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**Professional Doctorate in Health  
Psychology**

**University of Staffordshire**

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We did it!

# **Abstract**

**Lorna Parks**

## **Professional Doctorate in Health Psychology, 2025**

This portfolio documents the work I have completed whilst undertaking the Professional Doctorate in Health Psychology at Staffordshire University between 2022-2025. This work was completed while I was employed as a Trainee Health Psychologist, in an NHS bursary placement set up by Staffordshire University and an NHS Trust in the Northwest (0.8 WTE). Opportunities external to this placement were also sought to fulfil the requirements of the doctorate.

This portfolio is divided into the following chapters:

1. Professional Skills in Health Psychology
2. Research: From Design to Dissemination
3. Systematic Review
4. Consultancy in Health Psychology
5. Teaching and Training in Health Psychology
6. Health Psychology Interventions

Throughout each chapter, I demonstrate evidence of my development of each of these competencies in the form of research manuscripts, case studies and reflective commentaries. The portfolio outlines the work I have undertaken, and details the learning, experiences and challenges that have shaped my growth as a Health Psychologist. Further details of the content of each chapter are provided in the introduction.

# Introduction

This portfolio details my journey in completing the Professional Doctorate in Health Psychology between September 2022 – 2025. At the outset of the doctorate, I secured a two-year NHS bursary placement. I was then offered an extension on this contract which allowed me to continue developing my skills within the same role while I completed my qualification. Within this role I worked as a Trainee Health Psychologist, delivering one-to-one and group psychological interventions with a variety of patients diagnosed with a range of health conditions. I utilised opportunities both internal and external to my placement to successfully complete the five core competencies across various topics and areas, as detailed below.

## **Chapter 1: Professional Skills in Health Psychology**

The first chapter of this portfolio presents a reflexive report detailing my development as a health psychologist over the past three years. In the first section of this report, I discuss the work and experiences contributing to my completion of the core health psychology competencies. In the latter section I discuss my development in relation to the general professional competencies of a health psychologist.

## **Chapter 2: Research: From Design to Dissemination**

In chapter two I present my quantitative research project, which evaluated a brief training session aiming to enhance junior doctors' skills in responding to inpatients' psychological needs. This is accompanied by a reflective commentary which details my research experiences and decision making while undertaking this project.

## **Chapter 3: Systematic Review**

In chapter three, I present my systematic review exploring the impact of brief psychological interventions on well-being in adults with chronic health conditions. This is accompanied by a reflective commentary exploring my

experiences of conducting this review and my thought processes and decision making underpinning the project.

#### **Chapter 4: Consultancy in Health Psychology**

Chapter four contains a case study detailing a consultancy project in which I designed a leaflet to advertise an outpatient group intervention delivered by a local hospice. I outline the processes of consultancy including needs assessment, negotiation and planning, maintaining client relationships, and delivering and evaluating the work. This case study is accompanied by a contract I developed in the initial stages of the project.

#### **Chapter 5: Teaching and Training in Health Psychology**

The fourth chapter includes a case study and evaluation of five teaching and training sessions I developed and delivered to a range of different audiences, including university students at different levels, and resident doctors. The overarching theme of these sessions was “third-wave therapies in health psychology”. The case study provides an overview of assessment of learning needs, identification of content and structure, selection of materials and teaching approaches, and assessment of learning outcomes. The accompanying evaluation and reflective commentary offers my evaluation of the teaching sessions, and reflections on my resulting professional development.

#### **Chapter 6: Health Psychology Interventions**

The final chapter of my portfolio presents two distinct psychological interventions I completed as part of the professional doctorate. The first case study and reflective commentary relates to a one-to-one psychological intervention delivered in person, with a patient who was engaging in psychological support due to the challenges of living with inflammatory bowel disease. The second case study and reflective commentary relates to an online group intervention I delivered to support colleagues with psychological adjustment to a variety of health conditions.

Table of completion

<b>Module</b>	<b>Date of Completion</b>
Professional Skills in Health Psychology	June 2025
Research: From Design to Dissemination	January 2025
Systematic Review	January 2024
Consultancy in Health Psychology	June 2024
Teaching and Training in Health Psychology	January 2025
Health Psychology Interventions	June 2025

# **Professional Skills in Health Psychology**

## **Reflexive Report**

### **Background**

This report examines the professional development I have gained while undertaking the Professional Doctorate in Health Psychology. I discuss the knowledge and skills I have gained from my placement, and from academic work within each of the core competencies of a health psychologist. I also reflect on my development in relation to the general professional competencies of a health psychologist. While on the doctorate I maintained a reflective log, where I recorded experiences critical to my development. Across all areas of my work, I have been mindful of the British Psychological Society (BPS) code of ethics (British Psychological Society, 2021) and therefore worked in a manner which is respectful, responsible, with integrity and within my own competence. Following these ethical principles has easily integrated with my own professional and personal values, which include being compassionate, curious and striving to continually learn.

### **Placement overview**

I have worked as a Trainee Health Psychologist within an NHS Teaching Hospital Trust in Northwest England from October 2022 until completion of my doctorate. This role was set up by the Trust's Clinical Health Psychology Department in collaboration with the University of Staffordshire. It was the first time the service had taken on a trainee health psychologist, and I therefore experienced both successes and challenges whilst developing my job role.

My placement has involved numerous roles and responsibilities. The largest aspect of my role has been working clinically with outpatients, over several healthcare specialities, on a one-to-one basis and in groups. I have so far completed over 340 hours of individual clinical work with over 70 patients, and 45 hours of group work. I have worked within multiple healthcare specialities,



including inflammatory bowel disease (IBD), stroke, diabetes, dermatology, facial palsy, cancer and pain, the latter of the two in both individual and group work. I have also applied my skills to medical inpatient settings, being involved in triaging, consultation with staff, and direct patient work with 10 patients. I was offered a multitude of different CPD opportunities within my placement, allowing me to broaden my practice to involve a range of therapeutic models.

Other responsibilities in my workplace have involved service development, clinical audit, attendance at team meetings and group supervisions.

### **Section one: core competencies**

#### *Psychological interventions*

Prior to commencing the doctorate, I had some knowledge and experience of psychological interventions from my stage one MSc teaching and through working as an assistant psychologist in a pain management service. I was excited to continue developing these skills and broadening out to different patient groups. However, I initially experienced significant challenges in identifying appropriate cases for me to work with as a trainee. At the time there was one health psychologist in our service who clinically supervised me; however she was only available one day a week. The remaining clinicians in my team were clinical psychologists, who felt uncertain about my skill set and therefore struggled to identify appropriate cases for me. Therefore, it was two months until I started building up my caseload. I discussed frustrations around this in supervision.

While this was frustrating, I utilised opportunities to observe assessments and groups. I also collaborated with a senior colleague, supporting on the sleep aspect of therapy with a stroke patient. I also observed a nurse-led clinic to learn more about IBD, which was incredibly helpful to broaden my medical understanding, and learn how the nurse-led clinics function.

I slowly increased my caseload, initially doing joint assessments with IBD patients before moving to doing them independently. Then I had colleagues

observe my assessments in new specialities before moving to independently conducting them. Once I had a caseload, I was able to begin my academic work on this competence. I wrote up a case study of a face-to-face intervention with one of the first patients I worked with, who had IBD. I used an ACT model to support her on her goal of reducing panic around symptoms.

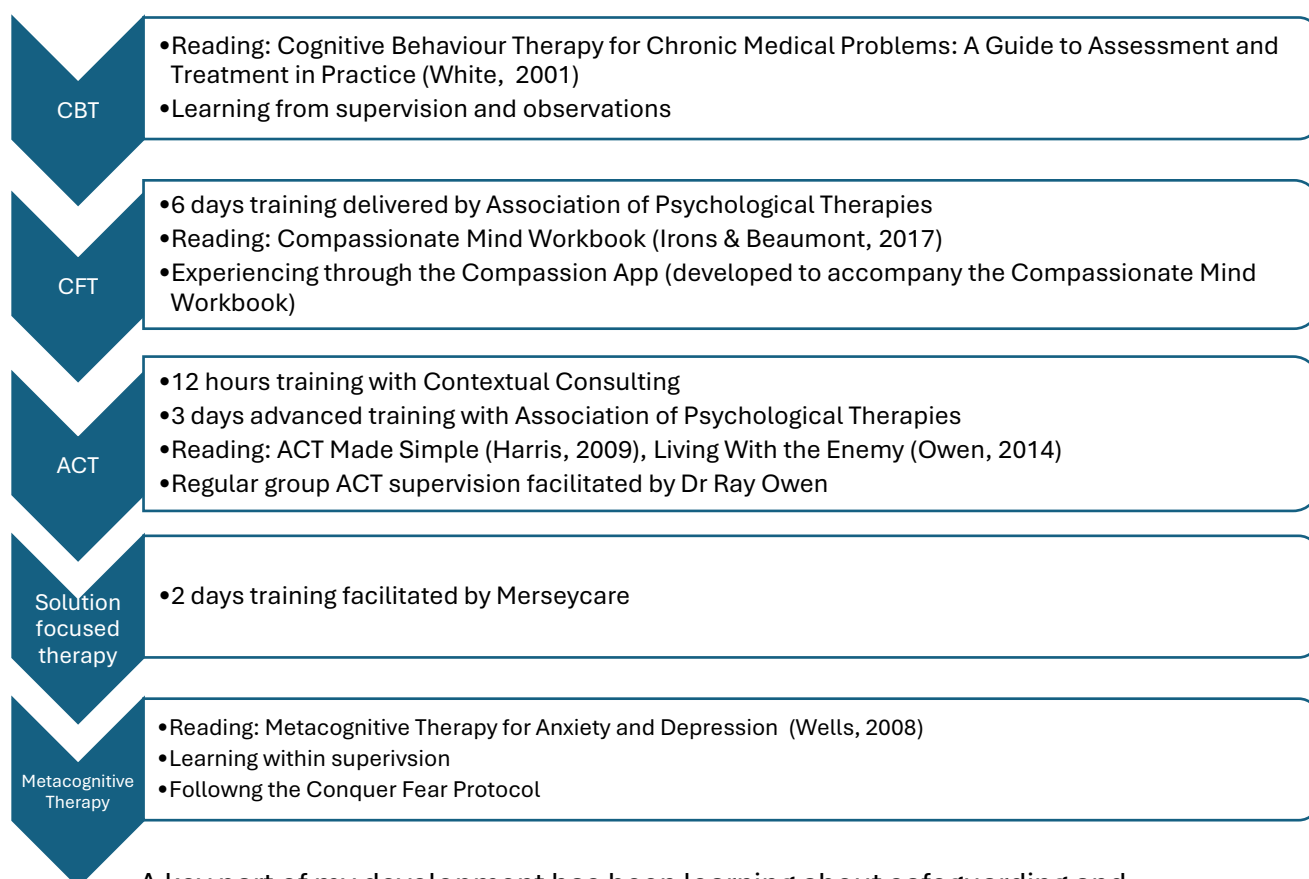
Alongside developing my skills in one-to-one clinical work, I started to develop group work skills. I initially observed, and then co-facilitated, a group targeting fear of cancer recurrence and have co-facilitated multiple pain management programmes. In March 2025, I developed and delivered a group intervention which informed my non-face-to-face case study. This was a challenging and lengthy process.

Finally, I have also developed my skills in inpatient work. I initially shadowed colleagues and then took responsibility for triaging referrals. This involved consultation with ward staff, gathering information and then making recommendations to ward staff and colleagues. I started independently working on wards in March 2024. I found this challenging, as it involves conducting an assessment and brief intervention within one session. It is also a high-pressure environment, and I have had to deal with unexpected difficulties such as having a staff member raise their voice in an aggressive way. I have noticed that as my confidence has grown in this environment, I have felt more comfortable making clinical decisions and managing expectations with ward staff. I have also developed skills in writing clinical notes that will be read by non-psychologists, including a formulation and plan, using layman terms in a concise way.

Attending training outside of the doctorate was critically important to my development of intervention skills. In March 2023, I had the opportunity to attend three days of training in Compassion Focused Therapy (CFT) with my team, and in June 2023 I attended 12-hours of Acceptance and Commitment Therapy (ACT) training with Contextual Consulting. Both training courses have been critical to my development of clinical skills, and I noticed an increase in my confidence after this. I have supplemented training with reading various

books (i.e., Harris, 2009; Irons & Beaumont, 2017; Owen, 2014; Wells, 2011; White, 2001), which has also contributed to an understanding and application of Cognitive Behavioural Therapy (CBT) and Meta-Cognitive Therapy theory and skills. For a full overview of therapeutic models underpinning my work, see Figure 1.

**Figure 1: Overview of therapeutic models underpinning my work**



A key part of my development has been learning about safeguarding and risk assessment. Psychologists often encounter potentially vulnerable people and from discussing historical life challenges we can encounter reports of historical abuse. I have therefore developed skills in gathering information about any potential safeguarding situations, liaising with GPs and social services, and completing safeguarding referral forms when encountering ongoing domestic abuse. I have also developed skills in assessment of suicide or self-harm risk and have worked with people who experience suicidal thoughts. I have stayed up to date with guidance around this (NHS England, 2025) which advises moving away from tools that quantify risk assessment, and

instead focus on curiosity, empathy and protective factors. I have also received feedback from patients about feeling supported in the manner I have taken to risk assessment.

### *Systematic review*

I started the doctorate with experience of a mini-systematic review from my stage one MSc degree. I remembered how time-consuming this had been and got started on it quickly, spending time early on in my placement researching potential topics. I conducted my review into the effect of brief psychological interventions on well-being in adults with chronic health conditions. While the project was daunting, I found it beneficial for my overall professional development. I became more understanding of quantitative data methods during the data extraction stage, which benefited me when conducting my research project. Despite not considering myself a creative person, I used mind maps to synthesise large amounts of information which highlighted how a creative approach is more suited to my learning style than I thought. I have also continually found the skills I have developed in conducting searches of academic literature helpful in my placement, when needing to effectively research specific topics such as application of a therapy model to a particular clinical issue.

I was pleased to receive positive feedback from my draft submissions, which boosted my confidence in my academic skills. After gaining this positive feedback, I submitted my review for publication. This was also daunting as it was my first experience of a submission. When the paper was rejected, I found I had to read the comments with an open mind, and re-frame my view of the feedback from 'critical' to helpful for the development and re-submission of my paper.

### *Research*

Research is a key part of being a psychologist. With my placement being in a clinical setting, I haven't had the opportunity to do formal research projects outside of my doctorate. However, I have been able to apply my research skills

to service evaluations, for example applying ethical considerations (BPS, 2021) and principles of anonymising data. I will continue to use my research skills as I progress in my career as a health psychologist.

Having to do a research project while working in healthcare gave me the opportunity to do an applied research project, evaluating a training session delivered to junior doctors (now known as resident doctors) as part of their clinical skills education. The applied nature came with challenges, (discussed in the research chapter of my portfolio) which continued when contacting the education team to disseminate my findings took multiple attempts. After I acknowledged their busy workload and simplified my email, I received a response and opportunity to continue to offer psychological training in the trust.

I also plan to submit my paper for publication and have presented this project at the BPS Division of Health Psychology (DHP) Annual Conference in June 2025. My presentation was well received by attendees and discussed in a health psychology email newsletter shared by an experienced health psychologist who was in attendance.

### *Teaching and training*

Prior to the doctorate I had little experience of delivering teaching and training, having delivered one online session within a previous work role. I was therefore apprehensive and decided to build my confidence and grounding as a trainee health psychologist before working on this competency.

I initially gained experience co-facilitating a training session to radiographers (in January 2023, and took my learning from this experience into planning my own teaching and training sessions. For example, we effectively used examples from popular TV to encourage reflections on claustrophobia. I utilised this idea in my own teaching sessions, bringing a popular TV character as a case study. Also, the radiographer session was delivered online while attendees were on lunch breaks, which impacted on engagement and felt uncomfortable. I now

avoid offering lunchtime training, as it conflicts with my own personal beliefs about the importance of getting a proper break away from work.

Prior to the doctorate, I had little experience of speaking in front of large groups and therefore found delivering training nerve wracking. I noticed that I was able to 'pull' confidence from my work on other competencies to feel more at ease in teaching contexts. Specifically, I started delivering group sessions around the time of my training with the medical doctors, and I noticed how some of the communication skills I was developing (such as projecting my voice, pacing appropriately, stopping for questions, appropriate use of PowerPoint) were applicable across contexts.

I also volunteered to deliver a brief session on the University of Staffordshire 'Welcome Back' day in September 2023, to the returning students. This was when I started the second year of the doctorate. This session was titled 'Reflections on working clinically as a trainee and writing up a case study'. I enjoyed the informal style of this talk, with it not being for a competence. It was also a helpful experience in developing my confidence in presenting, and I was pleased that trainees reflected that they had observed growth in my confidence from my previous workshop.

As I became more confident in teaching, I started to rely less on strategies to ease my anxiety. I stopped printing out notes to read out from, I stopped over-preparing prior to sessions, and I stopped seeking reassurance as much from colleagues. However, as I continue to develop in my career, I anticipate I will be delivering teaching in new settings and might find I need to lean on anxiety-management strategies again.

My experience of delivering training sessions for the doctorate has mostly been academic, which I have found interesting as it has given me a glimpse into the delivery side of university lectures. I was also able to contrast this with my experience of delivering a session to medical doctors and radiographers, as well as what I had learnt from my colleagues' experiences of delivering training to healthcare professionals. This has led to conversations about how we can try

and deliver training in a more creative way, (i.e., online videos) to increase accessibility.

### *Consultancy*

When embarking on my consultancy project, I wanted to gain experience outside of secondary care. I was therefore pleased to make links with a local hospice, where I experienced applications of health psychology in a charitable setting. I designed a leaflet to advertise the hospice's breathlessness management course, using expertise from patients. I gained skills in meeting clients, negotiating a piece of work, arranging a contract, delivering a project and re-negotiating timelines. All throughout this process I was considering BPS ethical principles.

While I have not completed any more formal consultancy projects, I have continued using these skills when working with different teams and departments across the Trust. Consultancy skills were particularly helpful when I negotiated with the Trust's Health Work and Wellbeing department to arrange my group intervention for colleagues. I used my negotiation skills to come to an agreement about group specifics, and to be clear about what I would need from their department.

### *Professional skills*

Throughout the doctorate, I have developed a range of professional skills as required by the BPS and the Health and Care and Professions Council (BPS, 2018; HCPC, 2024). Developing these skills is in line with making behavioural changes, and therefore I employed the behaviour change technique of self-monitoring. I did this through use of a reflective diary.

I had previously kept a five-week reflective diary as part of my stage one training. I therefore understood the benefits of using a reflective model. However, I had to simplify the process to maintain consistency. I initially used Gibbs' reflective cycle (1988) and found the questions felt prescriptive at times.

In line with the second edition of The Reflective Practice Guide (Bassot, 2023), I decided to focus on the act of writing, which facilitates thinking and cognitive processing, rather than aiming for 'perfect' reflections that can become unmanageable. Bassot recommended setting a timer and just writing about something in a freestyle manner, which I started to do and found my reflections flowed more naturally.

Alongside my personal reflections, I also utilised my academic and clinical supervision, peer supervision and the professional doctorate teaching sessions to develop my professional skills. The weekly clinical supervision I attended at work was a key part of this and was particularly helpful when I encountered difficult experiences in my personal life. Utilising supervision allowed me to reflect on how personal challenges may impact my professional practice, and how I could practically problem solve things to overcome these challenges.

## **Section two: general professional skills**

Within this section of this report, I reflect on my development of the professional skills required to qualify as a health psychologist.

### *Development and maintenance of systems for legal, ethical and professional standards in health psychology*

Psychologists are required to develop and maintain systems for legal, ethical and professional standards. I have had multiple opportunities to do this within my training. I have applied learning from one competency to other areas of my work. For example, within my research I learnt about anonymising participant identifiers. I have then applied to this service evaluations within my workplace.

I have kept up to date with my mandatory training, which includes content on data protection and information sharing. I have also liaised with the Trust's information governance team when developing a consent form for recording therapy sessions. Information governance approved this with no changes, reassuring me that I am aware of principles of good practice relating to data.



In my clinical practice, I use a checklist in assessments to ensure I remember to explain our departmental policies (i.e., confidentiality, information sharing, note keeping and record storage), and get consent to leave voicemail. I then accurately record this conversation in the patient's clinical notes to demonstrate that they have consented and document any queries or hesitancy around this.

Integrity is one of the BPS ethical principles which involves being honest, truthful, accurate and consistent. This is in line with my own professional value of being reliable, therefore it is important to me to demonstrate accountability. To facilitate being a reliable practitioner I keep a caseload spreadsheet, to stay on top of outstanding tasks, including any necessary information gathering, information sharing or safeguarding work. I use this spreadsheet daily and find it a helpful system to be a thorough practitioner.

Competence is another BPS ethical principle. I utilise clinical supervision to ensure I am working within my competence, understanding when I should be challenging myself to work with increasingly complex cases, versus when I should be handing work over. I also keep a record of developmental targets and milestones which I created in collaboration with my line manager and clinical supervisor. This helped the training journey feel less overwhelming, by breaking it down into achievable targets in six-monthly periods throughout the first two years of my placement.

#### *Health psychology advice and guidance*

As one of the newer fields to emerge in psychology, there can unfortunately be some ambiguity about the skillset of health psychologists. This was true of my service when I began my placement, despite the fact there was already an established health psychologist in post. Therefore, within my first few months in post I delivered a CPD session to my colleagues to give them an overview of my training and what I needed from the placement.

I now work alongside two senior health psychologists, which gives me insight into life as a qualified health psychologist. I have supported newly qualified and

trainee health psychologists in a local peer supervision group, which I was involved in setting up. For example, a newly qualified health psychologist shared with me that they were having challenges accessing training in Eye Movement Desensitisation and Reprocessing Therapy (EMDR). I was able to share how my health psychology colleagues had overcome these hurdles to become trained in this therapy.

I also regularly give health psychology advice and guidance in my clinical role, to different staff groups when working on the ward and to patients. I regularly condense complex psychological information and concepts and share them in a relevant, accessible and acceptable way.

#### *Communication skills in different contexts*

Throughout my training, I have developed my skills in verbal and non-verbal communication. I do this in an adaptable way, based on the person that I am working with and the setting I am working in. For example, if someone is extremely anxious, has ongoing trauma symptoms, or is seriously unwell, research shows that they might find it harder to integrate and retain new knowledge (Cohen et al., 2013; Maloney et al., 2014). I therefore use simpler language and concepts. I support this with written communication, utilising handouts, emails with brief session summaries, and sharing videos that explain things in a visual way.

Alongside my verbal communication skills, my clinical work has allowed me to develop my skills in written communication, particularly through clinical letters and report writing. I found developing my letter writing skills challenging, particularly communicating formulation information. I have been guided through this with my clinical supervisor and have now become more independent with my letter writing.

I am also aware of when I need further training or to lean on colleagues for support when working with people with different communication needs. Previously in my placement, a colleague has led a skills-sharing session focused on communicating with deaf patients. If I was to work with someone

who communicated via sign language, I would re-visit this training. I haven't had any opportunities to work with interpreters while in my placement, but it was something I did as an assistant psychologist. If I was to do this again, I would remember to book in extra time for sessions and allow the interpreter opportunities to de-brief regarding their own emotional response to the session. I would also revisit the BPS guidance on working with interpreters (BPS, 2017).

*Team-working skills, including issues around development and maintenance of appropriate boundaries, confidentiality issues, and an understanding of team leadership*

Throughout my training I've worked in a team of clinical and health psychologists. I have also been involved in multi-disciplinary teams in my inpatient work, which is often short term. This has been interesting, as working alongside a team that you are not embedded within requires good communication and rapport-building skills. This can be tricky to navigate, particularly when teams have little experience of working with psychologists and therefore often have unrealistic expectations. I have managed this by being friendly but clear about the remits of our service and asking open questions about their psychological needs.

Working within a team of psychologists has been a pleasure, and I have experienced compassionate leadership which has allowed me to feel safe to develop and thrive. Alongside my manager, who has led the operational aspects of my role, I have also experienced leadership from my clinical supervisor in the development of my clinical skills. I have reflected on the important skills and attributes that make an effective leader, which I've then used in parts of my job role which require me to use leadership skills. For example, when running my group intervention, I was supported by a trainee clinical psychologist who had no previous health psychology experience. I was clear with my instructions, ensured there was always time for her to ask any questions, used open questions to ascertain her understanding of her role,

gave feedback on the sections she delivered, and was fair in my delegation of tasks.

Working in a large team of psychologists has meant I have had plenty of experience of attending team supervisions where we discuss clinical cases and learn from each other. This does however pose potential confidentiality issues, and in team supervision we use pseudonyms. I learnt more about this when I assessed a patient who informed me that her daughter had very recently finished a university placement within our team. The daughter had informed the university that her mum was on our waiting list, however this information had not been passed onto our team. I reflected on this with our senior leadership team and, as I hadn't worked closely with the daughter, I felt comfortable continuing to work with the patient. However, I did not discuss this patient in any shared supervision space as members of our team had developed close working relationships with the daughter.

Confidentiality is of upmost importance when working as a psychologist, which I think extends into my personal life. Outside of work I have felt extremely uncomfortable when I see psychologists or healthcare professionals potentially breaching confidentiality by sharing information about their clinical work in their personal lives. This is something I've seen happen online from 'psychology influencers' who post about their job roles. I've also heard a clinician talk about clinical scenarios they've been involved in while in public. This has highlighted to me how, even when names and personal information is withheld, we shouldn't be sharing details about our patients' lives. To me, sharing stories outside of work breaks the trust that patients place in us and is disrespectful.

#### *Service users and carers*

Completing my training at a university which values the roles of service users and carers has been extremely beneficial for my professional development. The University of Staffordshire have a service user on the interview panel for the professional doctorate, and have sessions delivered by service users in the first year of teaching. One session involved completing role-play scenarios with

them, which was helpful as it enabled me to get feedback from a service user on my communication skills. I was then able to continue my working relationship with one of the service users, who agreed to do a roleplay with me within a workshop I delivered. This was beneficial to my session delivery as she brought her real-life experience as a chronic pain patient into the roleplay.

Involving service users and carers in service development is not something I have had much opportunity to do within my placement. From my consultancy work I experienced the benefit of working alongside service users. I have also discussed the importance of co-design and patient involvement in peer supervision with trainees who work in a service that has a group run by past patients. I am now taking a proactive approach to doing this in the future; by offering patients I discharge an opportunity to consent to be invited to contribute to service development.

#### *Equality, diversity and inclusion*

I left my stage one training with an understanding that a person's health and wellbeing is impacted by a wide variety of factors, including key social demographics such as geography, ethnicity, gender and socioeconomic status.

Working in an equitable way means understanding how someone's characteristics (i.e., where they live, their ethnicity, gender and socioeconomic status) might impact their health and wellbeing. The area I work in is socially deprived, with almost a quarter of residents living in the most deprived neighbourhoods in the country, an average life expectancy which is below the England average, and a higher than national average of people claiming benefits. Therefore, I consider the impact of socioeconomic status within my clinical work. I ask about ongoing financial stressors and consider the financial impact of attending therapy sessions (i.e., through loss of work time or travel costs) and signpost people towards financial support. I also might consider any helpful information I have gained from previous patients, for example about local foodbanks, and handy tips for saving money on food, if appropriate.

Furthermore, I have learned about the importance of understanding people's cultural backgrounds during therapy. It is important to understand if someone is spiritual or religious, particularly as therapeutic models I use draw on evolutionary psychology knowledge. I am therefore cautious of the language I use to deliver therapy in a way that will not inadvertently confront or contradict someone's belief systems.

Finally, I have developed an understanding about working with people who belong to minority groups. It is important to acknowledge that I can never fully understand the lived experience of being marginalised or discriminated against where I do not share their characteristics. I highlight to people that I am grateful to be learning about their experiences from the work we are doing together. I have found that this fits in well with my usual approach of trying to place the patient in the expert seat when it comes to their health condition, as I am also always working within health conditions that I have no lived experience of.

Another important consideration is neurodiversity and adapting therapy materials to suit individuals. The approach I have been encouraged to take when working with somebody with a neurodivergence or learning disability, is to find out what works for them when learning something new or communicating with professionals. While I have not had lots of experiences working with people with diagnosed neurodivergence, I have worked with people who suspect they may be undiagnosed ADHD or autistic. I have previously been flexible with people, particularly when using a protocolised approach. I have been able to offer more sessions than the protocol suggested and found that flexibility worked well in the sessions, although the patient struggled to maintain progress.

#### *Need to engage in continuing professional development (CPD)*

Throughout my training, I have participated in several courses of CPD. These have primarily been based on therapy models, initially on CFT and ACT. I attended both within a short space of time and found it hard to consolidate knowledge from both CPD courses into my practice. This taught me that it can

be beneficial to space out CPD courses, as to not overwhelm myself. Alongside this I have also attended two days of training in solution-focused therapy.

Outside of therapeutic training, I have attended training in trauma-informed practice which has been directly beneficial for my clinical work. I have also attended a CPD session delivered in the trust titled 'working across systems', which focused on leading a team of people who work in different organisations. I had not realised that this training was aimed at management staff when I booked onto it, but found it useful for my consultancy project.

I plan to continue to engage in CPD in line with HCPC requirements (HCPC, 2024). I am planning to attend training in CBT next which will supplement my therapeutic skills.

#### *Organisational and systemic issues*

Working for the NHS has given me insight into various organisational and systemic issues which can impact on patient care and staff experience. The trust I work for merged with a neighbouring trust, with my manager becoming responsible for psychology provision across a much larger organisation. This has had a knock-on impact on our line management and ability to receive operational support. It has also highlighted inconsistency of health psychology provision across the wider geographical area. This has led to frustrations in healthcare teams across the trust, and us receiving referrals we have had to reject until we have more funding for extra psychology posts. Our team have reflected on how it would be unethical to suddenly widen our referral criteria, even though we want to support as many patients as possible.

I have also learnt about challenges working in the NHS as the systems do not always suit psychological professionals. For example, as my post is set up under the Annex 21 stipulation it is classed as an NHS band 7 post. This meant there was an expectation for me to hold the clinical caseload of a band 7 psychologist, rather than that of a trainee. This conflicts with the BPS principles of working within the boundaries of one's own competence. I spoke about this with my manager, and we agreed to maintain my caseload target as 6 cases per

week, in line with trainee clinical psychologists, leaving adequate time for reading and development. It was agreed that my caseload would slowly build up as I progressed through training, and that we would supplement my clinical contacts through co-facilitating groups.

### *Personal Development as a Professional Health Psychologist*

Reflecting on my overall personal development, I can see how far I have come in gaining the knowledge and skills required for qualifying as a professional health psychologist. Working on the doctorate has required a high level of autonomous and accountable working, with a need to plan out a large amount of work, stick to deadlines and stay motivated. I am driven to produce high-quality work and have reflected on a tendency to place pressure on myself which could hinder my progress.

I have also reflected on my own anxieties working as a trainee, with a tendency to feel 'imposter syndrome'. At times it has felt like my skills aren't developing as quickly as they should be, and I noted a tendency to compare myself to trainee clinical psychologists I've worked alongside, who I felt had more clinically advanced skills than me. However, coming to the end of my training I realise I should have trusted the process more, as looking back on my work I can see how my skills were developing along the way. I have also been able to use my psychological knowledge and skills to my own benefit, both professionally and personally. I have gained an understanding of how my own mind works, and have learnt to be kinder to myself, rather than self-critical, when work is challenging. This has enabled me to be a more present and grounded clinician, which I believe has supported my ability to deal with challenges in my clinical work.

In my clinical work, I have slowly become more autonomous, broadening my skills across different settings, therapies and healthcare specialities. I have noticed I am relying less on supervision for making therapy plans, and am more independent in my decision making, both in my clinical work and when fielding queries from other healthcare professionals. In my therapy work I have



demonstrated skills in building rapport and encouraging feelings of safety and support when people are experiencing difficult and uncertain health situations. I have experienced a variety of complex and unexpected situations which I have become skilled in independently dealing with. These have ranged from managing difficulties in a therapeutic relationship when a patient disclosed risk information and asked me to not share it with her GP, to navigating hard conversations with grieving family members after a patient sadly passed away in complex circumstances.

From my training I have gained a depth of specialised health psychology knowledge. I understand psychological aspects of multiple health conditions, and have insight into the required medical knowledge to work into the specialities I have input in. Alongside becoming more knowledgeable, I have also become more comfortable in discussing the limitations of my own knowledge with both patients and other staff members. I am now able to see this not as a flaw or failing on my own part, but as an open and honest approach with curiosity and a keenness to learn. My development of knowledge has also given me new research interests, which I hope to be able to formally pursue as I progress through my career.

I have also identified my priorities for my continued professional development as I begin my qualified career. I initially aim to complete formal training in CBT. Most of my clinical work is grounded in a CBT model and I believe attending training in this model will solidify my baseline therapy models and skills and increase my confidence in 'purist' CBT without integrating other models. I then hope to do further training in working directly with trauma. At present, I have worked with patients who have a trauma history on goals related to their physical health. When trauma has been a block to progress, or someone wants to work around processing traumatic memories, I hand them over to senior colleagues. Therefore, a sensible future step for me as a qualified health psychologist is to complete training in trauma-focused work, such as Trauma-Focused CBT, Trauma-focused ACT or EMDR.

## **Conclusion**

This report has given a broad overview of the knowledge, skills and competencies I have gained over the course of my professional doctorate in health psychology. The experiences I have had during my training, alongside the ongoing process of personal and professional reflection, have equipped me to begin my career as a qualified health psychologist. I have had the privilege to learn from many skilled practitioner psychologists, academic health psychologists and from the people living with long-term health conditions I have worked with. I look forward to the next step of my career, continuing to learn from others, while sharing my own knowledge and skills.

