



# A Volunteer-Run, Face-to-Face, Early Intervention Service for Reducing Suicidality

## A Service Evaluation of The Listening Place

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**Abstract.** *Background:* Befriending is one of many strategies with the potential to reduce suicidal ideation and decrease the risk of suicide. *Aims:* To measure change in suicidal ideation and behavior among visitors (service users) supported at The Listening Place (TLP), a charity which offers volunteer-run, face-to-face befriending to people who are suicidal. *Method:* This study was peer reviewed and preregistered on the Open Science Framework prior to data extraction. Anonymized data were extracted for visitors at the point of referral and after 3 months of receiving support. Paired-sample tests were used to test whether self-reported suicidal ideation and behaviors changed after 3 months of support from TLP. Multivariable regressions were used to test whether change in suicidal feelings was associated with demographic characteristics or baseline self-reported suicidality. *Results:* TLP received 13,938 referrals from July 2016 to February 2022. Self-reported suicidal ideation, suicidal behavior, and feelings of distress decreased after 3 months, while feelings of support increased. Only self-reported suicidal behavior prior to referral was associated with a lesser reduction in self-reported suicidality after 3 months. *Limitations:* In the absence of a control group, it cannot be concluded that TLP causes the reduction in self-reported suicidality. *Conclusions:* An empathetic, nonjudgmental, listening service for people who are feeling suicidal was well received by users, who experienced a reduction in suicidality.

**Keywords:** suicide, mental health, nonclinical intervention, befriending, volunteering, charity

Worldwide, more than 700,000 people die from suicide every year (World Health Organization, 2021). In the United Kingdom, 6,507 people died from suicide in 2018 (Office for National Statistics, 2019), which is approximately equivalent to 17 deaths per day and an 11.8% increase compared to 2017 when 5,821 deaths occurred. The Office for National Statistics (ONS) defines suicide as death from intentional self-harm, for anyone aged 10 or older, and death caused by injury or poisonings, where intent was undetermined, for people aged 15 or older. However, these statistics do not capture people who attempted suicide or experienced suicidal thoughts. It has been estimated that a fifth (20.6%) of adults will think about suicide during their lifetime, with one in 20 (5.4%) reporting suicidal thoughts in the last year and one in 15 (6.7%) attempting to take their own life (UK 2014 Adult Psychiatric Morbidity Survey; McManus et al., 2016).

The suicide prevention strategies of the UK national governments (England, Northern Ireland, Scotland, Wales)

take the position that deaths by suicide are largely preventable and that no one should have to experience suicidal thoughts (for England, see Department of Health, 2017). There is no single risk factor that predicts suicidal behavior (Turecki et al., 2019). Rather, there are many such risk factors, including previous suicidal ideation or behavior, mental health disorders, and certain psychological traits. Therefore, strategies seek to alleviate or mitigate the adverse effects of multiple psychological, psychiatric, social, and environmental factors, while enhancing protective factors. Evidence-based interventions for suicide prevention include restricting means and encouraging help-seeking (Pirkis et al., 2015), cognitive-behavioral therapies (Tarrier et al., 2008), and psychotherapies (Calati & Courtet, 2016). While there is also some evidence that crisis helplines can contribute to the reduction of suicidal thoughts and behavior, it should be noted that many of the studies examining the effectiveness of crisis lines have serious methodological

limitations (Hoffberg et al., 2020). For a recent overview of the strength of the evidence base for suicide prevention, see Platt and Niederkrotenthaler (2020). Despite the existence of suicide prevention programs in the United Kingdom, more effective action is needed to reduce the incidence of suicidal behavior and the prevalence of suicidal ideation.

Befriending services offer emotional support, informational guidance, and/or practical assistance. First developed in the voluntary sector as a psychosocial intervention for depression, anxiety, and loneliness, befriending schemes, also termed professional social support, have been shown to be effective in reducing distress and symptoms in people with schizophrenia (Turkington et al., 2018). Professional social support involves active listening, showing interest, being communicative, expressing sympathy and empathy, being trustworthy, and encouraging sharing of feelings.

The Listening Place (TLP; <https://listeningplace.org.uk/>; Charity No. 1164739) uses a selective suicide prevention strategy inasmuch as it provides support for at-risk individuals who have already exhibited some form of suicidal behavior or ideation (Turecki et al., 2019). TLP offers free support to anyone older than 18 years who *no longer feels that life is worth living*. This support takes the form of empathetic, nonjudgmental listening from trained volunteers, who do not offer advice. Appointments are usually fortnightly, face-to-face, and – crucially – with the same volunteer. These appointments take place at the TLP premises or at satellite sites (e.g., within primary mental health hubs) in London. People can self-refer to TLP, but most referrals come from the NHS or other charities. TLP has a strict confidentiality policy, which enhances safeguarding by overcoming the barriers that traditionally prevent suicidal people from sharing their thoughts and plans (e.g., perceived fear of children being taken into care). Confidentiality is broken only with visitors' permission or when required by law.

We report the results of a service evaluation of TLP. We aimed to (1) describe the use of TLP, (2) compare the severity of suicidal ideation and behavior before and after engagement with TLP, and (3) explore whether particular demographics or baseline suicide-related variables are associated with a change in self-reported suicidal feelings after 3 months of support from TLP. In relation to the second of these three aims, we hypothesized that the severity of suicidal ideation would decrease after 3 months of using TLP, and in relation to the third aim, we hypothesized that there would be no significant associations with age, gender, ethnicity, or baseline suicidality. Our service evaluation sought to meet one of the recommendations in the NICE Guidelines on “Preventing suicide in community and custodial settings,” which were published in 2018 (<https://www.nice.org.uk/guidance/ng105>): “Non-clinical interventions, such as telephone or text helplines or volunteer-run face-to-face talking are important

to support people with suicidal thoughts and keep them safe. There is increasing demand for non-clinical interventions but little evidence on the benefits. Research is needed to evaluate how effective they are” (p. 24).

