

# TRANSFORMING A PATIENT'S ACTIONS

**BREANNE KUNSTLER** EXPLAINS HOW UNDERSTANDING HUMAN BEHAVIOUR TECHNIQUES CAN HELP PHYSIOTHERAPISTS CREATE PHYSICALLY ACTIVE PATIENTS.

Just over half of Australian adults, and only one-third of children, reported achieving the minimum recommended physical activity (PA) levels from 2014 to 2015 (Commonwealth of Australia 2017). Meeting these standards involves adults participating in at least 150 minutes of moderate intensity (eg, brisk walking) or 75 minutes of vigorous intensity (eg, spin class), or an equivalent of both, weekly. In addition to this, it is also important to participate in muscle strengthening activities for all major muscle groups twice a week and reduce time spent sedentary (Department of Health 2014). Being inactive contributes negatively to the total disease burden, or impact of disease, in Australia. We could decrease this burden by 13 per cent by simply increasing our activity levels by 15 minutes on five days each week. Sounds easy to do, right? That's just a walk to the local coffee shop and back.

Participating in PA is a human behaviour; it's something measurable that we can observe someone doing. Therefore, supporting someone to increase their PA level involves behaviour change. You are supporting them to change their behaviour from not participating in PA to participating in PA. Behaviour change involves identifying the problem (eg, inactivity), understanding what leads to the problem (by exploring and asking questions, leaving assumptions aside) and addressing the problem by testing strategies (different strategies work for different people) (Behaviourworks Australia 2017).

It is understanding and applying this process or method of changing behaviour that can make increasing patient PA levels complex for

physiotherapists and other health professionals. Is it as simple as starting at the start and finishing at the end?

**Table 1:** The BCTs most frequently used by 216 Australian physiotherapists to change PA behaviour (Kunstler et al 2019).

BCT	Physiotherapists (n, %)
Graded tasks <sup>a</sup>	173, 74.9%
Social reward <sup>b</sup>	163, 73.8%
Reward approximation <sup>c</sup>	160, 72.4%

<sup>a</sup> Graded tasks involves setting the patient small tasks that gradually get harder (Michie et al 2013).

<sup>b</sup> Social reward involves providing a verbal or non-verbal reward for progressing towards a goal (eg, congratulations) (Michie et al 2013).

<sup>c</sup> Reward approximation involves rewarding the patient for progressing towards achieving their goal. Reward frequency decreases gradually until the patient gets close to achieving the goal (Michie et al 2013).

Physiotherapists use several techniques with their patients to change their behaviour, often without realising it (Kunstler et al 2019, Kunstler et al 2018). These are called behaviour change techniques (BCTs) and include techniques we often use clinically, like goal setting, problem solving and action planning. However, there are 90 other BCTs that we can use to help us change patient behaviour





Photo: @iStock.com/Cecilie\_Arcurs

(Michie et al 2013). Interestingly, very few (37.6%,  $n = 111$ ) Australian physiotherapists have psychology qualifications or have attended professional development that is psychology-inspired, which is where one would expect physiotherapists to learn how to change behaviour (Kunstler et al 2019). Despite this, physiotherapists are still frequently using 29 different BCTs to change the behaviour of their patients (Table 1), so it is not necessary to be a psychologist to attempt to change behaviour.

So, we know that physiotherapists use BCTs, but just because physiotherapists know some techniques to use to change behaviour, it doesn't mean that they are successful at it. Physical activity behaviour change interventions provided by physiotherapists are not very successful, and the small changes in PA seen in patients are not maintained long term (Kunstler 2017).

Physiotherapists can feel out of their depth when it comes to behaviour change. Changing behaviour can seem like a complex and daunting task, something that certainly cannot be done in the amount of time we have with our patients (Füzéki et al 2017). Well, it depends what approach you take. You can take a long-winded and time-consuming approach, or you could use a quicker approach. It's up to you.

The EAST Framework (<http://tinyurl.com/yy8n4kfa>) can be used when trying to change patient behaviour, be it increasing PA levels,

adhering to rehabilitation exercises or simply making another appointment (The Behavioural Insights Team). Let's explore the EAST Framework with a case study.

### Case study

Sarah is a 33-year-old first-time mother of 4-week-old, Zac, who certainly keeps her busy. Sarah experienced a grade 2 perineal tear during delivery. She comes to see you because she was told by her maternal and child health nurse that she had a gap appearing between her tummy muscles. She is concerned that she can feel her intestines if she presses on it. She does not have a history of back or pelvic pain.

Aside from her immediate complaint, Sarah experienced gestational diabetes mellitus (GDM) during her pregnancy that was successfully treated by her GP using Metformin 1g BD. Her parents both have type 2 diabetes and her GP said she is now at greater risk of also developing the condition. Sarah is eager to fit back into her pre-baby jeans but she's not quite there yet.

Sarah's prioritised problem list:

1. abdominal muscle separation (DRAM), measuring two centimetres in supine
2. GDM, at risk of type 2 diabetes
3. desire to lose weight.

