Effectiveness of Daily Poetry Reading for Enhancing General Wellbeing

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Contents

Abstract

Bibliotherapy improves general wellbeing (Frieswijk et al, 2006), as does mental imagery (Blackwell et al 2012). The current research examined the effectiveness of poetry-reading for improving wellbeing amongst adult participants with an interest in poetry. A further enhancement of these benefits from manipulating reading instructions to incorporate mental imagery was also investigated. A between-subjects design was used. 438 participants took part in a ten-day online poetry-reading course. The sample was non-clinical, and participants had already completed an online poetry course from the charity ReLit. Participants were randomly allocated to one of three reading-instructions conditions: standard (n = 141), enhanced (n = 152), or enhanced-plus-reminder (n = 145). The General Health Questionnaire-12 (GHQ-12) and Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) were used to assess wellbeing. Assessment took place before, immediately after, and two-weeks following the course. 63.4% of the participants reported completing the poetry task every day (M = 9.84 days, SD = 0.67). A significant improvement in wellbeing was found between pre-intervention assessments (GHQ: M = 13.85, SD = 5.75, d = 0.83 and WEMWBS: M = 46.70, SD = 8.22, d = 0.37) and post-intervention assessments (GHQ: M = 9.49, SD = 4.76, d = 0.74 and WEMWBS M = 49.70, SD = 8.20 d = 0.33). This was maintained at follow-up (GHQ: M = 9.86, SD = 5.04 d = -0.08, and WE: M = 49.45, SD = 8.27, d = -0.03). Manipulating reading instruction was not found to significantly affect this improvement. **Conclusions:** Bibliotherapy was shown to significantly improve wellbeing but further investigation is required to determine the effect of manipulating reading instructions. Directions for future research are discussed.

There is increasing international interest in the concept of positive mental health and its contribution to all aspects of human life (Tennant et al. 2007). The World Health Organisation declared positive mental health to be the "foundation for wellbeing and effective functioning for both the individual and the community" (WHO, 2014, p.10) and defined it as a state "which allows individuals to realise their abilities, cope with normal stresses of life, work productively and fruitfully, and make a contribution to their community" (WHO, 2001a, p.1).

Moreover, although often used interchangeably, mental health (i.e., emotional, psychological, and social wellbeing) and mental illness (i.e., major depressive episode, generalised anxiety and alcohol dependence) constitute separate (yet) correlated unipolar dimensions (Keyes et al. 2005). Positive mental health thus cannot simply be described as the absence of mental illness. As such, therapies to improve general wellbeing (e.g. physical exercise: Fox et al. 2007), a measure of mental health, are applicable to people with low wellbeing but no clinical diagnosis of mental illness as well as to clinically-diagnosed patients with poor general wellbeing (a likely combination given that the two correlate). This dual-focus is appealing as it allows the therapies to have a more widespread impact than those which solely target clinical symptoms. Moreover, aside from correlating with mental illness, general wellbeing has also been associated with health and longevity (Diener & Chan, 2011). This emphasises the importance of therapies focused on improving general wellbeing, by highlighting how effects are comparable to those of other risk factors more traditionally targeted by public health e.g. healthy diet (Diener & Chan, 2011).

One therapy that targets general wellbeing is Bibliotherapy. Bibliotherapy is a 100-year-old term coined by the American essayist, Samuel Crothers (Crothers, 1916), which translates literally to "therapeutic value derived from books". It describes an expressive therapy that involves storytelling or the reading of specific and validated texts with the purpose of healing. The self-managed intervention is generally facilitated by a healthcare professional although most often, this facilitation is limited to introducing, monitoring and reviewing the outcome of treatment (NICE, 2009).

Several randomised clinical trials have evaluated the effectiveness of bibliotherapy interventions for general wellbeing. Frieswijk et al. (2006) compared the self-management ability (defined as the ability to obtain those resources necessary for the production of wellbeing); mastery and subjective wellbeing of 97 elderly and somewhat frail participants who participated in bibliotherapy to that of 96 matched-control participants in a delayed-treatment control condition. They found that compared to the delayed-treatment, bibliotherapy significantly increased self-management ability and mastery and that the increase in self-management ability prevented a decline in wellbeing, but only in the short-term. Additionally, Latchem and Greenhalgh (2014) conducted a systematic review of five quantitative, three qualitative and four mixed methods studies all investigating the effect of reading on the health and wellbeing of people with neurological conditions. They found all but one of the quantitative studies reported a positive effect of reading and that the evidence from the qualitative studies demonstrated multiple positive effects of shared reading groups.

Holland et al. (2017) found a bibliotherapy exercise, which involved taking 10 minutes before bed to slowly read short poems whilst focusing on the present moment, reduced psychological distress, but did not significantly enhance wellbeing. The author considered

that this result may have been partly due to the participants not having an expressed interest in literature. Additionally, the sample size (n = 42) of the study was considered inadequate and was also limited to student participants. As such, the **first aim** of the current research is to investigate whether Bibliotherapy positively affects general wellbeing, amongst adult participants with an expressed interest in literature.

Moreover, when used as a treatment for symptoms of depression, the reading materials used for the bibliotherapy are often cognitive, behavioural, or cognitive–behavioural in nature (Gregory, Canning, Lee, & Wise, 2004). This means that they are based on the core principles of cognitive or behaviour therapy, incorporate the foundational elements of a cognitive conceptualisation of depression (e.g. you "feel the way you think") and provide exercises designed to help the reader overcome negative feelings associated with depression (e.g. by identifying and disrupting distorted thinking). The aim of this design, termed 'cognitive bibliotherapy', is to provide the reader with the means for key cognitive processes that contribute to depression.

Empirical support for cognitive bibliotherapy comes from a meta-analysis of 29 cognitive bibliotherapy studies, which found a large effect size of 0.99 (Gregory et al 2004). Additionally, cognitive bibliotherapy used within a randomised clinical trial was found to have a significant impact on both depressive symptoms and cognitions amongst adults with subthreshold depression, with these changes being maintained at follow-up (Moldovan, 2012). Importantly, the researchers of this study found automatic thoughts, measured by the Automatic Thoughts Questionnaire (Hollon & Kendall, 1980), significantly mediated the effect of bibliotherapy on depressive symptoms. These findings emphasised the importance of cognitive mechanisms such as automatic thoughts for the effectiveness of bibliotherapy.

Automatic thoughts refer to images or mental activity that occur in the mind in response to a trigger, without the involvement of any conscious thought. The finding that automatic thought mediates the effectiveness of bibliotherapy is not so surprising considering the extensive literature on mental imagery and wellbeing. Mental imagery refers to representations and the accompanying experience of sensory information without a direct external stimulus (Pearson et al. 2015). One study found vividness of positive future imagery to be significantly associated with optimism; a feeling that had previously been associated with better general wellbeing and mental (and physical) health (Blackwell et al. 2012). Another study examined the effects of mental imagery ability on the efficacy of two positive psychology interventions to enhance wellbeing. Although mental imagery ability was not found to influence the efficacy of either intervention, participants with high mental imagery ability reported greater increases in post-intervention wellbeing than participants with low mental imagery ability (Odou et al. 2013).

Hence, given the empirical support for the effectiveness of bibliotherapy, the additional benefit of including cognitive mechanisms in bibliotherapy, and the empirical association between mental-imagery and general wellbeing, we considered whether including a mental imagery component in poetry-reading instructions might enhance the benefits of bibliotherapy. We also considered whether we could further enhance the positive effect by requiring participants to consciously recall these mental images several times during the following day, particularly when feeling overwhelmed or stressed. This was the **second aim** of the current research.

In line with research demonstrating the effectiveness of bibliotherapy and cognitive bibliotherapy for improving wellbeing, as well as the empirical association between mental imagery and wellbeing, we predicted that bibliotherapy would improve general wellbeing for all participants. We additionally hypothesised a greater improvement would be found from manipulating reading instructions to include a mental-imagery component, with a further instruction to recall these images outside of the reading task environment helping to extend these benefits.

Method

Design

The experimental hypotheses were tested using a between-subjects design. Participants were randomly allocated to either the standard instructions condition, the enhanced instructions condition or the enhanced-plus-reminder instructions condition. Randomisation was stratified using the General Health Questionnaire-12 (GHQ-12) score at baseline (above or below the median) and gender. Outcome measures were scores of two wellbeing questionnaires: GHQ-12 and Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS). These questionnaires were administered pre-randomisation, immediately post-intervention and 2-weeks following the end of the intervention.