## Method

### The Listening Place Journey

TLP service users are referred to as visitors. After referral, a staff member from TLP contacts the visitor to provide information about the service and to offer them an initial appointment with a supervising volunteer. At this 50-min appointment, a brief history is taken, and the visitor is encouraged to share the suicidal thoughts they have been having and any history of suicide attempts. They also complete some questionnaires (see below). If the visitor and volunteer agree that appointments may be beneficial, the visitor is given a series of six, fortnightly appointments with a listening volunteer. After approximately 3 months, the visitor has a review appointment to discuss how the visitor now feels and again complete the questionnaires. Visitors can stop appointments with TLP at any time, but it is usual to stop at one of the review appointments that take place every 3 months.

### Data Extraction

We extracted anonymized data for all visitors referred to TLP from when the charity opened in July 2016 to 1 month after registered report acceptance (March 1, 2022). For every visitor, we extracted the year of referral, age at referral, gender, self-reported ethnicity, number of listening appointments, and number of review appointments. We also extracted data collected from the three questionnaires administered as part of the routine TLP service: the self-report version of the Columbia Suicide Severity Rating Scale (C-SSRS), three Likert-scale feeling thermometers, and a Visitor Experience Questionnaire. The C-SSRS and feeling thermometers were extracted at two time points: the initial appointment and the first review appointment (approximately 3 months later). The Visitor Experience Questionnaire (VEQ) was extracted at the 3-month review appointment.

### Demographics

Age at referral was calculated using date of birth and date of referral. Given the high rates of suicidal ideation (37%–83%) and suicidal attempts (9.8%–44%) in people identifying as

transgender (McNeil et al., 2017), gender was recorded in five categories: cisgender female, transgender female, cisgender male, transgender male, and other. Ethnicity was recorded according to the 18 categories used by the ONS and an additional category: prefer not to say. In this report, we use the ONS five category breakdown: White (White British, White Other); Black (Black African, Caribbean, or Black British); Mixed or Multiple ethnic groups; Asian (Chinese, Indian, Bangladeshi, Pakistani, Other Asian); Other ethnic group (Arab, Other ethnic group); and prefer not to say.

### Columbia Suicide Severity Rating Scale (C-SSRS)

As the C-SSRS does not need to be administered by someone with clinical training, it is ideal for use in a volunteer-led organization. The C-SSRS has high specificity and sensitivity, is sensitive to changes in ideation/behavior over time (Posner et al., 2011), and has good inter-rater reliability (Mundt et al., 2010) but may not be able to predict future suicide attempts in people without a history of suicide attempts (Brown et al., 2020). The self-report version of the C-SSRS requires visitors to answer “yes” or “no” to six questions about the severity of their suicidal thoughts. All visitors answer four questions: 1 “Have you wished you were dead or wished you could go to sleep and not wake up?”; 2 “Have you actually had any thoughts about killing yourself?”; 6 “Have you done anything, started to do anything, or prepared to do anything to end your life?”; and 7 “In your entire lifetime, how many times have you done any of these things?”, which has four options: “0,” “1-5,” “6+,” and “unknown.” Only those who respond “yes” to question 2, then answer Questions 3-5: 3 “Have you thought how you might do this?”; 4 “Have you had any intention of acting on these thoughts of killing yourself, as opposed to you have the thoughts but you definitely would not act on them?”; and 5 “Have you started to work out or worked out the details of how to kill yourself? Do you intend to carry out this plan?” Questions 1-5 were combined into a suicidal ideation score (range 0-5).

At the initial appointment, the visitor needs to consider the period specified in the question when describing the severity of their suicidal thoughts (the past month for Questions 1-5 and the past 3 months for Question 6). At the review appointment, the visitor is asked to consider the period since they last completed the questionnaire (approximately 3 months).

### Feeling Thermometer Scale

The feeling thermometer scale measures self-reported feelings of distress, suicide, and support, each on a 0-10

Likert scale (e.g., 10 on the Likert scale corresponds to *extremely distressed* or *extremely suicidal* or *extremely well supported*, whereas 0 corresponds to *not at all distressed*, *not at all suicidal*, and *not at all supported*). When answering, the visitor is asked to consider how they have felt in the preceding month.

### Visitor Experience Questionnaire (VEQ)

The VEQ is divided into three sections. In the first section, visitors are asked to indicate their views about TLP by rating how much they agree with 10 statements, each on a 5-point Likert scale (i.e., *strongly agree*, *agree*, *neither agree nor disagree*, *disagree*, or *strongly disagree*). These 10 statements are in Electronic Supplementary Material 1 [ESM 1].

The second section asks the visitor: “Overall, how would you describe your experience at The Listening Place?” The visitor is asked to tick one option on a 5-point Likert scale (*very good*, *fairly good*, *neither good nor poor*, *fairly poor*, *very poor*).

The final section of the questionnaire asks the visitor: “In the box below, please add comments about any aspects of your experience at The Listening Place.” Data collected in response to this question have not been extracted as part of this evaluation.

### Data Analysis

#### The Listening Place Population

To address aim (1), we describe the flow of visitors through TLP. For all referrals, we report age, gender, and ethnicity. We then report the proportion of visitors who attended an initial appointment and compare this group to those who did not attend an initial appointment in respect of age, gender, and ethnicity. Next, we report the proportion who attended an initial appointment, at least six listening appointments, and a review appointment (a *supported* subgroup) and compare them to those who attend an initial appointment but do not attend six listening appointments and a review appointment, with respect to age, gender, ethnicity, and the questionnaire data collected at the initial appointment (i.e., the C-SSRS and the feeling thermometer).

#### Subjective Experience of TLP

For the supported subgroup, we described visitors’ experience of TLP. We report the responses to the first two sections of the VEQ collected at the 3-month review appointment. If items in the first section had an internal consistency (Cronbach’s  $\alpha$ ) greater than .8, we established a single composite measure and reported the individual items in the

supplementary material. For each visitor, we summed their item scores and then convert the sum into a  $z$  score using the following formula: 
$$\frac{(\text{individual summed score} - \text{sample summed score mean})}{(\text{sample summed score standard deviation})}$$
 This measure accounts for missing data on one or more item at an individual level. We also report these data for the wider sample of visitors who attend an initial appointment.

