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PROFESSIONAL DOCTORATE IN HEALTH PSYCHOLOGY

UNIVERSITY OF STAFFORDSHIRE

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Thank you to my wonderful husband Ming,
and my wonderful children, Wills, Alice and Tom
for their love, patience and words of encouragement to me throughout this journey.

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My journey to become a psychologist started at the university of Bolton in 1989 (where I met my husband in our early twenties) and over the years and Master's degrees that followed, I have been helped by so many people, who have shaped me to become the psychologist I am today – thank you to you all for being part of my journey.

Portfolio Abstract

Kerry Jacqueline Lum

Professional Doctorate in Health Psychology, 2025

This portfolio documents the work I have completed during my Professional Doctorate in Health Psychology (2021-2025) at the University of Staffordshire (formerly Staffordshire University). During my doctoral studies I worked as a band 7 Clinician in the Family Intensive Support Service – Autism Spectrum Condition (FISS-ASC) at an NHS Trust in the South-East of England. External opportunities were also sought to complete the programme.

The portfolio is divided into six chapters:

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

Within each chapter, I present evidence of my development in the form of research manuscripts, case studies and reflective commentaries. These outline the work I have completed, and the experience and skills I have developed over the course of the doctorate. Further details of the chapter contents are provided in the introduction.

Introduction

In this portfolio, I present the work undertaken during my Professional Doctorate in Health Psychology at the University of Staffordshire (formerly Staffordshire University), between 2021 and 2025. During my doctorate, I worked as a Chartered Psychologist and Practitioner of Specialist Behaviour Support in the Family Intensive Support Service – Autism Spectrum Condition (FISS-ASC) for an NHS Trust in a 0.6 role. The post involved working autonomously as a clinician with young people living with autism, who inflict physical harm to themselves and/or others. The role has involved helping to set up the new service, triaging referrals, psychological intervention with clients and their families, conducting cognitive assessments, writing reports, supervising the Assistant Psychologist, attending multi-disciplinary and multi-agency meetings, interviewing for Assistant Psychologists and delivering parental workshops. I also resumed a part-time private practice I had previously run as a Coaching Psychologist. In year three of the doctorate, I was fortunate to also gain a 0.4 part-time role as a Trainee Practitioner Psychologist in a Paediatric Diabetes Team at an NHS Children's Hospital. This role involves working autonomously as a clinician with patients and their families. I am responsible for the psychological service for newly diagnosed patients and patients attending the 'High HbA1c Clinic'. I completed the five core competencies of the Professional Doctorate in Health Psychology across these different roles, detailed below.

Chapter 1: Professional Skills in Health Psychology

Chapter one focuses on the professional skills of health psychology I have developed through the course of the doctorate. I present a reflexive report of my development of competencies and skills accompanied by excerpts from the reflective diary I have kept throughout my studies.

Chapter 2: Research from Design to Dissemination

Chapter two presents my quantitative manuscript about associations between health anxiety by proxy, parental quality of life, resilience and perceived burden of care, in parents of teenagers with Type 1 diabetes. This is accompanied by a reflective commentary which outlines my rationale, decision making and reflection throughout the research process.

Chapter 3: Systematic Review

Chapter three presents my systematic review about the effectiveness of Acceptance and Commitment Therapy (ACT) for reducing health anxiety in adults. This is accompanied by a reflective commentary outlining my rationale, decision making and reflection throughout the process.

Chapter 4: Health Psychology Interventions

Chapter 4 presents my one-to-one face-to-face intervention conducted through my role at FISS-ASC using an ACT-based technique called ‘DNA-V’ with a teenager living with autism, and my group online delivered intervention conducted through my private practice position, improving wellbeing in a group of menopausal women. Each are accompanied by a reflective commentary detailing my recruitment, formulation, decision making around intervention and evaluation of the interventions.

Chapter 5: Consultancy in Health Psychology

Chapter 5 presents the case study of a piece of honorary consultancy work I undertook delivering staff and parental workshops for an International Children's Centre. Processes of the consultancy are included, such as securing the consultancy, planning and negotiating with the client, and undertaking and evaluating the work. The chapter also includes my working contract and terms and conditions.

Chapter 6: Teaching and Training in Health Psychology

My final chapter is about the first module I completed on the doctorate. I present a case study of teaching and training I delivered for two universities in the south of England. The theme for my teaching was 'Health Psychology Interventions to manage Stress, including Coaching Psychology'. I delivered sessions to year 3 undergraduate students and to Master's students. I delivered face-to-face sessions and a hybrid session to a variety of small and large groups of students. The case study details the planning, delivery and evaluation of the sessions. The evaluation and reflective commentary include feedback from students and my reflection on my development.