Preparing for the Course: Recruitment, Participants and Drop-outs

Participants in the study were recruited from a database of individuals who had all completed a six-week free ReLit online bibliotherapy course and had expressed an interest in participating in future research linked to the website. Relit is a charity founded by Dr Paula Byrne and Professor Sir Jonathan Bate. The aim of the charity is to practice and research Bibliotherapy. One function of the charity is to provide an online poetry course which aims to

improve mental health. The course, entitled "Literature and Mental Health", explores how enjoying literature can help us to endure life. It involves a flexible reading load and provides learners with the opportunity to exchange their ideas and feelings during online discussions. As such, the current study provided participants with the opportunity to engage in a further two weeks of online bibliotherapy, whilst their general wellbeing was assessed.

Our method of recruitment was predicted to lead to high participation rates since we were contacting people who had already displayed an interest in the area of the research. Individuals were recruited via an email sent by Professor Sir Jonathan Bate (see Appendix I) which briefly described the study and invited the recipient to participate. It was considered that the opportunity to have a further 10 days with novel poems, recommended by Professor Sir Jonathan Bate, was a sufficient incentive for participation.

Upon receiving the e-mail, the recipients were instructed to contact the researcher for more information should they wish to participate. Those who did this were sent an email with further details of the research (Appendix II), as well as the Information Sheet (see Appendix III) and electronic link to the Consent Form (Appendix IV), created using the online data collection software called Qualtrics (https://www.qualtrics.com/).

We intended to recruit 150 participants in total (50 per condition) as this was considered sufficient to detect a moderate difference in outcome between the different reading instructions. However, we received over 1000 responses to the recruitment email. The first 800 responders were sent an email with further details of the research, along with the Information Sheet and electronic link to the Consent Form. The remaining responders were sent an email thanking them for their interest, but explaining that we had received enough

participants for our research (see Appendix V). 757 participants completed the Consent Form and were sent a further email (see Appendix VI) with Qualtrics links to the basic-demographic-questionnaire (see Appendix VII), GHQ-12 and WEMWB. 470 participants completed these measures. Finally, 31 participants were excluded from the study due to scoring above 24 in the GHQ-12 as this is the recommended score for use in non-psychiatric settings (Goldberg et al., 1997 and Plummer et al., 2000). This resulted in sample of 439 participants.

To randomise participants, we divided them into four groups, based on gender and whether they scored above or below the GHQ-12 baseline score median of 13 (male-below, male-above, female-below, female-above). Participants in each group were given an ID number. We labelled each of our three conditions 'A', 'B' and 'C', corresponding to our "standard", "enhanced" and "enhanced-plus-reminder" instruction conditions respectively. A random online generator (http://dave-reed.com/Nifty/randSeq.html) was used to allocate participants from each of our four stratified groups to the three conditions.

One participant dropped out post-randomisation and their data was not used in our analysis. Of the remaining 438 participants, 384 participants completed the GHQ-12 and 387 completed the WEMBWS at the post-intervention assessment and 344 participants completed the GHQ-12 and 345 participants completed the WEMWBS at the follow-up assessment. In total, 326 participants completed both questionnaires at all three time points (see figure 2 for timeline of participant recruitment).

It is important to note that a significant minority of participants had 6 or fewer items missing from their completed GHQ-12 and 7 or fewer items missing from their completed WEMBWS. We dealt with this issue using prorating.

Over 1000 participants registered their interest	Remaining participants were sent an email to thank them for their interest but inform them that we had received enough participants for our research

800 were sent the Information sheet and consent form via email

757 participants completed the consent form

439 participants completed our initial measures and were randomised (1 participant dropped out post-randomisation)	31 participants excluded due to scoring above 24 on the GHQ

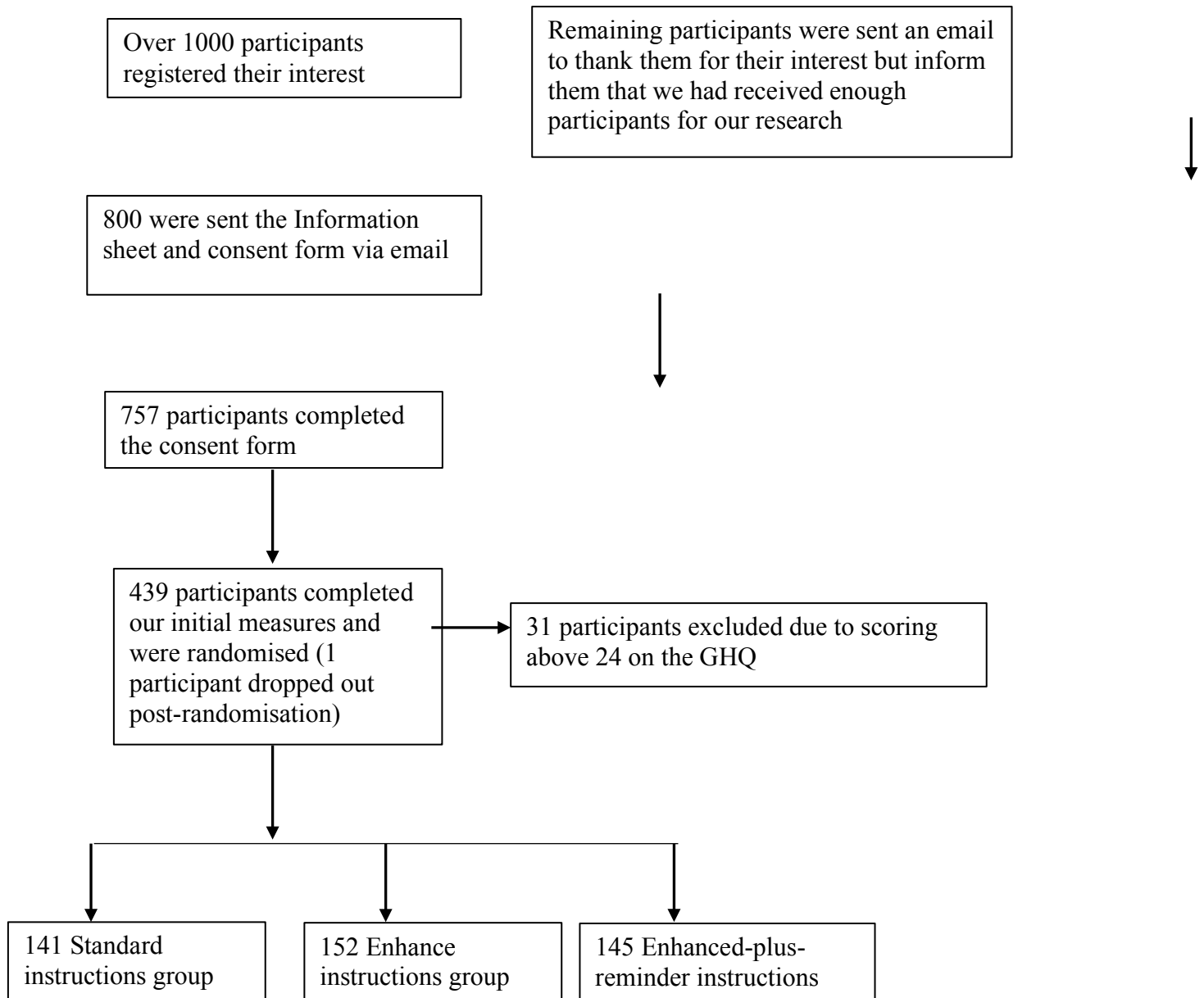|		
141 Standard instructions group	152 Enhance instructions group	145 Enhanced-plus-reminder instructions

Figure 2. Trial profile showing participant flow

Measures

To investigate the effect of the poetry course on the participants' wellbeing, we re-administered the GHQ-12 and WEMWBS the same day the poetry course ended and again two-weeks later. We believed that including a follow-up assessment would provide us with some estimate of the durability of the effectiveness of the course. All of the outcome measures were collected online using Qualtrics.

