Evaluating the Feasibility of Prison Officers Delivering a Guided Self-Help Programme for Stress to Adult Male Offenders Serving a Long-Term Prison Sentence and Clinical Research Portfolio

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Chapter One: Systematic Review

The Effectiveness of Psychological Therapies for Prisoners with Mental Health Problems: a Systematic Review Update

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Written in accordance with the guidelines for submission to the Journal of Consulting and Clinical Psychology (Appendix 1.1)

Abstract

Background

Prisoners have substantial mental health needs. Prisoners should have access to healthcare of the same standard as non-prisoners, however, it is unclear whether interventions recommended for non-prisoners are applicable or effective for prisoners.

Aim

To examine the effectiveness of CBT- or mindfulness based psychological interventions for prisoners with anxiety and/or depression.

Method

EMBASE, MEDLINE, and PsycINFO were systematically searched for research published on psychological interventions for prisoners with anxiety/depression using keywords and subject headings. The Crowe Critical Appraisal Tool Version 1.4 (Crowe & Sheppard, 2011) was used to assess the quality of the studies by the author and a second rater.

Results

Six relevant papers were identified and included. The quality of the articles varied, and a number of methodological limitations were identified.

Conclusion

Studies of moderate methodological quality provided evidence that psychological interventions are effective at reducing anxiety and depression in

prisoners. Outcome measures used have not been validated on a prisoner or forensic population. Future studies of psychological interventions for prisoners experiencing anxiety and depression are needed, using tools validated for prison populations. Future research should clearly report rates and reasons for attrition. The background, training, manualisation, and supervision/adherence of interventions should be reported in future studies.

Keywords

Prisoners, anxiety, depression, psychological intervention

Introduction

Mental health problems are risk factors for a range of adverse outcomes in prison and on release, including self-harm (Hawton et al., 2014), suicide (Fazel et al., 2008), violence (Goncalves et al., 2014), and recidivism (Baillargeon et al., 2009). Prisoners have substantial mental health needs, with high comorbidity rates and a disproportionately higher incidence of mental health problems compared with the general population (Fazel, et al., 2016). Rates of anxiety and depression of prisoners in the UK have been estimated between 30% and 75% (Harris et al., 2007; Singleton et al., 1997).

The Scottish Government's *Vision for Justice* identifies the improvement of health and wellbeing in justice settings as one of seven priorities (Scottish Government, 2017). Furthermore, the Basic Principles for the Treatment of Prisoners (the Mandela Rules) stipulate that prisoners should have access to healthcare of the same standard as non-prisoners (United Nations, 2015). Guidelines exist regarding treatment of mental health problems of non-prisoners in the community (National Institute for Health and Clinical Excellence, 2011a, 2011b); however, it is unclear whether these interventions are applicable or effective for prisoners. Prisoners often present with highly complex psychological problems, including associated co-morbidities, significant trauma histories, substance misuse, traumatic brain injury, and cognitive impairment (Goff, et al., 2007). Furthermore, the prison environment can significantly affect mental health, including isolation, lack of meaningful activity, bullying, violence, family disconnection, and lack of autonomy (Goomany & Dickinson, 2015). Imprisonment may present an opportunity to address the complex needs of individuals who may previously have

had limited access to health care. Identifying effective interventions for anxiety and depression in prisoners has the potential to guide service development, reduce health inequalities, and result in a wider, societal impact, including reducing recidivism (Leigh-Hunt & Perry, 2015).

Previous systematic reviews indicate that a diverse range of psychological interventions, including art therapy, are effective in reducing anxiety and depression in different subgroups of offenders, including adolescents and adults, and they exclusively included randomised controlled trials (Leigh-Hunt & Perry, 2015; Yoon et al., 2017). This review will include both randomised and non-randomised studies. While randomised studies are the most rigorous in design, non-randomised studies can provide important information in the context of a paucity of research focusing on adult prisoners.

Research Questions

The aim of this review is to systematically examine the effectiveness of CBT- or mindfulness based psychological interventions on anxiety and depression in prisoners. Specifically:

1. What psychological interventions for anxiety and depression in prisoners have been investigated in empirical studies?
2. How effective are psychological interventions in reducing anxiety and/or depression in prisoners?
3. What clinically relevant outcome measures have been used?

Method

This systematic review follows Preferred Reporting Items for Systematic Reviews and Meta-analyses guidelines (PRISMA; Moher et al. 2009). Searches of the Cochrane Database of systematic reviews and the Database of Abstracts of Reviews of Effects (DARE) were completed to find previous literature reviews on the chosen topic.

Search Strategy

A search of EMBASE, MEDLINE, and PsycINFO was carried out on 30.11.2019. Search terms were derived from terms used in previous systematic reviews (Leigh-Hunt & Perry, 2015; Yoon et al., 2017). Reference lists of previous systematic reviews and the article with the highest quality rating in this systematic review were hand searched to locate potentially relevant articles (Johnson et al., 2019; Leigh-Hunt & Perry, 2015; Yoon et al., 2017). Records from 1999 to 2019 were reviewed, as this time range reflects modern-day prison experiences such as the prison environment and available illicit substances.

The search algorithm was:

Prison* OR inmate* OR offender* OR correctional OR incarcerat* OR imprison* OR jail* OR penetentiar*

AND

psychological therap* OR psychotherap* OR psychological intervention*

OR

cognitive behavio* OR CBT

OR

acceptance and commitment therap* OR “ACT”

OR

dialectical behavio* or DBT

OR

compassion focused therap* OR CFT

OR

Self-help OR bibliotherap* AND anxiety AND depression OR low mood OR depressive disorder*

OR

mindful*

Search terms were combined using Boolean operators “AND” and “OR”. Truncations (symbolised by an asterisk) were used with search terms to ensure that all search terms following the truncation were identified in each database search.

Inclusion Criteria

- Adult prisoners (aged 18 and over)
- Anxiety or depression as outcome measures
- Implementation of CBT-based or mindfulness psychological interventions (e.g. CBT, ACT, CFT, DBT, IPT, mindfulness)
- Conducted in Western, industrialised countries
- Published in the last 20 years (1999-2019)

Exclusion Criteria

- Case studies, reviews, dissertations, book chapters, study protocols, or non-peer reviewed articles
- Articles not published in English
- Studies in psychiatric hospitals
- Studies that require participants to meet a specific diagnosis that is not an anxiety or depressive disorder (e.g. Emotionally Unstable Personality Disorder), or require a specific experience (e.g. sexual offending or domestic violence). These populations are more likely to benefit from specialist interventions rather than interventions focusing on anxiety and depression more generally.
- Qualitative studies
- Unpublished articles

Search Results

The author conducted the search and selected the articles. The initial searches yielded 4989 results. After duplicates were removed and articles were screened by title and abstract, the full texts of 31 identified papers were assessed for eligibility. Six papers were selected as meeting the inclusion criteria and included in the final review (Figure 1). One paper (Pardini et al., 2015) consisted of a pilot study and a main study, both of which were appraised. Therefore seven studies were evaluated.

Reference lists of the selected studies and the journals in which they were published were hand searched to ensure that relevant papers were not omitted

in the search. No articles were identified. The author and a second rater assessed quality of the included studies (see Quality Rating).

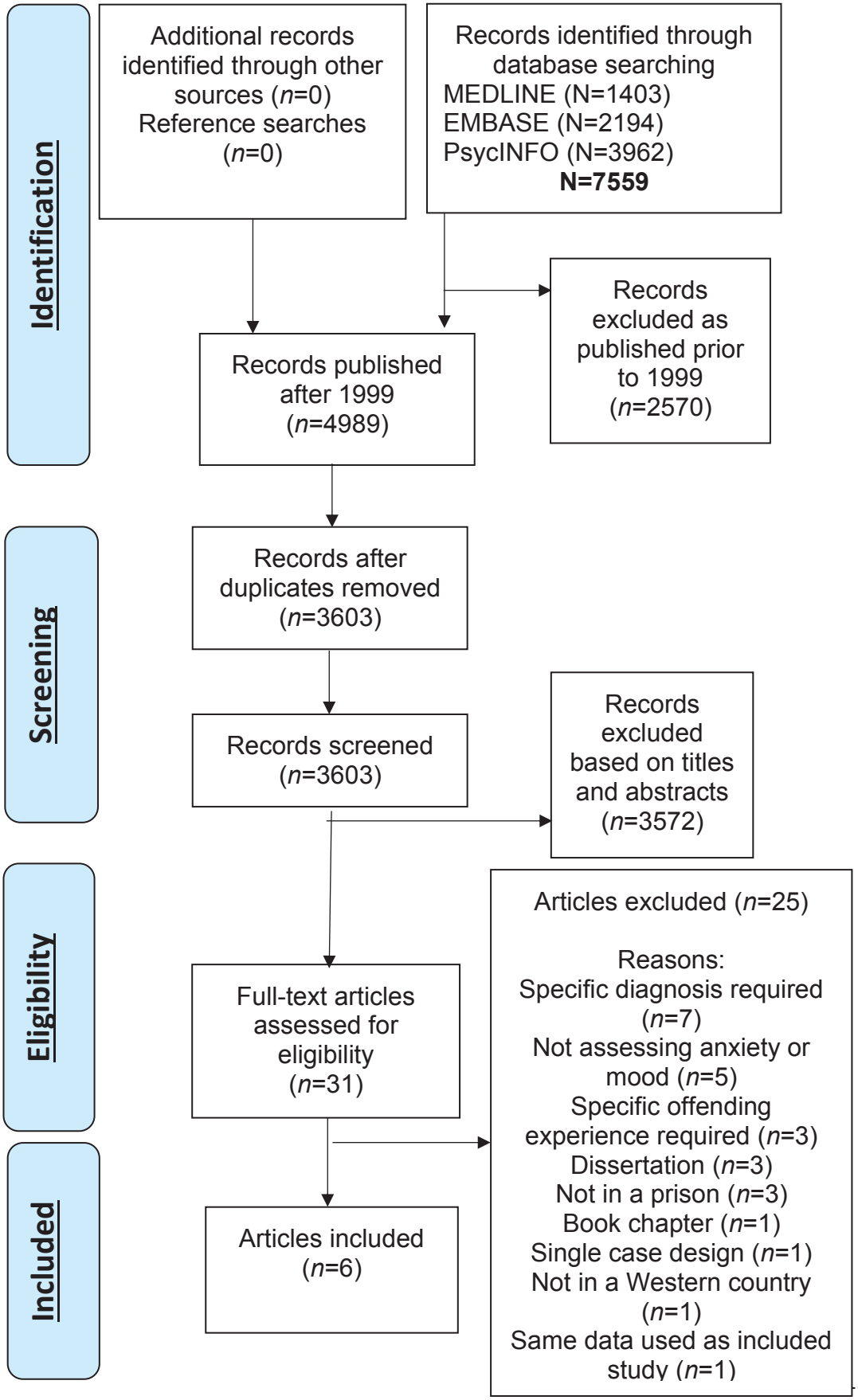

Figure 1: Study selection process presented in accordance with the PRISMA guidelines

Quality Rating

It is recognised that the sensitivity of quality rating tools are dependent on the domains of appraisal and can involve a degree of subjective judgement during rating, however, they are widely used in the systematic review of studies. The Crowe Critical Appraisal Tool (CCAT) was used to assess quality of the studies (Crowe & Sheppard, 2011) as it allowed the appraisal of various study designs and highlighted study strengths and limitations. This tool has a good construct validity and good inter-rater reliability with an interclass correlation coefficient of 0.83 for combined research designs (Crowe & Sheppard, 2011; Crowe, et al., 2012). However, as the CCAT was not design specific, it lacked potentially relevant items measured in other tools, and it did not consider the risk of bias.

The author and a second rater selected a study that was not included in this review and completed the CCAT to ascertain its correct use. Once this was established, the author and the second rater separately assessed the selected studies to appraise the quality of their research design. The initial agreement rate between the two assessors was 88%. In the context of disagreements, they were resolved through discussion and subsequently 100% agreement was reached.

Data Extraction

Data from the included studies was extracted and tabulated. This consisted of research design, participant demographics, intervention description and duration, outcome measures, and study results. In consultation with a statistician, effect sizes were calculated by the author where data was available (Ferszt et al., 2015; Pardini et al., 2015b).

Results

Study Characteristics

There were 1287 participants in the seven studies. Four took place in America (Ferszt et al., 2015; Johnson et al., 2019; Pardini et al., 2013a,b). As the location of one study was not reported, the first author was contacted and confirmed it occurred in America (Ferszt et al., 2015). Two were in the UK (Adamson et al., 2015; Maunder & Moss, 2009) and one in Australia (Riley et al., 2019). Pardini and colleagues reported two independent studies that were carried out in different prisons; a pilot study (2013a) and a main study (2013b).

Three studies consisted entirely of men (Adamson et al., 2015; Maunder & Moss, 2009; Pardini et al., 2013b), two of women (Ferszt et al., 2015; Riley et al., 2019), and two with men and women (Johnson et al., 2019; Pardini et al., 2013a).

Study Quality

The methodological quality of the included studies was variable, with scores ranging from 48% to 88% on the CCAT (Table 1). Although there is no specified cut-off score, a higher percentage is considered indicative of a higher quality study, and consideration of individual criteria scores is important to interpretation (Crowe, 2013).

Title	Preliminaries /5	Introduction /5	Design /5	Sampling /5	Data Collection /5	Ethical matters /5	Results /5	Discussion /5	Total /40	Total %
Adamson et al., (2015)	4	5	2	3	3	2	3	4	26	65
Ferszt et al., (2015)	3	1	3	2	2	2	3	3	19	48
Johnson et al., (2019)	5	5	4	5	4	4	4	4	35	88
Maunder & Moss, (2009)	4	5	2	2	1	2	3	2	21	53
Pardini et al., (2013a)	4	5	3	4	3	1	3	4	27	68
Pardini et al., (2013b)	4	5	3	3	3	2	3	4	27	68
Riley et al., (2019)	4	5	2	2	3	2	2	4	24	60

Table 1. CCAT scores

1. How effective are psychological interventions in reducing anxiety and/or depression in prisoners?

Two studies provided evidence for the effectiveness of interventions delivered individually. Maunder and Moss (2009) found self-help significantly reduced pre-treatment anxiety at post-treatment. Pardini and colleagues (2013a,b) found self-help significantly reduced pre-treatment depression at post-treatment, and these gains were maintained at 4-week follow-up on a clinician-rated measure (Hamilton Rating Scale for Depression), but not a self-report measure (Beck Depression Inventory-II).

Three studies (Ferszt et al., 2015; Johnston et al., 2019; Riley et al., 2019) reported significant reductions in anxiety and depression following groups. Ferszt and colleagues (2015) demonstrated group-based mindfulness reduced anxiety and depression in participants recruited in 2012 (*n*=22), however, not in those recruited in 2013 (*n*=15). The authors postulated that this might be due to the 2013 group's experience of different facilitators each week and changes in the prison environment, including moving cells. Furthermore, pre- and post-intervention anxiety and depression in the 2013 group were significantly higher than the 2012 group. Johnston and colleagues (2019) reported group Interpersonal Therapy (IPT) produced larger reductions in depressive symptoms than the treatment-as-usual control group. Riley and colleagues (2019) reported a significant reduction in pre-treatment depression and anxiety at post-treatment following a mindfulness and ACT-based group.

Adamson and colleagues (2015) reported on an Improving Access of Psychological Therapies (IAPT) service that consisted of a range of interventions delivered individually and in small groups. The authors found pre-treatment depression and anxiety reduced at post-treatment following engagement in the IAPT service.

Studies reported small (Cohen's *d*=-0.18 Johnston et al., 2019), medium (Cohen's *d*=-0.54 Ferszt et al., 2015; eta squared=0.120 Maunder & Moss, 2009), and large effect sizes (depression effect size=0.85 and anxiety effect size=0.96 Adamson et al., 2015; Cohen's *d*=-0.75 and 1.07 Ferszt et al., 2015; partial eta squared=0.14 Pardini et al., 2013a; partial eta squared=0.12 Pardini et al., 2013b) for the main treatment outcome. Treatment effects were maintained at a 4-week follow-up (Maunder & Moss, 2009; Pardini et al., 2013a,b) and 3-month follow-up (Johnston et al., 2019). Three studies had no follow-up (Adamson et al., 2015; Ferszt et al., 2015; Riley et al., 2019). Study findings of effectiveness are summarised in Table 2.

Authors (date), location	Participants: N, Mean age (SD), gender	Design, conditions	Outcome measures related to anxiety and depression[1]	Statistics	Findings
Adamson et al. (2015) HMP Lincoln; UK	N=893[2] Mean age=33.21 (SD=9.73) 100% male	Observational, prospective cohort design Single group pre- vs post intervention IAPT Service	PHQ-9 GAD-7	PHQ-9 *Pre-treatment* M=16.7, SD=5.19 *Post-treatment* M=15.26, SD=4.31 *t*(893)=16.3, *p*<0.0001, ES=0.85, CI=0.51-1.19 GAD-7 *Pre-treatment* M=15.26, SD=4.31 *Post-treatment* M=10.19, SD=6.14 *t*(893), *p*<0.0001, ES=0.96, CI=0.66-1.25	Intervention significantly reduced anxiety and depression. PHQ-9 91% (*n*=568) above clinical cut-off at pre-treatment, which reduced to 55% (*n*=345) at post-treatment. GAD-7 94% (*n*=588) above clinical cut-off at pre-treatment, which reduced to 52% (*n*=327) at post-treatment. 6% dropped out (*n*=93) and 14% were moved prison or released from prison (*n*=223). 8% (*n*=122) were unsuitable for further treatment and referred on.

[1] **BDI**: Beck Depression Inventory; **BDI-II**: Beck Depression Inventory-II; **BHS:** Beck Hopelessness Scale; **BSI:** Brief Symptom Inventory; **BSS:** Beck Scale for Suicide Ideation; **CEDS-10:** Center for Epidemiologic Studies Depression Scale; **DAS**: Dysfunctional Attitudes Scale; **DASS-21:** Depression Anxiety Stress Scales; **GAD-7:** Generalised Anxiety Disorder-7; **HADS:** Hospital Anxiety and Depression Scale; **HRSD:** Hamilton Rating Scale for Depression; **LIFE:** Longitudinal Interval Follow-up; **PHQ-9:** Patient Health Questionnaire-9; **PSS:** Perceived Stress Scale; **QIDS:** Quick Inventory of Depressive Symptoms–Self-Report; **STAI:** The State-Trait Anxiety Inventory; **SCL-90-R**: Symptom Checklist-90

[2] 893 prisoners had at least two clinical contacts (one assessment and one treatment session) and their data was included in analysis. 1273 prisoners completed initial assessment.

Authors (date), location	Participants: N, Mean age (SD), gender	Design, conditions	Outcome measures related to anxiety and depression[1]	Statistics	Findings
Ferszt et al. (2015) Women's prison; USA	N=37 <u>2012</u> *n*=22 Mean age=34.5 (SD=10.52) 100% female <u>2013</u> *n*=15 Mean age=35.33 (SD=8.13) 100% female	Single group pre- vs post intervention Mindfulness Based Programme	PSS STAI CEDS-10	<u>2012</u> <u>Anxiety</u> *Pre-treatment* PSS: M=24.61 SE=0.95 STAI: M=55.44 SE=2.45 *Post-treatment* PSS: M=20.83 SE=1.48 STAI: M=43.11 SE=1.46 PSS: $t(17)=2.805$, $p=0.012$ Cohen's *d* calculated=-0.54 STAI: $t(17)=4.079$, $p=0.001$ Cohen's *d* calculated=1.07	<u>2012</u> Intervention significantly reduced anxiety and depression. 18% (*n*=4) dropped out. Reasons not provided. <u>2013</u> No significant change in anxiety or depression following intervention. No attrition.

[1] **BDI**: Beck Depression Inventory; **BDI-II**: Beck Depression Inventory-II; **BHS:** Beck Hopelessness Scale; **BSI:** Brief Symptom Inventory; **BSS:** Beck Scale for Suicide Ideation; **CEDS-10:** Center for Epidemiologic Studies Depression Scale; **DAS**: Dysfunctional Attitudes Scale; **DASS-21:** Depression Anxiety Stress Scales; **GAD-7:** Generalised Anxiety Disorder-7; **HADS:** Hospital Anxiety and Depression Scale; **HRSD:** Hamilton Rating Scale for Depression; **LIFE:** Longitudinal Interval Follow-up; **PHQ-9:** Patient Health Questionnaire-9; **PSS:** Perceived Stress Scale; **QIDS:** Quick Inventory of Depressive Symptoms–Self-Report; **STAI:** The State-Trait Anxiety Inventory; **SCL-90-R**: Symptom Checklist-90

				<u>Depression</u> CEDS-10: Pre-treatment M=17.78 SE=1.20 Post-treatment M=13.56 SE=1.17 *t*(14)=4.228 *p*=0.001 Cohen's *d* calculated=-0.75 <u>2013</u> No significant effect of intervention on anxiety (PSS *p*=0.062; STAI *p*=0.709) or depression (CEDS-10 *p*=0.246). <u>Differences between groups</u> Pre-treatment anxiety scores were significantly lower in 2012 (M=55.44) than 2013 (M=89.8), *t*(32)=-9.234, *p*<0.0001. Post-treatment scores were significantly lower in 2012 (M=43.11) than 2013 (M=91.13), *t*(32)=-14.612, *p*<0.0001.	

Authors (date), location	Participants: N, Mean age (SD), gender	Design, conditions	Outcome measures related to anxiety and depression[1]	Statistics	Findings
Maunder & Moss (2009) HMP Acklington; UK	N=38 Mean age=35.22 (SD=11.45) 100% male	RCT Self-help intervention (*n*=20) Delayed treatment control group (*n*=18)	HADS BSI	HADS *Pre-treatment* M=12.61 SD=4.23 *Post-treatment* M=10.89 SD=4.1 t(31)=2.057, *p*=0.048, Eta squared=0.12 No significant difference between post-treatment and follow-up of treatment group (*p*=0.609), suggesting maintenance of gains.	Intervention significantly reduced anxiety. 25% (*n*=5) of intervention group lost at 4 weeks post-intervention. Four weeks later, a further 13% (*n*=2) of intervention group and 10% (*n*=2) of delayed treatment control group dropped out. Attrition due to non-attendance of appointments, withdrawals, discharges, and transfers.

[1] **BDI**: Beck Depression Inventory; **BDI-II**: Beck Depression Inventory-II; **BHS:** Beck Hopelessness Scale; **BSI:** Brief Symptom Inventory; **BSS:** Beck Scale for Suicide Ideation; **CEDS-10:** Center for Epidemiologic Studies Depression Scale; **DAS**: Dysfunctional Attitudes Scale; **DASS-21:** Depression Anxiety Stress Scales; **GAD-7:** Generalised Anxiety Disorder-7; **HADS:** Hospital Anxiety and Depression Scale; **HRSD:** Hamilton Rating Scale for Depression; **LIFE:** Longitudinal Interval Follow-up; **PHQ-9:** Patient Health Questionnaire-9; **PSS:** Perceived Stress Scale; **QIDS:** Quick Inventory of Depressive Symptoms–Self-Report; **STAI:** The State-Trait Anxiety Inventory; **SCL-90-R**: Symptom Checklist-90

				BSI No significant change (p>0.05).	

Authors (date), location	Participants: N, Mean age (SD), gender	Design, conditions	Outcome measures related to anxiety and depression[1]	Statistics	Findings
Pardini et al. (2013) <u>Study 1</u> Metropolitan jail; USA <u>Study 2</u> Maximum-security prison; USA	<u>Study 1</u> N=37 Mean age=29.37 (SD=9.22) 78.4% male (*n*=29) <u>Study 2</u> N=42 Mean age=32.7 (SD=8.3)	<u>Study 1</u> RCT Self-help intervention (*n*=17) Delayed-treatment control group (*n*=20) <u>Study 2</u> RCT	<u>Study 1</u> BDI SCL-90-R DAS <u>Study 2</u> HRSD BDI-II BSI BHS	<u>Study 1</u> <u>BDI</u> Significant Condition x Time interactions *F*(1,35)=5.65, partial eta squared=0.14 <u>DAS</u> Significant Condition x Time interactions *F*(1,32)=9.25, partial eta squared=0.22 Treatment gains maintained at 4-week follow-up ($p<0.05$)	<u>Study 1</u> Data collapsed across groups: <u>BDI</u> 45% of completers (*n*=9) moved from above clinical cut-off at pre-treatment to below cut-off at end of treatment. 80% of completers (*n*=16) had a reliable change. 57% (*n*=21) dropped out due to release from jail. <u>Study 2</u> Data collapsed across groups:

[1] **BDI**: Beck Depression Inventory; **BDI-II**: Beck Depression Inventory-II; **BHS:** Beck Hopelessness Scale; **BSI:** Brief Symptom Inventory; **BSS:** Beck Scale for Suicide Ideation; **CEDS-10:** Center for Epidemiologic Studies Depression Scale; **DAS**: Dysfunctional Attitudes Scale; **DASS-21:** Depression Anxiety Stress Scales; **GAD-7:** Generalised Anxiety Disorder-7; **HADS:** Hospital Anxiety and Depression Scale; **HRSD:** Hamilton Rating Scale for Depression; **LIFE:** Longitudinal Interval Follow-up; **PHQ-9:** Patient Health Questionnaire-9; **PSS:** Perceived Stress Scale; **QIDS:** Quick Inventory of Depressive Symptoms–Self-Report; **STAI:** The State-Trait Anxiety Inventory; **SCL-90-R**: Symptom Checklist-90

	100% male	Self-help intervention (*n*=19) Delayed-treatment control group (*n*=23)		No significant interactions on the SCL-90-R <u>Study 2</u> <u>BDI-II</u> Significant Time x Condition effect *F*(1,42)=6.12, *p*<0.05 Pre-treatment M=27.84, SD=11.7 Post-treatment M=13, SD=10.31 Effect size calculated: partial eta squared=0.12 <u>HRSD</u> Significant Time x Condition effect *F*(1,42)=8.82, *p*<0.05 Pre-treatment M=16.53, SD=5.05 Post-treatment M=7.26, SD=7.59 Effect size calculated: partial eta squared=0.18	<u>BDI-II</u> 55% (*n*=21) of completers had a clinically significant change 60% of completers (*n*=23) moved from above clinical cut-off at pre-treatment to below cut-off at end of treatment 4-week follow-up gains not maintained (*p*<0.05) <u>HRSD</u> 62% of completers (*n*=24) moved from above clinical cut-off at pre-treatment to below cut-off at end of treatment. 45% (*n*=17) of completers had a clinically significant change. 4-week follow-up gains maintained (*p*>0.05). 2% (*n*=1) refused to continue, 2% (*n*=1) transferred to another institution, 2% (*n*=1) discharged, and 9% (*n*=4) dropped out for "other reasons".

