TRANSFERRING SKILLS FROM SUPERVISION TO THERAPY: A QUALITATIVE AND QUANTITATIVE *N*=1 ANALYSIS

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Abstract. The importance of clinical supervision is increasingly recognized, as is the need to demonstrate that the work we do in the NHS is effective. However, observational analyses of supervision or evidence bearing out the effectiveness of supervision are rare and narrow in focus. To contribute to the evidence base, the present *N*=1 content and outcome evaluation describes and then assesses the effectiveness of cognitive behaviour therapy supervision, in terms of its observed impacts on a supervisee and her patient. The supervisee was a trainee therapist participating in a diploma course in cognitive therapy. The study utilized a qualitative and quantitative content analysis methodology, based on the intensive coding of a series of 10 longitudinal, video-recorded supervision sessions, linked to the subsequent 10 therapy sessions. Based on this method, 14 supervisory themes were extracted, which served to describe the change methods employed in the supervision. The predicted transfer (generalization) of those themes from supervision to therapy was observed to occur to a surprisingly marked extent, indicating that the supervision was effective. Implications are drawn for developing supervision and related research.

Keywords: Clinical supervision, observation, n=1, effectiveness.

Introduction

There is a growing consensus that clinical supervision represents an essential component within the continuing professional development of mental health practitioners (Department of Health, 1998). Similarly, such practitioners have consistently regarded supervision as a "corner-stone" of the training and support that they require (Russell & Petrie, 1994; p. 27). It appears to be the primary component and most frequently used method for teaching practitioners how to practise specific therapies.

Although widely-regarded as important, supervision has been a strikingly poorly researched topic within the mental health field. Russell and Petrie (1994) referred to this as an "alarming" state of affairs (p. 27), noting that traditionally supervisors are meant to develop competence by drawing on their skills as therapists and on their past experiences as supervisees. These two sources of guidance for the supervisor are unlikely to be sufficient to form the basis of competent supervision (Hess, 1987; Worthington, 1987; Watkins, 1990)

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and has therefore led some to conclude that it is probable that clinical supervision is being practised incompetently by many supervisors (Binder, 1993). Indeed, some commentators even believe that supervision "like love, cannot be taught" (Scott, 1999, p. 756).

One of the constraints on developing competent clinical supervision is the sparse literature on the effectiveness of different approaches. A major review of 144 empirical studies of supervision concluded that there was a general absence of both conceptual and methodological rigour (Ellis, Ladany, Krengel, & Schult, 1996).

While these negative perceptions of the supervision literature seem justified, there is a danger of assuming that all relevant research is of a similarly deficient standard (a version of the "uniformity myth"). In order to try and isolate a core of methodologically sound studies, Milne and James (2000) undertook a systematic review of studies in which an observation of the effects of cognitive behavioural supervision were included within the study designs. Twenty-eight empirical studies that met this evaluation criterion (and other specifications, including an intervention designed to enhance supervision) were located. The authors concluded that the results of cognitive behavioural supervision were positive, including demonstrated benefits to patients. It thus appeared possible to isolate a seam of good quality, empirical evaluations of supervision, and to draw conclusions from this body of work, even if much of the parallel research is weak. This review included ways that supervision can be taught and ideas about how the effectiveness of supervision can be evaluated. In the present paper, we turn to this issue of evaluating the effectiveness of clinical supervision.

In general, there remain disagreements within the field concerning the principal criterion of successful supervision. Some researchers argue that this should be the learning of the supervisee, whereas others believe that the ultimate measure of successful supervision is appropriate outcomes for the patient (Krasner, Howard, & Brown, 1998; Holloway & Neufeldt, 1995). Clearly, this argument pivots around the appropriate level of analysis, based on considering supervision to be part of an "educational pyramid" (Seidman & Rappaport, 1974). On the logic of the educational pyramid, a multi-level analysis of supervision would begin by considering the supervisor's trainer (the "consultant"), linking this to the impacts that this consultancy had on the supervisor, then in turn looking for impacts down the pyramid in relation to the supervisee/therapist and his or her patients. In their critical review of research on primarily cognitive behavioural supervision, Milne and James (2000) were able to locate only two studies that had analysed the effectiveness of supervision within this full pyramid (i.e. Parsons, Reid, & Green, 1993; Parsons & Reid, 1995). By contrast, they found 14 studies that had analysed the effect of supervision upon the supervisees/therapist and its related impact on the patient. However, these 14 studies had tended to use simple behavioural measures of the impact and may, therefore, have reached misleading conclusions regarding the effectiveness of the supervision.

