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RESEARCH ARTICLE

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"Every patient teaches you something new": experiences of physiotherapists delivering cognitive functional therapy for chronic, disabling low back pain in a randomised controlled trial

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ABSTRACT

Purpose: Cognitive functional therapy (CFT) is an individualised person-centred biopsychosocial intervention that demonstrated large and sustained clinically important improvements in people with chronic, disabling low back pain (LBP) in the RESTORE randomised controlled trial. This study aimed to explore physiotherapists' experiences of delivering CFT in the RESTORE trial.

Materials and methods: Cross-sectional qualitative design using reflexive thematic analysis with interviews of 15 treating physiotherapists (3–25 years experience) across Perth and Sydney.

Results: The overarching theme was "*Driving on P(probationary)-plates*." The probationary driver analogy encompassed feelings of being newly competent, gaining experience, and refining competencies. Four themes were developed: "Sharing the journey of transformational change," "Refining new competencies," "Navigating patient complexity," and "Balancing patient care with trial-related processes." Physiotherapists described the life-changing improvements and re-engagement with valued activities of their patients under the theme of "Sharing the journey of transformational change." "Refining new competencies" described the continued enhancement of physiotherapists' new competencies towards an individualised and collaborative approach.

Conclusions:: The experiences of physiotherapists trained to deliver individualised, person-centred biopsychosocial care within an RCT can be likened to being a probationary driver. Experiential learning, ongoing support, and opportunities to navigate challenges with complex patients were important aspects of the journey towards mastery.

➤ IMPLICATIONS FOR REHABILITATION

- Physiotherapists have traditionally reported challenges addressing psychosocial barriers in people with chronic low back pain.
- People with disabling CLBP should be offered high-value person-centred biopsychosocial interventions, such as CFT, with a therapist who shares the journey with them.
- Ongoing peer and mentor support is a valuable extension to high-quality competency based training for physiotherapists delivering expanded scope biopsychosocial treatments like CFT.
- When treating patients with complex presentations, physiotherapists and their patients may benefit from integrated interdisciplinary input (e.g., from physicians, psychologists, and social workers).

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Introduction

Recognising the multidimensional nature of low back pain (LBP), current guidelines emphasise a biopsychosocial (BPS) approach to managing a person's pain and disability [1–5]. Randomised controlled trials (RCT) of BPS approaches have shown promising results in the treatment of musculoskeletal pain conditions [6]. However, a recent review has highlighted challenges in delivering BPS physiotherapy interventions within RCTs due to potential limitations of the training of physiotherapists [7]. Physiotherapists delivering care in BPS trials have mostly been trained using short, didactic approaches, with minimal mentoring or experiential learning [7]. Consequently, the recommendation has been made for physiotherapists in RCTs to receive comprehensive BPS training to a competency standard before trial commencement, with ongoing fidelity checking during the trials [7].

The transition from training in BPS approaches in preparation for a clinical trial to delivering them within the trial has not been widely studied. In a qualitative evaluation of an implementation trial of subgroup targeted care for LBP, physiotherapists reported gaining confidence in BPS care but felt they lacked psychosocial skills and reported some difficulties engaging patients without being able to use "hands-on" therapy [8]. The only other study investigating physiotherapists' perspectives on the delivery of a BPS intervention during an RCT highlighted ongoing levels of physiotherapist discomfort dealing with psychosocial issues [9].

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Therefore, understanding the transition from training in BPS approaches to delivering these interventions in clinical trials is important to inform how best to optimise training and this delivery.

Cognitive functional therapy (CFT) is a physiotherapist-led, BPS approach for the management of patients with chronic disabling low back pain. A recent randomised controlled trial (RESTORE) demonstrated large and sustained (52 weeks) clinically important improvements in pain-related activity limitation, pain intensity, pain catastrophising, pain-related fear, and pain-self-efficacy as well as substantial cost savings per person when compared to usual care for people with chronic disabling low back pain [10]. A key aspect of RESTORE was training physiotherapists delivering CFT to a competency standard. Our previous research explored the experiences of physiotherapists undergoing this training [11]. They reported the experience was like that of a "learner driver." This represented an individual journey that required a BPS understanding of the person and their condition, skill development, mentoring with feedback, and clinical integration to become confidently competent [11]. To date, the experiences of physiotherapists treating people with CLBP with CFT in large RCTs are unknown.