Table of Completion

Module	**Date of completion**
Professional Skills in Health Psychology	January 2025
Research from Design to Dissemination	January 2025
Systematic Review	June 2024
Consultancy in Health Psychology	June 2023
Health Psychology Interventions	June 2023
Teaching & Training in Health Psychology	June 2022

Chapter 1: Professional Skills in Health Psychology

1.1 Reflexive Report

BACKGROUND

I have worked part-time (0.6) as a Band 7 Practitioner of Specialist Behaviour Support for an NHS Trust in the South-East, in a Family Intensive Service for Autism Spectrum Conditions (FISS-ASC), during my doctorate. The post involves working autonomously as a clinician with young people living with autism, who inflict physical harm to themselves and/or others. The role has involved helping to set up the new service, triaging referrals, psychological intervention with clients and their families, conducting cognitive assessments, writing reports, supervising the Assistant Psychologist, attending multi-disciplinary and multi-agency meetings, interviewing for Assistant Psychologists and delivering parental workshops. I also resumed a part-time private practice I had previously run as a Coaching Psychologist. This provided the opportunity for me to conduct my doctoral group intervention, to work with privately referred clients, and work as a supervisor for Coaching Psychologists.

As a result of the doctoral training, I secured an additional developmental position as a ‘Trainee Practitioner Psychologist’ in a Paediatric Diabetes team (0.4) from July 2024, the contract will be uplifted to ‘Practitioner Psychologist’ once I obtain HCPC registration. This role involves working autonomously as a clinician with patients and their families. I am responsible for the psychological service for newly diagnosed patients and patients attending the ‘High HbA1c Clinic’.

Throughout my doctoral training, I have maintained a reflective diary, in line with best practice (HCPC, 2022). It is imperative as a Health Psychologist to be a reflective practitioner, to grow from experiences and understand where I need to develop further. Whilst I had reflected in my previous roles, my reflection skills developed more deeply during the doctorate. When I started my reflective diary, I used Rolfe's reflective framework (2001) but soon found I wanted to reflect more deeply, so switched to use Gibbs Reflective Cycle (Gibbs, 1988).

PROFESSIONAL COMPETENCIES

Teaching and Training

Having left a career in education in 2019, to move to a career where I could deliver interventions in Health Psychology, I was reluctant to do further teaching as it felt like a step backwards. I already had a qualification in teaching. However, teaching at university levels 6-7 was a new experience for me, as I had previously taught levels 2-3. I secured three lectures teaching Level 6 BSc Psychology at a University in East Sussex and two lectures teaching Level 7 MSc Health Psychology at a University in West Sussex. Whilst the setting and the level of delivery was different, the teaching very much felt like my previous experience of teaching, as the students were the same age-range I had taught previously, and whilst I am enthusiastic to talk about psychology, the experience reaffirmed for me my decision to change my career to be intervention focussed. I had always taught face-to-face sessions previously but teaching at the University in West Sussex afforded me an opportunity to deliver a hybrid session. A student had Covid and could not attend one of the sessions, this meant that the session was both face-to-face for some students and live online for the student with Covid. It was challenging finding ways to incorporate the student in group activities, but I managed. The feedback I got from staff and students at both universities was positive. Since I submitted my teaching, I have delivered on-line training courses, for staff at my Trust and training workshops for parents of clients around aspects of autism throughout my placement which have been well received. These workshops have felt more like intervention than teaching in an education environment, and I have preferred this. I have improved my teaching and training skills by using different online forums to deliver sessions (Zoom, Teams), interactive online sessions, as well as through hybrid teaching and teaching a wider range of audiences.

Health Psychology Interventions

This module was my prime motivation for doing the Doctorate, so I could get HCPC registration and practice as a Health Psychologist in the NHS. When I started the doctorate, I had accredited training in coaching psychology interventions, a Diploma in Coaching Psychology, training in cognitive-behavioural coaching, positive psychology coaching and mindful emotion coaching. During the doctorate, I undertook additional courses in other types of therapeutic approaches. As a result, my skill set has expanded drastically, and I have expanded my experience of different client groups through my placement.

