

Exploring physiotherapists' experiences of implementing a cognitive behavioural approach for managing low back pain and identifying barriers to long-term implementation.

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Abstract (250 words)

Objectives: Our objectives were two-fold: (i) to describe physiotherapists' experiences of implementing a cognitive behavioural approach (CBA) for managing low back pain (LBP) after completing an extensive online training course (iBeST), and (ii) to identify how iBeST could be enhanced to support long-term implementation before scale up for widespread use. **Design:** We conducted semi-structured interviews with 11 physiotherapists from 6 National Health Service departments in the Midlands, Oxfordshire and Derbyshire. Questions centred on (i) using iBeST to support implementation, (ii) what barriers they encountered to implementation and (iii) what of information or resources they required to support sustained implementation. Interviews were transcribed and thematically analysed using NVivo. Themes were categorised using the Theoretical Domains Framework (TDF). Evidence-based techniques were identified using the behaviour change technique taxonomy to target relevant TDF domains. **Results:** Three themes emerged from interviews: anxieties about using a CBA, experiences of implementing a CBA, and sustainability for future implementation of a CBA. Themes crossed multiple TDF domains and indicated concerns with knowledge, beliefs about capabilities and consequences, social and professional roles, social influences, emotion, and environmental context and resources. We identified evidence-based strategies that may support sustainable implementation of a CBA for LBP in a physiotherapy setting. **Conclusions:** This study highlighted potential challenges for physiotherapists in the provision of evidence-based LBP care within the current UK NHS. Using the TDF provided the foundation to develop a tailored, evidence-based, implementation intervention to support long term use of a CBA by physiotherapists managing LBP within UK NHS outpatient departments.

Contribution to the paper

Removed for masking.

Keywords: low back pain; physiotherapy; evidence based practice; implementation; theoretical domains framework; behaviour change wheel.

Background

There is now wide recognition that low back pain (LBP) can be managed with a cognitive behavioural approach (CBA) (1, 2). In 2008, the National Institute of Health Research commissioned a definitive trial of CBA for LBP, in which the intervention was delivered largely by physiotherapists. The intervention, entitled Back Skills Training (BeST), was designed predominantly as a group-based intervention that combined a CBA with exercise to improve function and physical activity. BeST is manualised, whereby a manual describes the intervention in depth including who the intervention is for and how to deliver it with session-by-session narratives and plans. The trial included over 700 people and found the CBA intervention to be both clinically and cost-effective (3-7). The original training of physiotherapists was undertaken using a face to face format; however, issues of scalability for national and international implementation necessitated the development and evaluation of a 10-hour online learning package – iBeST (8). This online learning package has been described elsewhere (8), and included self-directed reading, reflective practice, skill rehearsal, multiple choice questions, formative tests with feedback, a discussion forum, and multimedia. While iBeST provides education to physiotherapists in how to use and deliver a CBA for LBP, it is widely acknowledged that the provision of education alone via any method such as printed education materials or face-to-face educational outreach, has only small effects on improving implementation of desired behaviour in practice settings (9, 10). There is some evidence that implementation strategies will be more successful if they are tailored to the users' needs (11). Thus, an assessment of the likely barriers and facilitators to long-term implementation is recommended to explore how to encourage sustained implementation (12). Therefore, the aim of the current study was to explore physiotherapists' experiences with the implementation of CBA for LBP alongside a larger quantitative evaluation of the efficacy of iBeST (8). We wanted to ascertain if and how iBeST can be enhanced to promote sustained implementation of a CBA by physiotherapists for managing LBP.

Methods

Design Overview

This paper reports on a qualitative study carried out alongside a larger quantitative evaluation of iBeST. The qualitative design was guided by a constructivist approach, where individuals actively construct knowledge within a given context through gaining and building upon current understanding (13). This approach was used to gain a comprehensive understanding based on participants' subjective knowledge, attitudes and experiences. Semi structured individual interviews were conducted to allow exploration of new or interesting points raised by the participant during the interview (14). The interview guide was informed by the study objectives and relevant literature, was piloted by the research team, and revised accordingly (supplement 1).

Participant Information

A total of 23 physiotherapists from eight NHS Trusts took part in a trial and completed training with iBeST (8). Since this study had to be conducted within a pre-specified time frame, theoretical saturation could not be used to determine sample size. Alternative guidance on sample size was drawn from the work of Guest, Brunce and Johnson (15), who re-analysed 60 interviews and found that data saturation had occurred after 12 interviews. This is supported by previous qualitative work in this field, where data saturation was found after 11 interviews (16, 17). Thus, this study used a purposive sample and aimed to interview 12 of the 23 participants once within six months of completing iBeST. All 23 participants were invited by email, the first 12 to respond were included for the qualitative study.