The aim of this study was to explore physiotherapists' experiences of delivering a BPS intervention (CFT) to people with chronic, disabling LBP in the RESTORE RCT. Understanding the physiotherapists' experiences can inform the refinement of biopsychosocial interventions in RCTs and enhance their effectiveness, ultimately improving outcomes for individuals with chronic low back pain.

Materials and methods

Design

We used a phenomenologically oriented qualitative study design to engage in the exploration of experiences and meaning [12,13]. The research is nested within a multi-centre randomised controlled trial (RESTORE) across Sydney and Perth, Australia, in primary care physiotherapy clinics [14]. Our epistemology was contextualism [15] and our ontology was constructivist [16]. Reflexive thematic analysis [17,18] was used to approach and make meaning with the data. Reflexive thematic analysis is a theoretically flexible interpretative approach to qualitative data analysis, comprising six stages [17]. We highlight and describe our engagement with the six stages in Table 1. Curtin University Human Research Ethics Committee approved this study (HRE2018-0062).

Table 1. Reflexive thematic analysis approach and application.

Reflexive thematic analysis stage [19]	Our approach
1. Familiarisation with the data	Re-reading of the data and preliminary note-taking by PS on trends, researcher thoughts and feelings
2. Generating initial codes	Coding using data that might be useful in addressing our research aim both semantically and latently recognised the multiple meanings of contextualism and constructivism. Codes were refined over three iterations by PS.
3. Generating themes	Codes were reviewed and analysed as to how different codes may be combined according to shared meanings to form themes or sub-themes. This involved mapping using Microsoft PowerPoint (Microsoft Corp., Redmond, WA, USA) to construct different meanings, relationships between, and salience of codes to create themes. Four different theme maps were created and discussed by the team until one thematic map was agreed upon.
4. Reviewing potential themes	We conducted a recursive review of the themes in relation to the coded data items and the entire dataset to ensure there was a coherent narrative within themes, and then among themes. Emergent themes were presented to the group and discussed.
5. Defining and naming themes	Themes, codes and accompanying quotes were reviewed to ensure each theme provided a coherent and internally consistent account of the data that could not be provided by the other themes. At this stage, we constructed an overarching theme that brought all themes together to create a lucid narrative that answered our aim of exploring physiotherapists' experiences of delivering CFT in the RESTORE RCT
6. Producing the report	We ordered the themes in a way that made sense to the construction of experiences the physiotherapists described in a way that also provided a narrative to the overarching theme

Participants

All of the 15 physiotherapists who participated in the RESTORE trial were interviewed (seven female). All physiotherapists had achieved competency to deliver CFT, as reported in the previous study, in which the physiotherapists were interviewed at the end of training in the RESTORE trial [11]. The current study was a follow-up of the same physiotherapists once they had been delivering CFT for between 6 and 12 months in the RESTORE trial. Although 18 physiotherapists completed training, one withdrew from the trial due to maternity leave and carer responsibilities, and two ceased practising physiotherapy. The clinical experience of the physiotherapists involved in the trial ranged from 3 to 25 years. All participants provided written informed consent to participate.

CFT intervention delivered in RESTORE RCT

The intervention delivered in the RESTORE RCT was CFT, which is a physiotherapist-led individualised BPS approach for people with disabling chronic LBP. It aims to identify and target personally relevant unhelpful beliefs, emotions, and behaviours that act as barriers to each person's recovery, coaching them to self-manage their condition [20]. A description of the content and physiotherapists' and trainers' perceptions of the CFT training has been published [11]. During the delivery of CFT in primary care physiotherapy clinics, physiotherapists did not have routine individualised mentoring but were able to seek advice from one of the trainers and a psychologist in the research team if needed. They also received peer and trainer support through a private Facebook group and had a 1-h group Zoom conversation every three months with the trainer-researchers to discuss any challenges in implementing CFT in the context of the trial. Approximately every seventh patient of each physiotherapist was monitored by the trainers to ensure ongoing fidelity against a competency checklist.

