Practice Article

EJA | EVALUATION Journal of Australasia

Evaluation Journal of Australasia
1–19

DOI: 10.1177/1035719X20927146
journals.sagepub.com/home/evj
SAGE

Evaluating telephone and online psychological support and referral

Andrew Hawkins and Jasper Odgers
ARTD Consultants, Australia

Amanda Reeves
Department of Education and Training Victoria, Australia

Alicia McCoy
Beyond Blue; University of Melbourne Australia

Abstract

Mental health counselling and support over the telephone or internet is increasingly common. Evaluating effectiveness requires outcome measures and understanding factors driving behaviour. This article describes a theory-driven evaluation of the one-month outcomes of a short-term solution-focused support session for anxiety or depression with a counsellor. The primary aim of the evaluation was to measure the outcomes of this session on service users' help-seeking behaviour. It also sought to understand reasons for behaviour based on behaviour change theory. A secondary aim was to measure changes in feelings of stress and coping before and after the session, and collect evidence of the value of the service in terms of 'consumer-defined recovery'. The evaluation found the service was effective, with the overwhelming majority taking some action, being more engaged with a health professional, having reduced feelings of distress, increased confidence to cope and less hopelessness. Improvements for service users included 'reality testing' the advice given and building commitment or intent to follow the advice, and 'rehearsing' so service users can demonstrate to themselves they have the skills required and can overcome any obstacles to following the advice.

Corresponding author:
Jasper Odgers, ARTD Consultants, PO BOX 1167, Sydney, NSW 1230, Australia.
Email: jo@artd.com.au

Keywords
behaviour change, mental health, online psychological support, support service, theory-driven evaluation

Introduction

One in five Australians experience a mental health condition in a given year and almost one in two will experience a mental health condition at some point in their lifetime (Australian Bureau of Statistics [ABS], 2008). Emotional, mental and physical stressors due to causes such as illness, job insecurity, financial concerns and relationship difficulties can contribute to an individual developing mental health difficulties (Australian Institute of Health and Welfare, 2014).

Telephone and online support services for individuals experiencing mental health issues play a significant role in Australia's mental health system (National Mental Health Commission, 2014; Sands et al., 2016). Telephone support services, as a more established medium than online services, have proven successful for crisis intervention and treatment for conditions such as depression (King et al., 2006). Potential advantages of such services are that they have wider geographic reach including to those in rural and remote communities, that they offer anonymity and confidentiality, that they provide an immediate response anytime during a 24-hr period, and they give the caller a sense of control that they can hang up at any time (King et al., 2006; Urbis Keys Young, 2002). Telephone counsellors have been described as being 'available, empathic helpers who listened to callers and let them talk, helped them to calm down, and provided options for addressing their concerns' (Kalafat et al., 2007, p. 334).

There are a myriad of supports available online and on the telephone in Australia. These services vary in length (some services are intended to provide single session support and others ongoing support) and in the type of service they offer, as well as the population groups they target. A Contributing Lives Review in 2014 emphasised the importance of telephone and online services that linked people directly to effective interventions and local service systems (National Mental Health Commission, 2014). Approximately 4% of Australians aged 16–85 years are believed to have used a telephone counselling service for mental health issues at some point in their lifetime (Bassilios et al., 2015). These support services provide a suitable and accessible pathway for people to seek help and there is some limited research to demonstrate effectiveness (Mishara et al., 2007). The most comprehensive known studies took place in the United States in the 2000s with these showing some benefit for callers to crisis hotlines. This included a reduction in confusion, depression, anger, anxiety, hopelessness and feelings of being overwhelmed (Kalafat et al., 2007). Other research has found that callers reported an increased sense of well-being and personal empowerment, and that their experience with the service had contributed to their personal recovery process (Spirito, 2011).

The importance of the helping styles of counsellors has also been noted. Positive caller outcomes have been found to be more likely when empathy and respect are demonstrated to the callers (Mishara et al., 2007), and when callers feel cared for, supported and reassured, and listened to (Sands et al., 2016). Research into callers' follow-through with referrals made by telephone counselling services have found rates of approximately 50% (Stein & Lambert, 1984). More recent research found that approximately a third (33.2%) of callers had made or kept an appointment in the 1–52 days (average 13 days) since their original call (Kalafat et al., 2007). Reasons for this included inappropriate referrals, concerns about the organisation they were referred to and barriers accessing the service such as long waiting times.

It has been suggested that further research is needed to understand caller perceptions of telephone counselling services and whether callers' needs are met through their experience with such services (Bassilios et al., 2015; Sands et al., 2016).

The purpose of this article is to share the findings of an evaluation of a support service that provides telephone and online psychological support and referral.

Description of service

Beyond Blue has offered a support service since 2013. The purpose of the Support Service is to provide the Australian population with support and access to high-quality information about depression and/or anxiety, as well as assistance in identifying appropriate referral services to support callers with additional needs. Trained professionals with counselling experience provide immediate, short-term, solution-focused support and referrals via telephone, email and webchat. All calls, webchats and emails are one-on-one, confidential and the client can choose to remain anonymous.

There is a high and increasing demand for the Beyond Blue Support Service. In 2017–2018, 168,864 contacts were received for all channels, an increase of 10% (15,552) compared with the previous financial year (Medibank Health Services, 2016). Approximately 64% of contacts are telephone calls, 30% are web chats and 6% are emails. On average, there are 14,000 calls to the service a month.