Authors (date), location, design	Participants: N, Mean age (SD), gender	Design, conditions	Outcome measures related to anxiety and depression[1]	Statistics	Findings
Riley et al. (2019) Women's prison; Australia	N=59 Mean age=34.73 (SD=9.98) 100% female	Single group pre- vs post intervention Mindfulness and ACT-based group	DASS-21 PHQ-9	PHQ-9 -1.56 [-2.03, -1.08], *p*<0.001 Effect size= -1.56 DASS-21: Depression subscale -1.44 [-2.50, -0.38], *p*<0.001 PASS-21 Anxiety subscale -1.76 [-2.60, -0.93], *p*<0.001	Intervention significantly reduced depression and anxiety. "A number of prisoners" were moved to other locations within the prison or to other prisons, but this was not quantified.

Table 2. Summary of effectiveness of psychological interventions

[1] **BDI**: Beck Depression Inventory; **BDI-II**: Beck Depression Inventory-II; **BHS:** Beck Hopelessness Scale; **BSI:** Brief Symptom Inventory; **BSS:** Beck Scale for Suicide Ideation; **CEDS-10:** Center for Epidemiologic Studies Depression Scale; **DAS**: Dysfunctional Attitudes Scale; **DASS-21:** Depression Anxiety Stress Scales; **GAD-7:** Generalised Anxiety Disorder-7; **HADS:** Hospital Anxiety and Depression Scale; **HRSD:** Hamilton Rating Scale for Depression; **LIFE:** Longitudinal Interval Follow-up; **PHQ-9:** Patient Health Questionnaire-9; **PSS:** Perceived Stress Scale; **QIDS:** Quick Inventory of Depressive Symptoms–Self-Report; **STAI:** The State-Trait Anxiety Inventory; **SCL-90-R**: Symptom Checklist-90

2. What psychological interventions have been investigated in empirical studies?

Three studies investigated interventions delivered individually (Maunder & Moss, 2009; Pardini et al., 2013a,b) and three examined interventions delivered in a group (Ferszt et al., 2015; Johnston et al., 2019; Riley et al., 2019). One study evaluated an IAPT service, which comprised interventions delivered individually and in groups (Adamson et al. 2015).

Various therapeutic modalities were investigated. Three were based on Cognitive Behavioural Therapy (Maunder & Moss, 2009; Pardini et al., 2013a,b), one on Mindfulness (Ferszt et al., 2015), one on Acceptance and Commitment Therapy (Riley et al., 2019), and one on Interpersonal Therapy (Johnson et al., 2019).

Experience of facilitators varied. Two studies involved therapists with prior experience of the intervention (Ferszt et al., 2015; Riley et al., 2019). Riley and colleagues (2019) also involved an Aboriginal project officer to promote engagement of Indigenous group members. Johnston and colleagues (2019) involved prison employees; five were mental health clinicians while four were from a non-mental health capacity, and all completed 1.5 days of IPT training and attended supervision. The IAPT study consisted of a variety of mental health professionals who were working in the IAPT Service and received supervision (Adamson et al. 2015). Self-help interventions did not require facilitators (Maunder & Moss, 2009; Pardini et al., 2013a,b).

The duration of group interventions was 90 minutes delivered once per week (Ferszt et al., 2015; Riley et al., 2019) or twice per week (Johnson et al., 2019), over five

weeks (Riley et al., 2019), ten weeks (Johnson et al., 2019), and twelve weeks (Ferszt et al., 2015). Johnson and colleagues (2019) included four individual sessions to help maintain focus on goals. Self-help intervention in Pardini and colleagues (2013a,b) was over four weeks, while Maunder and Moss (2009) did not report a time range. The average length of treatment in Adamson and colleagues (2015) was four sessions. The frequency and duration of sessions were not reported.

Treatment fidelity varied. Two interventions were based on treatment and training manuals (Johnson et al., 2019; Riley et al., 2019) and self-help interventions were manualised (Maunder & Moss. 2009; Pardini et al. 2013a,b). Johnson and colleagues (2019) involved independent experts to provide adherence and competency ratings of audio recorded sessions. There were no reported attempts to determine treatment fidelity in the remaining studies (Adamson et al., 2015; Ferszt et al., 2015; Maunder & Moss, 2009; Pardini et al., 2013a,b; Riley et al., 2019). Intervention characteristics are summarised in Table 3.

Authors	Intervention description	Facilitator	Duration
Adamson et al. (2015)	IAPT service: 1. Step 2: low-intensity CBT-based interventions for mild-to-moderate depression and anxiety disorders, including guided self-help, psychoeducational groups, and IPT. 2. Step 3 high-intensity CBT: individual and small groups, for moderate-to-severe depression and anxiety. Included eye movement desensitisation and reprocessing (EMDR). 3. Step 3 counselling: IPT and person-centred counselling for mild-to-moderate depression, adjustment difficulties, bereavement and grief. 4. Step 4: psychological therapy for those not recovered despite high-intensity treatment and those at current high risk of self-harm or suicide. Delivered individually and in groups.	Step 2: Psychological Well-being Practitioners and Senior Psychological Well-being Practitioners Step 3: CBT Therapists Step 3: Counsellors Step 4: Clinical Psychologists	Overall, M=4.19 sessions (SD=3.02). Step 2: M=4.5 sessions (SD=3.06, min=2, max=8). Step 3: M=7.5 sessions (SD=6.11, min=2, max=20).
Ferszt et al. (2015)	Mindfulness Based Programme: practicing mindfulness meditation and mindfulness movement exercise. CD player provided for meditation practices.	Facilitator received training in programme and had “a number of years” of experience of facilitating group-based mindfulness programmes in correctional settings.	90 minutes/week over 12 weeks

Johnson et al. (2019)	Standard group IPT, as specified in the study treatment and training manuals (Johnson & Zlotnick, 2012; Johnson et al., 2015). Intervention aimed at improving communication, changing relationship expectations, or adapting to changes by building or better utilising a social network.	9 employed at participating prisons; 5 as prison mental health clinicians and 4 in non-mental health positions, e.g. discharge planner. Facilitators attended 1.5-day IPT training and weekly supervision.	20 group sessions of 90 minutes over 10-weeks. Four individual sessions to help maintain focus on goals.
Maunder & Moss (2009)	Based on CBT principles, two self-help booklets for anxiety and depression were adapted from Northumberland, Tyne and Wear NHS Trust booklets. Materials had been adapted with prisoners (Maunder et al., 2004).	None	Unknown
Pardini et al. (2013a,b)	The "Feeling Good" book was based on CBT. Participants provided with a reading schedule (approximately 110 pages per week) to complete on time and ensure appropriate time is spent on materials. Participants received weekly postcards as reminders of reading and upcoming assessments.	None	4 weeks
Riley et al. (2019)	Group based on ACT manual. Involved mindfulness and acceptance strategies, and value-guided behavioural activation techniques. Detailed workbook used.	Therapist experienced in ACT and an aboriginal project officer.	90-minute group sessions over 5 weeks

Table 3. Characteristics of psychological interventions

3. What clinically relevant outcome measures have been used?

A range of outcome measures were used (Table 2). Several measures were used in only one study, exceptions being the PHQ-9 (Adamson et al., 2015; Riley et al., 2019), GAD-7 (Adamson et al., 2015; Johnson et al., 2019), BSI (Maunder & Moss, 2009; Pardini et al. 2013b), HRSD and BHS (Johnson et al., 2019; Pardini et al. 2013b). It is beyond the scope of this review to provide psychometrics for all outcome measures used. Psychometric properties of the five outcome measures used in more than one study were of good reliability and consistency (Table 4).

Several measures were used in studies on a prison or forensic population (HRSD, BHS, DAS, STAI, BSI, and SCL-90-R). However, these outcome measures have not been validated on a prison or forensic population.

	PHQ-9	HRSD	BHS	GAD-7	BSI
Test–retest reliability	Intraclass correlation =0.94 (Zuithoff et al., 2010)	Intraclass correlation =0.65-0.98 (Trajkovic et al., 2011)	Intraclass correlation =0.93 (Kliem et al., 2018)	Intraclass correlation =0.83 (Spitzer et al., 2006)	Intraclass correlation =0.68-0.91 (Derogatis et al., 1993)
Internal consistency	Cronbach's alpha=0.89 (Kroenke et al., 2001)	Cronbach's alpha=0.79 (Trajkovic et al., 2011)	Cronbach's alpha=0.87 (Kliem et al., 2018)	Cronbach' s alpha=0.92 (Spitzer et al., 2006)	Cronbach's alpha=0.7 (Derogatis et al., 1993)

Table 4. Psychometric properties in general adult settings

Discussion

Anxiety and depression are experienced by between 30% and 75% of prisoners (Harris et al., 2007; Singleton et al., 1997). This high prevalence highlights the need for effective psychological intervention to alleviate such difficulties.

1. How effective are psychological interventions in reducing anxiety and/or depression in prisoners?

All studies reported an overall reduction in anxiety and depression, which is consistent with previous systematic reviews (Leigh-Hunt & Perry, 2015; Yoon et al., 2017). Self-help CBT and group IPT reduced anxiety/depression and treatment gains were maintained (Johnson et al., 2019; Maunder & Moss, 2009; Pardini et al., 2013a). Mindfulness groups reduced anxiety and depression, except for prisoners with higher levels of anxiety who experienced recent changes in the prison (Ferszt et al., 2015; Riley et al., 2019). Four studies reported large effect sizes, however, two had no control group and outcomes may reflect non-specific benefits of intervention or placebo effects (Adamson et al., 2015; Ferszt et al., 2015). A previous systematic review found non-prisoner studies without control groups had larger effect sizes than studies with control groups (Huhn et al., 2014). Furthermore, no studies measured mechanisms of change and therefore active components of treatment is unknown.

Six of the seven studies were of moderate methodological quality. The lack of control group in pre-post, single group designs (Adamson et al., 2015; Ferszt et al., 2015; Riley et al., 2019) makes it unclear whether reductions in symptoms reflect natural fluctuations over time or non-specific effects of intervention. Two

studies consisted of large sample sizes (N=893 Adamson et al., 2015; N=181 Johnson et al., 2019), which increases the likelihood of detecting treatment effects due to increased statistical power.

Excluding data from dropouts results in biased estimates of treatment effects (Nüesch et al., 2009). Inclusion of attrition data was not reported (Maunder & Moss, 2009; Riley et al., 2019) and may bias results. Reasons and rates of attrition provide information regarding acceptability and effectiveness of interventions but were often not reported. It is uncertain how much attrition is due to the feasibility and logistics of delivering intervention in prison, such as prisoners moving or leaving prison, and how much is due to lack of effectiveness and non-engagement, such as prisoners choosing to discontinue. Both have implications for service planning; the former highlights the need for an integrated care pathway (Public Health England, 2018) and the latter the need for acceptable and effective interventions.

Research ethical matters was rated as high in only one study (Johnson et al., 2019), while the remaining studies were low. As prisoners are a vulnerable population, it is vital for studies to be well-designed and address inequalities in power, autonomy, and education so that consent is truly informed (Grudzinskas & Clayfield, 2005). Furthermore, the effects of researchers may have inflated outcomes as prisoners potentially responded to perceived demand characteristics.

2. What psychological interventions have been investigated in empirical studies?

The psychological interventions investigated varied in format (individual, group, and self-help), and were based on different treatment modalities (CBT, ACT, IPT, and mindfulness). Sufficient intervention information is vital for study replication, however, there were no details of facilitator training (Riley et al., 2019) or supervision (Ferszt et al., 2015; Riley et al., 2019). Recommended measurements of treatment fidelity include a treatment manual, fidelity ratings, supervision, and therapist certificates, and underpins accurate evaluation of interventions (Prowse & Nagel, 2015). Only one study involved an independent assessor to check treatment fidelity (Johnson et al., 2019), therefore it is unknown whether interventions in the remaining studies were valid or reliable. This is important in the "replication crisis" of research evaluating psychological intervention (Hengartner, 2018).

The highest quality study, Johnson and colleagues (2019) trained non-mental health professionals. This is in line with studies that found reductions in anxiety and depression in non-prisoners following psychological interventions delivered by trained lay health workers (Khan et al., 2019; Patel et al., 2010). This demonstrates the potential to upskill the workforce during limited resources and increasing demand.

Prisoners should have access to the same healthcare standard as non-prisoners (United Nations, 2015). Interventions recommended for non-prisoners with anxiety and depression have yet to be evaluated in prisons, including

guided self-help and psychoeducational groups (NICE, 2011b), which highlights a gap in research.

3. What clinically relevant outcome measures have been used?

Outcome measures used have not been validated on a prisoner or forensic population. As a population with complex needs, it is likely that prisoners systematically differ from non-forensic populations (Goff, et al., 2007).

Treatment gains were maintained on the clinician-rated HRSD but not the self-report BDI-II (Pardini et al., 2013b). This is consistent with findings that clinician-rated and self-report measures of improvement are not equivalent, and therefore should be combined for an accurate assessment of symptoms (Cuijpers et al., 2010). Only two studies included both types of measures (Johnson et al., 2019; Pardini et al., 2013b), which undermines the validity of outcome data in the remaining studies.

Prisoners have low literacy skills (Clark & Dugdale, 2008). McHugh and Behar (2009) found only 7% of self-report anxiety and depression measures were readable for individuals with six years of formal education or lower, and therefore would be comprehended by the majority of prisoners. The reviewed studies did not report readability, and prisoners may not have fully understood the outcome measures.

Strengths and Limitations

A strength is the use of a second rater to evaluate the quality of the selected articles, which will increase the inter-rater reliability of this review. In consultation with a statistician, effect sizes were calculated.

A limitation is that one researcher defined the inclusion/exclusion criteria, conducted searches, and selected studies. Studies were restricted to those written in English as there was no access to a translator. Limitations of studies appraised in the review included small sample sizes, the use of non-validated outcome measures, and insufficient treatment fidelity measurement (see discussion).

Recommendations for Future Research

Future studies of psychological interventions for prisoners experiencing anxiety and depression are needed, using tools validated for prison populations. Research should clearly report attrition rates and reasons. The background, training, manualisation, and supervision/adherence of interventions should be recorded.

Conclusions

Studies of moderate methodological quality indicate that CBT- and mindfulness based psychological interventions are effective at reducing anxiety and depression in prisoners. However, there is a need for higher quality, more robust studies in this area. This knowledge will inform policies and service development to meet prisoners' mental health needs. Health and social care

professionals working with this population should be aware of the high prevalence of anxiety and depression and make appropriate referrals to psychological interventions available.

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Chapter Two: Major Research Project

Evaluating the Feasibility of Prison Officers Delivering a Guided Self-Help Programme for Stress to Adult Male Offenders Serving a Long-Term Prison Sentence

Chapter word count: 6,791

Written in accordance with the guidelines for submission to the Journal of Mental Health (Appendix 2.1)

Plain English Summary

Title

Evaluating the feasibility of Prison Officers delivering a guided self-help programme for stress to adult male offenders serving a long-term prison sentence

Background

There is a high prevalence of mental health problems in prisoners (Fazel et al., 2016). Prisoners should have access to healthcare of the same standard as non-prisoners (United Nations, 2015), and CBT-based self-help is recommended for depression and anxiety in non-prisoners (NICE, 2011). Living Life To The Full (LLTTF) is a CBT-based approach that reduced anxiety and depression in non-prisoners, but has not been studied in prison. Prisoners have a high incidence of head injury (HI) (McMillan, et al., 2019) and brain injury reduces responsivity to intervention.

Research Questions

1. Will prisoners take part in and engage with LLTTF?
2. Do LLTTF booklets need to be adapted for prisoners?
3. Does LLTTF show an effect of reducing anxiety and/or depression?
4. Does history of HI reduce responsivity to LLTTF?
5. Does LLTTF reduce number of breaches of prison rules?

Method

Prison Officers in HMP Shotts were invited to take part and attend LLTTF training. Male prisoners aged 21 and above in HMP Shotts were recruited using posters. Assessment of anxiety, depression, perceived functioning, and history of HI was carried out. Prisoners' work attendance and breaches of prison rules for the month prior to and month during LLTTF was collected. Prison Officers and prisoners provided feedback of LLTTF at end of treatment.

Main Findings

Six (6%) Prison Officers attended LLTTF training and two (33%) withdrew prior to prisoner recruitment. 6% (*n*=15) of prisoners invited to take part volunteered and were eligible. Seven prisoners completed LLTTF.

There was a sign of a treatment effect with reductions in depression following LLTTF. Anxiety reduced at the last session and increased at post-treatment, which reflects the deterioration in a minority of prisoners. Due to the small sample size, history of HI and responsivity was not explored. Prisoners were not on report the month prior to LLTTF, therefore impact on breached rules was not explored.

Feedback from Prison Officers and prisoners indicated materials required adaptation for prison, such as including activities feasible in prison. Prison Officers highlighted practical barriers to delivery of LLTTF, including limited time.

Conclusions

Guided self-help in prison is worth pursuing. Revision of materials with Prison Officers and prisoners is recommended, and evaluated in future research. Due to practical barriers reported by Prison Officers, designated guided self-help workers may be better placed to deliver this intervention.

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Abstract

Background

Prisoners have substantial mental health needs. Prisoners should have access to healthcare of the same standard as non-prisoners and CBT-based self-help is recommended for anxiety and depression in non-prisoners. Living Life To The Full (LLTTF) is a CBT-based approach that has been demonstrated to reduce anxiety and depression in non-prisoners.

Aims

To evaluate the feasibility of Prison Officers providing guided self-help support to adult male offenders experiencing stress.

Method

Prison Officers and prisoners in HMP Shotts were invited to participate. Prison Officers completed LLTTF training and met prisoners individually for four sessions of LLTTF. Prisoners completed measures of anxiety, depression, and perceived functioning. This was supplemented by questionnaires completed by Personal Officers, work attendance, and breaches of prison rules. Feedback about LLTTF was collected from prisoners and Prison Officers.

Results

Six Prison Officers (6%) attended staff training and two (33%) withdrew prior to prisoner recruitment. 6% (*n*=15) of prisoners invited to take part volunteered and were eligible. Seven completed LLTTF. A large effect size was associated with depression self-ratings pre- to post-treatment. Pre-treatment anxiety

reduced at Week 4 and increased at post-treatment, which reflects deterioration in a minority. Feedback from Prison Officers and prisoners indicated LLTTF materials require adaptation for prison. Prison Officers highlighted practical barriers to delivery, including limited resources.

Conclusions

Guided self-help in prison is worth pursuing. Revision of materials with Prison Officers and prisoners is recommended, and piloted prior to future research. Designated guided self-help workers may be better placed to deliver LLTTF due to practical barriers reported by Prison Officers.

Keywords

Prisoners, anxiety, depression, guided self-help, Prison Officers

Introduction

Prisoners have substantial mental health needs, with high comorbidity rates and a disproportionately higher incidence of mental health problems compared with non-prisoners (Gillies et al., 2012). Mental health problems are risk factors for adverse outcomes in prison and on release; including self-harm (Hawton et al., 2014), suicide (Fazel et al., 2008), violence (Goncalves et al., 2014), and recidivism (Baillargeon et al., 2009). There is no national reporting of routine health statistics in prisoners. Surveys estimate one in seven prisoners have a diagnosis of clinical depression during imprisonment (Fazel et al., 2016), and prisoners report poorer mental wellbeing than non-prisoners (Tweed et al., 2019). A comprehensive assessment of prisoners' health in Scotland found that rates of medication prescribed to manage depression in SPS (Scottish Prison Service) were higher than the Scottish general population (Graham, 2007), which indicates a considerable burden of mental health problems in prisoners in Scotland.

The Scottish Government's *Vision for Justice* identifies the improvement of health and wellbeing in justice settings as one of seven priorities (Scottish Government, 2017), and the Basic Principles for the Treatment of Prisoners (the Mandela Rules) stipulate that prisoners should have access to healthcare of the same standard as non-prisoners (United Nations, 2015). Although a growing literature indicates that psychological interventions are effective for prisoners with anxiety and depression (Leigh-Hunt & Perry, 2015; Yoon et al., 2017), pharmacological interventions are often the only treatment available (Adamson et al., 2015). National Institute for Health and Care Excellence (NICE) guidelines recommend

CBT-based self-help as part of stepped care for depression and anxiety in non-prisoners (NICE, 2011a, 2011b). A pilot study in prison by Maunder and Moss (2009) found self-help materials adapted for use in prisons reduced anxiety. Furthermore, Pardini and colleagues (2014) found self-help reduced depression in prisoners. Although promising findings, further studies are required to develop the evidence base of self-help for prisoners with anxiety and depression.

One self-help approach is Living Life To The Full (LLTTF); a series of booklets based on a cognitive behavioural approach. The booklets aim to develop common life skills, including understanding feelings, problem solving, balanced thinking, and activity scheduling (Williams, 2007). LLTTF delivered within a class-based setting reduced anxiety and depression, and improved social functioning for adults within the community (Williams, et al., 2018). LLTTF has not been piloted within prison.

The utility of self-help materials depends on their readability. It is estimated that 50% of the prison population have reading abilities below an 11-year-old (Clark & Dugdale, 2008); however, Dunlop and Bennet (2017) found 47% of self-help materials available in 12 prisons in Scotland had a reading age above 11. Widely used, the Flesch Reading Ease (FRE) indicates how readable a text is and a higher score indicates easier readability (Dunlop & Bennett, 2017). The Simplified Measure of Gobbledygook (SMOG) is sometimes preferred as a more rigorous test of evaluating medication information (Buck, 1988).

Lifetime prevalence of head injury (HI) in prisoners is estimated to be 50-60% (Farrer & Hedges, 2011; Shiroma et al., 2010) and is common in Scottish prisoners (McMillan, et al., 2019). Severe HI is associated with cognitive impairment and personality change, including impulsiveness, impaired concentration and memory, and poor planning and problem solving. Research indicates that rehabilitation of adults with acquired brain injury is often hindered by clients' lack of engagement and motivation (Holloway, 2012). Therefore, historic HI is likely to impact on ability to engage with interventions, particularly if adaptations for cognitive impairments are not made. This is reflected in the Scottish Government's initiative to develop services for HI, including interventions (National Prisoner Health Network, 2016).

Expert opinion indicates that anxiety and depression can lead to breaches of prison rules, including poor attendance at prison work, failed drug tests, and violence. This can make prisoners difficult to manage and leads to their accrual of reports, which impedes progression.

Present Study

In line with the MRC Complex Interventions Framework (Craig et al., 2008), this study aimed to evaluate the feasibility of Prison Officers providing guided self-help support to adult male offenders serving a long-term prison sentence. The study aimed to contribute to the evidence base of psychological interventions for anxiety and depression in prisoners.

Research questions:

1. Will prisoners take part in and engage with LLTTF?
2. Do the LLTTF booklets need to be adapted for prisoners?
3. Does LLTTF signal an effect of reducing anxiety and/or depression?
4. Does history of HI reduce engagement and responsivity to LLTTF?
5. Is there indication that exposure to LLTTF reduces the number of breaches of prison rules?

Method

Design

A non-randomised repeated measures within-subjects design was used to compare prisoners at pre-treatment and post-treatment. Three-month follow-up data was to be collected, however, this was not possible due to recruitment difficulties. Feasibility data were collected throughout the study (see Procedure).

Procedures

Setting

This study took place in Her Majesty's Prison (HMP) Shotts, a Scottish prison for adult male offenders serving a long-term sentence of four or more years. The field researcher attended mandatory SPS safety training prior to recruitment.

Ethical approval

Approval for the study was obtained from SPS (17.05.2019; Appendix 2.2) and the South East Scotland Research Ethics Committee 02 (SESREC 02) (28.05.2019: 19.08.2019; 20.09.2019; 20.11.2019; Appendix 2.3).

Recruitment

Prison Officers were recruited during June 2019 and prisoners from June to October 2019.

Participants

Prison Officers and prisoners in HMP Shotts were given Participant Information Sheets (Appendix 2.4) and provided written informed consent (Appendix 2.5).

Prisoners on four landings were initially invited to participate. This was reduced to three landings (see Prisoner Procedure).

Inclusion criteria: Participants were adult male prisoners (aged 21 and above) in HMP Shotts who experienced mild-severe levels of distress, who were prepared to attend four sessions of LLTTF, able to read and write, and able to engage in LLTTF.

Exclusion criteria: Prisoners deemed by Prison Officers or healthcare staff to pose a direct risk of harm to the field researcher (e.g. history of offences perpetrated against female professionals) or who were at risk of imminent and significant self-harm.

Justification of Sample Size

This is a feasibility trial testing key elements of conducting research in this setting (i.e. ability to recruit and train Prison Officers, recruit prisoners, collect data, deliver LLTTF), and informing a power calculation for a larger study. The review by Billingham and colleagues (2013) observed that ongoing feasibility studies in the UK had a median sample target of 36 (range=10-300), therefore this study aimed for a sample of 36 from the 240 prisoners across the four landings.