Procedures, ethics and consent

Ethical approval was granted by the University of Warwick's Biomedical and Scientific Research Ethics Committee (BSREC; reference 244-10-2012). Trial physiotherapists who had completed online training with iBeST were invited to participate by email. Interested participants were contacted by the researcher by email or telephone and were sent a participant information sheet and consent form. For consenting participants, the researcher arranged a suitable time to conduct the interview.

Participants were interviewed once over a 6-month period (June-December 2013), which was conducted solely by the lead author (a physiotherapist who had undertaken training in a CBA and in qualitative research methods). Interviewees had previously liaised with the interviewer by phone and knew that the interviewer was a researcher involved in the development of iBeST. Thus, the interviewer remained alert to the ways that their position as a developer of iBeST may have shaped the interview, and assured participants that criticism of iBeST was welcomed. All interviews were conducted at the participants' place of work (NHS) and participants provided verbal consent prior to interview, which was audio recorded using a digital recorder.

Data Analysis

Recordings were transcribed, anonymised, and analysed using an inductive thematic analysis (13). While returning transcripts to participants may have given a more nuanced understanding, this was not possible due to time constraints. Computer software (NVivo, version 10) was used to aid data analysis. This involved an iterative process of analysing the transcripts line by line to develop initial codes to describe the data, and then comparing all codes against each other to identify the most significant or frequently cited codes. These codes were then modelled to illustrate relationships and were grouped to develop themes and sub-themes. Each theme was narratively summarised and supported with verbatim quotes. Throughout this process we ensured that early codes closely resembled the data, and that all codes were compared within and between interviews for constant comparison (13). Two transcripts were double coded by a member of the research team (EW) to discuss and agree on the codes and interpretations. Lastly, there were ongoing discussions with the research team to ensure the authenticity and rigour of coding, reduce researcher bias, and offer alternative interpretations of the data (18).

Themes were then independently categorised by two members of the research team (HR and AH) into determinants of behaviour change using the Theoretical Domains Framework (TDF). The TDF consists of a set of 14 domains covering the main factors believed to influence clinicians' behaviour change, for example, knowledge, skills, beliefs about capabilities, beliefs about consequences,

optimism and professional identity (19). This framework has been well validated and applied successfully in both primary and secondary care contexts (19, 20). Classifying themes in this way synthesised the data in relation to implementation barriers and facilitators. After categorising themes, results were compared and differences resolved through discussion between the two researchers (HR and AH). Lastly, we used the behaviour change technique taxonomy proposed by Michie et al (21) to provide examples of theoretically informed strategies to overcome the corresponding determinants of behaviour change.

Results

From the 12 consenting participants, one interview was cancelled on two occasions and could not be rearranged within the available time, leaving 11 participants who were interviewed (11/12; 92%). Interviews had a mean duration of 38 minutes (range: 22 to 64 minutes). The sample varied with respect to prior CBA experience, professional work experience (range: 6 to 35 years) and age (range: 26-55 years) allowing us to explore the views of therapists with a range of experiences (Table 1). From these 11 participants, 7 had gone on to implement a CBA in their clinical setting following completion of training with iBeST.

Table 1. Participant demographics

There were three main themes: (i) anxieties about using a CBA, (ii) experiences of implementing a CBA, and (iii) sustainability for future implementation of a CBA. Each theme is summarised below and supported with verbatim quotes.

Anxieties about using a CBA

It's different

All participants were anxious about adopting a CBA as it was a different way to manage patients. This anxiety stemmed from three central aspects of a CBA: (i) using an exploratory questioning approach, (ii) using a facilitative therapeutic style, and (iii) the contrast in content to their usual practice. Concerns relating to an exploratory questioning approach were around their own ability, where this style of questioning might lead, and how to move the discussion forward when needed.

"I'm not experienced enough with that kind of questioning to know when is the right time to close that down?" ID08

"...to do any of these exploratory questions, you just think, "When am I ever going to ask an open ended question?" Because I just can't cope with the time constraints to get the answer." ID226

For some therapists, their main concern in using this style of questioning was that it may lead to issues that were outside the therapist's scope of practice.