The WEMWBS (see Appendix VIII) was developed by an expert panel drawing on current academic literature, qualitative research with focus groups, and psychometric testing of an existing scale (Tennat et al. 2007). The scale asks positively-worded questions about different aspects of mental health. We decided to include a measure that focused on positive mental health as it enables the effects of w*ellbeing* to be nicely assessed since, as stated in the Introduction of this report, wellbeing is not solely the *absence* of psychological distress or illness. The WEMWBS consists of 14 items (e.g. I've been feeling cheerful), that participants rate on a 5-point scale (None of the time [1]; Rarely [2]; Some of the Time [3]; Often [4]; All of the Time [5]). The total score was the sum of the 14 items, whereby higher scores indicate better subjective wellbeing. The WEMWBS has good content validity (goodness of fit index = 0.91 and adjusted goodness of fit index = 0.87), good internal consistency (Cronbach's Alpha = 0.89 [for a student sample]; 0.91 [for a population sample]) and good test re-test reliability (0.83 ($p < 0.01$) (Tennant et al, 2007). For our sample, Cronbach's α was .93 for the pre-intervention WEMBWS data, .94 for the post-intervention WEMBWS data and .94 for the follow-up WEMBWS data.

The GHQ-12 (see Appendix IX) is used extensively as a screening instrument for common mental disorders as well as for more general measure of psychiatric wellbeing, largely amongst non-psychiatric populations and community settings (María del Pilar Sánchez-

López, 2007). One large appeal of the GHQ-12 is that is brief, simple and easy to complete. The questionnaire is comprised of 12 items, aimed to assess the individual's current state and whether it differs from their usual state. It does this by asking the respondent whether they have experienced a particular symptom or behavior recently (e.g. have you recently been able to enjoy your normal day to day activities?), using a four-point rating scale: less than usual, no more than usual, rather more than usual, or much more than usual. We scored our GHQ-12 responses using Likert scoring (0-1-2-3). The total score is the sum of all 12 items, whereby higher scores indicate more distress.

The internal consistency of the GHQ-12 is good (Cronbach's Alpha ranges from 0.82 to 0.86), as is its validity; correlational analysis of GHQ-12 and global quality of life scores produce a significantly negative correlation ($r = -0.56$, $P < 0.0001$) (Montazeri et al, 2003). For our sample, Cronbach's α was .91 for the pre-intervention GHQ data, .87 for the post-intervention GHQ data, and .87 for the follow-up GHQ data.

Finally, the compliance questionnaire (Appendix X) that was administered at the end of the intervention assessed how many days, out of the 10, they managed to complete the poetry reading exercise and whether they intended to continue to read poetry for the coming weeks.

Poetry Reading Online Course

Once participants had been randomised, an email was sent to the participants in each condition (see Appendix XI) to welcome them to the course and inform them of their reading instructions.

The **standard** reading-instructions were as follows:
Your reading instructions are identical to those who would have followed during the ReLit course. You are required to simply read the poems, as you normally would, each day that they are allocated to you.

The **enhanced** reading-instructions were as follows:
Your reading instructions require you to create mental images in your mind while you are reading the poems. The particular mental images are up to you but they should be based on the content of the poems, relating the poem to your own life and aspirations. Particularly focus of creating images that suggest to you a feeling of personal wellbeing.

The **enhanced-plus-reminder** reading-instructions were as follows:
Your reading instructions have two parts;

1)   While you are reading each day's poem, we would like to ask you to create mental images in your mind. The particular mental images are up to you but they should be based on the content of the poems, relating the poem to your own life and aspirations. Particularly focus of creating images that suggest to you a feeling of personal wellbeing.

2)   During the next day, we'd like you to make a point of briefly pausing what you are doing several times during the day so that you can intentionally recall the images and any linked sense of wellbeing that you created while reading the previous day's poem. You may want to make a particular point of trying this at time when you feel particularly stressed or rushed.

For each day of the ten-day course, the participants were asked to read a specified poem, chosen by Professor Sir Jonathan Bate. The poems were sent by email each day and were also made available on the ReLit website (https://relit.org.uk/). The email sent on the last day of the course also included a Qualtrics link to the GHQ-12, WEMWBS and a compliance questionnaire. Two-weeks after the end of the course, the GHQ-12, WEMWBS were administered for a final time, again using a Qualtrics link.

Statistical Analyses

Statistical analyses were performed using SPSS (v24: SPPS Inc., Armonk, NY).

Preliminary Analysis

We conducted a series of tests to confirm that there were no significant baseline differences between the participants in each of the three conditions. Three one-way ANOVAs were used to check for differences in terms of our continuous variables (age and wellbeing scores) and three Chi-square tests were used to check for baseline differences in terms of our remaining discrete variables (gender, whether they had formally studied English literature, and their most advanced educational qualification).

Primary Analysis

Next, we used multi-level modelling to assess changes across time and differences in the pattern of this change for our three conditions. We conducted separate multilevel models for GHQ-12 and WEMWBS scores. Multilevel modelling was chosen because it has a characteristic of using all the available data (in comparison to an ANOVA).

In a multilevel model the intercept gives you the average mean score at time point 0 and the slope gives you the expected change at one time interval. Another strength of multilevel modelling is that the intercept and the slope can be specified randomly which means that the intercept is allowed to vary between participants and participants are allowed to have different slopes. To find the best model fit, we conducted a series of likelihood ratio tests using the top-down approach according to Long (2012).

Supplementary Analysis

As the GHQ-12 is a clinical measure but was being used in our study to assess a non-clinical population, we expected that lots of participants would have low scores on the GHQ-12 at the pre-intervention assessment. Considering that a higher score on the GHQ-12 is associated with greater distress, a low starting score provides little scope to show further reductions. For this reason, it was decided that further multi-level modelling analysis of the GHQ-12 would split the participants according to whether they scored above (or equal to) or below the median (13) at baseline determine whether the pattern of change differed between these two sub-groups (note that from this point onwards the sub-group of participants who scored above (or equal) to the median (13) at baseline will be referred to as the "above sub-group" and those who scored below this median will be referred to as the "below sub-group").

Since the WEMBWS is not a clinical measure, a ceiling effect was not expected, and so it was not necessary to dichotomise this data.

Results

To test for significant differences between the three conditions in terms of age, GHQ scores and WEMBWS scores, we conducted three one-way ANOVAs. As expected, neither age F (2,411) = 0.40, p =.67, GHQ score $F(2,425)$ = 1.42, p =.242, nor WEMBWS scores $F(2,427)$ = 0.86, p = .41, differed significantly between our three conditions (see Table 1 for the means and standard deviations of this data).

Table 1
Means and (standard deviation) for age, GHQ and WEMBWS scores at baseline

Variable	Standard condition (n = 141)	Enhanced condition (n = 152)	Enhanced-plus-reminder condition (n = 145)	Statistic comparing the three conditions (F value)	P-value
Age	56.68 (14.13)	55.21 (13.93)	56.17 (13.53)	$F(2,411)$ = 0.40	p =.669
GHQ	13.23 (0.49)	13.92 (0.47)	14.39 (0.48)	$F(2,425)$ = 1.42	p = .242
WEMWBS	47.14 (8.46)	47.00 (8.72)	45.96 (7.43)	$F(2,427)$ = 0.89	p = .413

None of our chi-square tests were significant. Gender did not differ between the three conditions, $\chi^2(6)$ = 12.18, p = .058, although we note that it approached significance. There were no differences based on whether English literature had been studied formally, $\chi^2(4)$ = 8.43, p=.077, nor based on the most advanced educational qualification, $\chi^2(8)$ = 6.08, p = .639 (see Table 2 for means and standard deviations of this data). Therefore, none of the conditions significantly differed for any baseline characteristic.

Table 2

Gender, whether english literature had been studied formally, and most advanced educational qualification information

Variable	Standard condition (n = 141)	Enhanced condition (n = 152)	Enhanced-plus-reminder condition (n = 145)	Statistic comparing the three conditions (χ^2 value)	P-value
Gender					
Female	84.4%	83.6%	91.7%	12.175	.058
Male	11.3%	15.1%	6.2%		
Eng. Lit.					
Yes	77.3%	88.8%	80.7%	8.43	.08
No	18.4%	10.5%	16.6%		
Most advanced ed qualification					
A-level	8.5%	6.6%	8.3%	6.08	.64
GCSE	7.8%	3.9%	4.1%		
Undergrad	37.6%	46.1%	42.1%		
Postgrad	41.8%	41.4%	43.4%		

Assumptions for linear mixed modelling were tested. Linearity of the residuals was confirmed for GHQ-12 and WEMBWS scores. Homogeneity of variances for the random effects was confirmed for WEMBWS scores only. It was considered that homogeneity of variances was not satisfied for GHQ-12 due to the fact that the GHQ-12 is a clinical measure used in our research to test a non-clinical sample. Lastly, the assumption of multivariate normality for using Maximum-Likelihood estimation was not fulfilled. Transformation of the scores was not done to keep models more interpretable, and the estimation method was not changed in order to be able to conduct Likelihood-Ratio-Tests for model comparisons.

