *N (of 52)*			
No formal qualifications	1	1	0
Standard grade/equiv.	4	2	2
Higher grade/equiv.	4	0	4
HNC/HND/SVQ/RSA Diploma	5	3	2
Undergraduate degree	21	12	9
Postgraduate degree	17	7	10
Chronicity – *N (of 52)*			
0-6 months	3	2	1
6-12 months	5	3	2
1-2 years	5	1	4
2-4 years	7	5	2
5 years or more	32	14	18
Medication - *N (of 51*)*			
Yes	20	9	11
No	31	16	15

**One participant missed this item.*

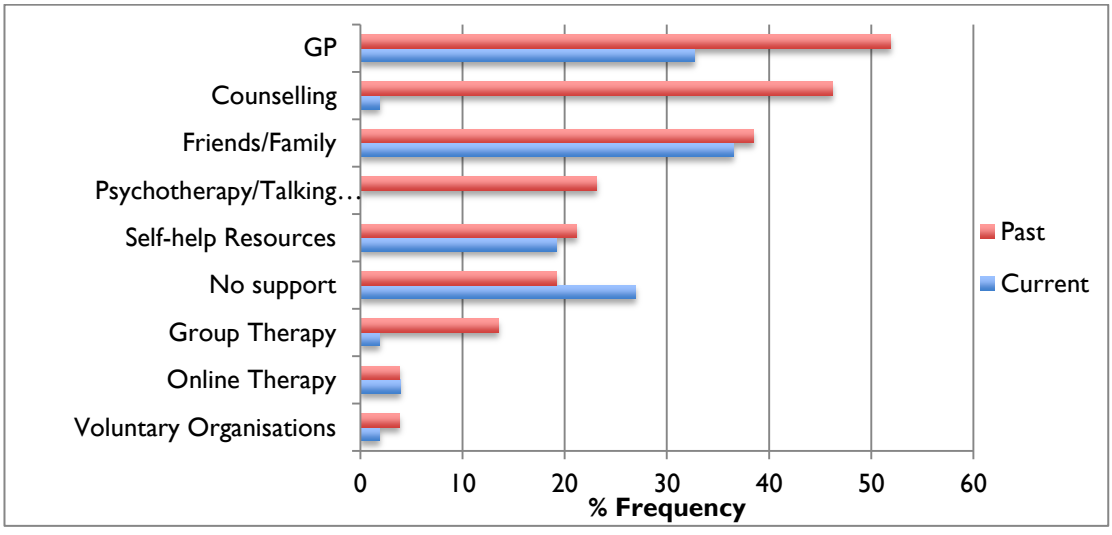
Figure 1 – Chart showing percentage frequency of church attendance



Level of support, attribution of illness and views on what might help

Participants answered a range of questions regarding attribution of illness, current and past support, and what they believed would be helpful. Figure 2 shows the percentage of participants receiving various forms of mental health support in the past and currently. In terms of current support, the most common source was 'Family and Friends' followed by 'GP'. In terms of past support, the most common source was 'GP' followed by 'Counselling'. Nine participants reported other sources of past and current support. Just over half (27/53) had seen their GP in the past and 17 were currently in contact with their GP.

Figure 2 – Chart showing number of participants receiving support from various means in past and currently (N=52)



Figures 3 and 4 show the percentage of participants endorsing a number of factors contributing to their illness and possible sources of help respectively.

Figure 3 – Chart showing percentage of participants endorsing options in response to the question 'Which of the following have a role in causing your current difficulties?' (N=52)

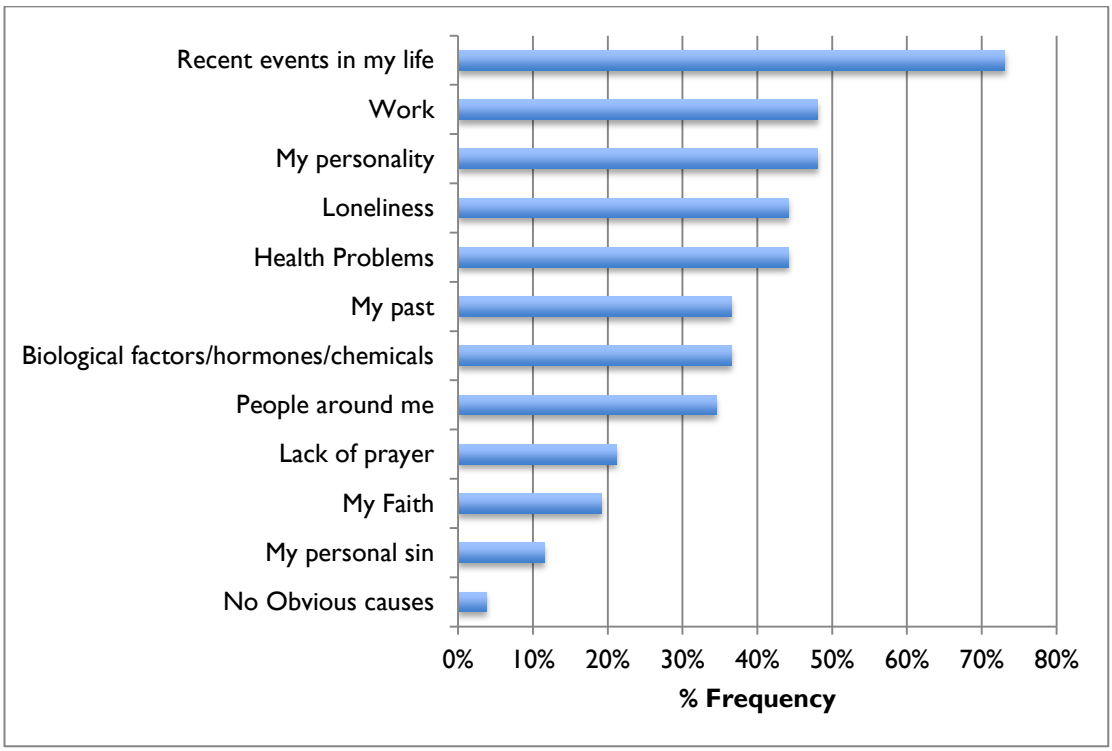
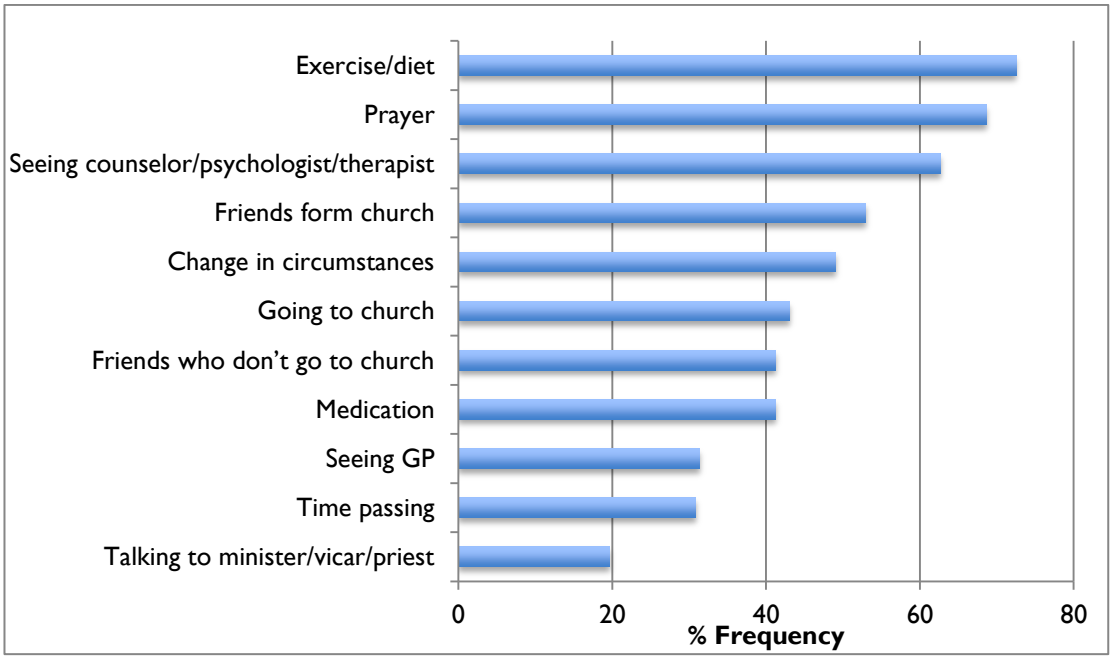


Figure 4 – Chart showing percentage of participants endorsing options in response to the question 'What might help?' (N=51)



Relationship between Christian faith and mental health

Participants' median responses to questions regarding the interaction between their Christian faith and mental health services are shown in table 2. Further comments on this topic are in Appendix 7.