"I think my main concern is that I'm not sure where the boundary is...I'm quite happy to have extra skills... but I'm not sure that we've got enough skills to deal with some of these patients in a complete sense...I don't know that it's appropriate that then physio just takes on this sort of realm completely... I'm not sure that it's necessarily quite right." ID08

Participants perceived the facilitative style of a CBA to be very different to their usual practice, where they were the treatment provider who would assess, diagnose and provide recommendations.

"...a big thing with physios is we like to fix things, we're not very good of the kind of 'this is the idea' and then letting people come up with it" ID258

"I'm so used to sort of dictating to the patient, saying this is what you're going to do and then asking them how is it, rather than allowing them to lead. So I kind of struggled to get my head around that..." ID208

All participants felt that a CBA was very different to their usual LBP treatment in relation to content and style, and did not feel confident in their knowledge and skills to be able to deliver a CBA.

"...there was maybe a concern as well that...a clinician feeling not skilled enough in actually using those skills with real patients and the potential that they could talk about anything and everything."

ID205

Participants also had difficulty adapting to the initial patient assessment, which contrasted to their usual practice in that it did not assess biomedical factors such as lumbar spine range of movement.

"...we don't really feel confident doing the assessment because it's so different..." ID289

There was unease in how to raise the concept of being managed with a CBA programme to patients and therapists would have liked more guidance on how to introduce this approach (i.e. building self-efficacy

and skills for long term self-management) to patients.

"...but it's actually I think that first bit of when you see them, how you actually almost, this is what we're offering you, sort of thing, this is how it'll work, how you link that..." ID289

Lastly, many participants were sceptical that a CBA would be effective for persistent LBP patients.

This appeared to be linked with their discomfort in moving away from the use of traditional techniques, such as manual therapy.

"...it's a lot of time invested... So I think just a bit, just a bit concerned that it will be effective... And that they won't just end up coming back into the system again." ID08

It's not what patients expect

Participants were concerned that patients come to physiotherapy with expectations of receiving hands on treatment. Therefore, they were concerned that patients would not be satisfied receiving a CBA treatment programme.

"...and also I kind of feel I probably do need to just look at their movements and do some sort of physical examination because I think that's probably what patients expect of us to a certain extent..."

ID337

Anxiety could be reduced

Participants identified factors that helped reduce anxiety. In particular, participants valued the manualised format of the intervention, which offered detailed guidance for implementation, and found that it reduced ambiguity around how to use a CBA in practice. They also found the ability to revisit the online training useful given the time it can take to implement changes to LBP services

"Because I'd like to revisit that because it's been so long since I did the training and I thought, 'Oh if you're going to start soon I'll need to get that refreshed.'" ID05

Experiences of implementing a CBA

Difficulty identifying the right patients

Participants struggled to identify patients that required management with a CBA. This appeared to be linked with their understanding of a CBA and their preference for biomedical treatment.

"...they're going to be perhaps depressed, aren't they? I think they might catastrophise and... think they might be too complex..." ID226

"I didn't feel that I had any patients that fitted the criteria for, with the back pain, for the group. Or if they did they definitely needed some more specific bits and pieces doing as well so, you know, like I wanted to do some bit of manual therapy - stuff like that." ID08

For two sites, finding patients was more difficult due to competition of services from both external and internal groups, particularly where pain management programmes or pre-existing biomedical back groups were in place.

"I think we've got a conflict because we're trying to set this up ...we've got two part time Clinical Psychologists who also want to set up almost an identical course... if you look they're doing six sessions and they look very similar the headings and content..." ID226

Surprisingly positive outcomes

The therapists who delivered a CBA in practice, spoke of the positive experiences this provided. In particular, they were surprised to see that patients had benefited from the programme, and felt they improved with each session they delivered.

"...that group really like the ...the map...the brain and there's one or two of them that have really ... they love that idea and...I actually brought a picture into that session from the explain pain book so they could look at that...you know the homunculus man stuff and some of them were really fascinated by that and I thought, I must bring that in more in everyday practice I think." ID337

Sustainability for future implementation of a CBA

It is needed

Participants identified that there was a clinical need for this type of intervention within the UK NHS

and felt that the large evidence-base behind a CBA was important.

"...it's something that needs to be set up across the Trusts...It's just Psychology Services are so limited and have never been able to have access to it..." ID05

Change is needed for it to happen

Participants identified changes that were needed to make delivering a CBA sustainable. The majority of participants felt that they needed more time than the standard appointment length to be able to use a CBA with patients.

