Use It or Lose It: Post-workshop Reflection Enhances Learning and Utilization of CBT Skills

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Many therapists attend 1- or 2-day workshops as part of their continuing professional development. Recent literature has suggested that workshops are largely ineffective unless followed up by consultation or supervision. However, not all therapists have this option, and the question remains whether there are ways to potentiate workshop learning in the absence of follow-up consultation. This study tested the hypothesis that creating opportunities to reflect in the weeks following a workshop would enhance learning and utilization of skills. Two groups of practitioners, who attended the same 2-day CBT skills workshop in successive years, were compared: a training-as-usual group and a reflection group. The reflection group completed reflection worksheets at the end of each workshop day and were instructed to complete follow-up reflection worksheets at 1, 4 and 8 weeks post-workshop. Ten weeks after the workshop, the reflection group reported enhanced use of new skills with clients and a trend towards increased awareness of workshop learning. Further analysis revealed that group differences were almost entirely linked to use of follow-up reflection worksheets. Those participants in the reflection group who used follow-up reflection worksheets reported far greater awareness and use of skills than those who did not. Reminder emails had the predicted effect of increasing the use of the reflection worksheets; twice as many participants in the email reminder group used the reflection sheets compared with the nonreminder group. The results suggest that the relatively simple strategy of introducing reflection worksheets to workshop handouts, and sending reminder emails may significantly enhance learning and utilization of workshop skills.

Cognitive-behavioral therapy (CBT) is now well established as a primary evidence-based treatment of choice for a range of mental health disorders (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012; Tolin, 2010). However, at this stage, a significant challenge for health systems is to disseminate CBT effectively so that the protocols demonstrated to be so effective in efficacy research trials can be implemented with fidelity by therapists in the community (Chorpita & Regan, 2009; Stirman, Cris-Christoph, & DeRubeis, 2004). It has been reported that for medical treatments, there is typically a 17-year gap between the development of an evidence-based treatment and its widespread implementation (Institute of Medicine, 2001). Several authors have noted that this kind of translation-into-practice gap is readily apparent in the implementation of CBT in health services (Chorpita & Regan, 2009; Kazdin, 2008; Lyon, Stirman, Kerns, & Bruns, 2011; McHugh & Barlow, 2010).

In recent years, researchers have examined ways to enhance the effectiveness of CBT dissemination (Beidas, Koerner, Weingardt, & Kendall, 2011; Simons et al., 2010). There is growing evidence that CBT training programs can have a positive impact on practitioner knowledge and skills (Beidas & Kendall, 2010; Karlin et al., 2012; Sholomskas et al., 2005; Westbrook, Sedgwick-Taylor, Bennett-Levy, Butler, & McManus, 2008). To enhance the effective implementation of CBT in health services, some authors have focused on ways to improve the delivery of face-to-face training workshops (Bennett-Levy, McManus, Westling, & Fennell, 2009; Lyon et al., 2011). Others have focused on ways to increase access to training and effectiveness through online delivery (Beidas, Edmunds, Marcus, & Kendall, 2012; Bennett-Levy, Hawkins, Perry, Cromarty, & Mills, 2012; Weingardt, Cucciare, Bellotti, & Lai, 2009). Another line of research has been to identify personal and systemic barriers to implementation—for instance, does the organization or individual value the idea of “evidence-based treatments” (Lewis & Simons, 2011; Stirman et al., 2012)? Perhaps most importantly, it has been increasingly recognized that workshops and training programs may be of limited benefit in the absence of ongoing consultation and supervision to consolidate and enhance learning post-workshop (Beidas et al., 2012; Lyon et al., 2011).
Organizational-level interventions such as consultation/supervision, where consultants work with specific services to enhance the skill base of their employees, can prove extremely effective (Simons et al., 2010; Westbrook et al., 2008). However, many training workshops are attended by diverse practitioners from various organizations, and many of these therapists do not have access to formalized workshop follow-up or ongoing consultation/supervision. The question therefore arises: Is there a way to enhance and sustain learning from therapist training workshops in the absence of organizational support? This question is the focus of the present study.