I used my placement opportunity to fulfil my individual case study, with a teenage client, delivering a 7-week intervention, using DNA-V (Hayes & Ciarrochi, 2015) to build psychological flexibility and resilience, to reduce anxiety and aggression. This was the first time I had been able to put this training into practice, and I grew from this. I used my private practice as a Coaching Psychologist to deliver a five-week online group intervention to four menopausal women about living healthily through their menopause journey using positive psychology coaching (Green & Palmer, 2018) and psychoeducation. I felt very pleased that three of the women had improved quality of life and lowered stress levels by the end of the intervention and the qualitative feedback reflected they had found the intervention helpful. I had not delivered group interventions online previously, so this experience expanded my skill set. Although I was devasted to find I had failed the write-up of the group intervention case study, this experience helped me to really expand my understanding of formulation. This has since been helpful for me formulating interventions. I feel fortunate to be able to use the new approaches I trained in and develop my skills further.

Throughout the doctorate I have also expanded my knowledge and use of routine outcome measures greatly. Prior to the doctorate, I had used some coaching psychology outcome measures, SF-12 quality of life scale (Ware et al., 1996), International Physical Activity Questionnaire (IPAQ) (Craig et al., 2003) and Perceived Stress Scale (PSS-14). However, I now routinely use additional measures such as Revised Children's Anxiety & Depression Scale (RCADS) (Chorpita et al., 2015), Anxiety Scale for Children – autism spectrum disorder (ASC-ASD) (Rodgers et al., 2016), Children's Revised Impact of Event Scale (CRIES-8) (Perrin et al., 2005), Sheffield Learning Disabilities Outcome Measure (SLDOM) (Girgis, 2013), Children's Global Assessment Scale (CGAS) (Green et al., 1994), Goal Based Outcomes (GBO) (Law & Jacob, 2015), Health Anxiety by Proxy Scale (HAPYS) (Ingeman et al., 2021), Problem Areas in Diabetes (PAID) (Welch et al., 1997) and Outcome Rating Scale (ORS) (Miller et al., 2003). I really understand the value of taking measures at the start and end of interventions and how this can provide evidence to support the impact of intervention, which can be useful for clients, as well as for me as a clinician and for service evaluation. I look forward to opportunities to expand my outcome measures knowledge further in my new role with the diabetes service.

Throughout my Doctorate, as I work for the NHS, I have been fortunate to have monthly clinical supervision with a Clinical Psychologist, monthly Management Supervision and attend quarterly peer supervision with a group of Coaching Psychologists, quarterly Trust peer supervision, as well as have supervision from the Health Psychology Interventions Module Leader and my Academic Supervisor. Prior to the doctorate, I had not had such regular supervision, and I have appreciated having supervision with different supervisors. Each supervisor has a different approach and learning from their wisdom and experience has enabled me to grow as a practitioner. Supervision has been invaluable for me to reflect upon difficult and unpredictable situations I have experienced where I have had to take personal responsibility during interventions, such as when an autistic client attempted to strangle me, when a diabetic patient had a hypoglycaemic incident during a session; and when an autistic client disclosed his family had dangerous XL Bully dogs in a household with his physically disabled younger sister. I feel I have really developed my abilities to formulate and deliver a variety of interventions throughout the Doctorate, as well as expanded the client groups I work with in my different roles. This was very influential in me securing my role in the Paediatric Diabetes team.

Consultancy

I was concerned about doing this module, as I was worried about securing a consultancy, this was a field I had no prior experience in. Initially, I secured an honorary consultancy at a city council in the Midlands. I had a few meetings about the opportunity, but it fell through a few months later due to a lack of funding. They offered me an alternative consultancy opportunity, but I did not feel I could enthusiastically commit to this. Through contacts at the university, I contacted an International Children's Centre in the north-west Midlands to offer my services and was delighted to be offered an opportunity to deliver two online staff workshops and one parental workshop using Shein's (1999) Expertise Model approach. This was more in-line with the work I was doing on my work placement.

I found the preparation of the contract very challenging and was unsure about the formal legal terminology. Initially, I constructed a contract that protected the client's interests but not my own. Thankfully, I had supervision which helped me shape the contract to represent both our interests. The importance of the contract became clear when in the final session, there was a change of client, as the original client was on annual leave. The new client asked for certificates of attendance and to record the session. These were not things that were in the contract, and I had to sensitively decline. I have learned from this, the importance of clear communication and that in future, I would include more boundaries around the piece of work within the contract, along with options to make amendments. I feel contract writing was my area of greatest development from this module. I disseminated the learning to my youngest son, when he set up his freelance animation business, I helped him write a contract that he has now used on several international projects. I have also revised my private practice contract due to this learning. I feel my confidence as a Health Psychologist has grown from this module, and I would feel more comfortable in future to approach organisations to offer my skills and services.