The service receives the majority of contacts from females (59% for telephone and 75% for webchat). The telephone service has a higher representation of male callers (41%) compared with other channels and has a slightly older demographic. The most frequent telephone callers are aged 35–44 years (18%) followed by 25–34 years (22%), whereas 47% of webchats users are aged 15–24 years.

The majority of individuals are contacting the service about themselves (70% telephone and 95% webchat) with the remaining callers being family members, partners and professional care providers. In 2017–2018, depression and anxiety were the main topics discussed by service users; together they account for about 98% of all topics; family and relationships was the third most common topic discussed (34%), noting that more than one topic can be discussed per call. The vast majority of contacts (85%) were assessed as 'nil to low risk of suicide'. Interventions predominantly include 'brief support' (90%) followed by 'referral information' (70%).

Method

Evaluation purpose

The purpose of the evaluation was to determine the immediate and short-term (1 month) outcomes of a single session of psychological support and referral via the Beyond Blue Support Service. This project focused on changes in individuals' feelings about the problem that prompted their contact with Beyond Blue and actions taken based on the advice and/or referral information received from the Support Service. The primary aim of this evaluation was to determine the immediate and short-term (1 month) outcomes of a single session of brief psychological support and referral. It also sought to understand reasons for behaviour based on theories of behaviour change (Fishbein et al., 2000). A secondary aim was to measure changes in feelings of stress and coping before the call, after the call, 3 days after the call and 1 month after the call.

The study did not include a process evaluation or mixed methods as is often the case in modern evaluation practice. While the project brief was to 'measure outcomes', the evaluation sought to move beyond measurement and test the extent to which certain 'mechanisms' or 'factors known to influence behaviour' were 'fired' or activated by the service. This analysis also sought to test the service in terms of the theory of 'consumer defined recovery' that places less emphasis on clinical symptoms and more on the person's sense of hope (Andresen et al., 2010). It also sought to identify any deficiency or lost opportunities to influence behaviour suggested by a synthesis of behaviour change theories (Fishbein et al., 2000), which would in turn have implications for service improvement. For example, if the study showed that the advice would be 'embarrassing to follow', then service re-design would need to explore this concept further through additional evaluation activity.

Evaluation design

The evaluation used a theory-driven approach – to the extent that sought to unpack and test the extent to which the service leveraged the substantive social science theory that underpins the intervention (Donaldson & Lipsey, 2006) – as well as measure outcomes in terms of actual behaviour change. It did not seek to develop an overall programme theory or undertake a mixed-methods evaluation of process and outcomes as this was out of scope for the project. The evaluation was designed and carried out by ARTD Consultants. In this case, as the intervention is aimed directly at decision making and behaviour change, a synthesis of behaviour change theories (Fishbein et al., 2000) and previous experience operationalising these into survey items was used. Amending survey items to be relevant to the service allowed the evaluation to test which factors that influence behaviour were 'fired' by the intervention. Outcomes were operationalised in terms of help-seeking behaviour changes and mental health benefits as collected in the survey battery developed for the research. It was also considered that if the evaluation could help identify which key factors known to influence behaviour were not influenced by the intervention, this

Table 1. Demographics of service users by channel and user type.

Demographic	Phone	Chat	Self	Other
Median age	42	28	35	47
Male	32% (36.4%)	32% (23.1%)	36%	22%
Female	68% (58.9%)	66% (72.2%)	63%	78%
Heterosexual	86%	81%	81%	95%
Homosexual	5%	5%	7%	1%
Other	9%	14%	13%	5%
Aboriginal and Torres Strait Islanders	4%	3%	4%	3%
Non-English-speaking background	18%	17%	19%	14%
State (Top 3)	VIC (31%) NSW (30%) QLD (21%)	NSW (34%) VIC (24%) QLD (20%)	NSW (33%) VIC (26%) QLD (20%)	VIC (37%) NSW (26%) QLD (19%)

Source: Survey 1.
Where available, national demographic statistics about Beyond Blue Support Service clients have been provided in parentheses (Medibank Health Services, 2016). VIC: Victoria; NSW: New South Wales; QLD: Queensland.

would yield useful information for programme modification. For example, if people felt following the advice would not actually be helpful, or if they would be too embarrassed, or people important to them would disapprove and so on. As a theory-driven evaluation, it allowed the identification of how various 'performance indicators' for the service may be improved based on relevant theory (Shaw et al., 2006), in this case a theory of behaviour change.

Participants

All service users who contacted the service between November 2017 and February 2018 and met pre-determined inclusion criteria were invited to participate in the evaluation. This time period was set to align with the commissioning organisation's needs. These criteria included that they were aged 18 years or above, that they were assessed by the counsellor as being nil to low risk of suicide, that they had accessed the Support Service through telephone and webchat channels, and that they were calling about themselves and/or family members and partners. Service users were excluded if they had indicated signs of psychosis which would impair decision-making. Service users had to agree to be emailed an online survey and in doing so were willing to provide a first name and email address.

Almost 4,000 (3,969) people contacted the Support Service during the data collection period. Of these, 2,019 (51%) met the inclusion criteria and 1,477 (73%) consented to participate in the evaluation. Four hundred three participants completed Survey 1 (a response rate of 27%) and 308 participants consented to be sent Survey 2 with 128 completing it (a response rate of 42% of those who completed Survey 1).

The demographic characteristics of participants in Survey 1 are outlined in Table 1.