Table 2 – Questions on the relationship between Christian faith and mental health

Question	***Median score***
How appropriate do you think it is for a Christian to use mainstream mental health services? (1=Totally inappropriate, 7=Totally appropriate)	7
How helpful is your Christian faith in coping with your low mood, stress or anxiety? (1=Very unhelpful, 7=Very helpful)	5
How supported do you feel by your church in dealing with your low mood or worries? (1=Not at all, 7=Very well)	3
How able do you feel to speak about your problems in your church context? (1=Not at all, 7=Totally free)	2
How important is it for any intervention helping your low mood, stress or anxiety to incorporate your Christian faith? (1=Not at all, 7=Extremely)	6
How supportive do you find your church towards those with low mood, stress or anxiety? (1=Not at all, 7=Extremely)	4
How accepting of your Christian faith would you expect mainstream mental health services to be? (1=Not at all, 7=Extremely)	4

Primary outcome measures at baseline

Tests of normality were carried out on primary outcome measures of the baseline sample. Kolmogorov-Smirnov tests, distribution histograms, values of skew and kurtosis, stem-and-leaf plots and Q-Q plots suggested that the distribution of data approximated normality, and therefore parametric statistics could be used.

After completing initial questionnaires, 52 participants were randomised into either the IA or DA group. 27 were allocated to the IA group and 25 to the DA

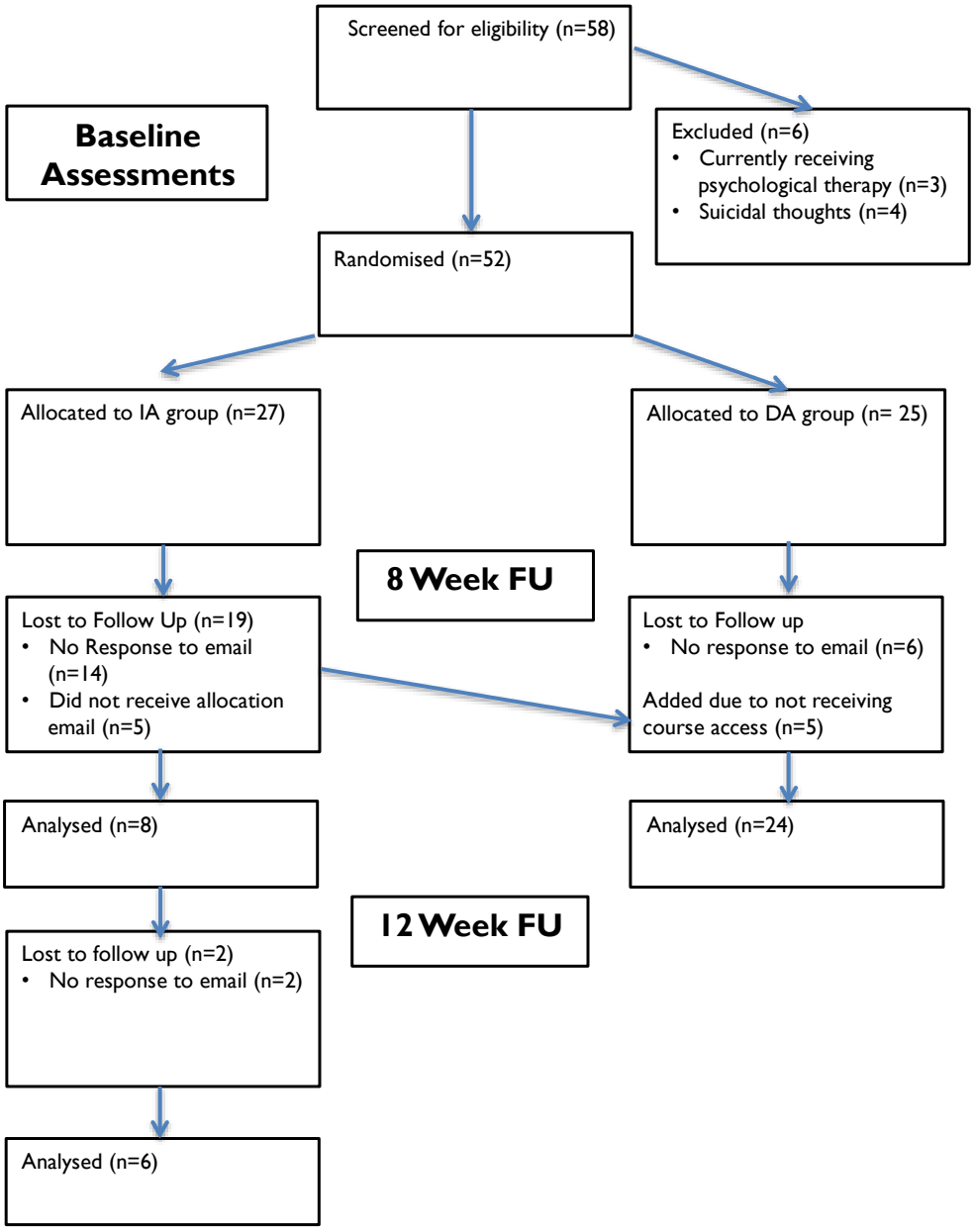
group. Mean scores on primary outcome measures at baseline for the full sample and two treatment groups are shown in Table 3. There were no statistical differences between groups on all baseline primary outcome measures. As a whole group, mean PHQ-9 and GAD-7 scores lie just above the cut off between mild and moderate depression and anxiety (Kroenke et al., 2010). Of the 52 participants completing the PHQ-9, 5 were minimally depressed, 19 were mild, 16 were moderate, 8 were moderately severe and 4 were severe. Of the 52 participants who completed the GAD-7, 11 had minimal anxiety, 19 were mild, 8 were moderate and 13 were severe. The mean WSAS score lies just above the cut off between 'significant functional impairment but less severe clinical symptomatology' and 'moderately severe psychopathology' (Mundt et al., 2002). Of the 52 to complete this measure, 8 scores indicated subclinical problems, 14 were associated with 'significant functional impairment but less severe clinical symptomatology', and 30 scores indicated 'moderately severe or worse psychopathology'.

Table 3 - Primary Outcome Measures at Baseline

Variable	***Statistic***	***All subjects***	***DA***	***IA***
PHQ-9	$N_{Obs}(N_{Miss})$	52 (0)	25 (0)	27 (0)
	Mean(SD)	10.8 (5.3)	11.9 (5.3)	9.7 (5.1)
GAD-7	$N_{Obs}(N_{Miss})$	51 (1)	25 (0)	26 (1)
	Mean(SD)	9.3 (5.4)	10.0 (5.1)	8.6 (5.6)
WSAS	$N_{Obs}(N_{Miss})$	52 (0)	25 (0)	27 (0)
	Mean(SD)	20.5 (9.1)	22.4 (8.2)	18.6 (9.6)

$N_{Obs}(N_{Miss})$ – Number of observed participants (number missing)

Figure 5 – CONSORT diagram showing participant recruitment and follow-up



Eight-Week Follow-up

Figure 5 shows a CONSORT flow diagram regarding follow-up and analysis at week FU8 and FU12 time points. From the original allocation groups, eight of the IA group and 19 of the DA group completed the FU8 questionnaires. A participant was deemed to be lost to follow-up if they failed to respond to three reminder emails at one time point. A further 5 participants who had been randomised to the IA group, reported having been allocated to the DA group (i.e. denied receiving allocation email). Given those participants had no access to the course and had not

received any contact informing them of being randomised to the IA group, therefore experiencing the same conditions as the DA group, they were treated as DA participants for analysis. This left 8 IA participants and 24 DA participants with completed FU8 data. This meant that in total, 32 out of 52 participants completed FU8. The mean number of days between baseline and FU8 was 61.8 (SD=5.8).

Descriptive statistics for primary outcome measures at FU8 are shown in Table 4. Figures 6-8 show change in primary outcome measures for those completing primary outcome measures at both time points.

Table 4 - Primary outcome measures at FU8

Variable	*Statistic*	*All subjects*	*DA*	*IA*
PHQ-9	$N_{Obs}(N_{Miss})$	32 (20)	24 (6)	8 (14)
	Mean(SD)	9.3 (5.5)	9.8 (5.8)	7.5 (4.7)
GAD-7	$N_{Obs}(N_{Miss})$	32 (20)	24 (6)	8 (14)
	Mean(SD)	7.7 (5.5)	8.6 (5.7)	5.0 (4.0)
WSAS	$N_{Obs}(N_{Miss})$	32 (20)	24 (6)	8 (14)
	Mean(SD)	18.2 (10.1)	18.9(10.5)	16.0 (9.2)

$N_{obs}(N_{miss})$ – Number of observed participants (number missing)

Exploratory analysis assessed the statistical significance of the changes in mean scores whilst controlling for baseline scores. For each outcome measure, treatment effect at 8 weeks was estimated using analysis of covariance (ANCOVA) adjusting for the corresponding baseline measure. Results of these are shown in Table 5. These show no significant differences in change on outcome measures over time as a result of treatment group. However, there was a trend towards this on the WSAS. Participants in the IA group showed average improvements of 2.87, 3.31 and 6.39 units on the PHQ-9, GAD-7 and WSAS respectively.