The first multilevel model investigated the effect of time and of the interaction effect between time and condition for GHQ-12 scores. A significant main effect of time was found, $b(SE)$ = -1.48 (.43), t = -3.45, p = <.001, with mean GHQ-12 scores decreasing at each time-point, indicating improved wellbeing for all three conditions (see Table 3 for the means and

standard deviations of this data). No significant interaction effect between time and condition was found, $b(SE) = .063$ (.079), $t = 0.801$, $p = .424$, meaning the condition did not differ in their rate of change in GHQ-12 scores over time.

Table 3
Means and (standard deviations) for GHQ scores at each time point for each condition

Assessment	Condition			
	Standard n, x̄ (SD)	Enhanced n, x̄ (SD)	Enhance-plus-reminder n, x̄ (SD)	For all three | x̄ (SD)
Pre (n = 428)	137, 13.23 (5.69)	149, 13.92 (5.78)	142, 14.39 (5.74)	13.85 (5.75)
Post (n = 384)	121, 8.76 (4.49)	136, 9.86 (4.65)	127, 9.80 (5.06)	9.49 (4.76)
2-week follow-up (n =344)	119, 9.45 (5.04)	111, 9.71 (4.31)	114, 10.42 (5.65)	9.86 (5.04)
Pre-to-post effect size	$d = 0.87$	$d = 0.77$	$d = 0.85$	$d = 0.83$
Pre-to-follow-up effect size	$d = 0.70$	$d = 0.83$	$d = 0.70$	$d = 0.74$
Post-to-follow-up effect size	$d = -0.15$	$d = 0.03$	$d = -0.07$	$d = -0.08$

Likelihood ratio tests were conducted to determine the model which gives the best fit. We found that the model with only time as fixed and random gave the best model fit, b $(SE) = -2.00$ (.14) $t = -13.81$, $p = <.001$.

We also conducted a multilevel model using our dichotomised data to determine whether the pattern of change in wellbeing was different. We did not find this to have any effect and again found a significant main effect of time for both the above, b (SE) = -3.21 (.60) t = -5.35, p = <.001, and below, b (SE) = -0.77 (.38) t = -2.04, p = .043 sub-groups and no interaction between time and condition for neither the above sub-group, b (SE) = -0.09 (.27) t = -.34, p = .736 nor the below sub-group (b (SE) = 0.15 (.18) t = 0.85, p = .40 sub-groups (see Table 4 for the means and standard deviations of this data).

Table 4
Means and (standard deviations) for dichotmised GHQ scores at each time point for each condition for the a) Below Group and b) Above Group

a)

	Condition			
Assessment	Standard n, x̄ (SD)	Enhanced n, x̄ (SD)	Enhance-plus-reminder n, x̄ (SD)	For all three conditions| x̄ (SD)
Pre (n = 200)	69, 9.18 (2.32)	68, 9.11 (2.40)	63, 9.08 (2.34)	9.13 (2.34)
Post (n = 182)	60, 7.95 (3.45)	65, 7.51 (3.67)	57, 8.68 (3.10)	8.02 (3.44)
2-week follow-up (n =161)	51, 8.71 (3.91)	59, 7.81 (4.98)	51, 8.31 (2.50)	8.25 (3.98)
Pre-to-post effect size	d = -0.42	d = -0.52	d = -0.15	d = -0.38
Pre-to-follow-up effect size	d = -0.15	d = -0.33	d = -0.13	d = -0.27
Post-to-follow-up effect size	d = 0.21	d = 0.07	d = -0.3	d = 0.06

b)

	Condition			
Assessment	Standard n, x̄ (SD)	Enhanced n, x̄ (SD)	Enhance-plus-reminder n, x̄ (SD)	For all three conditions| x̄ (SD)
Pre (n = 228)	65, 17.92 (4.59)	81, 18.08 (4.21)	82, 17.99 (4.78)	18.00 (4.51)
Post (n = 202)	55, 10.45 (5.27)	74, 11.31(5.07)	73, 10.58 (5.74)	10.81 (5.36)
2-week follow-up (n =182)	53, 11.40 (5.27)	62, 10.98 (4.85)	67, 11.45 (6.17)	11.27 (5.44)
Pre-to-post effect size	$d = -1.51$	$d = -1.45$	$d = -1.41$	$d = -1.45$
Pre-to-follow-up effect size	$d = -1.32$	$d = -1.56$	$d = -1.19$	$d = -1.35$
Post-to-follow-up effect size	$d = 0.18$	$d = -0.07$	$d = 0.15$	$d = 0.09$

We then conducted a multilevel model to investigate the time effect and the interaction effect of time and condition on WEMWBS score. There was no interaction between condition and time, $b(SE) = 0.12$ (.18), $t = 0.66$, $p = .510$, meaning the condition did not differ in their rate of change in WEMWBS scores over time. However, there was a significant main effect of time, $b(SE) = 1.12$ (.39), $t = 2.91$, $p = .004$, which suggests that wellbeing increased

significantly over time for participants in all three conditions (see Table 5 for the means and standard deviations of this data).

Table 5

Means and (standard deviations) for WEMBWS scores at each time point for each condition

Assessment	Condition			
	Standard n, x̄ (*SD*)	Enhanced n, x̄ (*SD*)	Enhance-plus-reminder n, x̄ (*SD*)	For all three conditions| x̄ (*SD*)
Pre (n = 428)	137, 47.13 (8.46)	149, 47.00 (8.72)	144, 45.96 (7.43)	46.70 (8.22)
Post (n = 384)	122, 50.30 (8.48)	136, 49.65 (8.45)	129, 49.19 (7.68)	49.70 (8.20)
2-week follow-up (n =344)	118, 49.81 (8.65)	111, 50.20 (7.96)	116, 48.37 (8.11)	49.45 (8.27)
Pre-to-post effect size	*d* = 0.37	*d* = 0.31	*d* = 0.43	*d* = 0.37
Pre-to-follow-up effect size	*d* = 0.31	*d* = 0.34	*d* = 0.31	*d* = 0.33
Post-to-follow-up effect size	*d* = -0.06	*d* = 0.07	*d* = -0.10	*d* = -0.03

Likelihood ratio tests were conducted to determine the model which gives the best fit. We found that the model with only time as fixed effect and random intercept was the best fitting model, b (*SE*) = 1.36 (.14) t = 9.39, p = <.001.

Post-hoc analysis

We then plotted a histogram of our compliance measure (Figure 1). This measure is based on

participants being asked how many days out of the 10-day course they managed to complete the poetry task.
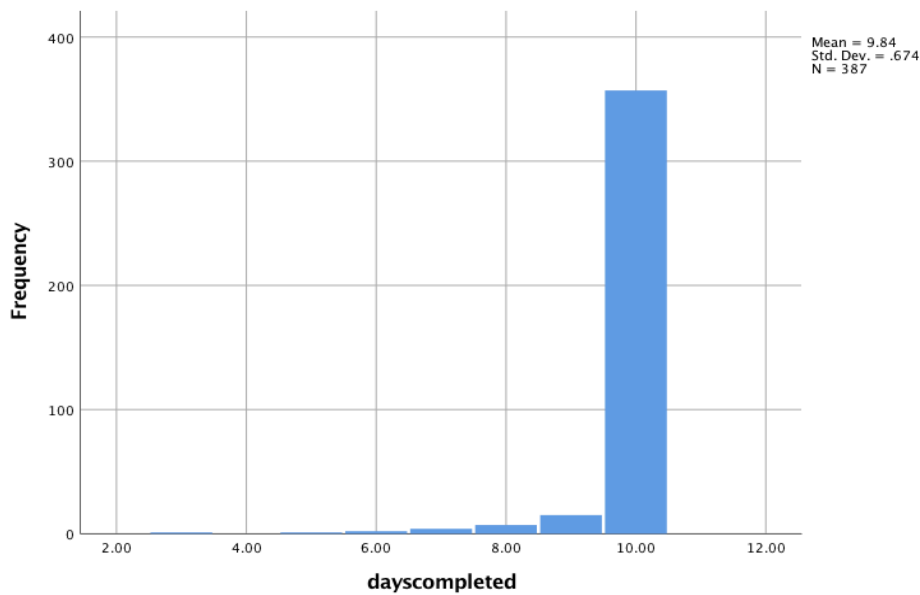
Compliance measure

Mean = 9.84
Std. Dev. = .674
N = 387

Figure 1. Histogram of number of days the participants reported managing to complete the poetry reading exercise.