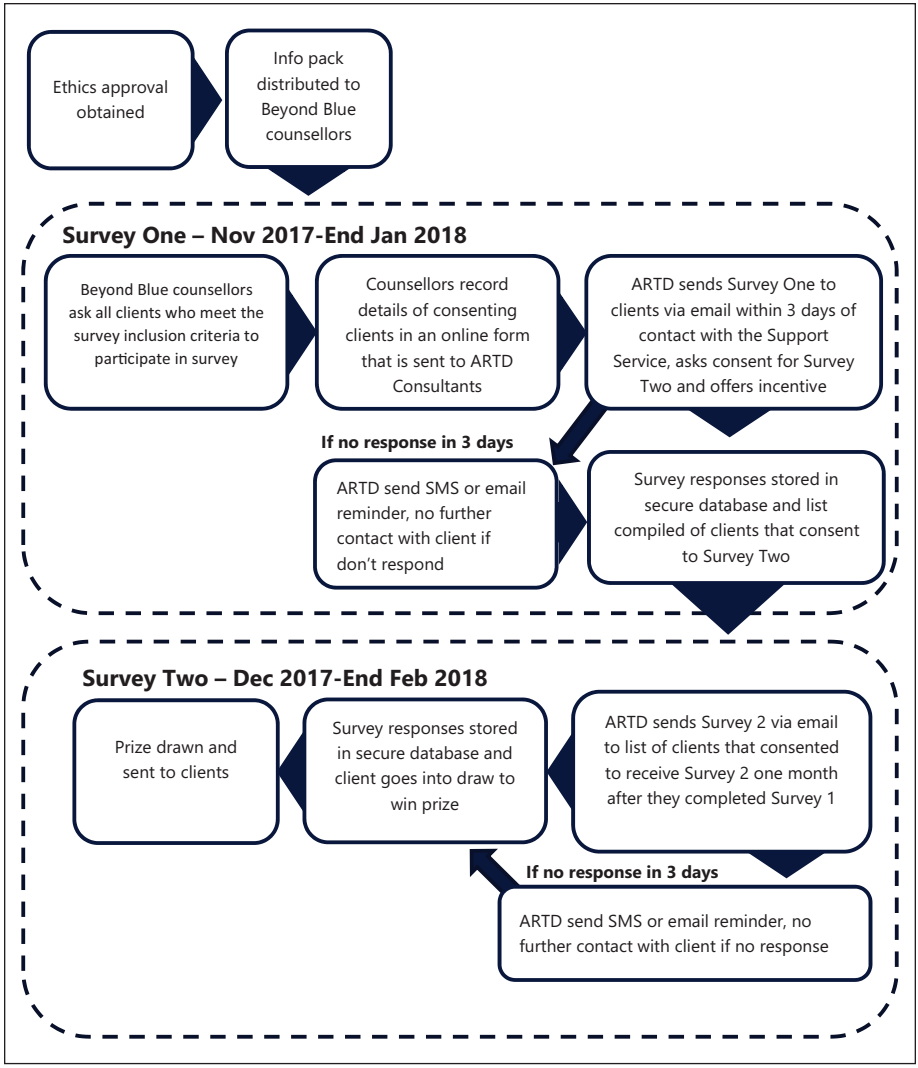

Figure 1. The evaluation process.

All attempts were made to reduce the burden of data collections on service users and staff. The first survey was delivered to those who consented to participate 3 days after their contact and the second survey was released 28 days after their initial contact. Service users who did not complete the survey were reminded once only via SMS or email (Stern et al., 2014) 3 days after their initial invitation. The full evaluation process is outlined in Figure 1.

Data collection tool

The survey items were designed to measure the following:

- Demographics (Survey 1 only): service history, satisfaction with the service and actions taken as a result of the service. Items on satisfaction focused on whether the person felt listened to, respected, helped to feel better and provided with good advice. The actions taken were in open text.
- Kessler-5 (K5; Survey 1 only): a measure of psychological distress which measures levels of negative emotional states (Andrews & Slade, 2001), was included in Survey 1 to capture the level of anxiety and/or depression people may be experiencing. The K5 is a subset of five questions from the Kessler Psychological Distress Scale–10 (K10).
- One item from the K5 was later repeated in Survey 1 and in Survey 2 to measure changes in 'consumer-defined recovery'. This is a useful measure as consumers may attend less to the frequency of symptoms of distress than clinicians do, and more on their sense of self-worth and optimism about the future (Andresen et al., 2010). As such, items about 'hopefulness' and 'worthlessness' are likely to reflect how consumers define their recovery. One of these items was included in the survey protocol because it also appeared in the K5 which is used by Beyond Blue.
- Distress and Coping (slider scale): we developed a slider scale that asked, 'how distressed you feel' and how 'confident you feel to take action' that was administered at four different time points (see Table 2 for detail on the four time points and the use of a retrospective pre-tests).
- Factors influencing behaviour change (three items in Survey 1 repeated in Survey 2 with five further items): The necessary factors are that the person has formed a strong intention to perform the behaviour; the person is able to overcome barriers to perform the behaviour; and the person has the skills necessary to perform the behaviour.

It is important to note that this approach did not expect to measure changes in anxiety or depression as a result of the service using the K5, but, instead, was interested in the level of anxiety and depression of those accessing the service compared with the broader population of Beyond Blue service users. The primary interest was the usefulness of the service in terms of changes in help-seeking behaviour. The data collection tools used in the evaluation relied on four key elements: the K5 relevance to both mental health and 'consumer defined recovery', a purpose built visual analogue scale of stress and coping, an eight-item scale for assessing behaviour based on synthesis theory of factors influencing behaviour and behaviour change, and other items related to satisfaction with the counsellor, demographics and extent of interaction with the service or other similar services (Table 2).