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# Research: From Design to Dissemination

## Quantitative Research Manuscript

### **Increasing compassionate care on medical wards: pilot evaluation of a brief training session**

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## Abstract

### Aim

This pilot study tested a training session delivered to junior doctors working on medical wards. The training session was underpinned by principles of Compassion Focused Therapy and aimed to enhance junior doctors' skills in responding with compassion to inpatients' psychological needs. The effectiveness of this training session was evaluated using constructs from the COM-B model of behaviour change.

### Methods

Foundation year one junior doctors working on medical wards within an NHS Teaching Hospital Trust in Northwest England attended the session as part of their clinical skills education training. Participants who consented to take part completed questionnaires immediately prior, and immediately after, the training session. The primary outcome measure utilised was a six-item questionnaire measuring physical and psychological capability, physical and social opportunity, and reflective and automatic motivation. Satisfaction data were also collected.

### Results

66 Junior doctors (36 female, 27 male, 3 other) participated in this study. Participants' motivation to deliver compassionate care scores were high prior to the training session. Physical and psychological capability scores significantly improved following the session, with small to medium effect sizes ( $d = 0.293$  and  $0.765$  respectively). Physical and social opportunity scores also significantly improved; again with small to medium effect sizes ( $d = 0.331$  and  $0.455$  respectively). Participants reported high satisfaction with the brief training session.

### Conclusions

Junior doctors are highly motivated to deliver compassionate care. A brief training session significantly improved their capability and opportunity, with greatest improvements seen in their knowledge of delivering care compassionately. Their perceptions of potential barriers to compassionate care (including limited time, high workload, and culture) were also amenable to change. High satisfaction with the training suggested acceptability to participants. Avenues for future research to build upon these findings are discussed.

#### Keywords

Compassionate care, compassion focused therapy, junior doctor education, clinical skills training, medical inpatients.

## 1.1 Introduction

Admission to a medical hospital ward is often linked to difficult circumstances, such as an acute medical emergency, deterioration of a long-term health condition or surgical treatment. It is therefore understandable that hospitalisation has been linked to increased existential suffering (Fridh et al., 2015) and emotional difficulties (Alzahrani, 2021). Furthermore, systematic review findings indicate that prevalence of psychiatric disorders, including anxiety and depression, on hospital wards is substantial and higher than those reported in the general population (van Niekerk et al., 2022).

Psychological distress has been associated with deterioration of physiological measures and decreasing efficacy of medical interventions (Psychological Professions Network, 2020). It is therefore important to consider how we can improve psychological well-being within the population of medical inpatients. In certain medical specialities, such as stroke care and burns care, presence of psychologists in multidisciplinary teams is required or recommended in commissioning guidelines (Brychta & Magnette, 2011; Sarah & Clark, 2011), increasing the likelihood of regular psychology input in these settings. On general medical wards however, psychologists are not consistently integrated (Pudalov et al., 2018). Furthermore, in the UK, despite the growing presence of psychological professions in physical healthcare services, numbers still demonstrate a reasonably small workforce with a number of vacant job posts (Busuttil et al., 2024). Therefore, enhancing the psychological skills of multidisciplinary healthcare professionals is an avenue to reduce the psychological burden of hospital admission.

Over the past decade, there has been a growing recognition of the importance of compassion in healthcare (i.e., Lains et al., 2024). Defined as “a benevolent emotional response toward another who is suffering, coupled with the motivation to alleviate their suffering and promote their well-being” (Gilbert & Choden, 2013, pg. 94), compassion has been linked to increased patient



satisfaction, improved clinical outcomes and reduced costs (Watts et al., 2023) alongside enhanced doctor-patient relationships (Amutio-Kareaga et al., 2017).

Practising in a compassionate way is referenced in the generic professional capabilities' framework for medical doctors (GMC, 2017). However, traditional clinical training and practice have been rooted in the biomedical model, causing educational and practical barriers to compassion (Sinclair et al., 2016). A recent systematic review of compassion training in healthcare concludes that training needs to be based on a comprehensive model of compassion and tailored to learners' workplace settings (Sinclair et al., 2021).

Compassion-focused therapy (CFT) provides a comprehensive model of compassion, drawing on evidence bases including evolutionary theory, neuroscience, emotional regulation and social motivation systems theory (Gilbert, 2009, 2014). While CFT has been used to improve well-being and reduce burnout in healthcare professionals (i.e., Corrigan et al., 2024; Franco & Christie, 2021; Neff et al., 2020), there is no published research using CFT principles to train healthcare professionals in delivering compassionate care. Interestingly, a qualitative evaluation highlighted that training healthcare educators in CFT (Rayner et al., 2021) had a positive impact on their clinical practice, with participants citing an increased understanding of distress-related behaviours. This suggests that the CFT model could be useful in supporting healthcare professionals to better respond to patients' psychological needs.

This study evaluates a training session incorporating CFT principles delivered to junior doctors working on medical wards in a hospital in Northern England. The training session aimed to enhance junior doctors' skills in responding to medical inpatients' psychological needs with compassion. Michie and colleagues' (2011) COM-B model of behaviour change was used as a framework to evaluate the effectiveness of the session. This framework states that three essential conditions are necessary for a behaviour (B) to happen:

capability (C), opportunity (O), and motivation (M). These conditions are further broken down into psychological capability and physical capability, physical opportunity and social opportunity, and finally, automatic motivation and reflective motivation. To better understand the behaviour - responding to patients' psychological needs with compassion - this study assessed participants' perceptions of their capabilities, opportunities, and motivations. Therefore, the study's aim was to understand how effective a brief training session is at increasing medical professionals' capability, opportunity and motivation to respond to medical inpatients' psychological needs.

## 2. Methods

### 2.1 Design and setting

This study utilised a pre-post design, comparing the same group of participants at two time points; immediately prior and immediately after the training session. Training was delivered in a secondary care setting within an NHS Teaching Hospitals Trust.

### 2.2 Participants

An opportunistic sample was recruited. Only participants eligible for inclusion (working as a foundation year one (FY1) junior doctor on a medical ward) were invited to take part in the study. A cohort of 70 FY1 junior doctors employed by the trust attended the training session as part of a mandatory clinical skills education day, and they were all invited to take part in the study.

### 2.3 Outcome measures

#### *2.3.1 Primary outcome measure*

The primary outcome measure was an adapted Brief Measure of Capability, Opportunity and Motivation (COM-B; Keyworth et al., 2020), which is intended for use in diverse populations including healthcare professionals, and regarding multiple behaviours. The measure allows for adaptation based on the

behaviour in question, and in the present study text was amended to tailor questions towards the behaviour of responding to inpatients' psychological needs with compassion. The measure is based on Michie et al.'s (2011) Behaviour Change Wheel which proposes that in order to change a behaviour, an individual must have the capability, opportunity and motivation to do so. This measure consists of six individual scales: physical opportunity, social opportunity, reflective motivation, automatic motivation, physical ability and psychological ability, for which answers are given on a scale from 1 (strongly disagree) to 10 (strongly agree). Definitions of the constructs and how they were applied to this study can be seen in Table 1. An open-ended question asked participants who scored less than six on items to briefly explain why, allowing for further exploration of barriers to compassionate care. This measure has been validated for use with healthcare professionals (Keyworth et al., 2020).

### *2.3.2 Secondary outcome measures*

Secondary outcomes involved a four-item confidence measure, which was created for the purpose of the study. Cronbach's alpha analysis was used which demonstrated that the items were reliable (0.859), therefore the items were used as a scale and average (mean) scores were calculated. The final outcome measure was the compassion to others subscale from the Compassionate Attributes and Engagement Scale (Gilbert et al., 2017). This is a 13-item measure of ability to give compassion to others.

### *2.3.3 Satisfaction data*

Participants completed a brief satisfaction survey at the end of the training session. They were asked a mixture of open and closed questions, including questions about the session content, time length, if they would recommend to colleagues, overall satisfaction and areas for improvement. Responses included a mixture of yes or no questions and scales from one to five. These surveys were anonymous and not linked to participants' ID, therefore people who chose not to participate in the study were still able to provide anonymous satisfaction data.

**Table 1: COM-B constructs defined and applied to the current study**

COM-B Construct	Definition	Question relating to this construct
Physical Capability	The skills required to perform a behaviour	I am physically able (e.g., have the necessary communication skills, including building rapport and asking open questions) to respond to inpatients' psychological needs with compassion.
Psychological Capability	Ability to engage in the necessary thought processes, comprehension, and reasoning to perform the target behaviour	I am psychologically able (e.g., have knowledge of how to validate people's experiences, knowledge of helpful coping strategies, ability to appropriately refer onwards) to respond to inpatients' psychological needs with compassion.
Social Opportunity	Having the support and influence from other people which encourages the behaviour	I have the social opportunity (e.g., feel supported by colleagues and management) to respond to inpatients' psychological needs with compassion.
Physical opportunity	The necessary environmental structures and equipment in place to perform the behaviour	I have the physical opportunity (e.g., an appropriate environment, enough time) to respond to inpatients' psychological needs with compassion.
Reflective Motivation	Evaluating the behaviour and planning to perform it	I am motivated (e.g., have the desire to, think it will be helpful) to respond to inpatients'

		psychological needs with compassion.
Automatic Motivation	Having the emotional desire and impulse to perform the behaviour	Responding to inpatients' psychological needs with compassion is something that I do automatically (e.g. is something I do before I realise, I'm doing it).

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## 2.4 Procedure

All FY1 junior doctors in the trust attended the training session as part of their clinical skills education. A week before the training session, they were emailed a participant information sheet informing them of the planned evaluation. Consenting to take part in the study and completing the outcome measures was optional, and all potential participants were made aware that their decision regarding participation would not impact on their attendance at the training session. Participants then attended the training session, for which they were split into two groups to ensure that a minimum level of staffing on the wards was maintained.

A period of five minutes was allocated at the start of the training sessions for attendees to complete a consent form and a pack of questionnaires, if they agreed to take part in the study. The training session was then conducted over an hour and twenty minutes, and the attendees taking part in the study had five minutes to complete a second pack of questionnaires including a satisfaction questionnaire. This procedure was repeated at the second training session with the remainder of the cohort.

## 2.5 Description of intervention

The intervention comprised an 80-minute training session, delivered with a mixture of didactic teaching style, brief engaging video clips and group reflective tasks. The session was underpinned by principles from Gilbert's (2014) compassion-focused therapy. It covered the following aspects:

- Definition of compassion, an evolutionary understanding of emotional distress, and the three emotion regulation systems (threat, drive, soothe; Gilbert 2014)
- Discussion of the range of psychological responses to hospital admission.

- Group tasks applying this knowledge to their own experiences as trainee medics, and then to patient case studies.
- How to use knowledge of these theories to cultivate compassionate responses to patients.
- Using this knowledge to think about supporting patients; through language and behaviour, coping techniques and onward referrals to help reduce distress.
- Overcoming barriers to delivering compassionate care.

Participants were encouraged to participate through use of group tasks, open questions about their reflections on the content, and regular opportunities to ask questions.

## 2.6 Analysis

Quantitative data from outcome measures were input and analysed using Jamovi version 2.3.28 (2022). Descriptive statistics were calculated, repeated measures *t* tests were used to calculate the difference between scores before and after the intervention, and finally Cohen's *D* was used to calculate effect sizes.

Answers to the open-ended questions within the primary outcome measures were input onto an excel database, collated into a word document and analysed using a content analysis. Content analysis is a versatile approach that can be integrated into quantitative research methods (Shelley & Krippendorff, 1984). The present study followed a quantitative manifest content analysis approach, analysing the surface meaning of text, recognising and counting content without identifying a deeper meaning (Kleinheksel et al., 2020).

Satisfaction data was input into Excel and data from closed questions was imported into Jamovi where descriptive statistics were computed.

### 3. Results

Out of the 70 junior doctors attending the training, 66 participated in the study (94%). Participants received the training in two separate groups. Data for both groups were combined and analysed as one dataset<sup>(1)</sup>. Descriptive statistics are presented in table 2.

**Table 2: Descriptive statistics**

Variable	Number
<b>Gender</b>	
Female	36
Male	27
Prefer not to say	2
Other	1
<b>Medical Speciality</b>	
Respiratory	11
Geriatrics	9
General Surgery	9
Trauma & Orthopaedics	8
Paediatric	4
Cardiology	4
Gastroenterology	3
General Medicine	3
Stroke	3
Urology	3
Psychiatry	3
Haematology	2
Endocrinology	2
Missing data	2



The majority of participants (54%) were female. Participants worked across a range of medical specialities, the most common of which were respiratory (16%), geriatrics (13%), general surgery (9%) and trauma and orthopaedics (12%).

### 3.1 Primary outcome measure

Descriptive statistics were calculated for all outcome measures at both timepoints. Effect sizes and significance values for comparisons were determined (presented in Table 3).

**Table 3: Statistical Analyses**

Measure	Scale	Pre- intervention mean (SD)	Post- intervention mean (SD)	<i>P</i>	Cohen's D
<b>COM-B</b>					
Physical Capability	1 – 10	7.97 (1.37)	8.39 (1.24)	0.02	0.293
Psychological Capability	1 – 10	7.36 (1.44)	8.44 (1.17)	<.001	0.765
Physical Opportunity	1 – 10	6.02 (2.14)	6.56 (2.42)	0.009	0.331
Social Opportunity	1 – 10	7.00 (1.58)	7.58 (1.81)	<.001	0.455
Reflective Motivation	1 – 10	8.59 (1.57)	8.74 (1.40)	0.3	0.113
Automatic Motivation	1 – 10	8.23 (1.36)	8.38 (1.26)	0.2	0.143
<b>Secondary outcome measures</b>					
Confidence Scale	0 – 4*	2.87 (0.59)	3.28 (0.51)	<.001	0.823
Compassion to others total	10-100	77.5 (9.82)	81.6 (10.1)	<.001	0.473
Compassionate engagement	6 – 60	46.6 (6.19)	49.1 (6.15)	<.001	0.448
Compassionate action	4 – 40	30.8 (4.51)	32.6 (4.78)	0.001	0.427

\*0 = no confidence, 4 = high confidence

### *3.1.1 Capability*

From Table 3 it can be seen that participants perceived themselves to be reasonably capable of delivering compassionate care at baseline. Results indicated that participants' levels of psychological capability (i.e. having knowledge, comprehension and reasoning to validate emotions and respond appropriately) to deliver compassionate care had the largest scope for change, which was significant with a medium effect size ( $p = <0.01$ ,  $d = 0.765$ ). Furthermore, their physical capability to deliver compassionate care (i.e. having the communication and rapport building skills) also increased to a high score. However, while this was statistically significant, the effect size was small ( $p = 0.02$ ,  $d = 0.293$ ).

### *3.1.2 Opportunity*

Participants perceived they were most lacking in opportunity to deliver compassionate care. They reported a mid-level of physical opportunity (i.e. appropriate time and space) to deliver compassionate care at baseline, which had a small but significant increase following the training session ( $p = 0.009$ ,  $d = 0.331$ ). This construct did however have the biggest standard deviation (2.42), indicating the biggest variation in scores. Social opportunity (i.e., support from others) to deliver compassionate care was also above the mid-point (mean = 7.00 out of a potential 10) at baseline, which again had a small but significant increase ( $p = <.001$ ,  $d = 0.455$ ).

### *3.1.3 Motivation*

Participants reported high levels of motivation to deliver compassionate care at baseline. This was seen in both reflective and automatic motivation scores, which had minor and non-significant changes ( $p = 0.3$  and  $0.2$  respectively). Effect sizes also indicated the training session had little effect ( $d = 0.113$  and  $0.143$ ).

### *3.2 Secondary outcome measures*

#### *3.2.1 Confidence measure*

While participants felt reasonably confident at baseline this increased after the training session. This change was significant with a large effect size ( $p = <.001$ ,  $d = 0.823$ ).

#### *3.2.2 Compassion to others scale*

Participants reported high levels of compassion prior to the training session in both subscales. This indicates that participants considered themselves able to engage in other people's psychological distress and take action to reduce it. For both compassionate action and compassionate engagement subscales mean scores slightly increased after the training session, which was significant for both scales with small effect sizes ( $p = .001$ ,  $d = 0.427$  and  $p = .001$ ,  $d = 0.448$  respectively).

### *3.3 Perceptions of barriers*

Participants who scored lower than a six on items of the primary outcome measure were invited to leave a brief comment explaining why. 39 participants left comments. The five themes identified were: lack of time, lack of training, skills or knowledge, understaffing, high workload and culture. For example comments, see table 4.

The frequency of comments relating to each theme was calculated for before and after the training. Reassuringly, the number of participants indicating that lack of time presented a barrier to compassionate care reduced from 21 prior to the training, to 12 after the training.

Reductions were also seen in the number of participants citing all other barriers to compassionate care, indicating that attending a brief training session had a beneficial impact on their perceptions of barriers to delivering compassionate care.

**Table 4: Reasons cited for low scores**

Reason	Frequency pre	Frequency post	Total	Example comments
Lack of time	21	12	33	<i>"I don't usually have enough time on the ward to build a rapport with every patient to accommodate for their psychological needs"</i> <i>"Very rarely enough time"</i> <i>"I don't have the time to do what will help patients from a psychological point of view"</i> <i>"Time pressures make it hard to respond with the attention needed"</i>
Lack of training / skills / knowledge	16	3	19	<i>"No previous training given in psychologically dealing with patients issues"</i> <i>Sometimes difficult to know what will help patients in that moment"</i> <i>"More training on clinical psychology (needed) to practice techniques"</i>
Understaffing	9	6	15	<i>"The wards are not well staffed enough to give us (doctors) to give our patients the time they need"</i> <i>"Wards are understaffed"</i>
High workload	9	4	13	<i>"Less work [needed]. Difficult to do my own work and look after my own mental health let alone be available to others"</i> <i>"Workload does not give me an opportunity"</i> <i>"Capacity is limited and I still have other urgent jobs to manage"</i>

Reason	Frequency pre	Frequency post	Total	Example comments
Culture	8	4	12	<p><i>“Taking action in the ways discussed in this study aren’t commonly discussed among medical peers”</i></p> <p><i>“Other priorities of other staff on ward”</i></p> <p><i>“I believe it is more about observing your seniors than anything else”</i></p> <p><i>“I think the staff previously on there should have a good baseline to deal with patients psychology needs so that I can learn from example”</i></p> <p><i>“Support [needed] from senior staff”</i></p> <p><i>“Sometimes it seems other team members are dismissive or unaware of a patients distress”</i></p> <p><i>“If the ward staff could also be reminded of the lessons taught here, then as a junior doctor I can learn from them”</i></p>

### 3.4 Satisfaction data

Satisfaction questionnaires were returned by 67 participants. Results are presented in table 5.

**Table 5: satisfaction data**

Question	Scale	Number	Mean score (SD)	Range
Did the session meet your expectations?	1 (didn't at all) – 5 (completely did)	67	4.52 (0.53)	3-5
Was the content relevant to you?	1 (not at all) – 5 (highly relevant)	67	4.61 (0.6)	2-5
Did the information all make sense?	1 (not at all) – 5 (completely)	67	4.78 (0.42)	4-5
Overall, how satisfied were you with this session?	1 = not satisfied at all, 5 = highly satisfied	60	4.52 (0.59)	3-5

Question	Number (percentage)
Would you be interested in attending future sessions led by the psychology department?	
Yes	56 (94.9%)
No	3 (5.1%)
Missing	8 (11%)

Was the session the appropriate length in time?	
Not long enough	1 (1.5%)
Correct amount of time	57 (85.1%)
Too long	9 (13.4%)

Would you recommend this session to your colleagues?	
Yes	66 (98.5%)
No	1 (1.5%)

High scores indicated that the training session met participants' expectations, was relevant to their job roles, and easy to understand. Overall satisfaction was high. All apart from one stated they would recommend the session to their colleagues, and 94% stated they would be interested in attending future psychology training sessions.

In the open-ended questions, participants stated that they liked the interactivity of the session, the coping techniques shared, the case studies and the CFT model. They stated they would like more examples and demonstrations.

#### 4. Discussion and conclusion

##### *4.1 Discussion*

This paper describes an evaluation of a novel and brief training session, utilising principles of compassion-focused therapy to increase junior doctors' skills in providing compassionate care on medical wards. As expected from a sample of junior doctors, participants' levels of compassion towards others, and motivation to deliver compassionate care were high across both timepoints. Results show that a brief intervention has the scope to improve doctors' confidence in delivering compassionate care. Results also demonstrated that the training session improved doctors' perceptions of their capability (i.e., communication skills) and opportunity (i.e., adequate time and support from others) to deliver compassionate care. This was particularly true for psychological capability, suggesting the training session had a large impact on their knowledge of how to care compassionately.

This session was designed to overcome previously cited educational barriers to compassionate care (Sinclair et al., 2021). It utilised a comprehensive definition and model of compassion to directly target the behaviour, allowed for group and self-reflective opportunities, and tailored case studies to learners' workplaces. Results suggest that utilising CFT's definition of compassion and three systems model was successful in improving this cohorts' capability and opportunity to deliver compassionate care, alongside their confidence in doing so. The improvements seen in opportunity scores suggest changes to participants' perception of their ability to deliver compassionate care within the time frame they have, and with the support they receive from their colleagues. This may be due to the training exploring concrete ways to respond to patients'

psychological needs that do not take much time. Furthermore, conversations participants had with peers during group work may have facilitated changes in perceived social support.

Previous research reflects the practical barriers to compassionate care discussed by participants in the current study. For example, Sinclair's (2021) review cites lack of time, high workload and negative attitudes from colleagues as creating an uncompassionate culture. This is also reflected in literature looking at wider communication skills training in this cohort (Perron et al., 2015). In the present study, it was promising to see reductions in the frequency that these barriers were cited following the training session, indicating that a brief training intervention did have a beneficial impact on participants' perceptions. However, after the training time was still cited by 12 out of 66 participants (18%) indicating that participants still felt they would not have time to deliver compassionate care. This suggests changes to the wider healthcare systems may be required to allow for increased compassion within their clinical work.

Despite the time and workload pressures faced by junior doctors, this study indicates that brief training significantly improved their perceptions of capability, opportunity and confidence to respond to inpatients' psychological needs with compassion. Furthermore, data indicated that the training was acceptable and relevant to them, and satisfaction scores were high. Participants also indicated they would recommend it to colleagues and would attend similar sessions in the future, indicating they found it a valuable part of their clinical skills education. This supports the utility of brief training interventions, which in future research could be rolled out to other healthcare professionals.



#### *4.2 Strengths*

This study benefited from a high uptake, with the majority of the junior doctor cohort taking part in the study. Conducting the study as part of their mandatory training adds ecological validity to the findings, indicating that the training could easily be incorporated into clinical education. Furthermore, this study provides a novel application of CFT principles to upskilling medical colleagues' clinical practice.

#### *4.3 Limitations*

There are several limitations with this pilot study. The sample was recruited from a single hospital, limiting generalisability of findings. Although the study measured capability, opportunity and motivation immediately after the training, it was not possible to get any longer term follow up data. Furthermore, it would have been interesting to measure compassionate care in clinical practice to better understand the impact of the training.

#### *4.4 Conclusions*

The psychological burden of hospital admission is known to be significant, and symptoms of psychological distress on medical wards are prevalent.

Compassionate care has been shown to improve patient experience and clinical outcomes. This paper has reported on a pilot study evaluating a brief training session delivered to junior doctors, aiming to enhance skills in responding to medical inpatients' psychological needs with compassion.

Participants had high levels of compassion and high levels of motivation and confidence to deliver compassionate care at baseline. Results suggest that a brief training session, which is straightforward and easily replicable, shows significant improvements in capability, opportunity and confidence to deliver compassionate care. High satisfaction also indicates the acceptability of this brief psychological training to doctors. Future research could develop the

evidence base for this brief intervention by evaluating its use in other hospital settings and with different professional groups.

## **Footnotes**

- (1) Analyses were run to check for differences between groups at pre and post. There was a significant difference between groups in physical opportunity at baseline, but not at post. When running the analysis for groups separately, there was a significant difference in physical opportunity for the first group, but not the second. There were no significant differences between groups for any other constructs at either time point.

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## **Reflective Commentary**

### **Introduction**

This is a reflective report accompanying my manuscript which investigated a brief training session aiming to enhance junior doctors' skills in responding to inpatients' psychological needs. Within this reflective report I discuss the background to my research paper and the process I have undergone including: designing the study, conducting the study, analysing and interpreting data, writing up my paper and dissemination. I also discuss key lessons learnt and the overall contribution of this research project towards my development as a health psychologist.

### **Background**

The idea for my research project started developing when I experienced working on medical wards. As discussed in my paper, we witness a lot of patients experiencing low level psychological distress in response to hospitalisation, and demand for psychology input would often outweigh our capacity. Furthermore, our anecdotal experience was that healthcare professionals we worked alongside would often feel out of their depth in managing patients' emotions, unsure of how to respond in a helpful manner outside of referring to psychological professions. I therefore wanted to explore how psychologists can better support healthcare professionals in managing patients' emotions. I had initially considered conducting a needs assessment using the COM-B model of behaviour change to gain a thorough understanding of healthcare professionals' training needs. After further discussion with academic and clinical supervisors, I decided to design, deliver and evaluate a training session, to ensure my project was thorough enough to fulfil the requirements of this competency.

### **Planning**

*Getting access to a sample*

The first step of planning my study was finding a large enough group of healthcare professionals to deliver training to, to ensure sufficient data collection. I had learnt from colleagues' previous experiences of organising training that getting staff released from their usual workplace duties could be challenging, and often sessions would have poor attendance. I therefore decided that rather than advertising the session out to individual staff members, I would speak to clinical education and senior managers for advice on how I could target a large group. I put the feelers out sending emails to various people. This involved me "selling" my research project in a way that was appealing and likely to get buy in. While this felt nerve-wracking, it was a helpful experience contributing to development of my professional and communication skills as a trainee health psychologist.

After emails and meetings with the education department, I was pleased to secure an opportunity to teach a cohort of junior doctors starting in the trust. This was an ideal sample, as they attend clinical skills education days, for which they are released from ward work. I was pleased my training session would be conducted within this context, rather than in a short break from a busy day of clinical work.

### *Research design*

Once I had secured a staff group, I started thinking about the design of my project. This was an iterative process, going back and forth between academic supervisors and the Trust's education team, finding a balance between ideal conditions for research and the real-life context and constraints of teaching timetables.

The study proceeded with a between groups design, as the doctors were split into two groups to ensure that minimum staffing levels on the wards were met. This allowed for a control group and an experimental group to be naturally formed based upon participants' rotas (see table one for the planned study design). There was to be a gap of three weeks between data collection points,



which again was decided by the doctors' schedules. While this didn't feel ideal, it was agreed with my academic supervisors that such a period would suffice, and that unfortunately this was sometimes the nature of doing research in the real world.

**Table one: planned study design**

Group	Timepoint one (day of training)	Timepoint two (three weeks later)
Intervention	Attend training (complete questionnaires before and after)	Complete questionnaires online
Control	Complete questionnaires online	Attend training (complete questionnaires before and after)

### *Outcome measures*

Now that I had my recruitment sample and design, I finalised my research question and considered options for data collection. I considered my project from a behaviour change perspective and I knew that I wouldn't logistically be able to measure the actual behaviour of junior doctors responding to emotional needs within their clinical work. I therefore decided to use outcome measures that might best reflect their likelihood of performing the behaviour and chose to use Keyworth et al.'s brief measure of capability, opportunity and motivation (Keyworth et al., 2020). This measure was ideal because it is adaptable and has been validated in healthcare professionals. I carefully considered the wording of my adaptations of the measure within my academic supervision.

I chose to use two secondary outcome measures: a measure of compassion to others (Gilbert et al., 2017) and a confidence measure. It was challenging finding a validated confidence measure within this context; therefore, I used

the wording of items within the compassion scale to write questions about the doctors' confidence in being compassionate within their jobs. I used a response scale from a confidence measure which had been validated with healthcare professionals (Walsh et al., 2021) and used a Cronbach Alpha's analysis to ensure the scale was reliable.

### *Ethical approval*

As my project was a service evaluation, I did not have to apply for NHS ethical approval and was able to get my project approved by the Trust's clinical audit team, as well as the university. I had to carefully consider ethical principles around recruitment and informed consent, as I was not recruiting participants through a 'normal' self-identifying route, but rather was offering participation in the study as an add-on to the teaching session they would be attending regardless. I shared information with them prior to the study through their clinical skills tutor, and I asked to be copied into emails about this, so I was visible and contactable by potential participants.

My project was classified as a 'low-risk' project. The main ethical concern I had was the potential of the training session to cause psychological distress, as I was asking participants to reflect on their own emotional well-being as well as emotions they encounter in clinical contexts. I therefore had a distress protocol in place and spoke about this with my senior colleague who would be attending the training sessions with me. We agreed how we would appropriately respond to any distress arising in the sessions.

Another ethical consideration was data anonymity and security. I sought supervision for advice around generating anonymous participant identifiers and spoke to the university's ethics chair to ensure OneDrive is a secure method of data storage.

### **Conducting the Study**

Conducting this research project was challenging and pushed me outside of my comfort zone. I had only recently started communicating with doctors regularly at work and could find their language with complex medical terminology quite daunting. I would often have to ask them for clarification during conversations, which could make me feel like a 'clueless trainee'. I was extremely nervous before my first training session, as I had never delivered training to such a large group and had little experience of teaching healthcare professionals. However, once I relaxed into the sessions, I enjoyed it and found that the doctors were engaged. Reflecting afterwards, I noted that being able to share psychological knowledge and have meaningful conversations with the doctors helped me balance some of my worrying thoughts about being a 'clueless trainee', knowing that despite not always understanding medical terminology, I did have skills and expertise I can share with them.

I also found that feeling nervous about both the training session delivery and the data collection elements contributed to me feeling a lot of pressure. In the first session, I struggled to find a balance between discussing the research elements of the session and focusing on the training session itself. While I introduced the study and gave time for outcome measures, I didn't give a thorough explanation of the research process. I then noticed reluctance from participants to repeat outcome measures post-session. Unfortunately, I did lose a small number of participants at this point. I had assumed that participants who were happy to take part in the study would have been understanding of the need to repeat outcome measures, from the information I had shared with them prior to the day.

The intervention group were emailed online questionnaires to complete at the second time point, three weeks after their training. Unfortunately, at this stage I had high attrition, with only five out of 31 completing follow up data. I had expected some attrition, due to participants' busy workloads alongside potential factors like absence or annual leave. I had also been warned by the

clinical education team that it can be extremely tricky to get doctors to respond to emails outside of training days.

It felt frustrating to have such high attrition rates at this point, particularly when participants had been engaged in the sessions, had mostly been willing to complete questionnaires, and had given me positive feedback from satisfaction questionnaires. A learning point I have taken from this is to be explicit in explaining questionnaire use, and the importance of follow up measures. I could also speak to potential participants while designing research projects to explore how I can make continued involvement in studies as easy as possible.

### **Data analysis and revisiting design**

After the deadline for data collection had passed, I was feeling lost on how to proceed due to the high levels of attrition. I met with research supervisors, and we agreed that as I did not have enough follow up data to conduct my planned ANOVA analyses, we had to rethink the design. I decided to combine both groups into one group and use a within-group design conducting t-tests and analysing for effect sizes.

This was frustrating as I felt like I had planned to do a 'better' analysis. I considered the implications for my findings, particularly that I could not ascertain a longer-term impact of the training session. However, after discussing in supervision I reflected that my study was a small-scale service evaluation testing a new training initiative, and that it is fairly commonplace for pilot studies, particularly those conducted in healthcare settings, to have designs similar to mine. Finally, I felt reassured that while my study did not have the perfect design, I had gained access to a reasonably large number of a hard-to-reach sample, who do not often have time to participate in psychological research studies.

Another issue arose when analysing my data, regarding my primary outcome measure (an adapted brief measure of capability, opportunity and motivation; (Keyworth et al., 2020)). I realised that when adapting the measure and reproducing it in a word document, I made an error in the scales. The original paper uses the scale 0-10, and as an oversight of detail I generated a scale from 1-10. As I realised this after data collection, there was nothing I could do about it. I reflected on the implications of this and discussed it in supervision. Fortunately, I have not compared my data to any other papers using the same outcome measure, as it has previously been used in different contexts (primarily in health behaviour change). However, if future research is conducted in similar context using this measure, then any comparisons of data would be impacted by my error. I have therefore ensured to clarify the scales I used within my write up.

I had also collected some open-text data from participants who had scored lower on the primary outcome questionnaire scales, and from satisfaction questionnaires. I was initially unsure of how to use this data and looked at other pilot studies published by my chosen journal (i.e., Leibowitz et al., 2024). I decided to use a content analysis method which fit in with the quantitative nature of my paper. I again sought supervision when making this decision.

### **Interpreting results and writing up**

When interpreting my results I initially felt quite underwhelmed by not having the analyses I planned for, and feeling like my data didn't have much to say. I spoke about this in supervision and found that discussing my results helped me think clearly about my data, and contextualise it with my knowledge about the participants and their job roles, as well as the wider systems they work within. I left this meeting feeling excited about my research and the story it tells. It felt empowering for participants, demonstrating that they are highly compassionate, and highly motivated and capable of responding to patients' psychological needs appropriately.

Writing up my paper allowed me to revisit the research literature I had been reading when planning my project with new ideas about search terms. I had initially been looking for literature on compassionate care, but at the writeup stage found some helpful papers looking at communication skills training. This was helpful for contextualising my results and thinking about the implications and potential avenues for future research within this topic.

### **Dissemination**

I started disseminating my research by sharing it with colleagues within our team meetings. I have plans to continue disseminating my findings within my workplace, specifically by sharing with senior managers. This is with the aim of continuing to offer the training to junior doctors on a regular basis, and to potentially move on to offering it out to different staff groups.

I have also presented my research at the Staffordshire University annual health psychology conference. At the time of writing, I am also planning to submit an abstract to the Division of Health Psychology annual conference.