Intervention Content

Due to its effectiveness with adult non-prisoners (Williams et al., 2018) and its availability to this study without cost, LLTTF was implemented over other self-help approaches. LLTTF comprises nine CBT-based booklets that promote

understanding of anxiety or depression; including altered thinking, feelings, and behaviour (Williams, 2007). Four booklets were used; “Why do I feel so bad?” covered formulation, “I can't be bothered doing anything” centred on activity scheduling, “Why does everything always go wrong?” focused on thought-challenging, and “How to fix almost everything” incorporated problem solving. Professor Williams, author of LLTTF, identified these as essential components of low-intensity intervention for anxiety or depression. Linked worksheets were adapted following feedback from Prison Officers (Appendix 2.6).

Readability

Reading age of the booklets was assessed with Readability Studio, Oleander Software. Two pages of each booklet were inputted into the programme.

Prison Officers

Prison Officers attended a single 3.5-hour session of LLTTF training delivered by Professor Williams and completed a modified version of the Training Acceptability Rating Scale (Appendix 2.7).

The Forensic Matrix indicates that practitioners delivering low-intensity interventions in forensic settings should receive supervision every four sessions (the Matrix Working Group, 2012). As LLTTF is a low-intensity intervention, teaching support sessions were offered by a Clinical Psychologist once per month. This was an opportunity for Prison Officers to ask questions and discuss any problems. These sessions were open access and Prison Officers were required to attend at least one session during the study period.

Prison Officers met with the field researcher at the end of study to complete a questionnaire on their views of LLTTF.

Prisoners

It was intended to recruit prisoners from four landings that LLTTF trained Prison Officers worked across. Due to staffing issues, this was reduced to the three landings where the trained Prison Officers were based.

Recruitment posters and Participant Information Sheets were distributed to each cell to maximise the likelihood of prisoners being aware of the study (Appendix 2.8); this method has been successful in previous Doctorate in Clinical Psychology research projects (Crowe, 2018; McGinley, 2017). If interested, a prisoner added his name to the poster and placed it in a ballot box at the front desk of the landings. Posters were placed at the front desk of each landing to maximise awareness of the study.

The field researcher met prisoners indicating interest in the study individually to discuss the Participant Information Sheet, obtain written informed consent, complete baseline measures, and answer any questions. As formal reading tests were considered too burdensome to complete during assessment, prisoners were shown worksheets and asked if they could complete these with guidance from staff. If a prisoner did not believe he could complete the worksheets, he was excluded. The prisoner's Personal Officer completed a questionnaire assessing the prisoner's wellbeing.

The trained Prison Officers met with prisoners individually for four 20-30 minute sessions, which involved discussing a booklet and worksheets. Prison Officers were asked to deliver sessions on a weekly basis, where practical given the prison regime. Prisoners completed questionnaires (PHQ-9, GAD-7, and satisfaction questionnaire) at the end of each session and placed them in sealed envelopes to allow data anonymity. In the event of disclosure of suicidal ideation, Prison Officers followed the 'Talk To Me' process as per prison protocol.

At post-treatment, prisoners completed a questionnaire on their views about LLTTF. Outcome data from prisoners and their Personal Officer was to be collected at this time and at three-month follow-up. Due to recruitment difficulties, the three-month follow-up was not possible.

Measures

Primary Outcome Measures

This consisted of the recruitment and retention of Prison Officers and prisoners, and the rates of and reasons for attrition, and qualitative feedback of the intervention from Prison Officers and prisoners.

Secondary Outcome Measures

Prison Officers

Staff completed a modified Training Acceptability Rating Scale (Davis et al., 1989) for the training and an end of study questionnaire that was developed to evaluate staff views of LLTTF and barriers to implementation (Appendix 2.9).

Prisoners

There are no validated measures of mental health symptoms for prisoners. The following measures were selected as they appeared the most suitable of available standardised tools.

The Patient Health Questionnaire-9 (PHQ-9) assessed depression. It has good psychometric properties (Cronbach's alpha=0.89; Kroenke et al., 2001) and has been used in prison studies (Adamson et al., 2015; Randall et al., 2018; Riley et al., 2019).

The Generalised Anxiety Disorder-7 (GAD-7) measured anxiety. It has good psychometric properties (Cronbach's alpha=0.92; Kroenke, et al., 2007) and has been used in prison studies (Adamson et al., 2015; Randall et al., 2018).

The Ohio State University Traumatic Brain Injury Identification Method—Interview Form assesses history of HI (OSU TBI-ID, Bogner & Corrigan, 2009). McGinley (2017) found that this measure has greater construct validity than other HI screening tools in prisoners. The Other Central Nervous System (CNS) Compromise tool was used in conjunction with the OSU TBI-ID to identify other causes of CNS damage (Bogner & Corrigan, 2009).

Questionnaires were developed for specific areas of interest to be explored. One questionnaire assessed prisoners' views of their functioning on a Likert scale; including their ability to talk to others confidently (Appendix 2.10). A questionnaire

on Personal Officers' views of the prisoner's wellbeing was developed using a Likert scale (Appendix 2.11).

Expert opinion indicates that mental health problems can lead to prisoners breaching prison rules and accruing reports. To examine whether LLTTF might affect reports, the number of reports accrued for one-month pre-treatment and one month during intervention were recorded, in addition to work attendance.

Results

Readability

The average FRE score was 87.5, indicating "good" readability. The average SMOG Grade Level was 7.5, suggesting that people require 7.5 years of education to understand the booklets (Table 1).

LLTTF Booklet	Flesch Reading Ease (FRE) Scale Value	SMOG Grade Level	SMOG Reading Age
Why do I feel so bad?	86	7.4	12-13
I can't be bothered doing anything	81	8.2	13-14
Why does everything always go wrong?	99	6.3	11-12
How to fix almost everything	84	8.3	13-14
Mean (SD)	87.5 (7.9)	7.5 (0.9)	

Table 1. Readability of the LLTTF booklets

Prison Officers

All 103 Residential Prison Officers were invited to participate. Nine (9%) signed up and six of these (66%) attended staff training; one did not attend due to sickness and two due to staff shortages. Prior to recruitment of prisoners, two

Prison Officers (33%) withdrew from the study; one due to promotion and one moved to a position with no prisoner contact (Appendix 2.12).

Prison Officers' duration of experience working in prisons ranged from five years to more than 20 years (Appendix 2.13). Their previous training in mental health varied; three had completed Mental Health First Aid, one Suicide First Aid, one had training in Mindfulness, one had a BSc in Psychology, one an MSc in Forensic Psychology, and two had no training (Appendix 2.14).

Staff training feedback indicated that three Prison Officers believed materials required adaptation for prison and there should be more focus on worksheets than booklets. Consequently, worksheets were adapted; cartoons were removed where possible (as staff believed these would be perceived as childish) and examples were adapted to include activities that were feasible in prison (e.g. going to the gym). As staff did not believe prisoners would be receptive to the booklets, they were given the option to solely use the short linked worksheets if they considered this would facilitate engagement.

Prisoners

Recruitment posters, Participant Information Sheets, and ballot boxes were placed on four landings and 29 (12%) prisoners indicated interest in the study. Of these, 14 (48%) were not eligible (Table 2).

Reasons for exclusion at time of assessment	*n* (%)
No reported anxiety or depression. Had not realised study was for prisoners experiencing anxiety or depression and had thought it was to learn "general life skills" (indicating that the poster was misperceived).	6 (21)
Refused to meet field researcher (attributed to high levels of anxiety and depression by Prison Officers).	2 (6)
Did not wish to participate and no reason provided.	2 (6)
Wrote to the health care manager to volunteer but no LLTTF trained staff on their landing.	2 (6)
Not eligible due to ongoing serious self-harm.	1 (3)
Left prison.	1 (3)

Table 2. Reasons for exclusion at point of assessment

Fifteen participants completed pre-treatment assessment. Of these, four were excluded (Table 3). Four participants did not commence LLTTF as staff did not have sufficient time to begin the approach. Seven participants completed LLTTF. No participants commenced LLTTF and dropped out of the study. Participation is presented in Figure 3.

Reasons for exclusion during study	*n* (%)
Staffing shortages and Prison Officers feeling uncomfortable working with prisoners unknown to them led to recruitment focusing on the landings where LLTTF trained staff were based. Recruitment from one landing ceased (consequently recruitment was open to three landings) and participants were informed they were no longer eligible for the study.	2 (13)
Refused to meet with assigned Prison Officer for sessions and stated he felt uncomfortable talking about emotions with Prison Officers. He was encouraged to self-refer to the Mental Health Team if he required support with his mental health.	1 (6)
Moved prison.	1 (6)

Table 3. Reasons for exclusion during study

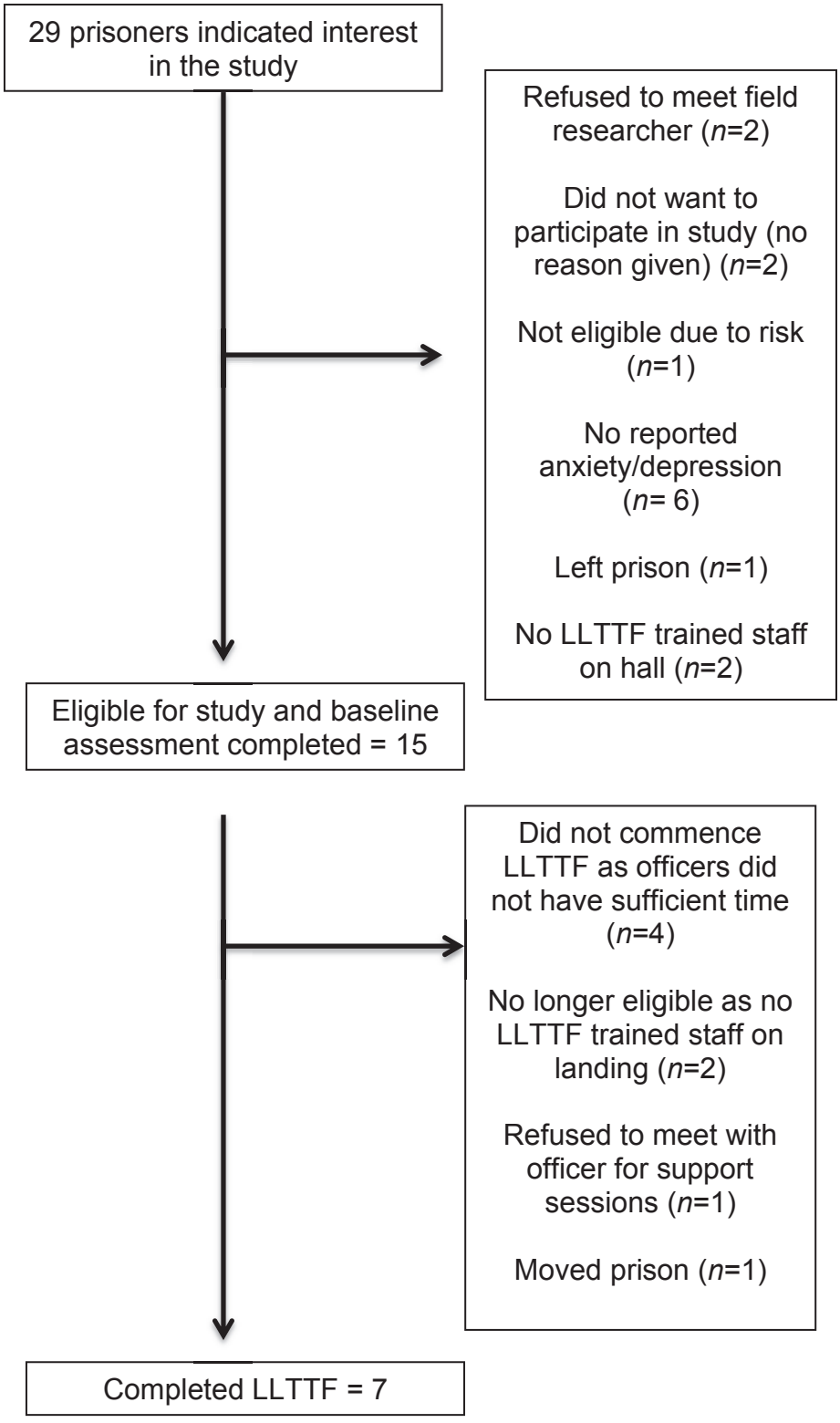

Figure 3. Flowchart of prisoner participants

The ballot boxes for prisoner recruitment went missing from the landings during the study. The NHS triage boxes, which prisoners use to self-refer to healthcare services, were then used as an alternative for prisoners to indicate interest in the study.

Demographics

All eligible participants were Caucasian (median age 35.8 years; IQR:29-42). The majority were single (87%) and said they did not consume alcohol (93%) or misuse substances (80%) in prison. Of the completers (median age 38 years; IQR: 31-42), the majority reported no consumption of alcohol (*n*=6) or substance misuse (*n*=5) in prison (Table 4).

		Eligible Participants (N=15) (%)	Completers (*n*=7) (%)
Age	**Median**	37 (IQR:29-42)	38 (IQR: 31-42)
Religion	**No religion**	11 (73)	5 (71)
	Christian	4 (27)	2 (29)
Ethnicity	**White Scottish**	12 (80)	6 (86)
	White British	2 (13)	0 (0)
	White Other	1 (6)	1 (14)
Marital Status	**Single**	13 (87)	6 (86)
	Separated	1 (6)	0 (0)
	Married	1 (6)	1 (14)
Employment in prison	**Yes**	10 (67)	4 (57)
	No	5 (33)	3 (43)
Alcohol	**Yes**	1 (6)	1 (14)
	No	14 (93)	6 (86)
Substance misuse	**Yes**	3 (20)	2 (29)
	No	12 (80)	5 (71)
Children	**0**	5 (33)	2 (29)
	1	2 (13)	0 (0)
	2	3 (20)	1 (14)
	3	3 (20)	2 (29)
	4	2 (13)	2 (29)

Table 4. Participant Demographics

Of eligible participants, 87% (*n*=13) self-reported a psychiatric diagnosis, including depression (*n*=7), PTSD (*n*=5), OCD (*n*=1), and Schizophrenia (*n*=1). 20% (*n*=3) reported a diagnosis of Antisocial Personality Disorder and 6% (*n*=1) Emotionally Unstable Personality Disorder. The majority were prescribed psychotropic medication before imprisonment (67%) and were currently taking psychotropic medication (80%). A minority had previously been admitted to hospital due to their mental health (20%) and had previous involvement with a mental health charity (13%). Of the completers, 86% (*n*=6) reported a psychiatric diagnosis, with depression the most common (*n*=4) followed by PTSD (*n*=3). 57% had previous psychological therapy (*n*=4). The majority had taken prescribed psychotropic medication prior to imprisonment (86%) and were currently taking such medication (86%). At baseline, one participant (14%) had ongoing input from Clinical Psychology. A minority had been previously admitted to hospital due to their mental health (29%) and had previous involvement with a mental health charity (29%) (Appendix 2.16).

Head Injury

On the OSU-TBI, eight eligible participants (53%) reported a moderate or severe TBI (TBI with 30 minutes or more loss of consciousness). Eight (53%) reported a TBI before the age of 15 with loss of consciousness, and eight (53%) reported multiple TBIs, defined as two or more TBIs occurring close together. Overall, eight (53%) had a history of moderate-severe or multiple TBI and in completers, five had such a history (71%). Four eligible participants (27%) reported no history of TBI.

Five participants (33%) reported other events that may have compromised their Central Nervous System; one each for AIDS diagnosis, asbestos exposure, lived near a power plant, lived near a chemistry factory with a leak, and employment in a job requiring breathing equipment (Table 5). Overall, 80% (*n*=12) had a history of TBI or CNS events.

	***n* (%)**
Moderate or severe TBI	8 (53)
TBI with any loss of consciousness before the age of 15	8 (53)
Multiple TBIs	8 (53)
Recent TBI	8 (53)
CNS events	5 (33)
Any of the above	12 (80)

Table 5. Summary of OSU-TBI and CNS results in those eligible to participate

The relationship between historic HI and response to LLTTF was not explored because of modest sample size.

Anxiety and depression

Prisoners completed pre-treatment assessment once they had indicated interest in the study. Commencement of intervention varied amongst prisoners due to dependence on trained Prison Officers' capacity. Post-treatment assessment was completed the week of or the following week that prisoners had completed intervention. During assessment with the field researcher, some prisoners were

inconsistent in responses within one session; e.g. described experiences of anxiety/depression but provided answers on psychometrics which did not reflect this.

In the 15 eligible participants, the median PHQ-9 was 13 (IQR=10-19) and the median GAD-7 was 10 (IQR=6-17). The median for the functioning questionnaire was 6 (IQR=6-8).

In completers (*n*=7), a large effect size was associated with reductions in PHQ-9 scores pre- to post-treatment, alongside an increase in GAD-7 scores from pre to post-treatment. . These changes were not statistically significant ($p>0.05$). The change in scores for functioning were associated with a low effect size (Table 6).

	Pre-treatment (Median, IQR)	**Post-treatment (Median, IQR)**	**Statistical Significance *(p)***	**Effect Size *(r)***	**Test Statistic (*z*)**
PHQ-9	19 (10-23.25)	15 (1-15.5)	0.06	0.709	-1.876
GAD-7	10 (6-19)	12 (2-18)	0.31	0.386	-1.022
Functioning	6 (5-7)	7 (4-8)	0.5	0.0258	0.682

Table 6. Pre-treatment and post-treatment scores for completers (*n*=7)

Pre-treatment anxiety and depression scores were lower at Post-treatment in 5/7 prisoners (Figures 4 and 5).

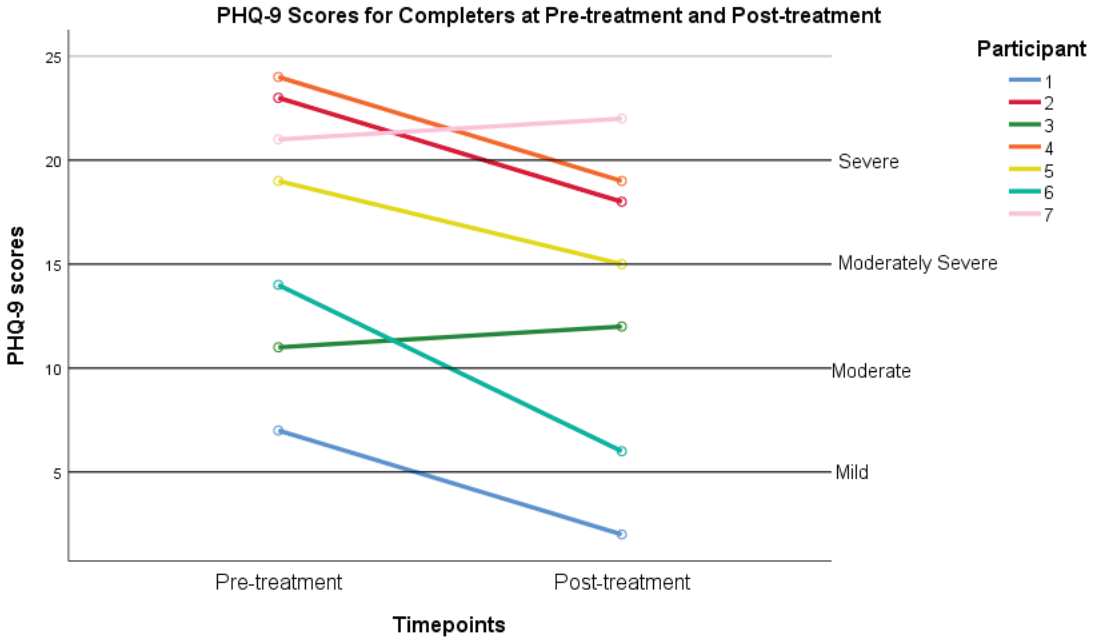

Figure 4. PHQ-9 scores for completers at Pre-treatment and Post-treatment

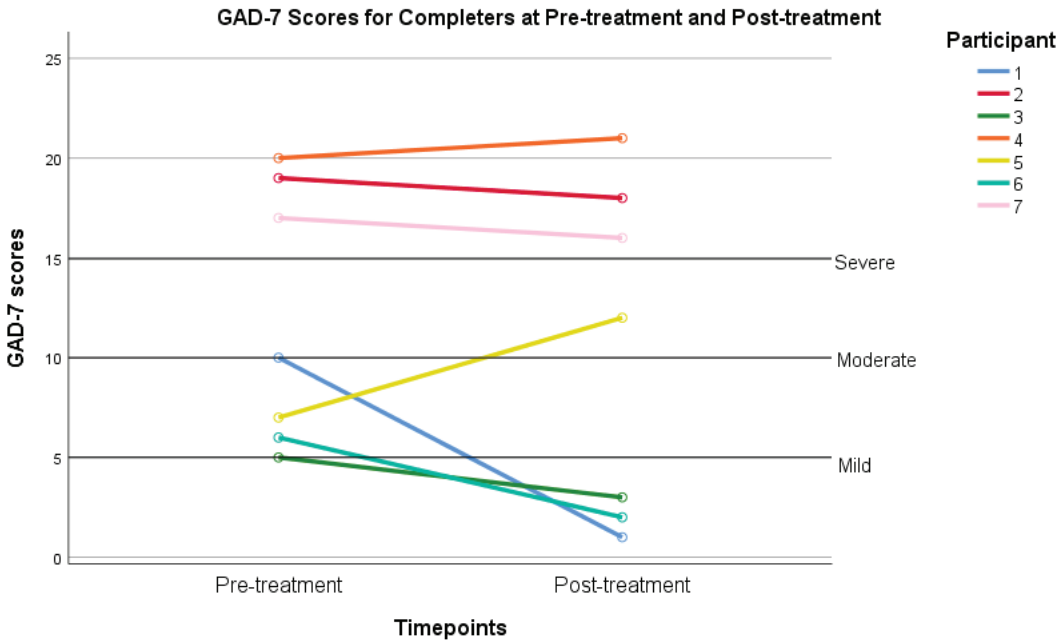

Figure 5. GAD-7 scores for completers at Pre-treatment and Post-treatment

The weekly PHQ-9 and GAD-7 questionnaires were lost in the prison for one participant. Another prisoner completed a GAD-7 questionnaire in three out of four sessions. Six completers had data for Pre-treatment and for the final session in Week 4. Medium and large effect sizes were associated with reductions in PHQ-9 and GAD-7 scores pre- to Week 4 respectively These changes were not statistically significant (p>0.05) (Table 7).

	Pre-treatment (Median, IQR)	**Week 4 (Median, IQR)**	**Statistical Significance *(p)***	**Effect Size *(r)***	**Test Statistic (*z*)**
PHQ-9	20 (13-22.5)	7 (2.25-11)	0.058	0.77	-1.892
GAD-7	13.5 (7.75-18.5)	4.5 (1.25-11.5)	0.115	0.64	-1.577

Table 7. Pre-treatment and Week 4 scores for completers (n=6)

Figure 6 shows weekly fluctuations in depression scores on PHQ-9, and, Figure 7, weekly anxiety scores on GAD-7. There was a deterioration of depression and anxiety for two prisoners from Week 4 to Post-treatment.

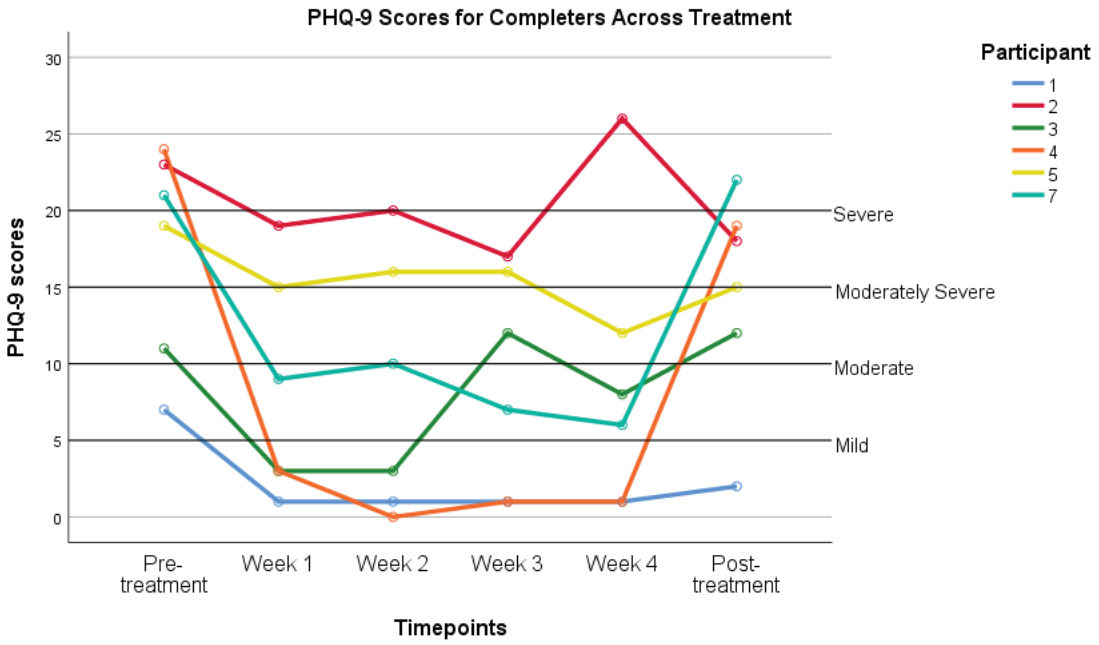

Figure 6. PHQ-9 Scores for Completers across treatment

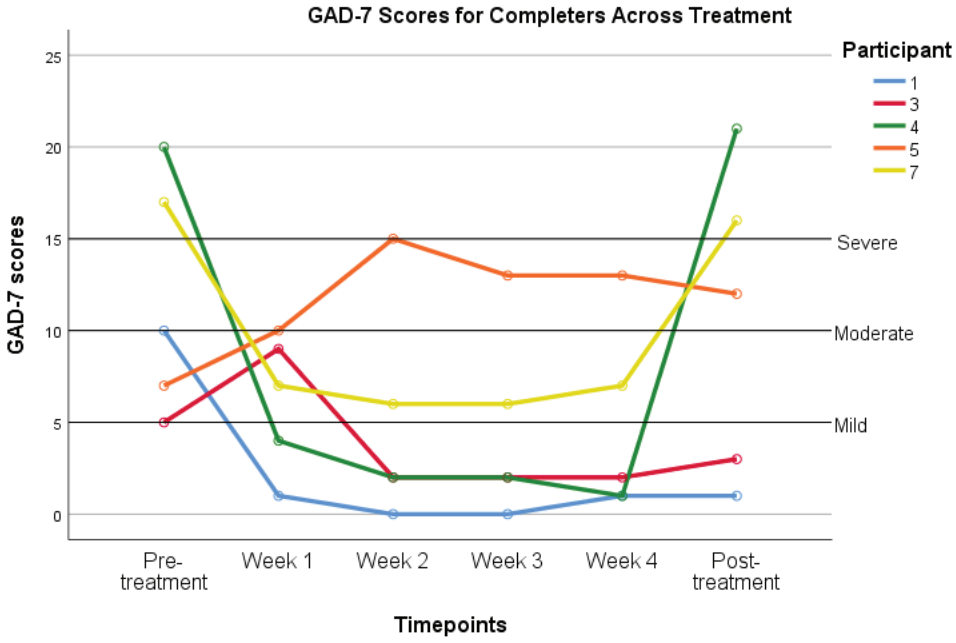

Figure 7. GAD-7 Scores for Completers Across Treatment

Five prisoners perceived improvement in functioning following treatment, and two a decrease in functioning (Figure 8).