Table 2. Relative focus of Questionnaires 1 and 2.

Focus area	Survey 1			Survey 2
	Pre-contact (collected retrospectively)	Post contact (collected retrospectively)	3 days after contact	1 month after contact
Distress levels	Distress about problem (one item)	Distress about problem (one item)	Distress about problem (one item)	Distress about problem (one item)
Coping ability	Confidence to take action to cope with problem (one item)	Confidence to take action to cope with problem (one item)	Confidence to take action to cope with problem (one item)	Confidence to take action to cope with problem (one item)
Consumer-defined recovery	Helplessness *past month pre-contact* (one item)		Helplessness last few days since contact (one item)	Helplessness last few weeks since contact (one item)
Help-seeking behaviour and action taken	Previous forms of support accessed	Intention to seek help immediately after the call	Key attitudes and immediate behaviour related to help-seeking	Key attitudes and behaviour at 1 month related to help-seeking

Table 3. Satisfaction with Beyond Blue counsellor at 3 days.

The Beyond Blue counsellor . . .	Strongly disagree		Mostly disagree		Tend to disagree		Tend to agree		Mostly agree		Strongly agree		Total	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
listened to me	23	5.9	15	3.8	6	1.5	41	10.5	66	16.8	241	61.5	392	100
was respectful towards me	24	6.0	2	0.5	5	1.3	14	3.5	37	9.3	316	79.4	398	100
helped me feel better	24	6.2	16	4.1	13	3.4	69	17.9	97	25.1	167	43.3	386	100
gave me good advice	19	4.8	14	3.5	11	2.8	53	13.3	92	23.1	209	52.5	398	100

Data collection. The first survey was conducted 3 days after accessing the service (Table 2). The first survey included a retrospective pre-test on levels of distress and coping and the K5 prior to making contact. The second survey was conducted 28 days after accessing the service. Survey delivery was automated so that the same period of time elapsed for all interviewees. Reminders were kept to a minimum to further ensure a comparable period of time between receipt of the service and completion of the survey for all respondents.

Data analysis

The method was a repeated-measure design incorporating a retrospective pre-test to measure changes across four time points: prior to receiving the service, immediately after the service, 3 days after receiving the service and 1 month after receiving the service. Data were analysed using the statistical software package SPSS, and paired-sample *t* tests and regression models were used to test the hypotheses that the intervention would lead to changes in help-seeking behaviour.

Ethical considerations

Approval for the evaluation was applied for by ARTD Consultants and obtained via a registered Human Research Ethics Committee. Participants were asked screening questions before they were invited to participate so that high-risk service users were not subjected to any distress by participating in the study. Participants could also withdraw at any time. In the introduction of each survey, participants were reminded that they could opt out at any time without consequences.

Findings

Satisfaction with the service

Respondents were first asked about their satisfaction with the Beyond Blue counsellor to establish whether they had a positive experience with the service. The majority of respondents were satisfied with Beyond Blue counsellors and their ability to listen, be respectful, make the respondent feel better and provide good advice.

Mental health benefits

The next set of analyses relate to changes over time in respondents' levels of distress and ability to cope in relation to the problem that prompted their contact with Beyond Blue. In response to questions in Surveys 1 and 2, respondents indicated that their ability to cope with their mental health, anxiety or depression increased directly after contact with Beyond Blue (Figure 2). Similarly, the levels of distress experienced by the respondents decreased directly after contact with Beyond Blue. The improvements in respondents' ability to cope and level of distress also persisted over time, with distress as low at 3 days and 1 month after contact as immediately after.

Distress. As shown in Figure 2, there appears to be an improvement in distress over time. There was a 42% reduction in mean scores for distress just after contact (Table 4).

To confirm whether these differences were statistically significant, paired-sample *t* tests were conducted on five pairs (see Table 5).

The results of these statistical tests showed that the improvements in distress over time were statistically significant. Respondents' levels of distress improved just after

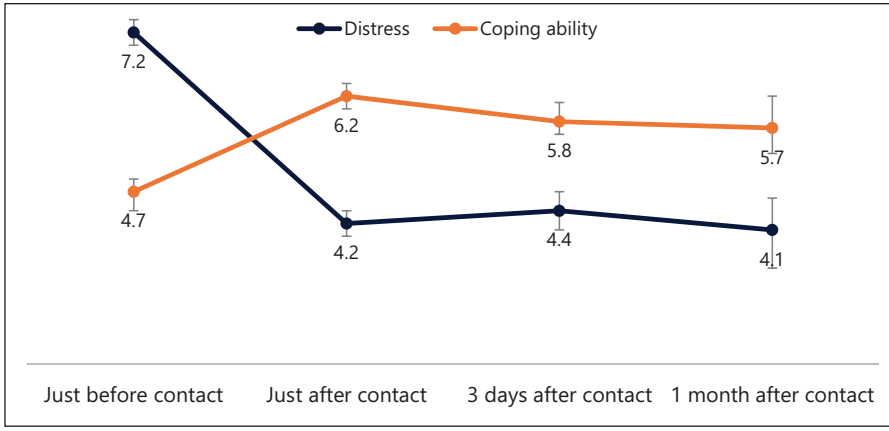

Figure 2. Changes in ability to cope and level of distress over time.
Errors bars indicate 95% confidence intervals (CIs) around the mean. Just before contact, just after contact and 3 days after contact utilise all responses to Survey 1 ($n = 403$) to calculate the mean score, while 1 month after contact only uses responses to Survey 2 ($n = 128$).