Although it is important to interpret standardised effect sizes with caution in small samples such as this, within subjects effect sizes in the IA group on the PHQ-9, GAD-7 and WSAS were d=0.51, d=0.74 and d=0.75 respectively. Between groups effect sizes were d=0.54, d=0.60 and d=0.63. All of these would be considered medium effect sizes based on Cohen's norms (Cohen, 1988). The present study achieved 25%, 30% and 32% power to detect differences in effect size between groups on the PHQ-9, GAD-7 and WSAS at a significance level of $p<0.05$.

Figure 6 – Mean scores (95% Confidence intervals) on PHQ-9 at baseline and FU8 in IA and DA group

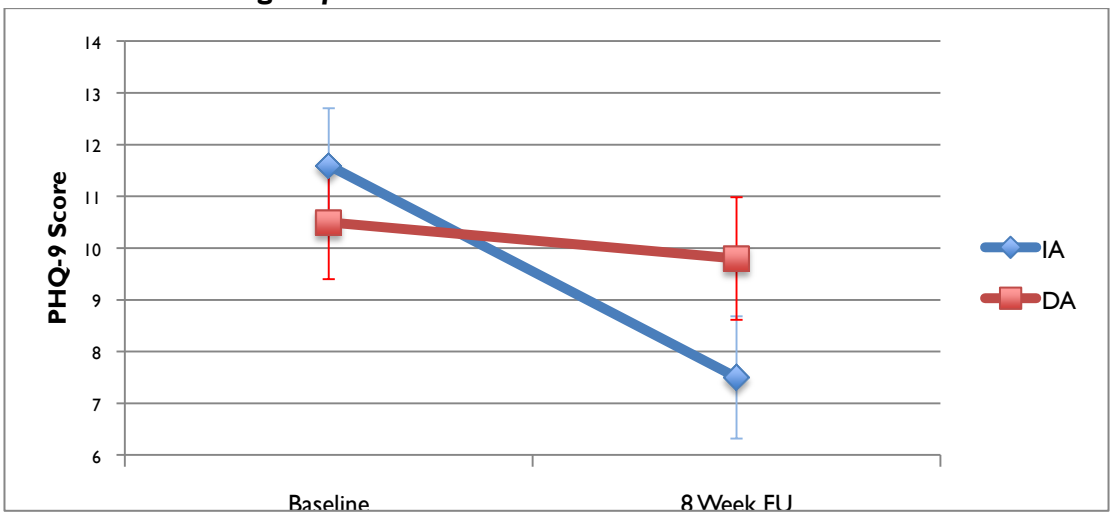


Figure 7 – Mean scores (95% Confidence intervals) on GAD-7 at baseline and FU8 in IA and DA group

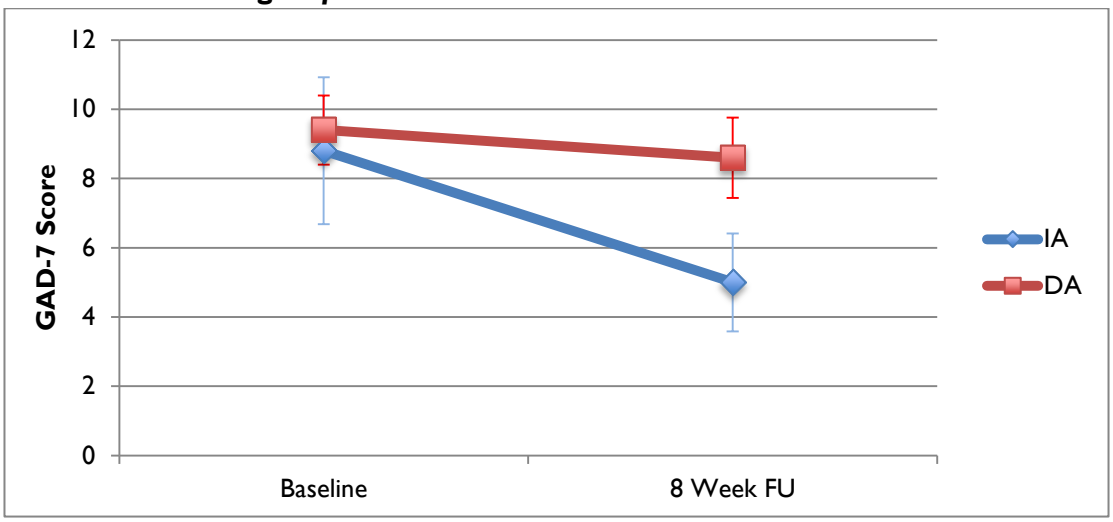


Figure 8 - Mean scores (95% Confidence intervals) on WSAS at baseline and FU8 in IA and DA group

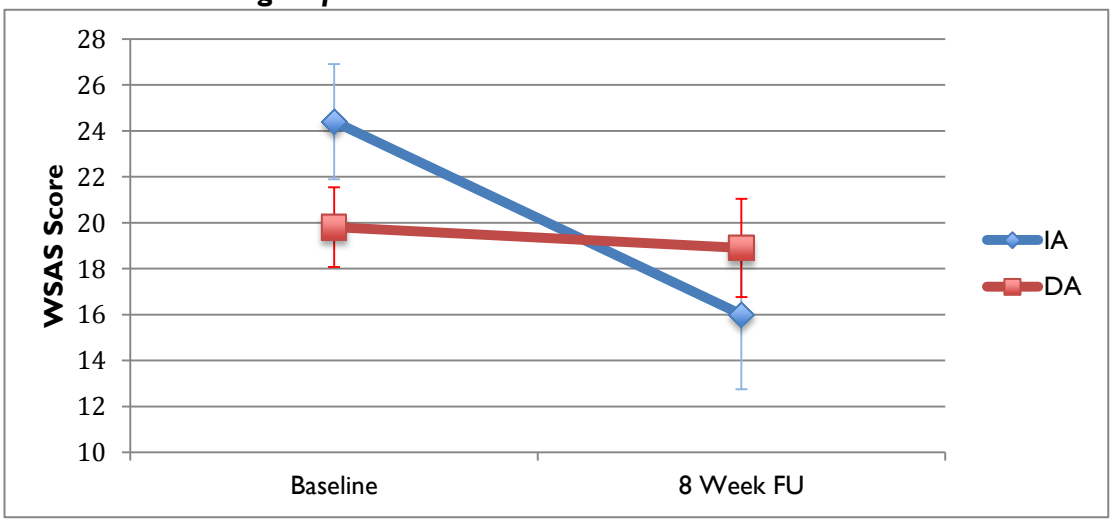


Table 5 - Coefficients, 95% confidence intervals and p-values for treatment group effect on FU8 scores, adjusted for baseline scores.

Outcome	*N*	*Coefficient*	*95% CI*	*P-value*
PHQ-9 score	32	-2.87	(-7.02, 1.28)	0.17
GAD-7 score	32	-3.31	(-7.52, 0.90)	0.12
WSAS score	32	-6.39	(-13.49, 0.72)	0.08

Twelve-Week Follow-up

Those participants (N=8) who completed questionnaires at FU8 in IA group were contacted again after 12 weeks to repeat primary outcome measures. Those who did not respond to three emails at FU8 were deemed lost to follow-up (N=14). For those completing FU12 questionnaires (N=6), the mean (SD) scores went from 8.3 (5.2) to 8.5 (3.6) in PHQ-9, 3.8 (3.3) to 6.2 (5.1) on GAD-7 and remained at 16.7 for WSAS. The mean (SD) number of days between FU8 and FU12 was 26 (9.4).

Course use and satisfaction

Participants in the IA group who completed FU8 questionnaires (N=8/27) were asked about their use of the course at FU8. Of the eight participants, two used the course weekly, two used it two to four times per month, three used it monthly, and one less than monthly. Two reported completing the course. Five participants reported using the videos, six signed up for support emails and seven read at least one e-book.

Seven participants reported that they were either very satisfied or slightly satisfied with the course (one answered 'Not applicable' having not used the course sufficiently). Seven participants reported that they were likely to recommend the course to a Christian friend or family member.

Participants were asked what they found most helpful about the course. Various comments were made, specifically mentioning the e-books, the accessibility and convenience of the course, the videos and the reassurance provided by the fact that such a course existed. In terms of things that were unhelpful, a number of participants commented that they did not receive support emails, and some were unable to access certain aspects of the course due to technical problems (e.g. could not play videos or lack of internet access).

Testing differences between email responders and non-responders at FU8

Mean scores in primary outcome measures were compared between those who did and did not complete FU8 questionnaires. In total, 32 completed questionnaires compared with 20 who did not. There were no significant differences based on independent samples t-tests for mean scores for PHQ-9 (mean (SD) 10.8(5.2) vs 10.7 (5.4)), GAD-7 (mean (SD) 9.3 (5.1) vs 9.4 (6.0)) or WSAS (mean (SD) 20.9 (8.3) vs 19.7 (10.3)). Median church attendance was once per week in both groups.

Comparisons were then made between those who did and did not complete FU8 in the IA group only, given the comparatively low completion rate. There were 8 completers and 14 non-completers in this group. Independent samples t-tests indicated no significant difference in primary outcome measures at baseline.