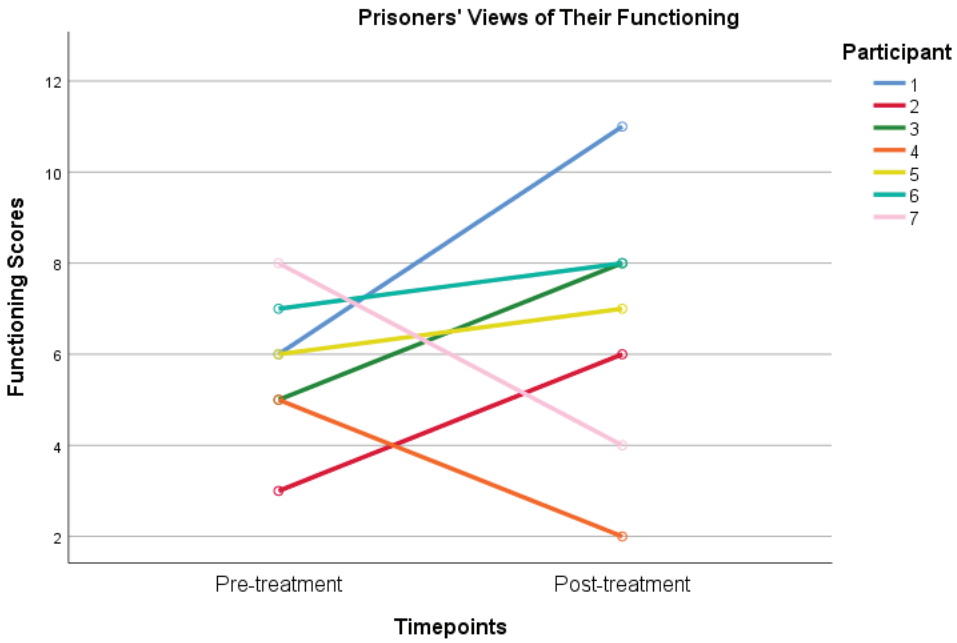

Figure 8. Prisoners' Views of Functioning

Personal Officer feedback

Five of seven Personal Officers (71%) completed questionnaires about completers' functioning pre-treatment. Of these, one questionnaire had missing responses (14%). Seven Prison Officers completed these questionnaires at end of treatment (100%).

Figure 9 shows Personal Officers' views of prisoner functioning increased from pre-treatment to post-treatment for three prisoners. The Personal Officer reappraised her pre-treatment rating for one prisoner at post-treatment, having decided that he was initially less able.

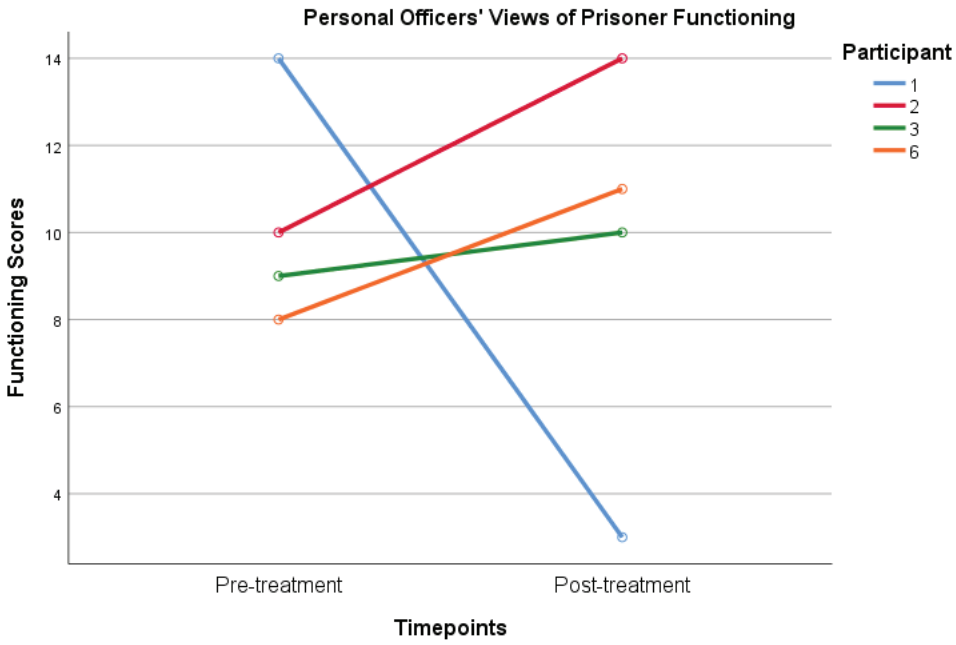

Figure 9. Personal Officers' Views of Prisoner Functioning

Reports accrued and work attendance

During the month prior to LLTTF and the month LLTTF was administered, six completers (86%) accrued no reports. One participant had not accrued reports in the month before LLTTF and accrued one during LLTTF. Of those who were employed in prison, there was 100% work attendance for the month prior to and the month during LLTTF.

Prisoner Feedback

Completers (*n*=7) provided feedback through a satisfaction questionnaire at each session, except for one participant who did not complete this for the first session ("Why do I feel so bad?"). They also completed a post-treatment assessment with the field researcher (Appendix 2.17).

LLTTF was perceived by prisoners to be understandable, aimed at school children, not adapted for prison, and adversely affected by Prison Officers' delivery (Table 8). The booklets were not perceived as relevant to prison life; one prisoner commented on the problem-solving booklet: "how can I fix a long-term sentence?".

Prisoners' Views of LLTTF	***n* (%)**
Easy to read and follow	4 (57)
Examples not feasible in prison (e.g. visiting friends, texting, yoga)	4 (57)
Booklets perceived to be childish (e.g. cartoons)	3 (43)
Impact of Prison Officers on sessions:	2 (29)
Prison Officer appeared embarrassed by booklets	1 (14)
Prison Officer skimmed through materials too quickly	1 (14)

Table 8. Prisoners' views of LLTTF

LLTTF was reported to change ways of thinking, improve relationships with Prison Officers, and increase understanding of mental health problems (Table 9).

Prisoners' Views of the Impact of LLTTF	*n* (%)
Individuals reporting any positive change	6 (86)
Resulted in changes in prisoners' way of thinking	2 (29)
Learned that activities improve mood and provide a purpose in life	1 (14)
Felt more able to speak to Prison Officers	1 (14)
Normalised mental health problems	1 (14)
Increased self-understanding	1 (14)
Encouraged self-improvement in prison	1 (14)

Table 9. Prisoners' Views of the Impact of LLTTF

Suggested changes to LLTTF were to include examples of activities relevant to a prison environment and for more directive content (one prisoner wished to be told "don't do it."). One commented on the popularity of fitness and sports in prison and suggested including illustrations of sports on booklets covers or basing examples on fitness. Opinion on illustrations was divided (Table 10).

Suggestions for change to LLTTF booklets	*n* (%)
Include examples of activities feasible in prison (e.g. going to education to attend courses or cleaning the cell)	2 (29)
Less words and more illustrations	1 (14)
Less illustrations	1 (14)
Use fitness and sports as examples or as pictures on booklets	1 (14)
Materials to be more directive	1 (14)

Table 10. Prisoners' suggestions for changes to LLTTF booklets

The majority completed worksheets, perceived materials as easy to follow, and agreed they would use the booklets again, while 57% would recommend the booklets (Table 11).

Questionnaire statements	*n* (%)
The materials were easy to understand and follow	6 (86)
I was able to ask questions about the booklets	6 (86)
I will use the booklets again	6 (86)
I found the course helpful	5 (71)
I completed the worksheets	5 (71)
I would recommend the booklets	4 (57)
I read all the booklets	4 (57)

Table 11. Prisoners' questionnaire responses

Prison Officer Feedback

Due to informal reports of barriers to the delivery of LLTTF, the end of study staff questionnaire was amended to capture their experience (approved by SESREC 02, 20.11.2019).

The three Prison Officers who delivered LLTTF provided feedback about the approach (Appendix 2.18). The content was viewed as important and materials required adaptation for prison, with views that the current editions were perceived as patronising and childlike. The importance of relationships prior to and during sessions was highlighted (Table 12).

Prison Officers' Views of LLTTF	***n* (%)**
Materials required adaptation for prison	3 (100)
Prisoners perceived materials as patronising and childlike (e.g. cartoons and jokes minimised their experiences)	3 (100)
Content viewed as important	2 (67)
Materials perceived as overly simplistic	2 (67)
Importance of pre-existing relationship with prisoner for delivering this support	1 (33)
Sessions developed relationships between prisoners and staff as prisoners "saw the human and not just the white shirt"	1 (33)

Table 12. Prison Officers' views of LLTTF

Lack of practical support was a barrier to intervention, with a need for staff to prioritise covering core duties and more LLTTF training/supervision (Table 13).

Prison Officers' Views of Barriers to LLTTF	***n* (%)**
Required more support to deliver LLTTF	3 (100)
Required more staff to cover core duties while the trained Officers deliver LLTTF	3 (100)
Required more LLTTF training/supervision to discuss materials	1 (33)

Table 13. Prison Officers' views of barriers to intervention

Suggestions for change included not using a recruitment ballot box, revising materials with Prison Officers and prisoners, and delivering awareness sessions for prisoners (Table 14).

Suggestions for change	*n* (%)
The recruitment ballot box may have been perceived as a method to anonymously report other prisoners for breaching prison rules. This may have deterred prisoners from volunteering for the study as other prisoners may have believed they were “grassing” on others.	1 (33)
Revise materials with Prison Officers and prisoners.	1 (33)
Awareness session to inform prisoners of the study and show the materials may have facilitated recruitment.	1 (33)
Include prisoners in training sessions, which could increase their “buy in” to LLTTF.	1 (33)

Table 14. Prison Officers’ suggestions for change

None of the Prison Officers attended the teaching support/supervision sessions. The available dates did not fit with shift patterns for two and the emails about the sessions were lost amongst other emails for one.

Discussion

1. *Will prisoners take part in and engage with LLTTF?*

Only a small proportion (12%) of the 240 prisoners were willing to take part and of these, 14 (48%) were not eligible. This may be due to prisoners not perceiving they are experiencing mental health problems and consequently not coming forward. Screening prisoners for mental health problems on admission to prison would allow identification of those who need support and treatment. Prison Officers, education and healthcare staff could be involved in identifying prisoners who may benefit from LLTTF. As an alternative to the recruitment ballot box, prisoners could have indicated interest to Prison Officers. Awareness sessions would allow prisoners to view materials and ask questions, which may promote engagement. These changes may promote recruitment in future studies.

2. *Do the LLTTF booklets need to be adapted for prisoners?*

The readability of the booklets was "good", which indicates acceptability in the context of low literacy levels in the prison population (Clark & Dugdale, 2008). Although changes were made to the worksheets, assumptions were made a priori and with hindsight, further changes would have been beneficial. Prisoners and Prison Officers did not consider some aspects of the booklets appropriate to prison. Activities available in prison are limited and prisoners are a complex population who may disengage with interventions in response to feeling patronised. Materials could be revised in conjunction with prisoners and Prison Officers, which is consistent with Dvoskin and Spiers (2004) and Maunder and Moss (2009). Due to their popularity in prison, fitness/sports could be incorporated into the materials to promote engagement.

3. *Does LLTTF signal an effect of reducing anxiety and/or depression?*

Overall, effect sizes signal large reductions in depression associated with the intervention, which approached statistical significance (p=0.06) despite the modest sample size. Although pre-treatment anxiety reduced at Week 4, there was an increase at post-treatment. This may reflect individual variability due to a deterioration in two prisoners, and indicates the need for further research. Some prisoners showed improvement in mood, anxiety, and function, which is in contrast with deterioration in a minority. This indicates a signal of a treatment effect, which is consistent with previous research (Maunder & Moss, 2009; Pardini et al., 2014; Williams et al., 2018). However, this should be interpreted with caution as some prisoners provided inconsistent responses during assessment with the field researcher, which highlights a limitation of self-report. Furthermore, prisoners may have responded to perceived demand characteristics, with a belief that responding favourably may improve their status within prison or affect their sentence. This underlines the importance of collecting objective data and data from other sources. A high level of comorbidity and previous engagement in psychological intervention suggests that prisoners are more complex than the mild-moderate cases who would typically benefit from self-help in non-prisoners.

4. *Does history of HI impact engagement and responsivity to LLTTF?*

This was not explored due to modest sample size.

5. *Is there indication that exposure to LLTTF reduces the number of breaches of prison rules?*

It was not possible to explore this, as prisoners were not on report the month prior to LLTTF. Breaches were too infrequent to be a useful measure, and reports accrued only reflect rule breaches that prison staff are aware of. Anecdotal evidence suggests that no accrued reports is atypical in prison. Future research should use objective data, such as reports accrued, as a measure of mental health and functioning to supplement self-report.

Prison Officers

Prison Officers' negative perceptions of materials may have influenced their delivery of LLTTF and consequently prisoners' perceptions of materials. This highlights the need for supervision; however, no Prison Officers attended teaching support/supervision sessions, in contrast to their desire to have additional support. This may have been due to their lack of understanding of the role of supervision in delivering low-intensity interventions. Prison Officers' motivation to engage in the study possibly decreased with time, demonstrated by missing recruitment ballot boxes. Furthermore, Prison Officers had limited time to deliver LLTTF and frequently move positions as required, which has implications for training and those able to deliver guided self-help. These practical barriers suggest that specific guided self-help worker roles would be beneficial, and Prison Officers may be better placed to provide prompts to prisoners.

Strengths and Limitations

This is the first known feasibility study to investigate provision of guided self-help to prisoners experiencing stress by Prison Officers. In line with the MRC Complex Interventions Framework (Craig et al., 2008), this study achieved its aims by

assessing key uncertainties, including testing procedures, exploring recruitment and retention, and evaluating acceptability. This is important information for future studies.

Overall the sample size was small. A lack of control group makes it unclear whether changes in symptoms reflect natural fluctuations of symptoms over time or non-specific effects. No follow-up data makes it uncertain whether effects are maintained. Treatment fidelity was not measured. Questionnaires used have not been validated for prisoners and it is unclear whether they are suitable for this group.

Recommendations

In the context of research that demonstrated reductions in anxiety and depression in prisoners following self-help (Maunder & Moss, 2009; Pardini et al., 2014) and the high prevalence of mental health problems in prisoners, guided self-help in prison is worth further investigation. It is recommended that materials are revised following discussion with Prison Officers and prisoners, and piloted prior to future studies. Practical barriers encountered by Prison Officers suggest dedicated guided self-help workers may be better placed to deliver this intervention, with Prison Officers providing prompts to prisoners. Future studies should use a mixed methodology, including quantitative and qualitative analysis, involve a larger sample, a control group, and follow-up. Appropriate supervisory structures should be in place and future studies could evaluate supervision in various forms in prison, such as groups or scheduled times.

Conclusions and implications

Signals of a treatment effect suggest that guided self-help may reduce anxiety and depression in prisoners. This is important in the context of government initiatives to ensure prisoners have access to the same standard of healthcare as non-prisoners. With the high prevalence of anxiety and depression in prisoners, dedicated guided self-help workers may help alleviate these difficulties and Prison Officers could provide prompts to prisoners. Appropriate supervisory structures should be in place to ensure safe practice. Further research is recommended.

Conflict of Interest

Professor Chris Williams is author of LLTTF; the materials used in this study. He is a shareholder and director of a company that commercialises this and other resources.

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Appendices

Appendix 1.1 Submission guidelines for the Journal of Consulting and Clinical Psychology

The *Journal of Consulting and Clinical Psychology® (JCCP)* publishes original contributions on the following topics:

- the development, validity, and use of techniques of diagnosis and treatment of disordered behavior
- studies of a variety of populations that have clinical interest, including but not limited to medical patients, ethnic minorities, persons with serious mental illness, and community samples
- studies that have a cross-cultural or demographic focus and are of interest for treating behavior disorders
- studies of personality and of its assessment and development where these have a clear bearing on problems of clinical dysfunction and treatment
- studies of gender, ethnicity, or sexual orientation that have a clear bearing on diagnosis, assessment, and treatment
- studies of psychosocial aspects of health behaviors

Studies on the following topics will be considered if they have clear implications for clinical research and practice:

- epidemiology
- use of psychological services
- health care economics for behavioral disorders

Although *JCCP* largely publishes research that is empirical and quantitative in method, rigorous theoretical papers on topics of broad interest to the field of clinical psychology will be considered, as will critical analyses and meta-analyses of treatment approaches on topics of broad theoretical, methodological, or practical interest to the field of clinical psychology.
JCCP also considers methodologically sound single-case designs (e.g., that conform to the recommendations outlined in the "What Works Clearinghouse (WWC) Single-Case Design" paper).
JCCP does not consider manuscripts dealing with the etiology or descriptive pathology of abnormal behavior (which are more appropriate for the *Journal of Abnormal Psychology*). Similarly, the journal does not consider articles focusing primarily on assessment, measurement, and diagnostic procedures and concepts (which are more appropriate for *Psychological Assessment*). Editors reserve the right to determine the most appropriate location of a manuscript.

Masked Review

This journal uses a masked reviewing system for all submissions. The first page of the manuscript should omit the authors' names and affiliations but should include the title of the manuscript and the date it is submitted.
Footnotes containing information pertaining to the authors' identities or affiliations should not be included in the manuscript, but may be provided after a manuscript is accepted.
Make every effort to see that the manuscript itself contains no clues to the authors' identities.
Please ensure that the final version for production includes a byline and full author note for typesetting.
Keep a copy of the manuscript to guard against loss.

Cover Letter

The cover letter accompanying the manuscript submission must include all authors' names and affiliations to avoid potential conflicts of interest in the review process. Addresses and phone numbers, as well as electronic mail addresses and fax numbers, if available, should be provided for all authors for possible use by the editorial office and later by the production office.

Length and Style of Manuscripts

Full-length manuscripts should not exceed 35 pages total (including cover page, abstract, text, references, tables, and figures), with margins of at least 1 inch on all sides and a standard font (e.g., Times New Roman) of 12 points (no smaller). The entire paper (text, references, tables, etc.) must be double spaced.

Until May 31st 2020, prepare manuscripts (instructions on preparing tables, figures, references, metrics, and abstracts) according to the *Publication Manual of the American Psychological Association* using the 6th or 7th edition. Starting June 1st 2020, all manuscripts should be submitted in the 7th edition. Manuscripts may be copyedited for bias-free language (see Chapter 3 of the 6th edition or Chapter 5 of the 7th edition).

Authors submitting manuscripts that report new data collection, especially randomized clinical trials (RCTs), should comply with the newly developed Journal Article Reporting Standards for Quantitative Research in Psychology: The APA Publications and Communications Board Task Force Report (PDF, 222KB) (JARS; see *American Psychologist*, 2018, *73(1)*, 3–25 or Appendix in the *APA Publication Manual*).

For papers that exceed 35 pages, authors must justify the extended length in their cover letter (e.g., reporting of multiple studies), and in no case should the paper exceed 45 pages total. Papers that do not conform to these guidelines may be returned without review.

The References section should immediately follow a page break.

Brief Reports

In addition to full-length manuscripts, the *JCCP* will consider Brief Reports of research studies in clinical psychology. The Brief Report format may be appropriate for empirically sound studies that are limited in scope, contain novel or provocative findings that need further replication, or represent replications and extensions of prior published work.

Brief Reports are intended to permit the publication of soundly designed studies of specialized interest that cannot be accepted as regular articles because of lack of space.

Brief Reports must be prepared according to the following specifications: Use 12-point Times New Roman type and 1-inch (2.54-cm) margins, and do not exceed 265 lines of text including references. These limits do not include the title page, abstract, author note, footnotes, tables, or figures.

An author who submits a Brief Report must agree not to submit the full report to another journal of general circulation. The Brief Report should give a clear, condensed summary of the procedure of the study and as full an account of the results as space permits.

Title of Manuscript

The title of a manuscript should be accurate, fully explanatory, and preferably no longer than 12 words. The title should reflect the content and population studied (e.g., "treatment of generalized anxiety disorders in adults").

If the paper reports a randomized clinical trial (RCT), this should be indicated in the title. Note that JARS criteria must be used for reporting purposes.

Abstract and Keywords

All manuscripts must include an abstract containing a maximum of 250 words typed on a separate page. After the abstract, please supply up to five keywords or brief phrases. Manuscripts published in the *Journal of Consulting and Clinical Psychology* will include a structured abstract of up to 250 words.

For studies that report randomized clinical trials or meta-analyses, the abstract also must be consistent with the guidelines set forth by JARS or MARS (Meta-Analysis Reporting Standards) guidelines, respectively. Thus, in preparing a manuscript, please ensure that it is consistent with the guidelines stated below.

Please include an Abstract of up to 250 words, presented in paragraph form. The Abstract should be typed on a separate page (page 2 of the manuscript), and must include each of the following sections:

Objective: A brief statement of the purpose of the study

Method: A detailed summary of the participants (N, age, gender, ethnicity) as well as descriptions of the study design, measures (including names of measures), and procedures
Results: A detailed summary of the primary findings that clearly articulate comparison groups (if relevant), and that indicate significance or confidence intervals for the main findings
Conclusions: A description of the research and clinical implications of the findings

Participants: Description and Informed Consent

The Method section of each empirical report must contain a detailed description of the study participants, including (but not limited to) the following: age, gender, ethnicity, SES, clinical diagnoses and comorbidities (as appropriate), and any other relevant demographics.
In the Discussion section of the manuscript, authors should discuss the diversity of their study samples and the generalizability of their findings.
The Method section also must include a statement describing how informed consent was obtained from the participants (or their parents/guardians) and indicate that the study was conducted in compliance with an appropriate Internal Review Board.

Measures

The Method section of empirical reports must contain a sufficiently detailed description of the measures used so that the reader understands the item content, scoring procedures, and total scores or subscales. Evidence of reliability and validity with similar populations should be provided.

Statistical Reporting of Clinical Significance

JCCP requires the statistical reporting of measures that convey clinical significance. Authors should report means and standard deviations for all continuous study variables and the effect sizes for the primary study findings. (If effect sizes are not available for a particular test, authors should convey this in their cover letter at the time of submission.)
JCCP also requires authors to report confidence intervals for any effect sizes involving principal outcomes (see Fidler et al., *Journal of Consulting and Clinical Psychology*, 2005, pp. 136–143 and Odgaard & Fowler, *Journal of Consulting and Clinical Psychology*, 2010, pp.287–297).
In addition, when reporting the results of interventions, authors should include indicators of clinically significant change. Authors may use one of several approaches that have been recommended for capturing clinical significance, including (but not limited to) the reliable change index (i.e., whether the amount of change displayed by a treated individual is large enough to be meaningful; see Jacobson et al., *Journal of Consulting and Clinical Psychology*, 1999), the extent to which dysfunctional individuals show movement into the functional distribution (see Jacobson & Truax, *Journal of Consulting and Clinical Psychology*, 1991), or other normative comparisons (see Kendall et al., *Journal of Consulting and Clinical Psychology*, 1999).

Articles must include a discussion of the clinical implications of the study findings or analytic review. The Discussion section should contain a clear statement of the extent of clinical application of the current assessment, prevention, or treatment methods. The extent of application to clinical practice may range from suggestions that the data are too preliminary to support widespread dissemination to descriptions of existing manuals available from the authors or archived materials that would allow full implementation at present.

Data Transparency

In order to reduce the likelihood of duplicate or piecemeal publication, authors are required to provide, in their cover letter, a list of published, in press, and under review studies that come from the same dataset as the one in the submitted manuscript, as well as a narrative description of how the submitted manuscript differs from the others.
This narrative description should include how the manuscript differs (or does not) in terms of research question and variables studied.
Authors also are required to submit a masked version of the narrative description that can be provided to reviewers. Please add this as an appendix table on the last page of the submitted manuscript. Please base your description on the following examples, edited according to your specific data circumstances.

Do not provide the title of the manuscript, authors, or journal in which it was published. Do provide the names of the relevant variables (i.e., substitute the numbers in the examples below for actual names, such as depressive symptoms, therapeutic alliance, etc.).

Data and Stimulus Materials

Should your paper ultimately be accepted for publication, *JCCP* would like to encourage you to determine if posting materials and/or data is right for your study and, if so, to make your data and materials publicly available, if possible, by providing a link in your paper to a third-party repository.