Research

Empirical Study

I decided to combine my interests in health anxiety and diabetes, as I had recently secured a role as a clinician in a paediatric diabetes team, to look at health-anxiety-by-proxy in the parents of teenagers with Type 1 Diabetes. The ethics application was lengthy, and I submitted six drafts to my academic supervisor, prior to submitting the application formally. This paid off, as the result of my formal ethics application was 'approved with minor amendments'. Once the ethics were approved, I conducted the research, recruiting through social media, which I do not normally engage in. This was a steep learning curve and one where I felt vulnerable and frustrated. With support from my supervisors, peers and children I was able to navigate the process and spent three weeks posting and reposting about my research. I was delighted that this hard work paid off and I achieved three times the minimum number of participants I needed.

The analysis of the data was another learning curve, where I had to brush up and improve my SPSS skills. I had not completed a linear regression previously, so this was a new skill to learn. I feel my SPSS learning over the years paid off in the analyses of this data and the availability of YouTube clips about different aspects of SPSS processes, were helpful. I know these skills will be helpful for me in the future. Writing up the journal article was challenging as the maximum word count for my chosen journal was 3000 words, including references and tables. It was difficult to write to such a tight word count, however, this journal seemed the most appropriate platform for my research, as it is a popular peer-reviewed journal often found in diabetes teams staff rooms and read by multi-disciplinary staff.

Systematic Review

I had not conducted a systematic review before, having only conducted literature searches and a mini-systematic review for my MSc in Health Psychology. I was aware that search engines had changed a lot over recent years, and I lacked confidence knowing where to start and how to conduct a thorough search. I set up a few sessions with a librarian at the University to help me develop my skills and confidence, re-read lecture notes from the module and bought a book about how to do a systematic review. All these things helped me. It turned out the topic I had chosen was quite unique and my search generated small numbers. My academic supervisor suggested I re-ran my search a few months after I had done so initially and this generated slightly different numbers of papers, which I found concerning. It turned out that I had entered slightly different Boolean parameters around the search terms. This was an important learning point for me. Having passed the module, I had feedback from my supervisor about changes I should make to the review, prior to submitting it for publication. Having previously had a paper published from my MSc, I have awareness about setbacks and potential revisions that a Journal may ask for, and the potential for them to turn the paper down. I am in the process of submitting now.

Through this module, I feel my systematic reviewing skills have improved drastically and I now would feel more confident to conduct another systematic review. My online searching skills and use of Boolean parameters have improved. I have also had the opportunity to be a second reviewer for the first time. Another gain was that I also learned a lot more about health anxiety through the reading. Despite a gain in confidence, I do feel there is still room for improvement though around my online searching skills, as the technology is continually changing. I also learned skills completing a full ethics application, about social media, how to carry out a linear regression on SPSS, and how to write an article for a journal with a very tight word limit. These are all skills I can take forward in my career.

Professional Skills

I feel I have really developed many skills, including clinical skills through self-funded training, and confidence as a clinician through the Doctorate. The reflection I have engaged with throughout the process, in line with HCPC requirements, has really supported me to develop my reflective skills. I believe reflection is the precursor to growth. Reflecting using models was new to me. As well as maintaining my reflective diary, the importance of ‘debriefing’/reflecting after client sessions became apparent to me. Debriefing opportunities have enabled me to reflect immediately after difficult sessions. Whilst it is not always possible to debrief with a colleague, I am mindful to spend some time unpacking and self-reflecting on sessions, so that I am better able to formulate and plan for future sessions. I have noticed that I reflect more in general in life, since starting the doctorate, which is continually helping me to grow as a person.

When I started my placement, I was not very confident to use my full range of skills, sticking mostly to positive behaviour support strategies. As time has gone on and I have undertaken further accredited intervention courses, I have become more comfortable to consider the full range of my skill set when I am formulating with clients, including my previous skillset as a Coaching Psychologist. Because my confidence and skillset had developed, I felt able to apply for a role in a paediatric diabetes team, which was advertised as a ‘Clinical Psychologist’. I was delighted to be offered the developmental position as a ‘Trainee Practitioner Psychologist’, which will become ‘Practitioner Psychologist’ when I qualify.

My resumed private practice feels different this time around, due to my additional skills and experience. I have been working with different clients, and I feel more confident about the skill set I have, how I can apply these skills and how I can develop through reflection. I feel this has made me a better practitioner. I am aware that there is still plenty of scope for me to develop further as a health psychologist and the reflective practices I have embedded are good growth practices, to enable me to continue to develop. Moving forward, I will continue to keep a reflective diary in line with HCPC requirements.