Sample size calculation

A power analysis assessed the number of participants required to detect significant changes in a future substantive RCT. The primary analysis would compare changes in PHQ-9 and GAD-7 after an 8-week interval. The study would be powered to be able to detect a between-group difference of 5 points on both the PHQ-9 and GAD-7, as this would represent a clinically significant improvement.

Based on a two-sample t-test, a sample size of 27 participants per arm would be required to have 90% power to detect significant differences where $p<0.05$. In the pilot, follow-up data at the primary end point were available for approximately 62% of those randomised. To allow for this, 44 participants per group (total N=88) would be randomised.

Discussion

Given the significant proportion of the population with mental health problems who do not receive psychological interventions, there is a need to reach those individuals who may be reluctant to access healthcare services. Religious people are one such group, and this study investigated an intervention modified to appeal to such a group.

This study provides important information relating to how an online, spiritually integrated CBT intervention for common mental health problems could further be developed. Follow-up data suggest the intervention may provide clinically meaningful benefits in improving low mood, anxiety, and functioning amongst Christians, however the study had limited statistical power to detect significant differences which may be present. It is important to note however that the study did not aim to provide substantive results. The aim was to test recruitment, the gathering of data and to obtain an estimate of effect size and completion/non-completion rates. From this, the sample size for a substantive study could be estimated.

In terms of recruitment, the majority of participants heard about the study either from advertisements in Metro newspaper, or a radio interview regarding the project. Although several large churches and university Christian Unions were contacted, no participants were recruited from these sources, suggesting that information about the course may not have been passed to potential participants. It is possible that this reflects suspicion about psychological therapies within Christian organisations. Alternatively, churches may face many requests to pass on information from a wide range of sources, and be unable to agree to all such requests. It is noteworthy that a significant proportion (38.5%) of participants heard about the project either through word of mouth, or through social media, suggesting many were keen to share information about the study. This may imply an awareness of a need for such interventions amongst Christians.

Many participants had been experiencing mental health problems for significant periods of time, with around half never having accessed formal health services, in keeping with previous findings of a treatment gap of people experiencing mental health problems but not accessing services (Kohn et al., 2004). In contrast to some previous findings, the majority (45/52) of participants also suggested that although they felt it was appropriate for a Christian to use mainstream mental

health services, it was also very important that their Christian faith was incorporated into their treatment, highlighting the need for health services to take the spiritual beliefs of patients seriously in a therapeutic context. The sample was split in their views of the extent to which they believed mainstream health services would be supportive of their faith. Further important insight supporting this interpretation was ascertained in qualitative responses, which are included in Appendix 7.

Only a minority of participants (9/52 agreed in some form) felt well supported by their church in dealing with their mental health problems. It is unclear whether this reflects prior negative experiences, or a reluctance to talk about such problems in a church context. The majority indicated that they felt unable to talk about mental health in a church context (33/52), but did find their personal faith helpful (35/52). It is noteworthy that exercise and diet were the most commonly endorsed factor that could help, highlighting the importance that small, behavioural changes might make, as would be predicted by the CBT model. It is also important to note that only a minority believed that faith-based factors (lack of prayer, personal sin or my faith) were important causal factors in their current problems. This is in line with previous research showing that a majority of people believe general health factors to be related to mental health problems, compared with a minority citing personal sin as a cause (Sheehan & Kroll, 1990). Cultural differences may exist between the present UK sample and the US, where the majority of such research has been conducted.

Taken together, these results suggest that participants viewed faith as a positive factor, but the institution of the Church was perceived to be less helpful. Participants believed that mainstream health services were appropriate for them, but also that their faith should be incorporated into any intervention they received, which may not currently be the case. It is possible that this perceived difficulty in talking about mental health in a church context is reflective of a broader problem with stigma concerning mental health in society (Corrigan, 2004), and that the Church merely reflects this, rather than being a special case.

The study suggests that the intervention may be worthy of further pilot research, given the possible reduction in symptoms in some participants who used the course. There was a trend towards a difference in change in mean ability to function and there were moderate effect sizes for all three primary outcome

measures between groups. Given the limited statistical power afforded by the small sample, the pilot study did not aim to answer whether the intervention is effective. Given the trend towards improvement in one primary outcome measure, it is possible that in a larger sample, these effects would have been statistically and clinically significant, given the moderate average change scores for the intervention group and medium effect sizes. The pattern of results are in keeping with what might be expected for an evidence-based online intervention, and provide proof of concept for the current modifications. Given the limited sample to complete FU12, it is unclear the extent to which the effects of the course are sustained over time.

Satisfaction with the course was high amongst those in the IA group based on the feedback of those who responded (8/22). The course was considered accessible and worthwhile, however non-responders may not have thought as highly of the course. Several participants were encouraged by the fact that a course allowing them to incorporate their Christian faith into an intervention for their mental health existed. This is something that participants valued highly. Participants also approved of the convenience of an online course. It is noteworthy that those in the IA group often did not use the course regularly. This may reflect the lack of personal communication and prompting to continue using the course. Although automated weekly reminder emails were available, not everyone requested these, and some reported that these were not received despite signing up. This may reflect spam-blocking software blocking automated emails.

Due to the limited resources of the current study, direct support could not be offered (e.g. personalised checks on allocation, reminders or advice regarding course completion by email or phone). NICE (2009) state this is likely to improve the impact of CBT resources. Any future study should therefore supplement automated emails with short support contacts to enhance engagement and application of course content. Previous research has found larger effect sizes when personal support is provided (Titov, 2011). This also has implications for implementation of online therapies within the health service. The results even with limited course use, suggests that efficacy could be improved by, for example, checking login code was received, providing checks concerning automated support and the provision of individualized reminders and support from a support worker (Gellatly et al., 2007).

Strengths and Limitations

This study gathered important information about the process of recruiting participants for potential future research to further test the present intervention. The open nature of recruitment enabled the opportunity to see the source of interested participants. The study also demonstrated the demand for such a course amongst Christians in the UK, and their wish for mental health services to incorporate faith into interventions. It also suggested that the course may reduce symptoms of psychological distress in groups who may have had symptoms for a long time either without support, or having gained limited benefit from support.

Limitations include the feasibility/pilot design and lack of sufficient resources, which limited the participant support that could be offered. The planned small sample size and small numbers completing follow-up questionnaires, particularly within the IA group also limited the possibility of finding significant results. Whilst such follow-up rates are in line with other online trials that do not involve therapist contact (e.g. Rosmarin et al., 2010), it is possible that this affected the outcome, particularly as differences may be present between those who did and did not complete follow-up in IA group. Increased follow-up in the DA group may reflect that those in the DA group would benefit from access to the course if they completed follow-up, whereas the IA group had no such incentive.

The study also had a self-selected sample open to anyone interested in taking part. This may mean that those who participated were not reflective of the target population as a whole. However, the nature of such an intervention would mean that it may mainly be of interest to a specific group of Christians open to seeking help online, so challenges would be associated with other forms of recruitment.

Technical and recruitment difficulties (such as support emails not being received, participants not receiving group allocation) were also a limitation, and provided guidance for a substantive RCT. Some emails may have been trapped in 'spam' filters, so a future study may benefit from participants adding study email addresses to a 'safe' list, or incorporating alternative forms of contact to maximise the chances of participants engaging actively with the course and research.

Future Work

This study can inform, and provide a sample-size calculation for, a future substantive RCT, testing the effectiveness of the intervention in a larger sample. Specific learning points may relate to the importance of personal interaction to improve follow-up rate. Advertising could also be tailored to social media, given the apparent sharing of the study and referral via friends, which had not been planned.

Further work could investigate attitudes to mental health within the Christian community and amongst church leaders. The present sample may have self-selected those who want to include faith in a psychological intervention. Research could also investigate such views within other religions, assessing the desire for equivalent tailored CBT interventions.

Implications

Given the promise of this intervention in appealing to a group who may otherwise not access secular mental health services, there are public health implications regarding implementation. One possibility is providing information on such an intervention to GPs and mental health professionals, who could suggest such an intervention for patients expressing a desire to incorporate their faith into their mental health care. Mental health services could provide support with the intervention to improve outcomes. Increasing awareness of such courses within Christian organisations, who could recommend resources as appropriate, may also be beneficial. It is possible that increased collaboration between health services and local churches could lead to better care for a wider range of people.

This study highlights the importance of mental health services considering patients' religious and spiritual concerns. This may improve engagement, and also is a necessary component of ensuring that interventions are person-centred. Indeed, NHS guidance suggests that all health professionals should consider spiritual issues when working with a patient (Scottish Government, 2009). This may improve relationships between religious patients and therapists, as well as religious organisations and health services. This may benefit many people of different faith groups dealing with mental health problems.