Making your data and materials publicly available can increase the impact of your research, enabling future researchers to incorporate your work in model testing, replication projects, and meta-analyses, in addition to increasing the transparency of your research.
The APA's data sharing policy does not require public posting, so you are free to decide what is best for your project in terms of public data, materials, and conditions on their use. Note, however, that APA policy does require that authors make their data available to other researchers upon request.

Manuscript Preparation

Until May 31st 2020, prepare manuscripts according to the *Publication Manual of the American Psychological Association* using the 6th or 7th edition. Starting June 1st 2020, all manuscripts should be submitted in the 7th edition. Manuscripts may be copyedited for bias-free language (see Chapter 3 of the 6th edition or Chapter 5 of the 7th edition).
Review APA's Journal Manuscript Preparation Guidelines before submitting your article.
Double-space all copy. Other formatting instructions, as well as instructions on preparing tables, figures, references, metrics, and abstracts, appear in the *Manual*. Additional guidance on APA Style is available on the APA Style website.
Below are additional instructions regarding the preparation of display equations, computer code, and tables.

Tables

Use Word's Insert Table function when you create tables. Using spaces or tabs in your table will create problems when the table is typeset and may result in errors.

References

List references in alphabetical order. Each listed reference should be cited in text, and each text citation should be listed in the References section.

Figures

Graphics files are welcome if supplied as Tiff or EPS files. Multipanel figures (i.e., figures with parts labeled a, b, c, d, etc.) should be assembled into one file.
The minimum line weight for line art is 0.5 point for optimal printing.
For more information about acceptable resolutions, fonts, sizing, and other figure issues, please see the general guidelines.
When possible, please place symbol legends below the figure instead of to the side.
APA offers authors the option to publish their figures online in color without the costs associated with print publication of color figures.
The same caption will appear on both the online (color) and print (black and white) versions. To ensure that the figure can be understood in both formats, authors should add alternative wording (e.g., "the red (dark gray) bars represent") as needed.

Permissions

Authors of accepted papers must obtain and provide to the editor on final acceptance all necessary permissions to reproduce in print and electronic form any copyrighted work, including test materials (or portions thereof), photographs, and other graphic images (including those used as stimuli in experiments).
On advice of counsel, APA may decline to publish any image whose copyright status is unknown.

Publication Policies

APA policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications.

Ethical Principles

It is a violation of APA Ethical Principles to publish "as original data, data that have been previously published" (Standard 8.13).

In addition, APA Ethical Principles specify that "after research results are published, psychologists do not withhold the data on which their conclusions are based from other competent professionals who seek to verify the substantive claims through reanalysis and who intend to use such data only for that purpose, provided that the confidentiality of the participants can be protected and unless legal rights concerning proprietary data preclude their release" (Standard 8.14).

APA expects authors to adhere to these standards. Specifically, APA expects authors to have their data available throughout the editorial review process and for at least 5 years after the date of publication.

Authors are required to state in writing that they have complied with APA ethical standards in the treatment of their sample, human or animal, or to describe the details of treatment.

Appendix 1.2 Quality Rating Tool - CCAT Form

Crowe Critical Appraisal Tool (CCAT) Form (v1.4)

Reference | Reviewer

This form must be used in conjunction with the CCAT User Guide (v1.4); otherwise validity and reliability may be severely compromised.

Citation

	Year

Research design (add if not listed)

❑ Not research		Article | Editorial | Report | Opinion | Guideline | Pamphlet | ...
❑ Historical		...
❑ Qualitative		Narrative | Phenomenology | Ethnography | Grounded theory | Narrative case study | ...
❑ Descriptive, Exploratory, Observational		A. Cross-sectional | Longitudinal | Retrospective | Prospective | Correlational | Predictive | ...
		B. Cohort | Case-control | Survey | Developmental | Normative | Case study | ...
Experimental	❑ True experiment	Pre-test/post-test control group | Solomon four-group | Post-test only control group | Randomised two-factor | Placebo controlled trial | ...
	❑ Quasi-experiment	Post-test only | Non-equivalent control group | Counter balanced *(cross-over)* | Multiple time series | Separate sample pre-test post-test [no Control] [Control] | ...
	❑ Single system	One-shot experimental *(case study)* | Simple time series | One group pre-test/post-test | Interactive | Multiple baseline | Within subjects *(Equivalent time, repeated measures, multiple treatment)* | ...
❑ Mixed Methods		Action research | Sequential | Concurrent | Transformative | ...
❑ Synthesis		Systematic review | Critical review | Thematic synthesis | Meta-ethnography | Narrative synthesis | ...
❑ Other		...

Variables and analysis

Intervention(s), Treatment(s), Exposure(s)	Outcome(s), Output(s), Predictor(s), Measure(s)	Data analysis method(s)

Sampling

	Group 1	Group 2	Group 3	Group 4	Control
Total size					
Population, sample, setting					

Data collection (add if not listed)

Audit/Review	a) Primary | Secondary | ... b) Authoritative | Partisan | Antagonist | ... c) Literature | Systematic | ...	Interview	a) Formal | Informal | ... b) Structured | Semi-structured | Unstructured | ... c) One-on-one | Group | Multiple | Self-administered | ...
Observation	a) Participant | Non-participant | ... b) Structured | Semi-structured | Unstructured | ... c) Covert | Candid | ...	Testing	a) Standardised | Norm-ref | Criterion-ref | Ipsative | ... b) Objective | Subjective | ... c) One-on-one | Group | Self-administered | ...

Scores

Preliminaries		Design		Data Collection		Results		Total [/40]	
Introduction		Sampling		Ethical Matters		Discussion		Total [%]	

General notes

Appraise research on the merits of the research design used, not against other research designs.

Category Item	Item descriptors [☑ Present; ☒ Absent; ■ Not applicable]	Description [Important information for each item]	Score [0–5]
1. Preliminaries			
Title	1. Includes study aims ☐ and design ☐		
Abstract (assess last)	1. Key information ☐ 2. Balanced ☐ and informative ☐		
Text (assess last)	1. Sufficient detail others could reproduce ☐ 2. Clear/concise writing ☐, table(s) ☐, diagram(s) ☐, figure(s) ☐		
		Preliminaries [/5]	
2. Introduction			
Background	1. Summary of current knowledge ☐ 2. Specific problem(s) addressed ☐ and reason(s) for addressing ☐		
Objective	1. Primary objective(s), hypothesis(es), or aim(s) ☐ 2. Secondary question(s) ☐		
	Is it worth continuing?	**Introduction [/5]**	
3. Design			
Research design	1. Research design(s) chosen ☐ and why ☐ 2. Suitability of research design(s) ☐		
Intervention, Treatment, Exposure	1. Intervention(s)/treatment(s)/exposure(s) chosen ☐ and why ☐ 2. Precise details of the intervention(s)/treatment(s)/exposure(s) ☐ for each group ☐ 3. Intervention(s)/treatment(s)/exposure(s) valid ☐ and reliable ☐		
Outcome, Output, Predictor, Measure	1. Outcome(s)/output(s)/predictor(s)/measure(s) chosen ☐ and why ☐ 2. Clearly define outcome(s)/output(s)/predictor(s)/measure(s) ☐ 3. Outcome(s)/output(s)/predictor(s)/measure(s) valid ☐ and reliable ☐		
Bias, etc	1. Potential bias ☐, confounding variables ☐, effect modifiers ☐, interactions ☐ 2. Sequence generation ☐, group allocation ☐, group balance ☐, and by whom ☐ 3. Equivalent treatment of participants/cases/groups ☐		
	Is it worth continuing?	**Design [/5]**	
4. Sampling			
Sampling method	1. Sampling method(s) chosen ☐ and why ☐ 2. Suitability of sampling method ☐		
Sample size	1. Sample size ☐, how chosen ☐, and why ☐ 2. Suitability of sample size ☐		
Sampling protocol	1. Target/actual/sample population(s): description ☐ and suitability ☐ 2. Participants/cases/groups: inclusion ☐ and exclusion ☐ criteria 3. Recruitment of participants/cases/groups ☐		
	Is it worth continuing?	**Sampling [/5]**	
5. Data collection			
Collection method	1. Collection method(s) chosen ☐ and why ☐ 2. Suitability of collection method(s) ☐		
Collection protocol	1. Include date(s) ☐, location(s) ☐, setting(s) ☐, personnel ☐, materials ☐, processes ☐ 2. Method(s) to ensure/enhance quality of measurement/instrumentation ☐ 3. Manage non-participation ☐, withdrawal ☐, incomplete/lost data ☐		
	Is it worth continuing?	**Data collection [/5]**	
6. Ethical matters			
Participant ethics	1. Informed consent ☐, equity ☐ 2. Privacy ☐, confidentiality/anonymity ☐		
Researcher ethics	1. Ethical approval ☐, funding ☐, conflict(s) of interest ☐ 2. Subjectivities ☐, relationship(s) with participants/cases ☐		
	Is it worth continuing?	**Ethical matters [/5]**	
7. Results			
Analysis, Integration, Interpretation method	1. A.I.I. method(s) for primary outcome(s)/output(s)/predictor(s) chosen ☐ and why ☐ 2. Additional A.I.I. methods (e.g. subgroup analysis) chosen ☐ and why ☐ 3. Suitability of analysis/integration/interpretation method(s) ☐		
Essential analysis	1. Flow of participants/cases/groups through each stage of research ☐ 2. Demographic and other characteristics of participants/cases/groups ☐ 3. Analyse raw data ☐, response rate ☐, non-participation/withdrawal/incomplete/lost data ☐		
Outcome, Output, Predictor analysis	1. Summary of results ☐ and precision ☐ for each outcome/output/predictor/measure 2. Consideration of benefits/harms ☐, unexpected results ☐, problems/failures ☐ 3. Description of outlying data (e.g. diverse cases, adverse effects, minor themes) ☐		
		Results [/5]	
8. Discussion			
Interpretation	1. Interpretation of results in the context of current evidence ☐ and objectives ☐ 2. Draw inferences consistent with the strength of the data ☐ 3. Consideration of alternative explanations for observed results ☐ 4. Account for bias ☐, confounding/effect modifiers/interactions/imprecision ☐		
Generalisation	1. Consideration of overall practical usefulness of the study ☐ 2. Description of generalisability (external validity) of the study ☐		
Concluding remarks	1. Highlight study's particular strengths ☐ 2. Suggest steps that may improve future results (e.g. limitations) ☐ 3. Suggest further studies ☐		
		Discussion [/5]	
9. Total			
Total score	1. Add all scores for categories 1–8		
		Total [/40]	

Appendix 1.3 Scoring Guidelines for CCAT

Overview of scoring a paper

The Form is divided into eight categories and 22 items. Each item has multiple item descriptors that make it easier to appraise and score a category. Each category receives its own score on a 6 point scale from 0–5. The lowest score a category can achieve is 0, and 5 is the highest score. Categories can only be scored as a whole number or integer, i.e. 0, 1, 2, 3, 4, or 5, that is half marks are not allowed.

There are tick boxes (❑) beside item descriptors. The tick box is useful to indicate if the item descriptor is

- Present (☑) – For an item descriptor to be marked as present, there should be evidence of it being present rather than an assumption of presence.
- Absent (☒) – For an item descriptor to be marked as absent, it is implied that it should be present in the first place.
- Not applicable (■) – For an item descriptor to be marked as not applicable, the descriptor must not be relevant given the characteristics of the paper being appraised and is, therefore, not considered when assigning a score to a category.

Whether an item descriptor is present, absent, or not applicable is further explored in the section *Guidelines for scoring categories and items*. All categories must be scored because all categories are applicable in all research designs. Only item descriptors may be marked 'not applicable'.

While it may be tempting to add up all the present marks (☑) and all the absent marks (☒) in each category and to use the proportion of one to the other to calculate the score for the category, this is not appropriate. It is incorrect because not all item descriptors in a category have equal importance. For example, in the *Introduction* category there are two items (*Background* and *Objective*) and a total of five tick boxes. If a paper being appraised has all boxes marked as present (☑) except for *Primary objective(s), hypothesis(es), or aim(s)*, which is marked as absent (☒), should the paper be scored 4/5 for that category? It could be argued that a research paper without a primary objective, hypothesis, or aim is fundamentally flawed and, as a result, should be scored 0/5 even though the other four tick boxes were marked as present.

Therefore, the tick marks for present, absent, or not applicable are to be used as a guide to scoring a category and not as a simple check list. It is up to you as the appraiser to take into consideration all aspects of each category and based on both the tick marks and judgement assign a score to a category.

Similarly, the research design used in each paper should be appraised on its own merits and not relative to some preconceived notion of a hierarchy of research designs or 'gold standard'. What is most important is that the paper used an appropriate research design based on the research question being addressed, rather than what research design was used.

The total score given to a paper can be expressed as a percentage by dividing the *Total* by 40 (that is, eight categories multiplied by the maximum score of five) and writing the result on the first page of the Form. The *Total* % should be written to the nearest full percent (Table 1). There is no need for decimal places because they do not add anything to the accuracy of the score obtained.

Finally, the *Total* or *Total* % score a paper obtains is not the sole criterion on which an overall assessment of a paper is based. The *Total* or *Total* % score is a useful summary but may not be applicable in all cases. When reporting an appraisal using the CCAT, the score obtained in

every category must be stated along with the *Total* or *Total %* score. This prevents papers that score high overall but very poor in one or more categories being hidden amongst papers which scored high throughout all categories. Based on the reasons for the appraisal, some papers which have a low score in certain category but which have a high total score may be ranked lower than those with a lower total score but a high score in that particular category. These processes are up to you, as the appraiser, to detail before you begin appraising papers.

Table 1 *Total* and corresponding *Total %*

Total	Total %	Total	Total %	Total	Total %	Total	Total %
0	0	10	25	20	50	30	75
1	3	11	28	21	53	31	78
2	5	12	30	22	55	32	80
3	8	13	33	23	58	33	83
4	10	14	35	24	60	34	85
5	13	15	38	25	63	35	88
6	15	16	40	26	65	36	90
7	18	17	43	27	68	37	93
8	20	18	45	28	70	38	95
9	23	19	48	29	73	39	98

Appendix 2.1 Author Guidelines for Submission to the Journal of Mental Health

About the Journal

Journal of Mental Health is an international, peer-reviewed journal publishing high-quality, original research. Please see the journal's Aims & Scope for information about its focus and peer-review policy.
Please note that this journal only publishes manuscripts in English.

Journal of Mental Health accepts the following types of article: Original Article, Review Article, Research and Evaluation, Book Review, Web Review.
Book Reviews All books for reviewing should be sent directly to Martin Guha, Book Reviews Editor, Information Services & Systems, Institute of Psychiatry, KCL, De Crespigny Park, PO Box 18, London, SE5 8AF

Peer Review

Taylor & Francis is committed to peer-review integrity and upholding the highest standards of review. Once your paper has been assessed for suitability by the editor, it will then be double blind peer reviewed by independent, anonymous expert referees. Find out more about what to expect during peer review and read our guidance on publishing ethics.

Preparing Your Paper

Structure

Your paper should be compiled in the following order: title page; abstract; keywords; main text introduction, materials and methods, results, discussion; acknowledgments; declaration of interest statement; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figures; figure captions (as a list).

Word Limits

Please include a word count for your paper.

Style Guidelines

Please refer to these quick style guidelines when preparing your paper, rather than any published articles or a sample copy.
Any spelling style is acceptable so long as it is consistent within the manuscript.
Please use double quotation marks, except where “a quotation is ‘within’ a quotation”.
Please note that long quotations should be indented without quotation marks.

Formatting and Templates

Papers may be submitted in Word format. Figures should be saved separately from the text. To assist you in preparing your paper, we provide formatting template(s).

Word templates are available for this journal. Please save the template to your hard drive, ready for use.
If you are not able to use the template via the links (or if you have any other template queries) please contact us here.

References

Please use this reference guide when preparing your paper.
An EndNote output style is also available to assist you.

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To help you improve your manuscript and prepare it for submission, Taylor & Francis provides a range of editing services. Choose from options such as English Language Editing, which will ensure that your article is free of spelling and grammar errors, Translation, and Artwork Preparation. For more information, including pricing, visit this website.

Checklist: What to Include

Author details. All authors of a manuscript should include their full name and affiliation on the cover page of the manuscript. Where available, please also include ORCiDs and social media handles (Facebook, Twitter or LinkedIn). One author will need to be identified as the corresponding author, with their email address normally displayed in the article PDF (depending on the journal) and the online article. Authors' affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted. Read more on authorship.
Should contain a structured abstract of 200 words. Use the following headings: Background, Aims, Method, Results, Conclusions, Declaration of interest. The declaration of interest should acknowledge all financial support and any financial relationship that may pose a conflict of interest. Acknowledgement of individuals should be confined to those who contributed to the article's intellectual or technical content.
You can opt to include a **video abstract** with your article. Find out how these can help your work reach a wider audience, and what to think about when filming.
Between 3 and 8 **keywords**. Read making your article more discoverable, including information on choosing a title and search engine optimization.

Funding details. Please supply all details required by your funding and grant-awarding bodies as follows:
For single agency grants
This work was supported by the [Funding Agency] under Grant [number xxxx].
For multiple agency grants
This work was supported by the [Funding Agency #1] under Grant [number xxxx]; [Funding Agency #2] under Grant [number xxxx]; and [Funding Agency #3] under Grant [number xxxx].

Disclosure statement. This is to acknowledge any financial interest or benefit that has arisen from the direct applications of your research. Further guidance on what is a conflict of interest and how to disclose it.

Data availability statement. If there is a data set associated with the paper, please provide information about where the data supporting the results or analyses presented in the paper can be found. Where applicable, this should include the hyperlink, DOI or other persistent identifier associated with the data set(s). Templates are also available to support authors.

Data deposition. If you choose to share or make the data underlying the study open, please deposit your data in a recognized data repository prior to or at the time of submission. You will be asked to provide the DOI, pre-reserved DOI, or other persistent identifier for the data set.

Supplemental online material. Supplemental material can be a video, dataset, fileset, sound file or anything which supports (and is pertinent to) your paper. We publish supplemental material online via Figshare. Find out more about supplemental material and how to submit it with your article.

Figures. Figures should be high quality (1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour, at the correct size). Figures should be supplied in one of our preferred file formats: EPS, PS, JPEG, GIF, or Microsoft Word (DOC or DOCX). For information relating to other file types, please consult our Submission of electronic artwork document.

Tables. Tables should present new information rather than duplicating what is in the text. Readers should be able to interpret the table without reference to the text. Please supply editable files.

Equations. If you are submitting your manuscript as a Word document, please ensure that equations are editable. More information about mathematical symbols and equations.

Units. Please use SI units (non-italicized).

Using Third-Party Material in your Paper

You must obtain the necessary permission to reuse third-party material in your article. The use of short extracts of text and some other types of material is usually permitted, on a limited basis, for the purposes of criticism and review without securing formal permission. If you wish to include any material in your paper for which you do not hold copyright, and which is not covered by this informal agreement, you will need to obtain written permission from the copyright owner prior to submission. More information on requesting permission to reproduce work(s) under copyright.

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This journal uses ScholarOne Manuscripts to manage the peer-review process. If you haven't submitted a paper to this journal before, you will need to create an account in ScholarOne. Please read the guidelines above and then submit your paper in the relevant Author Centre, where you will find user guides and a helpdesk.

When submitting an Original Article or Research and Evaluation, please include a sentence in the Methods section to confirm that ethical approval has been granted (with the name of the committee and the reference number) and that participants have given consent for their data to be used in the research.
When submitting a Review, please confirm that your manuscript is a systematic review and include a statement that researchers have followed the PRISMA guidance. Please also confirm whether the review protocol has been published on Prospero and provide a date of registration.

Please note that *Journal of Mental Health* uses Crossref™ to screen papers for unoriginal material. By submitting your paper to *Journal of Mental Health* you are agreeing to originality checks during the peer-review and production processes.
On acceptance, we recommend that you keep a copy of your Accepted Manuscript. Find out more about sharing your work.

Data Sharing Policy

This journal applies the Taylor & Francis Basic Data Sharing Policy. Authors are encouraged to share or make open the data supporting the results or analyses presented in their paper where this does not violate the protection of human subjects or other valid privacy or security concerns.
Authors are encouraged to deposit the dataset(s) in a recognized data repository that can mint a persistent digital identifier, preferably a digital object identifier (DOI) and recognizes a long-term preservation plan. If you are uncertain about where to deposit your data, please see this information regarding repositories.

Authors are further encouraged to cite any data sets referenced in the article and provide a Data Availability Statement.

At the point of submission, you will be asked if there is a data set associated with the paper. If you reply yes, you will be asked to provide the DOI, pre-registered DOI, hyperlink, or other persistent identifier associated with the data set(s). If you have selected to provide a pre-registered DOI, please be prepared to share the reviewer URL associated with your data deposit, upon request by reviewers.

Where one or multiple data sets are associated with a manuscript, these are not formally peer reviewed as a part of the journal submission process. It is the author's responsibility to ensure the soundness of data. Any errors in the data rest solely with the producers of the data set(s).

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Appendix 2.2 Ethical Approval from Scottish Prison Service

From: Carnie James <James.Carnie@sps.pnn.gov.uk>
Sent: 17 May 2019 15:40
To: Tom McMillan <Thomas.McMillan@glasgow.ac.uk>
Cc: Brodie Colin <Colin.Brodie@sps.pnn.gov.uk>; Young Linda <Linda.Young@sps.pnn.gov.uk>; Fiona.Mair@lanarkshire.scot.nhs.uk
Subject: RE: Research proposal HMP Shotts for SPS Ethics

Tom

The Research Access and Ethics Committee is now content to approve access given Shotts' support for the project.

Please sign and return the standard access regulations as usual.

Regards
Jim

Appendix 2.3 Ethical Approval from the South East Scotland Research Ethics Committee 02

Lothian NHS Board

South East Scotland Research
Ethics Committee 02

Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000

www.nhslothian.scot.nhs.uk

Date 28 May 2019
Your Ref
Our Ref

Enquiries to : Joyce Clearie
Extension: 35674
Direct Line: 0131 465 5674
Email: Joyce. Clearie@nhslothian.scot.nhs.uk

28 May 2019

Miss Jennifer Lai
Institute of Health and Wellbeing
Gartnavel Royal Hospital
Administration Building - 1st Floor
G12 0XH

CC Professor Tom McMillan (Chief Investigator)

Dear Miss Lai

Study title: **Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence**

REC reference: **19/SS/0044**
IRAS project ID: **253738**

Thank you for your letter of 27th May 2019. I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 21 May 2019

Documents received

The documents received were as follows:

Document	*Version*	*Date*
Covering letter on headed paper [Cover letter to REC]		27 May 2019
Non-validated questionnaire [End of Programme Feedback Form]	4	27 May 2019
Non-validated questionnaire [Personal officers's views of prisoner functioning]	3	27 May 2019

Non-validated questionnaire [Staff trained in LLTTF – end of study questionnaire]	3	27 May 2019
Non-validated questionnaire [Prisoner functioning questionnaire]	3	27 May 2019
Non-validated questionnaire [Demographic questionnaire - prisoners]	3	27 May 2019
Non-validated questionnaire [Training questionnaire]	2	27 May 2019
Participant consent form [Consent Form]	5	27 May 2019
Participant consent form [Consent Form]	7	27 May 2019
Participant information sheet (PIS) [PIS]	7	27 May 2019
Participant information sheet (PIS) [PIS]	6	27 May 2019
Response to Additional Conditions Met [response to additional conditions met letter]		27 May 2019

Approved documents

The final list of approved documentation for the study is therefore as follows:

Document	*Version*	*Date*
Confirmation of any other Regulatory Approvals (e.g. CAG) and all correspondence	1	16 January 2019
Copies of advertisement materials for research participants [Recruitment poster]	2	26 January 2019
Covering letter on headed paper [Cover letter to REC]	1	15 May 2019
Covering letter on headed paper [Cover letter to REC]		27 May 2019
GP/consultant information sheets or letters [Letter to Mental Health Team]	1	28 January 2019
IRAS Application Form [IRAS_Form_25022019]		25 February 2019
IRAS Application Form XML file [IRAS_Form_25022019]		25 February 2019
MHRA Notice of No Objection Letter (Medical Devices) and relevant correspondence	1	30 January 2019
Non-validated questionnaire [Demographic questionnaire - prison staff]	1	28 January 2019
Non-validated questionnaire [Satisfaction questionnaire for each session]	3	01 February 2019
Non-validated questionnaire [End of Programme Feedback Form]	4	27 May 2019
Non-validated questionnaire [Personal officers's views of prisoner functioning]	3	27 May 2019
Non-validated questionnaire [Staff trained in LLTTF – end of study questionnaire]	3	27 May 2019
Non-validated questionnaire [Prisoner functioning questionnaire]	3	27 May 2019
Non-validated questionnaire [Demographic questionnaire - prisoners]	3	27 May 2019
Non-validated questionnaire [Training questionnaire]	2	27 May 2019
Participant consent form [Consent Form]	5	27 May 2019
Participant consent form [Consent Form]	7	27 May 2019
Participant information sheet (PIS) [PIS]	7	27 May 2019
Participant information sheet (PIS) [PIS]	6	27 May 2019
Research protocol or project proposal [Proposal]	12	03 May 2019
Response to Additional Conditions Met [response to additional conditions met letter]		27 May 2019
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		

Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Sample diary card/patient card [Worksheet]		
Summary CV for Chief Investigator (CI) [Short CV for Chief Investigator]	1	01 February 2019
Summary CV for student	1	01 February 2019
Summary CV for supervisor (student research)	1	01 February 2019
Summary CV for supervisor (student research)	1	01 February 2019
Summary, synopsis or diagram (flowchart) of protocol in non technical language [Participant flowchart (prisoners)]	1	17 May 2019
Summary, synopsis or diagram (flowchart) of protocol in non technical language [Participant flowchart (prison staff)]	1	17 May 2019

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

19/SS/0044	**Please quote this number on all correspondence**

Yours sincerely

Joyce Clearie
SESREC 2 Manager

E-mail: joyce.clearie@nhslothian.scot.nhs.uk

Copy to: *Miss Jennifer Lai*
Mr Raymond Hamill, NHS Lanarkshire

Lead Nation
Scotland: nhsg.NRSPCC@nhs.net

Lothian NHS Board

South East Scotland Research Ethics Committee 02

Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000

www.nhslothian.scot.nhs.uk

Date 19 August 2019
Your Ref
Our Ref

Enquiries to : Joyce Clearie
Extension: 35674
Direct Line: 0131 465 5674
Email: Joyce. Clearie@nhslothian.scot.nhs.uk

19 August 2019

Miss Jennifer Lai
Institute of Health and Welllbeing
Gartnavel Royal Hospital
Administration Building - 1st Floor
G12 0XH

Dear Miss Lai

Study title:	**Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence**
REC reference:	**19/SS/0044**
Amendment number:	**SA1**
Amendment date:	**17 July 2019**
IRAS project ID:	**253738**

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

No significant ethical issues were raised with this amendment
Approved documents

The documents reviewed and approved at the meeting were:

Document	*Version*	*Date*

Notice of Substantial Amendment (non-CTIMP) [SA form]		17 July 2019
Other [Amazing bad thought programme]	1	17 July 2019
Other [Bad thought spotter]	1	17 July 2019
Other [checklist things stopped doing]	1	17 July 2019
Other [E4SP problem solving]	1	17 July 2019
Other [My activity planner]	1	17 July 2019
Other [My bad thoughts]	1	17 July 2019
Other [Planner and reviewer sheets]	1	17 July 2019
Other [Rate your moods]	1	17 July 2019
Other [things you dc that help]	1	17 July 2019
Other [Things that make me feel good]	1	17 July 2019
Other [Understanding feelings vicious cyclye]	1	17 July 2019
Research protocol or project proposal [protocol]	13	17 July 2019

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

Working with NHS Care Organisations

Sponsors should ensure that they notify the R&D office for the relevant NHS care organisation of this amendment in line with the terms detailed in the categorisation email issued by the lead nation for the study.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities– see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

19/SS/0044:	**Please quote this number on all correspondence**

Yours sincerely

.....