## How do you help Sarah?

Your proposed treatment plan must address Sarah's immediate complaint (the DRAM) but should also be holistic enough to address her diabetes risk and desire to lose more weight. This is not something that can be done in one session.

You introduce Sarah to the anatomy of the abdomen and explain the aetiology and typical physiotherapy management of DRAM. You provide Sarah with suggestions for compressive underwear and bike shorts and give her some Tubigrip. You also prescribe her some gentle abdominal exercises and give her advice on rolling out of bed and safe lifting of Zac. You establish that she can hold a gentle lower abdominal contraction for five seconds before consciously needing to let go, so you prescribe her 10 times five-second holds with 10-second breaks, to be repeated three times per day. Sarah is happy with this and agrees to come back next week for a review.

Sarah comes back for her next review. She has purchased some supportive underwear and is doing well with the abdominal exercises, but she has not seen any improvement in her tummy gap yet. You reassure her that a two-centimetre diastasis is normal postpartum, explaining the normal timeframes for recovery, which address her concerns. Further, you redirect her attention towards muscle function, reassuring her that the abdominal exercise has progressed and that she can progress the length of her hold by a couple of seconds if she is capable.

Since Sarah is mastering one task, this is a good opportunity to address Sarah's other problems. She wants to lose some weight and is concerned about her risk of type 2 diabetes. You bring this up with her and she mentions that she is eating poorly because breastfeeding is 'draining her' and she is too exhausted to exercise. Sarah wonders: 'how is this relevant to my tummy gap anyway?'

You mention to Sarah that losing some weight and improving her fitness can help engage abdominal muscles, while also avoiding additional complications like urinary incontinence, which some women can get after having a baby, especially if they experienced a tear during delivery (Qaseem et al 2014). Suddenly Sarah has become more interested in improving her PA levels, and you didn't even need to mention her increased risk of type 2 diabetes.

So, you have Sarah's attention, what now? It's time to change behaviour using the EAST Framework.

**Easy**—make PA easy for Sarah.

Everyone prefers easier tasks over harder tasks, right? You might be inclined to encourage Sarah to achieve at least 150 minutes of brisk walking weekly so she meets the guidelines, but is this going to be easy and achievable for Sarah? She is a new and exhausted mum who is not currently doing any PA.

Consider encouraging her to take baby steps, with the baby! Walking to the store to pick up some milk, rather than taking the car, and getting packages delivered to the post office instead of to home might support Sarah to get out for a couple of walks a week. Just make it easy.

**Attractive**—find a way to make PA attractive to Sarah.

We are more likely to do something if our attention is drawn to it. What does Sarah enjoy doing? Is she a social butterfly who might feel a little bit isolated lately? Does she want to avoid the hassle of finding a babysitter just so she can exercise? Does she want professional advice when she exercises? Consider a local mother and baby exercise class, although this might be difficult for her to attend if she can't get there. Talk with Sarah to understand what she enjoys and what she feels capable of doing.

**Social**—demonstrate to Sarah that people just like her participate in PA. People often act the same way others do (The Behavioural Insights Team) so introducing Sarah to that mother and baby class will show her that other mums exercise too, and that it is normal to exercise postpartum. Also, as Sarah develops relationships with the other mums, she might also learn that they are doing abdominal exercises for their DRAM too. Making Sarah feel like she's part of a group, where she commits to attending weekly sessions and engages with others, might help her to commit to PA, not to mention the potential health benefits too.

**Timely**—use Sarah's life stage to help her see the relevance of PA. Sarah has just undergone a major life transition from being a young woman to now being a young woman and a mum. These transitions often provide 'teachable moments', where people are more inclined to listen and follow advice that they might not if they were not in that situation (Olander et al 2016). Discuss with Sarah how becoming fitter might help avoid incontinence now and later on (Qaseem et al 2014), reduce her likelihood of developing type 2 diabetes (Colberg et al 2016) and create unique bonding experiences for herself and her baby (Currie et al 2004).

It is also important to establish an action plan with Sarah, which will help her to plan her PA. This is easy if she chooses to attend a class as the days, times, and exercise duration and type are already set. But what if she wants to start a walking plan? Be sure to help Sarah decide the best times and days to walk, ensuring her program fits well with Zac's schedule because he will determine when she does what.

How do you know if your advice worked to help Sarah to increase her PA levels? It is important to compare Sarah's baseline PA levels to those she achieved after you provided your behaviour change intervention using the EAST framework. There are several ways to monitor changes in PA and you can learn about them by reading this issue of *In Touch*.

Email [ngeditor@australian.physio](mailto:ngeditor@australian.physio) for references.

**APA member Breanne Kunstler is a research fellow at BehaviourWorks Australia and is also a practising physiotherapist. She completed her PhD in 2018 in the use of behaviour change techniques to promote physical activity. Breanne is passionate about supporting and empowering physiotherapists to promote physical activity and shares this passion in her role as co-convenor of the APA advisory group, Physios4PA. Twitter: @BreanneKunstler @PhysiosforPA.**