

A POST-HOC ANALYSIS OF EMOTIONS IN SUPERVISION: A NEW METHODOLOGY FOR EXAMINING PROCESS FEATURES

Ian Andrew James and Kathryn Allen

University of Newcastle, UK

Daniel Collerton

Bensham Hospital, Gateshead, UK

Abstract. Supervision of therapy has received a lot of attention, but it has only recently begun to be examined in a systematic and empirical manner. This exploratory project employed a new type of methodology for examining the process of change occurring over four sessions of supervision. Video recordings of four clinical psychology supervision sessions were made, and after each session the supervisor and trainee independently provided commentaries of their experiences of supervision. Based on these commentaries, and further post-hoc reflections, the trainee was asked to choose an aspect of supervision to explore further. She chose to investigate her emotional reactions within the sessions. Hence, she was asked to provide further details about her emotions in each of the four sessions. The focus of supervision was a patient with neuropsychological problems following a stroke. The process analysis revealed that the trainee experienced a wide range of emotions in all of the supervision sessions, with anxiety being the most frequent. These emotions appeared to be responsive to the supervisor's conscious attempts to ensure appropriate affective arousal. Subsequent reflections on the processes highlighted via this methodology suggested that the dynamics observed were consistent with Vygotsky's theory of the Zone of Proximal Development.

Keywords: Supervision, processes, proximal development.

Introduction

Appropriate supervision is increasingly viewed as being important in the sustained delivery of quality therapy (Department of Health, 1998, p. 46). However, it is only recently that empirical work has appeared in the CBT literature in relation to the topic. For example, Milne and colleagues have undertaken a series of studies analysing trainee responses in relation to supervisor behaviours (Milne, James, Keegan, & Dudley, 2002; Milne, Pilkington, Gracie, & James, 2003).

Reprint requests to Ian James, Centre for the Health of the Elderly, Newcastle General Hospital, Westgate Road, Newcastle upon Tyne NE4 6BE, UK. E-mail: ianjamesncht@yahoo.com An extended version of this brief clinical report is available online in the table of contents for this issue: http://journals.cambridge.org/jid_BCP.

© 2004 British Association for Behavioural and Cognitive Psychotherapies

The present study examines the process features of supervision and has drawn from existing frameworks, such as Newcastle Cognitive and Behavioural Therapies Centre's "3-D Tiered model" (Freeston and Associates, 2003) and the Process Evaluation of Training Supervision model (PETS, Milne et al., 2002). The former model employs a comprehensive mapping of the structural and process features of supervision, while the latter examines the dynamic interplay (i.e. mini-impacts) between the supervisor and trainee. Both of the above frameworks have Kolb's (1984) learning cycle at their hearts. Thus they emphasize the need to engage the trainee in reflecting, conceptualizing, planning, experimenting and experiencing. It is the latter feature that is the focus of the present study, with an investigation of the "emotional content" of the supervision sessions. Emotional arousal has long been associated with learning and performance. Indeed, Yerkes and Dobson (1908) suggested that there was an inverted-U relationship between the level of tension or arousal with learning, with optimal learning occurring at a moderate level of arousal. The present study examines this notion to determine the relative range of emotions and arousal occurring within the supervision sessions.

Aims

This exploratory study examined the process of supervision by analysing the experiences of both the trainee and supervisor. Both members of the dyad were required to provide post-hoc verbal commentary of the sessions, based on observations of a video recording of each of the four supervision sessions. The study's objective was then determined by the trainee. Following her reflections on both the supervision and her post-hoc commentaries, she determined that the study's objective would be to examine the range of emotions she had experienced.

Method

Participants

The study involved a trainee (KA), a supervisor (IJ), a rater blind to the participants (DC), and an inpatient from a Stroke Rehabilitation Unit. The patient, when first seen by KA, was 4 weeks post-stroke; he had experienced an anterior cerebral infarct. He had been referred for neuropsychological assessment of his intellectual functioning in order to assess his rehabilitation potential. KA was a third-year clinical psychology trainee on her mandatory older adult placement. She had limited experience of delivering neuropsychological tests, and had not previously worked with a stroke patient. IJ was a consultant clinical psychologist with 6.5 years experience of working in older adult settings. He was an experienced supervisor. This was the first occasion in which KA received supervision from IJ. DC was a consultant clinical psychologist, who had 15 years' experience of working with older people and a special interest in neuropsychology. He was also an experienced supervisor on the Newcastle Diploma Course in CBT.