Table 4. Changes in mean level of distress scores.

Contact point	Mean score	Change	% change
Just before contact	7.2	NA	NA
Just after contact	4.2	3.0	−41.7
Three days after contact	4.4	−0.2	+4.8
One month after contract	4.1	0.3	−6.9

contact and remained low at 28 days after their initial contact with Beyond Blue. Their level of distress did not return to their originally high levels of distress.

Coping ability. As shown in Figure 2, there appears to be an improvement in ability to cope over time. There was a 32% increase in mean scores for coping ability just after contact (Table 6).

To confirm whether these differences were statistically significant, paired-sample *t* tests were conducted on five pairs (Table 7). There were statistically significant improvements in respondents' ability to cope between the following time points: (1) just before contact to just after contact ($p < .01$), (2) just before contact to 3 days after contact ($p < .01$), (3) just before contact to 1 month after contact ($p < .01$) and (4) just after contact to 3 days after contact ($p < .05$).

Consumer-defined recovery. While the K5 was only presented in Survey 1 (to reduce the burden of responding to the survey), one question relating to hopelessness was presented in both Survey 1 and Survey 2. This item decreased from 2.8 out of 5 just before contact

Table 5. Paired-sample *t* test results for level of distress over time.

		Paired differences					*t*	*df*	Sig. (two-tailed)
		Mean change	*SD*	*SE*	95% CI				
					Lower	Upper			
Pair 1	Just before contact → Just after contact	−3.120	2.633	.263	2.597	3.643	11.9	99	.000**
Pair 2	Just before contact → 3 days after	−2.740	2.723	.267	2.211	3.270	10.3	103	.000**
Pair 3	Just before contact → 1 month after	−3.337	3.247	.323	2.696	3.978	10.3	100	.000**
Pair 4	Just after contact → 3 days after	+0.372	2.708	.279	−0.927	.182	−1.3	93	.186
Pair 5	Just after contact → 1 month after	−0.154	3.451	.362	−0.565	.873	0.4	90	.672

Source: Beyond Blue Support Service Surveys 1 and 2.
Only paired responses to Surveys 1 and 2 were used for this analysis ($n = 119$). *SD*: standard deviation; *SE*: standard error; CI: confidence interval.
**$p < .01$.

Table 6. Changes in mean coping ability scores.

Contact point	Mean score	Change	% change
Just before contact	4.7	NA	NA
Just after contact	6.2	1.5	31.9
Three days after contact	5.8	−0.4	−6.4
One month after contract	5.7	−0.1	−1.7

Source: Beyond Blue Support Service Surveys 1 and 2.

to 2.3 out of 5 one month after contact. This indicates that the average respondent felt less hopeless after contacting Beyond Blue than they did before making contact.

To assess whether this difference was statistically significant, paired-samples *t* tests were conducted on three logical pairs, as shown in Table 8.

All pairs were significant, indicating there was a statistically significant difference between the mean scores on hopelessness: (1) just before contact and 3 days after contact ($p < .01$), (2) just before contact and 1 month after contact ($p < .01$) and (3) 3 days after contact and 1 month after contact ($p < .01$).

Help-seeking behaviour

The final set of analyses focuses on the actions taken by respondents as a result of their interaction with the service and attitudes predicting behaviour change. Taking action

Table 7. Paired-sample *t*-test results for ability to cope over time.

		Paired differences					*t*	*df*	Sig. (two-tailed)
		Mean change	*SD*	*SE* mean	95% confidence interval of the difference				
					Lower	Upper			
Pair 1	Just before contact → Just after contact	1.7	3.126	.321	−2.321	−1.047	−5.3	94	.000**
Pair 2	Just before contact → 3 days after	1.1	3.446	.363	−1.833	−0.389	−3.1	89	.003**
Pair 3	Just before contact → 1 month after	0.9	3.397	.358	−1.567	−0.144	−2.4	89	.019*
Pair 4	Just after contact → 3 days after	−0.6	2.372	.249	0.066	1.054	2.2	90	.027*
Pair 5	Just after contact → 1 month after	−0.2	3.029	.325	−0.427	0.864	0.7	86	.503

Source: Beyond Blue Support Service Surveys 1 and 2.
Only paired responses to Surveys 1 and 2 were used for this analysis ($n = 119$). *SD*: standard deviation; *SE*: standard error.
*$p < .05$. **$p < .01$.

Table 8. Paired-sample *t* tests for hopelessness over three time points.

		Paired differences					*t*	*df*	Sig. (two-tailed)
		Mean	*SD*	*SE* mean	95% CI of the difference				
					Lower	Upper			
Pair 1	Just before contact → 3 days after	0.21	0.94	0.05	0.12	0.30	4.41	392.00	.000
Pair 2	Just before contact → 1 month after	0.76	0.99	0.08	0.60	0.93	9.17	139.00	.000
Pair 3	3 days after contact → 1 month after	0.43	0.97	0.08	0.27	0.59	5.28	141.00	.000

Source: Beyond Blue Support Service Surveys 1 and 2.
SD: standard deviation; *SE*: standard error; CI: confidence interval.

could have been analysed in two ways. First, the respondent could have indicated that they had taken action as a result of the advice they were given at either Survey 1 or Survey 2. Second, a respondent could have indicated that they were not receiving help or support in Survey 1 and then indicate they were receiving help or support in Survey 2.