Our starting point for the study was the observation, articulated both in the adult education (Kolb, 1984; Schön, 1983) and therapist training and supervision literature (Bennett-Levy, Thwaites, Chaddock, & Davis, 2009; Bennett-Levy et al., 2001; Milne, 2009; Skovholt, 2001), that reflection appears to be central to the enhancement of skill development. Accordingly, we compared two groups of trainees who, in successive years, undertook the same training course with the same content and instructor. One group had “training-as-usual,” with no specific time for structured reflection. The other group was asked to complete a structured reflection worksheet at the end of both days of a 2-day training course and at 1, 4, and 8 weeks postcourse. Additionally, with the expectation that some trainees would not remember to reflect at follow-up, half of the reflection group was sent emails at 1, 4, and 8 weeks post-workshop, reminding them to use their reflection worksheets.

Our hypotheses were that: (a) the reflection group would report greater awareness and utilization of the CBT skills learned during the course than the training-as-usual group; (b) participants in the reflection group who report reflecting at 1 and 4 weeks post-workshop would report enhanced awareness and utilization of skills compared with those in the reflection group who do not reflect at 1 and 4 weeks; and (c) email reminders would serve to increase the number of people taking the opportunity to reflect.

Method

Participants

The two groups of participants were attendees at a 2-day CBT workshop, which was presented in successive years. Approximately 850 people attended each workshop. At both workshops, participants were given a form asking if they would be willing to be contacted in the next few weeks “to get feedback on the learning you have done” and to “find out more about participants’ experiences of workshops.” Those agreeing were asked to complete a form giving the researchers their email address. No further details of the nature of the study were given at that time.

Four hundred thirty participants in the first year of the workshop and 476 in the second year provided email addresses. However, many emails did not find their way to the participants due to difficulty reading handwriting, typing errors, or participant difficulties opening the email or completing the questionnaire. Our estimate from emails returned “message undeliverable” and feedback from participants is that at least 30% of emails either failed to find their target and/or presented technical difficulties that prevented participants from completing the questionnaire. Of those who received the questionnaire, we estimate the response rate was approximately 15%, although this may be an underestimate because we had no way to verify email receipt.

The resulting training-as-usual group (n = 50) attended the workshop one year; the reflection group (n = 48) attended the following year. The two groups were closely matched in age, gender, professional background, years of experience, and main therapeutic orientation (see Table 1). There were no significant differences, with the exception of a slight tendency towards an older mean age in the training-as-usual group, t(81) = 1.71, p = 0.09.

Workshop Content

The 2-day workshop was designed to teach CBT skills that have cross-situational applicability irrespective of diagnostic category. Specifically, the content covered was...
as follows: combining a positive therapeutic alliance with optimal structure; guided discovery strategies with an emphasis on Socratic method; use of verbal and written summaries to prompt client learning; symbolic syntheses of client emotional and cognitive systems (imagery, metaphor, icons, stories; Padesky & Mooney, 2012); constructive and deconstructive language (Mooney & Padesky, 2000); and construction of collaborative case conceptualizations (Kuyken, Padesky, & Dudley, 2009). A variety of training strategies were used, including didactic teaching, live demonstrations with audience volunteers, video demonstrations, role-plays, group exercises, detailed written handouts, individual exercises, and use of CBT techniques on oneself.

Procedure

The two groups experienced the same training course with the same handouts, videos, and experiential activities. Although the instructor’s clinical demonstrations were different each year (depending upon clinical issues portrayed by the volunteer), the teaching points derived from these were the same. The only difference in conditions for the two groups was that the training-as-usual group did not receive any specific instructions to reflect on their learning during or after the workshop, nor did they have reflection worksheets in their handouts packet; the reflection group had five reflection worksheets in the handouts packet and instructions to complete these (two during the workshop, three after as described below). In addition, half of the reflection group was randomly selected to receive email reminders to complete the follow-up reflection worksheets at 1, 4, and 8 weeks in order to see if such reminders would make a difference in learning or utilization.

Reflection Questions and Instructions

The reflection worksheets and questions were designed to help participants review new learning and experiences in the workshop, and to focus attention on utilizing the skills in clinical practice post-workshop.