Design

An exploratory design was used in order to examine the phenomenology of the process of supervision. KA saw her patient on four occasions over a period of 5 weeks. After each one hour session, KA received supervision from IJ and these sessions were filmed on video.

Following each supervision session, both KA and IJ were required to separately playback the recording of the supervision session and provide a verbal commentary, via an audiotape, of their experiences of the supervision.

The instructions given to KA were: "While watching the recording, please describe your experiences of the supervision using the dictaphone provided. Please give specific details about your feelings, physical sensations and thoughts." IJ's instructions were: "While watching the recording, please describe the change processes you were trying to employ during the supervision session." As outlined previously, this was an exploratory study and thus the focus on emotion had not been agreed prior to its design. However, based on her post-hoc reflections, KA became interested in her emotional reactions within the sessions. Thus, for the purposes of the present study, KA was asked to examine her own commentaries, identify her emotions and categorize them within themes. A reliability check was not undertaken with respect to this categorization process because it became apparent that, due to KA's idiosyncratic phrasing (use of slang and colloquiums), only she would be able to report on her feeling states. For example, she often used the word "good" in the commentary, which on some occasions meant "feeling contained", while on others it meant "having a sense of pride".

After all the data had been collected from the supervision sessions and subsequent analyses, KA and IJ met to collate and discuss the information obtained. The aim of this meeting was to reflect on the dynamic processes associated with the emotional statements made by KA in her commentary.

DC undertook a validity check of the quality of the supervision, assessing its competence. He watched one of the four sessions, which was selected at random from the set of four tapes. DC was blind to all other aspects of the study.

Results and discussion

The quality of the supervision was assessed as competent. DC also provided the following qualitative comment concerning the supervisor's performance: "Good, focused, CBT¹ style of supervision". KA identified eight themes within the four scripts as set out in Table 1. As one can observe, the most frequent emotion experienced during most sessions, and in total, was anxiety. The incidence of anxiety remained relatively constant across the four sessions. The second most frequently experienced emotion was a sense of containment, and this was experienced more frequently in later sessions. The incidence of pride also increased over the sessions. In contrast, the frequency of "relief" decreased over time from a relatively high level in the initial session. It is noteworthy that the third session was the most emotionally dynamic session, with high levels of negative (anxiety, shame, confusion, anger) and moderate levels of positive emotions (containment, relief, pride, interest) being experienced. In general, the frequency of negative and positive emotions was well balanced in each of the four sessions. In total, 64 instances of positive emotions were experienced, and 62 negative emotions. It is relevant to note that the terms positive and negative may be inappropriate to use in the current context because KA's categorizations may actually reflect emotional dissonance rather than positive or negative emotional states. For example, containment may not have been experienced as positive affect, rather as a decrease, or lack of being, in a negative emotional state.

¹ A CBT style of supervision was used; further details can be found in the extended report.

Table 1. Frequency of emotions in each of four sessions

Emotion	Themes	Examples from transcript	Session	Session	Session	Session	T
			1	2	3	4	
Anxious		I felt anxious I felt put on the spot I thought, oh no. . . I was worried because. . . I did not feel comfortable	10	9	10	9	38
Contained	Containment Being guided	I felt safe It felt more manageable I felt contained	3	6	10	8	27
Proud	Pleased with myself	I felt pleased with myself Made me feel good	2	3	4	10	19
Relieved	Relief Reassurance	I felt relieved I was reassured It put me at ease I felt better It felt good I felt relaxed	7	3	3	1	14
Shame	Embarrassment Felt silly	I felt silly I felt a bit stupid I felt embarrassed	2	0	7	2	11
Confused		I felt confused	2	2	4	1	9
Interested	Intrigue	I was intrigued I was interested	2	1	0	1	4
Angry		I felt cross	2	0	0	0	2

A typical example of dialogue between supervisor and trainee is presented in Table 2 – a verbatim sequence of dialogue. In this sequence, the supervisor knows that the trainee has some knowledge of executive functioning and a number of the appropriate assessment tools. However, IJ is fairly convinced that KA’s knowledge base is not well integrated. This opinion is based on her answers to some earlier probe questions used as part of a needs assessment. Thus the goal of this sequence of dialogue is to encourage the trainee to reflect on the reasons for selecting tests, and on other issues concerning their use. At the start of the sequence IJ’s initial questions are used to assess the trainee’s current knowledge base. Having gauged this, the supervisor goes on to ask some questions designed to get the trainee to reflect and assess novel information (i.e. a guided discovery process). This set of questions created anxiety in the trainee, which was noted by the supervisor. In order to ensure that anxiety was not too high to interfere with learning, some guiding statements and affirming body gestures (e.g. nods and smiles) were made.