In order to develop the measurement of supervision, the present study adopts a primarily qualitative method. We have previously analysed the effectiveness of clinical supervision using quantitative methods (Milne & James, 2002), but suspect that this approach was relatively insensitive. An alternative is to utilize qualitative methods, which carry the advantage of providing much more intricate detail of the phenomena under study, material that can be very difficult to represent through quantitative methods (Strauss & Corbin, 1990). However, there are of course strengths and weaknesses to both the qualitative and quantitative traditions, and therefore in the present study we propose to combine the methods. This is referred to in the literature as a "quantitative content analysis" (Strauss & Corbin, 1990).

Combining these methods can help to increase the sensitivity and validity of the analysis (as in providing a triangulation of qualitative and quantitative data).

In summary, the purpose of the present in-depth N-1 analysis was to analyse, in an unusually systematic way, the nature and effectiveness of CBT supervision. The analysis was based on one supervisor: supervisee/therapist dyad and the related therapist/patient dyad. We anticipated that: 1) the supervision would transfer to the therapy, in terms of the therapist utilizing change methods used within her supervision to the therapy she practised; and that 2) this transfer of skills would be "appropriate" (i.e. adhering to the CBT model and appearing to achieve the intended effect with the patient).

Method

Participants

The supervisor was a clinical psychologist (the fourth author) with a long-standing interest in CBT supervision. He had been trained to supervise through a series of post-qualification workshops and seminars, and had been practising as a supervisor of CBT therapists, in association with the local Cognitive Therapy Training Diploma, for a total period of two years. He was 33 years of age at the time of the study.

The supervisee/therapist was female and in her mid-forties. She was a General Practitioner with no prior experience or qualifications in cognitive behaviour therapy, nor had she been supervised previously in CBT. She was receiving the observed supervision in relation to her attendance on the above Cognitive Therapy Diploma training programme. She was selected for purely pragmatic reasons (i.e. complete set of supervision and therapy tapes) from a cohort of four such diploma students (Milne & James, 2002).

Research design

This was a mixed design. In relation to the first hypothesis (i.e. that transfer would occur) a longitudinal, *N*=1 approach was taken in relation to the replication of the transfer of supervision. Only one supervisee was studied, because of the resources required to undertake such an intensive, systematic analysis. Secondly, a cross-sectional design was employed, in which the data from all 20 observed supervision and therapy sessions were collated. This design served to test the second prediction, that the transfer of skills was "appropriate". For both of these hypotheses, qualitative and quantitative approaches were combined, within the quantitative content analysis approach (Strauss & Corbin, 1990).

Procedure

The underpinning for the quantitative content analysis was a grounded theory approach (Strauss & Corbin, 1990). The advantage of this approach is that it allows data to be coded based on emerging themes that are identified by observers (the second and third authors). That is, the coding is "grounded in the data" and so the themes are identified and specified within the naturalistic context of (in the present case) supervision and therapy. The standard approach to grounded theory was adopted in the present study. This entails three basic steps, commencing with "familiarization" (i.e. viewing the supervision and therapy videos to

become orientated to the material and to relevant phenomena). Next there is the "categorization" of the material so as to conceptualize it, by applying labels or categories to the observed events, based on the properties and dimensions that the observer perceives. Finally, there is an "interpretation" of the categorized data, in order to try to establish whether any patterns or themes exist between the categories.

In order to carry out this procedure, video-taped recordings collected for an earlier analysis of cognitive behaviour therapy supervision (Milne & James, 2002) were studied. In total, 10 supervision tapes were subjected to this grounded theory analysis. These tapes actually contained material from a second supervisee, as the standard approach within the training programme was for there to be one supervisor and two supervisees. Therefore, the observations were limited to periods when supervision was being provided to the supervisee of interest (at least 40 minutes per 90 minute tape were relevant). In addition to these 10 supervision tapes, the immediately subsequent 10 therapy sessions provided by the supervisee/therapist were also coded. These therapy sessions tended to last up to an hour.

The familiarization and categorization phases of the grounded theory analysis were undertaken by the first three authors, the first (DM) being an experienced trainer of supervisors and a researcher in this field. Based on the careful scrutiny of an initial series of tapes from supervision and therapy, 14 common themes were identified, as set out in Table 1.