Participants in the reflection group received reflection worksheets in the handout packet for both days of the workshop and for follow-up at 1, 4, and 8 weeks post-workshop. The reflection questions are listed in the Appendix. At the end of each workshop day, participants were given 5 to 10 minutes to complete the Day 1 and Day 2 reflection worksheets. At the end of Day 2, the workshop instructor directed participants to complete the additional reflection sheets 1, 4, and 8 weeks after the workshop to maximize learning.

Measures

Between the 9th and 10th week post-workshop, participants were emailed the follow-up questionnaire. The questionnaire asked participants to rate their outcomes and learning strategies.

Outcome Questions

Sixteen outcome questions assessed learning of the specific clinical skills taught in the workshop. Respondents rated on a 5-point scale (0 – 4) whether there had been any change in (a) their awareness of these 16 items since the workshop and (b) in actual therapist behavior (0 = no change to 4 = major change).

The 16 outcome questions assessed the following clinical skills: use of the therapeutic alliance in therapy; the use of structure in therapy; the balance between structure and alliance; use of note taking in therapy; guided discovery; making verbal summaries in therapy; making written summaries in therapy; asking questions for discovery, rather than changing the client’s mind; use of symbolic syntheses (metaphors, icons, stories, images, music); analytical/synthesizing questions; deconstructive questions; constructive questions; valuing client feedback; ability to construct a case conceptualization; sharing the conceptualization with the client; helping the client develop case conceptualization; using naturally occurring moments.

The distinction between awareness and behavior ratings was explained as follows: “because we can become more aware of an issue (e.g., lack of structure in our therapy), but may not have made any changes yet.” Respondents could also answer N, which stood for “no change necessary because I was already aware, or did this to a high degree.”

Learning Strategy Questions

Participants were asked to estimate the amount of time they had given to different learning strategies (a) in the first 2 weeks after the workshop, and (b) in Weeks 3–9 after the workshop. The four learning strategies were thinking about the workshop; talking about it to colleagues; reviewing the workshop handouts; and making further notes.

Question About Use of Reflection Worksheets

Participants in the reflection group were asked whether they had used the post-workshop reflection sheets at 1-, 4- and 8-week follow-up. In the Results section, this question has been used to distinguish two subgroups within the reflection group: a subgroup that used the reflection sheets (Ref-USE, n = 17) and a subgroup who did not use the reflection worksheets (Ref-NOTUSE, n = 23). The Ref-USE subgroup comprised those 17 participants who reported using the reflection sheets at both 1 and 4 weeks postworkshop. Eight participants reported using the worksheets at 1 week, but not at 4 weeks. They were not included in the Ref-USE group because it was determined that Ref-USE participants needed to demonstrate consistency in reflecting beyond the first post-workshop week. Reasons for not completing the reflection sheets were sought via a checklist and open-ended questions.
**Reflection Enhances Learning**

**Demographic Data**

The demographic data reported above were part of the questionnaire data collection.

**Statistical Analysis**

This paper reports two main outcome scores: mean score for Change in Awareness and mean score for Behavior Change. These mean scores were computed for each participant from 12 of the 16 items, where the rating had been between 0 and 4. On 4 of the 16 items, over 33.3% of participants gave N responses, indicating that participants were already aware of this information or did this “to a high degree” prior to the workshop, and therefore no change should be expected. These four questions—the use of the therapeutic alliance in therapy, making verbal summaries in therapy, valuing client feedback, using naturally occurring moments—were therefore excluded from the mean scores since it was deemed these questions did not represent new learning for a high proportion of the sample.

N responses were also excluded from the mean scores of the other 12 items. Where a participant had an N response, their mean score was computed from the remaining items.

**Results**

The first comparison between the training-as-usual (TAU) group and the reflection (Ref) group revealed a highly significant difference for Change in Behavior (TAU: $M = 1.60, SD = 0.75$; Ref: $M = 2.13, SD = 0.71$, $t(93) = 3.50$, $p < .001$); and a nonsignificant trend towards Change in Awareness (TAU: $M = 2.18, SD = 0.81$; Ref: $M = 2.44, SD = 0.68$, $t(93) = 1.72$, $p < .09$). The reflection group therefore appeared to benefit from the reflection sheets.