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Chapter 3 - Advanced Clinical Practice 1 – Reflective Critical Account

Psychological Therapy and Fixing Patients' Problems – A Reflective Account on Clinical Practice (Abstract Only)

Benjamin D. R. Wiffen

Submitted in part fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology

Abstract

In this reflective account, I apply Gibb's cyclical model of reflection to an incident occurring during a therapy session with an older person referred for grief work. This incident highlighted my propensity to want to 'fix' the problems of my clients, which I had noticed on a number of occasions through the course of my training. After describing this incident, I identified the thoughts and feelings that occurred at the time and afterwards before attempting to analyse what these meant in the context of my development as a therapist. Amongst the issues that arose for me were thoughts about whether psychology was helpful for everyone, and whether my therapeutic skills were sufficient, as well as some reflection on the nature of some distress in later life which may not be helped by therapy. I also reflected on how I have developed with regard to this particular concern over the course of my training using Stoltenberg's Counselor Complexity model. Finally, I reviewed my experience of this reflective process, evaluating the model I used and how beneficial I felt the process to be, as well as how it may fit in to my future development.

Chapter 4: Advanced Clinical Practice II – Reflective Critical Account

'To See Ourselves As Others See Us' – A Reflective Account On Research Supervision (Abstract Only)

Benjamin D. R. Wiffen

Submitted in part fulfilment of the requirements for the Degree of Doctorate in Clinical Psychology

Abstract

In this reflective account, I looked at my experiences of research supervision using Kolb's Learning Cycle (1984). I also compared this with my experience of clinical supervision. In particular, I chose to reflect on patterns of supervisory relationships in which I often found myself, and wondered how this came about. In particular, I wondered about the impression that supervisor often had of me, how they came to form such impressions, and how accurate these impressions were. I reflected on what I could learn about myself and about the process of supervision from these experiences. I also thought about how this fit in with the attachment style of both supervisor and supervisee. My impression was that there is a clear interaction between the style of both participants in a supervisory relationship, and things that may make for good supervision for one supervisee may reflect a difficult supervision experience for another. Consequently, it seems that it is important for both parties to be self-reflective, and to try to understand how they are perceived by the other party. Both may then be better able to adapt their approach to get the best from the relationship. Furthermore, in my experience, this is much easier for a trainee when there is a strong interpersonal supervisory relationship, built on the supervisor being interested in the trainee as a person, and not just as a supervisee.

Chapter 5 - Appendices

Appendix 1 – Author Guidelines for *Journal of Clinical Psychology*

Guidelines accessed in June 2014 from:
http://onlinelibrary.wiley.com/journal/10.1002/(ISSN)1097-4679/homepage/ForAuthors.html

Author Guidelines

Manuscript Preparation

Format . Number all pages of the manuscript sequentially. Manuscripts should contain each of the following elements in sequence: 1) Title page 2) Abstract 3) Text 4) Acknowledgments 5) References 6) Tables 7) Figures 8) Figure Legends 9) Permissions. Start each element on a new page. Because the ***Journal of Clinical Psychology*** utilizes an anonymous peer-review process, authors' names and affiliations should appear ONLY on the title page of the manuscript. Please submit the title page as a separate document within the attachment to facilitate the anonymous peer review process.

Style . Please follow the stylistic guidelines detailed in the *Publication Manual of the American Psychological Association, Sixth Edition*, available from the American Psychological Association, Washington, D.C. *Webster's New World Dictionary of American English, 3rd College Edition*, is the accepted source for spelling. Define unusual abbreviations at the first mention in the text. The text should be written in a uniform style, and its contents as submitted for consideration should be deemed by the author to be final and suitable for publication.

Reference Style and EndNote . EndNote is a software product that we recommend to our journal authors to help simplify and streamline the research process. Using EndNote's bibliographic management tools, you can search bibliographic databases, build and organize your reference collection, and then instantly output your bibliography in any Wiley journal style. *Download Reference Style for this Journal:* If you already use EndNote, you can download the reference style for this journal. *How to Order:* To learn more about EndNote, or to purchase your own copy, click here . *Technical Support:* If you need assistance using EndNote, contact endnote@isiresearchsoft.com , or visit www.endnote.com/support .

Title Page . The title page should contain the complete title of the manuscript, names and affiliations of all authors, institution(s) at which the work was performed, and name, address (including e-mail address), telephone and telefax numbers of the author responsible for correspondence. Authors should also provide a short title of not more than 45 characters (including spaces), and five to ten key words, that will highlight the subject matter of the article. Please submit the title page as a separate document within the attachment to facilitate the anonymous peer review process.

Abstract. Abstracts are required for research articles, review articles, commentaries, and notes from the field. A structured abstract is required and

should be 150 words or less. The headings that are required are: **Objective(s):** Succinctly state the reason, aims or hypotheses of the study. **Method (or Design):**Describe the sample (including size, gender and average age), setting, and research design of the study. **Results:** Succinctly report the results that pertain to the expressed objective(s). **Conclusions:** State the important conclusions and implications of the findings. In addition, for systematic reviews and meta-analyses the following headings can be used, Context; Objective; Methods (data sources, data extraction); Results; Conclusion. For Clinical reviews: Context; Methods (evidence acquisition); Results (evidence synthesis); Conclusion.

Article Types

- **Research Articles** . Research articles may include quantitative or qualitative investigations, or single-case research. They should contain Introduction, Methods, Results, Discussion, and Conclusion sections conforming to standard scientific reporting style (where appropriate, Results and Discussion may be combined).

- **Review Articles** . Review articles should focus on the clinical implications of theoretical perspectives, diagnostic approaches, or innovative strategies for assessment or treatment. Articles should provide a critical review and interpretation of the literature. Although subdivisions (e.g., introduction, methods, results) are not required, the text should flow smoothly, and be divided logically by topical headings.

- **Commentaries** . Occasionally, the editor will invite one or more individuals to write a commentary on a research report.

- **Editorials** . Unsolicited editorials are also considered for publication.

- **Notes From the Field** . Notes From the Field offers a forum for brief descriptions of advances in clinical training; innovative treatment methods or community based initiatives; developments in service delivery; or the presentation of data from research projects which have progressed to a point where preliminary observations should be disseminated (e.g., pilot studies, significant findings in need of replication). Articles submitted for this section should be limited to a maximum of 10 manuscript pages, and contain logical topical subheadings.

- **News and Notes** . This section offers a vehicle for readers to stay abreast of major awards, grants, training initiatives; research projects; and conferences in clinical psychology. Items for this section should be summarized in 200 words or less. The Editors reserve the right to determine which News and Notes submissions are appropriate for inclusion in the journal.

Editorial Policy

Manuscripts for consideration by the ***Journal of Clinical Psychology*** must be submitted solely to this journal, and may not have been published in another publication of any type, professional or lay. This policy covers both duplicate and fragmented (piecemeal) publication. Although, on occasion it may be appropriate to

publish several reports referring to the same data base, authors should inform the editors at the time of submission about all previously published or submitted reports stemming from the data set, so that the editors can judge if the article represents a new contribution. If the article is accepted for publication in the journal, the article must include a citation to all reports using the same data and methods or the same sample. Upon acceptance of a manuscript for publication, the corresponding author will be required to sign an agreement transferring copyright to the Publisher; copies of the Copyright Transfer form are available from the editorial office. All accepted manuscripts become the property of the Publisher. No material published in the journal may be reproduced or published elsewhere without written permission from the Publisher, who reserves copyright.

Any possible conflict of interest, financial or otherwise, related to the submitted work must be clearly indicated in the manuscript and in a cover letter accompanying the submission. Research performed on human participants must be accompanied by a statement of compliance with the Code of Ethics of the World Medical Association (Declaration of Helsinki) and the standards established by the author's Institutional Review Board and granting agency. Informed consent statements, if applicable, should be included with the manuscript stating that informed consent was obtained from the research participants after the nature of the experimental procedures was explained.

The ***Journal of Clinical Psychology requires*** that all identifying details regarding the client(s)/patient(s), including, but not limited to name, age, race, occupation, and place of residence be altered to prevent recognition. By signing the *Copyright Transfer Agreement*, you acknowledge that you have altered all identifying details or obtained all necessary written releases.

Appendix 2 – Advert in Metro Newspaper

Appendix 3 – Participant Information Sheet

We are offering free access to this resource as part of a research project run by researchers at the University of Glasgow. Please read over the information below to help you decide if you think it's for you.

Project title: Online Cognitive Behaviour Therapy (CBT) for individuals with Christian beliefs: a pilot randomised controlled trial

We would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Feel free to discuss the study with family and friends if you wish. Please contact us if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

Many people experience depression, stress and anxiety at times during their life. However, it can be difficult to get help for these problems, as access to formal healthcare services can be limited, and some people may be reluctant to seek help. Consequently, previous research has looked at ways of helping people who may experience these problems but do not want to or cannot access formal help. People within Christian communities also experience these difficulties, and can struggle to access support, or feel that it is inappropriate or unhelpful to seek formal healthcare for their problems. The current study examines an online educational package that teaches key life skills based on a form of talking therapy called Cognitive Behavioural Therapy. It has been modified to reach out to Christians experiencing high stress levels, anxiety or low mood.