The histogram showed that, 63.4% of participants reported managing to complete the task every day. Additionally, of those who responded to the question measuring compliance, 92.25% reported managing to complete the task every day. We then repeated our analyses selecting only the participants who reported 10 days compliance. We found this to make no difference to our key findings. The results again only showed a significant main effect of time on GHQ scores, *b(SE) = -1.6 (.48), t = -3.33, p < .001,* with no significant interaction between condition and time, *b(SE) = -1.85 (.23), t = -.82, p = .413* (see Table 6 for the means and standard deviations of this data).

Table 6

Means and (standard deviations) for GHQ scores at each time point for each condition but for fully compliant participants only

Assessment	Condition			
	Standard n, x̄ (*SD*)	Enhanced n, x̄ (*SD*)	Enhance-plus-reminder n, x̄ (*SD*)	For all three conditions| x̄ (*SD*)
Pre (n = 348)	137, 13.23 (5.69)	149, 13.92 (5.78)	142, 14.38 (5.74)	13.58 (5.75)
Post (n = 354)	121, 8.75 (4.49)	136, 9.86 (4.65)	127, 9.76 (2.66)	9.30 (4.72)
2-week follow-up (n =305)	118, 9.45 (5.04)	111, 9.71 (4.31)	114, 10.42 (5.65)	9.75 (4.94)
Pre-to-post effect size	*d* = -0.87	*d* = -0.77	*d* = -1.03	*d* = -0.81
Pre-to-follow-up effect size	*d* = -0.70	*d* = -0.83	*d* = 0.15	*d* = 0.09
Post-to-follow-up effect size	*d* = 0.15	*d* = -0.03	*d* = -0.70	*d* = -0.72

Additionally, a significant main effect of time, $b(SE) = 1.04 (0.40)$, $t = 2.59$, $p = < .010$, but no significant interaction between time and condition $b(SE) = 0.18 (.19)$, $t = 0.95$, $p = .344$, was found for the WEMBSW (see Table 7 for the means and standard deviations of this data).

Table 7

Means and (standard deviations) for WEMWBS scores at each time point for each condition but for fully compliant participants only

| | Condition | | | |
Assessment	Standard n, x̄ (*SD*)	Enhanced n, x̄ (*SD*)	Enhance-plus-reminder n, x̄ (*SD*)	For all three conditions| x̄ (*SD*)
Pre (n = 35-)	137, 47.14 (8.46)	149, 47.00 (8.72)	144, 45.96 (7.43)	46.91 (8.17)
Post (n = 357)	122, 50.30 (8.48)	136, 49.65 (8.45)	129, 49.19 (7.68)	49.87 (8.07)
2-week follow-up (n =307)	118, 49.81 (8.47)	111, 50.20 (7.96)	116, 48.37 (8.11)	49.57 (8.19)
Pre-to-post effect size	*d* = 0.34	*d* = 0.31	*d* = 0.43	*d* = 0.34
Pre-to-follow-up effect size	*d* = 0.32	*d* = 0.38	*d* = 0.31	*d* = 0.33
Post-to-follow-up effect size	*d* = -0.06	*d* = 0.07	*d* = -0.10	*d* = -0.04

We then analysed responses to the question "Do you think you will continue to read poetry for the coming weeks?", for which the available options to answer the question were: "Yes", "Possibly" and "No". The data was plotted in a histogram (see Figure 2).
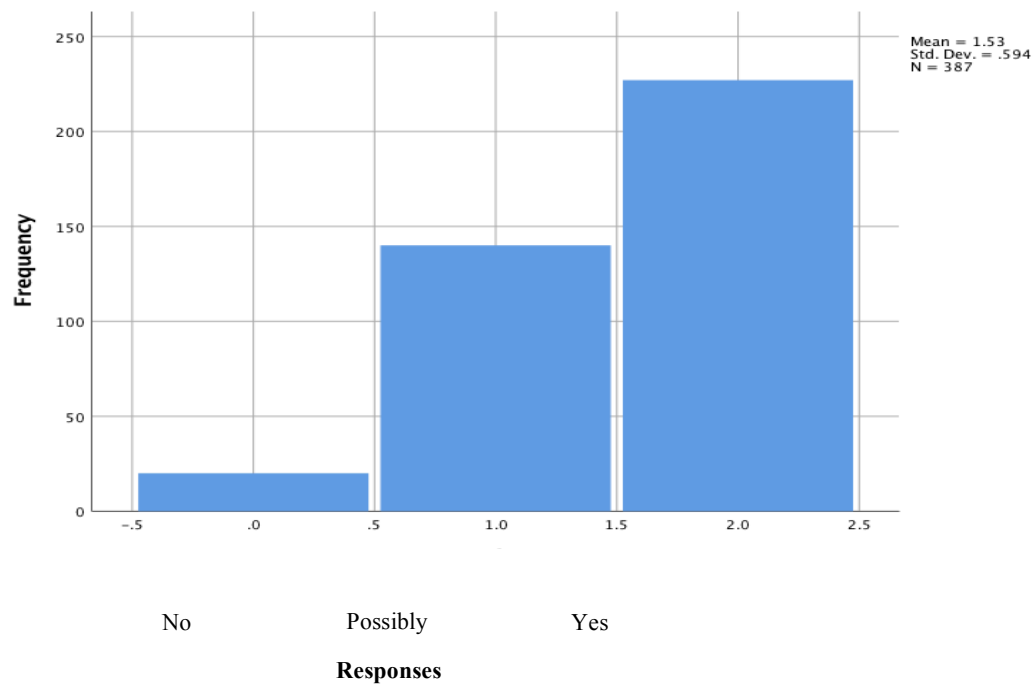
Likelihood of continuing

Figure 2. Histogram of responses to the question "Do you think you will continue to read poetry for the next coming weeks?"

The histogram showed that of those who responded to the question, 58.62% of participants said they would like to continue reading poetry and 41.38% responded with "possibly" or "no". Two independent t-tests were then conducted in order to investigate whether the pre-to-post assessment change differed amongst participants who responded "Yes" and those who responded "Possibly" or "No". A significant difference was found for both GHQ-12, t (376) $= 2.69$, $p = .045$, and WEMBWS scores, t (378) $= 2.81$, $p = .005$ (see Table 8 for the means and standard deviations of this data).

Table 8
Means, (standard deviations) and effect sizes for difference in both GHQ and WEMWBS scores between the pre-intervention assessment and the post-intervention for participants who responded "Yes" versus those who responded "Possibly" or "No"

	GHQ		WEMWBS	
	Yes n, x̄ (*SD*)	Possibly or No n, x̄ (*SD*)	Yes n, x̄ (*SD*)	Possibly or No n, x̄ (*SD*)
Pre	221, 13.80 (5.74)	157, 13.50, 5.76	223, 46.77 (7.90)	157, 46.83, 8.65
Post	224, 9.05 (4.39)	160, 10.11, 5.18	227, 50.27 (7.50)	160, 48.88, 9.07
Effect size	*d* = -0.93	*d* = -0.62	*d* = 0.45	*d* = 0.23

Discussion

Summary of the results

The current study aimed to investigate the effectiveness of bibliotherapy for improving wellbeing and whether different reading instructions would further these benefits. As expected, our results clearly demonstrate that poetry reading is beneficial for general wellbeing. After only ten days of daily poetry reading, participants showed a significant improvement in wellbeing, measured by the GHQ-12 and WEMBWS. This finding is consistent with the previous findings of Frieswijk et al (2006) and Latchem and Greenhalgh (2014). Additionally, it suggests that Holland et al's (2017) finding that bibliotherapy did not significantly improving wellbeing may have been due to inadequate sample size, the participants not being interested in literature and a student-only sample.

Moreover, the effectiveness of the bibliotherapy on wellbeing was maintained at our two-week follow-up measurement. This suggests that the positive effects of poetry reading are durable, even if the poetry reading is only performed for a short amount of time. However additional follow-up measures would be needed to investigate the extent of this durability.

No significant interaction effect between reading-instruction condition and time was found. This meant that the effect the poetry course did not differ significantly between our three conditions. This suggests, at least at face value, that none of our conditions helped to enhance the benefits of poetry reading more so than any other. We therefore have to reject our main hypothesis.