Using the categorization set out in Table 1, the observers (JP and JG) coded all 20 tapes independently, prior to a discussion and consensus between them on the relevant category for each observation. At the same time, the two observers made a distinction between whether any observed impacts arising in therapy, which were theoretically attributable to supervision, were "positive" (i.e. "appropriate") or "negative". This distinction was based on a simple judgement as to whether or not the impact seemed to be favourable (i.e. as intended) or unfavourable. In this way, "reliability", as normally established within a qualitative paradigm, could be established through the process of consensus. In addition, it was possible to use the observation process and meeting to clarify the frequency with which the different categories of supervision (as set out in Table 1) had occurred across the 10 observed tapes. Because these categories were the same for both "learners" (the learner in

Table 1. The themes that were defined following a grounded theory analysis of cognitive behaviour therapy and its supervision. The term "learner" is used to cover both the supervisee/therapist and the patient

| No. | Theme | Definition | Example |
|-----|---|---|--|
| 1. | Agenda-setting and managing the session | Organizing and managing the flow of the session (e.g. setting the agenda for the session; ending/closure; providing structure; staying on task – e.g. refocusing the learner) | "Would you like to cover X today?"; "Let's move on now"; "Is there anything you would like to talk about today?" |
| 2. | Behavioural tasks | Leading practical learning activities to actively develop competence (inc. role play and homework assignments) | Learning tasks (e.g. how to use diaries, charts, forms); behavioural tests "I would like you to try this (behavioural task)" |

Table 1. Continued.

| No. | Theme | Definition | Example |
|-----|--|--|---|
| 3. | Re-evaluation of thoughts and looking for evidence | Getting the learner to rethink/ reason their view | "What evidence do you have for that?"; "Do you think that is accurate?" |
| 4. | Collaboration | Working together towards a goal, including negotiation | "Can we agree to try and achieve X?" |
| 5. | Conceptualization | Providing a model of coping/ problem formulation/guiding learners to conceptualize | "One way of understanding this situation would be"; "Some people make sense of things this way" |
| 6. | Feedback | Provision of specific verbal or written feedback that is intended to weaken/strengthen aspects of behaviour/thoughts/feelings; can be positive and negative. Checking and giving feedback on homework tasks | "The way you set the agenda was very good"; "You could have strengthened this with adding more to the diary"; "That was really well done" |
| 7. | Gathering information | Asking for information and facts; defining that patient's problem | "Tell me about the panic" |
| 8. | Goal-setting | Clarifying and agreeing objectives for the learner. Discussing concrete plans | "We need a clearer sense of direction" |
| 9. | Informing/educating | Providing abstract data to the learner; information transmission (facts and figures, theories, ideas and methods) | "This is how thoughts affect feelings"; "One way to approach this is "; "There are theories that suggest " |
| 10. | Modelling | Learning practical activities that actively develop competence based on imitation | Modelling/demonstrating correct performance of how to deal with situations |
| 11. | Reflection | Encouraging learner to reflect on something; trying to get them to make sense/answer own question; guided discovery. | "Can you understand what is happening?" |
| 12. | Socialization to the model | Explaining the CBT model; familarizing the learner with the approach. | "You seem to be confused – let me explain it to you" |
| 13. | Summarizing and clarifying | Summarizing information in order to clarify links and understanding; asking for clarification | "Let me see if I got that right ''; "So what you did was '' |
| 14. | Supporting and understanding | Verbal and non-verbal non-specific reassurance, agreeing, encouraging, praising | "That's right", "fine", "good", "well-done"; nodding, smiling, laughing, empathy, warmth, genuineness |

Table 2. Mapping of the 14 supervision themes onto the CTS (R)

| Supervision themes from the present analysis | | Revised Cognitive Therapy Scale (CTS-R) items |
|--|--|--|
| 1. | Agenda-setting and managing the session | Item 1 – Agenda setting Item 4 – Pacing and efficient use of time |
| 2. | Behavioural tasks | Item 11 – Application of change methods Item 12 – Homework setting |
| 3. | Re-evaluation of thoughts and looking for evidence | Item 9 – Guided – discovery |
| 4. | Collaboration | Item 3 – Collaboration |
| 5. | Conceptualization | Item 10 - Conceptual integration |
| 6. | Feedback | Item 2 – Feedback (giving) |
| 7. | Gathering information | Item 7 – Eliciting key cognition |
| | | Item 8 - Eliciting behaviours |
| 8. | Goal-setting | Item 1 - Agenda setting and adherence |
| 9. | Informing/educating | Item 11 - Application of change methods |
| 10. | Modelling | Item 10 - Application of change methods |
| 11. | Reflection | Item 9 - Guided - discovery |
| 12. | Socialization to the model | Item 12 - Conceptual integration |
| 13. | Summarizing and clarifying | Item 2 – Feedback (giving and eliciting) |
| 14. | Supporting and understanding | Item 5 – Interpersonal effectiveness |