### Change in Suicidality

To address aim (2), we compared the C-SSRS and feeling thermometer data collected at the initial appointment with the data collected at the 3-month review appointment. We restricted this analysis to the supported subgroup. McNemar's  $\chi^2$  test for paired samples was used to analyze responses to the C-SSRS, and paired-sample  $t$  tests were used to analyze the feeling thermometer. We repeated this analysis without restricting the sample to the supported subgroup.

### Factors Associated With Change in Suicidality

To address aim (3), we tested which demographic factors were related to self-reported suicidality (i.e., the suicidality feeling thermometer) at the 3-month review. We restricted this analysis to the supported subgroup. Age, gender, ethnicity, the C-SSRS (suicidal ideation score and two suicide behavior questions) at the initial assessments, and the feeling thermometers at initial appointment were entered into a multivariable linear regression; the initial suicidality feeling thermometer was included as a covariate to adjust for individual differences in outcome. We report the results of a univariable model for each variable and the multivariable model, including the mean squared error and  $R^2$  for the latter. We tested the assumptions of the multivariable linear regression and transformed our data and/or adapted our interpretation accordingly. We repeated this analysis without restricting the sample to the supported subgroup.

### Missing Data

For the main analyses, we used cases with complete data only and report the sample size used in each test. We report the proportion of missing data for the sample of all referrals, and the supported subgroup, in the supplementary material, separately for each variable. We also report the results of analyses which seek to identify whether those with nonmissing data are representative of all visitors.  $\chi^2$  tests were used for categorical data and independent sample  $t$  tests for continuous data.

### Statistical Assumptions

To assess change in suicidality, the  $\alpha$  level was set at .003 (.05/16; age, gender with four dummy variables, ethnicity

with five dummy variables, two suicide behavior questions, the suicidal ideation score, and three feeling thermometers) after Bonferroni correction. For all other analyses, the  $\alpha$  level was set at .05. For  $\chi^2$  tests with any cell frequency that is  $< 5$ , Fisher's exact statistic was used instead. All analyses were performed in RStudio version 1.4.1103 using R version 4.0.3 (2020-10-10).

### Power Analysis

Aim 1: If the sample size of the group with an initial appointment and a review appointment is 2,814 and the sample size of the group with only an initial appointment is 4,674, then, when the  $\alpha$  level is .05, a two-sample  $t$  test would have 98.72% power to detect a small effect size of 0.1 (100% power for a medium effect size of 0.3 or larger). A  $\chi^2$  test of independence, when the  $\alpha$  level is .05, would have 100% power to detect an effect size of 0.1 or larger.

Aim 2: With a sample size of 2,814 visitors, when the  $\alpha$  level is .003, a two-tailed McNemar's  $\chi^2$  test for matched pairs would have 99.9% power to detect an odds ratio of 1.5 if 50% of the pairs were discordant (91.53% power if 25% of the pairs were discordant and 100% if 75% of the pairs were discordant). A two-tailed paired-sample  $t$  test for matched pairs, when the  $\alpha$  level is .003, would have 99.47% power to detect a small effect size of 0.1 (100% power to detect an effect size of 0.3 or larger).

Aim 3: With a sample size of 2,814 visitors, when the  $\alpha$  level is .05, a multivariate linear regression to test nine predictors would have 100% power to detect an effect size of 0.1 or larger.

These power analyses were performed with G\*Power (Faul et al., 2007, 2009) using sample size estimates extracted from the TLP database in September 2021.

### Ethics

This evaluation was approved by The Listening Place Board of Trustees. To protect visitors' anonymity, we do not report the exact  $N$  of any category which contains fewer than five individuals. Data from visitors who have requested their data be destroyed or not used for service evaluations have not been included.

### Timeline

We extracted data for all visitors, up to and including visitors referred to TLP 1 month after registered report

acceptance, and performed this service evaluation within 3 months of that date.

## Results

This study was accepted as a Stage 1 Registered Report on February 1, 2022, and is registered on the Open Science Framework at <https://osf.io/84aud>.

### The Listening Place Population

As of March 1, 2022, TLP had received 13,938 referrals. Referrals had a median age of 32 years (age range: 11–96 years, note referrals younger than 18 years are not offered appointments; interquartile range: 22 years). Around three-fifths (60.49%) of visitors were cisgender female, and 54.60% were of White ethnicity. Just over two-thirds ( $N = 9,559$ , 68.58%) of visitors had attended an initial appointment by this date and nearly one-third ( $N = 4,298$ , 30.84%) their first review appointment. Fewer than five visitors requested their data be destroyed or excluded from data analysis.

Visitors who attended an initial appointment were on average 1 year older than those who did not attend ( $N = 13,563$ ,  $t$  test = 307.32,  $df = 27,499$ ,  $p < .001$ ), but there was no difference in terms of gender or ethnicity. Measurements of suicidal ideation were all skewed: Over half of the visitors scored 4 or more (IQR = 2) on the C-SSRS suicidal ideation score, over half rated themselves as 8 or higher on the feelings of distress thermometer (IQR = 3), 7 or higher on the suicidality thermometer (IQR = 3), and 4.5 or lower on the feelings of support thermometer (IQR = 4). Nearly half (47.46%) of all visitors said they had done something or prepared to do something to end their life in the last month, and 77.93% said they had attempted suicide at least once in their lifetime. Data are presented in the table in ESM 2.

Of those who attended the initial appointment, 3,170 went on to meet criteria of being supported (Table 1). When compared to the 6,389 visitors who did not meet these criteria, the supported subgroup were older, by an average of 5 years, more suicidal, had more suicide attempts, and rated themselves as more distressed, more suicidal, and less supported. There were no differences between the groups in terms of gender or ethnicity.