Lastly, we found that the majority of our participants managed to complete the task for all ten days of the course and also that the majority of our participants were interested in continuing to read poetry after the end of the course. As part of our post-hoc analyses, we separately looked at whether complete compliance or interest in continuing to read poetry had any effect on the effectiveness of the bibliotherapy. We did not find compliance to make any difference to our results. Contrastingly, we found the difference between pre-intervention and post-intervention assessment was greater for participants who responded "Yes" to whether they were likely to continue to read poetry than for participants who responded "Possibly" or "No", for both the GHQ-12 and the WEMWBS. The means revealed that this was in a positive direction for wellbeing for both measures. This suggests that when the course had been more effective, participants were more inclined to show interest in continuing to read poetry.

Interpretation of Findings

There are several possible explanations for the non-significant interaction effect of condition and time, aside from manipulating reading instructions failing to further enhance wellbeing. Firstly, although the wording of the reading instructions was careful considered, it is possible that the participants failed to understand their specified reading instructions. This would have of course prevented participants from adhering to them. All of the participants had an expressed interest in English literature and hence it is unlikely that a language barrier would have prevented understanding. Additionally, although the instructions were delivered online rather than face-to-face, participants were advised to contact the researcher should they have any doubt about what the reading instructions required of them. However, whilst some participants did this and were responded to, without any face-to-face interaction it cannot be known for certain whether all the participants correctly understood their reading instructions. As such, it may have been the case that not all of the participants were reading the poetry as the instructions intended. One way that future research could overcome this issue is to have pre-intervention meetings between the researcher(s) and small groups of participants; either in real life or virtually e.g. over skype.

Furthermore, a second explanation for the non-significant result is that variables which have been related to wellbeing, such as the hobbies of the participant were not controlled. Listening to music using particular strategies has been found to be significantly associated with psychological wellbeing (Laukka et al. 2006). Additionally, sports participation has been found to be positively associated with emotional wellbeing (Steptoe, 1996). Hence, perhaps the amount of music-listening and sports participation differed significantly amongst participants in each condition during the ten-day poetry course. This is likely to have affected our assessment of wellbeing improvement between each condition, in turn preventing a

significant interaction effect from being found. Future research should control for participants' hobbies, perhaps by including a question about hobbies in the basic-demographic-questionnaire and then again in the compliance questionnaire to ask how much the participated in their hobbies during the course.

A further area which lacked control in our research was the amount of poetry reading participants engaged in outside of the course. It is possible that some of the participants read additional poems to those assigned by the course. This should be controlled given that the study is based on the association between poetry reading and wellbeing enhancement (Frieswijk et al, 2006 and Latchem and Greenhalgh, 2014). Future research should therefore request participants to limit their poetry reading to the poems assigned by the course.

Moreover, the *main* focus of our study was not to investigate the effectiveness of bibliotherapy but to investigate the effect of different reading instructions.
We therefore did not regard it necessary to include a no-intervention control condition. However, given that we found wellbeing to improve for all three conditions, a fourth, no-poetry condition would have provided a control to test the prediction of the effect of poetry reading on wellbeing in a more stringent manner. This is because although our data certainly suggests a positive effect of poetry reading on wellbeing, it may have been the case that an alternative pathway mediated this relationship. For example, given that our participants were all people who had signed up to do something positive for their wellbeing perhaps it was the case that they were all in the right psychological framework for their wellbeing to improve in upcoming weeks and engaged in other (wellbeing enhancing) activities aside from the course during this time. Hence, ideally, we would have had a control condition made up of participants who volunteered for the study but were assigned to a non-intervention control

condition. Nevertheless, as already stated our main interest was in regard to the effect of different poetry reading instructions and thus the control condition for this part of the research investigation was the standard-instruction reading condition; used to evaluate the effectiveness of manipulating reading. However, it is possible that our standard-instruction condition did not provide the baseline measurement that was intended. Creating mental images whilst reading poetry is a common reading technique, and hence, although it was not a requirement of the standard reading instructions, it is possible that participants in the standard condition created mental images anyway. Hence, although the mental imagery component of the enhanced and enhanced-plus-reminder instructions were more specified than to create general mental images, without a non-mental-imagery control it is difficult to evaluate the effectiveness of the reading instruction manipulation.

Control for this in future research would be difficult considering that specifically instructing participants to *not* create any mental images when reading the poetry would only create an ironic process (Wegner and Schneider, 2003). However, future research could attempt to deal with this issue by adding more elaborate and specified elements to the mental-imagery component of the manipulated reading instructions as this would accentuate the difference between the manipulated reading instruction experimental condition and the standard reading instructions control condition. Additionally, this issue could be addressed by the compliance questionnaire also asking participants if they created mental images whilst reading the poetry. This would also help infer whether participants understood their reading instructions as hopefully more people in the enhanced and enhanced-plus-reminder conditions would report creating mental images than those in the standard condition, even if people in the standard condition also reported creating mental images.

Implications of the research findings

As aforementioned, the majority of our participants reported that they were likely to continue to read poetry after the course had ended. Additionally, participants were more likely to show interest in continuing to read poetry when the course had been more effective. This suggests that participants, particularly those for which the course had been more effective, but also those for which the course had been less effective, responded positively to the poetry course and considered it realistic and manageable to continue to integrate it into their lives. This is a wonderful endorsement for bibliotherapy and so should hopefully encourage attention, recourses and funding for developing different bibliotherapy courses.

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Appendix I

Email sent from Jonathan Bate

DEPARTMENT OF EXPERIMENTAL PSYCHOLOGY
15 Parks Road, Oxford, OX1 3PH

Professor Kia Nobre
Head of Department

Reception: +44 1865 271444   Fax: +44 1865 310447

Letter from Professor Sir Jonathan Bate inviting potential participants to take part in the research

Dear X,

I hope you enjoyed the online ReLit course you completed earlier this year.

We are always looking at potential ways of improving the course. One current interest concerns the instructions we provide for reading the poems. It is possible that certain instructions might be more effective than others in enhancing people's sense of wellbeing and enjoyment as they work through the course. A psychology student (Lucy Helfgott) at Oxford University is conducting a research study to explore this possibility. I am writing to invite you to take part in the study.

If you decide to participate, you will be provided with a new selection of poems that I have personally chosen. You will receive one poem each day for ten days. We'd like you to read

through and enjoy each day's poem. There are three different sets of reading instructions. You will be randomly allocated to one of the three sets of instructions. To assess whether the instructions make a difference, you will be asked to complete short, confidential questionnaires covering wellbeing and stress at the beginning of the study and on three further occasions.

If you think you might like to participate, please contact Lucy Helfgott (the student who will be leading the research) by email at lucy.helfgott@pmb.ox.ac.uk   Lucy will provide you with further details and can set you up with access to the website, if you decide to join the study.

Yours sincerely,
Professor Sir Jonathan Bate CBE
Provost, Worcester College, Oxford

Appendix II

Email from the researcher, sent to those who responded to Jonathan's email to express their interest

DEPARTMENT OF EXPERIMENTAL PSYCHOLOGY
15 Parks Road, Oxford, OX1 3PH

Professor Kia Nobre
Head of Department

Reception: +44 1865 271444   Fax: +44 1865 310447

Dear _____

Thank you for expressing interest in my study on poetry reading and wellbeing. We intend to investigate whether different ways of reading poetry can enhance the potential psychological benefits of poetry reading. In particular, do certain ways of reading have a more marked effect on people's sense of wellbeing and reduced stress?

Please take some time to read the attached participant information sheet which outlines the study in more detail. After reading the information sheet you will need to fill out the attached consent form electronically and email it back to me. Once you have emailed me your consent form we are ready to begin the study!

Please note that this is not a formal mental health intervention. It simply aims to help enhance general wellbeing and improve stress-management. If you feel that you might need psychological support for mental health difficulties, we recommend that you book an appointment with your local General Practitioner who will be able to advise and make any appropriate referral.

Lucy Helfgott

Information Sheet

DEPARTMENT OF EXPERIMENTAL PSYCHOLOGY
15 Parks Road, Oxford, OX1 3PH

Professor Kia Nobre
Head of Department

Reception: +44 1865 271444   Fax: +44 1865 310447

Effectiveness of daily poetry reading for enhancing general wellbeing

PARTICIPANT INFORMATION SHEET

Student researcher: Lucy Helfgott (3rd Year Experimental Psychology Undergraduate)
Supervisor: Professor David M Clark.

We are looking for people who have already completed the ReLit poetry reading course to take part in our study investigating whether changing the poetry reading instructions can help to enhance further the potential benefits that the poetry reading provides. Before you agree to take part in the study, it is important that you know the purpose of this research and what it involves. Please take the time to carefully read the following information, which will give you an idea of what is involved and what your role as a participant will be if you choose to take part. If you have any questions or concerns, please do not hesitate to contact me (lucy.helfgott@prmb.ox.ac.uk).