As shown in Table 9, there were 301 respondents (75.8%) who indicated that they had taken action as a result of the advice they had received from Beyond Blue in

Table 9. Summary of respondents' action taken.

	Yes		No		Total	
	n	%	*n*	%	*n*	%
Have you taken any action as a result of the advice you received from Beyond Blue?						
Survey 1	301	75.8	96	24.2	397	100
Survey 2	123	87.2	18	12.8	141	100
Are you currently receiving help through your GP, psychologist, counsellor, psychiatrist, community mental health team or health professional?						
Survey 1 (all responses)	147	64.8	80	35.2	227	100
Survey 2 (all responses)	69	69.0	31	31.0	100	100
Survey 1 (paired only)	42	53.2	37	46.8	79	100
Survey 2 (paired only)	56	68.3	26	31.7	82	100

Source: Beyond Blue Support Service Surveys 1 and 2.

Survey 1. The proportion of respondents who indicated they had taken action in Survey 2 was slightly higher (87.2%). Across all responses to Surveys 1 and 2, there was a slight increase, from 64.8% to 69.0% (+4.2%), in the proportion of respondents who were currently receiving help through their GP, psychologist, counsellor, psychiatrist, community mental health team or health professional. However, when only using paired survey responses (i.e., respondents who answered both surveys), the proportion of respondents currently receiving help was lower in Survey 1 and, subsequently, the increase in the proportion of respondents currently receiving help was larger, rising from 53.2% to 68.3% (+15.1%). This supports a conclusion that those who completed both surveys were not biased towards those with a history of help-seeking behaviour as these respondents were less likely to be receiving help than those who completed only Survey 1.

A total of 301 ($n=301$, 75.8%) respondents indicated they had taken action since receiving advice from Beyond Blue 3 days earlier. This high level of respondents taking action after receiving advice suggests that the advice was deemed appropriate, valued and of interest to the respondent. The proportion of respondents who indicated they had taken action after 1 month was 10% higher (85.3%). Of the respondents who had not taken action, the most common reasons for this included perceived barriers to following up advice (such as lack of confidence, an inability to make decisions, too much effort required, prior negative experience, cost and location), not having had an opportunity to do so, not being interested in taking up the advice, intending to take up advice in the future or the conversation didn't require action to be taken.

Attitudes predicting behaviour change

Theories of behaviour change can be synthesised to suggest eight key factors that influence behaviour (Fishbein et al., 2000). These were operationalised into survey items to help explain behaviour change measured in the survey. While we believe the factors have face validity, they have not been validated psychometrically. Almost all

Table 10. Respondent reactions to advice received from Beyond Blue.

Variable	Factor	Survey item	% agree	Mean	*SD*
BC2_1	Intention	I intended to follow some or all of the advice	83%	4.69	1.48
BC2_2	Perceived ability	I felt I had the ability to follow some or all of the advice	84%	4.72	1.36
BC2_3	Obstacles	I have run into some obstacles following some or all of the advice (R)	59%	3.69	1.50
BC2_4	Belief in benefits	I think I would be better off if I followed the advice	85%	4.71	1.44
BC2_5	Social norms	People who are important to me would encourage me to follow the advice	88%	4.85	1.22
BC2_6	Embarrassment	I would be embarrassed to follow the advice (R)	15%	2.12	1.22
BC2_7	Discomfort	Actually obtaining or following the advice would be an uncomfortable or painful experience (R)	26%	2.61	1.56
BC2_8	Actual ability	I feel I could follow the advice if I really needed to	90%	4.90	1.22

Source: Beyond Blue Support Service Survey 2.
(R) indicates items which were reverse phrased. *SD*: standard deviation.

(83%) intended to follow the advice and the majority of respondents (59%) said they ran into obstacles. The results are presented in Table 10.

A regression analysis using the components of behaviour change as independent variables and whether respondents had taken action 1 month after contact with Beyond Blue as the dependent variable, indicated whether they had run into any obstacles ($\beta = .236$, $t = -2.018$, $p < .05$) and their actual ability (rather than perceived; $\beta = -.284$, $t = 2.058$, $p < .05$) significantly predicted behaviour change (Table 11). The proportion of variance accounted for is small (adjusted $r^2 = .128$) as there were relatively few people (12.8%) who did not take any action (Table 9).

Behaviour change can be measured with other dependent variables. The dependent variable with the most variation was, 'I have achieved goals I set with the Beyond Blue counsellor'. When we use the eight standard behaviour change questions, 42% (adjusted $r^2 = .419$) of the variance in achieving goals can be accounted for with just these eight items, as shown in Table 12. While running into obstacles was negatively associated with achieving goals, it was not statistically significant. The strongest and most statistically significant predictors of achieving goals was whether they intended to follow the advice ($\beta = .373$, 95% confidence interval [CI] [.026, .703]), followed by actual (rather than perceived) ability to follow the advice ($\beta = .280$, 95% CI [.041, .648]).

Table 11. Behaviour change regression model – taken action after 1 month.