Data collection

All interviews were conducted by the first author (PS). The first author is a female physiotherapist and PhD candidate with no training in CFT. She had interviewed the physiotherapists previously about their experience of CFT training. The physiotherapists were aware the interview was informing the first author's PhD. The first author's research interests include biopsychosocial care and qualitative research. Other authors were physiotherapist researchers (AS, PK), physiotherapist researcher-clinicians (RH, POS), and a clinical psychologist and researcher (RS). Physiotherapists

were emailed to seek their interest in being interviewed. A semi-structured interview guide (Table 2) was used based on previous research on the experiences and difficulties that physiotherapists report when implementing a BPS approach [18]. The interview was not pilot-tested, but the guide was discussed thoroughly among the authors. Interviews were held in person for seven physiotherapists and *via* videoconference (Teams, Microsoft Corp., Redmond, WA, USA) for eight physiotherapists. Videoconferencing rather than telephone interviews was chosen to ensure conversational nuances could still be relayed through body language and facial expressions [21]. No other people were present during the interviews. Before each interview, the interviewer reflected on what each physiotherapist had reported to be novel or challenging during training in the previous training study [11] and asked about these perceived challenges to understand the experiences of these challenges during the delivery phase of CFT within the trial (highlighted in Table 2: Longitudinal follow up on issues noted in training). Interviews were conducted iteratively; whereby new findings were investigated further in subsequent interviews with subsequent physiotherapists. There were no repeat interviews. Written reflections were made after each interview by the first author. Audio data was recorded using an electronic voice recorder. Interviews ranged from 52 to 220 min, with a mean duration of 89 min. All physiotherapists were interviewed sometime between 6 and 12 months after their commencement of treatment of participants within the RESTORE trial, and hence they had had six to 12 months opportunity to deliver CFT to trial participants.

Table 2. Semi-structured physiotherapist interview schedule.

Concept	Prompts
Context	Can you describe your overall experience delivering CFT to patients with CLBP within the RESTORE trial?
Facilitators to implementation	What did you perceive as facilitators to implementing CFT within the trial? • Mentoring? What were the most effective forms of mentoring? • Time? • Funding within the RESTORE trial? • Support from others in the trial?
Barriers to implementation	Can you describe barriers to implementing CFT within the trial? • Patient retention? Were trial patients different from clinical? • Perceptions from peers? • Patient expectations? • Support? • Scope of practice? • Issues with other health professionals? Referrers?
Longitudinal follow up on issues noted in training	Last time we spoke, you mentioned *(add here a personal issue, barrier or interesting point from their first interview for follow-up regarding the training and/or the trial)*. Can you tell me how that has been since implementing CFT for (x participant dependent) months now? In what ways could training have better addressed these issues?
Patient responses to CFT	Can you think of a difficult patient encounter? Can you describe it for me? • What do you think was going on for the patient at this point? • How did you manage that situation? • How did training teach you to deal with this experience? • Learnings from this experience?A constructive patient encounter? A transformative patient encounter?
Ways to improve, adapt or optimise CFT	In what ways could the implementation of CFT be improved? In what ways could CFT as a treatment be improved?
Sensors	Were the sensors helpful? How? Were the sensors a barrier in anyway? Why? Do you the think they added value to your treatment?

Data processing

The data was transcribed verbatim from the audio files using Temi (Rev.com, Austin, TX, USA) and NVIVO Transcription 2019 (QSR International, Burlington, MA, USA). Subsequently, data was entered, anonymised, and coded in Microsoft Word (Microsoft Corp., Redmond, WA, USA), and categories constructed in Microsoft Excel (Microsoft Corp., Redmond, WA, USA).

Data analysis

To understand physiotherapists' experiences of delivering a BPS intervention (CFT) to people with chronic, disabling LBP in the RESTORE RCT, reflexive thematic analysis [22] was used. The thematic analysis allows for a rich description and analysis of patterns of meaning within the data [23–25]. For data familiarisation, the first author (PS) made notes on the content of the data, key metaphors, and language used [23,25]. The entire dataset was then coded by PS, as an important component of thematic analysis is that subjectivity with understanding and meaning-making occurs within the reflexive lens of a single person [23,25]. Two co-authors (RH and PK) coded two transcripts each at the beginning of coding to expand the lens of construction of the coding, rather than confirm the coding. Categories were constructed using an iterative approach and returned to numerous times to construct themes with a central pattern of meaning [25]. To generate and refine themes, PS created mind maps that were refined into conceptual maps through team meetings. All research team members helped to refine and finalise the themes [23,25].