### **Reflections and lessons learned**

When starting out on the research journey, I wanted to do a quantitative project to challenge myself, following developing my qualitative research skills through my master's degree dissertation. The process of data analysis initially seemed daunting, but I found myself feeling more comfortable in doing this than I expected. This was aided by skills I developed when completing my quantitative systematic review: interpreting secondary data and learning about effect sizes. This was beneficial when it came to handling my own data.

Making research decisions felt confusing and daunting at times and brought up feelings of not being 'smart enough'. I found that persisting with the process despite feeling out of my comfort zone, reading around the topic and utilising supervision allowed me to slowly progress through the research journey. This

experience will impact my feelings about embarking on any quantitative research projects in the future. I will know that while I might feel out of my comfort zone, investing a little bit of time in reading and speaking to others with more expertise will help me re-familiarise myself enough to be adept in completing projects.

This project was also my first experience of doing research in a 'real-world setting' as opposed to an academic setting. This presented barriers including the design restraints discussed throughout this commentary. However, it has allowed me to develop my skills in research, problem solving when things do not go to plan, and liaising with external departments in workplaces.

In future when conducting research projects, I aim to use participant involvement throughout the design process. For this project, I had hoped that liaising with the clinical skills department throughout the design process would give the project a high chance of successful recruitment, retention and data collection. While recruitment went well, retention was challenging, and I wonder if speaking to junior doctors about the project during my planning could have increased retention.

While reflecting on this process, I have also considered the error made with my primary outcome scale. In previous research projects, I have paid good attention to detail and have not made errors like this before. I understood this in the context of wider circumstances at the time: balancing a busy work placement with little time for research and pushing to meet a university deadline. I am conscious that when future research opportunities arise, I will likely have to balance them with the other demands of working as a health psychologist, increasing the risk of errors happening again. Therefore, in the future I could collaborate with colleagues on any research projects that are being conducted alongside busy clinical work, to reduce the likelihood of human error.

## **Conclusion**

Completing this research project has been a long, challenging process. However, my skills have developed, and I hope to continue to use quantitative research methods as I progress through my career. Within this project, I have had the joy of being able to use numbers and results to evidence an argument I feel passionate about: that our junior doctor colleagues are compassionate, motivated to care for patients' psychological needs and are capable of doing so. Their compassion can be further supported by psychologists through brief training opportunities. However, consideration of wider systemic changes to their working culture and conditions are necessary to allow them to further enhance their psychological skills. I feel grateful to have had the opportunity to complete this project with my medical colleagues and look forward to future opportunities to continue applying and developing my research skills as I progress through my career.



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# Systematic Review

## Systematic Review Manuscript

**Title:** The impact of brief psychological interventions on well-being in adults with chronic health conditions

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## **Abstract**

**Background and objective:** Chronic health conditions are associated with reduced psychological well-being. Psychological interventions to improve well-being can be time demanding on patients and healthcare services, therefore brief psychological interventions are proposed as an alternative. This systematic review investigates the effect of brief psychological interventions on well-being in adults with chronic health conditions.

**Methods:** A systematic search was conducted using Medline, CINAHL Plus, APA PsycInfo, APA PsycArticles, APA PsycBooks (via EBESCO host), and Scopus; for articles published up to May 2023. Studies were included if they (1) investigated psychological interventions comprising six or fewer sessions, (2) were delivered to adults with a chronic health condition and (3) measured well-being. Study quality was assessed using The Effective Public Health Practice Project Quality Assessment Tool.

**Results:** Fifteen studies met inclusion criteria. Brief interventions studied included cognitive behaviour therapy (CBT), psychoeducation and distress management skills, mindfulness, motivational interviewing, and expressive writing. CBT interventions reported some benefit for illness-specific measures of distress and emotional response to illness. Psychoeducation, distress management skills and mindfulness interventions showed encouraging results on positive and negative affect. Most studies found no significant results for anxiety or depression.

**Discussion:** Overall, studies reported no positive impact on interventions on anxiety or depression. However, results indicated brief interventions may impact emotional responses to illness, and positive and negative affect. Due to the moderate-to-weak quality of the studies, recommendations are made for future studies incorporating strong research designs.

**Keywords: Brief psychological intervention, brief therapy, chronic health conditions, well-being, quantitative systematic review**

## **Introduction**

The prevalence of chronic health conditions is rising globally, due to increased life expectancy, improvements in medical treatment, and increasing risk factors such as obesity and hypertension (1). Healthcare services across the world already face significant challenges, evidenced by long waiting lists and increasing demand for healthcare workers in high-income countries (2,3), and poorer outcomes in low-and-middle-income countries (4). These pressures are likely to continue to increase as the prevalence of health conditions rise. Alongside treating the biomedical aspects of health conditions, it is important to support patients with psychological aspects and well-being, to maintain quality of life and healthy coping skills (5). It is therefore important to understand how psychological services can efficiently support people living with chronic health conditions.

Psychological well-being is a complex, multifaceted concept. Research usually takes one of two approaches: looking at the processes involved in achieving well-being, or the outcomes of having well-being (6). The process approach to understanding well-being involves looking at hedonic well-being, meaning attainment of happiness and pleasure; and eudaimonic well-being, meaning to engage in a meaningful life (7). The outcome approach to understanding well-being usually involves looking at life satisfaction and the absence of mental health conditions (6).

Research has demonstrated negative associations between chronic health conditions and psychological well-being. Psychological changes associated with diagnosis of a chronic condition can lead to negative feelings about oneself (8), which is likely to reduce the feelings of happiness and pleasure associated with hedonic well-being. Changes to physical function and social roles are associated with chronic health conditions (8) which is likely to disrupt the process of engaging in meaningful activity



required for eudaimonic well-being. Furthermore, chronic health conditions are associated with reduced life satisfaction (9) and poor mental health (10), indicating the outcomes of psychological well-being (6) are impacted by having a chronic health condition.

The research discussed indicates that chronic health conditions are associated with reduced psychological well-being. Poor psychological well-being may also exacerbate difficulties of having a chronic health condition. This is due to a bidirectional relationship between psychological factors and illness outcomes, meaning changes in one's psychological status can influence illness progression, and vice-versa (11). While the pathways through which this occurs are unclear, it is likely to be explained by a combination of factors, including effectively coping with the health condition (12), medication adherence (13) and psychoneuroimmunology (14). It is therefore plausible that poor psychological well-being can lead to ineffective coping with the demands of health conditions, which has further negative impacts on one's health and life, further reducing psychological well-being. This indicates a role for psychological interventions in the management of chronic health conditions.

Psychological interventions use scientific evidence to promote better adaption to a situation, optimising strengths relating to autonomy, self-help and knowledge, to meet a goal or outcome (15,16). Psychological interventions have various beneficial effects on people living with health conditions, including diabetes, pain, cardiovascular disease, chronic obstructive pulmonary disease, multiple sclerosis, chronic fatigue syndrome (17,18). Clinical guidelines recommend cognitive behavioural therapy (CBT) for managing depression in adults with a chronic health condition (19), and the use of CBT or acceptance and commitment therapy for managing chronic primary pain(20). Their presence in these evidence-based guidelines demonstrates the wide

acceptability and efficacy of using psychological approaches to managing health conditions.

While previous research highlights the importance of access to psychological support when living with chronic health conditions, access can vary based on availability of services and length of waiting lists. Engaging in therapy can also be intensive for patients while dealing with health conditions, with attendance at up to 24 appointments being required (21). This demand on patients' time and energy could make therapy inaccessible, particularly for those who have other work or childcare responsibilities, and for those who also attend regular appointments for medical care.

One approach to overcome barriers to accessing psychological interventions is the use of brief interventions. Previous meta-analytic evidence (22) has demonstrated effectiveness of brief psychological treatment of common mental health disorders (i.e., anxiety and depression). Furthermore, a recent systematic review has investigated the effectiveness of brief interventions for psychiatric disorders in young people with long-term health conditions, finding brief CBT effectively treated anxiety, although there was insufficient evidence to assess the impact on depression or quality of life (23). No comparable systematic reviews into the effects of brief psychological interventions in adults with chronic health conditions exist.

Given the detrimental impact of chronic health conditions on psychological well-being, and the consequential effect on life satisfaction, mental health, and illness outcomes, continuing to use psychological therapy is imperative in healthcare services. However, as the prevalence of health conditions rises and pressures on healthcare services increase, availability of psychological therapies is likely to decrease. Therefore, use of brief psychological therapy in this context needs to be better understood. This

systematic review aims to understand the effects of brief psychological interventions on well-being in adults with chronic health conditions.

### ***Objectives and review question***

This systematic review aims to investigate the impact of brief psychological interventions on well-being in adults with chronic health conditions. The review question is: how do brief psychological interventions affect well-being in adults with chronic health conditions?

### **Methods**

#### ***Research design***

This paper describes a systematic review, conducted and reported following the Preferred Reporting Items for Systematic Reviews and Meta-analysis (PRISMA; (24)) guidelines. Inclusion and exclusion criteria were defined following the framework PICOS: Population, Intervention, Control, Outcome, Study design (25).

#### ***Eligibility criteria***

To be considered eligible for this review, studies had to meet the following criteria.

##### *Population*

Participants had to be adults with a chronic health condition. There is a lack of consistency in the way chronic health conditions are defined. For example, research defining a condition as 'chronic' based on the time it is present for varies from a minimum of three to 12 months (26). This is further complicated by the change in treatments available and illness prognosis as medical research and sciences advance. For example, cancer is now classed as a long-term health condition, rather than a shorter, life-threatening disease (27). McKenna and Collins (28) defined chronic health

conditions based on having uncertain aetiology, multiple risk factors, a long latency period, a prolonged course of illness, noncontagious origin, functional impairment or disability, and incurability. This definition has been selected for the purpose of this review in order to be as inclusive as possible. Studies were excluded if participants were experiencing an acute health event, had psychiatric health conditions only, or if participants were children.

### *Intervention and context*

There is no standard definition for what classes as a brief intervention (23), arguably this could differ between different models of psychological therapy. Therefore, this decision was based on definitions adopted in a previous systematic review of brief psychological interventions (22). Studies had to include a brief psychological intervention, of six sessions or fewer that lasted for ten hours or fewer. Ten hours was chosen to allow for leniency for cases where therapy sessions may run slightly over one hour. Studies which utilised self-directed materials without therapist contact were included in this review if they met the inclusion criteria.

Studies conducted in any setting were eligible for inclusion in this review. This included face-to-face, virtually or through a mobile technology platform, and individual or group. Studies were excluded if interventions utilised behavioural only methods (i.e., exercise interventions) or a long-term psychological intervention (defined as >6 sessions).

### *Comparison*

Studies were eligible for inclusion if they included any comparator. This could include a longer psychological intervention (more than six sessions and ten hours long), a behavioural intervention, treatment as usual, or medication. Studies with no control

group but utilising a pre-post design were also included in this review. Descriptive studies or case studies were excluded.

#### *Outcome measures*

The primary outcome measure for inclusion in this review was any measure of well-being (for example, measures of affect, anxiety, depression, quality of life, illness-related distress). Additional secondary outcomes included measures of function, physiological illness outcomes and behaviour change outcomes. Data collected at any time point were eligible for inclusion. Studies were excluded if they had no measure of well-being.

#### *Study design*

Quantitative study designs, utilising randomised controlled trials (RCTs), controlled clinical trials, non-randomised control trials, cohort studies and quasi-experimental designs were eligible for inclusion in this review. Qualitative studies and case reports were not eligible for inclusion.

#### **Search methods**

Study searches were conducted using the following electronic databases: APA PsycInfo, APA PsycArticles, APA Psycbooks (via EBESCO host), CINAHL Plus, Medline and Scopus. Databases were searched up to 28<sup>th</sup> May 2023, without restriction on the start date. The only restriction imposed on the search was publication in English language.

The search strategy was as follows: ("Brief psychological intervention" OR "single session intervention" OR "SSI" OR "Short-term therapy") AND ("psychological" OR "well-being" OR "quality of life") AND ("chronic" OR "persistent" OR "disease\*" OR "health" OR "physical" OR "medical" OR "illness\*" OR "condition\*").

### ***Study selection***

All texts identified by the search were extracted into Rayyan, a research collaboration platform designed for systematic reviews (29). The first author (LP) screened the title and abstract of all papers, to exclude studies which did not meet the inclusion criteria. The second reviewer (SC) screened 10% of the initial studies independently. Full texts of studies which had not been excluded from their title and abstract were then obtained and read to determine which met the inclusion criteria, with 10% screened by the second reviewer. Inter-rater reliability was assessed using Cohen's Kappa (30). Title and abstract screening showed moderate agreement ( $k = 0.418$ , 95% agreement). Discrepancies were due to lack of clarity in abstracts, these decisions were discussed and resolved between reviewers. Full text screening showed perfect agreement ( $k = 1$ , 100% agreement). Decisions were recorded on the systematic reviewing software Rayyan and backed up on a spreadsheet, where reasons for excluding papers were documented.

### ***Data extraction***

A data extraction table was utilised, designed in accordance with the Cochrane Handbook for Systematic Reviews of Interventions (31), extracting key information and data from studies (see table one). The first reviewer initially conducted the data extraction, with the second reviewer checking 10% of the data extracted.

### ***Quality appraisal***

All included studies were assessed on their quality and risk of bias, using The Effective Public Health Practice Project Quality Assessment Tool (EPHPPQAT; (32). This tool was chosen to review studies of different designs consistently, on the same components. The quality of all studies was assessed by the first reviewer, with the second reviewer

appraising 10% of studies, blinded to initial decisions. Inter-rater reliability showed moderate agreement ( $k = 0.588$ , 85% agreement). Discrepancies were due to interpretation of the tool scoring system, and were agreed upon discussion between reviewers.

## **Results**

### ***Study selection***

Figure one represents the search strategy for this review, reported in accordance with PRISMA guidelines (24) (see figure one).

### ***Description of studies***

Descriptive data extracted from studies are summarised in Table 1.

#### ***Study settings and participants***

Fifteen papers were included in this systematic review, with a total of 898 participants (442 male, 449 female). Four included participants with cardiovascular disease (33–36), three with chronic pain (37–39), three with cancer (head and neck (40), cervical (41) and pancreatic(42)), two with diabetes (43,44), and three with other chronic health conditions (chronic kidney disease (45), traumatic brain injury (46) and multiple sclerosis(47)). Four papers were conducted in the USA(37–39,47), two in the UK (33,34), India (43,44) and Spain (35,36), and one paper each in New Zealand (40), China (41), Switzerland (45), Italy (42) and Ukraine (46). Thirteen of the 15 included studies were randomised controlled trials (33–36,38–43,45–47), two of which were described as pilot randomised controlled trials. Two studies were cohort trials (37,44), utilising a pre-post measure. Two papers were reporting on long-term follow-up measures of studies also included within this review (34,39).

### *Interventions*

One-third of the studies (n = 5) utilised a CBT framework (37–39,43,47). Apart from one which utilised a single group session lasting for two hours, these were all delivered on an individual basis, using protocols of four, five and six therapy sessions. Four papers reported results from interventions combining psychoeducation with emotional and physical distress management skills (35,40,44,46). These varied in length and format, with one intervention utilising six sessions of individual therapy, one utilising three sessions of individual therapy, one utilising a single individual therapy session and one utilising a single hour-long group session followed by a mobile health intervention. Three papers used a mindfulness intervention, one of which was a self-directed intervention (41), one a single session individual intervention (42), and one an individual therapy session followed by a mobile health intervention (36). The latter of these compared a mindfulness intervention and a positivity intervention with a control group. Two papers reported on the effectiveness of an intervention which utilised a two-session model of motivational interviewing delivered on an individual basis (33,34). Finally, one paper reported a self-directed intervention utilising expressive writing techniques (45).

### *Outcome measures*

Six papers measured the impact of interventions on anxiety, utilising the Hospital Anxiety and Depression Questionnaire (HADS, (48); (38,43,46), Generalised Anxiety Disorder Assessment (GAD-7, (49); (47)) and the State Trait Anxiety Inventory (STAI-Y1-STAI-Y2, (50) (42,45)). Five papers measured impact on depression using the depression subscale of the HADS (48) (38,39,43,46) or the Beck Depression Inventory (BDI-II,(51); (45). Four studies measured mood using the Positive and Negative Affect Scale (PANAS, (52); (35,36,41,46). Four studies utilised an illness-specific measure of



distress: Pain Catastrophising Scale (PCS, (53) (37), Diabetes Quality of Life (54); (43), Functional Assessment of Cancer Therapy – Head & Neck (FACT-HN, (55) (40), and The Intermittent Claudication Questionnaire (ICQ, (56) (33,34)

### ***Effects of interventions***

Narrative synthesis of data was conducted following guidance of Boland and colleagues (57). Extracted data are summarised in Table 2. Secondary data extracted from papers are summarised in Table 3. Due to heterogeneity in study populations and outcomes measures it was deemed impractical to perform meta-analysis. A table summarising frequency of populations, therapy type and outcome measures used was created to aid this decision making.

### ***Results synthesised by type of outcome measure***

#### ***Anxiety***

While one study found that a single session mindfulness intervention (42) significantly reduced anxiety ( $p = <0.01$ , no effect size available) and increased self-efficacy for managing anxiety, the other five studies found no significant differences in anxiety between the intervention groups and control groups (38,43,45–47).

#### ***Depression***

While one study (38) found that five sessions of CBT delivered on an individual basis significantly decreased depression compared to a treatment as usual control, ( $d=.47$ ,  $p = 0.01$ ) this was not maintained at 6-month follow-up (39). The remaining studies found no significant improvement in measures of depression when comparing with controls (43,45,46).

#### ***Positive and Negative Affect Scale.***

While six sessions of psychoeducation and distress management skills (46) demonstrated no significant difference in negative affect ( $p = 0.76$ ) a significant difference in positive affect was observed ( $d = 1.43, p = <0.001$ ) when compared to a control group. A self-directed mindfulness intervention (41) demonstrated significant increases in positive affect ( $d = .529, p = <0.001$ ) and decreases in negative affect ( $d = .647, p = <0.001$ ) compared to a control group. Furthermore, a single individual therapy session followed by a mobile health intervention using either mindfulness or positive strengthening techniques (36) was demonstrated to significantly increase positive affect ( $\eta^2 = 0.12, p = <0.001$ ) and decrease negative affect ( $\eta^2 = 0.12, p = <0.001$ ) in both intervention groups when compared to a Treatment as Usual (TAU) control group. Alongside this, a single session group intervention (1) incorporating psychoeducation and distress management skills (35) was reported to have a significant increase in positive affect ( $d = 0.57, p = <0.001$ ), which continued to significantly increase in comparison to control group after a mobile health follow up intervention ( $\eta^2 = 0.07, p = 0.003$ ). This study however only utilised the positive subscale of the PANAS.

#### *Condition/symptom specific outcome measures*

Five studies utilised scales measuring aspects of well-being specific to the condition or symptoms. This included emotional responses to illness and health-related quality of life. Two of these studies found that interventions (one utilising motivational interviewing and one utilising psychoeducation and distress management techniques) had no significant effect on health-related Quality of Life (HRQoL) when comparing with controls (33,34,40). However, three studies found that interventions – two hour CBT group (37), six sessions of individual CBT (47) and four sessions of individual CBT (43) – had significant effects on pain catastrophising ( $d = 0.28, p = <.05$ ), MS

acceptance ( $d = .80$ ,  $p = <.01$ ) and emotional response to diabetes ( $d = 1.42$ ,  $p = 0.001$ ) respectively.

#### *Effects synthesised by type of therapy*

##### *CBT*

The studies using a CBT model had mixed results. One (37) reported that a pain specific measure of distress, pain catastrophising, decreased ( $p = <.05$ ,  $d = 0.28$ ), although this finding is limited by the lack of a control group, the use of only one outcome measure and a small effect size. However, pain catastrophising did decrease in another study (38), after five individual sessions ( $p = 0.04$ ,  $d = .44$ ) which was maintained by six-month follow up ( $p = 0.02$ ,  $\eta^2 = 0.13$ ) (39). While this study reported promising results for pain catastrophising, it found no change in anxiety; and while depression initially reduced ( $p = 0.01$ ,  $d = .47$ ) this was not maintained at follow up ( $p = 0.12$ ,  $\eta^2 = 0.05$ ). Finally, four individual sessions of CBT (43) demonstrated no significant changes in anxiety, depression and quality of life when compared to a control group, however the intervention group demonstrated significant improvements in emotional responses to illness when compared to control ( $p = 0.001$ ,  $d = 1.42$ ). Brief CBT interventions therefore may influence emotional responses to illness, rather than depression and anxiety.

##### *Psychoeducation and distress management skills*

The four studies combining psychoeducation and distress management skills reported varied findings, with encouraging effects demonstrated on the PANAS scale. The study which utilised the highest number of sessions (six) (46) found no difference between groups in anxiety, depression or negative affect, but reported significantly higher improvements in positive affect in the control group ( $p = <0.001$ ,  $d = 1.43$ ). One group

session using these techniques was reported to significantly increase positive affect ( $p = <0.001$ ,  $d = 0.57$ ), which continued to increase after a mobile health intervention ( $p = 0.003$ ,  $\eta^2 = 0.07$ ) (35). Three individual sessions utilising these techniques (40) reported no differences between groups in distress, but a significant improvement in social HRQoL ( $p = 0.02$ ,  $d = 0.60$ ) in the intervention group compared to the control. Finally, one individual session using these techniques (44) was reported to decrease clinicians' ratings of patients' distress ( $p = <0.001$ ), although the high risk of bias in both this outcome measure and the study needs to be carefully considered when interpreting the results.

### *Mindfulness*

The three studies investigating mindfulness interventions reported a positive finding on anxiety and promising results for affect. A self-directed mindfulness intervention (41) was demonstrated to significantly increase positive affect ( $p = <0.001$ ,  $d = .529$ ) and decrease negative affect ( $p = <0.001$ ,  $d = .647$ ) when compared to a control group, changes which were found to be associated with reduced rumination and increased positive reappraisal. Furthermore, a single session of mindfulness (42) was found to be associated with a significant reduction in anxiety immediately after the intervention ( $p = <0.01$ ; although there was no control comparison for this timepoint), and in the longer-term the intervention group showed a significant increase in self-efficacy for managing anxiety ( $p = <0.01$ ), alongside a significant decrease in emotional response to symptoms ( $p = 0.02$ ), when comparing to control. Finally, a single individually delivered session of mindfulness followed by a mobile health intervention (36) was reported to significantly increase positive affect and decrease negative affect when compared to a control group ( $p = <0.001$ ,  $\eta^2 = 0.12$ ).

### *Motivational interviewing*

Two papers reported on one study utilising two individually delivered sessions of motivational interviewing (33,34). While a significant improvement in general QoL was observed in the intervention group when compared to a control group ( $p = 0.002$ ), this was not maintained at follow up ( $p = 0.495$ ). No differences were observed between groups in a condition-specific quality of life scale.

#### *Expressive writing*

A self-directed expressive writing intervention (45) demonstrated no significant differences between groups for anxiety or depression.

#### **Quality assessment**

Quality assessment was based on the Quality Assessment Tool for Quantitative Studies developed by the Effective Public Health Practice Project (EPHPP, (32)).

All studies apart from one, which was rated as strong quality (41), were of questionable quality, with eight studies being of moderate quality (33–36,42,45–47) and six studies being of weak quality (37–40,43,44).

The quality of studies was affected by various factors. Many of the studies recruited patients from a single trial centre, and reported low rates of participation, with four studies reporting 60-70% of participation (35,36,41,45) and three studies reporting less than 60% participation (38–40); therefore, results are likely impacted by selection bias. Six studies did not describe how they controlled for confounders (35–40), and only two studies described if participants were blinded to the research question (36,45), therefore most studies were rated as ‘weak’ or ‘moderate’ quality for both confounders and blinding. Two studies also experienced high rates of withdrawals and dropouts (42,43) suggesting potential viability issues, and one study had weak data collection methods (44).

## Discussion

The aim of this systematic review was to understand the impact of brief psychological interventions on well-being in adults with chronic health conditions. Fifteen studies that met the inclusion criteria were reviewed and synthesised. While studies varied in terms of population, intervention, and outcome measures, this review found that brief psychological interventions can offer benefit to well-being in adults with chronic health conditions. Specifically, evidence indicates that brief CBT may positively impact psychological responses to chronic health conditions, and interventions using psychoeducation, distress management and mindfulness techniques can benefit positive and negative affect. These benefits were demonstrated in participants with a range of chronic health conditions. However, there was a lack of evidence that brief psychological interventions impact anxiety or depression; only one study reporting a positive effect on anxiety, and only one study reporting a positive effect on depression.

The finding that there is no evidence for benefits on anxiety is inconsistent with previous research into brief interventions in other populations. Previously, a systematic review demonstrated that brief CBT has been found to be just as effective at reducing anxiety as longer length treatments in psychiatric populations (22). Similarly, brief CBT in young people with chronic health conditions and psychiatric disorders was demonstrated to have beneficial impact on anxiety. While the systematic review by Cape and colleagues was limited by the inclusion of studies with small sample sizes, meta-analysis demonstrated brief CBT interventions had large effect size on anxiety. They also found that mindfulness-based interventions had no positive impact on mental health outcome measures. It may be that the present review's findings differ due to differences in the inclusion and exclusion criteria. Whereas past reviews looking at the efficacy of brief interventions have focused on participants who meet a

threshold for diagnosis with a mental health disorder, the present review focused on participants with a diagnosis of a chronic *physical* health condition. Only two studies included in this review recruited participants who had an elevated level of distress (44,47). Participants in most of the studies reviewed had low levels of psychological distress, therefore it is plausible there was less scope for change to anxiety measures. This review therefore presents an interesting finding that brief psychological interventions may provide benefit to everyone living with a chronic health condition, regardless of elevated psychiatric distress, through improvements to positive and negative affect, and emotional responses to illness. However, this finding must be considered in context with the strengths and limitations of this review.

It is important to consider the implications of the heterogeneity of participants in studies included, with health conditions ranging from multiple sclerosis to chronic cardiovascular disease. While it could be argued that it is inappropriate to compare these populations, psychological therapies that have been studied in different populations target the same underlying processes. For example, CBT has a broad evidence base for different health conditions (21,58) leading to its inclusion in multiple NICE guidelines (19,20). Regardless of the patient group, it works through the same set of processes: altering cognitive appraisals, preventing emotional avoidance, and facilitating action (59). Therefore, when investigating the evidence base for psychological interventions, looking at the evidence across all patient groups is a sensible step in identifying preliminary evidence. Following this process, this systematic review provides preliminary evidence that brief CBT interventions, brief mindfulness interventions, and brief psychoeducational and distress management interventions may benefit emotional responses to illness and mood in adults living with chronic health conditions. Future research recruiting larger volumes of patients into RCTs of brief mindfulness and cognitive-behavioural interventions, utilising consistent

outcome measures of psychological responses to illness, could provide further evidence. For example, measures used could include the Brief Illness Perceptions Questionnaire (60).

#### Strengths and limitations

Overall, methodological quality of the included studies was moderate. While most papers were RCTs, study quality was undermined by a lack of clarity over patient blinding. Lack of blinding in studies which use patient-reported outcome measures can lead to a high level of reporting bias (61). Furthermore, heterogeneity between included studies in how well-being was measured limited this review, making it difficult to draw conclusions about the impact of brief psychological interventions. Despite these limitations, the aggregation of results across included studies has allowed us to provide a detailed exploration of the evidence around brief psychological interventions, which highlights areas requiring further exploration.

There are some potential limitations to the review process. Firstly, the search strategy utilised terms relating to the time length of interventions. It is possible that other studies have investigated brief psychological interventions without referencing to the timeframes in their title, abstract or key words, and therefore were excluded.

Furthermore, as this systematic review was developed to take a broad look at the evidence base around brief interventions, the constructs used for the inclusion and exclusion criteria were open to subjective interpretation. Specifically, there is no objective definition for the maximum length of an intervention defined as “brief” (23) and no widely agreed upon criteria for chronic health conditions (26). However, literature addressing the conceptual problems and giving evidence-based suggestions for definitions were referenced to ensure that decisions were made correctly, bringing methodological strength to the review process.



A strength of this review is the inclusion of any participants with long-term health conditions, regardless of diagnoses of mental health conditions or elevated levels of psychological distress. Only two studies included specifically recruited participants with elevated levels of distress, therefore preliminary findings can be cautiously applied to those with diagnoses of health conditions without high psychological distress. It is plausible that if brief CBT can benefit psychological responses to symptoms, then it could buffer against future development of comorbid mental health conditions. As the coexistence of mental health conditions is highly prevalent in those living with medical conditions (10), future studies could use RCTs to investigate offering brief psychological interventions post-diagnosis of a chronic health condition. Studies could explore the potential protective effect on psychological well-being, improving quality of life for many people. A long-term follow up period could investigate if this would protect against development of mental health conditions.

## ***Conclusions***

This is the first systematic review looking at the impact of brief psychological interventions on well-being in adults with chronic health conditions. The findings of this review suggest that brief psychological interventions may offer some benefit to well-being in adults with chronic health conditions. Specifically, interventions utilising brief CBT may benefit emotional responses to symptoms, and mindfulness, psychoeducation and distress management may offer some benefit to positive and negative affect. However, this review was limited by heterogeneity of studies and risk of bias in results. Furthermore, no benefits were found in measures of depression or anxiety.

Future research should further investigate brief psychological interventions and their use in chronic health conditions. Specifically, it would be useful to investigate: the

optimum number of sessions, delivery format, and use for those newly diagnosed with health conditions regardless of their level of psychological distress.