However, only about half of the members (25/48) of the reflection group reported using the reflection sheets at the 1-week follow-up, and approximately one third of participants ($n = 17$) reported using the reflection sheets at both 1 and 4 weeks. Therefore, to determine whether use of reflection sheets was the important factor in the training-as-usual vs. reflection group difference, three groups were compared: the TAU group ($n = 50$), the reflection group that used reflection sheets at 1 and 4 weeks (Ref-USE; $n = 17$), and the reflection group that did not use reflection sheets (Ref-NOTUSE; $n = 23$). The 8 participants who used the reflection sheets inconsistently—at Week 1 but not Week 4—were omitted from this analysis.

Figure 1 displays the means for the three groups. The one-way ANOVA demonstrated strong group differences in both Change in Awareness, $F(2, 84) = 6.12$, $p < .005$, and Behavior Change, $F(2, 84) = 11.80$, $p < .0001$. Bonferroni post-hoc comparisons of mean differences revealed significant advantages for the Ref-USE group over both the TAU and Ref-NOTUSE groups in Change in Awareness (Ref-USE/TAU $M_{diff} = 0.68$, $p < .004$; Ref-USE/Ref-NOTUSE $M_{diff} = 0.69$, $p < .015$) and Behavior Change (Ref-USE/TAU $M_{diff} = 0.96$, $p < .0001$; Ref-USE/Ref-NOTUSE $M_{diff} = 0.74$, $p < .005$). Therefore, there were strong indications that use or non-use of the reflection sheets is the key factor influencing the reflection group advantage over the training-as-usual group.

Differences between the Ref-USE group and the other two groups were also found in the reported use of learning strategies post-workshop. The Ref-USE group reported that, more than 2 weeks after the workshop, they thought about the workshop ($z = 2.77$, $p < .006$), talked about the workshop ($z = 3.61$, $p < .0001$), and reviewed the workshop handouts ($z = 4.04$, $p < .0001$) to a significantly greater extent than the TAU group. Significant differences were also found in the same comparisons between the Ref-USE and Ref-NOTUSE ($z = 2.25, 2.5$ and $3.7$, $p < .03, .02$ and $< .0001$) groups. No differences were found between any of the groups in report of making further notes. To summarize, it appears that using the reflection sheets kept the workshop alive in participants’ thoughts and conversations.

A final question concerned whether email reminders increased the likelihood of participants using the reflection sheets. Table 2 shows the proportion of participants in the reminder and nonreminder groups who used the reflection sheets at 1, 4 and 8 weeks. Providing email reminders more than doubled the use of reflection sheets at each time point, and all comparisons yielded highly significant differences ($z > 3.2$, $p < .001$). Nevertheless, despite reminders, only two-thirds of the reminder group used the reflection worksheets at 1-week follow-up, half at 4 weeks, and one third at 8 weeks. Less than one third of the nonreminder group used the reflection worksheets at any point post-workshop.

Reasons for not completing the reflection worksheets were different in the two groups. As expected, the nonreminder group reported forgetting about reflection worksheets to a greater extent than the reminder group: at 1-week follow-up, 30% vs. 0%; at 8 weeks, 75% vs. 21%. In both groups, between 30% to 50% of those who remembered that there were reflection worksheets reported that there were other reasons for not using them (e.g., not enough time, other priorities).

**Discussion**

The results of the study indicate that spending structured time reflecting on workshop learning both during a workshop and at 1 and 4 weeks post-workshop (the Ref-USE group) facilitates increased awareness of the learning and utilization of the skills at 10-week follow-up, compared with training-as-usual with no structured reflection. Furthermore, the results indicate that it is not enough simply to reflect on learning during a workshop. Participants using reflection sheets during the workshop but not after (the Ref-NOTUSE
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doubled the use of reflection sheets at 1, 4, and 8 weeks. Email reminders at least 8 weeks (indistinguishable from the group that reflected at 1, 4, and who reflected at 1 and 4 weeks, but not 8 weeks (n = 4), was TAU and Ref-NOTUSE groups, while the mean of those reflected at 1 week but not 4 weeks was very similar to the usual (TAU) participants, who had no workshop reflection sheets. It therefore appears important to reflect on workshop learning consistently in the weeks following a workshop if newly acquired skills are to remain in mind and be put into practice.