### Subjective Experience of TLP

For the supported subgroup, the Cronbach's  $\alpha$  of the first 10 questions on the VEQ was .91 signifying high reliability. For visitors who responded to at least one question

( $N = 1,510$ , 47.63%), the mean summed score was 47.98 ( $SD = 3.58$ ;  $Mdn = 50$ , IQR = 3; summed scores could range from 1 to 50). The median visitor experience  $z$ -composite score was 0.56 (IQR = 0.84; range  $-12.00$  to 0.56), where a value greater than 0 indicates a positive response. For the wider sample of visitors who attend an initial appointment, Cronbach's  $\alpha$  was .90. For the 1927 visitors (60.79%) who responded to at least one question, the mean summed score was 47.68 ( $SD = 4.13$ ;  $Mdn = 50$ , IQR = 3) and the median visitor experience  $z$ -composite score was 0.56 (IQR = 0.73;  $N = 1874$ ). All data are presented in the table in ESM 1 and the figure in ESM 7.

In terms of self-reported overall experience of TLP, 1,423 supported visitors provided a response to this question with 90.44% rating their experience as *very good*. Of the visitors who attended an initial appointment and answered this question, 89.77% of 1818 rated their experience as *very good* (see table in ESM 1).

### Change in Suicidality

For visitors in the supported subgroup (Table 2; Figure 1), the average suicidal ideation score decreased after 3 months ( $t$  test = 13.78,  $df = 1,683$ ,  $p < .001$ ), as did self-rated thermometer ratings for distress and suicidality ( $t$  test = 36.38,  $df = 2,550$ ,  $p < .001$  and  $t$  test = 33.63,  $df = 2,536$ ,  $p < .001$ , respectively). The average self-rated thermometer rating for support increased after 3 months ( $t$  test =  $-28.27$ ,  $df = 2,532$ ,  $p < .001$ ). In terms of suicidal behavior, there was a 15.12% reduction in the proportion of visitors reporting that they had done something to end their life after 3 months. There was also evidence that the number of lifetime suicide attempts changed after 3 months, but none of the Bonferroni-corrected post hoc pairwise comparisons were statistically significant. A similar pattern was observed when the sample was not restricted to supported visitors (see table in ESM 3). For lifetime suicide attempts, the post hoc pairwise comparisons suggested a significant change from no attempts to six or more attempts which we discuss below.

### Factors Associated With Change in Suicidality

Visitors in the supported subgroup who experienced a greater reduction in self-reported suicidality after 3 months at TLP were more likely to be younger at referral, have less intention to kill themselves and report fewer lifetime suicidal attempts (C-SSRS Q6 and Q7), and rated themselves as more supported at the initial appointment. In the multivariable model [ $N = 2011$ ,  $F(17, 1,993) = 13.1$ ,  $p < .001$ , mean squared error = 7.10,  $R^2/R^2_{\text{Adjusted}} = 10.05\%/9.29\%$ ], only reduced suicidal behavior was associated with a greater reduction in self-reported suicidality after 3 months at TLP (Table 3; Figure 2). Although this sample size is smaller than estimated for the a priori power calculation,

with 100% power, our sample is still powered to detect an effect size for the model as small as 0.026.

When looking at all referrals, the multivariable model [ $N = 2,578$ ,  $F(17, 2,560) = 18.82$ ,  $p < .001$ , mean squared error = 7.62,  $R^2/R^2_{\text{Adjusted}} = 11.11\%/10.52\%$ ] showed that

visitors who experienced a greater reduction in self-reported suicidality after 3 months at TLP were more likely to be younger at referral, cisgender male (compared to cisgender female), reported fewer lifetime suicidal attempts, and rated themselves as more supported at the

**Table 1.** The Listening Place (TLP) visitors who attended an initial appointment

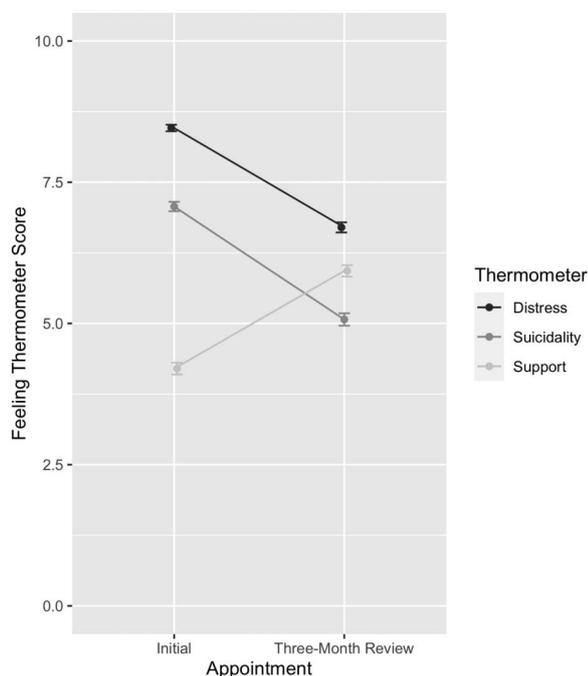
Variable	Visitors in the supported subgroup <sup>a</sup>	Visitors who did not meet supported subgroup criteria	<i>N</i>	Statistic <sup>b</sup>	<i>p</i>
<i>N</i>	3,170	6,389			
Age at referral			9,501	-257.14	<.001
<i>M</i> ( <i>SD</i> )	37.98 (13.46)	34.70 (13.22)			
<i>Mdn</i> (IQR)	36 (23)	31 (21)			
Gender (%)			9,557	1.75	.782
Cisgender female	1937 (61.10%)	3,848 (60.25%)			
Transgender female	7 (0.22%)	17 (0.27%)			
Cisgender male	1,192 (37.60%)	2,465 (38.59%)			
Transgender male	10 (0.32%)	18 (0.28%)			
Nonbinary/other	24 (0.76%)	39 (0.61%)			
Ethnicity (%)			9,288	6.77	.239
White	1730 (55.34%)	3,311 (53.73%)			
Black	619 (19.80%)	1,187 (19.26%)			
Asian	335 (10.72%)	688 (11.17%)			
Mixed	293 (9.37%)	625 (10.14%)			
Other	110 (3.52%)	270 (4.38%)			
Prefer not to say	39 (1.25%)	81 (1.31%)			
Suicidal ideation score			7,859	-300.03	<.001
<i>M</i> ( <i>SD</i> )	4.17 (0.96)	4.00 (1.04)			
<i>Mdn</i> (IQR)	4 (2)	4 (2)			
C-SSRS Q6 Have you done anything, started to do anything, or prepared to do anything to end your life?			8,879	25.38	<.001
No	1,493 (48.84%)	3,172 (54.48%)			
Yes	1,564 (51.16%)	2,650 (45.52%)			
C-SSRS Q7 In your entire lifetime, how many times have you done any of these things?			8,234	42.91	<.001
None	529 (18.78%)	1,288 (23.78%)			
1-5	1,654 (58.71%)	3,169 (58.50%)			
6+	634 (22.51%)	960 (17.72%)			
Distress			9,002	-454.97	<.001
<i>M</i> ( <i>SD</i> )	8.44 (1.51)	8.22 (1.63)			
<i>Mdn</i> (IQR)	9 (2)	8 (3)			
Suicide			8,982	-249.72	<.001
<i>M</i> ( <i>SD</i> )	7.06 (2.13)	6.51 (2.47)			
<i>Mdn</i> (IQR)	7 (4)	7 (3)			
Support			8,972	-142.47	<.001
<i>M</i> ( <i>SD</i> )	4.22 (2.66)	4.47 (2.77)			
<i>Mdn</i> (IQR)	4 (4)	5 (4)			