The analysis of the emotional content of the “competent” sessions revealed that the trainee’s emotional state was dynamic in all the sessions. She moved quickly between various states (see Tables 1 and 2): anxiety; relief, containment, confusion, etc. Table 1 also revealed that anxiety was the most frequently experienced emotion throughout.

Table 2. Dialogue and commentaries

Sequence I – Verbatim sequence of dialogue as recorded on video	Sequence II – Commentaries of trainee and supervisor
Supervisor: What do we mean by executive functioning?	Supervisor: Starting to consider how to assess possible problems with patient's frontal lobes (i.e. his executive functioning). So I must examine KA's knowledge about this area, and how to assess abilities within it. So I ask a broad open question about executive functioning. I'm aware this may cause some anxiety.
<i>Trainee: Erm, er.. (evidence of anxiety on trainee's face). It's to do with frontal lobes and helps with planning and things like that.</i>	<i>Trainee: IJ puts me on the spot by asking me about executive functioning. I feel anxious.</i>
Great! So if it is about planning, problem solving, and the ability to integrate information, what tests have we got to assess these features?	She clearly knows something about the processes relating to the area, although she is a little sketchy. So I reinforce her answer and elaborate the functions and processes further in my feedback. Now I ask her what tests she could use to examine executive performance.
<i>The word fluency test . . . and . . . the trail making test. . . . I think (anticipatory look).</i>	<i>I'm relieved I got the features right, but feel anxious when asked which neuro-tests to use. This stuff is pretty new to me. He's making me think hard here. It is helpful to try to picture the situation, as it's useful to draw on previous occasions that I've tested people.</i>
Yes! Let's take the trail making test. It is <i>certainly</i> a test of executive functioning, but just picture someone actually performing it. Now, if he did poorly on the task, what reasons might there be for his poor performance?	I think it was helpful to get her to think through things by asking her the question in a concrete fashion (i.e. getting her to picture someone doing it). The disclosure was an attempt to bring some light relief and demonstrate we all make mistakes, and that we've all had to go through a learning process.
<i>Well, as it is drawing test, I guess if the person had any visual spatial or motor problems this would interfere with how quickly he could do it.</i>	<i>It's good to know that he has made mistakes.</i>
Good, . . . you're not going to believe this, but I never used to ask people whether they had their right glasses on, or whether they could read – no wonder everyone used to perform so badly when I tested them.	I think it is time to consolidate her existing knowledge base and the new learning that's occurred, and so I provide a global summary. This is also being used as a platform to commence the experiential stage – the role play.
Ok, so let's see what we've got. You want to test his ability to plan and integrate information, because this will influence his rehabilitation potential, and ultimately his quality of life. From what you've said before, he is a bit anxious about the testing and gets tired easily. We have discussed the trailing making test as possibly being appropriate as this has the advantage of being relatively easy and quick – so not putting too much load on his cognitive system. Ok, so how confident would you feel about doing the test with him next time?	<i>IJ's summary has helped put things in place – feeling more comfortable again.</i>
<i>Sort of confident . . . although you know . . . I've er . . . only done it a couple of times before.</i>	Now introduce the idea of the role play to ensure that KA is confident and skilful enough to carry out the test in vivo. I know this will make her anxious, so give her the option of me demonstrating first.
In my experience the best way to check whether I've understood the test sufficiently well enough to use it with a patient is to actually practise doing it. Let's practise now – do you want to take the role of the patient or tester?	<i>Now feel anxious that must do a role play. But feel very relieved to have been given the option of observing first.</i>
{ <i>Demonstration of test, with trainee choosing role of patient</i> }	
Ok, now you be the therapist and now test me. Mind you, I've always had a bit of dodgy executive ability.	