1. Background and aims of the study

The proposed study aims to investigate the effectiveness of daily poetry reading on general wellbeing and stress levels. Given the relative ease of incorporating poetry reading into one's

day (low cost and time commitment), I believe it is of interest to investigate its effect on wellbeing and stress, something that affects a large proportion of the population. We aim to understand better the way in which moderating the instructions of a poetry reading task can help to further enhance the psychological benefits of the task

2. Why have I been invited to take part?

You have been invited because you are on the email list of people who have completed the ReLit poetry reading course and we understand that you have agreed to be contacted regarding future research studies. To participate in this study you need to be over 18 years old.

3. Do I have to take part?

No – we hope you are interested in taking part, but your participation in the study is completely voluntary. If you wish to ask any questions before deciding whether to take part, feel free to contact me (lucy.helfgott@prmb.ox.ac.uk). Even if you agree to take part and then decide that you not longer want to be a part of the study, then you can withdraw yourself and your data from the study without penalty (academic or otherwise), at any time and without providing a reason, by advising the researcher. You can also decline any question you do not wish to answer without penalty.

4. What will happen in the study?

If you are happy to take part, I will email you a short demographics questionnaire to find out a little more about yourself and your interests. I will then send over the poetry reading instructions, along with login details for you to gain online access to the poems for each day of the 10-day course. You will then be expected to follow the instructions, which involve reading the poems in a particular way for each day of the course, accessing them online, using the login details you will have been sent. The duration of the poetry task will depend on the instructions given and the pace at which the participant reads the poem. However, it should roughly take between 10 and 20 minutes to complete the poetry task each day. Before starting the course, you will be required to fill out two online measures of wellbeing; the General Health Questionnaire (GHQ-12 - Goldberg & Williams, 1988), a well validated general measure of distress and the Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al. 2007), a measure of wellbeing developed by Warwick and Edinburgh universities. The pair of questionnaires will take roughly 10 minutes to complete. You will also be asked to complete these questionnaires midway through the intervention (on the 5th day of the intervention) as well as at the end of the intervention (10th day) and finally, 2 weeks after you have officially finished the course. At the end of the course you will be asked to complete a short questionnaire which assess how often you did the poetry reading exercise.

5. Are there any potential risks in taking part?

Given the fact that our participants will have recently completed a poetry reading course, we feel it is unlikely that they are going to experience any problem with the study, such as

finding the demands of the course too much for them to handle. However, if you do have any concerns, the researcher (Lucy Helfgott) will be happy to discuss these with you either before, during or after the study and you are also welcome to talk to Prof. David Clark (Project Supervisor).

6. *Are there any benefits to taking part?*

By taking part you will be contributing to our increased understanding of how poetry reading, a very simple and inexpensive activity, can potentially act as a very useful stress-management technique and may improve wellbeing. Additionally, whilst taking part in the study, you may yourself learn how poetry reading can help you achieve a better sense of wellbeing.

7. *What happens to the data provided?*

Your data will be accessed only by members of the research team and is treated as strictly confidential. Since the outcome measures are online, the data will be stored using a computer database software called Qualtrics. Qualtrics is operated in a secure environment by the Department of Experimental Psychology. The data you provide will be anonymised (i.e. your name and other identifying information will be removed) for the purpose of analysis. In this datafile, individuals will only be identified by an experiment ID number, with the code linking ID numbers to individuals will be stored separately from the datafiles and be fully encrypted. The anonymised data will be used in the write-up of my research project as part of my psychology undergraduate degree course at the University of Oxford. In accordance with normal research practice, data from the study will be securely stored for a period of 5 years after completion of the study.

8. *Will the research be published?*

This research is being conducted as part of an undergraduate project.

The University of Oxford is committed to the dissemination of its research for the benefit of society and the economy and, in support of this commitment, has established an online archive of research materials. This archive includes digital copies of student theses successfully submitted as part of a University of Oxford postgraduate degree programme. Holding the archives online gives easy access for researchers to the full text of freely available theses, thereby increasing the likely impact and use of that research.

If you agree to participate in this study, the research will be written up as a thesis. On successful submission of the thesis, it will be deposited both in print and online in the University archives, to facilitate its use in future research. The thesis will be published in open access.

9. *Who has reviewed this project?*

This study has been reviewed by and received ethics clearance through, the University of Oxford Central University Research Ethics Committee.

10. Who do I contact if I have a concern about the study, or I wish to complain?

If you have a concern about any aspect of this project, please speak to the relevant researcher (lucy.helfgott@prmb.ox.ac.uk) or supervisor (david.clark@psy.ox.ac.uk) who will do her/his best to answer your query. The researcher should acknowledge your concern within 10 working days and give you an indication of how she/he intends to deal with it. If you remain unhappy, or wish to make a formal complaint, please contact the chair of the Research Ethics Committee at the University of Oxford (using the contact details below) who will seek to resolve the matter in a reasonably expeditious manner:

Chair, Medical Sciences Inter-Divisional Research Ethics Committee
Email: ethics@medsci.ox.ac.uk
Address: Research services, University of Oxford, Wellington Square, Oxford, OX1 2JD

11. Further information and contact details

If you would like to discuss the research with someone beforehand (or if you have a question afterwards), please contact:

Lucy Helfgott
Department of Experimental Psychology.
University of Oxford
OxCADAT
The Old Rectory
Paradise Square
Oxford
OX1 1TW.
Tel: 07454 815162
Email: lucy.helfgott@prmb.ox.ac.uk

Appendix IV

Consent Form

DEPARTMENT OF EXPERIMENTAL PSYCHOLOGY
15 Parks Road, Oxford, OX1 3PH

Professor Kia Nobre
Head of Department

Reception: +44 1865 271444   Fax: +44 1865 310447

PARTICIPANT CONSENT FORM

CUREC Approval Reference:

Effectiveness of daily poetry reading for enhancing general wellbeing

Purpose of Study: The purpose of this study is to investigate the effectiveness of poetry reading on improving wellbeing and reducing stress levels. This is of great interest due to the time efficient and cost effective nature of poetry reading as well as the number of people such a cheap and quick stress-reducing strategy could help.

Please initial each box

1   I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2   I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, and without any adverse consequences or academic penalty.

3   I understand that research data collected during the study may be looked at by designated individuals from the University of Oxford where it is relevant to my taking part in this study. I give permission for these individuals to access my data.

4   I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee.

5   I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project.

6   I understand how this research will be written up and published.

7   I understand how to raise a concern or make a complaint.

8   I agree to take part in the above study.

(optional)

9   I agree for my personal data to be kept in a secure database for the purpose of contacting me about future studies.

_____   _____   _____
Name of Participant   Date   Signature

Name of person taking consent   Date

Researchers
Lucy.helfgott@pmb.ox.ac.uk
David Clark. david.clark@psy.ox.ac.uk
Joanthan Bate. provost@worc.ox.ac.uk

Appendix V

Email sent to participants who had expressed interest in the research but this was after we had already recruited a large and sufficient number of participants

Subject: Poetry reading study

Dear X,

Thank you for your email. We are sorry that we were not able to include you in our study of poetry reading. A very large number of people kindly volunteered and we quickly filled the quota of places in the study. However, we are very grateful for your willingness to have been included in the study. Everyone in the study was given access to 10 poems that had been specially selected by Jonathan Bate. If you would like to see the poems and read through them in your own time, you will find them at the following web-link: https://relit.org.uk/trial

We hope you enjoy the poems and once again thank you for your kindness in volunteering.

Best wishes,
Lucy

Appendix VI

Email to administrate the baseline demographic questionnaire and two wellbeing measures

Dear Volunteer,

Thank you for returning the consent form for our study. We are delighted that you have kindly agreed participate.

The study will run for 10 days, starting on Sunday 19th November and ending on Tuesday 28th November. If you think you will be unable to complete the brief (10 minutes) poetry task on any one of these days, could you please alert me as it is essential that everyone included in the study is able to commit to the full 10-day programme.

Assuming you are able to join us for the full 10 days, you will shortly receive a set
of instructions outlining how we would like you to read each day's poem. Before I send you
the instructions, I would be grateful if you would complete the electronic questionnaire that
can be accessed from the first link below. It covers basic demographic information that is
needed for the study. Please could you also complete the two wellbeing
assessment questionnaires from the last two links below. They should only take a few
minutes to complete in total and completion of all 3 of them is essential for participation in
the research.