"...to do any of these exploratory questions, you just think, "When am I ever going to ask an open ended question?" Because I just can't cope with the time constraints to get the answer." ID226

Participants wanted to add more exercise components to the group sessions, with one participant saying that was *"...(their) physio brain because that's the way I've been programmed really..."* ID337.

For some participants, the initial assessment session would need to be adapted to fit in with their LBP care pathway. Furthermore, participants specified the need to allow sufficient administration time to invest in the set-up of the group sessions as many sites predominantly treated patients in individual sessions. This involved administrative tasks such as finding space and doing paperwork.

"I think we're time constrained - that's the biggest thing...we have to get our patients in and out..."

ID226

"...it just became impossible....the waiting list just suddenly shot up, so the time factor was too much." ID247

Lastly, participants needed support from their managers and peers to run a CBA programme, and would consider condensing the number of treatment sessions to encourage patient attendance.

Categorising themes with the TDF

Results from categorising themes and sub-themes into domains of behaviour change using the TDF framework are illustrated in Table 2. Themes were multifaceted and crossed a wide-range of the 14 TDF domains. For example, in the sub-theme of 'It's different', participants felt anxious about (i) their knowledge of a CBA, (ii) their ability/skills to use a CBA, (iii) their scope of practice, (iv) the

contrast of a CBA to their usual practice, and felt they lacked peer support and the necessary working environment to use a CBA. Thus, this sub-theme alone related to the domains of: knowledge, beliefs about capabilities, skills, social/professional role/identity, behavioural regulation, social influences, emotion, and environmental context and resources. The majority of our themes and sub-themes were classified under the domains of: environmental context and resources (frequency (f) =5), knowledge (f=3), social / professional role / identity (f=2), beliefs about capabilities (f=2), beliefs about consequences (f=2), social influences (f=2), reinforcement (f=2), and emotion (f=2). We identified evidence-based techniques from the behavioural change technique taxonomy that could be used to target the identified TDF domains and potentially address issues related to implementation that were apparent within the themes (Table 3).

Table 2. Themes and sub-themes categorised with the theoretical domains framework (TDF)

Table 3. Mapped behaviour change techniques to the identified TDF domains

Discussion

Summary of findings

This is the first study to explore the experiences of physiotherapists using an online training programme to implement a CBA in practice. While physiotherapists acknowledged the need for a CBA in the management of LBP, there were multiple concerns regarding its implementation within a physiotherapy setting. These concerns reflect the difficulty that many physiotherapists have in shifting from a biomedical model of care and adopting a biopsychosocial model to deliver psychologically informed treatment (22). These concerns largely focused around anxiety/lack of confidence, conflicts with traditional clinical management models, environmental context and resources such as administrative support and time, fear around scope of practice, patient expectations, and belief in a CBA. Further classification of themes with the TDF enabled us to identify strategies that may increase the likelihood of successful implementation of a CBA for managing LBP. To support implementation, this study suggests that the domains of environmental context and resources, knowledge, beliefs about capabilities, social and professional role, beliefs about

consequences, social influences, and emotion, should be targeted.

Findings in relation to the literature

The barriers to implementation identified in our study are in line with a recent systematic review that analysed literature exploring the knowledge, behaviours, attitudes, and beliefs of physiotherapists towards the use of psychological interventions in their practice (23). This review of 15 studies found that perceived barriers to the use of psychological interventions were a lack of understanding of the type and appropriateness of psychological interventions, a lack of practical skills to confidently implement them, patients' expectations of physiotherapists' traditional role, concern around their scope of practice, and environmental factors such as time constraints (23). Key recommendations from this review were the need to further explore physiotherapists' experiences of using psychological interventions to address the clear need for education (undergraduate and postgraduate) in this field.

Previous research exploring physiotherapist's experiences of using psychological interventions after receiving formal training is limited and the findings are varied. Synnott et al (16) found that physiotherapists were confident in using the psychosocial approach for managing low back pain after an intensive training programme. However, the authors themselves state the need for further evaluation to justify the high costs of the intensive training, which consisted of 12 hours of face-to-face training and at least 4 sessions of clinical supervision with patients. In a similarly intense training programme of a 3-4 day face-to-face workshop and weekly clinical supervision from a psychologist for 3-6 months, Nielsen et al (24) found that physiotherapists lacked confidence in the more cognitive aspects of a CBT programme for knee arthritis, and had concerns around their scope of practice. In a shorter training programme, Jacobs et al (25) found that 7 hours of face-to-face training changed physiotherapist's attitudes towards a biopsychosocial model of management for chronic pain. However, the authors have no information on whether this resulted in any change in practice or affected physiotherapist's confidence. Thus, it is evident that even after intensive training, there are still barriers to the use of psychological interventions in physiotherapists' clinical

practice.