Note. C-SSRS = Columbia Suicide Severity Scale; IQR = interquartile range. <sup>a</sup>Visitors were classed as supported if they attended an initial appointment, at least six listening appointments, and a review appointment. <sup>b</sup>Paired-sample *t* tests were used for continuous variables and McNemar–Bowker symmetry tests for categorical variables.

**Table 2.** Change in suicidality for The Listening Place (TLP) visitors in the supported<sup>a</sup> subgroup ( $N = 3,170$ )

Variable	$N$	Initial appointment Yes (%)	3-month review appointment Yes (%)	Statistic <sup>b</sup>	$p$
Columbia Suicide Severity Scale (C-SSRS)					
Suicidal ideation score (Q1-5)	1,684			13.78	2.20E-16
$M$ ( $SD$ )		4.26 (0.92)	3.86 (1.07)		
$Mdn$ (IQR)		5 (1)	4 (2)		
Q6 Have you done anything, started to do anything, or prepared to do anything to end your life? (% yes)	2,421	1,254 (51.80)	888 (36.68)	147.85	2.20E-16
Q7 In your entire lifetime, how many times have you done any of these things? (% yes) <sup>c</sup>	1911			8.07	.045
None		341 (17.84)	313 (16.38)		
1–5		1,152 (60.28)	1,172 (61.33)		
6+		418 (21.87)	426 (22.29)		
Feeling thermometer scales					
Distress	2,551			36.38	2.20E-16
$M$ ( $SD$ )		8.46 (1.49)	6.70 (2.31)		
$Mdn$ (IQR)		9 (2)	7 (3)		
Suicide	2,537			33.63	2.20E-16
$M$ ( $SD$ )		7.07 (2.13)	5.07 (2.82)		
$Mdn$ (IQR)		7 (4)	5 (4)		
Support	2,533			-28.27	2.20E-16
$M$ ( $SD$ )		4.20 (2.65)	5.93 (2.59)		
$Mdn$ (IQR)		4 (4)	6 (4)		

Note. IQR = interquartile range. <sup>a</sup>Visitors were classified as supported if they attended an initial appointment, at least six listening appointments, and a review appointment. <sup>b</sup>Paired-sample  $t$  tests were used for continuous variables and McNemar–Bowker symmetry tests for categorical variables. <sup>c</sup>Bonferroni-adjusted post hoc pairwise comparisons: none vs. one–five,  $p = .071$ ; none vs. six+,  $p = .711$ ; one–five vs. six+,  $p = 1.070$ .

**Figure 1.** Change in suicidality.

initial appointment (see table in ESM 4). The results remained consistent even after excluding influential outliers ( $N = 79$  individuals with a Cook's distance greater than four divided by the sample size minus the number of predictors plus one; results not shown).