Results

Four themes were constructed capturing the physiotherapists overall experiences of the delivering CFT in the RESTORE trial, with an overarching analogy of "Driving on Probationary plates" (Figure 1; Table 3). In this analogy of being a probationary driver, physiotherapists described feeling newly competent and able to deliver better care, while still developing their skills and expertise in CFT. The probationary driving analogy illustrated an individual journey described by each physiotherapist, involving the refinement of new competencies whilst navigating patient complexities and trial-related factors associated with delivering CFT within the RESTORE trial. Ongoing access to one of the trainers (JP) for advice as needed and a multidisciplinary perspective from the trial psychologist was considered to be helpful for some to support physiotherapists' journey of "driving on probationary plates".

Theme 1, "*Sharing the journey of transformational change*," elucidated the physiotherapists' narratives of significant patient transformations during the RESTORE RCT that were felt to be rewarding and transformative to their practice.

> *PT7: Seeing them* [patients] *transform their own lives helps guide my practice. Seeing how they have done it is what is rewarding.*

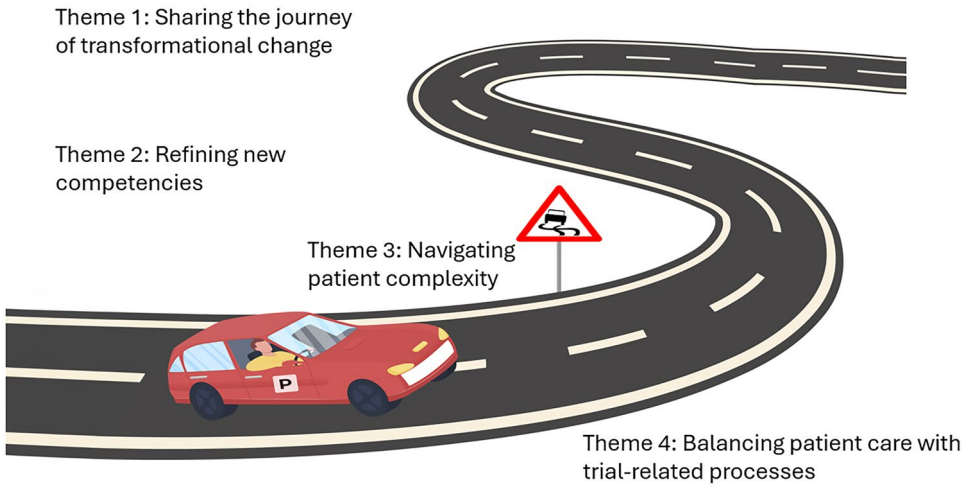

Figure 1. Themes represented in the overarching analogy of "driving on probationary plates."

Table 3. Themes.

Overarching theme: "*Driving on Probationary plates*"	
Theme 1:	Sharing the journey of transformational change
Theme 2:	Refining new competencies
Theme 3:	Navigating patient complexity
Theme 4:	Balancing patient care with trial-related processes

PT8: That was really the fascinating part. Like seeing them like day one compared to at discharge, they were almost completely different people, like in terms of their personality and all that. That massive change in them, it was phenomenal.

Sharing transformational journeys was expressed by most of the physiotherapists as giving them a deep sense of enjoyment and awe. The physiotherapists described developing a strong therapeutic alliance as integral to facilitating each patient's journey.

PT2: All I can say is I wish people could see what I've been able to see… there's just been stuff where I've just been, wow, that's cool. Like that makes me feel nice and I have shared lots of joy with patients and shared tears with patients.

PT5: I think having a really good therapeutic alliance with the patients was really important so they would get buy-in and trust with you to realize that, you know, sometimes it's not as easy as a quick sort of fix.

Many of the patient stories physiotherapists described were of life changing improvements for people and re-engagement with valued activities.

PT1: To start off with, she just had pain with everything… She couldn't walk really very far at all, and she just felt really discouraged. And I remember in the last session, just her talking about how much her life had changed.

PT8: Her 11-year-old daughter kind of went to like, "Oh, mum, you know, you go up and I'll take the shopping up." And she goes, "Actually, I can do it now. I can do it myself." Her whole demeanour, like everything, like her outlook on life just completely changed. And she had stopped taking all medications, pain meds just everything.

CFT was described as allowing for the transformation of broader aspects of the person's life than a more traditional, physically focused management approach. CFT was perceived by many of the physiotherapists to be a more effective treatment delivery than more passive hands-on treatments.