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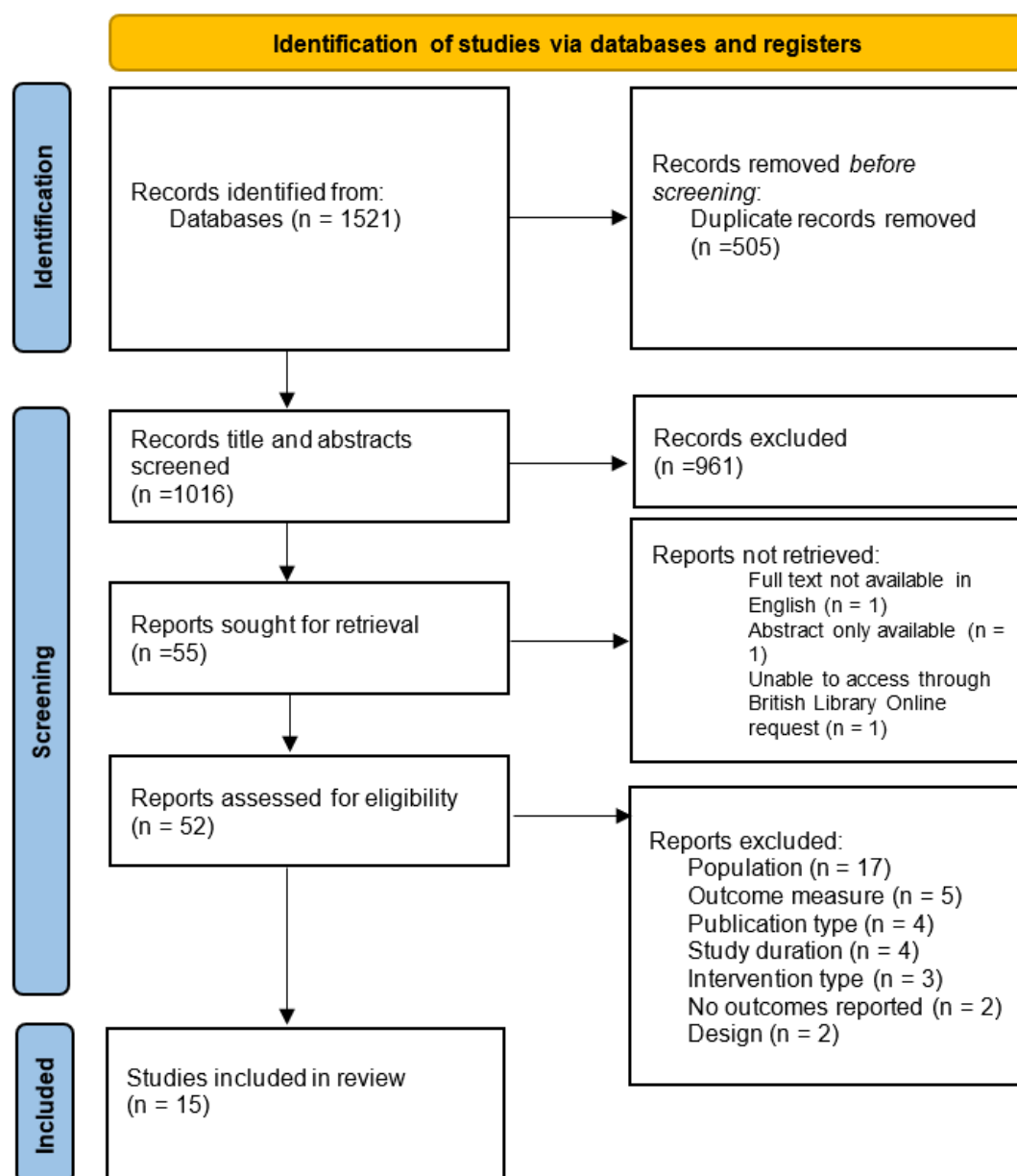
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Figure one: PRISMA flow diagram for search and screening process





**Table one: Descriptive data**

Study, country	Participant s (number, sex)	Age Mean (SD)	Health condition	Design	Intervention	Intervention provider	Intervention structure	Dose (total hours)	Delivery method	Comparat or	Site	Timepoints
Abraham et al (2020). India	80 35 male, 45 female	50.5	Type 2 diabetes	RCT	Cognitive behavioural therapy	Clinical psychologist	4 individual sessions held fortnightly for 30-45 minutes each	3 hours	F2F	TAU	Hospita l	T1 = baseline T2 = post-interventio T3 = 3 month follow up
Assonov, D. (2021) Ukraine	70 68 male, 2 female	46.44 (7.67)	Veterans with traumatic brain injury	RCT	Psychoeducatio n and distress management skills	Researcher	6 individual 60-minute sessions	6 hours	F2F	TAU	Rehab centre	T1 = baseline T2 = post treatment
Cunningham et al (2012) UK	58 39 male, 19 female	65.3	Intermittent claudication	RCT	Motivational interviewing	Trainee Health Psychologist	2 individual weekly sessions	2 hours	F2F	TAU	Home	T1 = baseline T2 = 4 month follow up
Cunningham et al (2013) UK	As above				As above				As above			T1 = baseline T2 = 4 month follow up T3 = 1 year follow up T4 = 2 year follow up
Farhane-Medina et al (2022)	69	63.7 (11.5)	Cardiovascula r disease including	RCT	Psychoeducatio n and distress management	Health Psychologist	A 60 minute F2F group session	60 minutes	Group session followed	TAU	Clinical research	T1= Baseline

**Table one: Descriptive data**

Study, country	Participants (number, sex)	Age Mean (SD)	Health condition	Design	Intervention	Intervention provider	Intervention structure	Dose (total hours)	Delivery method	Comparator	Site	Timepoints
Spain	54 male, 15 female		Angina pectoris (8) Myocardial infarction (33) Heart failure (5) Arrhythmia (5) Other (11) Combination of the above (7)		skills focusing on emotion regulation		followed by 14 daily WhatsApp messages with instructions to complete an emotion regulation activity		by individual follow up  Blended F2F/ mHealth		institute	T2= post-session T3= post-mHealth intervention T4= 2 weeks post mHealth intervention T5 = 4 weeks post mHealth intervention
Jones et al (2013) USA	53 16 male, 37 female	49.43	Chronic pain	Pilot cohort study	One group session using cognitive behavioural therapy principles	Not described	One two-hour group session	Two hours	Group	No control	Outpatient clinic	T1= pre-intervention T2 = post intervention T3 = 3 month follow up
Marinelli et al. (2020) Italy	114 53 male, 61 female	62	Pancreatic cancer	RCT	Mindfulness	Clinical psychologist	One individual session	One hour	Individual	TAU	Hospital ward	T1 = baseline T2 = post intervention T3 = post-surgery

**Table one: Descriptive data**

Study, country	Participant s (number, sex)	Age Mean (SD)	Health condition	Design	Intervention	Intervention provider	Intervention structure	Dose (total hours)	Delivery method	Comparat or	Site	Timepoints
Miller-Matero et al. (2021)  USA	60 13 male, 47 female	66.2 (12.6)	Chronic pain condition	RCT	Cognitive behavioural therapy	Two clinical psychology post- doctoral fellows	5 45-minute weekly sessions	3.75 hours	Individual , patient choice of in person or tele- health	TAU	Primary care clinic	T1 = baseline (pre- interventio ) T2= follow up (post- interventio )
Miller-Matero et al. (2022)  USA	As above				As above				As above			T1 = baseline T2 = 1 month f/u T3 = 6 month f/u
Molton et al. (2019)  USA	48 13 male, 35 female	37.9 (10.9)	Multiple sclerosis	RCT	Cognitive behavioural therapy	Not described	6 sessions	6 hours	Participa n-t choice of F2F, telephon e or a mixture	TAU	Outpati -ent clinic	T1 = baseline T2 = 4 month follow up
Pierro et al. (2022)  Switzerland	33 14 male, 12 female	48.6 (14.4)	Chronic Kidney Disease	RCT	Expressive writing intervention on 3 different topics: emotions, thoughts,	Researcher	20 minutes a day for three consecutive days	1 hour	Self- directed	Neutral writing task	Hospita l	T0 = baseline T1 = day of discharge T2 = third post-

**Table one: Descriptive data**

Study, country	Participants (number, sex)	Age Mean (SD)	Health condition	Design	Intervention	Intervention provider	Intervention structure	Dose (total hours)	Delivery method	Comparator	Site	Timepoints
					concerns about the disease and transplants, difficult life experiences and future expectations							operative month
Raveendranathan et al. (2019) India	41 16 male, 25 female	44.63 (14.7)	Diabetes (with diabetes-related distress)	Cohort study	Psychoeducation and distress management techniques	Psychiatry nurse	Single session intervention	1 hour	Individual, in person	None	Outpatient clinic	T1 = baseline T2 = two month follow up
Richardson et al. (2017) New Zealand	59 45 male, 14 female	N/A	Head and neck cancer	RCT	Psychoeducation and distress management skills, focusing on illness perceptions	A Health Psychologist	3 x 60 minute sessions, 30 minute phone call 3 weeks later	3.5 hours	Individual, F2F	TAU	Either hospital or home	T1 = Baseline T2 = 3 months post diagnosis T3 = 6 months post diagnosis
Shao et al. (2016). China	120 All female	45.54	Cervical cancer	RCT	Gratitude diary and mindfulness intervention	Self-directed	Asked to write down 3 things they felt grateful and listen to a 14-minute	7 hours self-directed	Self-directed	TAU	Home	T1 = baseline T2 = post - intervention

**Table one: Descriptive data**

Study, country	Participant s (number, sex)	Age Mean (SD)	Health condition	Design	Intervention	Intervention provider	Intervention structure	Dose (total hours)	Delivery method	Comparat or	Site	Timepoints
							mindfulness practice every evening for four weeks					
Tabernero et al. (2022) Spain	93 76 male, 17 female	63.9	Cardiovascula r diseases (i.e., angina pectoris, myocardial infarction, arrhythmia, heart failure)	3-arm RCT	A mindfulness group and positive strengthening group In person session giving an example of mindfulness or positive strengthening task mHealth intervention involved daily practice or a mindfulness activity or a positive strengthening activity	Qualified psychologist	One 60 minute in- person session followed by a daily message for two weeks, with a ten- minute exercise to perform	3hrs 20 mins	Individual session in person followed by self- directed mHealth interventi on	TAU	Hospita l/at home	T1 = baseline T2 = post in person interventio T3 = post mHealth interventio T4 = maintenan e (two weeks post interventio ) T5 = follow up (four weeks post interventio )

*SD = standard deviation, RCT = randomised control trial, F2F = face to face, TAU = treatment as usual, T = timepoint, N/A = not available*

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Abraham et al (2020) India	Type 2 diabetes	HADS-A	Cognitive behavioural therapy Delivered individually over 4 sessions	40	4.65(1.96)	T2= 3.90(1.61) T3 = 3.38(1.42)	p = 0.001* d = 0.81	TAU	40	4.05(2.98)	T2 = 4.05(2.68) T3 = 4.02(2.61)	p = 0.92 d = 0.010	p = 0.89
		HADS-D			4.15(3.07)	T2 = 3.13(2.59) T3 = 2.60(2.29)	p = 0.001* d = 0.58			4.18(2.73)	T2 = 4.07(2.65) T3 = 4.18(2.65)	p = 0.53 d = 0.003	p = 0.14
		Diabetes Quality of Life			2.85(0.31)	T2 = 2.80(0.28) T3 = 2.72(0.25)	p = 0.001* d = 0.56			2.85(0.31)	T2 = 2.83(0.30) T3 = 2.83(0.30)	p = 0.80 d = 0.03	p = 0.56
		IPQ-ER			22.72(2.51)	T2 = 19.67(2.57) T3 = 19.67(2.57)	p = 0.001* d = 1.42			22.57(2.14)	T2 = 22.60(2.45) T3 = 22.60(2.45)	p = 0.44 d = 0.44	p = 0.001*

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
						T3 = 18.78(3.00)					T3 = 22.73(2.40)		
Assonov (2021) Ukraine	Veterans with Traumatic Brain Injury	HADS-A	Resilience oriented intervention	35	NA	6.34(3.72)	NA	TAU	35	NA	7.02(3.31)	NA	p = 0.558 d = -0.19
		HADS-D	Delivered individually over 6 sessions			5.48(2.64)					6.65(3.21)		p = 0.143 d = -0.39
		PANAS+				32.58(4.88)					25.79(4.60)		p = <0.001* d = 1.43
		PANAS –				20.79(10.79)					20.66(6.74)		p = 0.760 d = 0.01
		CQLS				64.22(16.80)					54.85(12.89)		p = 0.017* d = 0.62
		PCL-5				16.80(9.61)					29.97(9.75)		p = <0.001* d = -1.36
		CD-RISC											p = <0.001*

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
						76.40(14.37)					63.31(12.86)		d = 0.96
Cunningham et al (2012) UK	Cardiovascular patients with Peripheral Arterial disease	General quality of life (QoL)  HRQoL-IC	Motivational interviewing  Delivered individually over 2 sessions	28	3.71(0.60)	4.11(0.69)		TAU	30	3.57(1.01)	3.27(1.20)		p = 0.002*  p = 0.187
Cunningham et al (2013) UK	Cardiovascular patients with Peripheral Arterial disease	General quality of life (QoL)  HRQoL-IC	As above	28	As above	T3 = 3.93(0.60) T4 = 3.76(0.70)  T3 = 9.86(9.28) T4 = 10.54(11.86)		TAU	30	As above	T3 = 3.70(1.15) T4 = 3.52(0.94)  T3 = 21.33(27.34) T4 = 19.35(23.77)		T3 p = 0.495 T4 p = 0.410  T3 p = 0.355 T4 p = 0.344
Farhane-Medina et al (2022)	Cardiovascular disease	Positive affect	Psychoeducation and	34	3.28(0.76)	3.93(0.68)	p = <0.001*	TAU	35	3.36(0.85)	NA	NA	NA



**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Spain		subscale of PANAS	distress management group session				d = 0.57						
			Mobile health intervention		3.28(0.76)	T3 = 4.01 T4 = 4.01				3.36(0.85)	T3 = 3.48 T4 = 3.59		<p>T3 = p = 0.008* 95% IC = [0.14, -0.92]),</p> <p>T4: p = 0.035* 95% IC = [0.03, 0.81]</p> <p>Main effect of time p = &lt;0.001* <math>\eta p^2 = 0.19</math>,</p>

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
													Significant effect of time x experimental condition $p = 0.003^*$ $\eta p^2 = 0.07$
Jones et al (2013) USA	Chronic pain	PCS	CBT  Delivered in one two-hour group session	53	28.09(10.97)	24.72(13.22)	$p = <.05^*$ $d = 0.28$	NO CONTROL					
Marinelli et al (2020) Italy	Pancreatic cancer	STAY-Y1 (T1 – T2)  Self-efficacy for managing anxiety (T1 – T2)  BPI-emotional (T3)	Mindfulness  Individual delivered in one session	65	43.4	28.2  8.3  2.5(1.8)	$p = <0.01^*$	Not measured at this timepoint  TAU	49		7.1  3.9(2.4)		$p = <0.01^*$  $p = 0.02^*$

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Miller-Matero et al (2021)  USA	Chronic pain	HADS-D  HADS-A  PCS	Cognitive behavioural therapy  Delivered in 5 individual sessions	27	5.15(2.69)	3.81(3.34)	p = 0.02* d = 0.47  p = 0.43 d = 0.16 p = 0.03 d = 0.44	TAU	29	4.52(3.86)	5.24(4.01)	p = 0.14 d = 0.28  p = 0.11 d = 0.31 p = 0.56 d = 0.11	p = 0.01* d = .47  p = 0.58  p = 0.04* d = .44
Miller-Matero et al (2022)  USA	Chronic pain	HADS-D  PCS	Cognitive behavioural therapy  Delivered in 5 individual sessions	26	4.96(2.79)	T2 = 4.08(3.89) T3 = 4.54(3.38)  T2 = 20.91(14.44) T3 = 17.78(11.77)	NA	TAU	24	4.35(3.90)	T2 = 4.87(4.13) T3 = 5.74(4.50)  T2 = 17.45(12.54) T3 = 22.90(14.18)	NA	p = 0.12* np2 = 0.05  T2: p = 0.63 np2 = 0.01 T3: p = 0.02* np2 = 0.13
Molton et al (2019)	Multiple Sclerosis	GAD-7	Cognitive behavioural therapy	23	NA	NA	NA	TAU	25	NA	NA	NA	Intervention term =

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
USA		ACHC-MS	Delivered in 6 individual sessions		32.10	37.10	p = <.01* d = .80			29.33	30.64	p = >0.45 d = .21	R2 = 1.8, p = .18  Intervention term R2 = .15, p = <.001*
Pierro et al (2022)  Switzerland	Chronic Kidney Disease	BDI-II  STAI-Y1  STAI-Y2	Self-directed expressive writing intervention	16	5.2(4.7)  43.8(12.7)  38.6(9.0)	T1= 2.9(3.1) T2= 3.8(5.6)  T1= 37.3(13.5) T2= 36.6(13.3)  T1= 36.1(12.0) T2= 32.2(10.8)	T0-T1: p = 0.034*  T0-T1: p = 0.523  T0-T1: p = 0.280	Neutral writing intervention	10	4.9(2.33)  41.3(8.8)  39.2(8.3)	T1= 2.6(2.8) T2= 2.8(2.9)  T1= 36.5(8.5) T2= 32.8(7.8)  T1= 33.7(9.6) T2= 28.7(9.0)	T0-T1: p = 0.090*  T0-T1: p = 0.199  T0-T1: p = 0.067	Interaction GxT (1, 24) = 0.00006, p = 0.994  Interaction GxT (1, 24) = 0.05, p = 0.818  Interaction GxT (1, 24) = 0.67, p = 0.419

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Raveendranathan et al (2019)  India	Diabetes	CGI-S  VAS	Psychoeducation and distress management  Delivered in one individual session	41	4.76(0.99)  7.76(1.16)	2.49(1.23)  3.45(2.16)	p = <0.001*  p = <0.001*	No control group					

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Richardson et al (2017)  New Zealand	Head and neck cancer	FACT-H&N (HRQoL)  Social HRQoL	Psychoeducation and distress management based on Common-sense model of illness perceptions  Delivered individually in three sessions	31	Change scores reported: T1 – T2: -4.03 (18.98) T1 – T3: 4.07 (20.95)  T1 – T2: 0.24 (3.24) T1 – T3: 0.24 (3.24)		NA	TAU	28	Change scores reported: T1 – T2: -3.54 (21.87) T1 – T3: 1.60 (18.01)  T1 – T2: -1.24 (4.26) T1 – T3: -1.92 (5.42)		NA	T1 – T2: p = .69 d = 0.01 T1 – T3: p = 0.31 d = 0.13  T1 – T2: p = 0.12 d = 0.39 T1 – T3: p = 0.02* d = 0.60
Shao, et al (2016) China	Cervical cancer	PANAS-POSITIVE  PANAS-NEGATIVE  RRS	Mindfulness and gratitude intervention  Self-directed	60	24.78(2.31)  22.67(3.18)	26.25(3.18)  20.75(2.47)		TAU	60	23.50(3.13)  21.77(4.53)	23.37(3.15)  21.98(4.70)		p = <0.001* d = .529  p = <0.001* d = .647  p = 0.011

**Table two: Results showing efficacy of interventions on measures of well-being**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
		ERQ			37.77(8.27)	34.05(4.88)				39.02(7.31)	37.78(8.64)		d = .548  p = <0.001 d = .820
Tabernero et al (2022) Spain	Cardiovascular disease	PANAS-POSITIVE	Mindfulness intervention	35	Pairwise comparisons showed: Difference between the TAU group and the mindfulness group = -0.49, p < 0.001) Difference between the TAU group and the positivity group = -0.71)								Time x condition p = <0.001 ηp2 = 0.12
			Gratitude interventions	35									
		PANAS-NEGATIVE	Control group	35	Difference between the TAU group and the mindfulness group = 0.38, p < 0.001 Difference between the TAU group and the positivity group = 0.58, p < 0.001, respectively								Time x condition p = <0.001 ηp2 = 0.12

*HADS = Hospital Anxiety and Depression Scale; HADS-A = Hospital Anxiety and Depression Scale – anxiety subscale; HADS-D = Hospital Anxiety and Depression Scale –depression subscale; IPQ-ER = Illness perceptions questionnaire- emotion regulation; PANAS = Positive and negative affect scale; CQLS = Chaban quality of life scale, PCL-5 = Posttraumatic Stress Disorder Checklist 5; CD-RISC = Connor-Davidson Resilience Scale; HRQoL-IC = Health-related quality of life- intermittent claudication; PCS = Pain catastrophising scale; BPI = British Pain Inventory; GAD-7 = Generalised anxiety disorder assessment; ACHC-MS = Acceptance of chronic health condition – multiple sclerosis; BDI-II = Beck depression inventory two; STAI-Y1 = State trait anxiety inventory-state; STAI-Y2 = State trait anxiety inventory-trait; CGI-S = Clinician global impression scale; VAS = visual analogue scale; FACT-H&N = Functional Assessment of Cancer Therapy—Head and Neck; HRQoL = Health related quality of life; RRS = ruminative response scale; ERQ = emotion regulation questionnaire*



**Table three: Secondary outcome data**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Abraham et al (2020) India	Type 2 diabetes	HBA1c  Overall barriers to self-care	CBT Delivered individually over 4 sessions	40	8.58(0.84)	T2: 8.19(0.78) T3: 8.08(0.81)  T2: 3.06(0.72) T3: 3.00(0.69)	p = 0.001 d= 0.60  p = 0.001 d= 0.50	TAU	40	8.41(0.73)	T2: 8.70(1.02) T3: 8.68(0.99)  T2: 3.30(0.75) T3: 3.31(0.75)	p = 0.007 d = 0.21  p = 0.01 d = 0.06	F = 2.90 p = 0.09  F = 0.85 p = 0.35
Assonov (2021) Ukraine	Veterans with Traumatic Brain Injury	MoCA (Montreal Cognitive Assessment Scale)  NSI (Neuro-behavioral symptom inventory)	Resilience oriented intervention  Delivered individually over 6 sessions	35	NA	27.05(1.99)  27.85(7.22)	NA	TAU	35	NA	24.42(2.86)  33.57(11.47)	NA	p = <0.001 d = 1.06  p = 0.030 d = -0.59

**Table three: Secondary outcome data**

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Cunningham et al (2012) UK	Cardiovascular patients with Peripheral Arterial disease	Walking behaviour (steps)  Perceived pain free walking	Motivational interviewing	28	3915.15(2145.30)	5273.59(3021.53)  2.00 (1.75)		TAU	30	3852.96(2312.77)  1.00(1.00)	3599.43(2850.30)  1.00(2.25)		p = <0.001  p = 0.008
Cunningham et al (2013) UK	Cardiovascular patients with Peripheral Arterial disease	Walking behaviour (steps)  Perceived pain free walking Median(interquartile range)	As above	28	As above	T3: 4564(2702) T4: 5007(3407)  T3: 3.00(2.00-5.00) T4: 3.50 (2.00-5.00)		TAU	30	As above	T3: 3112(2335) T4: 3301(2224)  T3: 3.00(0-5.00) T4: 4.50(0.75-5.00)		T3: p = 0.002 T4: p = 0.010  T3: p = 0.569 T4: p = 0.466
Farhane-Medina et al (2022) Spain	Cardiovascular disease	SEMCD (Self-efficacy for managing chronic disease)	Psychoed/distress management group session	34	7.71(1.79)  4.11(0.66)	8.02(2.00)  	p = 0.17 d = 1.31  p = <0.001 d = 0.57	TAU	35		Not measured at this timepoint		

Table three: Secondary outcome data

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
		CMSES (Cardiovascular Management Self-Efficacy Scale)  SEMCD  CMSES	Mobile health intervention		7.71(1.79)  4.09	4.26(0.67)  8.38	  p = 0.001			6.85(1.92)  4.31(0.47)	7.10  NA		p = 0.001 $\eta p^2 = 0.17$  p = 0.005, $\eta p^2 = 0.08$
Marinelli et al (2020) Italy	Pancreatic cancer	Length of hospital stay (days)  Number with surgical complications	Mindfulness  Individual delivered in one session	65		12.5(12.0)  47.7%		Not measured at this timepoint  TAU			13.6(14.1)  55.9%		p = 0.62  p = 0.48
Miller-Matero et al (2021)  USA	Chronic pain	Pain severity  Pain interference	CBT  Delivered in 5 individual sessions	27	6.52(1.72)  4.46(2.21)	5.15(2.16)  3.48 (2.23)	p = <0.001 d = 0.85  p = 0.02 d = 0.50	TAU	29	6.38(2.32)  4.56(2.78)	5.97(2.32)  4.20(2.81)	p = 0.26 d = 0.21  p = 0.40 d = 0.16	F= 4.08 p = 0.048 d = .85  F= 1.14 p = .29

Table three: Secondary outcome data

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
Miller-Matero et al (2022)  USA	Chronic pain	Pain severity  Pain interference	CBT  Delivered in 5 individual sessions	26	6.67(1.63)	T2: 5.17(2.24) T3: 4.54(2.62)		TAU	24	6.13(2.42)  4.59(2.91)	T2: 5.52(3.15) T3: 6.04(2.05)  T2: 3.65(2.50) T3: 4.90(2.82)		F = 5.11 p = 0.01 ηp2= 0.10  F = 2.82 p = 0.07 ηp2 = 0.06
Molton et al (2019)  USA	Multiple Sclerosis	Intolerance of Uncertainty scale (IU)	CBT/ACT  6 individual sessions	23	57.38	48.81	p = <.01 d = .60	TAU	25	63.61	61.61	p = >.45, d = .15	t = 2.1 p = <0.05
Pierro et al (2022)  Switzerland	Chronic Kidney Disease	Adherence  Renal function: CDK-EPI	Self-directed expressive writing intervention	16	9 yes 7 no  T0: 8.3(3.7)	4 yes 12 no  T1: 49.7(17.6)	T0>T1: p = <0.001 T1<T2: p = 0.150	Neutral writing intervention	10	7 yes 3 no  T0: 8.3(3.4)	2 yes 7 no  T1: 36.8(22.3) T2: 53.5(13.3)	T0>T1: p = 0.027 T1<T2: p = 0.035	χ2(1) = 4.0, p = 0.045  GxT T1vsT0: p = 0.119 T2vsT1: p = 0.379

Table three: Secondary outcome data

Study			Intervention group					Control group					Between group analyses
Author, Year, Country	Health condition	Outcome measure	Intervention	N	Pre	Post	Within group interaction	Control	N	Pre	Post	Within group interaction	
						T2: 56.6(17.2)							
Raveendranathan et al (2019)  India	Diabetes	Physical activity scale (Marshall et al 2005)  Medication adherence scale	Psychoed & distress management  One individual session	41	2.60(2.72)  4.28(1.15)	4.71(2.92)  4.89(0.53)	p = 0.001  p = 0.14	No control group					
Tabernero et al (2022) Spain	Cardiovascular disease	SEMCD	Mindfulness group	35	Significant difference between the TAU group and the mindfulness group and the positivity group for self-efficacy for managing the chronic disease (Mdifference=0.96, p= 0.001 and Mdifference=1.20, p< 0.001, respectively).								
		Positivity group	35										
		CMSE	Control group	35	Significant difference was found between the TAU and the positivity groups (Mdifference=0.17, p= 0.039).								

## Reflective Commentary

### *Background*

A systematic review assesses all the relevant research available in a specific area, to provide a summary of the evidence on a healthcare topic (Lasserson et al., 2023). They are conducted in a systematic manner following Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021) and the Cochrane handbook (Lasserson et al., 2023). It is important to follow these guidelines as systematic reviews provide a high standard of evidence, from which clinicians keep up to date about evidence, and policy makers assess risks and benefits of healthcare interventions (Liberati et al., 2009).

Conducting a systematic review is one of the requirements of a Professional Doctorate in Health Psychology. My previous experience was of conducting a small-scale systematic review as part of my MSc qualification in Health Psychology. This involved developing a research question, a search strategy and conducting a full systematic search, before choosing five studies to synthesise and report. Having had that experience of a small-scale review, I had some of the knowledge and skills and felt confident to get going on the systematic review journey. I also knew it would be a large, time-consuming project and I was keen to get started early on in my doctorate. As a student I was interested in reading around the topic of systematic reviews and finding appropriate resources to help me through. Armed with a helpful book by Boland and colleagues (2020) targeted at students, alongside university resources and official guidelines, I was ready to start the process.

Being on a bursary placement, I wanted to conduct a systematic review that would be beneficial to my service. When I joined the service, we were short staffed and had an ever-growing waiting list for outpatient psychology, and our team meetings would

involve reflections on how we can work in a time efficient manner. We also had a high demand and limited resource for inpatient work, and due to the unpredictable nature of patient treatment on medical wards we often only get one or two sessions to offer psychological support. Therefore, my team and I were interested to know how we could work more effectively with the limited time we had with inpatients, and how we could move outpatients through the service and towards discharge quicker. I therefore decided to focus my systematic review on brief therapy interventions.

## **Designing the systematic review**

### ***Defining the question***

The first stage of a systematic review is to do scoping searches of the literature and use the findings to decide on an appropriate topic, that has enough existing research evidence to review, and has not already been reviewed (Boland et al., 2020).

I was aware of a growing evidence base for brief or single session interventions. I had read a British Psychological Society article discussing the use of single session interventions to support people with chronic pain (Darnall, 2022), and a systematic review looking at single-session Acceptance and Commitment Therapy for people with chronic health conditions (Dochat et al., 2021). While conducting my scoping searches, I found a recent systematic review looking at the effect of brief psychological interventions on psychiatric conditions in children and adolescents with chronic health conditions (Catanzano et al., 2020), which found benefits on anxiety in a variety of health conditions. Reading a review that had been conducted in this manner – looking across health conditions, considering different models of therapy and different measures of mental health – encouraged me to conduct a similar review within adult populations. I was particularly interested in using similar methods of looking across multiple health conditions and multiple therapeutic models, as it mirrored some of the

lessons I had been learning in my placement when noticing similar psychological themes occurring across different health conditions, which could be treated with different models of psychological support. The questions forming in my head included: what brief psychological interventions are being studied? What are the common ingredients of different types of brief interventions? What aspects of interventions get kept, and which get lost, when condensing them? What outcomes can be changed in brief periods of time?

I decided to conduct a systematic review looking at the impact of brief psychological interventions on well-being in adults with chronic health conditions, choosing as it is a broad term that can encompass multiple psychological measurements. I decided on the following research question: How do brief psychological interventions affect well-being in adults with chronic health conditions?

### ***Developing search strategy***

I consulted a university librarian for advice on defining my search terms, and we worked together to develop my search strategy with the appropriate Boolean operators to successfully narrow my search. I trialled this on popular databases to confirm it would bring up appropriate results. The database Scopus was chosen due to the comprehensive range of literature available, and EBESCO-Host was used to combine multiple relevant psychological and medical databases: Medline, CINAHL Plus, APA PsycInfo, APA PsycArticles, APA PsycBooks.

### ***Defining inclusion and exclusion criteria***

Inclusion and exclusion criteria were defined following the framework PICOS: Population, Intervention, Control, Outcome, Study design (Tacconelli, 2010). The initial inclusion and exclusion criteria are described in table one.



**Table one: Inclusion and exclusion criteria defined following PICOS framework**

	<b>Inclusion criteria</b>	<b>Exclusion criteria</b>
<b>Population</b>	Adults living with a chronic health condition (i.e., diabetes, heart disease, chronic pain, etc).	Children or adolescents with a chronic health condition, participants experiencing acute health events, participants with psychiatric conditions only.
<b>Intervention</b>	Studies will be included if they test a brief (6 sessions or less, lasting for 10 hours or less) psychological intervention. Studies conducted in any setting: Interventions can be delivered face-to-face, virtually or through a mobile technology platform. They can be delivered in individual or group format.	Studies looking at behavioural only interventions (i.e., exercise interventions), studies test psychological interventions using non-brief approach.
<b>Control</b>	Any comparators, for example non-brief psychological intervention or therapy, behavioural interventions, medication, treatment as usual, wait-list control. Due to the limited number of studies looking at brief interventions in chronic health conditions, studies with no control group will also be included if they compare a measure of well-being before and after a brief psychological intervention.	Descriptive studies, case studies.
<b>Outcome</b>	Change in well-being measured from before intervention to follow up. Well-being scores can include any measure of well-being; for example, anxiety, depression, quality of life, illness-related distress.	Physical functioning or behavioural outcome measures only.
<b>Study design</b>	Quantitative studies, utilising randomised controlled trials (RCTs), controlled clinical trials, non-randomised control trials, cohort studies and quasi-experimental designs were eligible for inclusion in this review.	Qualitative studies and case reports were not eligible for inclusion

### ***Second reviewer***

Use of a second reviewer throughout study screening is recommended to reduce bias and increase reliability of studies identified (Stoll et al., 2019). As a student completing a full systematic review for the first time, I opted to ask a second reviewer to also be involved at the quality assessment process, to increase the opportunity for joint reflection on the review process.

As my systematic review had been designed with the benefit of my workplace in mind, my clinical supervisor agreed to be my second reviewer (SC). Due to the busy nature of her clinical job role, we agreed for her to review 10% of papers at the following stages: title and abstract screening, full paper screening, quality assessment. We agreed that after we had independently reviewed studies we would meet and discuss the decisions that we had made, and this joint reflection would allow us to collaborate on any difficulties with the review process or any disagreements on decisions made.

### ***Writing protocol***

Once I had decided on the finer details of my systematic review, I developed a protocol and registered it with PROSPERO. This is good practice for two reasons: it reduces duplication of research efforts by alerting other researchers that a review into a topic is already underway, and it increases research fidelity by requiring researchers to stick to their protocol.

### ***Conducting the systematic review***

#### ***Running search***

I chose to use Rayyan as a reference managing software, as it allows you to share reviews with collaborators while blinding each other to decisions that are being made. It also has the benefit of being able to screen title and abstract on a mobile device,

meaning it could be done in smaller chunks while away from a laptop screen, reducing cognitive fatigue. I found this worked particularly well as I was able to screen my papers on the go and when outside, making the task less arduous and easier to focus on. I found it simple to export my search results into Rayyan and remove duplicates, although I found myself checking through the duplicates removed to ensure no computer errors had been made. This increased the time but as the software was new to me it felt like an important step.

### ***Screening papers***

When screening papers, I realised I had given myself a tricky challenge by looking at concepts that can be ambiguous in their meanings. I thought I had clearly defined my inclusion and exclusion criteria, however when screening papers I realised studies were still falling into grey areas in-between my inclusion and exclusion criteria. It was during this stage that my systematic review became an iterative process, and I had to revisit the research, my definitions, and access support from my supervisors.

It was challenging screening some papers' participant populations against the criteria, which led me to realise the definition of chronic health conditions is not straightforward. I revisited the research base, which reviews differing definitions of chronic health conditions to highlight that there is a lack of consistency (Goodman et al., 2013). A definition from this paper – “They are generally characterized by uncertain etiology, multiple risk factors, a long latency period, a prolonged course of illness, noncontagious origin, functional impairment or disability, and incurability.” (McKenna & Collins, quoted in Goodman et al., 2013, p.9) – was chosen to be as inclusive as possible, and to counteract the problem that not all research reports how long participants experience their health condition for prior to study enrolment.

Furthermore, I realised my search terms could be more specific regarding what the psychological intervention involves when screening papers. I had not considered self-directed interventions, where therapist contact involves minimal instruction of a task (i.e., to do mindfulness exercise), which someone does for a prolonged period of time. Discussion with supervisors led me to decide to include interventions which involve self-directed tasks, regardless of how long participants are instructed to do the task for, as long as contact with a therapist is brief.

### *Data extraction*

I consulted guidelines from Boland and Colleagues (2020) and The Cochrane Handbook (2023) to develop a data extraction table. Extracting data from fifteen papers felt like a long and arduous process; and having more experience in conducting qualitative research prior to the doctorate I realised my limited knowledge of quantitative research methods was slowing me down, as I was having to consult research methods textbooks to aid my understanding of papers I was reading. I took three of the research papers to supervision to gain support in understanding which data to extract, for example when I found it difficult interpreting a paper's regression analysis (Molton et al., 2019). Overall, this process has helped me develop my understanding of quantitative research, which will be of benefit for my research abilities going forward.

### ***Quality assessment***

To assess quality of research papers, I used The Effective Public Health Practice Project Quality Assessment Tool (EPHPP, 2010). I chose this tool for its ability to review studies of different designs consistently, on the same components. While doing this process I was struck by the similarities between the papers overall, specifically the poor-quality ratings on two components: selection bias and blinding. This is likely in part due to the

nature of psychology intervention studies, as information covered in interventions tend to be reflected in outcome measures, therefore it is tricky to blind participants to the nature of the study.

### ***Data synthesis***

My first step for data synthesis was to look at the descriptive data from my studies and assess the appropriateness of a meta-analysis. I developed a frequency table and decided that the heterogeneity between the papers meant it would not be appropriate to do a meta-analysis, which a quantitative research supervisor agreed with.

When narratively synthesising data, I initially found it challenging deciding where to start, and again reflected on the difficulty with using such an inclusive research question, as heterogeneous data are harder to compare. I overcame this challenge by using a mind map to summarise and visualise my data on one large sheet of paper. I thought about the overarching story the research was telling me within the context of my review question, while getting a bird's-eye view of all the data.

I decided to synthesise my data initially by the aspect of well-being (anxiety, depression, positive and negative affect, quality of life) and then by type of therapy. Synthesising by type of therapy was an enjoyable task, as it allowed me to look in detail at the different intervention protocols to group them together – a task I enjoyed because it aligned with my interest in learning more about different intervention models and techniques. One thing I noted was that some interventions used similar techniques despite calling themselves different names. For example, an emotion regulation intervention (Farhane-Medina et al., 2022) and a problem-solving intervention (Raveendranathan et al., 2019) both started with education about the mind, followed by teaching skills to cope with changes to physical and psychological health. This allowed me to group together papers and learn about the impact of

psychoeducation and distress management techniques, and highlighted the importance of being specific when writing about interventions, to allow for replicability and fidelity.