PROFESSIONAL SKILLS

Systems for Legal, Ethical and Professional Standards in Health Psychology

In both my healthcare roles, I have had to learn more about and adhere to UK laws representing children. I also undergo mandatory annual training in paediatric life support as a core professional standard, which I had previously not undergone prior to the doctorate. As a health psychologist, it is very important to adhere to ethical and professional standards set by HCPC and the BPS.

A major ethical situation I faced at my work placement in October 2023 was when I was asked to attend a strategy meeting. At the time, I did not know what a strategy meeting was, nor the significance of it in children’s safeguarding. A strategy meeting is a multi-agency meeting called when there is cause to suspect a child has suffered, thereby meeting thresholds of Section 47 of the Children’s Act (1989). A client open to our team had been referred by a social worker who had disclosed an episode of sexual abuse by the client to his little sister. This was discussed in our initial assessment with the client’s father however, neither myself nor my colleague raised another social services referral, as the information had originally come to us from social services. The strategy meeting cited this as an error. As the direct information from the father was new to us, we should have raised a new social services referral. I learned from this strategy meeting not to assume that the information I was hearing was the same information detailed in the referral, and I know now that in any disclosure of sexual abuse, a fresh social services referral should be made.

I had a situation in 2022, when I accidentally added a note on the wrong client's medical record in our notetaking system. I had been switching from client to client and accidentally saved this note to the wrong file. I contacted our IT department, aware that I had potentially breached client confidentiality, and they pointed me to the form I would need to complete to get this resolved. I was aware this was a GDPR breach and reported it to my Line Manager also. General Data Protection Regulation (GDPR, 2016) is a European Union regulation that protects how information about living beings is processed and stored. She instructed me to complete an incident form but reassured me that it was not a serious breach, as the parents involved had not seen the medical record note. I felt mortified that I had made such a careless mistake, but I am glad that my training kicked in and I knew how to handle it. I have since been doubly sure when uploading notes to clients' medical records that I have the correct client open.

Providing Advice and Guidance

During my consultancy work, my client contacted me to ask for advice about how I use the outcome measure 'Anxiety Scale for Children -autism spectrum disorder' (ASC-ASD) (Rodgers et al., 2016) within my role. This surprised me as she was the Lead Clinical Psychologist for the service, and I had not expected her to ask for my advice as a Trainee Health Psychologist, this was a boost to my confidence. I was able to respond to her queries, checking with the measure's protocol before doing so. I have since also been asked for advice from my former Clinical Supervisor, about a couple of clients in her private practice. These incidences have supported me to grow as a clinician. Through providing supervision to our team's Assistant Psychologist and supervisee clients in my private practice, I have used different models of supervision to guide how I provide advice and support, using a developmental model with the Assistant Psychologist (Stoltenberg and McNeill, 2011); and a Double Matrix process model (Hawkins and Shohet, 2007) in private practice. These models helped shape supervision sessions in ways appropriate to the experience level of the supervisees and are models I would use again in the future.

Communication Skills in Different Contexts

Communication is so important, as it underpins the relationships we have with others. Through my work placement I have adapted my communication skills to work with young people who are neurodiverse (FISS-ASC), and sometimes their neurodiverse parents. This has included using clear speech, written agendas for sessions, communication cards, connecting through non-verbal communication (for example, listening to music together), using Pathological Demand Avoidance (PDA) strategies (PDA Society, 2024); and using chat functions online. These creative ways of working, have enabled me to engage with two selectively mute clients, who gradually opened their communication with me. It took half of our twelve sessions, for the young people to feel comfortable to open to me in each case, and this is a systemic issue with our service, as we are only commissioned to offer up to 12 sessions of intervention.

The scope of my work Involves working with parents who may have poor educational backgrounds, through to consultant psychiatrists, and I tailor my written and spoken communication accordingly. I also write letters to my young clients, and tailor the wording to make it accessible for them. I feel my skills in this area have developed throughout my doctorate.

I have communicated with audiences through conference presentations, conference posters and online training sessions, during my consultancy and through my work placement to professionals. I have tried to focus on clarity and simplicity to get complex messages across.