The study will randomise participants so that 50% have immediate access to an online life skills course, and 50% are offered access only after the end of the study (8 weeks). Those who access the course immediately will also be asked to complete some questionnaires after a further 4 weeks.

What is the Online Course?

The online course contains material derived from an existing widely used online package. It is intended for use by those experiencing symptoms of stress and low mood with Christian beliefs. The focus of the site is to deliver key life skills through online modules with the aim to relieve mild to moderate symptoms of stress and low mood. Topics covered include problem solving, tackling low confidence, boosting mood and challenging negative thinking. Weekly automated emails accompany the course.

Why have I been asked to take part?

The study is being offered to anyone over 18 years who is experiencing mild to moderate symptoms of low mood, depression, stress and/or anxiety, and who is interested in a Christian perspective in the course.

What will happen now?

Should you agree to participate by following the links, you will need to fill in a short consent form, which will ask you about your age, date of birth, gender, education /employment status, and whether you have been previously diagnosed or received support for any mental health related condition. You will also be asked about symptoms of low mood, anxiety, stress or depression. Based on the answers and information that you give within this pack, you will be informed if you are able to take part in the study. If you agree to take part in the study you will be asked to give informed consent, by agreeing to certain conditions and acknowledging that you are aware of what you are taking part in. You will also be asked to answer some questions about your opinions of the relationship between Christianity and mental health issues.

Once eligible participants have completed the full consent form, they will then be randomly assigned to one of two different intervention groups: Immediate access or the Control Group. Those in the immediate access group will have unlimited access to the course straight away. Those in the control group will have unlimited access to the course after an 8 week waiting period.

At the beginning of the study, all participants will then be emailed or posted a 'getting started' guide detailing all necessary information regarding the study for the

two different groups of participants. Participants will have the option of contacting the research team to get practical support with accessing the online package. All such contacts will be recorded in a contact log (participant, time/frequency and content of support need).

After 8 weeks, both groups will be asked to fill in some of the same questionnaires again about symptoms of low mood and anxiety, and views about the online course. The immediate access group will be asked to fill in the some of the same questionnaires again 4 weeks later.

Do I have to take part?

You do not have to take part. If you decide to take part you are still free to withdraw at any time, without giving a reason.

Are there any potential benefits of taking part in this study?

By using the package it is hoped that you may learn new skills to help with symptoms of low mood, anxiety or depression. In addition your opinions about packages will help us modify the approach so it is more suitable for other Christians who are experiencing symptoms of low mood, anxiety or depression. We need to do studies such as this one to see if such packages are effective for Christians with these problems. The purpose of such studies is to provide the most effective resources to individuals with these psychological problems, and therefore future course users may benefit from your participation.

Are there any disadvantages of taking part in this study?

The set of questionnaires you will be asked to complete before and after the study ask about symptoms of low mood, anxiety or depression. Whilst most people do not mind answering these questions, some people may feel upset. However, it is important that we ask these questions and find out if the online package is effective. Sometimes when people find out more about low mood and stress they can feel worse to start with. However this is usually just for a short time and most people feel better again quite quickly as they work through online courses like this one.

Getting extra support

Additional supports are available via your GP, NHS 24 or telephone support services such as The Samaritans or Premier Lifeline for any problems you face such as feeling distressed or if you are struggling. If your responses to questionnaires suggest extremely high levels of distress (e.g. feeling suicidal), we will direct you to contact your GP who will be able to provide the most appropriate further assistance.

Will my taking part in the study be kept confidential?

The information you give is entirely confidential and will not be disclosed to anyone outside the immediate research team without your permission.

All the information collected will be stored securely according to the Data Protection Act 1998.

What will happen to the results of the research study?

We will look at all responses to questionnaires and course participation to assess how effective the course is. We intend to present the results of the study as a scientific paper. Additionally a copy of the results can be sent to you if you wish. No individuals will be identified in the research publications, which will contain only anonymous information. The course will be freely available for public access, and bring no profit to the research team.

Who is organising and funding the research?

The study is organised and funded by the Institute of Mental Health and Wellbeing at the University of Glasgow. Appropriate liability insurance is in place for the study.

Who has reviewed the study?

This study has been reviewed and approved by the College of Medical, Veterinary & Life Sciences Ethics Committee at the University of Glasgow.

Who do I contact for further information?

More information about the study is available from the research team: info@moodhelp4churches.com

Or write to:

MoodHelp4Churches
c/o Professor Chris Williams
Mental Health and Wellbeing
Administration Building
Gartnavel Royal Hospital,
1055 Great Western Road,
Glasgow,
G12 0XH

Thank you for considering taking part in this research

Appendix 4 – Consent Form

I confirm that I have read and understand the participant information for the above study and have had the opportunity to contact researchers to ask questions.

☐ Yes

☐ No

I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

☐ Yes

☐ No

I agree that the information I give will be kept if I am not eligible for the study.

☐ Yes

☐ No

I confirm I understand that additional supports are available for problems such as distress

☐ Yes

☐ No

I agree to take part in the above study.

☐ Yes

☐ No

Appendix 5 – Novel questions on Christianity and Mental Health

How appropriate do you think it is for a Christian to use mainstream mental health services?
1 – Totally inappropriate ---------- 7 – Totally appropriate

How helpful is your Christian faith in coping with your low mood, stress or anxiety?
1 – Very unhelpful ---------- 7 – Very helpful

How supported do you feel by your church in dealing with your low mood or worries?
1 – Not at all supported---------- 7 – Very well supported

How able do you feel to speak about your problems in your church context?
1- Not at all able to speak about them ---------- 7 – Totally free to speak about them

How important is it for any intervention helping your low mood, stress or anxiety to incorporate your Christian faith?
1 – Not at all important ---------- 7 – Extremely Important

How supportive do you find your church towards those with low mood, stress or anxiety?
1 – Not at all supportive ---------- 7 – Extremely supportive

How accepting of your Christian faith would you expect mainstream mental health services to be?
1 – Not at all accepting---------- 7 – Extremely accepting

Appendix 6 – Ethical Approval Letter

University of Glasgow | College of Medical, Veterinary & Life Sciences

3 October 2013

Professor Chris Williams
Academic Unit of Mental Health and Wellbeing
Institute of Health and Wellbeing
University of Glasgow

Dear Professor Williams«Principal_Investigator»

MVLS College Ethics Committee

Project Title: Online CBT for individuals with Christian beliefs: a pilot randomised controlled trial

Project No: 200130015

The College Ethics Committee has reviewed your application and has agreed that there is no objection on ethical grounds to the proposed study. It is happy therefore to approve the project, subject to the following conditions:

- Project end date: 31 August 2014.
- The research should be carried out only on the sites, and/or with the groups defined in the application.
- Any proposed changes in the protocol should be submitted for reassessment, except when it is necessary to change the protocol to eliminate hazard to the subjects or where the change involves only the administrative aspects of the project. The Ethics Committee should be informed of any such changes.
- You should submit a short end of study report to the Ethics Committee within 3 months of completion.

Yours sincerely

Professor William Martin
College Ethics Officer

Approval200130015.docx

Professor William Martin
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Appendix 7 – Qualitative Information on Christianity and Mental Health
These comments came from participants at baseline in response to the following: *If you have any further comments on the relationship between common mental health difficulties and your Christian faith, then please add them below.*

"Faith is integral to identity, thoughts, values. You can't separate it from mental health, both need addressing and the Church and mental health services need to work closely together."

"Depression made it much more difficult for me to maintain routines and disciplines and to get out and meet people. So my attendance at church and small meetings fell off along with my personal devotional life. And while my faith life hasn't in the past been dependent on feelings, nonetheless, the feelings of relationship and communication with God dropped off completely and I feel like an atheist now - in feelings, but underneath that I still believe the Gospel."

"I sometimes struggle to feel God near me and to understand why he doesn't help when I cry out for help. I'm told by Church and people of Faith that God wants the best for me and is there for me in times of need but I struggle to believe this as i don't see the evidence of it. I often feel that God doesn't hear me or has abandoned me. I want to believe and I want to have the kind of relationship with God that other people in Church have with God but i struggle to know what i believe and to see where God is in my life."

"Christians with no knowledge of mental health issues just don't get it. Mental health professionals with no knowledge of faith just don't get it - I have witnessed both as a Christian, as a member of staff and as a patient."

"I'm continuously told by other Christians that I must have more faith because they feel that I do not really believe enough that God can heal me and to them that is inhibiting my healing- BUT I BELIEVE AND KNOW GOD HAS HEARD MY PRAYERS! I've also been told by a qualified nurse and friend from church that people may not want to phone or keep in touch with me because they may feel that

when they ask how I am I'm going to tell them that I am feeling down and unwell- Why can I not be truthful in my reply to my fellow Christians when I can be truthful to my non-Christian friends and they do not take offence and do not stopped calling or texting me. Why does being a depressed or anxious Christian cause some Christians to avoid contact with the unwell person?!!! Did not the Lord come to help those who are suffering and sick?!!! It has really made me want to stay away from church and the many so-called Christians."