Please access the links and complete the 3 questionnaires as soon as possible.

Link for Basic Demographic Questionnaire:
https://oxfordxpsy.az1.qualtrics.com/jfe/form/SV_42eoozNhDvuy0i9

Link for Wellbeing Questionnaire 1 (Warwick-Edinburgh Mental Wellbeing Scale):
https://oxfordxpsy.az1.qualtrics.com/jfe/form/SV_6MxVGAJ8KcHETGJ

Link for Wellbeing Questionnaire 2 (GHQ-12):
https://oxfordxpsy.az1.qualtrics.com/jfe/form/SV_8wy4GgU1QYjR6F7

All best wishes,
Lucy Helfgott

Appendix VII

Basic Demographic Questionnaire

Basic Demographic Information Questionnaire (final version will be administered online
using Qualtrics)

Thank you for agreeing to participate in our study. We will shortly be sending you login
details for the novel 10 day poetry reading course that you are entitled to. Before we do that,
could we ask you to provide some basic info about yourself by answering the following
questions:

1. What is your gender? (please circle your answer)
   o Male
   o Female
   o Prefer not to say
   o Other

2. How old are you? _____

3. What is your most advanced education qualification?

- o GCSE
- o A-level
- o Undergraduate Degree
- o Postgraduate Degree

4. Have you ever studied English literature formally?
- o Yes
- o No

Appendix VIII

Warwick-Edinburgh Mental Health Scale

How happy are you? Good mental wellbeing (some people call it happiness) is about more than avoiding mental health problems. It means feeling good and functioning well. This tool uses WEMWBS, a scale which is often used by scientists and psychologists to measure wellbeing. Please go through the following statements and tick the box that best describes your thoughts and feelings over the last two weeks.

1. I've been feeling optimistic about the future
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

2. I've been feeling useful
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

3. I've been feeling relaxed
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

4. I've been feeling interested in other people
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

5. I've had energy to spare
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

6. I've been dealing with problems well
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

7. I've been thinking clearly
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

8. I've been feeling good about myself
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

9. I've been feeling close to other people
   - None of the time
   - Rarely
   - Some of the time
   - Often
   - All of the time

10. I've been feeling confident
    - None of the time

- ▪ Rarely
- ▪ Some of the time
- ▪ Often
- ▪ All of the time

11. I've been able to make up my own mind about things
- ▪ None of the time
- ▪ Rarely
- ▪ Some of the time
- ▪ Often
- ▪ All of the time

12. I've been feeling loved
- ▪ None of the time
- ▪ Rarely
- ▪ Some of the time
- ▪ Often
- ▪ All of the time

13. I've been interested in new things
- ▪ None of the time
- ▪ Rarely
- ▪ Some of the time
- ▪ Often
- ▪ All of the time

14. I've been feeling cheerful
- ▪ None of the time
- ▪ Rarely
- ▪ Some of the time
- ▪ Often
- ▪ All of the time

Appendix IX

General Health Questionnaire - 12

Please read the questions below and each of the four possible answers. Select the response that best applies to you.

1. Have you recently been able to concentrate on what you're doing?
- ▪ Better than usual
- ▪ Same as usual
- ▪ Less than usual
- ▪ Much less than usual

2. Have you recently lost much sleep over worry?
- ▪ Not at all
- ▪ Not more than usual

- Rather more than usual
- Much more than usual

3. Have you recently felt that you are playing a useful part in things?
   - More so than usual
   - Same as usual
   - Less so than usual
   - Much less than usual

4. Have you recently felt capable of making decisions about things?
   - More so than usual
   - Same as usual
   - Less than usual
   - Much less than usual

5. Have you recently felt constantly under strain?
   - Not at all
   - No more than usual
   - Rather more than usual
   - Much more than usual

6. Have you recently felt you couldn't overcome your difficulties?
   - Not at all
   - No more than usual
   - Rather more than usual
   - Much more than usual

7. Have you recently been able to enjoy your normal day to day activities?
   - More so than usual
   - Same as usual
   - Less to than usual
   - Much less than usual

8. Have you recently been able to face up to your problems?
   - More so than usual
   - Same as usual
   - Less so than usual
   - Much less than usual

9. Have you recently been feeling unhappy or depressed?
   - Not at all
   - No more than usual
   - Rather more than usual
   - Much more than usual

10. Have you recently been losing confidence in yourself?
    - No at all
    - No more than usual
    - Rather more than usual
    - Much more than usual

11. Have you recently been thinking of yourself as a worthless person?
    - Not at all

- No more than usual
- Rather more than usual
- Much more than usual

12. Have you recently been feeling reasonably happy, all things considered?
- More so than usual
- Same as usual
- Less so than usual
- Much less than usual

Appendix X

Compliance Questionnaire

Compliance Questionnaire
Sent at the end of the 10 day intervention period

Thank you so much for taking part in our study into poetry and wellbeing. We would just like to ask you a few quick questions about your experience of the study over the past 10 days. Please answer them as honestly as possible.
These questions will only take you a few minutes to answer.

1. Which poetry reading instruction group were you assigned to? (circle your answer)
- Standard
- Enhanced
- Enhanced and Reminder

2. How many days, out of the 10, did you manage to complete the poetry reading exercise?

    _____

3. Do you think you will continue to read poetry for the next coming weeks? (circle your answer)
- Yes
- No

Appendix XI

Welcome email

Email send to participants in the standard instructions group

Dear all,

The course begins on Sunday 19th November and will run each day for the next 10 days, ending on Tuesday 28th November. You will be able to access the poem from the ReLit website (https://relit.org.uk/trial/sunday-19th). To access the next day, hover your mouse over the 'trial' section from the bar at the top and a drop-down menu should appear. We have not restricted access of all the poems, however, I expect you to only read the poem that is intended for that day. If you read ahead it might spoil my results!

I will also be emailing you the poem each day, along with a friendly reminder to read it.

I would now like to briefly explain the exercise. Please read the below instructions carefully. Don't worry, it's not too complicated. In any case - if you have questions, do not hesitate to contact me [lucy.helfgott@pmb.ox.ac.uk].

Your reading instructions are identical to those who would have followed during the ReLit course. You are required to simply read the poems, as you normally would, each day that they are allocated to you

Kind regards,
Lucy

Email send to participants in the enhanced instructions group
Dear all,

The course begins on Sunday 19th November and will run each day for the next 10 days, ending on Tuesday 28th November. You will be able to access the poem from the ReLit website (https://relit.org.uk/trial/sunday-19th). To access the next day, hover your mouse over the 'trial' section from the bar at the top and a drop-down menu should appear. We have not restricted access of all the poems, however, I expect you to only read the poem that is intended for that day. If you read ahead it might spoil my results!

I will also be emailing you the poem each day, along with a friendly reminder to read it.

I would now like to briefly explain the exercise. Please read the below instructions carefully. Don't worry, it's not too complicated. In any case - if you have questions, do not hesitate to contact me [lucy.helfgott@pmb.ox.ac.uk].

We would like to ask you to create mental images in your mind while you are reading the poems. The particular mental images are up to you but they should be based on the content of the poems, relating the poem to your own life and aspirations. Particularly focus of creating images that suggest to you a feeling of personal wellbeing

Kind regards,
Lucy

Email send to participants in the enhanced-plus-reminder instructions group

Dear all,

The course begins on Sunday 19th November and will run each day for the next 10 days, ending on Tuesday 28th November. You will be able to access the poem from the ReLit website (https://relit.org.uk/trial/sunday-19th). To access the next day, hover your mouse over the 'trial' section from the bar at the top and a drop-down menu should appear. We have not restricted access of all the poems, however, I expect you to only read the poem that is intended for that day. If you read ahead it might spoil my results!

I will also be emailing you the poem each day, along with a friendly reminder to read it.

I would now like to briefly explain the exercise. Please read the below instructions carefully. Don't worry, it's not too complicated. In any case - if you have questions, do not hesitate to contact me [lucy.helfgott@pmb.ox.ac.uk].

Your reading instructions have two parts;

1)   While you are reading each day's poem, we would like to ask you to create mental images in your mind. The particular mental images are up to you but they should be based on the content of the poems, relating the poem to your own life and aspirations. Particularly focus of creating images that suggest to you a feeling of personal wellbeing.

2)   During the next day, we'd like you to make a point of briefly pausing what you are doing several times during the day so that you can intentionally recall the images and any linked sense of wellbeing that you created while reading the previous day's poem. You may want to make a particular point of trying this at time when you feel particularly stressed or rushed.

Kind regards,
Lucy