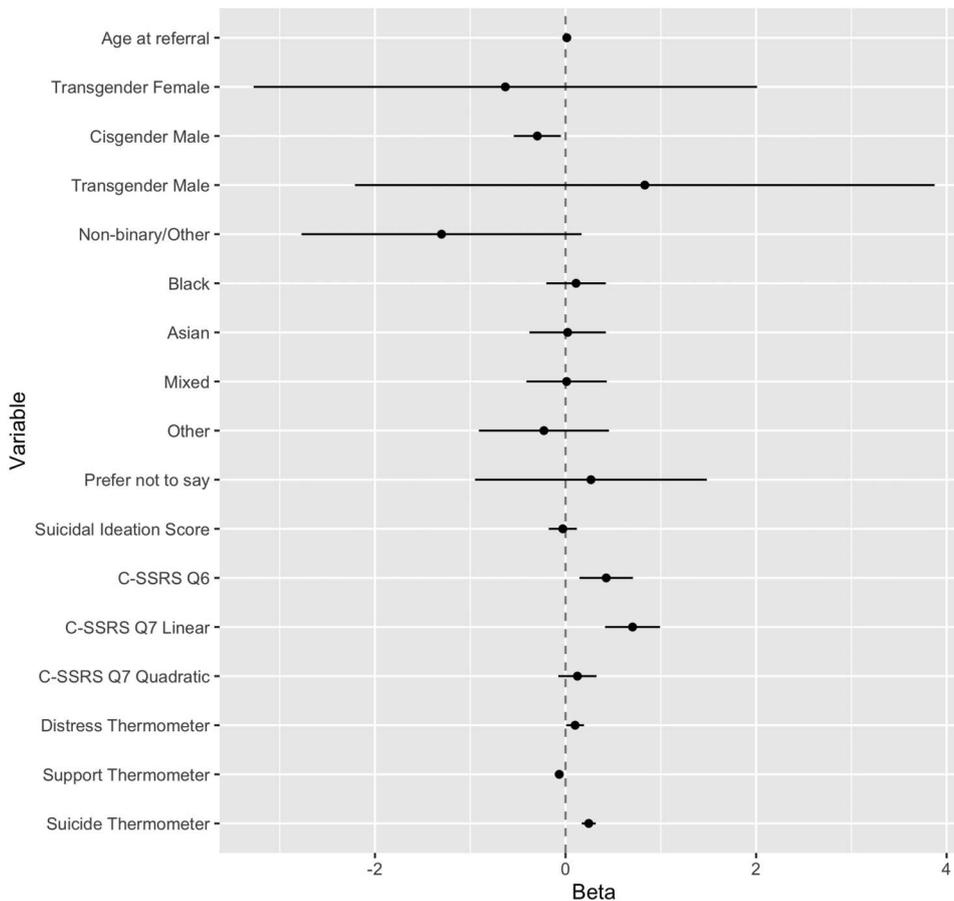
### Missing Data

The proportion of missing data for all referrals and the supported subgroup is presented in the table in ESM 5. A comparison between visitors who answered at least one question on the three questionnaires and those who had the opportunity but did not answer any questions is provided in the table in ESM 6. In brief, younger visitors were more likely to attempt to complete the C-SSRS and the feeling thermometers, at both the initial appointment and the 3-month review appointment, but older visitors were more likely to answer at least one question on the VEQ. No gender differences were observed. At the 3-month review appointment, White visitors were more likely to answer at least one question on the C-SSRS and VEQ, while visitors who selected *other* or *prefer not to say* were less likely to provide data on all three questionnaires.

**Table 3.** Factors associated with change in suicidality for The Listening Place (TLP) visitors in the supported<sup>a</sup> subgroup (N = 3,170)

Factors	Univariable <sup>b</sup>					Multivariable <sup>b</sup>				
	N	$\beta$ [95% CI]	SE	$p^c$	$R^2/R^2$ adjusted (%)	N	$\beta$ [95% CI]	SE	$p^c$	$R^2/R^2$ adjusted (%)
Age at referral	2,524	0.01 [0.01, 0.02]	0.00	<.001 <sup>e</sup>	9.05/8.98	2011	0.01 [0.00, 0.02]	0.00	.005	10.05/9.29
Gender	2,509				8.94/8.76					
Transgender female		-0.02 [-2.18, 2.14]	1.10	.987			-0.63 [-3.27, 2.01]	1.35	.639	
Cisgender male		-0.25 [-0.47, -0.04]	0.11	.022			-0.30 [-0.54, -0.05]	0.13	.019	
Transgender male		0.78 [-1.59, 3.14]	1.21	.520			0.83 [-2.21, 3.87]	0.54	.592	
Nonbinary/other		-1.06 [-2.31, 0.19]	0.64	.096			-1.30 [-2.77, 0.17]	0.75	.082	
Ethnicity	2,509				8.69/8.47					
Black		0.20 [0.14, -0.08]	0.47	.163			0.11 [-0.20, 0.42]	0.16	.489	
Asian		-0.04 [0.18, -0.40]	0.31	.809			0.02 [-0.38, 0.42]	0.20	.914	
Mixed		0.11 [0.19, -0.27]	0.48	.569			0.01 [-0.41, 0.43]	0.21	.959	
Other		-0.04 [0.31, -0.65]	0.57	.893			-0.23 [-0.91, 0.46]	0.35	.515	
Prefer not to say		0.71 [0.54, -0.35]	1.78	.189			0.27 [-0.95, 1.48]	0.62	.668	
Suicidal ideation score	2,269	0.10 [-0.02, 0.23]	0.06	.102	6.79/6.71		-0.03 [-0.18, 0.12]	0.08	.702	
C-SSRS Q6 Have you done anything, started to do anything, or prepared to do anything to end your life?	2,487	0.52 [0.30, 0.74]	0.11	<.001 <sup>e</sup>	9.29/9.22		0.43 [0.15, 0.71]	0.14	.003 <sup>e</sup>	
C-SSRS Q7 In your entire lifetime, how many times have you done any of these things? <sup>d</sup>	2,285				9.73/9.61					
Linear		0.80 [0.55, 1.05]	0.13	<.001 <sup>e</sup>			0.70 [0.42, 0.99]	0.15	<.001 <sup>e</sup>	
Quadratic		0.09 [-0.09, 0.28]	0.09	.319			0.12 [-0.08, 0.32]	0.10	.223	
Distress	2,535	0.10 [0.02, 0.18]	0.04	.013	8.85/8.78		0.10 [0.01, 0.19]	0.05	.035	
Support	2,528	-0.08 [-0.12, -0.04]	0.02	<.001 <sup>e</sup>	9.16/9.09		-0.07 [-0.11, -0.02]	0.02	.004	

Note. C-SSRS = Columbia Suicide Severity Scale; CI = confidence interval. <sup>a</sup>Visitors were classed as supported if they attended an initial appointment, at least six listening appointments, and a review appointment. <sup>b</sup>Adjusted for initial appointment suicidality feeling thermometer. <sup>c</sup>The  $\alpha$  level for this analysis was .003. <sup>d</sup>As Q7 is an ordered categorical, the linear regression fits two polynomial functions (the first is linear and the second is quadratic) and the difference between each of the levels is assumed to be equal. When Q7 is treated as unordered categorical, the direction of effect is the same for both models (results not shown). <sup>e</sup>Unrounded  $p < .003$ .



**Figure 2.** Factors associated with suicidality at the 3-month review.

## Discussion

The number of referrals received by TLP (on average 6–7 per day in this sample) and the number of visitors who attended the full number of appointments offered in the first 3 months demonstrates a societal demand for an empathetic, nonjudgmental, face-to-face listening service for people who are feeling suicidal. Our service evaluation also demonstrates that TLP is working as intended; self-reported suicidality goes down over time, for both visitors who attend all the appointments offered in the first 3 months and those who miss some appointments. It is a TLP policy that visitors are asked about suicide at every appointment, and there is evidence that asking about suicidal feelings does not induce ideation – a common misconception – but that instead it can reduce suicidal ideation and, with repeated questioning, lead to long-term improvements in mental health (Dazzi et al., 2014).