Note; Only one CTS-R item did not clearly correspond to a supervision theme – i.e. 'Eliciting appropriate emotional expression'

supervision is the supervisee/therapist; the learner in therapy is the patient), then it was possible to directly assess the transfer of CBT methods from the supervision to the therapy (hypothesis 1). This was also the second way in which we defined "appropriate" – i.e. adherence to the CBT approach as used by the supervisor (hypothesis 2).

Results

In terms of our objective of describing the nature of CBT supervision, Table 1 sets out the 14 themes that were identified, alongside definitions and examples. Table 2 indicates that the outcome of the grounded theory analysis mapped on very closely to the revised Cognitive Therapy Scale (Blackburn et al., 2001), as well as to an authoritative theoretical overview of CBT supervision (Liese & Beck, 1997). This "triangulation" enhances the validity of this description of CBT supervision.

In terms of the first hypothesis (that transfer would be observed), we were able to observe the themes set out in Table 1 within therapy that appeared to directly follow from supervision. Several examples of transfer were found for each of the 10 supervision sessions. To illustrate, on the first pair of tapes the supervision session included a considerable amount of information-gathering (Table 1, theme 7), where the supervisor attempted to obtain a clear understanding of what was happening with the patient. In the subsequent therapy session, the supervisee was observed to similarly spend considerable time gathering information, in order to get a clear understanding of what was happening with this patient. The

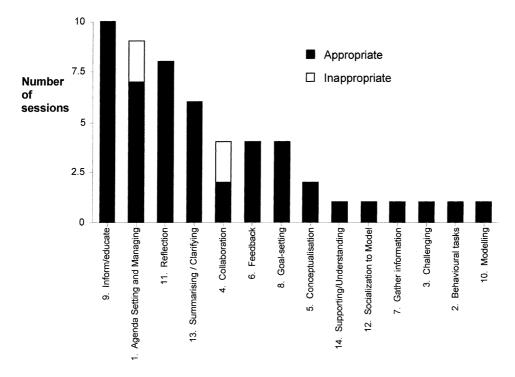


Figure 1. The generalization profile for the 14 supervision themes

same session also included a mirroring in relation to the supervisor's efforts to set goals for the next therapy session, as we observed that in turn the therapist attempts to set goals for the next week with the patient. Other examples from the same initial tape include a) the supervisor explaining the cognitive model of obsessional-compulsive disorder to the supervisee (who in turn explains it in the subsequent therapy session to the patient); and b) the supervisor asking the supervisee to re-evaluate her conceptualization of a particular behaviour and suggesting alternative views and competing evidence (which is then reflected in the subsequent therapy session, by the therapist getting the patient to re-evaluate his understanding of a particular behaviour and guiding the patient to gather evidence to test this alternative conceptualization).

In terms of our quantitative findings, the frequency of themes observed in supervision that transferred to therapy was also counted, in order to provide some general portrayal of the magnitude of the generalization. In this sense, we found that, across the 10 observed tapes, between four and nine themes were found to transfer from each supervision session to the subsequent therapy session (mean = 5.6; standard deviation = 1.67). Figure 1 presents these data for all 14 categories defined in Table 1. It can be seen that the most frequently observed form of transfer occurred in relation to "informing/educating" (theme 9), which occurred on all observed occasions. This was closely followed by "agenda setting and managing the session" (theme 1). These simple quantitative data, therefore, also support the interpretation that considerable transfer took place. This leads us to accept the first hypothesis: transfer of themes occurred strongly, whether assessed qualitatively or quantitatively.

Turning to our second hypothesis (that the observed transfer would be "appropriate"), the "appropriate" transfers noted in the preceding paragraph were accompanied by a small number of "inappropriate" generalizations. For instance, on the same two initial tapes we also observed the supervisor setting an agenda but not adhering to it (and the same thing then occurring in therapy). Also, in supervision there was an emphasis on education and only limited collaboration (with the same pattern again occurring within therapy).