PT10: It makes much more of a meaningful impact I found with this approach. I just find those people from psychological, physical, social point of view, it kind of addressed everything as opposed to just the physical side of things, which I think that's where patients can sometimes only get so far.

PT1: She's gone from having 24/7 pain to only at night and even night pain she understood. She's like 'I get where it's coming from' and I have a direction of how I can treat this now… Whereas if I had just done hands-on, she would have just come back and been sore again the next week.

Theme 2, "*Refining new competencies*," described the process of continued enhancement and practice of the new competencies physiotherapists had achieved at the end of the training, during the trial. Physiotherapists reported feeling confident delivering CFT with more practice, as each patient experience taught them something new.

PT13: Every patient teaches you something new… I'm really enjoying a new lens and a level of curiosity which you can have with the patient.

PT14: We did a heap of training and I think I'm pretty good at it. I think I'm better than most. I don't think I'm as good as the big dogs obviously… even with all the training that we did I still think it takes another couple of years to probably be good at it. You just have to keep practicing, practicing, see what works for you and what doesn't work for you.

However, one physiotherapist acknowledged ongoing discomfort when dealing with psychosocial factors.

PT11: This has been a weakness of mine from the start [during training] absolutely nailing down the emotional factors and the emotional impact that their impairments or their pain might have in their life.

The physiotherapists described a refinement of their clinical judgement around when and how to address psychosocial factors, depending on the patient. Physiotherapists also described becoming more skilled at patient-centred communication and a flexible approach to working with their patients. When encountering a clinical impasse with a patient who may demonstrate some resistance, physiotherapists described being able to use strategies to work from the patient's agenda.

PT8: If it became obvious that they didn't want to deal with a particular issue or whatever, then I just moved on and didn't go into it and, you know, just kind of casually mentioned it like a session later like, what about this? How's that going for you?

PT9: You've kind of got to pick up on and read the room a little bit there and go, okay, well maybe this is someone I'm going to drip feed this information to over the next, you know, four or five sessions gradually bit by bit, rather than hitting them with… all these things that they're just going

to go (explosion noise) and their brain's going to explode and they're going to freak out and run away.

Physiotherapists described becoming more collaborative in helping patients make sense of their pain, compared to a didactic, paternalistic clinical encounter.

PT7: I think that the other thing CFT really taught me is you can't just talk at them. You can't just explain pain, you have to make sense of the story. And that is a massive skill.

PT11: But not telling them, it's like they're coming up with the, the answers, I suppose, of their realization of how different that was. You've got to set them up.

Physiotherapists described the importance and refinement of their delivery of experiential tasks with patients. Experiential learning was described as a facilitator of patient behaviour change, and delivery of this care also changed the physiotherapist's perception of their role.

PT10: Definitely the first session, do a little bit of experiential learning and then more the second and third appointment started drawing their attention to get them to do something. And then they'd really struggle kind of doing it one way versus another way, and be like, "Can you see the difference there?" "Yeah. How do I get that stronger?" "Well, if you actually relax off, see where you can load that leg more."

PT18: Your beliefs will change by experience… you can only change beliefs, by kind of guiding them to an alternative and kind of confronting them. So certainly, the way I kind of see my role is it's kind of just to encourage and to guide and give options and alternatives rather than be didactic and say, this is the way.

As physiotherapists refined their skills, they described becoming more comfortable modifying how they delivered CFT to suit each individual patient, particularly when behavioural experiments did not provide an immediate response.

PT7: I think if they don't have a change [during behavioural experiments], I'm using other skills… You have to go for functional goals with those people, where you more just addressing those [psychosocial] factors and using the motivational interviewing to drive them towards that and trying to put them in the driver's seat around, what are you going to change?

PT9: Through the CFT model, your first option [with a patient] is going to be trying symptom modification and seeing if you can do that through your behavioural experiments or your sympathetic wind-down type exercises… Then there's that other cohort that you have to go, okay, not getting much change in pain here. So it's just reassuring them, "You're safe, it's okay. Let's work on function and find avenues in that way."

Theme 3, "*Navigating patient complexity*" highlighted physiotherapists' reported experiences in managing complex presentations with patients who were highly disabled by pain or were from diverse cultural backgrounds. This theme captured the challenges of physiotherapists using CFT to address a wider scope of maintaining factors with this highly disabled patient group, with a mean Roland Morris Disability Questionnaire score of 13.5 [*SD* 5.2] and 93% of CFT-only and 88% of CFT plus biofeedback group patients classified as medium-high risk of a poor outcome on the Keele STarT MSK screening tool [10].