## **Conclusions and dissemination**

### ***Findings and implications***

Initially, I was unsure how to interpret my findings into a useful take home message for readers because I hadn't found what I was expecting to find – decreases in anxiety and depression. Mentally broadening out from thinking about my own review and reflecting on it within the context of previous research helped me develop my implications and reasoning behind them. I realised a key difference of my review laid in the focus on well-being, which meant not specifically recruiting participants with elevated levels of psychological distress. Therefore, it made sense that there potentially could have been less scope for change in symptoms of psychological distress, reflected in the findings that while depression and anxiety didn't often change, responses to health conditions and positive and negative affect did.

### ***Dissemination***

As I had read a similar review using paediatric populations, I decided to target the same journal which it has been published in: Journal of Psychosomatic Research. The journal guidelines for submitting a systematic review are to follow the PRISMA statement, be 4000-5000 words long and be original research. References in text are required to be indicated by a number in square brackets, and figures and tables could be presented within the text. My review was written up within those guidelines.

As the research questions were created in line with problems my workplace was experiencing in terms of growing waiting lists, I plan to disseminate my findings to my

team. I plan to do this within a future Team Professional Development session, which we host regularly throughout the year. This will allow for team reflection on my findings and how their implication for future service development and service evaluation projects. I may also create a small poster to display within the department.

Furthermore, from conversations I have had networking and knowledge from previous workplaces, I know other services have longer waiting lists than they would like therefore I will aim to disseminate my findings more broadly – i.e., through avenues like regional health psychology groups, or at conferences if opportunities arise.

Our service is also looking at developing more psychology group therapy options to reduce waiting times, and I am involved in the development of a group to fulfil my psychological interventions competency. I can use the findings of my systematic review to think about key ingredients of interventions that might be effective delivered in a limited number of group sessions.

### **Overall reflections**

It took me longer than I had initially planned to decide on my systematic review topic, as I was also developing a growing interest in compassion focused therapy and bounced between two potential research ideas, torn between which would be the best topic to complete a high quality review with, and be of the most benefit to my service. This led to delays and my clinical supervisor and I reflected on my slight perfectionistic tendencies which were becoming a barrier to moving forward with my assignments. This was an interesting opportunity for self-development, as I realised how traits that have been helpful in me gaining previous academic qualifications could also play out as a hindrance, particularly given the flexible nature of the professional doctorate in terms of structuring my own learning plans and deadlines for different pieces of work.

Completing this systematic review has been a turbulent experience. All the way from conducting scoping searches to synthesising findings, I have found myself questioning if I am doing things correctly, wondering if I've picked the wrong topic, and learning easier ways to do things as I go along which could have saved time. It has been a steep learning curve, however seeing it all come together in my write up has felt highly satisfying, a feeling unique to a student overcoming new academic challenges for the first time.

If I was to conduct a systematic review in the future, there are things I would do differently. First of all, I would opt for specific inclusion and exclusion criteria to collect more homogenous data which would be easier to synthesise. Secondly, I would complete data extraction and quality assessment at the same time, to avoid having to familiarise myself with each paper twice. Finally, I would approach the processes with more enthusiasm and confidence, as while this review has been a long journey the destination of a completed project has been worth the travel.



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# Consultancy in Health Psychology

## Consultancy Case Study

### Introduction

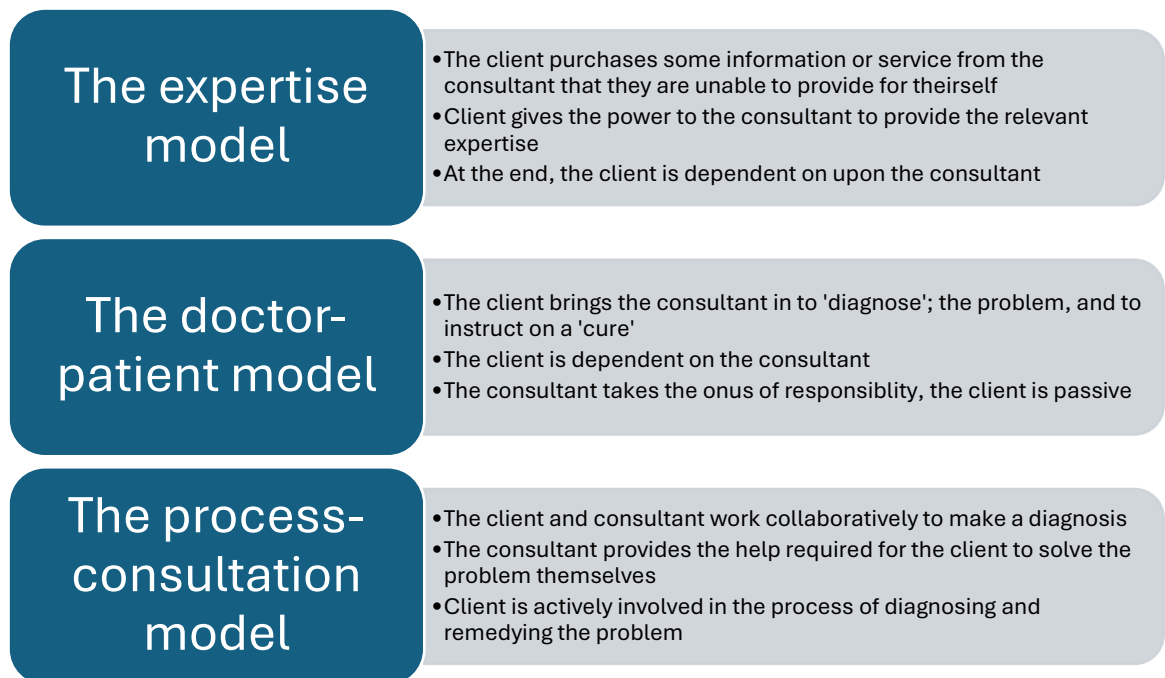
Health psychology consultancy involves drawing on health psychology theory, models and skills to provide a service to an external business or client (The British Psychological Society, 2020) and it makes up one of the key competencies of a health psychologist. There are multiple definitions of consultancy available spanning definitions specific to health psychology (for example, Earll & Bath, 2009) and from the school of business studies (i.e., Lippitt & Lippitt, 1994). A common theme amongst definitions is that of helping. Therefore, it is important to ensure the process is empowering for the client (Earll & Bath, 2009).

The consultancy project described in this case study involved the design of a leaflet to advertise a breathlessness management outpatient group intervention, delivered by a health psychologist and a respiratory practitioner. This opportunity arose through a mutual colleague who was aware that I was looking for a consultancy project and introduced me to the client in April 2023.

### Consultancy approach chosen

Right from this initial introduction, I was stepping into new shoes as working as a consultant was entirely new to me. I therefore familiarised myself with different models of consultancy to inform the manner in which I interacted with potential clients and how I represented myself as a trainee health psychologist. Schein (1999) discusses three models of consultancy: the expertise model, the doctor-patient model and the process consultation model (see figure one for definitions).

**Figure one: models of consultancy (Shein, 1999)**



I was keen to take a process-consultation model approach towards my interactions with the client and planning my project. I believe that when providing a service to a company you are unfamiliar with the client is the expert, therefore their active involvement would lead to better outcomes. I therefore took a collaborative stance to initial meetings, to communicate to the client that we would be working as equals, although with separate roles and responsibilities.

The approach taken to this project followed Newton's (2019) core stages of consultancy: propose (find, focus and frame), deliver (commence, collect, consider, create, counsel & consult) and close.

### **Section one: Propose**

#### *Finding*

According to Newton, the initial stage of consultancy, propose, involves finding, focusing and framing a project. The opportunity for this consultancy project emerged when I was introduced to the client through a mutual colleague. The client (BF) worked as a respiratory practitioner at a local hospice, where she ran a breathless management programme, alongside a health psychologist and a holistic therapist. BF was responsible for recruitment of patients into the programme and informed me that since the pandemic they had struggled with recruiting enough patients to run the

groups. Therefore, we agreed to initially meet to discuss how I could offer a consultancy service to support her in improving recruitment to the programme.

### *Focusing*

Once I had found this opportunity, I had to focus in on how the project could be developed to best suit the client's needs, and line up with my skill set and availability. This is an important step in the process, as consultancy requests are often vague and related to complex issues, and without focusing into specific requirements, consultants might be expected to solve every issue (Newton, 2019). It is important to establish a professional relationship and build rapport in this step, therefore a period of talking, thinking and time is required.

The client only worked at the hospice one day a week, she made it clear from the start that her time was limited. Therefore, we agreed to mostly stay in contact over email, supplemented by phone calls to give us opportunities to discuss ideas in more detail. We had an initial phone call during which BF explained the scope of the recruitment problem, and her current approach to handling it. She explained that the problem had been exacerbated by the covid-19 pandemic, and changes to staffing of local services, which were previously big referrers into the breathless management programme, leading to decreased awareness of the programme. BF suggested ideas such as me attending a general practice surgery away day to discuss the programme or contacting potential referrals directly. I felt this would have led to an 'expertise model' of consultancy (Shein, 1999), whereby I provided the service of increasing referrals to the breathless management programme. I explained to the client that while this may help initially improve local health care professionals' referral behaviour, it may be a short-term solution that would become ineffective if staff turnover repeated. Therefore, I suggested taking a 'process-consultation model' approach to the consultancy (Schein, 1999), where I provide support in helping the client solve the problem for themselves. We discussed that this could be through developing materials the client could use to support recruitment into the programme, a long-term solution. Therefore, the agreed aims of the consultancy were to develop a leaflet using health psychology models and principles of behavioural science to increase future recruitment into the breathless management programme. At this stage, I emailed a summary of our initial conversations to the client and the client shared their current leaflet with me.

### *Frame*

Now that the focus of the project had been determined, the next step was to frame the project. This involves negotiating the specifics (Newton, 2019), and developing a contract. As we had already had phone conversations and email correspondence, the client was happy with the first draft of the contract I sent over and signed it immediately. This was a testament to the benefit of having open and clear communication from the start. At this stage, I also thought about the wider system around the client I had been communicating with, and how that system can be understood as different types of clients discussed by Schein (1999). I had a *primary client*, BF, who was as my main point of contact was also my *contact client*. There was also an *intermediate client* group, senior members of staff at the hospice, and the '*ultimate client*': the group of patients who would be viewing the leaflet I designed.

### **Stage two: Deliver**

The deliver stage of Newton's model of consultancy is split into five iterative sections: commence, collect, consider, create and counsel and consult. While it is expected for this stage to be iterative rather than linear, I experienced a hurdle from the very outset. The initial commence step involves collecting resources for the work, which in this case included:

1. Data about recruitment numbers
2. Anonymised satisfaction data
3. Signed consent forms from patients willing to give feedback
4. Contact details of patients who were willing to give feedback

The client started the process of obtaining approval to send me this data after we signed the contract in May 2023. This had to be escalated to the Hospice Data Protection Lead, and due to changes in staffing this request was put on hold until November 2023. At this point I received data and instructions to have a DBS check to be able to speak to patients, which further delayed the project until February 2024.

Throughout this time, I sent multiple emails to the Data Protection Lead requesting updates on progress to ensure things were moving forward. As my client had made me aware of the circumstances surrounding the delays, I was understanding and communicated this in a friendly and open manner. My client and I had a reassuring phone call to discuss how the project could proceed after the unexpected delays, as I had less time to work on the project.

We agreed to slightly amend the scope of the project, reducing from two leaflets to one. The contract was tweaked accordingly and re-signed, which was a simple process as it was a minor change which my client and I had discussed in conversation. The client signed the contract promptly as she understood the reason for the changes I was making to the project outputs, which allowed us to proceed quickly. This experience has taught me the importance of open conversations when amending contracts.

Due to the delays faced I also shifted to using more of a 'doctor-patient model' of consultancy, as both my own and my client's limited time meant we had less time to collaborate on this project. We agreed I would work fairly independently in analysing data, speaking to patients and developing the leaflet.

#### *Commence, collect and consider*

Once the client had provided me with the current leaflet and the data discussed above, I was able to commence the project. I was provided with recruitment data from 2021-2022, which highlighted that out of 47 referrals into the group, 12 (25%) declined an assessment. Attrition reasons were down to poor physical health, which is in line with literature into palliative care outpatient groups (Moorey et al., 2009; Strömberg et al., 2005). Anonymous satisfaction data was also considered, which indicated that for patients who do complete the breathless management programme, satisfaction is high with all aspects. I therefore decided design a leaflet to provide future patients with key information about the benefits of the group, and to use feedback from previous patients to consider what facilitated their attendance to the group.

When developing the questions that I wanted to ask previous patients, I thought about the behaviour that I wanted the leaflet to help change: uptake of the breathless management programme. I decided to apply the Capability, Opportunity, Motivation model of Behaviour change (COM-B; Michie et al., 2011), to understand patients' perspectives of their own capability, opportunity and motivation to attend the group. I therefore framed my questions around this model (figure two). I chose to use this model because I was conscious to avoid anything too jargonistic and complex, and the model is concise and clear (Michie et al., 2011). Once I had framed my questions, I managed to speak to five patients over the phone to collect feedback.



**Figure two: questions based on COM-B model**

Capability	Opportunity	Motivation
<ul style="list-style-type: none"> <li>• <b>Physical capability</b> = what the group requires someone to do, physically</li> <li>• <i>Was the environment suitable for your needs?</i></li> <li>• <i>Were there any barriers to attending the group?</i></li> <li>• <i>Were the amount of sessions and length of sessions suitable?</i></li> <li>• <b>Psychological capability</b> = what the group requires someone to do cognitively</li> <li>• <i>How did you find the information and techniques shared in the group?</i></li> <li>• <i>Is understandable, easy to recall, appropriate amount/detail</i></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Social opportunity</b> = knowing what others in a similar position have done</li> <li>• <i>How did you find being in a group? What was it like meeting the other people?</i></li> <li>• <i>Did you know anyone else who had been on the group already?</i></li> <li>• <b>Physical opportunity</b> = how someone accesses the group</li> <li>• <i>How was the process of signing up to the group?</i></li> <li>• <i>How did you hear about the group?</i></li> <li>• <i>Would anything have made it easier for you to attend the group?</i></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Reflective motivation</b> = thoughts about why the group was important</li> <li>• <i>What was your motivation for attending the group? What made you want to go?</i></li> <li>• <i>What was important about the group, to you?</i></li> <li>• <b>Automatic motivation</b> = automatic responses to the idea of the group</li> <li>• <i>What was your initial response when you heard about the group?</i></li> <li>• <i>Feelings about the group beforehand</i></li> </ul>

Alongside planning the questions that I was going to ask patients, I was mindful of the process of inviting patients to talk to me and considered potential ethical issues in line with the British Psychological Society's ethical guidelines (BPS, 2018). I wanted to ensure patients gave informed consent before the client passed their contact details over to me and developed a consent form for clients to sign. I then carefully considered how to introduce myself when calling patients, and decided to say I was ringing on behalf of the hospice. I then reminded patients of my relationship with the client and the aim of the project and reassured them about how the data were being collected, stored and used. I then gave them the opportunity to ask any questions before sharing their feedback.

I used a deductive reflexive thematic analysis approach (Braun & Clarke, 2022) to consider my data, and how feedback fit into each aspect of the COM-B model.

### *Create*

I consulted the NHS toolkit for producing patient information (Department of Health, 2003) for guidance on how to ensure my leaflet was clear and understandable. These guidelines encouraged me to be concise and to use the least amount of information to get my points across. I created the leaflet using the design software Canva.

### *Counsel & Consult*

The counsel and consult phase was an iterative process. I spoke to my client after data collection, when I was considering the direction to take the leaflet in, and my client was happy to give me autonomy over this. Newton describes this phase as a period

during which the client has time to consider and accept or reject findings. While the outcome of this project didn't involve any specific findings, I was pleased that the client accepted the leaflet with one minor amendment.

### **Stage three: Close**

While Newton does not break the final stage down into subsections, he emphasises the importance of closing a project well. He explains that a satisfactory, organised and managed ending is important to allow the client to gain real value from the work, after the consultant's involvement has ceased. I believe that as the project involved giving the client the tools to increase their recruitment strategy, the value will be seen over the coming months. Newton recommends that to consider how well a consultant has influenced an organisation, they should ask themselves 'now the project is over, does the client have a better strategy?'. I believe that this project has resulted in a better recruitment strategy for the client through improved client knowledge, improved recruitment materials and motivation.

To support the client in understanding the work I completed, I wrote a clear and concise report summarising the approach I took and the findings around previous patients' perceptions of attending the group. The report included both quantitative data provided by the service, and qualitative I data collected. I also used diagram to present the COM-B model with explanations of each concept, applied to the project. For example, I didn't expect the client to understand the term 'psychological capability', and so explained that this means "*what the group requires someone to do, cognitively*". This report supplements the improved leaflet, to help the current client and any future colleagues understand how the leaflet has been designed, to support them in making any edits to the leaflet should the group evolve and change.

In Block's (2011) writing about the consultancy process, he describes measuring the success of a project by paying attention to the optimism and self-sufficiency left behind. At the end of the project, the client expressed they were excited to be able to share this leaflet with referral agents, indicating that the consultancy had left them feeling positive about future interactions with potential referrers into the programme and motivated to continue the recruitment process for future groups. I was pleased to be ending the project on an optimistic note, with a client who felt able to use the project outputs moving forward.

## **Client feedback**

My client provided written feedback stating that they were pleased with the outcomes of the project and were satisfied with the process of working with me. The client also shared the project with the hospice's Director of Care and Operational Services, the Medical Director and the CEO. I was pleased to hear further feedback from these senior staff, who described the project as *"invaluable"* and *"inspiring"*, and the leaflet as *"clear and concise, does not present as pushy or scary to a patient who may be inquisitive about the programme"*.

## **Reflections and summary**

This case study describes my first experience of working independently as a trainee health psychologist, providing a consultancy service to a local hospice. I have found it to be a useful experience for my overall professional development, particularly the initial stages of introducing myself and developing a professional working relationship with the client. While it was challenging to do this without any meetings in person, I believe I was able to build rapport effectively. I did this by responding quickly to emails, emailing a summary of our initial telephone call to demonstrate I understood the client, and offering regular telephone calls to show my commitment to effectively communicating. This was also my first experience of negotiating deliverables of a project and developing a contract. I felt I was able to do this effectively with a satisfactory outcome for all involved. From delivering this consultancy service, I would feel more confident about approaching future consultancy projects.

This project was not without setbacks and challenges. The delays faced in getting my approval to access data were frustrating and led to the project being far lengthier than anticipated. I believe this was down to resource and staffing within the information governance team at the hospice, something that I had not considered when planning and negotiating the project. However, I have learnt a valuable lesson from the experience, and in the future, I would ensure to get all necessary approvals prior to signing contracts, or make the clients' responsibility for providing the data withing a specific timeframe clear. Fortunately, this did not lead to any conflict between my client and me. I believe this was down to the working relationship that we had built up, and the fact we understood each other's availability for working on this project and amount of flexibility we both had with deadlines. Having this understanding of each other's roles and commitments outside of this project, meant we were both happy to

agree to pause the project while the necessary actions from the information governance teams happened behind the scenes.

Overall, I enjoyed the consultancy process as it allowed me to gain insight into a charity organisation. I also enjoyed speaking to palliative care patients and learning from their experiences of the service they had received. This opportunity to apply my health psychology knowledge and skills to an external service and a group of patients whom I had not worked with before will contribute to me becoming a more well-rounded psychologist with varied experiences. Having now experienced the consultancy process, I see consultancy as a pathway to continue my professional development in the future, through which I could work with a variety of clients and companies.

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## Consultancy Contract

# GENERAL SERVICE AGREEMENT

THIS Consulting AGREEMENT (the "Agreement") is dated this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between the Parties (the "Parties"):

### CLIENT

XXXXXX signing on behalf of XXXXXXXXX  
(the "Client")

### CONSULTANT

Lorna Parks, Clinical Health Psychology Department, XXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
(the "Consultant")

### BACKGROUND

- A. The Consultant has the necessary qualifications, experience and abilities to provide services to the Client.
2. The Consultant is agreeable to providing such services to the Client on the terms and conditions set out in this Agreement.
3. The consultancy work will be written up as a case study as part of the Consultant's Professional Doctorate in Health Psychology. A consent form is provided to the Client with further details as a supplement to this Agreement.

**IN CONSIDERATION OF** the mutual rights and obligations contained in this Agreement the Parties HEREBY AGREE AS FOLLOWS:

#### 1. SERVICES PROVIDED

- 1.1. The Client hereby agrees to engage the Consultant to provide the Client with the following services (the "Services"):

- 1.1.1. Up to two electronic leaflets will be developed to support Halton Haven Hospice in improving patient recruitment for the Breathlessness group.
- 1.1.2. A brief electronic report will be collated detailing the work the Consultant has done. This will explain the reason why the Consultant was enlisted to do the work and the problem the Client was experiencing with recruitment. It will summarise any data that the Consultant has been given access to regarding recruitment into the Breathlessness group. It will explain the scoping work the Consultant has done to consider how to improve recruitment. It will include an overview of any outcome data or qualitative data the Consultant has been able to access. It will explain why the information in the electronic leaflets was included, and how it aims to increase recruitment. This brief report will aim to increase the Client's understanding of how to improve future recruitment into the group, utilising the electronic leaflets.

- 1.2 The Consultant hereby agrees to provide such Services to the Client.

## **2. TERM OF AGREEMENT**

- 2.1. The term of this Agreement (the "Term") will begin on the date of this Agreement and will remain in full force and effect for the consultancy period, anticipated to be of 4 months, subject to earlier termination as provided in this Agreement (see clause 18). The Term may be extended with the written consent of the Client AND the Consultant.

## **3. PERFORMANCE**

- 3.1. The Parties agree to do everything necessary to ensure that the terms of this Agreement take effect.

## **4. FEE**

- 4.1. The Consultant will charge the Client a flat fee of **£0.00** for the Services (the "Payment").
- 4.2. The Consultant will not be reimbursed for any expenses incurred in connection with providing the Services of this Agreement. Any equipment used for the Services, including a laptop and recording materials, will not be reimbursed.
- 4.3. It is anticipated that no travel expenses will be occurred during the Services of this Agreement.

## **5. CONFIDENTIALITY AND PUBLICATION**

- 5.1. In relation to Confidential Information received from the other Party or from a third Party on behalf of the other Party, the Parties agree to treat such Confidential Information in confidence and to use it only for the project.
- 5.2. In this Agreement "Confidential Information" shall mean all information disclosed by one Party to the other Party which has value by virtue of not being publicly known, but shall not include any part of such information which: (i) is in or comes into the public domain in any way without breach of this Agreement; or (ii) the other Party can show was recorded in its files prior to receipt or can show to have been independently developed without recourse to the Confidential Information; or (iii) the other Party obtains from another source without breach of any obligation of confidentiality or non-use; or (iv) is required to be disclosed by law.

## **6. OWNERSHIP OF INTELLECTUAL PROPERTY**

- 6.1. All Intellectual Property and relevant material will be the sole property of the Consultant.
- 6.2. The use of the Intellectual Property by the Client will not be restricted in any manner.
- 6.3. The Client may not use the Intellectual Property for any purpose other than that contracted for in this Agreement except with the written consent of the Consultant. The Client will be



responsible for any and all damages resulting from the unauthorised use of the Intellectual Property.

## **7. RETURN OF PROPERTY**

- 7.1. Upon the expiry or termination of this Agreement, the Consultant will return to the Client any property, documentation, records, or confidential information which is the property of the Client.

## **8. CAPACITY/INDEPENDENT CONSULTANT**

- 8.1. In providing the Services under this Agreement it is expressly agreed that the Consultant is acting as an independent consultant and not as an employee. The Consultant and the Client acknowledge that this Agreement does not create a partnership or joint venture between them, and is exclusively a contract for service.

## **9. AUTONOMY**

- 9.1. Except as otherwise provided in this Agreement, the Consultant will have full control over working time and methods, in relation to provision of the Services in accordance with the Agreement. The Consultant will work autonomously and not at the direction of the Client. However, the Consultant will be responsive to the reasonable needs and concerns of the Client. Decision making will predominantly be made by the Consultant, although the Client will be asked to provide feedback on the Services and suggest any changes.

## **10. NOTICE**

- 10.1. All notices, requests, demands or other communications required or permitted by the terms of this Agreement will be given

in writing and delivered to the Parties at the following email addresses:

XXXXXXXXXXXXXXXXXXXXXXXXXXXX (The Client)

XXXXXXXXXXXXXXXXXXXXXXXXXXXX(The Consultant)

or to such other address as either Party may from time to time notify the other.

## **11. INDEMNIFICATION**

- 11.1. The Consultant's liability or the amount of any indemnity, damages or compensation payable by the Consultant on any claim or claims whatsoever concerning or relating, directly or indirectly to anything supplied or provided and including but not limited to claims based on negligence, misrepresentation (other than fraudulent misrepresentation), breach of contract, or warranty, shall not in aggregate exceed the monies actually received by the Consultant under this Agreement.

## **12. DATA SHARING**

- 12.1. The Client is responsible for gaining any necessary approvals from their Trust's research department in order to share data with the Consultant.
- 12.2. The Client is to do everything necessary to securely share routinely collected patient data with the Consultant for the purpose of the project, adhering to the relevant information governance policies.
- 12.3. The Client is to do everything necessary to gain consent from patients for their contact details to be shared with the Consultant, if they are willing to give feedback on the service for use for the project.
- 12.4. If the Client is unable to gain the necessary approval to share the data, they understand that the quality of the output of the project will be significantly affected.
- 12.5. The Consultant shall comply at all times with the General Data Protection Regulation and shall not perform any Services under

this Agreement in such a way as to breach, or cause the Client to breach, the General Data Protection Regulation.

### **13 DISPUTE RESOLUTION**

- 13.1. In the event that any disputes occur and cannot be resolved between the Client and the Consultant, a neutral third party will be contacted to mediate.

### **14 CONTACT ARRANGEMENTS FOR THE DURATION OF THE CONSULTANCY WORK**

- 14.1. Throughout the project, the Client and the Consultant agree to contact each other with any updates or questions, and to arrange the agreed regular telephone meetings, via email.
- 14.2. The Client and Consultant agree to have three telephone conversations to discuss progress of the project. This will take place after the contract is signed, at the midpoint of the project, and a fortnight before the project ends. The conversation a fortnight before the project ends will be used to ascertain the Client's feedback on the Consultant's work.
- 14.3. The Consultant will take responsibility for arranging a specific date and time for these conversations.

### **15 MODIFICATION OF AGREEMENT**

- 15.1. Any amendment or modification of this Agreement or additional obligation assumed by either Party in connection with this Agreement will only be binding if evidenced in writing signed by each Party or an authorised representative of each Party.

### **16 GOVERNING LAW**

- 16.1. This Agreement will be governed by and construed in accordance with the laws of England.

### **17 TERMINATION**

- 17.1. In the event that either Party wishes to terminate this Agreement prior to completion of the Terms of Agreement being completed, that Party

will be required to provide written notice 7 days in advance. Any work conducted prior to this will be provided to the Client, regardless of which Party terminated the Agreement.

## **18 STANDARD OF CONDUCT**

- 18.1. The Consultant will adhere to professional and ethical standards in line with the British Psychological Society Code of Ethics and Conduct.
- 18.2. The Consultant will use the British Psychological Society Code of Ethics and Conduct to consider any ethical issues that arise in connection with this Agreement. If this occurs, decisions made will be documented and communicated in writing to the Client.

**I hereby acknowledge receipt and accept the contents of this Agreement.**

### **CONSULTANT**

Name: .....

Title: .....

Signature: .....

Date: .....

### **CLIENT**

Name: .....

Title: .....

Signature: .....

Date: .....

# Teaching and Training in Health Psychology

## Teaching case study

This case study describes a series of five teaching and training sessions I delivered to fulfil this competency of the professional doctorate. The following aspects of delivering teaching and training sessions will be covered: assessment of learning needs, identification of content and structure, selection of materials and teaching approaches, and assessment of learning outcomes.

### Background

I chose to deliver my sessions around the theme of “third-wave therapies in health psychology”. I chose this theme after attending two three-day continuing professional development courses in compassion focused therapy (CFT; Gilbert, 2009) and acceptance and commitment therapy (ACT; Hayes, 2004). Seeing how well these therapy models could be used to support people with health conditions, I was keen to share my knowledge with other students and healthcare professionals. I therefore liaised with academic contacts and the clinical skills education department within my workplace and secured five teaching opportunities.

After considering various opportunities, I agreed to deliver the five sessions to different groups, allowing me to develop my teaching skills across a variety of contexts. These opportunities included one session delivered to healthcare professionals (junior doctors within my workplace), and four sessions delivered to students (undergraduate students, masters students and professional doctorate students) across three universities. The sessions also allowed me to teach groups of different sizes, ranging from a smaller group of 13 to a larger group of 34. For an overview of sessions, see table 1.

Throughout this process I followed the systemic approach described by Stefani (Stefani, 2009). This involves the following stages: 1) assessment of learning needs, 2) planning outcomes, 3) designing teaching, 4) implementing teaching strategies, 5) assessment of outcomes and 6) a revision cycle. Stages one to five are discussed

within this case study, and stages five and six are discussed in the accompanying evaluation.

**Table 1: overview of sessions**

Session number and title	Audience (and setting)	Number of participants	Format of delivery
1. Compassion focused therapy in physical healthcare services	Conference attendees (Staffordshire University)	13	Workshop (mixture of PowerPoint, roleplay demonstration, group tasks)
2. Building confidence in responding to inpatients' psychological needs	Foundation year one junior doctors (NHS Trust)	34	Training session (PowerPoint, group tasks)
3. Third-wave therapies in health psychology	Level six undergraduate psychology students (Staffordshire University)	23 (planned for 45)	Lecture
4. Health Psychology Practice – using Acceptance and Commitment Therapy & Compassion Focused Therapy	MSc Health Psychology students (Manchester Metropolitan University)	34	Pre-recorded lecture slides followed by an interactive workshop
5. Using the Acceptance and Commitment Therapy (ACT) Matrix as a formulation tool	Conference attendees (Staffordshire University)	24	Workshop (mixture of PowerPoint and group tasks)

### **Assessment of learning needs**

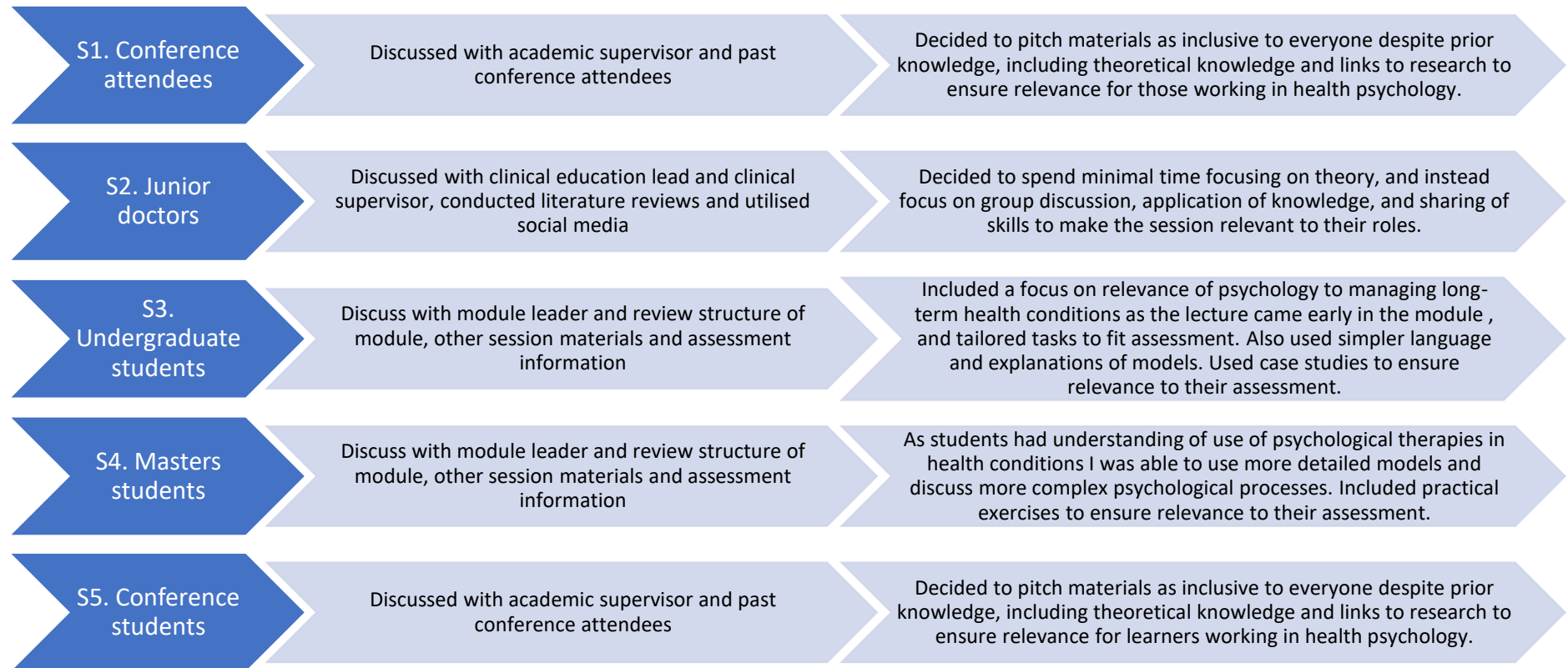
Learning can be described as a change to someone's thinking and behaviour (Burns, 2020). Northedge (Northedge, 2005) identifies three aspects to learning: (i) integrating knowledge through reading or hearing, (ii) fitting new knowledge in alongside what is already known, and (iii) expressing new ideas to communicate previously known concepts. This indicates the importance of learners engaging with the process of

learning and being able to connect concepts and ideas with what they already know. These ideas are in line with a constructionist school of thought, which emphasises that learners construct new understanding based on what they know and believe from previous experience (Kolb & Kolb, 2005).