Overall, however, the qualitative observations of the 14 themes indicated that supervision was appropriate: Only these two themes (i.e. agenda setting and collaboration) occurred inappropriately, and only on two observed occasions each, representing a frequency of only 7.4% of themes being transferred inappropriately. Secondly, comparison of these themes with representative literature on CBT supervision and therapy (e.g. Liese & Beck, 1997) suggests significant overlap, indicating that in this sense to the generalization was "appropriate". This leads us to accept the second hypothesis.

Discussion

The results of this small but intensive observational study of supervisory and therapy dyads in CBT indicates that there is considerable thematic transference of an appropriate kind from supervision to therapy. As anticipated, the qualitative approach appears to be more sensitive to this effect. This general conclusion is given support from an earlier and related direct comparison to the sensitivity of qualitative and quantitative methods (Hobson, 1999). In this earlier analysis, qualitative data drawn from paired supervision and therapy tapes showed a markedly stronger generalization effect. The present study extends the Hobson (1999) analysis by including a larger sample of paired tapes, and by ensuring that consensus was achieved between two or more raters on both the qualitative categories used and the frequencies with which the relevant behaviour categories were observed to occur.

Leaving on one side the issue of whether qualitative methodologies do indeed provide a more sensitive analysis, the data in the present study provide unusually strong evidence for the transfer of supervision themes to therapy. This is both a heartening and a somewhat surprising finding. The literature on training, of which supervision is taken to be a specific example, is replete with examples of poor generalization, dating from the seminal analysis by Baer, Wolf and Risley (1968). A subsequent review confirmed the need to give more systemic attention to procuring transfer (Salas & Cannon-Bowers, 2001). Similar impediments to the transfer of supervision skills have been observed. For example, Milne and James (2000) noted, from their systematic review of 28 empirical studies of mostly CBT supervision, that "the broader literature on clinical supervision has included few encouraging results in terms of changing supervisee performance" (p. 123). The relatively good results found in the present study may be attributable to the more systematic approach to supervision that was built into the training programme. Not only was the supervisor required to work jointly with two supervisees on a weekly basis, but (in relation to an overlapping piece of research) the supervisor also received weekly guidance and support from a consultant (the first author). Both the consultant and the supervisor also viewed tapes of supervision weekly, in order to strengthen good practice (Milne & James, 2002).

It is important to note that this study does not support the notion that a complete 1:1 transfer of actions from supervision to therapy necessarily makes for good therapy: far from it. What was made explicit to the supervisee, however, was that both supervision and therapy

necessitate change processes, and an awareness of such processes helps to promote learning and effective change. Thus, some of the transfer observed reflects the supervisee's increasing awareness of how various CBT methodologies can promote change. For example, a strong feature of the supervision was to get the supervisee to focus on "function". In the case of feedback, relevant questions would be: "what is its function"; "what needs to be done to fulfil that function"; "how will it move therapy forward"? It is thought that getting the supervisee to reflect on such issues increased the likelihood of the themes being observed subsequently in her therapy.

Methodological limitations

This was an exploratory study, containing a number of acknowledged flaws. For example, the work focused only on one of the supervisees from the dyad. However, there is no reason to believe that we have focused on a favourably biased sample of supervision and therapy. This particular participant was selected simply because we had a complete sequential dataset for her, in terms of both the supervision and therapy tapes; her partner did not have a complete set, owing to one week's absence due to illness. Obviously, one could still argue that the study would have been made more robust by including the "incomplete" data-set of the second trainee, but our limited resources prevented this from happening.

Another concern is that the raters of all 20 tapes were not themselves qualified in either CBT or supervision, which may have contributed to biases or errors in recording. Although we think that this is unlikely to have been a major factor (as the first author did some inter-rater reliability work with them and is himself an experienced supervisor), it follows that future research should analyse a larger and more representative sample of supervisees, utilizing more experienced observers.

Conclusions

In conclusion, we believe that the present small study provides clear if limited evidence that supervision in cognitive behaviour therapy can be effective, as measured by appropriate changes in therapy consequent upon supervision. Although this finding is based on only one supervisee, the transfer of supervision material to therapy was repeatedly obtained (i.e. replicated) across all 10 observed therapy sessions, making it highly likely that there was a causal link between the two activities. It is recommended that qualitative methods, such as those used in the present study, are adopted in future, to complement the more dominant quantitative ones. This appears to allow one to obtain a more precise and sensitive account of the transfer of supervision to therapy, as appears to have been the case with the present study.

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