PT6: I had a really challenging patient that had a non-English speaking background, was very fear related, extremely debilitated. And, basically needed like a carer, couldn't transport himself. Couldn't do anything. Like probably the worst I'd ever seen someone with back pain.

PT7: You couldn't easily just change his pain levels with movement or breathing… And it was just like, what are we going to do? What are you able to manage? So that was tricky.

Perceived scope of practice limitations that arose whilst navigating patient complexity were also highlighted by some physiotherapists and a feeling of pushback from patients. For some physiotherapists, they expressed a sense of wanting more support to address psychosocial factors.

PT4: One guy literally said, "I'm going to see the physio, I've got this problem, I don't want to talk about my sleep patterns and things like that. I don't want to talk about my personal problems."

PT1: I'm not trained as a psychologist. So, when it came to things like the anxiety and the depression and even the medication that she was on for that, and the fact that she said that that affected her mind… I didn't know that much about details of medications so having like a chat with the GP about like, what should I be expecting with this medication? What's the plan? That would have been helpful.

Physiotherapists described the nuances of helping their patients navigate different rehabilitation journeys. For some, this included the challenges of working with various comorbidities impacting their trajectories. The physiotherapists described feeling that sometimes patient responses were not in their control, particularly when patients had complex social or medical issues.

PT7: I think that there is a mix of responses with patients depending on so many of their contextual factors.

PT3: She was very overweight, she had low iron and dizziness, and had this bad back and she couldn't do much. So, she was probably my tricky one, not from the back perspective, but just the whole package I suppose.

Readiness for change was described by the physiotherapists as an important factor for their patients to progress. CFT was felt by many physiotherapists to work best with people with cognitive flexibility who were open to having their beliefs challenged. One physiotherapist felt patients with similar personalities to them, or who were more agreeable, were easier to work with.

PT1: I think honestly one of the biggest barriers is how much the patient is willing to work. I think CFT is obviously not hands-on, it's not them just coming in getting treated, like getting treatment from you and leaving, it's very much giving them tools to treat themselves. So, if they're not in the frame of mind to do that… I think part of what we do can help get them in the frame of mind, but I think some need more help.

PT6: I find if you are going to work with someone whose personality, that's not normally your personality, it just takes a bit more energy, you know you've got to actively play ball with them.

Some physiotherapists in the trial felt that access to one of the trainers and a psychologist in the research team who they could seek advice from was very important to managing patient complexity. Other physiotherapists did not use this individualised support but appreciated it was available and recognised its value. Individual advice and support from the trainer and when needed, a trial psychologist, was considered more helpful than group mentoring for many.

PT7: Sometimes it was a matter of like [mentors] saying, "You know, go back to look at what you can change, you can't change those other things"… this is not necessarily something you can train by a lecture. Because it is the nuances. And so I think that's why the mentoring and the ability to talk about real life patients is invaluable.

PT2: I think overall there was plenty of support and I know it would have been there if I needed it, but I think as time went by, I felt less need for it. I hope that is good.

Many of the physiotherapists felt they had become more aware of the need for multi-disciplinary co-care for some patients.

PT1: I would have loved to have been able to work with like the GP or, and probably like a psychologist or counselling, you know, just sort of have that multidisciplinary team. Exercise Physiologist, that would be amazing to have that sort of setting. I just think there were so many other factors that needed to be addressed for her to have success.

PT13: He did say that he'd had a troubled childhood. I asked how was early life for you? And he was like, 'I won't go there'. So, there was some layers of resistance built in, which is a real shame because he needed to access that [psychology] to work through… we didn't have any luck there as much as we tried to approach him and offer the consults with [psychologist]. He was offered that and didn't take it.

Theme 4, "Balancing patient care with trial-related processes," highlighted experiences described by the physiotherapists of maintaining their focus on patient care alongside trial-related processes to maintain trial fidelity, given RESTORE was an RCT.

PT5: I suppose the extra administration side of things makes it more difficult, but you know that's part and parcel of a trial when you've got to do the sensors and fill out the forms and stuff. And then you've got to do the notes on a different system.

PT13: We had key aspects of what our service was for delivery and fidelity for the trial. It was hard on some aspects of what we were doing [using the assessment forms and sensors] to make sure we got it right.