Our review expands on previous research in this field by analysing our findings with the TDF, enabling us to categorise the barriers to implementation and therefore, select evidence-based and theoretically informed strategies to support physiotherapist's implementation of psychological interventions. These strategies can be employed by future researchers and educators when designing future education or training programmes in this field to enhance support and maximise successful implementation.

Clinical implications and future work

Despite the wide acknowledgement of the need to manage persistent LBP with a CBA, this study identified significant barriers to its use in a physiotherapy context for the participants in this study. While the manualised approach of a CBA provided by iBeST was acknowledged by the physiotherapists to decrease the ambiguity around how to use a CBA, this alone was insufficient to overcome other barriers identified by them such as anxiety, highlighting the need for more comprehensive training. Additionally, numerous barriers to implementation were categorised under the TDF domain 'environmental context and resources'. Thus, stakeholders concerned with the organisation of services such as therapy managers and clinical commissioners need to be aware that there may be different time demands to manage LBP with a CBA to further facilitate implementation.

There is limited research concerning implementation strategies within the physiotherapy profession, with much of the literature based in the medical and nursing professions (26). For iBeST to support sustainable implementation of a CBA in a physiotherapy context, enhancing it with evidence based strategies that target the TDF domains identified in this study may be beneficial.

Limitations

While the generalisability of the findings may be limited due to the qualitative data and relatively small sample (n=11), the qualitative methods enabled us to generate rich and informative data.

Further, to our knowledge, this was the first study to explore the experiences of physiotherapists' implementing a CBA for persistent LBP following online training. While additional background information on therapists past experience with CBA would have added greater contextual information on our sample, our findings were supported by the limited literature in this field. Additionally, we used rigorous methods including independent double coding of themes with the TDF, we kept a clear audit trail to ensure transparency, and the lead researcher maintained a reflexive approach, taking into account their potential influence on the interview process and outcomes of the study (13). Reflecting on our findings, while we interviewed 11 of the desired 12 participants and achieved saturation of the identified themes within our sample, all interviewed participants were classified as being highly engaged with the online training programme (8). Thus, new themes may have emerged had we interviewed further participants who were less engaged with the training. Lastly, all participants knew that the interviewer had developed iBeST, which may have influenced their responses to interview questions (18).

Conclusions

Cognitive behavioural approaches need integrating into physiotherapy practice to provide optimal care and reduce risk of harm to LBP patients. This study has identified a number of challenges to the integration of a CBA in a physiotherapy outpatient setting in the UK NHS. To facilitate the physiotherapy profession in rising to the challenge of adopting an evidence-based cognitive behavioural approach for managing LBP, implementation strategies that target the domains of behaviour change identified in this study may be appropriate.

Declarations

Ethics approval and consent to participate

Ethical approval was granted by (removed for masking). All participants provided written informed consent, which was also audio recorded verbally prior to each interview. All participants provided consent for their data to be published.

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Table 1
Participant demographics.

Participant ID	208	289	243	258	337	197	257	226	05	07	08
Gender	F	F	F	F	F	F	F	F	F	M	F
Age (years)	26 to 35	56 to 65	36 to 45	26 to 35	46 to 55	36 to 45	36 to 45	46 to 55	46 to 55	26 to 35	36 to 45
Prior CBA experience	None	Yes	Yes	None	Yes	Yes	None	Yes	Yes	Yes	Yes
Years in profession	6	35	15	8	31	21	22	31	31	6	18

Table 2
Themes and sub-themes categorised with the theoretical domains framework (TDF).