While TLP has been shown to have a beneficial impact, at a group level, our analysis reveals that some visitors experience a greater reduction in suicidality after the first 3 months: those who do not report preparing or attempting to end their own life prior to receiving support and, in the

larger, more heterogeneous, sample of all referrals, younger visitors and cisgender male (compared to cisgender female) visitors. We are also aware that there will be visitors who do not experience any reduction in suicidality or report feeling more suicidal; there is a degree of suicidality which, for some people, can be lifelong and feeling suicidal can be a natural reaction to a person's current circumstances. However, TLP's intention is to reduce, not eradicate, suicidality, and the data point to the fulfillment of this aim.

A study of American college students found that mental health, including suicidal ideation, has worsened for all racial/ethnic groups over the last decade, but the rates of help-seeking and use of mental health services, over the same time period, have either decreased for racial/ethnic minority participants or have increased at slower rates compared to White participants (Lipson et al., 2022). Within our sample, we found no evidence of gender or ethnicity biases in terms of who attends their initial appointment at TLP or who attends all the appointments offered in the first 3 months. However, it is important to note that these studies took place in very different contexts, as TLP offers free support and is not government-funded, and rates of suicidal

ideation, stratified by demographic characteristics, in the underlying population are not known. We did, however, find that younger visitors are less likely to attend appointments. Although this suggests that TLP is less accessible to younger people, at the time of writing, TLP has always offered appointments between 9 a.m. and 9 p.m., seven days a week (removing one barrier to working-age adults seeking support). This age bias could be a temporal effect which will reduce as the diversity of referral sources increases.

## Limitations

The main limitation of this service evaluation is the study design which adds important caveats to the conclusions we can draw from these data. This is not a randomized controlled trial, and there is no control/comparison group. Therefore, we cannot legitimately infer that TLP causes the observed reduction in suicidality. It is possible that this sample of people could have experienced the same alleviation of suicidal feelings without receiving support from TLP. In addition, TLP has not been compared to other interventions to test its comparative benefit. Despite the current NHS waiting lists for mental health support, there is a scarcity of free, immediately accessible, alternative face-to-face support for suicidal ideation in London. We also need to consider the possibility of positive feedback bias (de Barra et al., 2014; visitors with better outcomes may be more inclined to complete the questionnaires or answer more positively), when examining the questionnaires at the 3-month review but in particular the VEQ. Questionnaires are given to visitors by TLP volunteers, although in some cases, this is a supervising volunteer and not the listening volunteer they see fortnightly. The reliability and validity of all the questionnaires needs to be taken into account. We have already discussed the validity and reliability of the C-SSRS, but the feeling thermometers are also subject to bias. In political science, respondents are more likely to provide warmer responses in person than when completing thermometers online and, across both contexts, are more likely to select numbers labeled verbally (Liu & Wang, 2015). It is unknown whether TLP volunteers label any thermometers verbally, but 0, 5, and 10 are accompanied by a written label which could have led visitors to round their response up or down.

Another substantial limitation is the lack of long-term follow-up. The observed reduction in self-reported suicidality may only be a temporary phenomenon which does not persist once visitors stop receiving support from TLP. The lack of follow-up also means that, without linking the TLP data to the UK electronic death statistics, we were not able to access reliable data on fatal suicide attempts. Suicidal ideation is correlated with, but independent of,

suicidal behavior; in nonpsychiatric populations, the relative risk of a fatal suicide attempt after expressing suicidal ideation is 6.6 (4.61–9.47), and this risk is higher in psychiatric populations (Hubers et al., 2018). Indeed, it became apparent during the analysis of these data that the only data available on suicide attempts (Q7 of the C-SSRS) lack test-retest reliability (221 visitors reported at least one lifetime suicide attempt at the initial appointment and then no lifetime suicide attempts at the 3-month review and 199 reported six plus suicide attempts at the initial appointment and then one to five at the 3-month review). However, this could be the result of visitors misreading the question and presuming they are being asked to consider the last 3 months, in line with the previous C-SSRS questions, rather than their entire lifetime.

## Conclusion

This service evaluation of TLP provides evidence, within the boundaries of the study design, that a face-to-face listening service, provided by trained volunteers, can help alleviate self-reported suicidality and distress and provide support for people who no longer feel that life is worth living.

## Electronic Supplementary Material

The electronic supplementary material is available with the online version of the article at <https://doi.org/10.1027/0227-5910/a000879>

**ESM 1.** Responses to the Visitor Experience Questionnaire (VEQ)

**ESM 2.** Comparison of The Listening Place (TLP) visitors who attended an initial appointment with those who did not

**ESM 3.** Change in suicidality for The Listening Place (TLP) visitors

**ESM 4.** Factors associated with change in suicidality for all referrals to The Listening Place (TLP)

**ESM 5.** Proportion of missing data for all referrals to The Listening Place (TLP) and the supported subgroup of visitors

**ESM 6.** Comparison of those The Listening Place (TLP) visitors with and without missing data

**ESM 7.** Distributions of the Visitor Experience Questionnaire (VEQ) z-composite score

## References

- Brown, L. A., Boudreaux, E. D., Arias, S. A., Miller, I. W., May, A. M., Camargo, C. A., Jr, Bryan, C. J., & Armey, M. F. (2020). C-SSRS