While the available data indicate that post-workshop reflection is critical to later awareness and utilization of skills, we cannot be sure what the optimum amount of reflection is, and when it should take place. Evaluation of the raw data indicated that the mean Awareness and Behavior Change scores of the small group (n = 8) that reflected at 1 week but not 4 weeks was very similar to the TAU and Ref-NOTUSE groups, while the mean of those who reflected at 1 and 4 weeks, but not 8 weeks (n = 4), was indistinguishable from the group that reflected at 1, 4, and 8 weeks (n = 10). While these numbers are clearly too small for statistical comparison, a tentative conclusion is that repeated reflection post-workshop is important, but there may be limits to the amount of times it is necessary to reflect. Future studies should determine how often and at what times post-workshop reflection should take place.

The simple act of providing reminders led to a marked impact on reflection sheet usage. Email reminders at least doubled the use of reflection sheets at 1, 4, and 8 weeks. Use of the reflection sheets in turn led to greater awareness and utilization of the workshop skills. The main reason that participants in the nonreminder group gave for failing to reflect was that they forgot about the reflection sheets. This suggests that the act of reflecting is not simply a matter of participant interest in the material. Other factors such as remembering play a key role, and reminders can serve to significantly increase participants’ rate of reflection post-workshop. The data strongly support the previous suggestions in the training literature that providing reminders is an important way to enhance the effectiveness of training (Lyon et al., 2011).

This study provides good support for the theoretical literature from adult learning and therapist training that suggests the centrality of reflection to therapist skill development (Bennett-Levy, 2006; Schön, 1983; Skovholt, 2001). Despite this theoretical literature, there has been a dearth of research that has actually demonstrated the effectiveness of reflection in therapist learning. The reflective questions were informed by studies suggesting the value of linking reflective questions to clinical practice, cognitive theory, and therapist self-awareness (Thwaites, Bennett-Levy, Davis, & Chaddock, 2013). However, from the present study, it is not clear whether some types of reflective question are more helpful than others (Lee & Hutchison, 1998). This could be a fruitful avenue for further research.

There are four important caveats about the study. First, the results are based on self-report, not objective measures of therapist behavior. Clearly the acid test of the value of a training course is its impact on actual therapist behavior. It is not known to what extent therapist reports on the questionnaire reflected actual behavior. However, the experimental design ensured that this relationship is the same for both groups. Because participants did not know they were in a comparative study, there is no reason to suggest that the demand characteristics would be greater for one group than another. In as much as the reflection questions primarily focused on the utilization of skills learned in the workshop, the results of the study are consistent with the experimental manipulation.

Second, enhanced awareness and utilization does not necessarily equate to enhanced skill. One of the benefits of follow-up consultation or supervision is that skills can be assessed to determine if therapists are adhering to protocols (Milne, 2009). Practicing skills in clinical contexts is clearly an important step in the process of skill development, but might be unhelpful if the skills are being practiced incorrectly.

Third, it is conceivable that, despite the same materials being presented in successive years, there may have been some variation between the first- and second-year presentations that could have affected the TAU/reflection group comparisons. For instance, the live role-plays, post-role-play clinical discussions, and audience questions.
were necessarily different. However, the course content and workshop materials remained the same, and as there were no significant differences between the TAU group and the Ref-USE and Ref-NOTUSE groups, we consider it unlikely that there was any presenter variation significant enough to affect the results. Furthermore, the most crucial comparison in this study was between the Ref-USE and Ref-NOTUSE groups. These subgroups of the reflection group attended the same workshop. Therefore, presenter variation could not have affected this comparison.