Vice Chair

E-mail: joyce.clearie@nhslothian.scot.nhs.uk

Enclosures: *List of names and professions of members who took part in the review*

Copy to: *Miss Jennifer Lai*

Lothian NHS Board

South East Scotland Research
Ethics Committee 02

Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 536 9000

www.nhslothian.scot.nhs.uk

Date 20 September 2019
Your Ref
Our Ref

Enquiries to : Joyce Cleane
Extension: 35674
Direct Line: 0131 465 5674
Email: Joyce.Cleane@nhslothian.scot.nhs.uk

20 September 2019

Miss Jennifer Lai
Institute of Health and Wellbeing
Garnavel Royal Hospital
Administration Building - 1st Floor
G12 0XH

Dear Miss Lai

Study title:	**Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence**
REC reference:	**19/SS/0044**
Amendment number:	**SA2**
Amendment date:	**10 September 2019**
IRAS project ID:	**253738**

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

No significant ethical issues were raised with this amendment.

Approved documents

The documents reviewed and approved at the meeting were:

Document	*Version*	*Date*

Headquarters
Waverley Gate
2-4 Waterloo Place
Edinburgh EH1 3EG
Chair Brian G. Houston
Chief Executive Tim Davison
Lothian NHS Board is the common name of Lothian Health Board

Notice of Substantial Amendment (non-CTIMP) [Notice of SA] 2		10 September 2019
Research protocol or project proposal [Protocol]	14	10 September 2019

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

Working with NHS Care Organisations

Sponsors should ensure that they notify the R&D office for the relevant NHS care organisation of this amendment in line with the terms detailed in the categorisation email issued by the lead nation for the study.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities– see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

19/SS/0044:	**Please quote this number on all correspondence**

Yours sincerely

Mr Lindsay Murray
Chair

E-mail: joyce.clearie@nhslothian.scot.nhs.uk

Enclosures: *List of names and professions of members who took part in the review*

Copy to: *Miss Jennifer Lai*

South East Scotland
Research Ethics Committee 02

Research Ethics Service

2nd Floor, Waverley Gate
2-4 Waterloo Place
Edinburgh
EH1 3EG
Telephone 0131 465 5674

Enquiries to: Agnieszka Di Domenico Prada
Direct Line: 0131 465 5678
Email Agnieszka.Prada@nhslothian.scot.nhs.uk

20 November 2019

Miss Jennifer Lai
Institute of Health and Wellbeing
Gartnavel Royal Hospital
Administration Building - 1st Floor
G12 0XH

Dear Miss Lai,

Study title:	**Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence**
REC reference:	**19/SS/0044**
Amendment number:	**SA03**
Amendment date:	**12 November 2019**
IRAS project ID:	**253738**

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

The Sub-Committee had no ethical concerns regarding the amendment.

Approved documents

The documents reviewed and approved at the meeting were:

Document	*Version*	*Date*
Non-validated questionnaire [Staff trained in LLTTF – end of study v4 tracked changes]	3	27 May 2019
Non-validated questionnaire [Staff trained in LLTTF – end of study v4]	4	01 November 2019
Notice of Substantial Amendment (non-CTIMP) [NOSA]		12 November 2019

Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

Chair-Dr Ian Zealley
Vice-Chair Dr Mary-Joan Macleod

NHS
Lothian

Working with NHS Care Organisations

Sponsors should ensure that they notify the R&D office for the relevant NHS care organisation of this amendment in line with the terms cetailed in the categorisation email issued by the lead nation for the study.

Statement of compliance

The Committee is constituted in accorcance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

HRA Learning

We are pleased to welcome researchers and research staff to our HRA Learning Events and online learning opportunities – see details at: https://www.hra.nhs.uk/planning-and-improving-research/learning/

19/SS/0044:	**Please quote this number on all correspondence**

Yours sincerely

Mr Lindsay Murray
Chair

E-mail: joyce.clearie@nhslothian.scot.nhs.uk

Enclosures: *List of names and professions of members who took part in the review*

Appendix 2.4 Participant Information Sheets

PARTICIPANT INFORMATION SHEET (PRISONERS)

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

You are invited to take part in a research study to test life skills books. It is important to understand why the study is being done and what it will involve. If you have questions about the study please speak to Ms Gillian Henderson, Senior Nurse, whose details are below. Take time to decide whether or not you want to take part.

What is the purpose of the study?

Living Life to the Full (LLTTF) is a series of books that teach key life skills. The approach seems to be helpful for adults in the general population in the UK but it has not been tested in prisons. We want to find out if these books are useful in a prison and whether it has an impact on prisoners' life skills and overall wellbeing.

What exactly is LLTTF?

LLTTF teaches life skills, including understanding your feelings, problem solving, tackling low confidence, boosting mood, and challenging negative thinking. It has been shown to be helpful for adults in the general population in the UK.

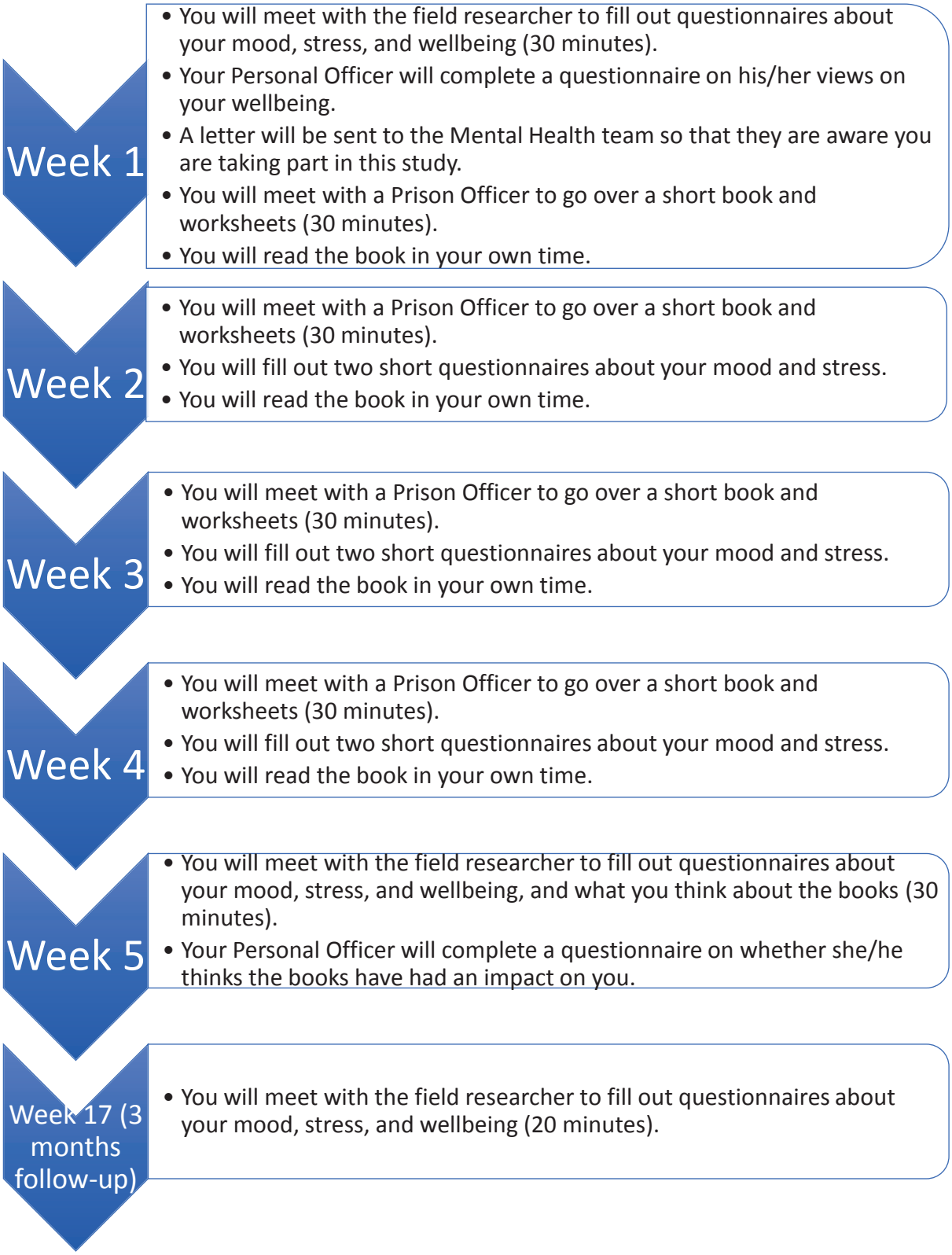
Why have I been asked to take part?

You have been asked to take part because you are serving a custodial sentence in HMP Shotts.

Do I have to take part?

No. It is up to you to decide whether or not to take part. There will be no consequences for you either way, except the time required to complete the study if you decide to take part. You are free to withdraw at any time and do not need to give a reason. You can do this by telling Jennifer Lai, the field researcher, or prison staff.

What will happen if I take part?



Where will the study take place?

The study will take place in HMP Shotts.

Are there any disadvantages of taking part in this study?

You will be asked to complete questionnaires about your emotional wellbeing and thoughts about yourself. The questionnaires may make you feel upset.

What if I feel upset during the study?

You can speak to your Personal Officer, the Prison Officer you meet for your appointments, or Jennifer Lai, the field researcher. They might contact the Mental Health Team to provide support to you. You may be placed on the Talk to Me programme.

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

You will help us find out whether LLTTF is helpful in a prison setting. Other people in prisons may benefit from this.

Will my taking part in this study be kept confidential?

Everything you disclose in the study will be confidential, unless we are concerned that you or another person is at risk of harm, or if a crime has been committed. We will pass such information to the Scottish Prison Service.

In this study, you will be identified by an identity number. Any information about you will have your name removed so that you cannot be recognised from it. Scientific publications from this study will not identify you or anyone taking part.

NHS Lanarkshire is the sponsor for this study. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. NHS Lanarkshire will keep identifiable information about you for ten years after the study has finished. The University of Glasgow will also store and use your anonymised research data in order to conduct this study.

Your rights to access, change or move your information are limited, as we need to

manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, and as outlined above, we will use the minimum personally-identifiable information possible.

NHS Lanarkshire will keep your name, NHS number and contact details confidential and will not pass this information to other organisations. NHS Lanarkshire will use this information as needed, to contact you about the research study, and make sure that relevant information about the study is recorded for your care, and to oversee the quality of the study. Certain individuals from NHS Lanarkshire and regulatory organisations may look at your medical and research records to check the accuracy of the research study. NHS Lanarkshire will only receive information without any identifying information. The people who analyse the information will not be able to identify you and will not be able to find out your name, NHS number or contact details. All the information collected will be stored securely according to the Data Protection Act 2018.

You can find out more about how we use your information by contacting the details below. You can access NHS Lanarkshire's Data Protection Notice in a folder at the front desk of the wing.

What if I lose capacity during the study?

If you lose the ability to understand information and make decisions during the time period that data is being gathered, your data will not be included in the study and will be destroyed. If you lose this ability after the time period the data is being gathered, your data will be included in the study and kept for ten years.

What will happen to the results of the research study?

We will look at all responses to the questionnaires. We plan to present the results of the study as a scientific paper and a copy of the results will be sent to HMP Shotts. No individuals will be identified in the research publications, which will contain only anonymous information. The results may be used in conference presentations.

Who is organising and funding the research?

The study is organised by the University of Glasgow and is part of a research thesis for the Doctorate in Clinical Psychology course.

Who has reviewed the study?

This study has been reviewed by the South East Scotland Research Ethics Committee 02, and the Scottish Prison Service Research Access and Ethics Committee.

Who do I contact for further information?

If you have any questions about taking part in research, you contact Ms Gillian Henderson, Senior Nurse (HMP Shotts, Canthill Road, Shotts, ML7 4LE). Ms Henderson is an independent contact person and is not part of the research team. You can also go to the front desk of the wing and ask for the folder that has information on taking part in research.

Who do I contact with a complaint about the study?

If you are unhappy about any part of the study and want to make a complaint, please contact Jennifer Lai, field researcher. You can also follow the normal NHS complaint procedure. The contact person for making a complaint in NHS Lanarkshire is: Ms Laura Jack, NHS Lanarkshire Headquarters, Kirklands Hospital, Fallside Road, Bothwell, G71 8BB.

Can I find out about the results of the study?

A summary of results will be available once the data is analysed. If you want to find out the results of the study, you can contact Dr Joy Ross, Clinical Psychologist (Forensic Mental Health Service, HMP Shotts, Canthill Road, Shotts, ML7 4LE).

What are the next steps?

If you are interested in the study, please write your name at the bottom of a poster for the study and put it in the box at the front desk of the wing. The field researcher will arrange a time to meet you to go over any questions you have about the study and to

complete some questionnaires. This will take about 30 minutes.

Thank you for considering this request to take part in this study.

PARTICIPANT INFORMATION SHEET (PRISON STAFF)

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

You are invited to take part in a research study to test some life skills books called Living Life To the Full. Before you decide it is important to understand why the research is being done and what it will involve. If anything is unclear and you would like to ask questions about the study please speak to Mr Willie Stewart, Deputy Governor. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

Living Life to the Full (LLTTF) is a life skills programme teaching skills to cope with life stresses. LLTTF has been shown to be helpful for adults in the general population in the UK but has not yet been researched in prisoners. We are interested to find out whether this approach would work in a prison setting. In particular, whether it would have any impact on prisoners' life skills and overall wellbeing.

How will the study take place?

A half day of training in LLTTF will be open to Prison Officers and they will learn to support prisoners with the booklets.

How long will this take?

Staff will be trained in supporting five short life skills training booklets. In this study, prison staff will deliver four of these booklets to prisoners and one booklet will be optional. A support pack will be provided that gives clear instructions about how to deliver each booklet.

What exactly is LLTTF?

LLTTF provides information on life skills. Topics covered include understanding your feelings, problem solving, tackling low confidence, boosting mood and challenging negative thinking. It has been shown to be helpful for adults in the general population in the UK.

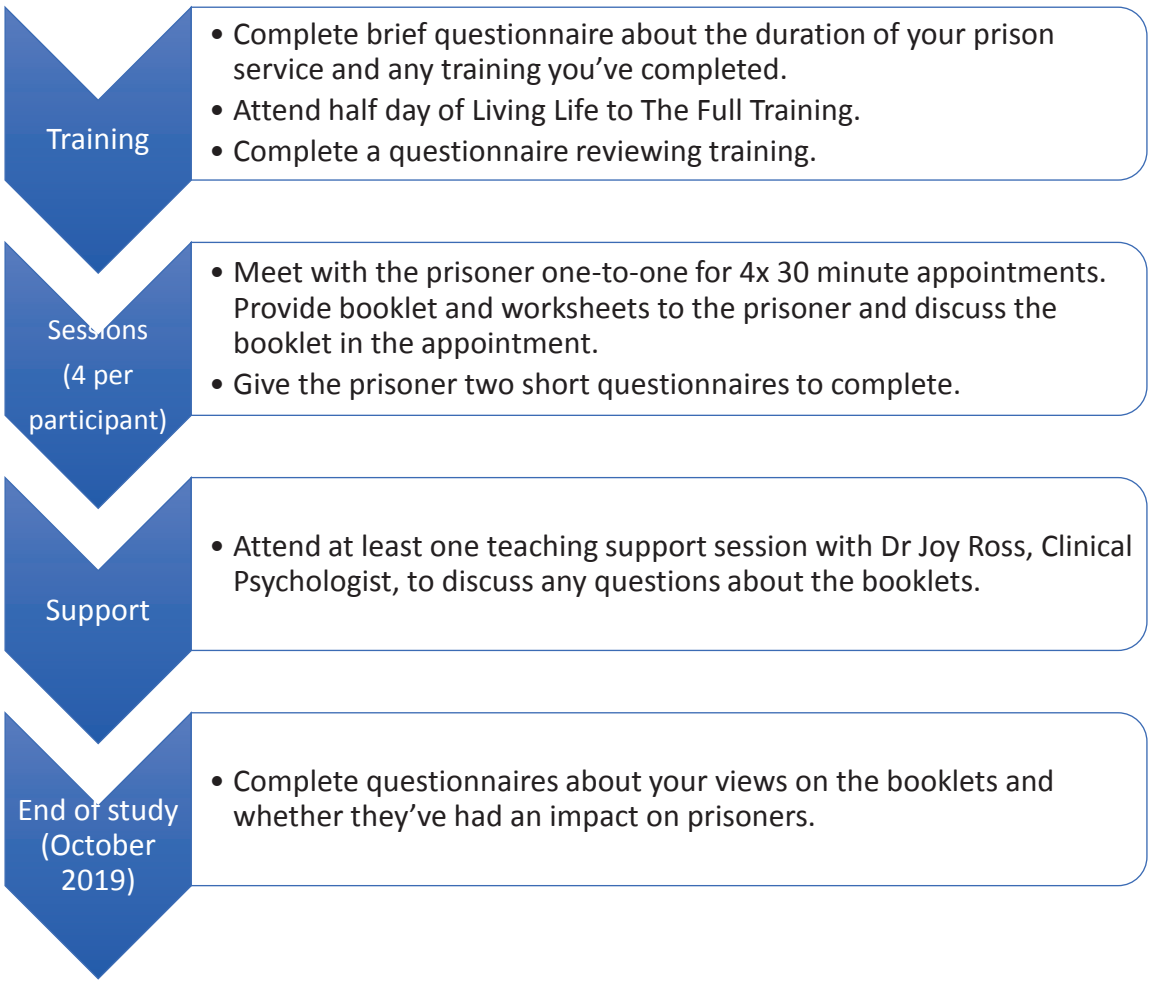
Why have I been asked to take part?

You have been asked to take part because you are a prison officer in HMP Shotts.

Do I have to take part?

No. It is up to you to decide whether or not to take part, and there will be no consequences for you either way, except the time required to complete the study if you decide to take part. You are free to withdraw at any time by telling Jennifer Lai, the field researcher, or your line manager. You do not need to give a reason for this.

What will happen if I take part?



Where will the study take place?

The study will take place in HMP Shotts.

Are there any disadvantages of taking part in this study?

The prisoners may become distressed during the study. If this occurs, we would encourage you to speak to the Mental Health team and to follow prison protocols as usual.

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

You will help us find out whether LLTTF is helpful in a prison setting and other people in prisons may benefit from this.

Will my taking part in this study be kept confidential?

Everything you disclose in the study will be confidential, unless we are concerned that you or another person is at risk of harm, or if a crime has been committed. We will pass such information to the Scottish Prison Service.

NHS Lanarkshire is the sponsor for this study. We will be using information from you in order to undertake this study and will act as the data controller for this study. This means that we are responsible for looking after your information and using it properly. NHS Lanarkshire will keep identifiable information about you for ten years after the study has finished. The University of Glasgow will also store and use your anonymised research data in order to conduct this study.

Your rights to access, change or move your information are limited as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, and as outlined above, we will use the minimum personally-identifiable information possible.

NHS Lanarkshire will keep your name and contact details confidential and will not pass this information to other organisations. NHS Lanarkshire will use this information as needed, to contact you about the research study, to oversee the quality of the study. Certain individuals from NHS Lanarkshire and regulatory organisations may look at your

research records to check the accuracy of the research study. NHS Lanarkshire will only receive information without any identifying information. The people who analyse the information will not be able to identify you and will not be able to find out your name or contact details. All the information collected will be stored securely according to the Data Protection Act 2018.

What if I lose capacity during the study?

If you lose the ability to understand information and make decisions during the study, your data will be included in the study and kept for ten years.

What will happen to the results of the research study?

We will look at all responses to questionnaires and the feedback. We plan to present the results of the study as a scientific paper and a copy of the results will be sent to HMP Shotts. No individuals will be identified in the research publications, which will contain only anonymous information. The results may be used in conference presentations.

Who is organising and funding the research?

The study is organised by the University of Glasgow and is part of a research thesis for the Doctorate in Clinical Psychology course.

Who has reviewed the study?

This study has been reviewed by the South East Scotland Research Ethics Committee 02, and the Scottish Prison Service Research Access and Ethics Committee.

Who do I contact for further information?

If you have any questions about the study or taking part in research, you can contact Mr Willie Stewart, Deputy Governor (HMP Shotts, Canthill Road, Shotts, ML7 4LE). Mr Stewart is an independent contact person and is not part of the research team.

The NHS inform website, in partnership with The Scottish Government Health Directorate, provides further information on taking part in in research. A guidance

leaflet on Consent is available via the website at https://www.nhsinform.scot/care-support-and-rights/health-rights/consent/consent-when-using-the-nhs#teaching-and-research.

Who do I contact with a complaint about the study?

If you are unhappy about any aspect of the study and wish to make a complaint, please contact Jennifer Lai, the field researcher. The normal NHS complaint procedure is also available for you. The contact person for making a complaint in NHS Lanarkshire is: Ms Laura Jack, NHS Lanarkshire Headquarters, Kirklands Hospital, Fallside Road, Bothwell, G71 8BB, telephone: 01698 858321, or email: laura.bryan@lanarkshire.scot.nhs.uk.

What are the next steps?

You will speak to your line manager for authorisation to attend a half day of LLTTF training and make contact with the research team to inform that you are interested in the study. You will then receive details on attending the training.

Thank you for considering taking part in this research.

Appendix 2.5 Consent Forms

CONSENT FORM – PRISONERS

Participant ID_____

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

Please initial box

1. I have read and understand the information sheet dated 03.06.19 (Version 7.1) for the above study. I have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that it will have no effect on my custodial sentence. I understand that I am free to withdraw at any time, without giving any reason and without my legal rights being affected. ☐
3. I agree that if researchers believe that I, or another person, is at risk of harm, or if a crime has been committed, they will pass this information on to prison staff. ☐
4. I consent to researchers accessing my prison incident reports. ☐
5. I consent to researchers accessing my work attendance (if applicable). ☐
6. I understand that identifiable data collected during the study will be accessible only to those individuals from the University of Glasgow involved in the study (field researcher and study supervisors). Anonymous data will be accessible by representatives of NHS Lanarkshire (for audit purposes), and by regulatory authorities, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my medical records. ☐
7. I agree to my data being kept for 10 years, including following loss of capacity if this happens during the data collection period. I understand this is for the purpose of future research and that all data will be destroyed confidentially after this period. ☐
8. I consent to take part in the above study by attending four sessions of Living Life To The Full, reading the books, completing questionnaires, and giving feedback on the books. ☐

9. I consent to my personal officer completing a questionnaire on their views of my functioning and the ease of working with me. ☐

10. I consent to a letter being sent to the Mental Health team to inform that I am taking part in this study. ☐

11. I wish to take part in this study. Yes ☐ ☐
No

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Person Taking Consent	Date	Signature

CONSENT FORM – PRISON STAFF

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

Participant ID: _____

Please initial box

10. I have read and understand the information sheet dated 03.06.19 (Version 6.1) for the above study and have had the opportunity to ask questions. ☐

11. I understand that my participation is voluntary, and that I am free to withdraw at any time, without giving any reason, and without my legal rights being affected. ☐

12. I understand that identifiable data collected during the study will be accessible only to those individuals from the University of Glasgow involved in the study (presenting researcher and study supervisor). Anonymous data will be accessible from representatives of NHS Lanarkshire (for audit purposes), and by regulatory authorities where it is relevant to my taking part in this research. ☐

13. I agree to my data being retained for 10 years, including following loss of capacity. I understand this is for the purpose of future research and that all data will be destroyed confidentially after this period. ☐

14. I agree to take part in the above study by participating in the Living Life To The Full (LLTTF) training, supporting participants with the LLTTF books, and attending at least one teaching support session during the study. ☐

15. I agree to complete the questionnaires as part of this study. ☐

16. I wish to take part in this study. Yes ☐ No ☐

_____	_____	_____
Name of Participant	Date	Signature
_____	_____	_____
Name of Person Taking Consent	Date	Signature

Appendix 2.6 Examples of Worksheets Adapted for Prison

LLTTF™ living life to the full www.llttf.com

Your Vicious Cycle

: the impact on five key areas of life

Living Life to the Full for Prisons

When you feel bad: Describe what's going on:

My thoughts:
What's on your mind?