"Feel that faith of any kind would be laughed at by politically correct forces in NHS and other public bodies, particularly in Scotland, except for some leniency towards ethnic minorities, but certainly little sympathy for Christians."

"My faith is always questioning the meaning of life: "friends" who back-bite and partaking in merry-making with these kinds of friends as pointless; materialism is pointless. :(I lose my interest in materialism and pointless socializing but revel in nature, books, good relationships. Am I depressed? This is my dilemma because it seems that if we don't like contacts with friends, we are classed as depressed."

"There is a bit of an attitude in church that if you are a Christian with depression you should be experiencing God's joy and if you aren't then something is wrong and - this attitude does not transfer to people with other disabilities I've noticed..."

"It is hard to be honest and open in a church environment. There is an unspoken pressure to have it all together. To take it to God in prayer and all will be resolved. But it isn't and then I feel guilty and alone."

"Prayer doesn't seem to help :(then I feel God can't intervene in this world."

"My Christian faith helps me to feel valuable and loved so reduces my mental health concerns."

"I did try mainstream counselling and felt on a totally different wavelength to the counsellor. Our perspectives were totally different. Once I found a Christian

counsellor I felt released to talk openly about my problems and how my faith helped and also impacted."

"When I haven't been to church for a couple of weeks I feel almost alienated from other members of the congregation. Good Christians go to church every week - is an impression that I have of what they think. (Abuse as a child and then as an adult whilst dealing with the past issues led to a breakdown after which I was diagnosed as having Bipolar II. Although I still have my faith, I feel uncomfortable around male vicars etc. and can only relate to/trust female vicars. It has also affected my image of God/Jesus as being male. After the adult abuse over 10 years ago I was referred to a female Christian Spiritual companion and subsequently to a female, private Christian Psychotherapist, both of which have supported me greatly. However, from time to time I still feel unworthy, unforgiveable and unlovable, even though my faith tells me otherwise - I just don't feel it.)"

"Find that I often expect the worse and have a pessimistic outlook on events about to happen. Feel as though I am worthless and have a defeatist attitude to most of the things I do. It comes and goes and isn't continuous. I am reading a lot of Christian literature relating to depression and life problems and tis has helped immensely. Obviously though I cant take these books with me to work and out and about. I do carry a new testament and have ordered a pocket devotional by Oswald Chambers to carry around with me."

"As a Christian it seems 'wrong' to be depressed and I therefore try to feel that Jesus is with me - but it is hard. I have found the church oddly ignorant of ways in which they can support those in need of help perhaps it is overwhelming to give the sustained support that those with mental health issues need. A quick fix with a cup cake and a prayer won't do it! A youthful married leadership team or complacent group leaders may have little understanding of the loneliness that can set in following bereavement and are at a loss as to how to offer meaningful support. It becomes easy to mix up a feeling of let down by people with a feeling of let down by God - maybe we expect a little too much of those who seek to be God's representatives, shepherds. Maybe we expect too much of God. Maybe I just think too much or have to little faith."

“My faith is a very personal thing. Though I have had the support of a few excellent priests in the past I see a lot of hypocrisy in organised religion (especially Catholicism I was brought up in) and struggle sometimes (especially on the bad days OR friends bad days, with the notion of a loving God who can allow good people and children suffer...”

“I don't think people would treat me the same if they knew I have mental problems.”

“I think my church could be supportive if I felt able to talk to them but I don't want everybody knowing how I feel. I have found that they are supportive of others to a certain extent but my concern is where does concern stop and gossip start. It's fine for someone to ask for prayer but then it can be sent round all the prayer groups - then almost the whole church finds out - hence my reason for not sharing.”

“I have been looking for a Christian organisation who deal with mental health issues and therapies such as CBT for a while and I'm so glad I heard about this website on UCB [radio station]. It's so vital to have Godly involvement in the healing process, because we need the presence of the Holy Spirit to heal, lead and guide us. Nothing and no one can transform a life like my beautiful Jesus; He is the restorer, healer, deliverer and freedom bringer! I'm trusting in my God!”

“Prayer helps calm me/rationalise things sort of. Group worship uplifts me. Silent worship challenges and sometimes calms me.”

“Sometimes faith helps sometimes it adds to sense of failure.”

Appendix 8 – MRP Proposal

A Pilot Randomised Controlled Trial of an online, low intensity, Cognitive Behavioural Therapy intervention for common mental health problems targeting individuals with Christian beliefs

Matriculation Number: 1103910

Date of Submission: 12th April 2013

Version number: 2

Abstract

Background

Many people do not seek for common mental health problems, and services struggle to meet existing demand. Means of widely disseminating evidence-based interventions are needed. People with Christian beliefs may avoid mental health services, believing their faith should be taken into account, or that their problems should be addressed in a church context. Interventions combining evidence-based psychological treatment and Christian beliefs may help overcome these barriers.

Aims

To investigate the feasibility and provide proof of concept for an online psychological intervention for common mental health problems written to respect and include a faith-based perspective.

Methods

50 participants will be recruited from Christian contexts to a pilot RCT of an online 8-session psychological intervention for common mental health problems. They will be randomly assigned to immediate or delayed treatment groups. Initial questionnaires will assess mood, demographics, religiosity and views on the interaction between mental health and Christianity. Assessments will be repeated on completion and at follow-up. Changes in mood will be tested and sample information recorded.

Applications

This study will assess feasibility of a full-scale RCT testing effectiveness of an easily accessible and cost-effective psychological intervention, which could reduce pressure on mental health services, and reach individuals reluctant to access formal healthcare.

Introduction

Since its inception, Cognitive Behavioural Therapy (CBT) has been found to be an effective intervention for a wide range of psychological disorders, and is thus the treatment of choice for many mental health conditions (NHS Education for Scotland, 2011). CBT is also recommended in the SIGN Guideline for depression, both in individual format, and as guided self-help or online, with the strongest level of evidence base (Scottish Intercollegiate Guidelines Network, 2010). Whilst its effectiveness is relatively uncontested, difficulties are encountered in dissemination and access, given the significant number of individuals presenting to services with mild to moderately severe psychological problems and limited availability of qualified professionals to provide specialist interventions.

Methods for wider distribution of CBT have become more common in recent years. These include groups, online courses, audio-visual material, and a proliferation of 'self-help' books that use the CBT model (Williams et al., 2013). These can help to reduce some barriers to accessing service, as well as providing an effective one-to-one intervention, which may not be possible due to service pressures within the NHS. *Living Life To The Full* is an online course that aims to be both acceptable and effective in reducing symptoms of mild to moderate depression and anxiety by teaching life skills within a CBT framework.

Many services have waiting lists, and linked to this are findings that suggest those who seek help from the NHS represent only around half of those experiencing the conditions (Kohn et al., 2004). Therefore significant unmet demand exists. This project aims to focus on recruiting people who may otherwise not access evidence based psychological therapies from a community setting, specifically through churches.

According to the last census, 59% of the population of England and Wales describe themselves as Christians (Office for National Statistics, 2012; N.B. Scotland data not yet published). Whilst, the number of people who show an active, outward identification with their faith is significantly smaller (around 10% attend church weekly; Ashworth & Farthing, 2007), it is still a significant proportion of the population. Within Christian groups, those experiencing mental health problems

may perceive a stigma against them, with mental health problems perceived as a sign of spiritual weakness. There can also be concerns that traditional medical treatments such as medication or psychiatry may in some way be damaging to faith (Koenig, 2005). Furthermore, reports exist showing that, religious organisations can discourage use of mainstream health services, claiming, for example, to offer healing through prayer alone (e.g. Dangerfield, 2013). Consequently, some Christians can be reluctant to attend mainstream mental health services, preferring to attempt to deal with their problem either individually or within a church context. Whilst this can be effective for some, others may miss out on much needed access to evidence-based treatments.

Consequently, a means to provide effective psychological healthcare to this group would be highly beneficial. A small handful of studies have attempted to augment existing therapies for religious groups with mixed success (Hodge, 2006). These therapies have also not been widely accessible. An alternative is to use the processes of CBT dissemination that are utilized in low intensity CBT services (e.g. bibliotherapy, classes or provision of resources online). This study will use the latter.

To meet the need for evidence based CBT to reach significant numbers of individuals with Christian beliefs experiencing mild to moderate depression or anxiety, an existing CBT resource has been modified to reach a Christian demographic. *Living Life To The Full With God* (LLTTFWG) was launched in November 2012, comprising of a course to be run within churches, and an online self-help course modified from the original secular resource. However, there is no data on the effectiveness of this course in its target population. This research will focus on the online version of the course.

Aims

This feasibility and pilot Randomised Controlled Trial (RCT) will:

- test different methods of recruiting people into the study.
- test the uptake, use and completion rates of the course.
- test the ability to gather completed questionnaires.
- describe the demographics of those entering the study.
- test the acceptability of the intervention.

- describe the module use and drop-out/completion.
- refine ways of retaining people in the study.
- establish an estimate of clinical effect in order to inform a power calculation for a future substantive RCT.