I took this overarching approach of constructivism to the designing and delivery of these teaching and training session. This approach ensures that students are active participants in learning, by building knowledge in terms of what they already understand, allowing for effective retaining of information (Fry et al., 2008.) It is also in line with my own professional values of collaborating with people I am working with, rather than seeing myself as an 'expert' imparting knowledge to others.

Conducting an assessment of learning needs can be thought of as having two goals: (i) to learn what is already known and what education is needed; and (ii) to ensure teaching is accessible, acceptable and useful (McCawley, 2004). Furthermore, being familiar with the audience allows materials to be appropriately tailored and made relevant, which is likely to increase motivation for engaging with the session, which is a contributing factor to 'deep' learning (Biggs & Moore, 1993). I conducted indirect needs assessments for all of my training sessions, which involved gathering secondary data rather than speaking directly to the learners I would be delivering sessions to (McCawley, 2004). While I took an indirect approach to conducting needs assessments for all groups, the specifics differed between the different groups. See figure 1 for an overview of session needs assessments.

Figure 1: overview of methods of needs assessments and outcomes





Sessions 1 and 5 were delivered at the University of Staffordshire health psychology conference, which provided challenges for assessing learning needs. While I was aware that all attendees would have a link in with health psychology (i.e., members of university staff, MSc or PhD students) I was not able to access any information about their areas of specialism or knowledge of third wave therapies prior to the session. To assess needs I spoke to members of the teaching team and previous students to understand their experiences of previous conference workshops. My supervisor advised that for these sessions it would be tricky to do an in-depth needs assessment, and that I should expect a wide variety of knowledge in the room and therefore pitch it for people who have no knowledge of third-wave therapies. Therefore, I ensured that my materials were pitched at an accessible level and relevant to attendees who were all likely to be working in or studying health psychology. This felt quite challenging for both sessions as I was having to introduce complex concepts underpinning a model of therapy and do that succinctly enough to leave time for workshop style activities. I found that creating specific learning outcomes was helpful for this process, to keep myself focused on which specific bits of knowledge I wanted to share.

For sessions 3 and 4 (academic sessions) I spoke to the course organisers who I had been in contact with to arrange the sessions. These sessions were both delivered as one-off standalone sessions in university modules. Module leaders shared materials for other sessions delivered on the module, therefore I was able to integrate my standalone sessions in a way that made them relevant for students. I was also able to tailor my materials to fit in with the module assessment. The undergraduate module assessment involved applying learning to a case study, therefore I created some case studies for learners to apply the therapeutic models to. The Master's module involved assessing them on using interpersonal skills in roleplay, therefore I asked students to do experiential exercises in pairs, to allow them an opportunity to practice their interpersonal skills.

Finally, for session 2 I spoke to several organisational leaders to assess learning needs of junior doctors, and reviewed literature looking at communication skills and compassion within this learner group. I also spent some time considering conversations I had previously had with junior doctors when working alongside them. Finally, as this cohort of junior doctors started their roles in August, and were only a few months into their first placement, I spent some time on social media reading and watching content shared by junior doctors to ascertain what people's lived experiences

of starting these roles was like. While this didn't directly influence my session, it provided some context for me, particularly around the difficult experiences that are relevant for this group (i.e., relocating for their training posts, making the transition from student to clinician, adjusting to work patterns with nightshifts / on call periods).

I got a sense of the overwhelming amount of knowledge for this group to learn, which encouraged me to be realistic with learning outcomes. Therefore, I went much more 'theory light', as it was the only psychology session they would be receiving I thought they are unlikely to retain complex theoretical information which wouldn't be followed up. I instead focused on one simple theory and practical things they could take from the session, which would be easy to practice within the session.

### **Identification of session structure and content**

#### *Learning outcomes*

Learning outcomes are defined as a change as a result of a learning experience (Watson, 2002). As education has generally shifted from a didactic towards a constructivist approach, learning outcomes have been argued to support the shifting of attention away from the content of courses, and towards the achievements of students (Maher, 2004). When designing my sessions, I consulted Bloom's taxonomy of learning. Bloom's taxonomy is a framework originally proposed in 1956, and revised in 2002, providing six levels of learning increasing in complexity (Bloom & Krathwohl, 1956; Krathwohl, 2002). As my sessions were all stand-alone sessions, I decided to tailor learning outcomes to Bloom's first three learning levels: knowledge, comprehension, application. See table 2 for an overview of session learning outcomes.

#### *Session structure*

For all of my sessions, structure was pre-determined to a certain extent. I had the most flexibility with session 2 (junior doctor workshop) as this was a new addition to the mandatory training education day, therefore aside from timings I was able to design my own structure. All other sessions had pre-determined requirements (i.e., workshop or lecture style, timings). I then had to tailor my delivery to be unique for each group within the constraints of the settings and contexts. There were similarities and differences between each session. For example, all sessions contained some didactic elements, as new concepts were introduced to learners, however in session 4 I was able to pre-record the didactic content and therefore could make the workshop far

more interactive with a focus on experiential learning. This was appropriate for this learner group, as their module so far had them practising interpersonal skills and performing interactive tasks together, therefore I was able to build upon this to fit their usual style of sessions, while delivering on entirely new content.

Furthermore, as I progressed through my teaching sessions and developed my skills, I made changes to improve my sessions, such as leaving more time for group tasks and ensuring to allow space for getting reflections from all group.

Table 2: learning outcomes and methods of assessment of learning

Session number and title	Learning Objectives	Assessment of learning
1. Compassion focused therapy in physical healthcare services	<ul style="list-style-type: none"> <li>• To understand the basic concepts of CFT</li> <li>• To understand how CFT fits with health psychology services</li> <li>• To be able to apply CFT to the experiences of a person with a long-term health condition and make sense of someone's experiences from a CFT perspective</li> </ul>	<p>End of session questions:</p> <ol style="list-style-type: none"> <li>1) What have you learnt from this workshop?</li> <li>2) Is there anything from this workshop you will apply going forward, in your professional or personal life?</li> </ol>
2. Building confidence in responding to inpatients' psychological needs	<ul style="list-style-type: none"> <li>• To reflect on what compassion is and how it helps us respond to difficult emotions</li> <li>• To consider different emotional responses to hospital admission and the factors driving them</li> <li>• To understand when and where to refer patients for onwards psychological support</li> <li>• To consider barriers to compassionate care and the importance of self-compassion</li> </ul>	<p>Pre &amp; post outcome measures:</p> <p>A brief measure of capabilities, opportunities, and motivations ("COM-B") adapted from Keyworth et al (2020) which measures their perceptions of their capability, opportunity and motivation to respond to patients' psychological needs with compassion</p>

Session number and title	Learning Objectives	Assessment of learning
3. Third-wave therapies in health psychology	<ul style="list-style-type: none"> <li>To understand why someone with a health condition might access a clinical health psychology service</li> <li>To be able to discuss why CFT and ACT are used in health psychology</li> <li>To consider the application of CFT and ACT to case studies</li> </ul>	<p>End of session questions</p> <ol style="list-style-type: none"> <li>1) As a result of this lecture, I have a better understanding of the challenges experienced by people with health conditions</li> <li>2) As a result of this lecture, I have a better understanding of why psychologists work in healthcare?</li> <li>3) As a result of this lecture, I have a better understanding of Acceptance and Commitment Therapy (ACT).</li> <li>4) As a result of this lecture, I have a better understanding of Compassion Focused Therapy (CFT).</li> </ol>
4. Health Psychology Practice – using Acceptance and Commitment Therapy & Compassion Focused Therapy	<ul style="list-style-type: none"> <li>To understand the core processes underpinning Acceptance and Commitment Therapy (ACT) and Compassion Focused Therapy (CFT)</li> <li>To be able to discuss why ACT and CFT are models are used within health psychology</li> <li>To be able to critically compare the two models</li> </ul>	<p>End of session questions:</p> <ol style="list-style-type: none"> <li>1) I have an understanding of the core processes underpinning Acceptance and Commitment therapy</li> <li>2) I have an understanding of the core processes underpinning Compassion Focused therapy</li> <li>3) I understand why ACT and CFT are used in health psychology</li> <li>4) I can consider the similarities and differences between ACT, CFT, CBT</li> </ol>
5. Using the Acceptance and Commitment Therapy (ACT) Matrix as a formulation tool	<ul style="list-style-type: none"> <li>To have a basic understanding of how the Acceptance and Commitment Therapy (ACT) matrix is used</li> <li>To be able to apply the matrix framework to a case study</li> </ul>	<p>End of session questions:</p> <ol style="list-style-type: none"> <li>1) I have a basic understanding of how the Acceptance and Commitment Therapy (ACT) matrix is used</li> <li>2) What have you learnt from this workshop?</li> </ol>

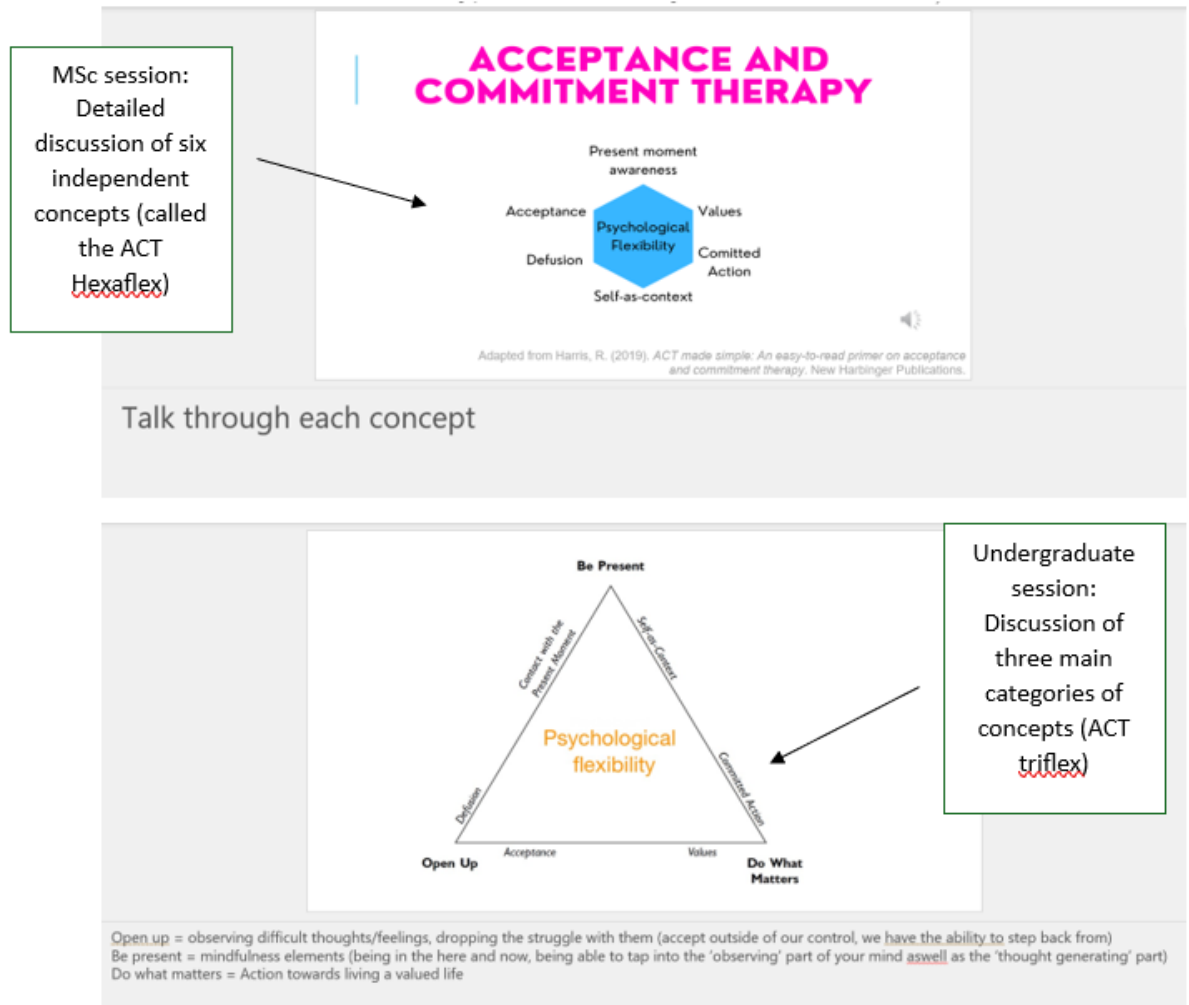
### *Session content*

When planning content, I considered two of Biggs and Moores' strategies to promote deep learning: motivational context and having a well-structured knowledge base. To set motivational context in sessions that were part of a module, I signposted between my session and the other module sessions and overall learning outcomes of the module and assessment. I also ensured a well-structured knowledge base for all sessions, reading literature tailored for each session and including references for all sessions.

I used PowerPoint to deliver content for all of my sessions. When PowerPoint is used effectively, i.e., with multimedia (such as audio, video, graphics, text, and special effects) it can have a positive effect on learning (Hallett & Faria, 2006). I also chose to integrate audio-visual aids which can improve student understanding and interest in larger settings (De Matos-Ala & Hornsby, 2013) and used case studies to bring teaching to life. For my first sessions I had a supervisor look over my slides to offer any suggestions and tips.

Content was consistently linked in with needs assessments and learning outcomes for each group, to be tailored for different learners. For example, sessions which were based on the same model of therapy offered a different level of detail based upon learners' pre-existing knowledge of psychological therapy. See Figure 1 for an example of differences between session content delivered at undergraduate and master's level.

Figure 1: Example of tailored session materials



### Selection of materials and teaching approaches

When planning my approach to teaching, I considered two of Biggs and Moores' (1993) strategies to promote deep learning: learner activity and interaction with others. I applied a number of strategies to increase learner activity (i.e., tailor made worksheets, Mentimeter, practical activities) and included group tasks to facilitate interaction with others. I also consistently made materials relevant for students and in line with how they usually learn. For example, academic sessions included more of a focus on psychological models and research, whereas the junior doctor session had more of a focus on practical applications of simpler psychological concepts. I also adapted my approach based on the size of the group, with an emphasis on small group work for workshops, and using technology to encourage interaction in the larger lecture-style

group. Finally, I always made materials relevant to the specific learner group to promote integration of new knowledge with what they already know.

### **Assessment of learning outcomes**

The fifth step of Stefani's (2009) approach to planning teaching is assessment of outcomes. Assessment can be understood as any process undertaken to understand an individual's knowledge, understanding, ability or skills (UK QAA, 2018). Assessment can also provide information to teachers to help shape future teaching (Yorke, 2003).

Sessions 1, 2 and 5 were delivered as one-off sessions; therefore, it was most appropriate to use informal methods of assessment as learners were not undergoing any formal CPD or certification by attending my session. For sessions 3 and 4, which were delivered as part of an academic module, it was not appropriate to use students' end of module assessments to judge the impact of my session as this was looking at their overall increase of knowledge from the module in its entirety. Therefore, I used informal assessment methods for all sessions. See table 2 for an overview of assessment of learning methods.

I mostly used student feedback questions to assess learning, which I built upon as I progressed through my sessions. I learnt that assessment should be in line with learning outcomes (Stefani, 2009), therefore I made the feedback questions quantitative and relevant to each learning outcome. I took a different approach during the session at my workplace, as it was delivered as a service evaluation. I used outcome measures that learners completed immediately before and after the session. During all the sessions I also spent time talking to each group during group tasks, to assess how students were making sense of and discussing session content. Upon reflection, the feedback questions I asked could have been improved. For example, rather than asking "As a result of this lecture, I have a better understanding of Acceptance and Commitment Therapy (ACT)" I could have asked them to briefly summarise why ACT is used in health psychology. Alternatively, I could have used a quiz to better differentiate between assessment of learning outcomes and gaining student feedback on their experiences of the sessions. I did however get a good sense of student's learnings from the group discussions, which is discussed further in my reflective commentary.



## Summary

This case study has discussed five teaching sessions delivered within a range of learner groups and settings. Three stages of the teaching process have been described including assessing learning needs, identifying content and structure of selection of materials and teaching approaches, and assessment of learning outcomes. Throughout designing, delivering and evaluating these sessions I have developed my skills in delivering stand-alone teaching and training sessions.

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# Evaluation and Reflective Commentary

## Background

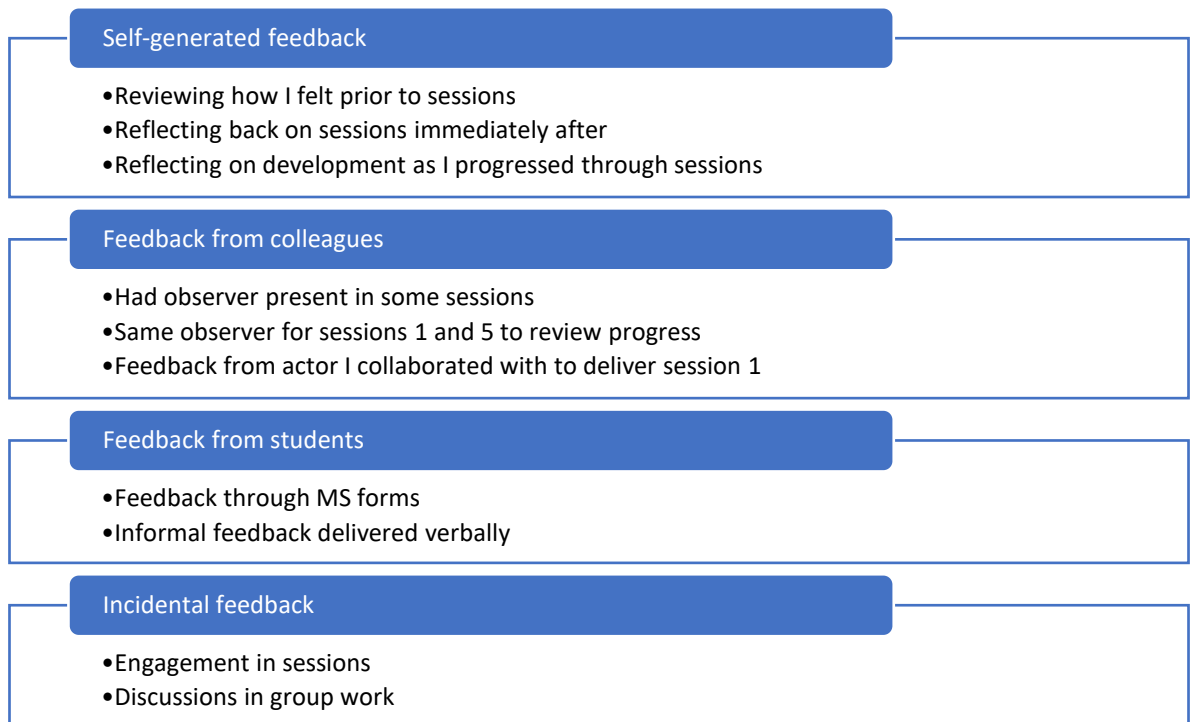
This evaluation and reflective commentary accompanies my teaching case study. Across the two reports I have followed Stefani's (2009) systemic approach to teaching, which concludes with a revision cycle. This commentary will cover the revision cycle by evaluating and reflecting on the teaching sessions.

Evaluating and reflecting on teaching is fundamental for improving and developing both teaching skills and learners' experiences (Ian & Martin, 2012). I felt this was a particularly important aspect of the process for me, as someone who was relatively new to delivering teaching and training. The following commentary discusses the feedback collated across the five sessions, which informs an overview of my teaching strengths and successes, followed by challenges and areas for improvement.

## Feedback

Hounsel (2009) describes four types of feedback available: self-generated feedback, feedback from colleagues, feedback from students, and incidental feedback. To conduct a robust evaluation, evidence must be pulled from all these sources. See Figure 1 for an overview of the different types of feedback I received.

**Figure 1: overview of feedback**



As I was relatively new to teaching and training, for my first three sessions I gathered the most feedback possible, including prior to the session. After that I progressed to planning sessions more autonomously gathering less feedback. For example, for sessions 1 to 3 I gathered feedback on slides prior to the session from different parties (See Table 1 for more detail).

**Table 1: feedback gathered in each session**

Session number	Audience (and size)	Feedback gathered (and type)	Tailoring for session
1	Conference attendees (13)	<p>Prior to session:</p> <ul style="list-style-type: none"> <li>- Slides reviewed by academic supervisor (from colleagues)</li> </ul> <p>During session:</p> <ul style="list-style-type: none"> <li>- Engagement with activities and group discussion (incidental)</li> </ul> <p>After session</p> <ul style="list-style-type: none"> <li>- Email feedback from service user</li> <li>- Supervisor completed peer observation form (from colleague)</li> <li>- Anonymous feedback form (from students)</li> <li>- Reflected on strengths and challenges of session (self-generated)</li> </ul>	<p>First teaching session therefore requested feedback during preparation</p> <p>Only session where I involved someone in delivering an aspect, so interested to gain feedback on her experience of working with me</p> <p>Student feedback was brief and kept questions open</p>
2	Foundation year one (FY1) junior doctors (34)	<p>Prior to session</p> <ul style="list-style-type: none"> <li>- Slides reviewed by clinical supervisors and workplace colleagues (from colleagues)</li> <li>- Reflected on previous teaching and how I could learn (self-generated)</li> </ul> <p>During session:</p> <ul style="list-style-type: none"> <li>- Engagement with activities and group discussion (incidental)</li> </ul> <p>After session</p> <ul style="list-style-type: none"> <li>- Supervisor completed peer observation form (from colleague)</li> <li>- Anonymous satisfaction questionnaire (from students)</li> <li>- Reflected on strengths and challenges of session (self-generated)</li> </ul>	<p>Representing our department therefore gained feedback from multiple colleagues</p> <p>Reflected on feedback about calming nerves and being more confident when getting group feedback</p> <p>Service evaluation so used a longer satisfaction questionnaire to inform delivering sessions again to future FY1s/other staff groups</p>

Session number	Audience (and size)	Feedback gathered (and type)	Tailoring for session
3	Level six undergraduate psychology students (23, planned for 45)	<p>Prior to session</p> <ul style="list-style-type: none"> <li>- Slides reviewed by module leader (from colleagues)</li> <li>- Reflected on previous teaching and how I could develop (self-generated)</li> </ul> <p>During session:</p> <ul style="list-style-type: none"> <li>- Engagement with Mentimeter, asking questions and discussion in pairs (incidental)</li> </ul> <p>After session</p> <ul style="list-style-type: none"> <li>- Optional question asking for feedback during assessment of LOs (from students)</li> <li>- Module leader completed peer observation form (from colleague)</li> <li>- Reflected on strengths and challenges of session (self-generated)</li> </ul>	<p>Hadn't taught undergrad before and I was keen to gain feedback prior to session</p> <p>Kept this brief and open ended to encourage more students to respond</p>
4	MSc Health Psychology students (34)	<p>Prior to session</p> <ul style="list-style-type: none"> <li>- Reflected on my last experience of academic teaching (self-generated)</li> </ul> <p>During session</p> <ul style="list-style-type: none"> <li>- Engagement with pre-session materials that had been set and tasks in session (incidental)</li> </ul> <p>After session</p> <ul style="list-style-type: none"> <li>- Questions asking for a rating of how beneficial teaching was and option to leave any feedback (from students)</li> <li>- Discussion with module leader who had been present (from colleagues)</li> <li>- Reflection on session immediately after (self-generated)</li> </ul>	<p>As this was now my second session as part of an academic module I reflected on the importance of conveying relevance to students</p> <p>Asked this question to ascertain how students perceived relevance of sessions for their overall learning</p>

Session number	Audience (and size)	Feedback gathered (and type)	Tailoring for session
5	Conference attendees (24)	<p>Prior to session:</p> <ul style="list-style-type: none"> <li>- Reflection on development of teaching skills so far, and previous experience of workshop delivery (self-generated)</li> </ul> <p>During session:</p> <ul style="list-style-type: none"> <li>- Engagement with activities and group discussion (incidental)</li> </ul> <p>After session</p> <ul style="list-style-type: none"> <li>- Supervisor completed peer observation form (from colleague)</li> <li>- Anonymous feedback form (from students)</li> </ul> <p>Reflected on strengths and challenges of session (self-generated)</p>	<p>Chose to have the same observer for my first and final session, to gain reflections on overall development</p> <p>Anonymous feedback brief due to being a 45-minute conference workshop</p>

## **Strengths**

When reflecting on all sources of feedback from my teaching sessions, I am pleased to have several areas of positive feedback, indicating the success of my teaching sessions overall.

### *Communication and session delivery*

One of my anxieties when starting to deliver teaching sessions was around my ability to communicate clearly. I had a difficult experience during my undergraduate degree when I first delivered a presentation and nerves caused me to rush through my material, not make eye contact and ultimately receive a poor assignment grade. This had scared me off teaching and I was nervous about making the same mistake again. However, I knew my confidence had grown in so many other professional areas in the ten years that had passed since and was therefore ready to embrace the challenge.

Overall, I am pleased to have received feedback that my communication was clear and well-paced. My sessions were delivered in rooms of various sizes, therefore I always started by checking in that all students could hear me. I also reflected on my previous experiences of speaking to large crowds and ensured to speak slowly and clearly.

In feedback from sessions 1 and 2, it was picked up on that I might have started off visibly nervous but settled into the sessions, and that my volume dropped at times when looking at my notes or slides. Reading feedback from the first two sessions, I felt reassured by comments, particularly from a service user who I enlisted to perform a roleplay with me in my first session. Reading these comments helped settle my nerves. This highlighted to me the importance of gaining feedback from multiple sources. If I had focused primarily on my own reflections, I may have been disheartened by the perception I had of my own nerves being a barrier to sessions. Having multiple sources of feedback allowed for a more realistic view of how I presented myself when delivering the sessions.

As I progressed through the five sessions, I noticed that my nerves were decreasing, and I was feeling more confident going into sessions. This helped me deliver information in a calm manner and become less reliant on my notes. I also started to make informal small talk with students as they were arriving, to ease myself into sessions, which I found helped with nerves. The feedback from students reflected my own observations of shifts in my confidence, with a student in session 3 saying they



couldn't tell I was new to teaching. This was also noted in observers' reports, and clear in the way students communicated with me, asking questions and engaging with sessions (incidental feedback).

As well as clear communication, I consistently received feedback that my delivery style was enthusiastic and engaging. One student remarked that she usually struggles to stay engaged in lectures but was able to stay engaged throughout mine. I believe that it was easy to deliver my sessions in an engaging way, as I am passionate about promoting the use of third wave therapies in health psychology. Therefore, I approached all of my sessions with enthusiasm and excitement about the materials I was delivering.

#### *Sharing and nurturing knowledge*

Another area of success was my ability to share knowledge with learners and provide opportunities for them to consolidate this knowledge with what they already know, thus motivating deep learning (Biggs & Moore, 1993). I thought of this process as myself planting a seed with new information, and then students watering and nurturing this seed through reflections, interactive tasks and group tasks.

Learners consistently shared that they understood the information in the sessions. For the more applied sessions (Session 1, 2, and 5) learners noted that they were also thinking about ways they could use the information in their own personal and professional lives, implying that my sessions had been impactful. In the academic sessions (sessions 3 and 4) learners shared that their knowledge had increased, and reflected on how psychological knowledge could be applied in the real world.

Alongside the feedback gained from students about sharing of knowledge, I found that "working the room" during group tasks was extremely helpful to gain incidental feedback. I was able to ascertain how information was landing with people, and support students if any confusion arose. I also was able to spend more time talking to learners, which I found helped regulate my nerves and reassure me about how the sessions were going. This particularly helped me in the junior doctor session, as I found my 'imposter syndrome' was particularly high here and found it hard to tell if the doctors were learning anything. However, speaking to them in smaller groups and hearing their reflections helped me realise they were making sense of the material and applying it to themselves and their patients. This was reflected in their feedback.

Working the room allowed me to gather information about student engagement and assimilation of new knowledge.

#### *Use of technology*

I integrated short video clips into all of my teaching sessions. I found that this was successful because it helped me catch my breath and get a break from delivery. I always chose short engaging clips, which was appreciated by students. I also received positive feedback on these from peer observers. To aid engagement in the larger lecture style session (session 4), I integrated different technology, using Mentimeter which allows students to answer questions using their phones. I found this to be effective to engage students and assess knowledge. The feedback I received from an observer of this session was that it worked well, and I could have integrated this more. I also received feedback on presentation of information through PowerPoint, with learners and observers consistently commenting on successful use of technology. This was aided by reflecting on my own experiences of attending teaching and utilising the Professional Doctorate teaching sessions, where I reflected with peers on what works well when using PowerPoint.

#### **Challenges and areas for improvement**

Alongside the strengths of my sessions, I also faced significant challenges. This included challenges with session timing, unexpected circumstances and getting group feedback. I have also identified ways I could improve getting student satisfaction feedback in future teaching sessions.

#### *Timings*

I initially found it challenging planning for timings of sessions. This meant that in my first session, there was no time for questions at the end, and students may have felt rushed giving their feedback. In the second session, the speaker in the room prior to me over-ran which meant that my session had less time than expected. Despite this challenge the session was still described as well-structured and was well-received by students, although one student did feedback that they wanted to know more about referral pathways into our service. This implies the section towards the end of the session, which was on referrals, may have been rushed.

I found the most challenging aspect of planning timings being knowing how long to set aside for group tasks. Throughout the process I've come to realise that I won't be able

to keep all students happy, as highlighted in feedback I received from my second session. Some students thought the group tasks were the best bit of the session and wanted more, whereas others wanted less time on group tasks. This is a good reminder that to keep session materials varied, to try and meet the learning needs of individuals.

Having the timing of my second session reduced by an earlier speaker was extremely frustrating. I was able to get through all of my session materials, with my session finishing a couple of minutes late. This has motivated me to allow more time than I may have anticipated, so that I do not have a knock-on effect for other people. I applied this learning to my later sessions, and for session 3 onwards I anticipated for delays and allowed extra time for tasks. I believe this was a successful change, as my latter sessions finished on time, and I did not feel that reduced time for tasks was at the detriment of student engagement or learning.

Another factor that may have impacted timings in my earlier sessions was trying to do too much in a short time. This was picked up on by my observer of session 2, who stated that I could have focused in on fewer learning outcomes and covered them more thoroughly. Again, this was a learning point I took into my later sessions. I found this challenging to do, as my passion for the topics can mean I want to go into lots of detail. However, as my final session was only 45 minutes long, I had to really simplify it and only talk about one aspect of the therapy. This was challenging due to the student group having various pre-existing knowledge of the psychological model. I overcame this by offering a brief explanation only, focusing on what they needed to know to engage in the session. I also signposted towards further learning for those who might be interested. I believe that my approach of simplifying this was successful, which was reflected in student feedback and observer feedback as well as incidental feedback gained when students fed back after group activities.

### *Unexpected challenges*

I encountered unexpected challenges during sessions 2, 3 and 4, which allowed me the opportunity to think on my feet and adapt delivery. In the second session, there was an unexpected room change, changing from a large room where people were sitting around tables, to a small room with rows of chairs, which was less than ideal for the groupwork. It felt important to still do groupwork, to allow them time for reflection and learning from colleagues. To allow this to still happen effectively, I verbally acknowledged that the set up wasn't ideal, and asked students to be mindful of the

acoustics in the room when talking in small groups. This was noticeably difficult, as the noise of groups talking was amplified in the small room. This was also challenging when getting students' attention after group tasks, particularly when they were excited about trying out the practical tools shared. To improve on this in future sessions, I could use a timer on a screen with an alarm when the time for group work is up, rather than depending on my ability to raise my voice.

Another unexpected challenge I faced was in session 4. My delivery included a pre-recorded lecture for students to watch prior to the session, followed by an in-person interactive workshop. I had prepared for the workshop on the basis that all students would have watched the pre-recorded lecture and therefore only included a brief summary of the lecture. Students were honest about not having prepared for the session beforehand, therefore I had to spend more time at the start recapping the pre-recorded session. This was okay as I was knowledgeable about the topic and able to 'wing' this and adapt the session to meet this unexpected challenge. However, it did impact on all of my timings for the session. This has taught me that in future I should expect for some students to have not done required preparation work.

Similarly, in session 3 students were still arriving up to 30 minutes into to the session. While this took me by surprise, I was able to acknowledge their arrival and continue with the session. When I reflected on the session, I had worried this might have made my delivery disjointed, however feedback from my observer reassured me otherwise. While I was able to maintain the flow of the session despite disruption, when I later went around the room talking to pairs during the exercise, I noticed that people who had arrived late were asking more questions about the models which had been covered in the first part. I did have regular summary slides in the lecture, however in future I could spend more time on these. I could also approach late comers in the break to offer a recap or ask if anything was unclear to them.

### *Group feedback*

An area for improvement I received after my first session was getting the groups to feedback to the room at the end of groupwork. In my second session I improved on this, but found students could be reluctant to feedback to the room which was reflected in one learner's feedback. I received helpful suggestions at this point, including using feedback I had gathered from "working the room" to start conversations, and using post-it notes to get groups to feedback. I trialled these out in future sessions. In session

4 when getting groups to feedback I shared things I had heard working the room, however it didn't generate as much conversation as I had hoped. In session 5 I used post-it notes. I could use more practice in incorporating this smoothly, as the amount of time it took was picked up in both student feedback and observer feedback. In future sessions, I could build on this by using technology to encourage students to provide feedback (i.e., Mentimeter or Padlet), or I could ask groups to nominate one speaker per group to share feedback. I could also ask groups to focus on sharing different things in feedback, to reduce the repetitiveness my observer noticed in session 5.

#### *Anonymous student feedback*

When reflecting on the feedback I had gained to write this commentary, I realised I could have better utilised the opportunity for anonymous student feedback by asking more structured feedback questions, such as "what could be improved about this session". I did this for my second session as it was part of a service evaluation and consequentially gained richer feedback. I would choose to take this approach with future training sessions. However, despite not having the best structure to my feedback questions, I still gained helpful data which incorporated aspects of improvement for each session.