My feelings: e.g feel down, stressed, angry, guilty, ashamed?
Write what you notice:

Altered Thinking

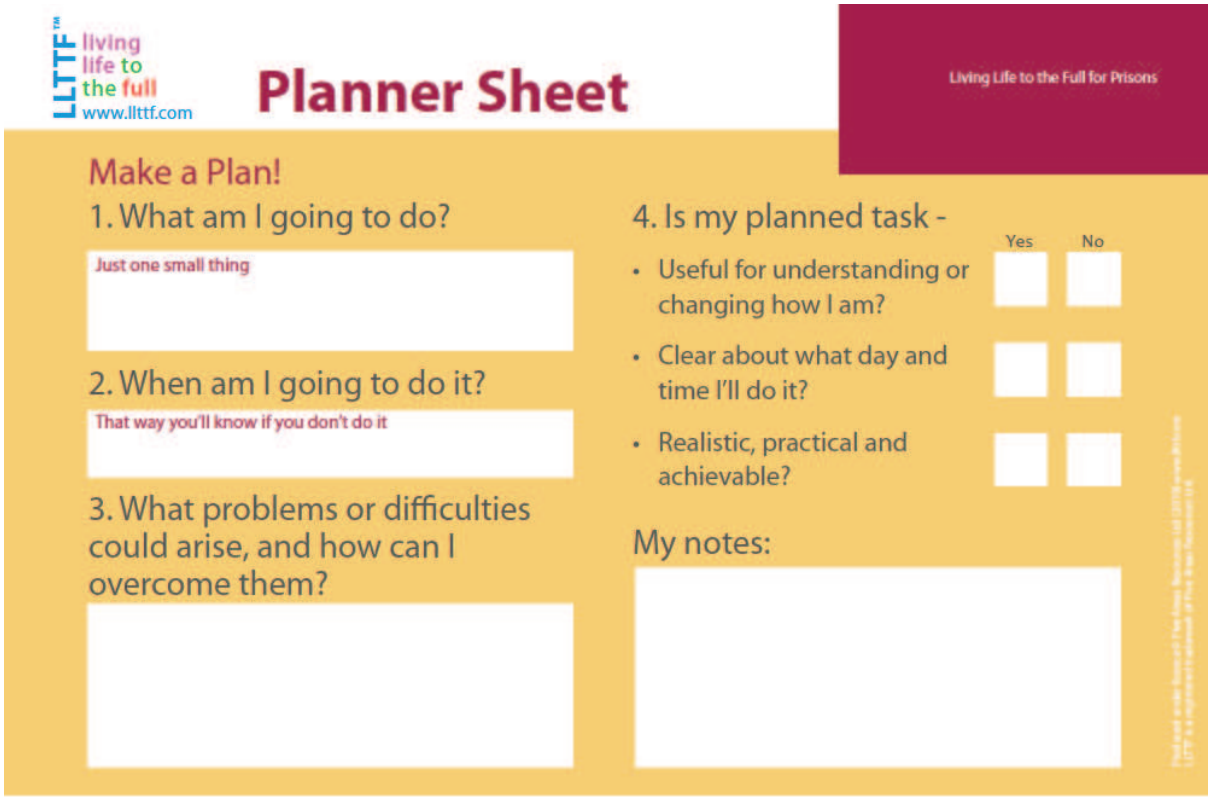
Altered Feelings

Altered Behaviour

Altered Physical Feelings

My behaviour:
What did you do, or stop doing?

My body: e.g. tense, pain, tired, shaky, hot, sweaty, heart or breathing speeded up, feeling sick, dizzy, churning gut, dry mouth... Write what you notice:



LLTTF™ living life to the full www.llttf.com

Planner Sheet

Living Life to the Full for Prisons

Make a Plan!

1. What am I going to do?

Just one small thing

2. When am I going to do it?

That way you'll know if you don't do it

3. What problems or difficulties could arise, and how can I overcome them?

4. Is my planned task -

	Yes	No
• Useful for understanding or changing how I am?		
• Clear about what day and time I'll do it?		
• Realistic, practical and achievable?		

My notes:

LLTF™ living life to the full
www.llttf.com

Bad Thought Spotter

Thinking like this makes us feel bad and do things in ways that make us feel even worse.

Are you your own worst critic?	Do you always seem to be beating yourself up about something?	☐
Do you focus on the bad stuff?	As if you were looking at the world through darkened glasses?	☐
Do you have a gloomy view of the future?	Expecting everything to turn out badly?	☐
Are you jumping to the worst conclusions?	Thinking it's the end of the world.	☐
Do you assume that others see you badly?	When you haven't checked whether it's true, it's called 'Mind Reading'	☐
Do you take responsibility for everything?	Including things that aren't your fault?	☐
Do you always unfairly blame others for every problem?	Never accepting responsibility?	☐

Appendix 2.7 Training Acceptability Rating Scale (Modified)

Project title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

Instructions: please rate your agreement with the following statements on this scale:

strongly disagree	moderately disagree	slightly disagree	slightly agree	Moderately agree	strongly agree
1	2	3	4	5	6

The first six statements concern the content of the training that you have just completed.

CIRCLE YOUR LEVEL OF AGREEMENT

1. **General acceptability:**

   This approach would be appropriate for a variety of prison staff 1 2 3 4 5 6

2. **Effectiveness:**
   The training will be beneficial for prison staff 1 2 3 4 5 6

3. **Negative side-effects:**
   The training will result in disruption or harm to prison staff 1 2 3 4 5 6

4. **Appropriateness:**
   Most staff would **not** accept that the training provided as an appropriate approach to interacting with prisoners 1 2 3 4 5 6

5. **Consistency:**
   The training was consistent with common sense and good practice in helping staff to work effectively with prisoners 1 2 3 4 5 6

6. **Social validity:**
   In an overall, general sense, most prison staff would approve of training in this method (e.g. would recommend it to others) 1 2 3 4 5 6

The next 12 questions focus on your impressions of the teaching process and outcomes i.e. how competently you think the training was conducted, and whether it was helpful or not. For each question **please tick** the statement that best expresses your opinion.

7. Did the workshop improve your understanding of the life skills?

Not at all □ a little □ quite a lot □ a great deal □

8. Did the workshop help you to develop work-related skills?

Not at all □ a little □ quite a lot □ a great deal □

9. Has the workshop made you feel confident in supporting prisoners with these booklets?

Not at all □ a little □ quite a lot □ a great deal □

10. Do you expect to make use of what you learnt in the workshop in your workplace?

Not at all □ a little □ quite a lot □ a great deal □

11. How competent were the workshop leaders?

Not at all □ a little □ quite a lot □ a great deal □

12. In an overall, general sense, how satisfied are you with the workshop?

Not at all □ a little □ quite a lot □ a great deal □

13. Did the workshop cover the topics it set out to cover?

Not at all □ a little □ quite a lot □ a great deal □

14. Did the workshop leaders relate to the group effectively? (e.g. made you feel comfortable and understood)

Not at all □ a little □ quite a lot □ a great deal □

15. Were the leaders motivating? (e.g. energetic, attentive and creative)

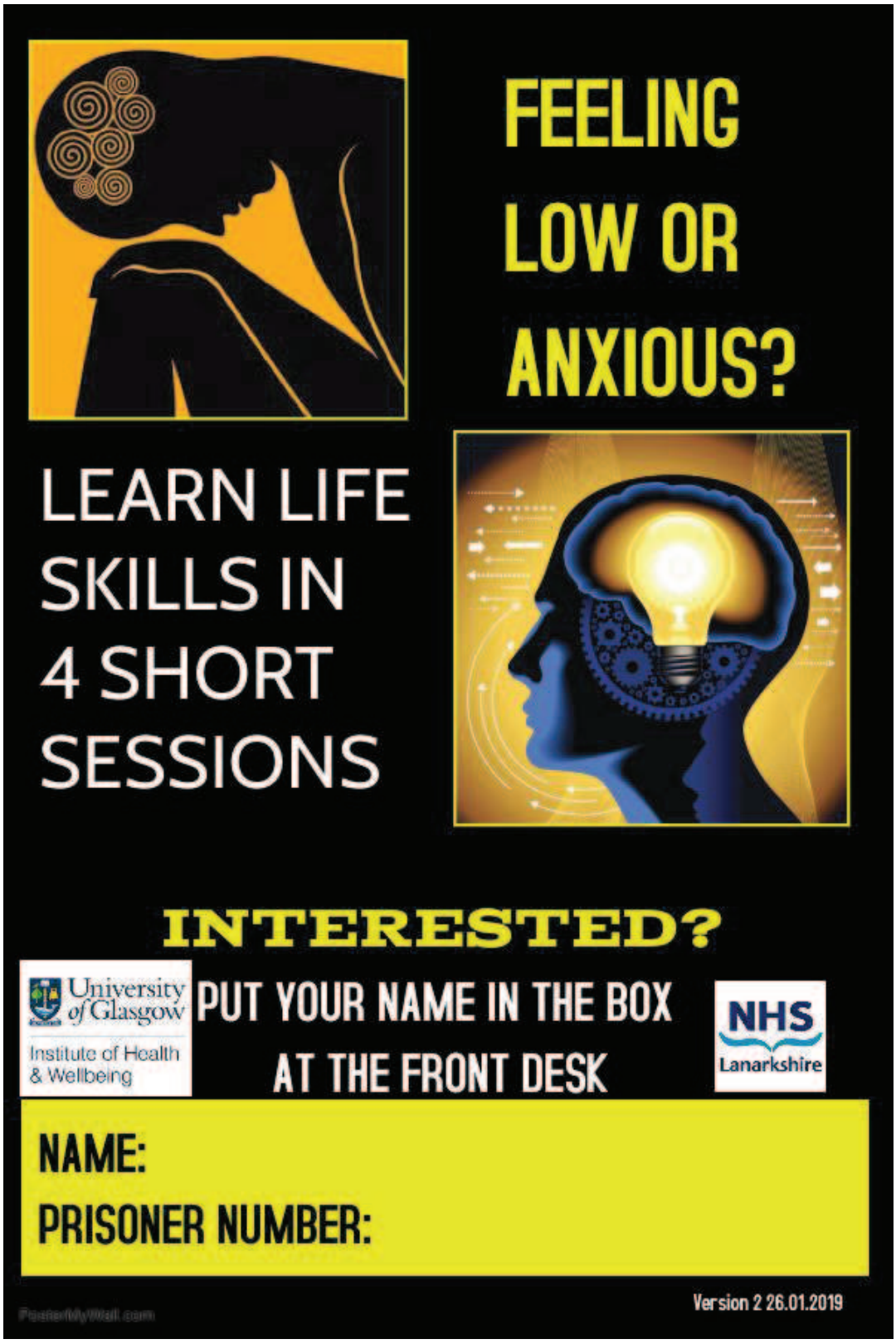
Not at all □ a little □ quite a lot □ a great deal □

16. What was the most helpful part of the workshop for you personally?

17. What change(s), if any, would you recommend? (e.g. to the content or teaching)

18. Please also make any other comments that you would like to offer.

Appendix 2.8 Recruitment poster



Appendix 2.9 End of Study Questionnaire for Prison Staff

STAFF TRAINED IN LLTTF – END OF STUDY

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

Date_____

Overall feedback *(please circle)*

I found the course helpful.	Yes	Somewhat	No
I read all the books.	Yes	Somewhat	No
The books helped me understand the topics covered.	Yes	Somewhat	No
The materials were easy to understand and follow.	Yes	Somewhat	No
I was provided with enough support to guide the books.	Yes	Somewhat	No
I am more likely to speak to prisoners and/or colleagues about mental health compared to before this study.	Yes	Somewhat	No
The teaching support sessions were helpful.	Yes	Somewhat	No
I would use the books.	Yes	Somewhat	No
I would recommend the books.	Yes	Somewhat	No

How useful do you think the approach is in a prison setting?

What is your impression of prisoners' perceptions of the materials?

What would you change about this approach overall?

Were there barriers to delivering the approach in prison? (e.g. time, relationships between prisoners and officers, the hall environment). What would help?

The teaching support sessions

What was helpful?

What was not helpful?

What would you change?

Any other comments

Appendix 2.10 Functioning Questionnaire for Prisoners

FUNCTIONING QUESTIONNAIRE (PRISONERS)

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

Participant ID: _____ Date_____

Baseline/End of Study *(please circle)*

Over the past week… *(please tick box)*

	Not at all	A little	A lot
I can relate to others.			
I can talk to others confidently.			
I can deal with upsetting thoughts.			
I can plan activities I enjoy.			
I can cope with stressful events.			
I can solve the problems I face when I need to.			

Appendix 2.11 Functioning Questionnaires for Personal Officers

PERSONAL OFFICER'S VIEWS OF PRISONER FUNCTIONING

Project Title: Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence.

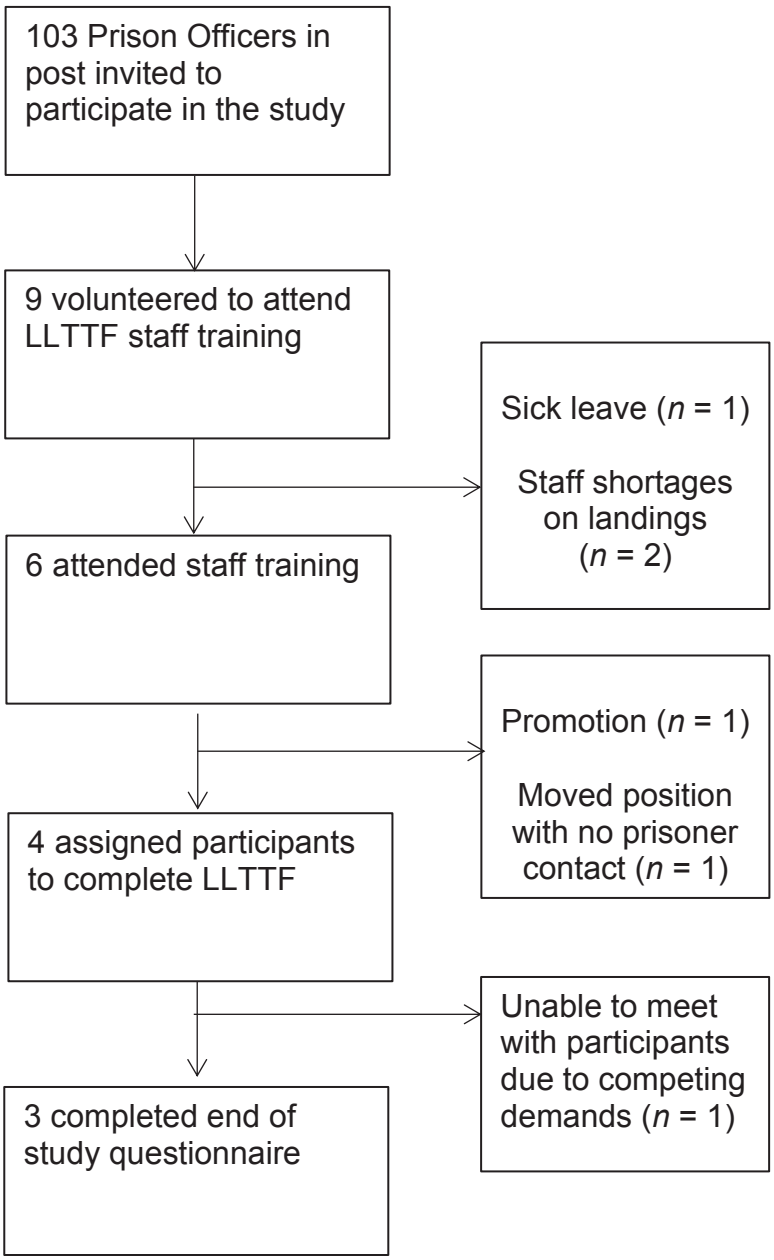
Participant ID: _____ Date_____

Baseline/End of Study *(please circle)*

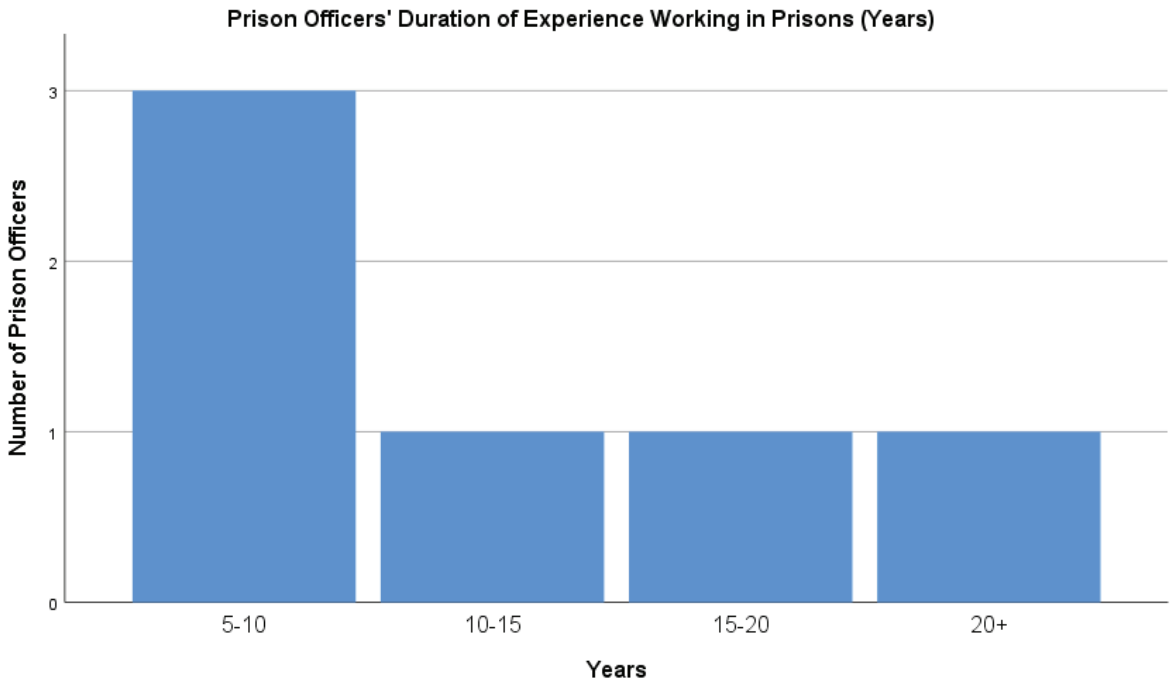
Within the past month: *(please tick box)*

	Yes	Somewhat	No
It has been easy to work with this prisoner.			
This prisoner has appeared stressed.			
This prisoner is likely to speak about things causing stress or low mood.			
I am likely to speak to this prisoner about mental health problems.			
This prisoner….			
Has good skills of self-management.			
Is able to understand why they feel as they do emotionally.			
Appears confident in themselves.			
Can tackle problems effectively.			
Knows what sorts of activities they can do to make them feel better.			
Is able to respond well to tackle upsetting thoughts.			

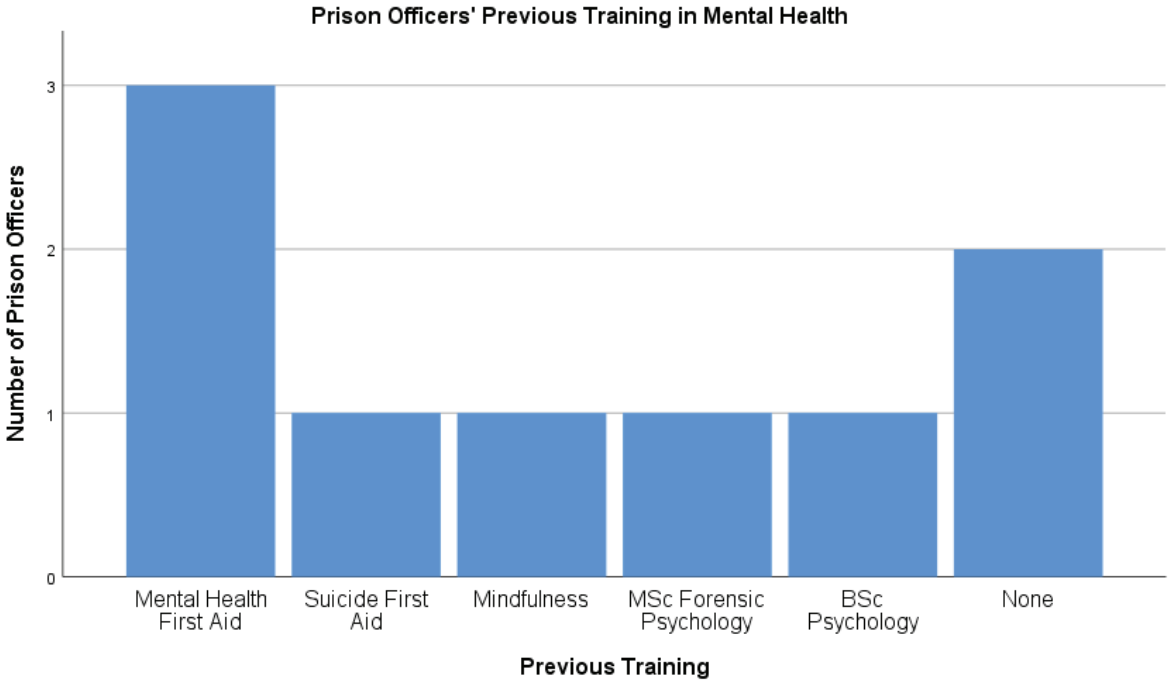
Appendix 2.12 Flowchart of Prison Officer participants



Appendix 2.13 Prison Officers' Duration of Experience working in Prisons



Appendix 2.14 Prison Officers' Previous Training in Mental Health



Appendix 2.15 Staff Training feedback

TRAINING ACCEPTABILITY RATING SCALE (modified)

Question	strongly disagree	moderately disagree	slightly disagree	slightly agree	moderately agree	strongly agree
	1	**2**	**3**	**4**	**5**	**6**
1. General acceptability: This approach would be appropriate for a variety of prison staff	1		2	2	1	
2. Effectiveness: The training will be beneficial for prison staff	1		1	3	1	
3. Negative side-effects: The training will result in disruption or harm to prison staff	4	2				
4. Appropriateness Most staff would **not** accept that the training provided as an appropriate approach to interacting with prisoners			1	2	2	1
5. Consistency: The training was consistent with common sense and good practice in helping staff to work effectively with prisoners	1	1		1	2	1
6. Social validity: In an overall, general sense, most prison staff would approve of training in this method (e.g. would recommend it to others)	1		2	2	1	

	Not at all	A little	Quite a lot	A great deal
7. Did the workshop improve your understanding of the life skills?		5	1	
8. Did the workshop help you to develop work-related skills?	2	3	1	
9. Has the workshop made you feel confident in supporting prisoners with these booklets?	2	2	2	
10. Do you expect to make use of what you learnt in the workshop in your workplace?		4	1	1
11. How competent were the workshop leaders?		1	1	4
12. In an overall, general sense, how satisfied are you with the workshop?	1	1	3	1
13. Did the workshop cover the topics it set out to cover?		1	4	1
14. Did the workshop leaders relate to the group effectively? (e.g. made you feel comfortable and understood)			2	4
15. Were the leaders motivating? (e.g. energetic, attentive and creative)	1		4	1

16. What was the most helpful part of the workshop for you personally?

Discussion about adapting to prison
Discuss how it would fit in prison setting.
Think about my job more closely.
Giving feedback on a tool that may be used in prisons and making it relevant.

It was all very interesting and informative.
I use these practices a lot in my daily working. I will use them.

17. What change(s), if any, would you recommend? (e.g. to the content or teaching)

Adapt to prison

To make it more suitable for a prison setting.
Get to know the prison environment and prisoners themselves and base the booklets more towards the prison setting.

Not using books
Less focus on books
No books, only handouts
Scrap the books, change the sheets, simplify it all to make it relevant. Offer different approach.

18. Please also make any other comments that you would like to offer.

Providing staff and prisoners alike are up for committing to this new process, it could be very beneficial.
Biscuits would help.
This workshop was pitched at middle class student academia and not pitched at the real world inside a prison. The lack of knowledge of a prison setting by the facilitators was patronising and naïve.

Appendix 2.16 Prisoner Mental Health Demographics

		Eligible Participants (N=15) (%)	Completers (*n*=7) (%)
Psychiatric diagnosis	**Yes**	13 (87)	6 (86)
	Depression	7 (47)	4 (57)
	PTSD	5 (33)	3 (43)
	OCD	1 (6)	0 (0)
	ASPD	3 (20)	2 (29)
	EUPD	1 (6)	0 (0)
	Schizophrenia	1 (6)	1 (14)
Previous Mental Health input	**Psychology**	6 (40)	4 (57)
	MH nurse	1 (6)	0 (0)
	Counselling	6 (40)	4 (57)
	Medication	10 (67)	6 (86)
	Substance Misuse Worker	1 (6)	1 (14)
	Psychiatry	2 (13)	2 (29)
Current medication for Mental Health	**Yes**	12 (80)	6 (86)
Current Mental Health treatment	**MH nurse**	4 (27)	1 (14)
	Psychology	3 (20)	1 (14)
	Counselling	2 (13)	1 (14)
	Art therapy	1 (6)	1 (14)
Previous admission with Mental Health Problems	**Yes**	3 (20)	2 (29)
	No	12 (80)	5 (71)
Previous involvement with Mental Health charity	**No**	13 (87)	5 (71)
	Yes	2 (13)	2 (29)

Appendix 2.17 Prisoner feedback

End of Session Satisfaction Questionnaires

Why do I feel so bad?