- performance in emergency department patients at high risk for suicide. *Suicide and Life-Threatening Behavior*, 50(6), 1097–1104. <https://doi.org/10.1111/sltb.12657>
- Calati, R., & Courtet, P. (2016). Is psychotherapy effective for reducing suicide attempt and non-suicidal self-injury rates? Meta-analysis and meta-regression of literature data. *Journal of Psychiatric Research*, 79, 8–20. <https://doi.org/10.1016/j.jpsychires.2016.04.003>
- Dazzi, T., Gribble, R., Wessely, S., & Fear, N. T. (2014). Does asking about suicide and related behaviours induce suicidal ideation? What is the evidence? *Psychological Medicine*, 44(16), 3361–3363. <https://doi.org/10.1017/S0033291714001299>
- de Barra, M., Eriksson, K., & Strimling, P. (2014). How feedback biases give ineffective medical treatments a good reputation. *Journal of Medical Internet Research*, 16(8), Article e193. <https://doi.org/10.2196/jmir.3214>
- Department of Health. (2017). *Preventing suicide in England: Third progress report on the cross-government outcomes strategy to save lives*. <https://www.gov.uk/government/publications/suicide-prevention-third-annual-report>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. <https://doi.org/10.3758/brm.41.4.1149>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/bf03193146>
- Hoffberg, A. S., Stearns-Yoder, K. A., & Brenner, L. A. (2020). The effectiveness of crisis line services: A systematic review. *Frontiers in Public Health*, 7, Article 399. <https://doi.org/10.3389/fpubh.2019.00399>
- Hubers, A. A. M., Moaddine, S., Peersmann, S. H. M., Stijnen, T., van Duijn, E., van der Mast, R. C., Dekkers, O. M., & Giltay, E. J. (2018). Suicidal ideation and subsequent completed suicide in both psychiatric and non-psychiatric populations: A meta-analysis. *Epidemiology and Psychiatric Sciences*, 27(2), 186–198. <https://doi.org/10.1017/S2045796016001049>
- Lipson, S. K., Zhou, S., Abelson, S., Heinze, J., Jirsa, M., Morigney, J., Patterson, A., Singh, M., & Eisenberg, D. (2022). Trends in college student mental health and help-seeking by race/ethnicity: Findings from the national healthy minds study, 2013–2021. *Journal of Affective Disorders*, 306, 138–147. <https://doi.org/10.1016/j.jad.2022.03.038>
- Liu, M., & Wang, Y. (2015). Data collection mode effect on feeling thermometer questions: A comparison of face-to-face and web surveys. *Computers in Human Behavior*, 48, 212–218. <https://doi.org/10.1016/j.chb.2015.01.057>
- McManus, S., Hassiotis, A., Jenkins, R., Dennis, M., Aznar, C., & Appleby, L. (2016). *Chapter 12: Suicidal thoughts, suicide attempts and self-harm*. <https://digital.nhs.uk/data-and-information/publications/statistical/adult-psychiatric-morbidity-survey/adult-psychiatric-morbidity-survey-survey-of-mental-health-and-wellbeing-england-2014#related-links>
- McNeil, J., Ellis, S. J., & Eccles, F. J. (2017). Suicide in trans populations: A systematic review of prevalence and correlates. *Psychology of Sexual Orientation and Gender Diversity*, 4(3), 341–353. <https://doi.org/10.1037/sgd0000235>
- Mundt, J. C., Greist, J. H., Gelenberg, A. J., Katzelnick, D. J., Jefferson, J. W., & Modell, J. G. (2010). Feasibility and validation of a computer-automated Columbia-Suicide Severity Rating Scale using interactive voice response technology. *Journal of Psychiatric Research*, 44(16), 1224–1228. <https://doi.org/10.1016/j.jpsychires.2010.04.025>
- Office for National Statistics (2019). *Suicides in the UK: 2018 registrations. Registered deaths in the UK from suicide analysed by sex, age, area of usual residence of the deceased and suicide method*. <https://www.ons.gov.uk/eoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/suicidesintheunitedkingdom/2018registrations>
- Pirkis, J., Too, L. S., Spittal, M. J., Krysinska, K., Robinson, J., & Cheung, Y. T. D. (2015). Interventions to reduce suicides at suicide hotspots: A systematic review and meta-analysis. *The Lancet Psychiatry*, 2(11), 994–1001. [https://doi.org/10.1016/S2215-0366\(15\)00266-7](https://doi.org/10.1016/S2215-0366(15)00266-7)
- Platt, S., & Niederkrotenthaler, T. (2020). Suicide prevention programs. *Crisis*, 41(Supplement 1), S99–S124. <https://doi.org/10.1027/0227-5910/a000671>
- Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., Currier, G. W., Melvin, G. A., Greenhill, L., Shen, S., & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: Initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American Journal of Psychiatry*, 168(12), 1266–1277. <https://doi.org/10.1176/appi.ajp.2011.10111704>
- Tarrier, N., Taylor, K., & Gooding, P. (2008). Cognitive-behavioral interventions to reduce suicide behavior: A systematic review and meta-analysis. *Behavior Modification*, 32(1), 77–108. <https://doi.org/10.1177/0145445507304728>
- Turecki, G., Brent, D. A., Gunnell, D., O'Connor, R. C., Oquendo, M. A., Pirkis, J., & Stanley, B. H. (2019). Suicide and suicide risk. *Nature Reviews Disease Primers*, 5(1), Article 74. <https://doi.org/10.1038/s41572-019-0121-0>
- Turkington, D., Spencer, H., Lebert, L., & Dudley, R. (2018). Befriending: Active placebo or effective psychotherapy?. *British Journal of Psychiatry*, 211(1), 5–6. <https://doi.org/10.1192/bjp.bp.116.197467>
- World Health Organization (2021). *Suicide*. <https://www.who.int/news-room/fact-sheets/detail/suicide>

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## Conflict of Interest

All the named authors have a role in the organization, The Listening Place. SES, HD, CL, and SS are all current volunteers. SA is the CEO of the organization. SD is a trustee and SP is an advisor.

## Publication Ethics

This evaluation was approved by The Listening Place Board of Trustees. To protect visitors' anonymity, we do not report the exact N of any category which contains fewer than five individuals. Data from visitors who have requested their data be destroyed or not used for service evaluations have not been included.

### Open Data

This study was accepted as a Stage 1 Registered Report on the February 1, 2022, and registered on the Open Science Framework at <https://osf.io/84aud>

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