#### **Summary**

While embarking on the process of delivering five teaching and training sessions was new and nerve-wracking, I found it to be extremely rewarding. I believe it has allowed me to develop my skills in communicating to large groups, which has been beneficial for other areas of my professional development (i.e., delivering therapeutic groups, speaking in large meetings). I also really enjoyed the opportunity to teach on subject areas I am passionate about and gained invaluable experience in speaking to multiple different groups of people about third-wave therapies, allowing me to learn from the students.

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# Health Psychology Interventions

## Face-to-face Case Study

### Introduction

This report details a face-to-face psychological intervention conducted with a patient, Kate (pseudonym). Kate has a diagnosis of ulcerative colitis, a condition which falls under the umbrella term inflammatory bowel disease (IBD). She attended a total of five sessions.

### Background

Ulcerative colitis is a relapsing-remitting gastrointestinal disorder, involving inflammation of the colon and rectum (Meier & Sturm, 2011). Kate was under the care of IBD specialist nurses for her condition, which was causing her bowel incontinence, mild stomach pain and fatigue. From a medical perspective, Kate's ulcerative colitis was in remission and there were no further interventions needed. However, Kate's symptoms persisted, which can be seen in ulcerative colitis patients in clinical remission (Jonefjäll et al., 2013). Kate was therefore referred to Clinical Health Psychology for support, as her symptoms were leading her to struggle with daily life. The referral stated she was finding it difficult to eat, leave the house, and spend time with her young children.

### Assessment

Assessment is an essential part of delivering a psychological intervention. It is used to gather information about the person seeking psychological support and to establish if their needs are best met within the service the psychologist is working in (Bull & Dale, 2021). Therefore, I used the assessment to ensure I was working within the boundaries of my own competencies, as per British Psychological Society's ethical guidelines (BPS, 2018); and that Kate's needs would best be met within remit of our service.

This assessment involved a 90-minute clinical interview. This is a common approach within health psychology, allowing for information gathering and development of a therapeutic relationship (Bull & Dale, 2021). Throughout this assessment I utilised active listening skills described within motivational interviewing (open questions, affirmations, reflective listening, summarising; Rollnick & Miller, 1995) and found they facilitated development of the therapeutic relationship.

This assessment began with Kate completing outcome measures followed by introductions to myself, our service, confidentiality, note keeping and the plan for the appointment. Within this introduction I explained my role as a trainee health psychologist, my competencies and boundaries, and use of clinical supervision to support my therapeutic work. Following this, open questions were asked to allow Kate to lead the conversation, such as “tell me what’s brought you to psychology”, and “what are your expectations today”.

This assessment took a biopsychosocial approach (Engel, 1977). This allowed for understanding biological factors of Kate’s health condition, the relationship between her physical health and psychological wellbeing, and her social circumstances, covering current and historical perspectives. Biopsychosocial approaches are commonly used by health psychologists working in medical settings (Belar & Deardorff, 2009).

### *Biological*

Kate explained that she was diagnosed with ulcerative colitis aged 17 and had trialled many medications in the 15 years since. She explained that her treatment successfully controlled the disease and inflammation, however she was still experiencing episodic incontinence of her bowel. She explained that this can be unpredictable, and she often criticises herself blaming symptoms on her diet, despite knowing that it was outside of her control. She reported restricting food before busy days to reduce the likelihood of incontinence. She



also reported experiencing fatigue, a common symptom of ulcerative colitis, which could be exacerbated by her tendency to restrict food.

### *Psychological*

Kate reported she was engaging in psychology because her symptoms were 'destroying' her mental health. She described struggling to engage in family days out, due to being hypervigilant to early warning signs in her stomach. She described how any movement or change in her stomach would trigger her to 'go in on myself' and panic, while attempting to control her bowel. She also noted a tendency to always go to the toilet as soon as she felt a 'twinge' or 'slight movement' in her stomach to check if she needed to empty her bowels, but often wouldn't need to. She spoke of always going to check, just in case.

### *Social*

Kate works as a specialist nurse in a busy role. She explained she had worked hard in her career, completing a master's degree, alongside her busy home life. Kate lives with her husband and three young children. It was clear how she valued being a caring, supportive mother. She explained that her relationship with her husband was close and supportive, but while she talked to her husband about having ulcerative colitis she would manage her symptoms privately and shield him from the practicalities of it.

### *Outcome measures*

Kate first completed the Core-10 (Barkham et al., 2013) which is standard for all patients within my placement. The Core-10 is a validated measure of general psychological distress, with ten questions measuring symptoms such as depression, anxiety and suicide risk. At assessment, Kate's score was 15/40, indicating mild psychological distress.

Kate also completed the IBD Control Questionnaire, a valid and reliable measure of overall disease control from the patient's perspective (Bodger et al., 2014). I commonly utilise this with IBD patients, as it captures different aspects

of living with IBD: disease control, impact on life and treatment satisfaction. Therefore, this questionnaire was chosen to quantify Kate's perceptions of her ulcerative colitis, and any changes to perceptions throughout the intervention. Kate's answers at assessment indicated a large impact on her life (4/16, where 0 means most impact and 16 means no impact), and low overall control (20/100, with 100 meaning best control).

## **Goal**

Kate explained that from the intervention, she hoped to learn to live with her symptoms and accept her long-term condition. She hoped that acceptance would allow her to talk more openly and ask for extra support. She prioritised learning to live with symptoms as her initial goal and spoke of wanting to reduce feelings of panic in response to early warning signs in her stomach.

## **Formulation**

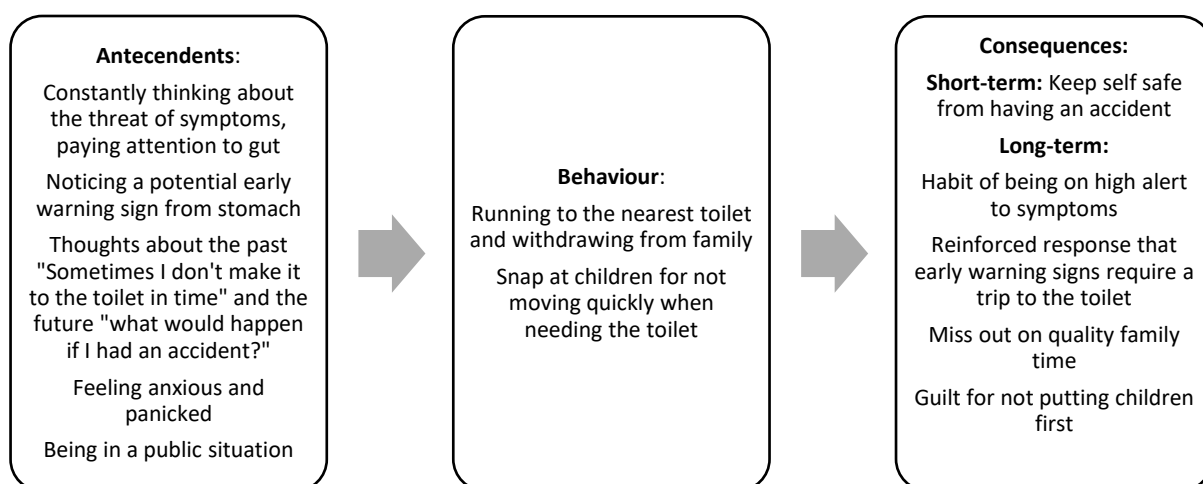
Formulation involves making sense of assessment information drawing on psychological theories, and tailoring the intervention accordingly (Johnstone & Dallos, 2013). It allows for individualised approaches, as problems that patients bring to therapy can appear similar but differ in how they develop and are maintained (Johnstone & Dallos, 2013).

I started the process by developing an understanding of the behaviour Kate wanted to change: her panic response. I was to use a simple method, as simple formulations are recommended for early-career therapists to ensure easy collaboration with patients (Padesky, 2020). Therefore, I chose an Antecedents, Behaviours, Consequences framework (figure one) to understand the context behind Kate's identified 'problem' behaviour, and the consequences of it (Hanley et al., 2003).

Kate and I developed this formulation together within our first session. I used questions which would allow me to complete each box, for example "how does this behaviour benefit you?" and "are there any longer-term drawbacks?". We

were then able to understand the factors driving the behaviour she wanted to change; and normalise her behaviour as a logical way to cope with the challenges of her symptoms.

**Figure one: Antecedents, Behaviour, Consequences formulation**



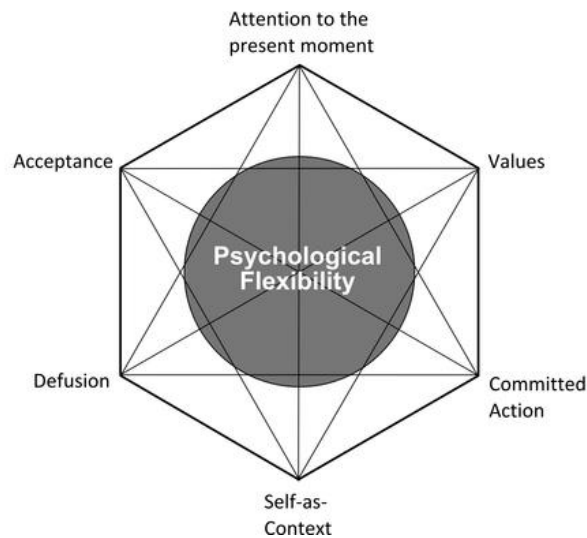
## Designing the intervention

Reflecting in clinical supervision, I decided Acceptance and Commitment Therapy (ACT; Hayes, 2004) would be a suitable model to use. We could not change Kate’s experience of symptoms, therefore the intervention aimed to increase psychological flexibility using ACT, to allow her to better respond to difficulties and re-engage with things that matter to her. As well as being a good fit for Kate’s experiences and goals, I had recently attended ACT training and had the benefit of my clinical supervisor’s ACT knowledge and experience to draw upon.

Within ACT, there are six core principles relating to psychological flexibility, known as “The Hexaflex” (figure two).

The intervention was designed with these six concepts in mind. ACT is designed to be flexible rather than manualised (Hayes, 2004), therefore rather than planning the intervention out chronologically, I planned techniques I could use relating to each concept (see table one). I aimed to utilise each technique and offered six sessions (one per concept).

**Figure two: Hexaflex**



**Table one: plan for intervention** (Concepts taken from ACT Made Simple; Harris, 2009)

ACT concept	Brief description of concept	Plan for implementing
Attention to the present moment.	Bringing attention to the present physical world and psychological state, without drifting off into thoughts or operating on autopilot.	Open questions to guide Kate to reflect on how her symptoms move her attention away from the present moment. Mindful breathing exercises to increase flexibility of attention.
Values.	How we want to behave on an ongoing basis, qualities that guide us through life like a compass.	Open questions to encourage reflection on values.
Committed Action.	Taking action guided by values, even in the presence of pain or discomfort.	Using values to set goals.
Self-as-context	Having an awareness of the thought generating element of the mind, and the observing element of the mind.	Holding formulation in mind when at work/on family days out. Noticing and naming when thoughts and feelings are showing up, being aware of impact on behaviour.

Defusion	Stepping back and detaching from thoughts, images and memories.	Pushing away paper metaphor.
Acceptance	Making room for painful feelings, sensations, and emotions.	Mindful acceptance of emotions exercise.

## Implementing the intervention

The intervention was delivered with ACT concepts framing each session, in a flexible manner (see table two).

**Table two: delivered intervention**

Session number	ACT techniques used ( <i>related concept</i> )	Overview of session delivered	Homework set
1	Pushing away paper metaphor ( <i>acceptance, defusion, Self-as-context</i> )	<ul style="list-style-type: none"> <li>Summarising assessment themes, formulation and plan</li> <li>Discussion of the ACT model</li> <li>Contracting</li> <li>Psychoeducation on anxiety</li> </ul>	Reflect on formulation, and try and notice when anxiety shows up and name the specific impact it is having ( <i>i.e., when thoughts start racing – that’s anxiety focusing me in on a threat</i> )
2	Mindful breathing technique ( <i>defusion, attention to the present moment</i> )	<ul style="list-style-type: none"> <li>Review homework</li> <li>Discussion of triggers (different stomach sensations) and consequential thoughts, feelings and behaviours</li> <li>Discussion of attentional bias</li> <li>Introduction of a technique to unhook from thoughts and be present</li> </ul>	Practise mindful breathing once a day Implementation intentions used to reinforce homework setting (agreeing where and when to practise)
3	Mindful acceptance of emotions ( <i>acceptance</i> )	<ul style="list-style-type: none"> <li>Review of homework</li> <li>Further exploration of triggers and practical management tools</li> <li>Introduction of a technique to increase acceptance</li> <li>Explain graded exposure approach to applying techniques at home</li> </ul>	Continue mindful breathing exercises.  Start applying mindful acceptance techniques while at home, in presence of stomach symptoms

- Review of homework
  - Review of overall progress
  - Ending intervention and completing outcome measures
- Continue applying techniques learnt in therapy

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Our first intervention session was three weeks after our assessment appointment. I started by reflecting on key assessment themes and our formulation. I restated our plan to have up to six sessions with the aim of Kate reducing panic around symptoms and becoming more accepting of her condition. Kate agreed this was accurate, and that the goals still felt important to her. I discussed the model of ACT with Kate and used the pushing away paper exercise (Harris, 2009) to demonstrate the fundamental concepts. As Kate was happy to proceed, we signed a therapy contract for the service, and a client consent form.

### ***Psychoeducation***

The first session covered psychoeducation, focusing on anxiety. I explained that anxiety is related to activation of the fight-flight system, which can lead to threat-focused attention. This helped to normalise Kate's experience of focusing her attention towards her gut and toilet availability, as her brain is keeping her safe from threats (incontinence). We discussed how normal it is for our brains to think back to past experiences (rumination) and predict future dangers (worry) to problem-solve threats. This developed Kate's understanding of the formulation by explaining the impact anxiety can have on our thoughts and feelings, and re-framing her worry and rumination as a normal, problem-solving function of the brain, rather than a 'bad' aspect of Kate's personality.

### ***Mindfulness***

A mindful breathing technique was introduced in session two, which involved focusing on the breath and observing the mind's tendency to wander. Kate reported that home practice of this helped her wind down before sleep and focus on the present. We built upon this technique in session three by

practising a mindful acceptance of emotions exercise, during which Kate focused on feelings of anxiety. I guided her through this practice, involving:

- Observing the feeling with curiosity, noticing where it sits in the body
- Breathing into the feeling
- Imagining expanding around the feeling
- Allowing the feeling to be there – not liking it, disliking it, just allowing it non-judgementally
- Expanding awareness out around the feeling – scanning the rest of the body and the environment

Kate reflected that this reminded her of using hypnotherapy during labour, which she had forgotten about. She reported understanding that she was able to change her relationship with uncomfortable sensations in her body.

Kate hoped that bringing these techniques of non-judgemental attention, openness and calm breathing into her daily life may allow her to tolerate the discomfort related to stomach sensations. I thought about how she could adopt these techniques, in a safe way, using graded exposure.

Kate and I discussed the sensations she feels in her stomach and her toilet habits in more detail. As this was our third session, I felt comfortable approaching this topic, as we had built rapport. Kate noted that any cramping, rumbling or niggling sensation in her stomach could send her into panic; and in public situations she was hypervigilant to those feelings. She reported that her incontinence was unpredictable and not always related to the stomach sensations she would panic about.

Kate reported that in-between our first and third sessions, she had referred herself to incontinence nurses who provided practical tools to support her self-management (i.e., incontinence pads). Kate noted that now when an episode does happen, it can be well contained, easily sorted and wouldn't be observable to others. She reflected that her changes in mood and behaviour

when thinking about symptoms could be more problematic than the symptoms themselves.

### ***Graded exposure***

Graded exposure is a well-established CBT technique involving a hierarchy of progressively challenging steps towards a stimulus (Marks, 1978), which has effectively been combined with ACT (Wicksell et al., 2009). I brought this technique in during our third session, when Kate wanted to start using mindfulness techniques in response to her symptoms (observing bodily feelings, breathing into the feeling, allowing it to be, expanding awareness out around it). We ensured she didn't set herself up for failure by starting in high-pressure situations, such as in public, and agreed to take a graded exposure approach.

Kate's trigger for panic was stomach symptoms which may represent upcoming incontinence, and not having access to a toilet. Kate lives in a busy house, and noted a tendency to pace around her bedroom becoming increasingly anxious when the only toilet was occupied. We agreed that before our fourth session, Kate would practice becoming used to uncomfortable stomach sensations, without immediately going to the bathroom, in the safety of her home. Kate agreed to start small, by taking a five-second pause in her bedroom to practice some mindful breathing techniques, instead of rushing to the toilet. We agreed she would not practice this when needing to go to the toilet imminently, but rather when feeling the early warning 'twinges' and cramps that tend to trigger panic. We agreed that Kate would increase the amount of time she spends doing this in five-second increments, bringing in other mindfulness techniques learnt in our sessions. Kate was keen to try this out, and we agreed to review at our next session.

Due to childcare, Kate rescheduled appointments and had three weeks to practise this in between session three and four. She then informed me that practising the techniques, initially in the privacy of her bedroom, had allowed



her to disrupt the cycle of panic in response to stomach symptoms. She described applying this in public when she was walking across a carpark and had a trigger. She described taking a breath, acknowledging the sensation, expanding her attention out to how the ground felt beneath her feet, and refocusing on her son. She noted that on this occasion, by the time she got to the toilet the cramping feeling had passed. She was pleased with this positive learning experience.

### ***Ending the intervention***

After Kate had learnt to respond to symptoms in a different way and disrupt the cycle of panic, she requested to end psychology appointments. This was during session four. I was surprised and had to adapt my session plan of moving onto one of the other ACT components. I asked Kate to review her progress on the initial goals she had set, and we considered areas of further work we could do. Kate explained she was happy with the progress she had made and wanted to continue putting what she had learnt into action in her daily life. Therefore, we repeated the outcome measures to evaluate the intervention and reinforce Kate's progress.

### ***Evaluation***

This case study draws on three types of evaluation: patient feedback, outcome measures and my observations.

#### ***Patient feedback***

Kate rated her progress on both her goals out of ten, providing examples of changes she had made to meet those goals (see table three), and repeated outcome measures (see table four).

**Table three: Kate's feedback relating to her goal progress**

Goal	Rating (1-10)	Changes made
Acceptance that she will always have ulcerative colitis	10/10	Making changes to accommodate condition, rather than trying to ignore it, by having a dedicated bag in car for emergency supplies Rather than playing symptoms down and pretending to be okay, had been to an IBD nurse appointment and spoken more openly about incontinence Referred herself to incontinence team, identified that accepting the chronic nature of the condition enabled her to seek this support
Panic about symptoms	8.5/10	Noticing and naming the feelings associated with anxiety in response to stomach symptoms Using mindfulness techniques to manage anxiety, and bring herself back into the present moment Feeling confident in engaging with family activities despite anxiety about incontinence

#### *Outcome measures*

**Table four: outcome measures**

Outcome measure and interpretation	Pre	Post
<b>Core-10</b>	15	0
<i>Range = 0 – 40</i>		
<i>Less than 11 = non-clinical range</i>		
<i>11 + indicates mild psychological distress</i>		
<b>IBD control total score</b>	4	12
<i>range = 0-16</i>		
<i>0 = worse possible control 16 = best</i>		
<b>IBD control Q5 – “How would you rate your overall control of your IBD?”</b>	20	50
<i>Range = 0-100</i>		
<i>0 = worst possible control 100 = best</i>		

Over the intervention, Kate's Core-10 score reduced from 15 (mild psychological distress) to 0 (no distress). Her IBD Control overall score increased from 4/16 to 12/16, indicating a decrease in barriers to life caused by IBD, and her rating of her overall control increased from 20% to 50%.

### *My observations*

I noted Kate's demeanour and emotions shifted as we progressed. Initially, she presented anxiously, talking quickly and shifting between subjects. However, her confidence grew regarding illness management, evidenced by her self-referral to the incontinence team. She also noticed feeling angry between our assessment and second appointment. I was not prepared for this emotional response but considered that I might feel the same way if I was coming to terms with a similar chronic condition. I dealt with this by normalising Kate's emotional response, and explained to her that coming to terms with a chronic illness and changes associated with loss of some bodily functions can be understood as grief (Becker et al., 2022), therefore anger could be part of the initial grieving process.

While we could have continued the intervention to build on Kate's progress, I was pleased to hear her positive evaluations and satisfaction with the intervention. This was reflected by her outcome measures, which indicated that despite a small shift in her overall IBD control, there was a dramatic decrease in her psychological distress.

### ***Reflections on my own development***

From this work, my skills in assessment and formulation, alongside planning, delivering and evaluating interventions have developed. I demonstrated capability in adapting sessions when facing unexpected outcomes or changes, which has built my confidence as a practitioner health psychologist. Furthermore, while developing IBD-specific knowledge, I have experienced the value of multidisciplinary healthcare, learning from the specialist nurses as I progressed through this intervention.

This intervention taught me about the importance of going outside of my comfort zone, trying out new models and skills, as many of the ACT techniques were new to me. I plan to further this, using more complex formulations and exploring more ACT techniques. Finally, I have learnt the importance of being specific, and in future will ensure to contract for specific numbers of sessions with patients and talk about the importance of attending regularly where possible. Overall, I felt pleased with how this intervention went, and enjoyed seeing Kate put in hard work outside of sessions, develop her self-management skills and decrease her psychological distress.

### ***Conclusion***

This case study has described an individual psychological intervention undertaken with Kate. It has detailed the assessment, formulation, delivery, and evaluation of the intervention. Using ACT techniques, Kate was able to make significant progress towards her goals of reducing panic around symptoms and becoming more accepting of her condition.

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# **One-to-one Case Study: Reflective Commentary**

## ***Introduction***

This reflective commentary relates to a five-session Acceptance and Commitment Therapy (ACT) intervention with a patient Kate, who was engaging in psychological support due to challenges living with ulcerative colitis. Throughout this commentary I reflect on areas that went well, challenges I faced, and lessons learnt from the experience; spanning assessment, formulation, delivery and evaluation of the intervention.

## ***Assessment***

My assessment with Kate was the first I had independently led on. I was fortunate to have experienced observing psychological assessments and therefore had a good idea of the areas to cover. From my background experience working in chronic pain services, most assessments I had observed had used a biopsychosocial formulation, and I was keen to stick with this simplistic approach. Furthermore, reading a chapter on assessment in 'Health Psychology in Clinical Practice (Forshaw, 2021) encouraged me to use a biopsychosocial approach, and offered helpful considerations for specific factors relevant to each area (Bull & Dale, 2021). My clinical supervisor was present to observe, contribute her reflections at the end, and support with clinical decision making if needed.

While I felt nervous approaching the assessment, my nerves eased as we began. Kate was extremely talkative and while this was beneficial in facilitating conversation, I found it challenging to tie all the information together, and to get a chance to weave summaries and reflections in. By around the hour mark, I felt so overwhelmed with information that I was struggling to think about where to take the conversation next. Something that I have learnt from this is to be more open in setting an assessment

structure with patients. I now find it can be beneficial to set an agenda for the assessment, which allows for steering people between the necessary topics.

While I worried that I had let Kate talk too much in the assessment, she reflected that it had been helpful to get things off her chest without being judged or given instructions on what to do. Given that Kate didn't often talk about her illness and the impact it was having, it was helpful to get dedicated time to talk to through.

### ***Formulation***

In line with keeping things simple while I was developing my clinical skills, I opted to use an Antecedents, Behaviours, Consequences (ABCs) formulation (Iwata et al., 2000). This worked well because I understood the psychological processes behind this and therefore felt confident developing it in the session with Kate. It also focused on a 'snapshot' of the context around one specific behaviour, and therefore didn't require Kate to discuss detail about her incontinence or personal history while we were building up our rapport. Furthermore, highlighting the short-term benefits of Kate's usual behaviours provided validation for her reasons for acting this way, and highlighting the long-term consequences increased motivation for change.

### ***Intervention delivery***

Delivery of the intervention was interrupted by Kate rearranging multiple appointments due to workplace and childcare responsibilities. This made it harder to build momentum, as longer breaks meant five weeks passed between our assessment appointment and going over any skills. However, when Kate did attend appointments, she was well engaged, ready to learn and reflect on our conversations. After our initial therapy session focusing on psychoeducation about anxiety, she reflected that she



could use that knowledge to understand how anxiety presents in the children she worked with.

Most of the techniques I used through this intervention were new to me. While the mindfulness exercises worked well, I found the ‘Pushing away paper’ metaphor, which is commonly used to explain the ACT model, challenging. In this exercise, a piece of paper represents all of someone’s difficult thoughts and feelings that prevent them from engaging in a valued life. While the exercise is intended to demonstrate the unhelpful coping strategies we have by movement of the paper, Kate took it as an opportunity to open up about more of her thoughts about her ulcerative colitis, which led to me abandoning the exercise to follow up on her revelations. This experience allowed me to think on my feet and adapt the session in response to Kate’s needs. It also highlighted where I could speak with clearer instructions when performing this metaphorical exercise.

### ***Ending the intervention***

Kate and I initially agreed to complete up to six sessions of therapy. I was surprised when Kate chose to end our intervention at four sessions, as I felt there was more work we could do around fatigue and anxiety around eating during a busy day, and reflecting back on this I understand it might have been better to set six sessions from the outset. However, Kate felt the initial work we had done around her panic, which had a knock-on effect on her symptom management and acceptance of her condition, was satisfactory. Her busy life outside of therapy likely had an impact on this decision. It may be that the progress she has made reducing panic does have an impact on her anxiety around food, and reducing the regular fight/flight activation associated with panic may have benefit on her fatigue. I gave Kate the option to open her referral back

up within three months, or seek a re-referral after that point, if anything changed and started to feel particularly challenging.

In hindsight, I wonder if a more complex formulation encompassing fatigue and diet would have increased Kate's motivation to continue therapy, for example the 5P's Cognitive Behavioural Therapy formulation (Dudley & Kuyken, 2013). This may have enabled me to include more factors into the formulation and indicated to Kate that there was scope to continue working together/. However, I didn't want to dramatically change our formulation after four sessions, or be persuasive in suggesting further work, for fear of undermining the progress she had made.

I could have improved the process of ending the intervention by bringing a therapy blueprint into our final session. Therapy blueprints are a worksheet which the patient and therapist complete together, summarising old patterns of thinking, feeling and behaviour the patient was getting stuck in, what they have learnt to change those patterns, and what they can do if they start to slip back into old patterns. This would have reinforced Kate's progress and helped maintenance moving forward. Thinking on my feet I asked Kate to rank her progress on her goals and reflect on what had changed for her as a result of the intervention, before offering a brief suggestion of other concepts from the model we hadn't yet covered. As Kate was happy to finish there, we completed finishing outcome measures. As I did not use a therapy blueprint, I summarised the key skills we had used and changes Kate had made in my discharge letter.

### ***Overall reflections***

As this was the first piece of therapeutic work I independently completed within my placement, reflecting back on it has allowed me to realise how much we learn from patients as therapists. As I have picked up more patients with diagnoses related to IBD,

I have been able to speak of things I learned from this intervention, for example the role of the incontinence team in managing IBD. Speaking to nurses working in the IBD team has also allowed me to develop my expertise, which has been helpful in gaining the trust of new patients. As I have started to move across specialties, I have noticed how lack of specialist knowledge can impact my confidence when meeting with a new patient, and therefore ensure to do appropriate reading prior to assessments.

Alongside development of health condition-specific expertise, I have noticed my therapeutic skills develop, and am aware of the areas I still have to grow in. For example, my confidence has grown in utilising different formulation methods which has been beneficial in keeping interventions focused on goals and mechanisms of change. However, I am still developing the ability to hold an initial formulation in my head during assessments. My colleagues speak of doing this and using it to determine a plan. I find I need to take time after assessment to reflect and start thinking of initial formulations and what might be a helpful plan and will involve my supervisor in this process. I am sure my skills will develop as my knowledge and experience grows.

Furthermore, when I first discharged Kate from our service, I had critical thoughts about this not being a 'good' piece of work, because I hadn't 'done enough' with her. This was driven by my growing knowledge of the ACT model, and my belief that as I hadn't used skills relating to all processes, I hadn't done well. Reflecting back, I now understand that Kate got what she needed out of the process at that time, and not utilising the entirety of the model doesn't de-value the work that we did.

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# **Group Intervention Case Study**

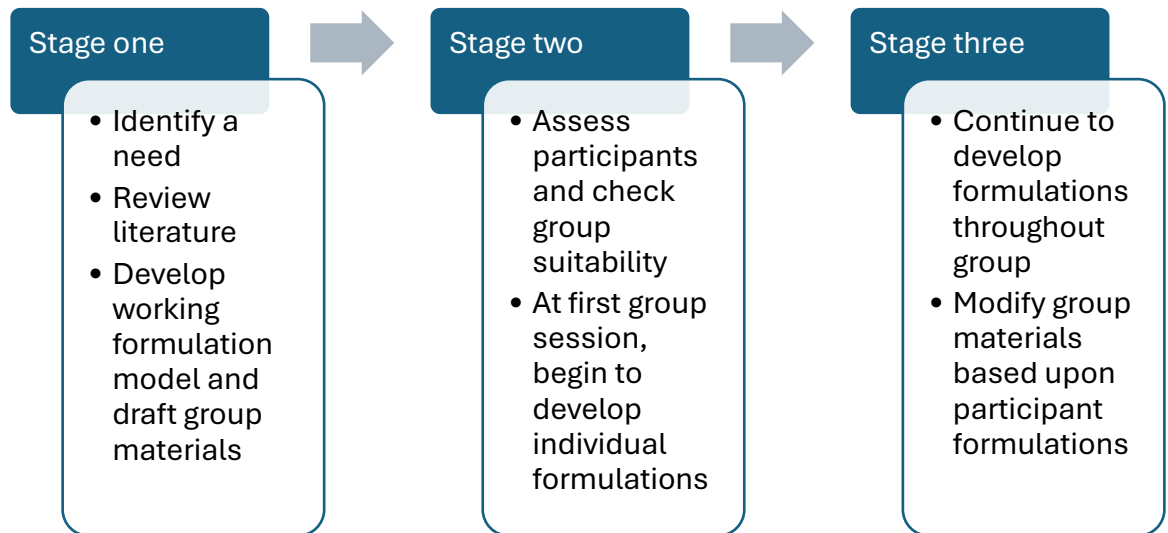
## **Introduction**

Diagnosis of a long-term health condition can have a significant impact on all aspects of a person's life and often requires a process of adjustment. While there is a wealth of research into this process, Moss-Morris (2013) provides an overarching model characterising adjustment as a return to equilibrium after critical illness events. This overarching model covers multiple factors including acceptance of illness, efficacy in self-management, appropriate emotional expression and maintenance of activity levels. This case study reports on a four-week psychological adjustment group, delivered to colleagues within my work placement who had various long-term health conditions. This group took an integrative approach, utilising techniques from cognitive behavioural therapy (CBT; Chand et al., 2023), acceptance and commitment therapy (ACT; Hayes, 2004) and compassion-focused therapy (CFT; Gilbert, 2009). Throughout this case study I discuss the process of developing the group, assessment and formulation, and delivery and evaluation of the group.

## **Approach taken**

After learning the value of delivering health psychology groups in a transdiagnostic way (i.e., Brassington et al., 2016; Dear et al., 2022) my service lead asked me to pilot a group across different healthcare specialities. This was novel to our service, where the groups we run were all condition-specific (e.g. pain management groups, palliative care groups). The overarching approach to developing the group involved three stages: identifying and formulating the need; assessment and formulation of participants; ongoing refinement of group materials (for more details, see Figure 1).

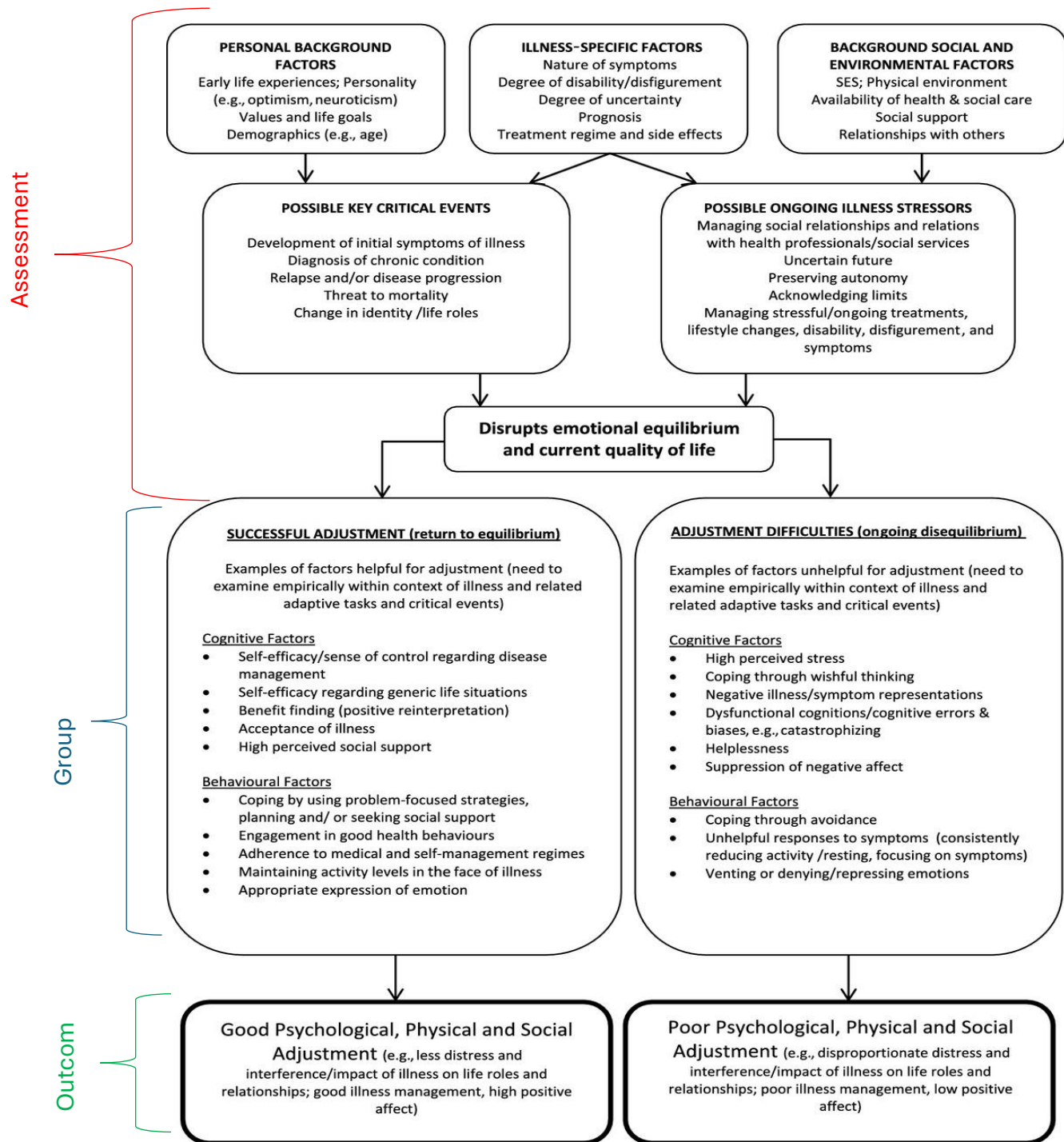
**Figure 1: Approach taken**



*Identifying a need and reviewing the literature*

I started by completing an audit of a sample of 50 outpatient referrals into our service to ascertain common themes. I found that the majority (32/50) cited issues around adjustment. I therefore developed a group focused on adjustment to health conditions, based on Moss-Morris's model (2013). I used this model to underpin the assessment, group content and targets, and assessment of outcomes (see Figure 2).