Team Working

I have worked in different teams in my diabetes and autism roles and regularly attend multi-disciplinary and multi-agency meetings about clients and patients, and inter-professional meetings. During the absence of a Clinical Lead for 10 months in FISS-ASC, I stepped up to more of a team leadership role, for example, interviewing Assistant Psychologists, and completing service evaluation documents. Having worked previously as a senior leader in education, I was able to showcase some of my transferable skills. Throughout my doctorate, my roles have enabled me to work in teams including psychiatrists, paediatric consultants, diabetic and mental health nurses, clinical and counselling psychologists, psychotherapists and dieticians. I have developed and maintained boundaries around the scope of my work, in line with HCPC regulations. In both my roles, I can uniquely contribute perspectives as a health psychologist to multi-disciplinary team discussions, thinking about impacts and intervention for patients around their physical and mental wellbeing. I also took part in the Interprofessional Education Day at Staffordshire University in January 2022, which involved working with laboratory technicians and nurses. This was an opportunity to explain what health psychologists do to new audiences and for me to work with laboratory technicians.

Service Users

I have been fortunate to work with a wide variety of service users, children of all ages, their parents and sometimes wider families in a variety of settings, in CAMHS, on the hospital ward, in the forest for Woodland Wellbeing, in family homes, schools, parks and cafes. As part of our routine outcome measures in FISS-ASC, we ask parents to complete an SLDOM survey (Sheffield Learning Disability Outcome Measure) (CORC, 2024). This measure enables service users to provide feedback about the service which we can act upon to make improvements. One such improvement was meeting clients in flexible locations of their choosing where possible, rather than just clinic, home or school visit options. Another improvement was offering hybrid parental workshops, as some parents suggested they would prefer a face-to-face setting, and others preferred online format. We were also in negotiations with a former service user, to engage her as an Expert by Experience (EBE), to help deliver some of our parental workshops, however, due to financial cuts by our Trust, we were unable to secure funding for EBE payment. I feel there is scope in future to incorporate service user evaluation from our capable autistic clients too. In the diabetes service, we have gathered parental feedback about charity-funded Woodland Wellbeing sessions we have provided. This has led to us changing the format of the sessions, to invite children of similar ages, rather than children across the age ranges. During doctoral training at university, we had the opportunity to have a session with an EBE who talked about her communication experiences with professionals. This enabled me to practice improving my communication skills through role play and emphasised the importance of maintaining good communication to maintain the therapeutic relationship.

ISSUES ASSOCIATED WITH EQUALITY, DIVERSITY AND INCLUSION

Both services I work for have a predominantly white British client base. This surprises me, as the location I work in is quite multi-racial, and I work in multi-racial teams. There may be obstacles for some ethnic minority families to access the FISS-ASC team. We only accept secondary referrals to our team; therefore, families must already be engaging with CAMHS, social services or the school inclusion service. There may be a reluctance for some families from ethnic minorities to seek assessment and ongoing support for autism for a variety of complex reasons. There is a need for enquiry locally to establish why there is an imbalance in ethnicities in our service. Both services I work for have access to interpreters if needed, however, I have not had a need to use these services to date. There was a racial issue when one of my autistic clients called a family in our waiting room “Ni**ers”. I exercised personal responsibility in this unpredictable situation apologising to the family and following up with them after my session.

Working in a specific area of East Sussex renown for having a thriving LGBTQ+ population, means that many of the clients I work with come from the LGBTQ+ community, and it is quite common for me to work with LGBTQ+ clients and families. Also, I have worked with a few clients with disabilities. These have mainly been learning disabilities, which had previously been undiagnosed prior to referral to our service. My training in cognitive assessments, helped me to identify these learning disabilities as I was able to conduct assessments and therefore, signpost clients to learning disability services after our service closed to them. I have also worked with a couple of families who had mobility issues. The centre I work in is step-free and I therefore thought, disability friendly. I did, however, identify a few tight corners with doors, which were far from ideal for wheelchair users, as my client got stuck and was able to pass this information on to the centre manager to inform future access changes.

Prior to my teaching sessions at both universities, I met with Module Leaders to establish if any students had special educational needs (SEN) so I could plan inclusively for their diversity. In the East Sussex group, there were students living with autism, selective mutism and trans-gender students. I used my previous experience teaching SEN students to plan resources and sessions that were free from unnecessary distractions, with clear instructions. The Module Leader explained how the selectively mute student preferred to communicate, so I would know her preferred method for me to use.

When I have been involved in shortlisting Assistant Psychologists, the Trust human resources department ensured that details which might identify any of the protected characteristics (Equality Act, 2010), are hidden from view for the shortlisting process, to prevent any unconscious bias. I have also undertaken mandatory Equality Diversity and Inclusivity training with the Trust, which keeps EDI issues at the forefront of my mind, and I know the process to report any issues through our 'Freedom to Speak Up' contact.