	Model	Unstandardised coefficients		Standardised coefficients	*t*	Sig.
		B	*SE*	β		
	(Constant)	.397	.288		1.379	.173
BC2_1	Intention	.019	.044	.089	0.425	.672
BC2_2	Perceived ability	.010	.048	.045	0.213	.832
BC2_3	Obstacles	−.050	.025	−.236	−2.018	.048*
BC2_4	Belief in benefits	.049	.034	.210	1.414	.162
BC2_5	Social norms	−.032	.035	−.129	−0.899	.372
BC2_6	Embarrassment	.038	.037	.158	1.030	.307
BC2_7	Discomfort	−.004	.028	−.019	−0.134	.894
BC2_8	Actual ability	.078	.038	.284	2.058	.044*

Source: Beyond Blue Support Service Survey 2.
Dependent Variable: Action2YN1. *SE*: standard error.
*$p < .05$.

Table 12. Behaviour change regression model – achieved goals with counsellor.

	Model	Unstandardized coefficients		Standardised coefficients	*t*	Sig.
		B	*SE*	β		
	(Constant)	.733	1.097		0.668	.507
BC2_1	Intention	.365	.169	.373	2.156	.035*
BC2_2	Perceived ability	−.024	.186	−.023	−0.128	.899
BC2_3	Obstacles	−.110	.097	−.115	−1.134	.261
BC2_4	Belief in benefits	.110	.133	.098	0.823	.414
BC2_5	Social norms	.055	.140	.046	0.392	.696
BC2_6	Embarrassment	−.056	.144	−.051	−0.388	.700
BC2_7	Discomfort	−.053	.109	−.060	−0.488	.627
BC2_8	Actual ability	.344	.152	.280	2.269	.027*

Source: Beyond Blue Support Service Survey 2.
Dependent Variable: Counsellor2_Goals. *SE*: standard error.
*$p < .05$.

Discussion

The findings of this article indicate that the Beyond Blue support service is effective and achieves what it has set out to do – that is, it increases users' ability to cope and reduces their level of distress. The majority of users take action immediately following their counselling sessions, and even more so after 1 month.

The success of the support service is likely linked to the high quality of the counsellors who provide the support service. The literature on similar support services indicates that positive outcomes for users are linked to counsellors who are empathetic and demonstrate respect towards service users (Mishara et al., 2007). Moreover, when users feel cared for, supported, reassured and listened to, there is a greater likelihood of a positive outcome occurring (Sands et al., 2016). Respondents in this study were very happy with the quality of the counselling advice they received and gave highly positive reviews of the counsellors, indicating that they felt listened to and respected.

However, some respondents indicated they did not take action after contacting the support service (i.e., they encountered obstacles) because they felt the advice was inadequate, impersonal or irrelevant. Making the advice more adequate, personal and relevant can be directly affected by the service and could improve the outcomes even further. One possible way of ensuring that advice is suitable is having the user demonstrate how they plan to take action after the session. This gives the counsellor and service user a moment to reality to check the advice and consider whether it is personally relevant to them. If they perceive any possible obstacles during this 'role-play', the counsellor can adapt the advice on the spot and increase the likelihood of the user taking action to improve their mental health.

It was useful to understand behaviour change theory prior to commencing this study, as it informed the structure of the survey instruments and the analyses which were undertaken. This understanding helped rule out any fundamental flaws that may be a systematic feature of the advice given by the service. That is, rather than just asking if respondents had followed the advice they had received or not, a theory-driven approach that could identify the key factors which were likely to moderate behaviour change was used. The survey instruments systematically asked all respondents about every possible factor of behaviour change to understand what was driving their action or lack thereof. This approach also allowed for regression analysis of the dataset, which would not have been possible had respondents just been asked why they did or did not take action after receiving advice from the counsellor.

This evaluation contributed to the literature on this topic as there is a paucity of information available on the outcomes of similar services. It provides insight to evaluators looking to evaluate telephone or online support services and associated behaviour change.

Limitations

The evaluation has several limitations associated with the study's design that were intended to minimise the risk and burden on service users. The protocol did not include a comparison group of similar people that did not receive the service – rather the approach was to compare changes over time for individuals in key help-seeking behaviour, stress and coping. While stress levels may be expected to attenuate even without the service (as people call the service when in maximum distress, that is, regression to the mean), it is also possible that people would engage in other help seeking without the service. We suggest that the survey result that reveals that 36.8% of

service users had never contacted anyone outside of their family and friends about this problem provides some evidence of the additional benefit of the service over and above the normal service system.

Medium- to high-risk service users were not asked to participate in the survey and, as such, the results should be interpreted as applying to service users of low to nil risk. It is uncertain whether those that chose to respond were representative of the low to nil risk population of service users.

The survey relied on self-report responses and therefore may be biased by socially desirable responding. That is, respondents may say what they believe makes them look good or is the 'correct' response. However, this was limited by an online survey rather than a phone survey where a respondent is interacting with a human (possibly the counsellor) and is more likely to provide socially desirable responses.

In tables where we have used percentage change throughout the report, this is to increase accessibility of the analysis of a non-technical audience. However, it is acknowledged that this measure is statistically inefficient (Vickers, 2001).