Biofeedback sensors and using technology as part of the trial were felt to have taken up too much time and interrupted flow for many of the physiotherapists. However, one physiotherapist found the biofeedback sensors helpful for some patients.

PT11: I don't know as a personality type how tech-y physiotherapists are. Your business-y physio or big chains may think [sensors] is a new business tool that's going to be generating people coming in, people are going to want this service… Whereas CFT you could pretty much have a chair, a bed, like it's pretty low tech, and then you're trying to add high tech [sensors].

PT2: For some people hand contact would be sufficient, symptom change would be sufficient, my feedback might be sufficient, mirror might be sufficient, video. And then for some people they responded better to that [sensor biofeedback].

Fidelity videos were described positively by the physiotherapists as a helpful way of getting feedback.

PT11: For accountability… Those reviews of the fidelity videos were great.

PT12: I loved getting feedback back about patients [from fidelity videos] because there were things that I did well and then there were other one or two little things I could have done differently. And it just helps you keep on track with it.

One physiotherapist appreciated the pragmatic design of the trial which allowed them to determine the number of treatments deemed necessary, including booster sessions.

PT18: There were some [patients] that didn't [need all the trial sessions], who really after the first three sessions they're doing quite well. So, we kind of spaced them out a bit farther and they were the type of people who didn't necessarily want their booster session. They were happy by the end of it just carrying on [independently].

Discussion

This study examined the experiences of physiotherapists delivering a BPS approach to participants with disabling chronic LBP as part of an RCT (RESTORE). "Driving on Probationary plates" was an analogy that captured the physiotherapists' overall experiences of delivering CFT within the trial, following their "learner driver" experience in CFT training. "Driving on probationary plates" refers to the experience of being a newly licenced driver who is still in a probationary period, typically characterised by a period with certain restrictions and a heightened level of scrutiny, for them to gain driving experience and refining competencies. The subsequent section explores the four themes that emerged through the physiotherapists' experiences.

Theme 1, "*sharing the journey of transformational change*," highlighted the rewarding experiences of sharing a transformative journey alongside patients. The concept of "sharing" the journey denotes a change in role from paternalistic towards a partnership and the importance of developing a strong therapeutic alliance. This is a similar finding to qualitative studies exploring experiences post-CFT training, as communication style changes from a constrained therapist-led style to a more informal, conversational approach, deepening therapeutic alliance [26,27]. The importance of a less prescriptive, more collaborative approach and therapeutic alliance was highlighted by Nielsen et al. Sanders et al., also reported that physiotherapists described the importance of the new open communication approach, which led to patients disclosing more information to them. Our results align with what patients have reported to be important, namely physiotherapists' communication skills, such as deep listening, encouragement, being empathetic and friendly, confident, and nonverbal communication [28].

While the initial training established a foundation, the physiotherapists emphasised their ongoing learning and refinement of skills during the RCT, particularly in patient-centred communication and navigating challenging therapeutic interactions. Although RESTORE training and mentoring of the physiotherapists (80+ h with experiential learning and competency assessment) can be seen as an exemplar for training [10] compared to other training programs for BPS interventions [8,9], the results of this study emphasise the importance of ongoing experiential learning. Research on training physiotherapists to hone their clinical reasoning skills highlights experiential learning is essential to developing higher-order metacognition, including reflective processes [29,30]. Learning through experiences also introduces elements of instability to the learning process, as patients vary in complexity [31]. Experience through practice may lead to acquisition of more lasting skills and competencies [31,32].

Physiotherapists highlighted challenges when managing highly disabled patients and those with high levels of complexity. On average, patients in the RESTORE trial had long-term LBP with high levels of pain-related disability and psychological distress, and some were older or had comorbidities that would usually lead to exclusion from RCTs [33]. Even though physiotherapists tailored their approach, there was acknowledgement of limitations to their scope of practice, particularly when dealing with profound psychological issues and health comorbidities. Similarly, in a stratified care RCT, physiotherapists described feeling they had improved their scope of practice, but recognised scope boundaries and felt they referred and discharged sooner than before the trial [8]. Evidently, with a highly disabled cohort in RESTORE, physiotherapists delivering CFT on "probationary plates" recognised they had limitations with some patients as a sole care provider.