Engaging in Continued Professional Development (CPD)

There is a need to engage in ongoing Continued Professional Development, as part of HCPC requirements as a health psychologist. I have engaged in CPD throughout my doctorate, through mandatory and optional Trust training, self-funded training, attendance at conferences, doctoral lectures and the interprofessional education day at the university. Through my training, I have become a better clinician, as I have developed my clinical toolbox, to include Cognitive Behavioural Therapy, Dialectical Behavioural Therapy, Acceptance and Commitment therapy, Positive Behaviour Support, DNA-V, Tree of Life narrative technique. I have undertaken in-house training in cognitive assessments and have been able to offer WISC-5 and ABAS-3 cognitive assessments to clients. This has expanded how I have been able to support families, to secure a Learning Disability diagnosis.

I have attended conferences over my doctorate studies, at university, through the Psychology Professions Network, and through my Trust. These opportunities have expanded my understanding of current practices and research. It is important to continue to engage with CPD, as the clinical horizon is forever changing, and it is important to keep abreast of new developments, to provide a proficient service. Through CPD, I also became a BPS Approved Psychology Practice Supervisor. I enjoy CPD and learning and I feel I have greatly developed as a Health Psychologist through this, and it is something I look forward to continuing with in the future.

Organisational and Systemic Issues

In my role in the diabetes team, the job title on my contract is ‘Practitioner Psychologist’, not ‘Health Psychologist’. Despite being a Band 7 clinician for over 3 years in my FISS-ASC role, as I do not yet have HCPC registration, I am being paid as a Band 6 ‘Trainee Practitioner Psychologist’ until I achieve HCPC registration, even though I am expected to carry out Band 7 role duties and my job title is ‘Practitioner Psychologist’. This expectation feels in breach of professional boundaries. I asked for the title ‘Health Psychologist’ but was told that our Trust does not use this title. Whilst I am very grateful to have secured a Practitioner Psychologist position, I am also upset that the Trust will not use the title ‘Health Psychologist’, as this is the doctorate I have spent almost four years studying. Our Trust uses the titles ‘Clinical Psychologist’ and ‘Practitioner Psychologist’. ‘Clinical Psychologist’ is the prime title and ‘Practitioner Psychologist’ incorporates all psychologists other than clinical psychologists. It feels a little insulting that we cannot use the title we have earned. At my end of placement visit, my clinical supervisor stated that my successful application for the above role had prompted him to re-evaluate how the Trust advertises for psychologists, and he said that the Trust would now be changing their advertising wording for all psychologist posts, they will be advertised as ‘Practitioner Psychologists’. This felt like a positive outcome for health psychologists.

I am fortunate to have worked as a Trainee Health Psychologist within the NHS since 2021, in both mental and physical health settings, under the same Trust, even though the settings I work in are run by different NHS Trusts. This is because one Trust buys in psychology staff from the other Trust. This is an organisational issue I had not come across before, so this situation expanded my understanding of the structure of NHS Trusts. I can see parallels between the two Trusts in terms of organisation, hierarchies and training, however, there are differences too. The diabetes team Trust has more financial stability and availability, there are various pots of money available for teams. This Trust also works with a children's charity, which provides financial support to teams. In contrast, the FISS-ASC Trust has made continual financial cuts since I have worked there and there are few opportunities for financial reimbursement for external training/events. Working for the two Trusts in different settings has helped me to understand the bigger picture of the NHS and how the system fits together. Bureaucracy involved in hiring new NHS staff is a lengthy process and I have experienced lengthy gaps of team members in our service. Each time this has happened; my workload has increased to cover the vacancy. This has been far from ideal, in a service that already has a waiting list over a year long.

The two roles I hold have very different Intervention models. FISS-ASC service is commissioned to offer up to 12 sessions of intervention. Sometimes, it takes 5 or 6 sessions to develop a therapeutic relationship with a client, so this can feel limiting and time pressured. Whereas the diabetes service can be working with a family over 18 years. Clients have access to psychological intervention periodically as needed throughout this duration.

DEVELOPMENT AS A HEALTH PSYCHOLOGIST

I have developed in so many areas since starting my doctorate. When I started, I had limited experience working with people with autism and no experience working in a physical health setting with diabetes. One of my biggest achievements has been to secure a role as a psychologist in a physical health setting. At the start of the doctorate, I had experience of ‘3Ps’ and ‘5Ps’ formulation but now, I also have experience using COM-B formulation, Vicious Flower, CBT and ACT formulation. This has enabled me to focus on selecting the appropriate formulation method with clients. My clinical skills and toolbox have expanded vastly, meaning I am able to offer a wide range of intervention in my roles, to suit the needs of the client. I also undertook in-house training in cognitive assessment and have been able to offer WISC-5 and ABAS-3 cognitive assessments, score and to write comprehensive reports from these. My written and verbal communication skills have expanded too, which has supported my intervention with clients and parents, my letter and report writing, my presentation skills and my social media skills. My clinical work has also been supported by my deeper reflections using Gibbs Reflective Cycle. Through completing my systematic review and quantitative research, I have expanded my research skills.