Recommendations for future evaluation

Future evaluations of this or similar services could be strengthened through the addition of a follow-up qualitative component to further explain the results from quantitative analysis. Although the survey design enabled insight into the actions taken, the helpfulness of those actions and the obstacles that were encountered, qualitative methods could further explore the factors that influence different types of behaviour and why or why not respondents acted on the advice given. For example, interviewing a purposive sample of respondents that demonstrated different characteristics would help to understand the variation in client groups accessing the service and inform how the service could be improved by tailoring the type and delivery of advice to these different clients. In addition, the research could be extended by working with the telephone counsellors to develop 'realist' hypotheses to be tested in the data. When combined with qualitative data from respondents, these may have suggested hypotheses about the types of support (or 'recovery' mechanisms that may be activated by different types of support) that are more or less effective for different types of clients in different circumstances or contexts. For example, certain techniques may be more or less likely to lead different people to think about, or plan to act than others. Knowledge of which techniques are most likely to alter the decision making (or overcome obstacles) of people in different circumstances (different histories, attitudes, etc.) would provide detailed evidence-based research findings for counsellors to adjust their techniques to different clients.

Conclusion

Overall, respondents reported reduced distress and increased ability to cope following contact with Beyond Blue. These improvements persisted 1 month after the contact, suggesting that the Support Service is having lasting positive effects for its users. In general, there were no major problems with the advice given in terms of factors known to be important for behaviour change (Fishbein et al., 2000), or in this case, seeking

further assistance. This study demonstrates the value of a short-term brief intervention support and referral service rather than other telephone services that focus on ongoing counselling. People who are accessing the support service are acting on the advice given and taking up those referrals so it is fulfilling its purpose by facilitating links to other areas in the mental health system. There is a role for this type of service which includes the option of webchat, as well as other telephone support services.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship and/or publication of this article: Funding for this evaluation was provided by Medibank Health Solutions.

ORCID iDs

Jasper Odgers https://orcid.org/0000-0002-8342-3425
Alicia McCoy https://orcid.org/0000-0002-3811-4551

References

Andresen, R., Caputi, P., & Oades, L. G. (2010). Do clinical outcome measures assess consumer-defined recovery? *Psychiatry Research*, *177*, 309–317.

Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler psychological distress scale (K10). *Australian and New Zealand Journal of Public Health*, *25*(6), 494–497.

Australian Bureau of Statistics. (2008). *National survey of mental health and wellbeing: Summary of results, 2007* (4326.0).

Australian Institute of Health and Welfare. (2014). *Australia's health 2014* (Australia's Health Series No. 14 Cat. No. AUS 178).

Bassilios, B., Harris, M., Middleton, A., Gunn, J., & Pirkis, J. (2015). Characteristics of people who use telephone counseling: Findings from secondary analysis of a population-based study. *Administration and Policy in Mental Health*, *42*, 621–632.

Donaldson, S., & Lipsey, M. (2006). Roles for theory in contemporary evaluation practice: Developing practical knowledge. In I. F. Shaw, J. C. Greene, & M. M. Mark (Eds.), *The SAGE handbook of evaluation* (pp. 57–75). SAGE.

Fishbein, M., Triandis, H. C., Kanfer, F. H., Becker, M., & Middlestadt, S. E. (2000). Factors influencing behavior and behavior change. In T. A. Revenson & R. A. R. Gurung (Eds.), *Handbook of health psychology* (pp. 3–17). Lawrence Erlbaum.

Kalafat, J., Gould, M., Munfakh, J., & Kleinman, M. (2007). An evaluation of crisis hotline outcomes. Part 1: Nonsuicidal crisis callers. *Suicide and Life-Threatening Behavior*, *37*(3), 322–337.

King, R., Bambling, M., Reid, W., & Thomas, I. (2006). Telephone and online counselling for young people: A naturalistic comparison of session outcome, session impact and therapeutic alliance. *Counselling and Psychotherapy Research*, *6*(3), 175–181.

Medibank Health Services. (2016) *Beyond Blue support service annual report financial year 2016*.

Mishara, B., Chagnon, F., Daigle, M., Balan, B., Raymond, S., Marcoux, I., Bardon, C., Campbell, J., & Berman, A. (2007). Which helper behaviors and intervention styles are related to better short-term outcomes in telephone crisis intervention? Results from a

silent monitoring study of calls to the U.S. 1-800-SUICIDE network. *Suicide and Life-Threatening Behaviour*, *37*(3), 308–321.

National Mental Health Commission. (2014). *National mental health review of programmes and services* (Vol. 1).

Sands, N., Elsom, S., Keppich-Arnold, S., Henderson, K., & Thomas, P. (2016). Perceptions of crisis care in populations who self-referred to a telephone-based mental health triage service. *International Journal of Mental Health Nursing*, *25*, 136–143.

Shaw, I., Greene, J., & Mark, M. (2006). *The SAGE handbook of evaluation*. The Cromwell Press.

Spirito, R. (2011). Sustaining recovery through the night: Impact of a peer-run warm line. *Psychiatric Rehabilitation Journal*, *35*(1), 65–68.

Stein, D., & Lambert, M. (1984). Telephone counselling and crisis intervention: A review. *American Journal of Community Psychology*, *12*, 101–126.

Stern, M. J., Bilgen, I., & Dillman, D. A. (2014). The state of survey methodology: Challenges, dilemmas, and new frontiers in the era of the tailored design. *Field Methods*, *26*(3), 284–301.

Urbis Keys Young. (2002). *National review of telecounselling and web counselling services* [Prepared for the Department of Health and Aging].

Vickers, A. J. (2001). The use of percentage change from baseline as an outcome in a controlled trial is statistically inefficient: A simulation study. *BMC Medical Rresearch Methodology*, *1*(1), 6.