Many physiotherapists desired multidisciplinary co-care in collaboration with GPs, psychologists, and other professionals. Similarly, in a qualitative process evaluation of risk-stratified care, treating physiotherapists reported appreciation of the need for multi-disciplinary co-care, including a dedicated email address to contact GPs, despite not having to use it [8]. Physiotherapists in this study valued contact with patients' GPs and access to the trial psychologist when needed, in line with reports regarding the delivery of physiotherapist-delivered cognitive behavioural therapy to people with knee osteoarthritis in an RCT, whereby physiotherapists valued psychologists' input as their scope of practice expanded [9].

Through RESTORE, most physiotherapists felt supported by the opportunity to liaise with the trainer and trial clinical psychologist, however, not all felt they needed this level of support. This suggests that an individualised approach to ongoing support and training during clinical trials of BPS approaches may be helpful. Physiotherapists have described mentoring as important in other qualitative studies of delivering BPS care within other clinical trials that underwent less extensive training [8,9,34]. The extensive training in the RESTORE trial may mitigate the need for as much post-training mentoring as other BPS approaches.

Individual challenges were part of the RESTORE journey for each physiotherapist. Given most physiotherapists historically have been trained to assess and manage pain from a biomedical model [35,36], implementing a BPS approach can require a significant behavioural change for physiotherapists [37–39]. Experiencing ongoing challenges addressing patients' psychosocial factors is described by physiotherapists delivering BPS care in other RCTs [8,9]. Healthcare professionals' personal factors, such as feeling embarrassed or reluctant to ask about patients' psychosocial factors, may hinder the delivery of BPS care [40]. An observational study of physiotherapist interactions with LBP patients highlighted limitations to physiotherapists' ability to recognise and respond to emotions, such as time pressure and the need to conform to scripts as part of playing the role of physiotherapist [41]. Addressing BPS factors may be a continual challenge for some physiotherapists, and deconstructing socio-cultural norms and perceptions of the role of physiotherapists is encouraged.

The delivery of CFT within the RESTORE RCT was complex; consisting of multiple behavioural, technological, and organisational components [42]. Physiotherapists described balancing the delivery of individualised care with extra trial-related demands as more taxing but understood their importance to the fidelity of the trial. For many physiotherapists, the use of movement sensors was considered to interfere with delivering CFT, either because they competed for consultation time or because they perceived the sensors were not adding adequate value. The trial results support the sensors did not add value [10]. Limited qualitative research has investigated the experiences of physiotherapists regarding the extra processes of being involved in an RCT. In one other RCT, physiotherapists reported that the requirements of the trial potentially created a barrier to individualising care [9]. Given the paradigm shift required for many physiotherapists to deliver BPS care, more time and support for trial obligations is an important consideration for managing physiotherapist workload in future RCTs.

Strengths and limitations

Braun and Clarke's checklist for good reflexive thematic analysis [43] was used, and all components were included in this study. This study was conducted in an Australian context, with physiotherapists working in different private practices, some of them being the only ones trained in CFT. Physiotherapists interested in a biopsychosocial behavioural experiment approach to care were sampled, which may limit transferability of the findings. A limitation of this study is that it does not explore how the training experience might vary for physiotherapists working in rural or regional settings, which warrants future research.

Conclusions and clinical implications

The study of physiotherapists' experiences delivering CFT to people with disabling, chronic LBP in the RESTORE RCT describes the delivery of CFT in an RCT as one of "Driving on Probationary plates." This captured feeling newly competent and able to deliver better care while still developing skills and expertise. Using the analogy of a probationary driver, each physiotherapist outlined a unique journey that involved honing new skills while managing trial-specific issues and patient complexity. Using a qualitative study design, this study highlights the significance of experiential training, support from trainers, and adjustments in a clinical setting to support physiotherapists in delivering care and navigating challenges when shifting their practice in an RCT with complex patients.

These findings may help inform future training in BPS approaches, which need to provide experiential training for physiotherapists to deliver competent care and support physiotherapists individually to overcome barriers in the context of an RCT. In terms of real-world clinical practice, our findings suggest that while CFT can lead to transformational patient outcomes, the real-world implementation of such a biopsychosocial approach requires careful consideration of the complexities and constraints of everyday physiotherapy practice. Further research is needed to explore strategies for scaling these approaches, including the necessary support systems and training modifications that could enable physiotherapists to adopt and adapt CFT effectively in diverse clinical settings.

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