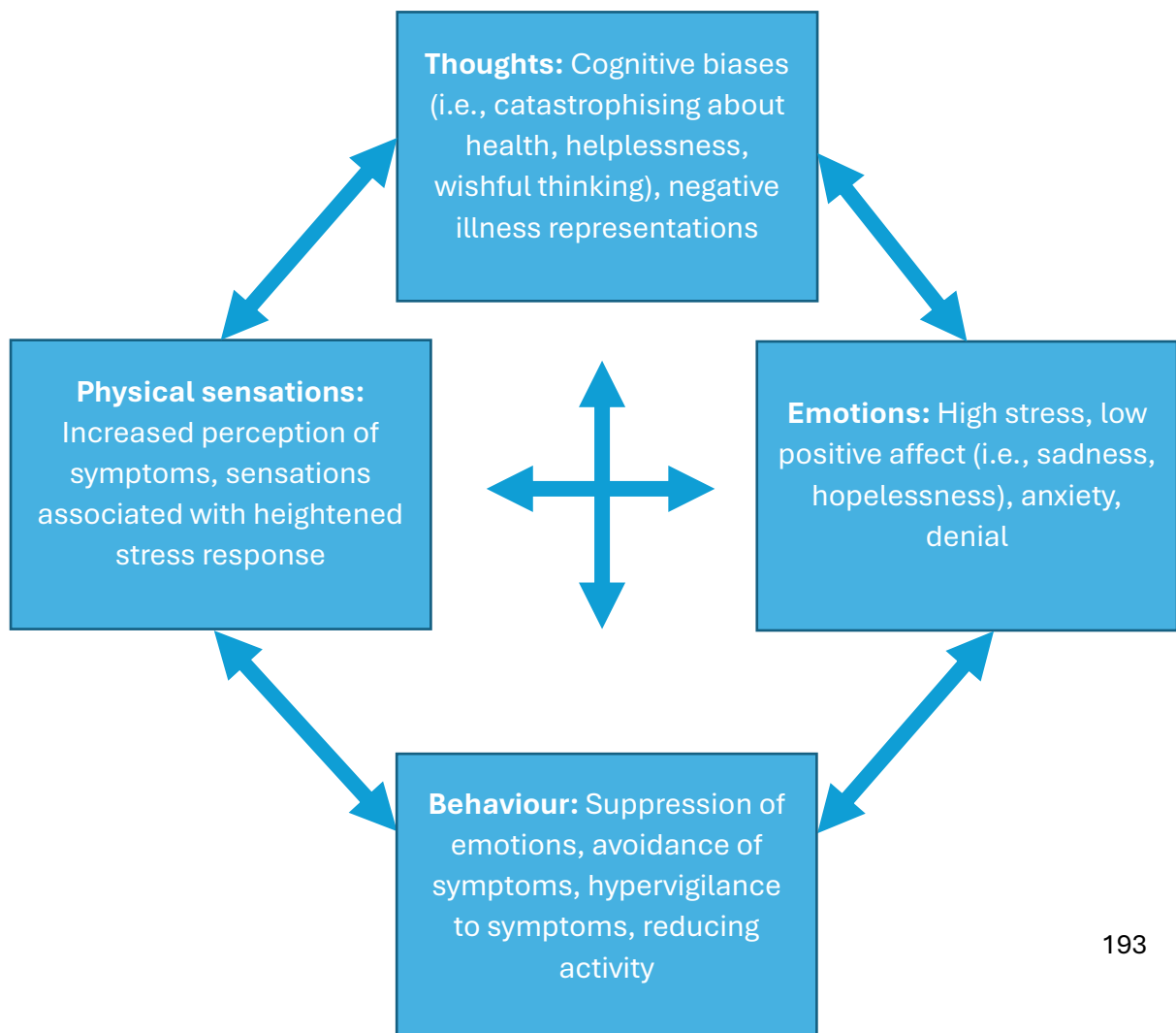
**Figure 2: Applications of Moss-Morris's model of Adjustment**



### *Developing a working formulation*

The first stage involved developing a working formulation of factors contributing to adjustment. As Moss-Morris describe relevant factors in cognitive and behavioural terms, I decided to use a CBT model for formulations. CBT is an evidence-based approach for people with health conditions (Beltman et al., 2010), remaining effective when delivered online (Adhikary et al., 2023). I utilised a “hot cross bun” model (Greenberger & Padesky, 1995), which demonstrates the relationship between thoughts, feelings, behaviours and physical sensations, as a formulation tool throughout the group. This allowed me to map out the relationship between cognitive factors (including both thoughts and emotions) and behavioural factors discussed in Moss-Morris’ adjustment model which contribute to difficulties with adjustment. I also considered the role of physical sensations (see Figure 3).

**Figure 3: Working Formulation of Adjustment Difficulties**





### *Drafting group materials*

I developed an idea of topics the group would cover and the therapeutic approach I would take prior to recruiting participants, so that I had a good idea of the intervention I was assessing people for. I therefore started to build an outline of the group. I considered the model of adjustment and the working formulation I had developed; alongside the therapeutic models and skills I felt confident delivering in a group setting. See Table 1 for an overview.

**Table 1: Overview of Topics and Relevant Techniques**

Topic	Therapy techniques
Introducing adjustment and formulations	Psychoeducation around adjustment CBT “hot cross bun” formulation model
Cognitive factors	
- Understanding thoughts and thought biases	Psychoeducation
- Managing difficult thoughts	Thought defusion techniques (Harris, 2009) Worry time (Newman & Borkovec, 2002)
Emotions	
- Impact of suppressing emotions	ACT struggle switch exercise and acceptance of emotions exercise (Harris, 2009)
- Recognising and expressing emotions	CFT three circles (Gilbert, 2009)
- Understanding and managing stress	Psychoeducation around fight/flight system, mindfulness and relaxation exercises
Behaviours	
- Remaining as active as disease allows	Linking behaviours to values through choice point (Harris, 2009)
- Engaging in good health behaviours (diet, physical activities, sleep etc)	Healthy lifestyle information
- Problem focused coping	Discussion of worrying vs problem solving, applying cognitive techniques to break cycles of rumination

I planned to utilise ACT exercises and skills. ACT has been demonstrated to improve quality of life in people with long-term conditions (Konstantinou et al., 2023), and has previously been utilised in a transdiagnostic group intervention for chronic illness (Brassington et al., 2016). I also planned to use a CFT model

of emotion regulation to introduce emotions. This model simplifies the complexity of our emotions into three groups, linking in evolutionary theories. It integrates the cognitive and physiological aspects of emotions in a way which is accessible and simply explains the link between our psychological well-being and physical health (Gilbert & Simos, 2022). I therefore took an integrative approach to this intervention. As CBT, ACT and CFT share concepts and techniques, they are suitable to use in an integrative way (Kennedy & Pearson, 2020). Furthermore, as no single therapy model will meet all of someone's needs, working in a flexible and integrative way can be of benefit in a group (Braham et al., 2015).

### **Assessment**

The group was delivered to colleagues with a long-term health condition, with the understanding that once it had been tested, we would understand where it might fit into our outpatient service offering. After liaising with the head of the Health Work and Well-being (HWWB) department I agreed to deliver the group over four weeks, online. HWWB referred five people, two of whom couldn't make the dates due to work commitments. All three who proceeded to assessment were appropriate for the group. See Table 2 for an overview of participants.

When participants were referred into the group, I initially made telephone contact to ensure they could attend the dates and arranged a 90-minute assessment appointment. These assessments followed a semi-structured interview format (Bull & Dale, 2021), supported by a bespoke proforma. Questions covered the relevance of the group, their suitability, their ability to use the technology to attend, their hopes for the group, and background information about their health and wellbeing.

While conducting the assessments, I held in mind the adjustment model, formulating information about background factors (personal, social and environmental), illness-specific factors, key critical events and ongoing illness stressors. This allowed open conversations about their current presentations,

and if it was the correct time for them to be engaging with psychological intervention. I was screening for any potential trauma symptoms relating to critical events, particularly for colleagues whose illness had posed a threat to their mortality. I also conducted risk assessments to ensure that participants were not experiencing any ongoing thoughts of harm to themselves or others, which would have indicated they were not appropriate for a group intervention. In this case I would have followed our local risk management policy (i.e., liaising with general practitioners and community mental health services to access immediate support).

**Table 2: Overview of Patients**

Pseudonym, age, job role	Health condition(s)	Core employment issues	Presenting problem	Associated thoughts	Associated emotions	Associated behaviours	Goals
Beatrice, 56, Health care assistant	Kidney disease, diverticulitis, chronic asthma, lymphoedema, back pain	Off on long-term sick following spinal operation with post-op complications and critical illness	Anxious about catching respiratory conditions out of the house. Desperate to get back to work but fearful having to interview for new jobs. Boom and bust.	“I’ll never pass an interview” “What lies ahead” “what if I become unwell again”	Upset Angry Isolated Fatigued Unmotivated	Staying at home Not getting dressed Eating more (comfort eating)	Return to work Meet others in a similar situation
Rachel, 60, Paediatric nurse	Long-term asthma, allergic bronchopulmonary aspergillosis and flares of bronchitis	Periods of long-term sick, recently returned to work. Highly stressed about HR processes, feeling unsupported	Anxiety around breathlessness  Long standing ‘low level’ anxiety and low mood – exacerbated last year due to health	“If I lose my job, I could lose my home which is everything to me” “I’m useless” “others are judging me”	Anxiety Worry Fear Low mood Not valued A Failure Fatigued Loss of concentration	Anxiety behaviours - overthinking, procrastination. Withdrawing from others and activities. Not eating well	Learn to manage overthinking. More self-compassion. Better understanding and communication about mental

Pseudonym, age, job role	Health condition(s)	Core employment issues	Presenting problem	Associated thoughts	Associated emotions	Associated behaviours	Goals
							and physical health.
Victoria, 54, Radiographer	Chronic back pain, two disc tears in spine, enlarged thyroid	Currently off on long-term sick, unable to do job with level of pain. High pressure environment, lots of guilt about being off work	Anxiety – always had anxiety and just got on with it. Struggling now not in work – watch the tv at home, mind starts going over things, notices anxiety  Low mood around not being able to do job and missing out on enjoying life (ie city breaks, holidays)	Thinking back to previous difficult work experiences “did I do the right thing” “will there be enough staff when I go back to work” “how are they coping without me” “What will happen when I go down to	Upset Angry Anxious	Stay in pyjamas  Ruminate and let thoughts spiral	Learning how to cope in work. Wanting to enjoy life again. Manage my anxiety better. To be able to think different in everyday life. Reassurance not to be frightened of anxiety.

Pseudonym, age, job role	Health condition(s)	Core employment issues	Presenting problem	Associated thoughts	Associated emotions	Associated behaviours	Goals
				less pay”			

Alongside attending their assessment appointments, participants completed a range of outcome measures prior to the group starting. Measures were selected based upon Moss-Morris's factors associated with adjustment. As I planned to utilise ACT skills, I also measured psychological flexibility and cognitive fusion. Outcome measures utilised are discussed in Table 3.

**Table 3: Outcome Measures utilised**

Concept associated with ‘good adjustment’	Related outcome measures(s)
Less distress	Outcome Rating Scale (Miller et al., 2003) Chronic Illness Acceptance Questionnaire (Beacham et al., 2015) Confidence measures
High positive affect	
Less interference / impact of illness on life	
Good illness management	
Outcome measures associated with Acceptance and Commitment Therapy	
Psychological flexibility	Acceptance and Action Questionnaire (Fledderus et al., 2012)
Cognitive fusion	Cognitive Fusion Questionnaire- Chronic Illnesses (Trindade et al., 2020)

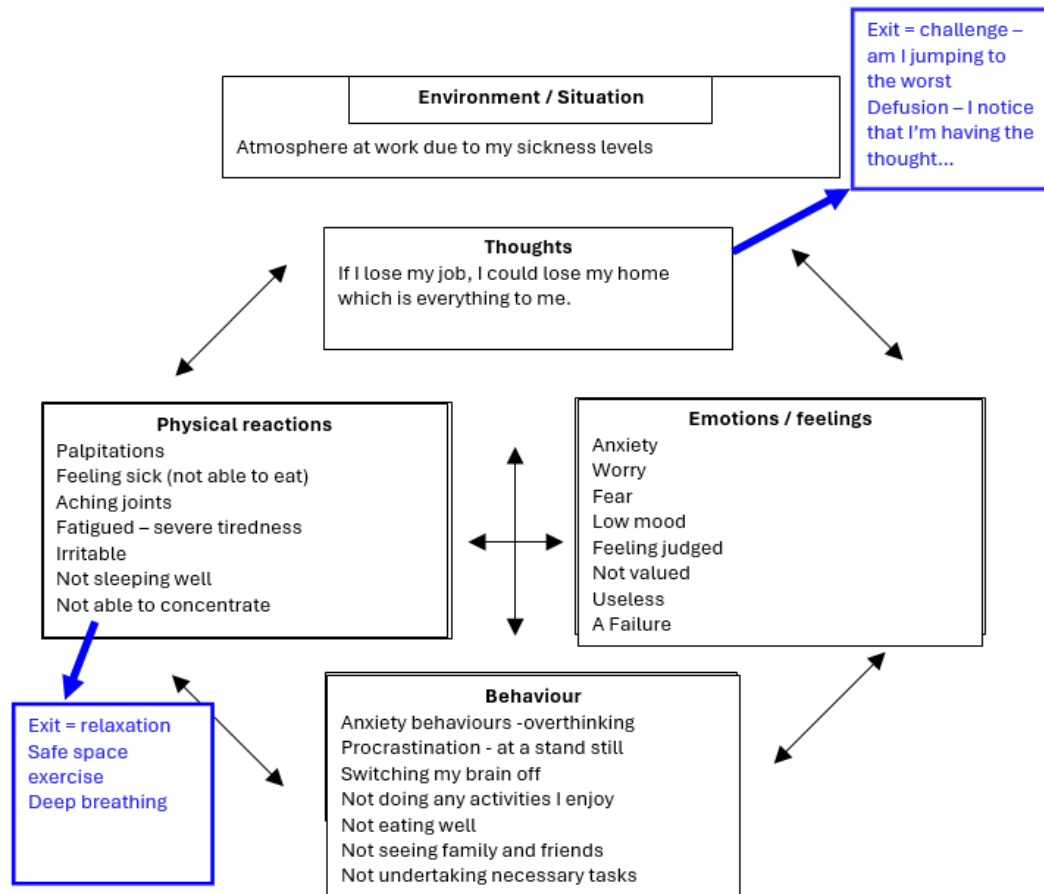
### **Individual formulations**

Participants completed their own formulation models as a home practice task, after we had worked through an example during the first session. All participants demonstrated how they had used the "hot cross bun" model to formulate challenges relating to their health, and how their responses can become tricky cycles. Further information about participants' formulations is displayed in Table 2. All participants reflected on issues relating to their employment. All participants described worrisome thoughts about the future, which were associated with difficult emotions, physical symptoms of distress and unhelpful coping behaviours (e.g., avoidance, rumination, procrastination).

I explained to participants that we would be considering different techniques to help them 'break' the cycles they had drawn out, with two overall aims: improving their responses to their health condition and promoting adjustment. I

continued to draw participants attention back to their formulations as the group progressed, so that they could map on 'exit strategies' to help break those cycles (see Figure 3 for an example).

**Figure 3 – example of a participant formulation (exit cycles added towards end of group)**





## **Refinement of materials, implementation and delivery**

### *Materials*

Before the second group session, I was able to refine the materials based on the formulation models participants had sent me. For example, all participants noted a sense of being disconnected from the things in life that mattered to them. I therefore decided it was important to introduce values before healthy behaviours. This was to give them time to reflect on their values to ensure that any behaviour changes were meaningful to them. Similarly, I decided to focus on anxiety instead of stress, as anxiety was mentioned more consistently than stress by participants. I also used the outcome measures to inform refinement of materials. For example, as all participants scored high on cognitive fusion, I decided it was important to dedicate time to covering cognitive biases and thought management techniques.

As this was a pilot group it was hard to know how long materials would take to deliver, and I had to make changes along the way. Table 3 summarises the planned sessions and the actual delivery. I also made changes based upon participants' wishes. I sent out a questionnaire asking participants to rate potential topics to cover within the healthy lifestyles section. This allowed me to tweak the materials based on what the three participants most wanted to discuss.

**Table 3: Planned Session Content and Changes Made During Delivery**

<b>Session</b>	<b>Session aims</b>	<b>Changes made during delivery</b>
<b>1: Introductions to adjustment</b>	<ul style="list-style-type: none"> <li>• Introductions</li> <li>• Understanding adjustment</li> <li>• Introducing “hot cross bun” model</li> <li>• Introduce mindfulness</li> <li>• Set homework – complete formulations</li> </ul>	Delivered according to plan
<b>2. Managing thoughts and feelings</b>	<ul style="list-style-type: none"> <li>• Recap &amp; review homework</li> <li>• Introducing emotions and emotion regulation</li> <li>• Struggle switch exercise</li> <li>• Acceptance exercise</li> <li>• Cognitive biases, thought defusion</li> <li>• Review formulations and exit strategies</li> <li>• Set homework – practice techniques</li> </ul>	Postponed thought defusion until the following week due to timings
<b>3: Balancing out activity and doing what matters</b>	<ul style="list-style-type: none"> <li>• Recap and review homework</li> <li>• Activity levels and patterns</li> <li>• Introduce values</li> <li>• Safe place exercise</li> <li>• Homework to practise strategies and review formulations</li> </ul>	Covered thought defusion after missing it previous week
<b>4: Healthy lifestyles, managing uncertainty and tying things together</b>	<ul style="list-style-type: none"> <li>• Recap and review homework</li> <li>• Health behaviours</li> <li>• Choice point</li> <li>• Problem-focused coping</li> </ul>	Out of healthy lifestyle topics only went into detail on sleep, and signposted participants towards information for the remaining topics.

### *Delivery style*

The outcomes of a therapy group are influenced not just by the psychological understanding and strategies, but also by group processes such as therapeutic relationships between members, group cohesiveness, inclusion and inspiration (Bieling et al., 2022). Therefore, to facilitate the development of relationships, I allowed space for informal talk and ensured all participants had space to share their stories. I also encouraged all participants to contribute to the development of group rules in session one, an exercise which provides an opportunity to set expectations about how participants interact with one another (Bieling et al., 2022).

Participants successfully built rapport, evidenced by their setting up of a WhatsApp chat for communication in between sessions. They also spoke openly within the group and bonded over shared experiences. While this was positive, I was cautious to contain conversations and stay focused. This was important as all participants were going through HR procedures, and while I wanted them to share their experiences, I was concerned it may overtake conversations. Furthermore, optimism is related to positive outcomes (Bieling et al., 2022) and I was conscious of conversations becoming overly negative and focused on complaining. I managed this by gently acknowledging frustrations and highlighting that the aim of this group was not to 'fix' those difficulties, rather to explore helpful techniques to support challenges associated with having a health condition.

As the group was only four weeks long, I used the final session to continue introducing new materials, alongside summarising everything and giving an opportunity for questions. I highlighted to participants throughout that it was not expected they would 'reach adjustment' by the end of the four weeks. Instead, I set expectations around having a better understanding of their psychological well-being and coping strategies to manage challenges. To end the intervention, I asked participants to reflect on their main take aways from

the group, which led to some helpful feedback and demonstrated their understanding. I finished the intervention by emailing them copies of the session materials, a summary document, and signposting towards future support.

As an online group, there were technological difficulties in the final group session. One participant had trouble joining the call. Fortunately, another participant was able to video call her and she joined this way. Another issue in the final session was that one participant was at work and had to move office multiple times, disrupting the flow of the session.

## **Evaluation**

I evaluated this intervention by considering three sources: outcome data, anonymous satisfaction data, and informal feedback given within sessions.

### *Outcome data*

Participants were asked to complete outcome measures at three time points: prior to the group, at the end of the group, and four weeks after the group. Unfortunately, only one participant returned their outcome measures at the four-week follow up timepoint. Attrition is a common issue faced in patient-reported outcome data, which can be impacted by a multitude of reasons including changes in health, unexpected life events, or the perception of data completion as being time-consuming and tedious (Biering et al., 2015).

Outcome data is displayed in Table 4. Examination of scores indicates that psychological well-being (measured by the outcome rating scale) slightly improved for Beatrice and Victoria, with a larger improvement for Rachel. Acceptance improved for all participants (for Victoria it initially reduced, but by the four-week follow up it improved), and psychological flexibility improved for one participant.

Changes to confidence in managing physical health and psychological wellbeing varied between participants. For the two who were on long-term sick leave, their scores for confidence managing physical health and psychological

wellbeing in work did not change. However, Rachel's confidence in looking after her physical wellbeing increased, both in work (by two points) and in her daily life (by three points). All Victoria's confidence scores either stayed the same or slightly reduced, and Beatrice's scores indicated slight improvements in her confidence managing her physical health and psychological wellbeing in daily life. While this was disappointing to see, it may be that it was unrealistic to expect confidence to improve within a short time frame.

At both the start and the end of the group intervention, Victoria scored the highest possible score for cognitive fusion, indicating that she was extremely distressed by thoughts about her health. This could make sense in the context of ongoing investigations she was having. In the final session a 'worry time' technique was introduced, which encourages a different approach to managing worrisome thoughts by allocating time for problem solving. Victoria was interested in trying this out, and data indicates that after four weeks her cognitive fusion had improved (decreased by 8 points). It may be that worry time, along with continued use of the other techniques, helped to reduce the distress she experienced relating to thoughts about her health. The other two participants' cognitive fusion scores also decreased, indicating they became less distressed by thoughts about their health.

#### *Anonymous satisfaction data*

Overall satisfaction with the group was high, with two participants scoring it 10/10 and the third scoring it 8/10. Participants fed back that the group met their expectations, the content was highly relevant to them, the information made sense, and the techniques and handouts were helpful. All participants stated that while the sessions were an appropriate time length, there were not enough sessions, and they would have liked the intervention to last for longer. In terms of what was helpful, all participants cited that it was helpful to meet other staff members in similar circumstances. They discussed finding the techniques helpful, citing that they were better able to manage negative thinking and behaviour, or accept anxiety and thoughts.

When reflecting on improvements, all participants stated it should be longer than four weeks, with one stating a preference for in-person sessions. One participant felt that too much time was allocated to participants sharing their experiences, which detracted from the materials and learning. While this participant felt it took away from their opportunity to learn, I believe I had an appropriate balance between group materials and development of relationships, because the two both contribute to the success of a group (Bieling et al., 2022). If the group had been in person, the balance may have been weighted slightly heavier to learning and materials, as participants would have had more time to bond within the coffee break.

#### *Incidental feedback*

Participants shared incidental feedback throughout the four weeks. They discussed being more aware of their emotions, thoughts and automatic behavioural responses. Beatrice discussed using mindfulness techniques to ground herself when feeling overwhelmed and wanting to give up. Rachel discussed noticing her automatic negative thoughts in response to physical symptoms of fatigue and responded with thought-defusion skills. Victoria discussed learning that emotions aren't something to fear. She also discussed behavioural changes she had made (e.g., pacing activities, drinking water, taking vitamin D, eating well), alongside citing times she was being kind to herself and finding gratitude when her health felt challenging.

**Table 4: Outcome data**

Outcome measure	Range of scores	Interpretation of scores	Participant	Pre	Post	4 week follow up
Acceptance and Action Questionnaire-2	7 to 49	Higher total scores on the AAQ-II indicate higher psychological inflexibility, and more potential psychological distress. Lower total scores mean more psychological flexibility.	Beatrice	29	31	
			Victoria	24	24	31
			Rachel	38	19	
Confidence measures	1 to 7	Higher scores indicate higher confidence.	Beatrice			
		1. How confident do you feel looking after your psychological well-being in daily life?	Q1	3	4	
			Q2	3	4	
			Q3	3	3	
			Q4	3	3	
		2. How confident do you feel looking after your physical health in daily life?	Victoria			
			Q1	3	1	2
			Q2	1	1	1
			Q3	0	0	0
			Q4	0	0	0
		3. How confident do you feel (or would you feel) looking after your psychological well-being in work?	Rachel			
			Q1	3	3	
			Q2	1	4	
		4. How confident do you feel looking after your physical health in work?	Q3	3	3	
			Q4	3	5	

Chronic illness acceptance questionnaire	0 to 48	Higher scores indicate greater levels of acceptance.	Beatrice	18	24	
			Victoria	13	3	21
			Rachel	12	23	
Cognitive fusion questionnaire – chronic illnesses	7 to 49	Higher scores indicate higher cognitive fusion	Beatrice	36	28	
			Victoria	49	49	41
			Rachel	32	24	
Outcome rating scale	0 to 40	Higher scores indicate better wellbeing	Beatrice	19	23	
			Victoria	15	16	17
			Rachel	13	25	



### *Overall evaluation*

The aim of the group was to promote adjustment to long-term health conditions. All participants showed how they had improved in terms of their adjustment. Outcome measures indicated some small improvements in psychological well-being, and acceptance scores improved for everyone, indicating a shift in how much participants' illnesses impacted on their ability to live their life.

### **Summary**

This four-session pilot psychological adjustment group was delivered to three staff members over Microsoft Teams. I took a broad cognitive-behavioural approach to the group, utilising Padesky's "hot cross bun" as the main formulation model. Participants' engagement and feedback were encouraging, and outcome data indicated some small improvements. However, adjustment to a health condition is an ongoing process and it is not something that people can 'achieve', particularly in the space of four weeks. Small changes demonstrate that the materials and techniques were successfully utilised to move participants towards adjustment.

Throughout this process, I have grown confidence in integrating different therapeutic techniques and knowledge to support patients in the process of adjustment. I have also learnt about both developing and delivering groups and have experienced taking a two-stage approach to formulation. This allowed me to develop a group underpinned by psychological models and knowledge, while being flexible and adapting it to meet participants' needs. I have also learnt about delivering interventions online and will feel confident in delivering both group and individual therapy online in my future career.

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# **Group Intervention: Reflective Commentary**

## **Introduction**

When practising cognitive behavioural therapy, reflection is essential for ongoing professional growth and development of therapeutic skills (Prasko et al., 2012). The following commentary provides reflections of all aspects of the group intervention detailed in the accompanying case study.

Prior to running this group intervention, I had co-facilitated multiple pain management programmes within my work placement and therefore felt I had a reasonable starting point with some group work skills under my belt. However, this was my first time being completely responsible for the planning, designing and delivery of a group intervention and therefore was a new challenge. It was also my first time delivering a group intervention online, which I felt nervous about. Throughout this reflective commentary, I will discuss the challenges experienced throughout the intervention process, the successes and the learning points I have taken out of the experience.

## **Challenges**

It is fair to say that setting up this group was challenging from the outset. Fourteen months passed between deciding to run the group and starting the first session. The initial challenge was finding an appropriate group of participants to pilot the materials on. We initially opened it up for patients to self-refer into, which had an extremely low response rate. In hindsight, it would have been helpful to utilise a co-creation approach, involving patients in designing the aims of the group and supporting with the recruitment strategy. This is something I would consider in the future as I expect it would increase uptake.

The hurdles faced in the early stages impacted on my motivation and at times I considered abandoning the project. However, I approached my Trust's Occupational Health department and was pleased they responded with enthusiasm to offer this intervention to colleagues on their waiting list. To

increase accessibility for colleagues in work, they requested I condense it from a planned six sessions into four sessions and offer it remotely. I was pleased that the group was able to proceed, even if it didn't look as initially planned. There may also have been benefits to waiting, as I was a more skilled and confident clinician with more group experience than I had when I started the planning process.

Working therapeutically with colleagues was also new to me, which came with challenges. I had to seek managerial advice on how to book the appointments on our electronic administration system Careflow, which isn't used in occupational health to maintain staff confidentiality. As we required appointments on the system for activity monitoring purposes, I had to openly discuss this with each and get their informed consent, with the understanding that their information would be visible on a trust-wide system. I also had to get GP information from all of them and consent to contact their GPs in the case of any risk information being shared. This safety netting allowed me to feel comfortable going into their psychology assessments. This experience has taught me about the administrative side of service development, particularly developing a new service pathway, and the operational duties that need to be considered with ethical guidelines in mind.

Another novel aspect of working with colleagues was different themes discussed in assessment, around the impact of high-pressured NHS work environments on well-being. This was particularly interesting as I was used to hearing about the patient experience of the current NHS pressures, rather than the staff experience. I also had to be mindful of the fact that group facilitators and group members all work for the same trust and may potentially know each other professionally or personally. I managed this by being clear in the group rules initially about confidentiality and having an open discussion about how we wish to respond if we see each other unexpectedly.

A theme that came up in two assessments I conducted with people who live in Southport was the impact of the stabbings and riots which occurred in July 2024. It was emotionally challenging hearing people recall their personal

perspectives on these traumatic circumstances. While this was emotionally challenging, it allowed me an opportunity to practice my skills in assessing for ongoing post-traumatic stress symptoms and have helpful therapeutic conversations around strengthening their existing coping strategies. I also found it helpful to encourage the participants to be the experts in deciding if it was the right time for them to be joining the group, by asking them if they felt they had the emotion regulation skills to get the most out of group therapy.

The group being hosted online came with the usual challenges with remote working, whereby it was felt 'clunkier' to get outcome measures and copies of worksheets from participants. We were fortunate that in the first three sessions there were no technology issues, however technology issues impacted the flow of the fourth session. I managed this by reducing some of the session content and offering a telephone call to catch up one participant on the content they had missed.

Being online also reduced opportunities for informal conversations. This was challenging both for group members building rapport, and for myself as a facilitator not being able to easily talk to participants individually. I managed this by finishing the session 15 minutes early and staying online after so that participants could stay if they wanted a one-to-one discussion. One participant did this in week three after noticing a slight deterioration in their mood. This was a helpful opportunity to do some formulation, risk assessment and brief intervention. This 15-minute window also had the benefit of meaning the group finished on time, therefore I would take this strategy into any future groups I run, both online and face-to-face.

I believe the biggest challenge felt by both myself and the participants was the brief nature of the group. All participants fed back that they felt like they were just getting started and the group had come to an end. When analysing outcome measures, I did feel as though the short timescale had impacted on opportunity for meaningful change. One alternative for future groups is to run sessions fortnightly, so they span a longer period of time overall, and participants have more time in between sessions to complete home tasks and

practice skills. I have also learnt not to introduce new materials and skills in the final session, as it felt uncomfortable not having an opportunity to check in with how the skills had gone in practice.

When ending the group, I had a sense that it had felt like a helpful introduction to psychology, but that participants may benefit from further input. One direction I am considering taking the group is offering it to patients on the waiting list in our service, who are waiting to have therapy. This would allow for quicker access to psychological intervention, give an opportunity for patients to meet others with long-term conditions and would also skill them up to prepare them for individual therapy.

### **Successes**

Alongside the challenges, the group had strengths and successes. Although the group was small, we successfully facilitated an interactive atmosphere, and participants felt safe to share their experiences. They bonded quickly despite being online, which was demonstrated by them setting up a group chat at the end of the first session. By the end of the group they were also comfortable phoning each other, with one participant calling another when she was having technology difficulties.

I took a flexible and adaptable approach to the group, spending more time on some materials than others. I also sent out a Microsoft forms questionnaires so participants could pick topics they wanted to discuss within the healthy lifestyles week, and therefore I was able to focus in on behaviours they wanted to change. All participants wanted to discuss sleep, and none of them wanted to discuss smoking – therefore I was able to tailor this session to meet their needs.

Finally, the success of the group was well demonstrated through the verbal feedback given and the anonymous satisfaction questionnaire results.



## **Summary**

Developing a group psychological intervention from its infancy through to delivery has been a challenging process but has contributed to my professional development. I have learnt about service development, considered ethical issues, and gained experience in working clinically with colleagues. I have embedded my knowledge about psychological adjustment to long-term conditions, and integrated therapeutic knowledge and skills from different models into a brief intervention focused on adjustment. In future, I would utilise a co-development perspective, involving potential participants in the design and development. I would also consider running the intervention for further sessions if it was a standalone intervention, or in its current format as part of a 'pre-therapy' package. In terms of continuing my own skills, I hope to further develop and continue to run this group which will enable me to further my own group facilitation and general therapeutic skills.

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