Plan of investigation:

Participants

The intervention is targeted at individuals experiencing mild to moderate symptoms of depression or anxiety who have Christian beliefs that they wish to be incorporated into a psychological intervention. Participants will be those who respond to advertisements for a course to help people experiencing these symptoms who may want their faith recognised in the intervention they receive. We will aim to recruit approximately 50 participants.

Inclusion and Exclusion criteria

Inclusion criteria will be broad and based on self-selection of those who choose to use the course. Exclusion criteria will be active suicidal ideation, which would trigger a suggestion to attend formal health services and the offer of information about how to access help (e.g. contact numbers for NHS 24, Samaritans, Premier Lifeline). Those currently receiving psychological therapy would also be excluded.

Recruitment Procedures

Advertisements would be placed in publications likely to reach targeted individuals such as a Christian magazines or websites, as well as an advertisement in a mainstream newspaper, Metro. Advertisements would also be placed in bulletins, notice sheets or notice boards of churches and university Christian Unions. Participants will be given an option to participate in the study, giving them the opportunity to access the course for free. Consent will be taken online where possible, with an option for versions to be sent by post for participants who prefer this.

Possible means of recruitment:

-Notices or email bulletins to large churches or University Christian Unions

-'Premier' website (A Christian Media outlet)
-Life and Work Magazine (Church of Scotland)
-A Catholic media source e.g. The Tablet Magazine
-'Action on Depression' and other mental health organisation websites
-Advertising in Metro newspaper
-Targeted Google advertisements if funding allows

Measures

The primary measures of depression and anxiety will be the Patient Health Questionnaire-9 (PHQ-9; Kroenke et al. 2001) and the General Anxiety Disorder-7 (GAD-7; Spitzer et al. 2007), which are well validated and widely used, as well as being free to access. A measure of social functioning, the Work and Social Adjustment Scale (WSAS; Mundt et al., 2002) will also be used. These measures would be completed before, immediately after time to complete the course (8 weeks) and at a follow-up time point (12 weeks). The waiting list control group will complete measures at baseline and 8 weeks only.

A brief measure of religiosity, the Duke University Religiosity Index (Koenig & Bössing, 2010), encompassing organisational and non-organisational religious activity and intrinsic religiosity will be administered at the start of the course. An understanding of the religiosity of those to whom such a modified course would appeal would be helpful.

We will assess individuals' view of the interplay between mental health and Christianity, participants' views of mental health services, and their perception of the attitude of the church to mental health by developing a questionnaire. It is estimated that all questionnaires would take around 10 minutes to complete.

Design

Analysis of key measures will be descriptive, exploring take-up and completion rates, scores on depression and anxiety measures before and immediately after and at follow-up completing LLTTFWG as well as sample demographics, religiosity and beliefs on the relationship between religious beliefs

and mental health. We will aim to recruit approximately 50 participants who will be allocated to immediate or delayed treatment groups.

Research Procedures

Adverts would be placed in various places online and in relevant organisations at around the same time point of the start of the study (approximately October 2013). Advertisements will include a research website address and contact email address to find out more about the study.

On following the link to the study website, potential participants will access an Information sheet explaining what the study is about, its timescale, what information will be asked of them, and explaining that they will be randomised into an immediate or delayed treatment group. They will also be told that they are free to withdraw at any time. Participants will be provided with an email and postal address for any questions they may have, as well as a contact telephone number of a member of the university department.

A hybrid approach will be taken, whereby people will be given the opportunity to complete all measures online, or to receive questionnaires and consent forms by post. It is expected given the online nature of the course that the majority will prefer online measures. Initial questionnaires will screen whether inclusion or exclusion criteria are met. We will seek consent to record responses even in those who are not suitable for the study. At this point, for participants completing questionnaires online, informed consent will require participants to tick boxes to confirm they have read each point of information, and that they agree to take part (see Varnhagen et al., 2005).

Participants using the online version would complete initial questionnaires, those in the immediate treatment group would be given an access code and link to the LLTTFWG online resource, as it would appear in general release, including instructions of how to use the resources for those in immediate treatment group. For those in the delayed access group, they would be told that they would be contacted again in 8 weeks with the further questionnaires and access code for those in the delayed treatment group. For those participating by post,

questionnaires would be sent out with consent form, and when these are returned, a code to access the course and website address would be sent to them, or a letter informing them they would be contacted again in 8 weeks.

All participants will be provided with emergency contact details in case of any deterioration in their mental health (e.g. 999, NHS 24 etc.), and requested to contact these numbers in case of deterioration. Those who score highly on suicidality items will be excluded at this point, and requested to contact their GP or emergency numbers. The immediate access group will have access to weekly support emails that encourage engagement and completion of the course modules.

After a participant has been recruited, if they fail to respond to requests to complete questionnaires, they will be contacted with 2 reminder emails, then twice by telephone and then sent postal questionnaires. If there is no response to this, it will be assumed they wish to withdraw from the study.

After 8 weeks, those in the both the immediate and delayed groups will repeat the mood and functioning questionnaires, as well as asked some questions regarding how they found the course, how much they completed, what they have used etc. for those in the immediate treatment group. At all time points participants will be given the choice of completing responses online using an online survey, or a paper questionnaire by post. The immediate treatment group will be asked to complete questionnaires again at 12 weeks.

Data Analysis

The main measures of interest will be recruitment rates, use of the course and response to research questionnaires. We will also describe course satisfaction and clinical effect.

As well as this, a number of further descriptive measures will be of interest, including the sample demographics, and measure of religiosity, which may aid understanding of to whom the course appeals. The recruitment rates via each of the advertising strategies will also be described.

Items addressing participants' views on the interaction between mental health and Christian faith, and participants' views on the course will provide helpful guidance in targeting the final course, and further justification for the intervention to be accessed in this format.

Justification of Sample Size

As this is a pilot, the results from this study would be used to estimate power for a full RCT in the future. As such, a convenience sample size of 50 participants starting this feasibility study is reasonable.

Settings and Equipment

The LLTTFWG course itself is hosted at llttf4churches.com, which requires a code to access content. The research component of the study could be hosted through a survey site such as 'Survey Gizmo'. An email account would need to send links to participants at appropriate time intervals, as well as a website to act as an initial contact point for advertising links, providing information etc. Data would be confidentially stored online through survey site, and later securely downloaded and anonymised for data analysis.

Health and Safety Issues

No health and safety issues envisaged for the researcher. See 'Health and Safety for Researchers' form for details and procedures for risk to participants.

Ethical Issues

These include the ethics of randomising participants to a waiting list control group, and also dealing with participants who indicate extremely low mood/suicidality. For those participants, emergency contacts would be provided, and they would be excluded from the study. Participants would be informed that they would be randomised in advance and must be willing to agree to this in order to participate in the study. For those individuals who do not agree with this, they could be linked to other healthcare websites. Furthermore, during the waiting period, participants could be provided with emergency contact details should their mood deteriorate.

Data collected online will be stored securely on survey website, and then downloaded to password protected computer. Data would be anonymised before analysis. Questionnaire data would be stored confidentially, and also anonymised when data is entered to secure computer. All data would be destroyed kept for 5 years and then destroyed.

The study will be subject to ethical review from the university research ethics board.

Financial Issues

-Travel – None foreseen.

-Survey hosting (Survey Gizmo approx. £6/month for student rate) for 8 months = £48.

-Website hosting – approximately £4 per month for 8 months = £32

-Costs of sending and questionnaires to individuals who prefer this to online format (including printing, envelopes, labels, stamps, prepaid envelopes) = £80.91 based on 15 participants requesting postal questionnaires.

-Questionnaire rights – All questionnaires selected are freely available for research use online so no cost would be incurred.

-Advertising costs – The majority of recruitment will be done through advertising with no cost incurred (e.g. through churches, university Christian Unions and other Christian organisations). An advertisement will be placed in Metro newspaper with funds provided by Professor Williams.

Total Cost Estimate = £161. See 'Research equipment, consumables and expenses form' for further breakdown.

Timetable

28th January 2013 – Submit draft proposal

April 2013 – Submit final proposal

June 2013 – Submit ethics proposal

August 2013 – Draft systematic review due

Autumn 2013 – Commence data collection, place advertisements etc.

Spring 2014 – End data collection – it is anticipated the study will take around 2 months to recruit sufficient participant numbers and a further 10 weeks for those recruited to complete course. As well as this, follow-up questionnaires would be required around 4 weeks later, therefore around 6-7 months of time from first participants to start to final participants finishing.
May-July 2014 – Data analysis and write up
End of July 2014 – Submit Project
September 2014 – Viva examination

Practical applications

This intervention is low in cost and easy to provide to large numbers of people. If found to be effective and acceptable, then this would provide justification for a larger scale roll out. This could have the effect of reaching some of the individuals who would not consider contacting standard healthcare services, as well as providing an alternative referral destination for GPs when seeing patients experiencing depression and anxiety who place Christian beliefs as an important part of their life. This may help reduce pressure on PCMHTs, and could also help the NHS meet its aims regarding spiritual care of individuals (NHS Education for Scotland, 2010).

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