Fourth, the study is based on a relatively small sample from a large audience, due to various forms of attrition. About 55% of the sample gave their email addresses as potential volunteers. However, a large number of this potential sample was lost because of illegible handwriting and technical difficulties in electronic receipt, which has implications for future studies using this method. We do not know how representative our sample was of the total sample, but similar problems and attrition rates applied to both groups in successive years, and the TAU and reflection groups were closely matched on all relevant variables. Thus, there is no reason to suppose that the comparison between groups was differentially affected by these selection factors.

Within the above limitations, this study has several practical implications to enhance therapist training. First, the data suggest the value of follow-up reflective worksheets as a means to potentiate therapist skill acquisition and implementation. For all practitioners, but particularly those many practitioners who attend workshops but do not have access to follow-up consultation or supervision, the worksheets may represent a potent way to stretch learning beyond the workshop, and integrate it into clinical practice.

Second, email reminders appear at least to double the use of reflection worksheets at follow-up. For workshop organizers and instructors, the inclusion of reflection sheets and email reminders represents a simple, low-cost way to maximize workshop learning. Although the researchers in this study did not have access to a participant email database, organizers almost always have the email addresses of workshop participants and can integrate a plan to send out a group reminder emails.

Third, where follow-up consultation is available (Beidas et al., 2012; Simons et al., 2010), reflection sheets can provide a powerful link between the training program and consultations. Areas of relative weakness can be identified and tracked; competencies can be formally assessed; and further reflection sheets may be used to enhance skills and utilization. Indeed, there is no reason why this simple strategy of written reflection sheets should not be regularly used in association with consultation or supervision sessions. Our results suggest that it may well be advantageous.

Fourth, instructors can now quote the results of the present study in order to reinforce the importance of reflection for future skill development and utilization. We do this routinely in our training workshops. Not only is the workshop learning enhanced, but this instruction may also play a part in heightening awareness of the importance of reflection as core therapist competency (Roth & Pilling, 2008; Thwaites et al., 2013).

In summary, this study provides empirical support for the value of reflection in therapist learning, and suggests some simple practical strategies that instructors can use to assist the translation from workshop training to the utilization of skills. Future studies should build on these data to determine the quantity and optimum time for post-workshop reflection and the kinds of reflective questions and activities most likely to facilitate learning from workshops. Our overall conclusion is that building structured reflection experiences into workshops may be an important component in the successful dissemination of empirically supported therapies, perhaps particularly valuable to those practitioners attending workshops who do not have access to ongoing consultation or supervision.

**Appendix**

**Reflection Questions for the Five Reflection Worksheets**

**Day 1 Questions**

1. What were the main things you learned today: From the teaching? From the role-plays in your role as therapist, or client or observer?

2. How will this be useful to you? What differences will it make in your clinical practice?

**Day 2 Questions**

Same questions 1 and 2 as Day 1, plus:

3. What will you do to derive maximum benefit from the workshop over the next few months?

**1-Week Follow-up Questions**

1. What are the main things I learned from the workshop? (if you haven’t already reviewed your notes, do so now)

2. Having reviewed your notes, is there anything else that was important?

3. How am I going to practice/implement this learning over the next month? What are the implications for my work with clients, for supervision and for training?

**4-Week Follow-up Questions**

Review your notes and the 1-Week follow-up reflection sheet, then reflect on what you have been able to practice, and what, to date, you’ve not been able to.

1. What learning from the workshop have I practiced or implemented?

2. How well has this gone? What have I done well?
3. What improvements can I make? What do I need to do to accomplish this?
4. What learning from the workshop have I been unable to practice or implement?
5. What has stopped me doing this?
6. Is there a way I could practice this in the next month?

If so, how?

8-Week Follow-up Questions

Review your notes and the 1-week and 4-week follow-up reflection sheets, then reflect on what you have been able to practice, and what, to date, you’ve not been able to.

1. What am I now doing differently in my practice as a therapist as a result of attending the workshop? What am I doing more of or less of?
2. How can I improve on these changes in the next months?
3. What other changes do I have in mind to make, but have not yet been able to do?
4. What do I need to do to achieve these changes?
5. What learning from the workshop have I been unable to practice or implement?
6. What has stopped me doing this?
7. Is there a way I could practice this in the next month? If so, how?

References


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