Theme	Sub-theme	Key issues identified	TDF domains
Anxieties about using a CBA	It is different	<ul style="list-style-type: none"> • Knowledge of a CBA including patient suitability, patient assessment, and CBA content. • Experience (or lack of) with using a CBA including skills, delivery of CBA content, and facilitative-led groups. • Perceived scope of practice and professional boundaries. • Ability to successfully use CB skills and to run group sessions with a facilitative style. • Usual or traditional physiotherapy practice and its contrast to a CBA. • Peer support/lack of support in the set up and delivery of a CBA. • Routine work structure including allocation of treatment session time, care pathways, and space for groups. • Physiotherapists negative emotions around delivering a CBA (e.g. anxiety). • Belief that the intervention will or will not work. • Effectiveness of a CBA in relation to patient outcomes. 	<ul style="list-style-type: none"> • Knowledge • Skills • Social and professional role • Beliefs about capabilities • Behavioural regulation • Social influences • Environmental context and resources • Emotion • Optimism • Beliefs about consequences • Goals
	It is not what patients expect	<ul style="list-style-type: none"> • Patients' expectations of physiotherapy treatment, as perceived by the physiotherapists. 	<ul style="list-style-type: none"> • Knowledge
	Anxiety could be reduced	<ul style="list-style-type: none"> • Ability to revisit online training when required. • Manualised format reduced anxiety and ambiguity around using a CBA. 	<ul style="list-style-type: none"> • Environmental context and resources • Knowledge • Beliefs about consequences
Experiences of implementing a CBA	Difficulty identifying the right patients	<ul style="list-style-type: none"> • Ease/difficulty in identifying patients and sustaining attendance at the CBA group sessions. 	<ul style="list-style-type: none"> • Beliefs about capabilities • Environmental context and resources • Memory attention and decision processes
	Surprisingly positive outcomes	<ul style="list-style-type: none"> • Patients' reactions to the intervention. • Physiotherapists' enjoyment in delivering a CBA. 	<ul style="list-style-type: none"> • Reinforcement • Emotion
Sustainability for future implementation of a CBA	It is needed	<ul style="list-style-type: none"> • The evidence base behind a CBA for managing people with LBP. 	<ul style="list-style-type: none"> • Reinforcement
	Change is needed for it to happen	<ul style="list-style-type: none"> • Time needed to set-up a CBA intervention and to complete training. • Administrative support/lack of support to set up and organise a new service (using a CBA, delivering groups). • Longer appointment times needed to use CBA techniques such as exploratory questioning. • Need to adapt how a CBA is used to suit local care pathways. • Changes to clinical diaries/set up to facilitate group-based treatments. • Managerial support essential. • Need for more exercise components with a CBA to align with physiotherapists' perceived role. 	<ul style="list-style-type: none"> • Environmental context and resources • Social influences • Social and professional role

Table 3. Mapped behaviour change techniques to the identified TDF domains

DF domain	Techniques judged to be effective in changing each construct domain
Knowledge	<ul style="list-style-type: none"> Information regarding behaviour / outcome (research evidence, persuasive communication) Education
Skills	<ul style="list-style-type: none"> Rewards (certificate); incentives (self-evaluation) Graded task, starting with easy tasks (structure of learning) Rehearsal of relevant skills (video, practices) Modelling/demonstration of behaviour by others (videos) Perform behaviour in different settings (case studies) Audit and feedback (mini and final tests)
Beliefs about capabilities	<ul style="list-style-type: none"> Graded task, starting with easy tasks (structure) Rehearsal of relevant skills (video, practices) Social processes of encouragement, pressure, support (persuasive communication)
Beliefs about consequences	<ul style="list-style-type: none"> Self-monitoring (CPD, reflective exercises) Persuasive communication (therapist/patient quotes) Information regarding behaviour / outcome (evidence, support) Feedback (tests and exercises) Education
Social / professional role / identity	<ul style="list-style-type: none"> Social processes of encouragement, pressure, support (persuasive communication)
Social influences	<ul style="list-style-type: none"> Social processes of encouragement, pressure, support (persuasive communication, peer support) Modelling/demonstration of behaviour by others (videos)
Goals	<ul style="list-style-type: none"> Rewards (certificate), incentives (self-evaluation) Social processes of encouragement (support for service evaluation) Persuasive communication (therapist/patient quotes) Information regarding behaviour / outcome (evidence, support)
Emotion	<ul style="list-style-type: none"> Coaching
Environmental context and resources	<ul style="list-style-type: none"> Environmental changes - objects to facilitate behaviour (case studies/examples, materials for different stakeholders, business case)
Reinforcement	<ul style="list-style-type: none"> Self-monitoring (CPD, reflective exercises) Planning, implementation (guidance, support, service evaluation)
Behavioural regulation	<ul style="list-style-type: none"> Planning, implementation (guidance, support, service evaluation) Use of imagery (video modelling)