	Yes	A Little	No
Did the content make sense?	2	1	3
Is the topic relevant to you?	2	3	1
Clear plan of what you can do next to build on the session?	2		4
Recommend the session to a friend?	2		4

What did you like about the book?

Nothing (x2)
Pure pish – pitched at kids. Nothing appealed.
Everything is relevant
Nothing. It's a waste of paper.
Not much

What did you not like about the book?

Everything (x2)
Pitched at kids - Liked nothing
Nothing
It's very childish – aimed perhaps at people with difficulties. Patronising.
Most of it

What would you change?

Too infantile
Re-write whole book
Nothing
Everything. More realistic content.
Make it relevant to adults.
All of it

I can't be bothered doing anything

	Yes	A Little	No
Did the content make sense?	2	2	3
Is the topic relevant to you?	3	4	
Clear plan of what you can do next to build on the session?	2	1	4
Recommend the session to a friend?	1	1	5

What did you like about the book?

Not relevant, but better than last one.
Nothing (x3)
Not much. Prefer talking.
I'll read it more in depth.
Poor.

What did you not like about the book?

Aimed at children
Based for children
Aimed at kids. I am a long term prisoner. It does not bear any semblance to jail life.
Too childish.

I think the book is more aimed at people not in jail.
Very poor book.
Most, if not all.
Very much all of it.

What would you change?

Content not aimed at adult. Makes you out to be a child.
Everything. Pitch at jail life.
The book – more verbal interaction than using book.
Nothing.
Your book is pish.
Re-write it (x2)

Why does everything always go wrong?

	Yes	A Little	No
Did the content make sense?	2	2	3
Is the topic relevant to you?	3	3	1
Clear plan of what you can do next to build on the session?	1	1	5
Recommend the session to a friend?	2		5

What did you like about the book?

Very little (x2)
Nothing (x3) – directed at kids
How it's broken down into understandable chapters. Easy to read.
Easy to read. Very practical.

What did you not like about the book?

Most
Aimed at kids and patronising
Could have been longer. A bit kiddish.
Nothing
Everything (x2)
Patronising

What would you change?

The author – very patronising
Written (all materials that is) by person who has no understanding of jail life
More mature and indepth content.
Nothing.
This module was poor.
Don't give out.
All of it

How to fix almost everything

	Yes	A Little	No
Did the content make sense?	2	3	2
Is the topic relevant to you?	2	4	1
Clear plan of what you can do next to build on the session?	2	2	3
Recommend the session to a friend?	2	1	4

What did you like about the book?

Very little.
Nothing, not relevant to my setting.
Simple to read and understand. Gave ideas and made me think. It was positive.
Didn't drift when reading.
Book was rubbish.
Bit better than rest.
A lot of variates on concepts.
Nothing

What did you not like about the book?

Most of everything.
I feel that the person who wrote it is taking the piss out of me. How can I fix a long term sentence – get real.
Could be more complex content-wise. Would like more challenging and deeper ideas.
Everything (x2)
Based for kids.
Nothing

What would you change?

Whole course is infantile.
Everything – this is time out of my life I will not get back.
Little bit more mature content. Discuss ideas that are more testing, out of the box. Bit more humour.
Totally rework and rewrite (x2)
Just about all.
Nothing. It's very self explanatory.

End of Treatment feedback

1) Overall, what have you thought of the approach?*(Please circle)*

	Response	*n* (%)	Response	*n* (%)	Response	*n* (%)
I found the course helpful.	Yes	5 (71)	No	1 (14)	Not Sure	1 (14)
I read all the books.	Yes	4 (57)	No	2 (29)	Not Sure	1 (14)
I completed the linked worksheets.	Yes	6 (86)	No	1 (14)	Not Sure	
The booklets helped me understand the topic covered.	Yes	5 (71)	No		Not Sure	1 (14)
I was able to do the activities suggested in the books.	Yes	2 (29)	No	3 (43)	Not Sure	2 (29)
The materials were easy to understand and follow.	Yes	6 (86)	No		Not Sure	1 (14)
I was able to ask questions.	Yes	6 (86)	No		Not Sure	1 (14)
I will use the books again.	Yes	6 (86)	No	1 (14)	Not Sure	
I would recommend the books.	Yes	4 (57)	No	2 (29)	Not Sure	1 (14)

General feedback

School

Was like being at school – felt like being taught. It was like a project at school.
Childlike - aimed for primary schools.

Usefulness

If I'd known these skills before, I might not be in prison.
I want my children to learn these skills.

Difficulties with concentration

Had a lack of motivation – I picked up the book but did not read them. It was hard to get into the right mindset. Would take an hour to read one page but did not take in information.

Officer attitudes

Prison officer was cringing as went over book.

The prison officer was doing it in a rush and skimmed the materials.

Change in mindset

I've stopped being so negative or thinking about what others think of me. I've been giving advice to other prisoners. I'm not getting involved in jail drama, I am doing my own thing.

Learned that doing things improve your mood and gives you a purpose in life.

Not relevant to prison

Texting – don't have a phone so I skipped it.

Activities in prison are limited. A lot of the booklets are tailored for outside (e.g. stop texting and meet friends instead, leave phone at home, walk the dog) – activities are restricted in prison.

I would recommend the books if they were more tailored to prison.

Not suitable for a prison environment.

Wouldn't have opportunities to do yoga.

Readability

It's straight forward and not too taxing.

Some people in the prison can't read and so I wouldn't recommend the books to them.

It was almost too easy.

Other

In prison, you don't want to cry and let your guard down as others could target you.

It's all common sense.

"Why does everything always go wrong? – I'm a drug addict".

I've seen the mental health team for many years and read self-help books.

It'd be more helpful if it asked deeper questions or was more challenging; getting to the root of what I'm thinking.

Now can speak to officers, before couldn't

Fitness and sports are big in jail.

What did you like about the books?

Easy to follow

Breaks things down into steps.

Easy to follow. Could learn anything from them. Well constructed – author knows what he is doing. A lot you can take from them for everyday life. Knowing what to say to others and put your point across. Helps you to speak more about how you're feeling.

Easy to read and follow. Everything in the book is something that would happen in everyday life. It's written in a way for everybody.

It was easy to read – almost too easy.

Self explanatory

Led to changes

Led to meaningful interactions.
Different way of thinking and dealing with things.
Good for morale.
Offered a different perspective.
Encouraged me to better myself in prison.
Made me think about my thoughts and helped me change my thinking.
Helps people understand themselves.

Normalises mental health problems

Shows that people are out there that understand me.
I'm not alone with the mental pain.

Other

Would be easy to take up in the right mind.
Illustrations brilliant.
Didn't help me. Might helps others.
Nothing.

What did you not like about the books?

School/children

Reminds me of school – can put you off. Some guys weren't good at school or couldn't be bothered. Pictures are more for kids.
The books patronise you, This depresses me.

Other

Have less books – easier to digest
Nothing (x3)
Not tailored to the prison.
I showed others the books and we laughed together.

How could the books be better?

Use of sports

More of sports/fitness.

Pictures

Remove pictures.
Front covers are boring – "I can't be bothered", so why would I bother now? Use pictures of weights/tennis instead.
Less reading, less words. More illustrations for people to understand it. Helps focus more.

Other

Do a survey for adults to see what they think of the books.
Be more directive in the books "don't do it".
More challenging, more thought provoking, more controversial and exciting.
Show the darker side of life – why people offend.

Do the books need to be changed for use in a prison? How so?

Adapt to prison
Some things can't do in prison: texting, visiting friends.
Make examples tailored to prison e.g. socialising – aim to have 2 games of snooker, make yourself to go to education and attend courses, clean your cell and dust your shelves.

No – easy to pick up. Eye catchers.
No.
Have more optional books.

Appendix 2.18 Prison Officer feedback

STAFF TRAINED IN LLTTF – END OF STUDY

Overall feedback

I found the course helpful.	Yes	2	Somewhat	1	No	
I read all the books.	Yes	2	Somewhat		No	1
The books helped me understand the topics covered.	Yes	1	Somewhat	1	No	1
The materials were easy to understand and follow.	Yes	1	Somewhat	2	No	
I was provided with enough support to guide the books.	Yes	2	Somewhat		No	1
I am more likely to speak to prisoners and/or colleagues about mental health compared to before this study.	Yes	1	Somewhat		No	2
The teaching support sessions were helpful.	Yes		Somewhat		No	
I would use the books.	Yes	1	Somewhat		No	2
I would recommend the books.	Yes	1	Somewhat		No	2

How useful do you think the approach is in a prison setting?

Booklets

Scrap books and completely rewrite the course.

Booklets remind me of what you'd find in a doctor waiting room.

Overly simple

Worksheets were overly simply.

Potentially very useful if material pitched at higher reading age and higher intellectual level. Prisoners have a business knowledge of outside world (e.g. running drug organisations).

Building Relationships

Sitting with prisoners one-on-one to build trust and develop relationships meant prisoners saw human and not just the white shirt. An informal chat that wasn't work related improved relationships over time.

Prevalence of mental health problems in prison

Very as the prisoners all need help with mental health. So many people could benefit from this. Trauma in prison can lead to officers experiencing mental health problems. The content is helpful.

It is similar to other programmes where you talk about things and then prisoners go away and think about it. In general, prisoners are more guarded opening up to Prison Officers about their mental health problems. For more deeper mental health problems, we'd refer them to the Mental Health Team.

Sitting and talking to them, and letting them go away and think about it is helpful. It gives them control and what he got out depended how much effort he put in.

What is your impression of prisoners' perceptions of the materials?

Negative attitudes

Patronising, didn't like it – it was too simplistic.

Cartoons – "do they think we're daft?"

All smiley faces – not appropriate for jail. Needs to be based in the prison.

Cartoons/jokes minimised and infantalised their experiences. They were not relevant for the prison and there was a need for more serious content.

It was as though the message was: we [the officers] are the adults and you [the prisoners] are children. They have serious mental health problems and their lives are more serious.

Elephants were massively patronising and childish.

It was a bit childlike e.g. cartoons

Content

Worthwhile when they got past the visuals. They benefited more from sitting one to one, talking and feeling listened to.
He understood the content. And he understood that it was being presented in a lighthearted, humorous way to help.
Simple to understand – e.g. the cycles of feelings

Other
Need re-written
Don't think feedback given at training was taken into account.
Some examples weren't relevant to prison e.g. going for a walk in the park.
The approach was self explanatory, with the session plans. I would use the books if I had concerns about a prisoner.

What would you change about this approach overall?

More support
More frequent training sessions to go over the materials and to include prisoners in it (for buy in and involvement, gives them some ownership)

Re-write materials
Re-write the books with prison officer and prisoner involvement
Put it all in one book so prisoners can have an overview of the topics and then work through them. They can then read it and come back to discuss it with the officers.
CD was of poor quality – as though done in a hurry. Redo them.
Get rid of the books.
I would recommend the booklets if tweaks were made to make them more relevant to prison. Lots was useful but needed to be relevant to prison life. Make the books more prison-based. Prisoners don't get the chance to do a lot in prison. Find out what they can and can't do, which is different for all the halls. Officers give them a timeframe to do an activity e.g. time to walk in the regime. A prisoner can sit in his cell, watch TV, play the play station, clean his cell.

More support from SPS

To have more support [from SPS] to deliver it – another officer could cover duties [as an officer] while we deliver the approach.

Shouldn't be target-led but individual led.

Recruitment

Ballot box was a way that prisoners could volunteer other people, and it also looks as though they are grassing on other prisoners. It looked like a way to anonymously say something.

Other

You only get one shot with prisoners.

Were there barriers to delivering the approach in prison? (e.g. time, relationships between prisoners and officers, the hall environment). What would help?

Prison environment

Time – staff shifts and prison routine

Prisoners lose interest/motivation when they're put on report; buy in is so important

Important to deliver it to participants in the same hall so we know the prisoners

Not having a relationship with the prisoner and make it hard to be open about their mental health. I structured sessions so that he would have a look and then come talk to me, which worked better than me going through it all and asking him there and then. If you're on the same landing, you can build a relationship and build rapport.

[This hall] is difficult to engage. Prisoners are more likely to hide mental health problems as it could be seen as a sign of weakness. The prisoners on this hall don't tend to talk about their mental health. Mainstream halls generally struggle to open up. Protection prisoners are more likely to open up.

Availability of resources

Not enough prisoners were able to access it – it would have been better to identify people and encourage them to volunteer. There were not enough prison officers who volunteered to deliver the approach.

Not having cover during our shifts

Time – getting away was challenging due to being understaffed and you have to leave the front desk. There needs to be a minimum of three officers per landing. Around Christmas/winter time, there tends to be staff off due to sickness.

Other roles/pressures

Officers have enough work doing their main duties and there are massive pressures from managers to get things done. It [taking part in the study] can feel like a duty – being told to do this and that. This can affect staff wellbeing.

What could help

An awareness session could have been helpful to tell prisoners what the study is about and what is being offered, show them the books. That might have helped more of them sign up.

The teaching support sessions

Didn't fit in with my shift pattern.
We get so many emails and the email about the sessions got lost in my inbox.
I was off during the dates offered.

Appendix 2.19 Research Proposal

Evaluating the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence

1. Introduction: Prisoners have substantial mental health needs, with high comorbidity rates and a disproportionately higher incidence of mental health problems compared with the general population. It is estimated that 10% to 12% of individuals in prisons meet criteria for major depression (Fazel & Seewald, 2012) and the prevalence of anxiety disorders in prisoners is higher than that in the community when adjusted for age, sex, and education (OR 5.1, 95% CI 4.3-6.1) (Butler et al., 2006). These mental health problems are risk factors for a range of adverse outcomes in prison and on release, including self-harm (Hawton et al., 2014), suicide (Fazel et al., 2008), violence inside prison (Goncalves et al., 2014), and reoffending upon release (Baillargeon et al., 2009).

Growing literature indicates that psychological interventions are effective in treating prisoners with anxiety and depression (Leigh-Hunt & Perry, 2015; Maunder et al., 2009; Yoon et al., 2017). However, pharmacological interventions are often the only treatment available in prisons. Living Life To The Full (LLTTF) is a life skills package that teaches every day life skills, such as problem solving, confidence, and thinking differently, with a focus on general wellbeing (Williams, 2007). LLTTF has been demonstrated to reduce levels of stress and low mood, and impaired social function within the community (Williams, et al., 2018). In a pilot study, Maunder and colleagues (2009) found that self-help materials adapted for use in prisons resulted in significant reductions in reported symptoms of anxiety in prisoners within a category C prison in the North of England ($t(30)=2.867$, $p=0.008$, Eta squared = 0.215). Although this is a promising finding, there is a need for further studies to expand on the current knowledge base of the use of self-help materials in prisons.

a) **Aims and Research Questions:** To evaluate the feasibility of a guided self-help programme for an adult male population of offenders serving a long-term prison sentence. Due to numerous uncertainties, and in line with the MRC Complex Interventions Framework, the overall aim of this pragmatic study is to inform future studies, including to generate effect size estimates that could be used in power calculations for future trials (Craig et al., 2008).

- Can prison staff and prisoners be recruited to engage in LLTTF?
- Will prisoners attend and complete the programme?
- Do the LLTTF booklets need to be adapted for prisoners? If so, which booklets need to be adapted and in what way?
- Is there an indication that the programme has a signal of an effect in altering levels of stress and low mood, and the number of breaches of prison rules? Is there a relationship between attendance and outcome?

2. Plan of Investigation

a) Participants: Adult male offenders serving a long term prison sentence (sentences of four years and above).

b) Inclusion and Exclusion Criteria: This study will recruit individuals who are experiencing **mild-**severe levels of distress (score of **above 4** on the PHQ-9), those prepared to attend four sessions of the programme, can read and write, are able to engage, and are serving a long-term prison sentence which has a remainder of at least three months. The latter is to allow for the implementation and evaluation of LLTTF. **Prisoners who are deemed to pose a direct risk of harm to the field researcher, as advised by healthcare staff or prison staff,**

and those considered at risk of imminent and significant self-harm will be excluded from the study.

c) Recruitment Procedures: This study will take place in HMP Shotts. Information regarding staff training in LLTTF will be dispersed among prison staff through a participant information sheet and emails. Training will be available to Prison Officers. If there is an insufficient number of staff willing to participate in the training (less than 6), recruitment will be opened to other members of staff; including social workers, physical training instructors, and education staff.

Recruitment for prisoners to engage in LLTTF will be opened to the landings where staff who have participated in the staff training are based. This is due to practicalities of prison staff working within their designated landing.

Staff within the prison, including healthcare and education professionals, will be informed of the study and asked to notify prisoners. As a method used in previous Doctorate in Clinical Psychology research projects, recruitment posters will be placed under each cell door in order to maximise the likelihood of prisoners being aware of the study. If interested, a prisoner will write his name at the bottom of the poster and submit it in a ballot box on the front desk of the wing. Bundles of posters will be placed on noticeboards within each wing which will allow prisoners to take a poster and write their name on the bottom if interested.

d) Measures: Staff participating in the LLTTF training will complete a modified Training Acceptability Rating Scale to rate the training provided. At the end of the study, staff will be asked to complete a questionnaire developed for this

project, which will consider their views of the programme, including whether they received appropriate support and if they believe they and/or others benefited from the programme.

For prisoners, clinical questionnaires will be used in the form of the Patient Health Questionnaire-9 (PHQ-9), to measure levels of depression, and the Generalised Anxiety Disorder-7 (GAD-7), to measure levels of anxiety.

Anecdotal evidence highlights that poor attendance at work is common amongst those experiencing high levels of psychological distress, which leads to prisoners accruing a report and consequently leads to punishment, which impedes progression. Therefore, reports accrued over the previous three months will be reported at baseline and at the three month follow-up. Reports consist of failure to attend work, failed drug tests, and any other breach of prison rules. The three month period reflects the requirement of such a period of stability in order to be considered for progression. This is to examine whether engaging in LLTTF has an impact on reports accrued.

The Ohio State University TBI Identification Method — Interview Form will be used at baseline to assess incidences of head injury in prisoners. This is to examine whether engagement and responsivity to LLTTF is impacted by previous head injury.

Due to a paucity of outcome measures adapted for prisoners, it was decided that questionnaires would be developed for this study to allow specific areas of interest to be explored. Although outcomes measures exist for non-prisoner populations, adapting these would alter their properties of validity and reliability. A questionnaire will be developed for prisoners to consider the impact of the

programme on their functioning; including their ability to relate to others, talk to others confidently, and manage their thoughts, which will be rated on a Likert scale. A further questionnaire will be developed for this study for personal prison officers to consider the prisoner's wellbeing. This will comprise of ratings on a Likert scale to reflect the perceived ease of working with the prisoner and their perceptions of the prisoner's wellbeing and stress. Furthermore, they will be asked to consider whether a wider change has occurred within the halls, for instance, if prison staff are more likely to speak to prisoners about mental health. This information will be supplemented through the reporting of number of referrals according to prison hall to the psychological services, comparing referrals at the start and end of the study.

To monitor the provision of LLTTF, staff will complete an attendance form to indicate whether the prisoner attended the support session, whether the booklet was provided, and what was covered. If the session does not take place, the reason will be recorded by the staff member.

e) Design: A non-randomised repeated measures within subjects design will be used to compare data for prisoners at different time-points; baseline, end of the programme, and three month follow-up. At the end of the programme and three month follow-up, the average number of breaches in prison rules of participants in the study will be compared to the average number of breaches of prison rules accrued for the remaining prisoners in the block, which will be a between groups design.

f) Research Procedures:

The reading age of the LLTTF booklets will be assessed through a readability programme prior to the study commencing.

Staff who are interested in being trained in the programme and have approval from management will have the opportunity to attend a half day (approximately three hours) of LLTTF training in HMP Shotts. This will consist of training in five booklets; behavioural activation, thinking, problem solving, confidence, and formulation. Following the training, staff will complete the Training Acceptability Rating Scale. Informed consent will be sought from staff and a demographics questionnaire will be completed.

In line with the governance structure indicated by the Forensic Matrix for all programmes developed by the Matrix Working Group (2012), teaching support sessions will be provided by the field supervisor once per month. This will be an opportunity for staff to ask questions about introducing and supporting the booklets, discuss any problems with implementation, and for signposting to other services if appropriate. These sessions will be open access and staff will be required to attend at least one session during the study period. The number of staff who utilise these sessions per month in addition to the amount of time spent in each session will be collected and reported. Furthermore, at the end of the study, staff will be asked to complete a questionnaire and consider whether the teaching support sessions were helpful, what was unhelpful, and what might be different.

The field researcher will meet prisoners who are interested in participating in the study on an individual basis to go over the information sheet, seek informed consent, complete baseline measures and a demographic questionnaire, show

examples of the booklets, and answer any further questions. Formal reading tests such as the NART were considered too burdensome for completion during the initial appointment. As an alternative, prisoners will be shown two worksheets from the LLTTF booklets and asked if they feel they would be able to complete these with guidance from a staff member. If a prisoner does not consider the worksheets acceptable, they will be excluded from the study due to an inability to engage with the booklets. The reasons for exclusion will be noted by the field researcher in order to capture participant flow and reasons for attrition. Participants will be asked about previous and current mental health input. If participants have difficulties with describing their difficulties or input, their medical records will be accessed if deemed appropriate, for instance if someone indicated a significant history of depression but could not recall details of input.

Prior to LLTTF commencing, the prisoner's personal prison officer will complete a questionnaire rating the prisoner's wellbeing that will be designed for this study.

Staff delivering LLTTF will be provided with five booklets; behavioural activation, thinking, problem solving, confidence, and formulation. The initial four booklets will be mandatory and the latter will be a back up. A support pack with each participant's name will be provided to the prison officers providing clear instructions about delivery of the material. Within each pack, there will be envelopes for each session; these will include the corresponding booklet, worksheets, and questionnaires (PHQ-9, GAD-7, and session satisfaction questionnaire). There will be an envelope with the participant ID number for each week, in which the participant can place their completed questionnaires in and seal to allow data anonymity. It will be highlighted that the field researcher

will not see these questionnaires imminently and therefore if the participant wishes to discuss suicidal thoughts, they should speak to the member of staff delivering the intervention or their personal officer. In the case of the disclosure of suicidal ideation, prison staff will follow the Talk To Me process as per HMP Shotts protocol. To monitor the provision of LLTTF, staff will complete an attendance log.

The field researcher will meet with prisoners to collect outcome measures at the end of the programme and at a three month follow-up. Furthermore, at the end of the programme and three month follow-up, the prisoner's personal prison officer will complete a questionnaire rating the prisoner's wellbeing that will be designed for this study.

Participants will be asked at the end of the programme to complete a questionnaire about their views of the LLTTF materials overall and how, if at all, they need to be adapted.

g) Data Analysis: Data will be input in Microsoft Excel and analysed in SPSS. The proportion of prison officers who attend the LLTTF training out of the overall number of prison officers will be reported to provide information regarding uptake and feasibility of training staff, in addition to the amount of time spent in teaching support sessions.

Demographic information of participants will be reported (age, ethnicity, incidences of head injury). Descriptive statistics (means, standard deviations, confidence intervals, and effect sizes) will be reported for outcome measures, reports accrued, and attendance of sessions. The number of referrals to

psychological services at the start and end of the study will be reported. Furthermore, a correlation will be used to explore whether there is a signal of an effect between session attendance and outcomes, with the effect size being reported.

h) Justification of sample size: In an audit of sample sizes for feasibility and pilot trials registered in the United Kingdom Clinical Research Network database, Billingham and colleagues (2013) found that feasibility trials had a median sample size of 36 (IQR=25-50). Therefore this study will aim for a sample size of up to 36. There are approximately 535 prisoners in HMP Shotts and this study will recruit from the landings where staff who have participated in the staff training are based. Furthermore, an aim of the study is to explore how many prisoners volunteer to engage with the programme.

i) Settings and Equipment: LLTTF booklets will be used and prison staff will be trained to deliver this programme. Sessions will be on an individual basis.

3. Health and Safety Issues

a) Researcher Safety Issues: The field researcher will meet prisoners on a one-to-one basis to collect outcome measures. Due to the potential risk of aggression, distress, and disclosure of suicidality, the field researcher will complete the appropriate de-escalation training and be aware of prison protocols in regard to these scenarios. The field researcher will carry a personal alarm at all times.

b) Participant Safety Issues: The programme will take place in a private room on a one-to-one basis within the prison. This will be a familiar environment for

participants and all will be aware of fire/safety procedures. The participant will work through the LLTTF booklets while being guided by the member of staff. If any emotional distress occurs during the study, the staff member will direct them to the mental health team as per prison protocol.

4. Ethical Considerations: As a vulnerable population, offenders may feel coerced into participating in the study by prison staff. The voluntary nature of participation will be highlighted within the information sheet and during the initial meeting with the field researcher where outcome measures will be collected. All participants will be given a participant identification number to ensure anonymity and confidentiality for research purposes. A protected database containing participant identification numbers will be accessible in the event of questionnaire responses indicative of risk and referral to crisis interventions is warranted. The research team (the university supervisors, the field supervisor, and the field researcher) will have access to this database.

5. Financial Issues: LLTTF resources and trainer time will be provided at no charge. NHS Lanarkshire has agreed to reimburse the field researcher's travel time to and from the prison. The field researcher will contact authors of psychometrics directly to arrange permissions to use the outcome measures.

6. Timetable: A full research proposal will be submitted to the University of Glasgow academic team in August 2018. Ethical approval will be sought from the NHS and the local Research and Development department, in addition to the Scottish Prison Service. Recruitment will begin in May 2019. Data collection will take place from May 2019-October 2019. Analysis will be carried out in November 2019. The study will be written up for submission to the University in January 2020.

7. Practical Applications: It is anticipated that the results of this study will help determine the feasibility, acceptability, and utility of LLTTF in a prison setting. It is hoped that this study will provide an indication of a signal of an effect of the approach in altering levels of stress and low mood, and the number of breaches of prison rules. Furthermore, it is hoped that participants will provide feedback on how, if at all, materials need to be adapted for a prison setting.

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