KA experienced a wide range of emotions. In order to account for this finding, the authors examined the supervisor's and trainee's protocols. This examination revealed that the supervisor was cognisant of the anxiety, and moreover was actively orchestrating it in an attempt to foster learning (see Commentaries/Sequence II in Table 2). From the sequence of dialogue one can see the anxiety is often caused by IJ asking "probe" questions, testing KA's knowledge base. These questions are often part of a needs assessment process, whereby IJ is determining how much training is required with respect to a particular issue (e.g. what are the steps required for KA to perform a test of executive functioning). If the appropriate training is subsequently given, positive outcomes will include new learning for KA and she is also likely to feel more contained and proud. While the material in Table 2 captures some of the process features occurring, unlike the video material, it fails to capture some of the non-verbal features that were key to how the supervision was managed. Observation of the recordings revealed that a rich interplay of verbal and non-verbal interpersonal processes occurred during the supervision. By analogy with the therapy literature, the interplay was "responsive" (i.e. IJ was consciously managing the session around the perceived moment-to-moment learning needs of KA).

Comment

In subsequent discussions, the authors felt that the processes observed in the supervision sessions could be explained in terms of Vygotsky's theory of Zone of Proximal Development (ZPD, Vygotsky, 1978). In its full form ZPD is rather complex; however, put simply, it concerns the notion of a dynamic zone encompassing an area of potential learning. The bottom boundary of the zone indicates the learner's current state of competence, while the top boundary marks the highest level that, given optimum quality training and support, the learner could currently attain. Vygotsky argued that understanding how to work effectively in the zone was the key to good training. Hence, he believed that a skilful trainer would be able to assess the learner's current level of competence, her needs, work out what she was most ready to do, her range of potential, and the support required to help her achieve that potential. The ZPD model also suggests that movement from lower to higher levels often creates a degree of discomfort and/or anxiety. Thus the role of the trainer is to graduate the learning steps, such that the level of anxiety is never so high that it becomes overwhelming.

A form of structuring that helps to organize these graduated steps appropriately is called "scaffolding" (Vygotsky, 1978). This process refers to the gradual construction and then deconstruction of support systems used to facilitate the training (e.g. emphatic nods, smiles, summarizing of information, use of feedback, modelling). Ideally, at the end of training there should always be a decrease and eventual withdrawal of trainer control and support, as a function of the trainee's increasing mastery of a given task. The scaffolding process is a further example of "responsivity", whereby the trainer deliberately manipulates the nature of the session in relation to the trainee's abilities. The Verbatim sequence in Table 2 presents dialogue from the current study illustrated within a ZPD framework; it also provides an example of the "responsivity" process. This study analysed some of the process features underpinning supervision. It employed a rather novel methodology that appears to be helpful in delineating these features. Specifically, this phenomenological study has suggested that the ZPD model may be useful. It provides a framework for illustrating the change mechanisms employed by the supervisor and the apparent role of appropriate affect in enabling change to

occur. This small study requires replicating, using a more rigorous design and a larger number of participants. Hence, the current work should be viewed as a pilot, introducing a design that might aid further investigation into the process features of supervision. With respect to the current project, of particular concern was the failure to monitor whether the behaviour of the supervisor had the desired impact in relation to KA's learning needs. Despite such shortcomings, the study has provided some valuable insight into the phenomenology of the processes occurring within supervision.

References

- DEPARTMENT OF HEALTH (1998). *A first class service*. Leeds: Department of Health.
- FREESTON, M., ARMSTRONG, P., & ASSOCIATES (2002). *3-D Model of supervision*. Obtainable from authors at the Newcastle Cognitive and Behavioural Therapies Centre, Plummer Court, Newcastle Upon Tyne, UK.
- KOLB, D. (1984). *Experiential learning*. Englewood Cliffs, NJ: Prentice-Hall.
- MILNE, D. L., JAMES, I., KEEGAN, D., & DUDLEY, M. (2002). Teacher's PETS: A new observational measure of experiential training interactions. *Clinical Psychology and Psychotherapy*, 9, 187–199.
- MILNE, D. L., PILKINGTON, J., GRACIE, J., & JAMES, I. (2003). Transferring skills from supervision to therapy: A qualitative and quantitative $N = 1$ analysis. *Behavioural and Cognitive Psychotherapy*, 31, 192–202.
- VYGOTSKY, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: MIT Press.
- YERKES, R., & DOBSON, J. D. (1908). The relation of strength of stimulus to rapidity of habit formation. *Journal of Comparative and Neurological Psychology*, 18, 459–482.