When I started the doctorate, my Clinical Supervisor at the time, had little understanding of health psychology and this led to an uncomfortable situation in my initial work placement visit, where due to her lack of understanding, she was quite rude to my Academic Supervisor. I felt mortified by the situation, very embarrassed and stressed by the whole thing. This situation made me very aware that I need to explain to other professionals what health psychologists are and the worth we bring to the NHS. Three and a half years on, I have a new Clinical Supervisor, and he has really listened to me about health psychology and has developed his understanding. Perhaps the biggest recognition of this was when he authorised that all Trust psychologist positions should be advertised as ‘Practitioner Psychologist’ roles, rather than ‘Clinical Psychologist’ roles. He also complimented me in his ‘End of Placement’ report stating that I was a “trailblazer for health psychology”.

When I started the doctorate, despite already being a Chartered Psychologist, I did not feel like a ‘proper’ psychologist, as I was not working in the NHS, nor doing much intervention work.

I felt my career had mainly been about teaching others what psychology was, rather than ‘doing’ it. However, now I do feel like a proper Health Psychologist, and I can see the value I bring to my NHS roles. I can also see the value more now, in the teaching of psychology I had previously done, and the value of the teaching and training I did during the doctorate, especially as I reunited with a former student during my teaching module, who now has a PhD herself. I think working in intervention, I have gained a wider perspective on the breadth of psychologist roles. I am looking forward to my future, developing my career as a health psychologist.

REFERENCES

Children's Act 1989. C.47. Retrieved December 4, 2024, from https://www.legislation.gov.uk/ukpga/1989/41/section/47

Chorpita, B. F., Ebesutani, C., & Spence, S. H. (2015). Revised children's anxiety and depression scale user's guide. *UCLA: Child First*.

Childrens Outcomes Research Consortium (CORC), (2022). *SLDOM*. Retrieved November 11, 2024, from https://www.corc.uk.net/outcome-experience-measures/sheffield-learning-disabilities-outcome-measure-sldom/

Craig, C. L., Marshall, A. L., Sjöström, M., Bauman, A. E., Booth, M. L., Ainsworth, B. E., Pratt, M., Ekelund, U., Yngve, A., Sallis, J.F. & Oja, P. (2003). International physical activity questionnaire: 12-country reliability and validity. *Medicine & science in sports & exercise*, *35*(8), 1381-1395.

Equality Act 2010. Retrieved December 4, 2024, from https://www.gov.uk/discrimination-your-rights

General Data Protection Regulation 2016. Retrieved December 4, 2024, from https://ico.org.uk/for-organisations/data-protection-and-the-eu/data-protection-and-the-eu-in-detail/the-uk-gdpr/

Gibbs, G. (1988). *Learning by Doing: A Guide to Teaching and Learning Methods*. Oxford Further Education Unit, Oxford Polytechnic.

Girgis, E., Sheffield Children's NHS Foundation Trust, & CORC (2013). *Sheffield Learning Disabilities Outcome Measure (SLDOM)*. Retrieved December 23, 2024, from: https://www.corc.uk.net/outcome-experience-measures/sheffield-learning-disabilities-outcome-measure-sldom/

Green, B., Shirk, S., Hanze, D., & Wanstrath, J. (1994). The Children's Global Assessment Scale in clinical practice: An empirical evaluation. *Journal of the American Academy of Child & Adolescent Psychiatry, 33*(8), 1158-1164.

Green, S., Palmer, S. (2018). Positive psychology coaching: Science into practice. *Positive psychology coaching in practice*, 1-15.

Hawkins, P., & Shohet, R. (2007). Towards a learning culture. *Leading Work with Young People*, 142-155.

Hayes, L. L., & Ciarrochi, J. V. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. New Harbinger Publications.

HCPC. (2022, October 7). *What your standards say*. Retrieved August 7, 2024, from https://www.hcpc-uk.org/standards/meeting-our-standards/reflective-practice/reflection-and-meeting-your-standards/

Ingeman, K., Frostholm, L., Frydendal, D. H., Wright, K. D., Lockhart, E., Garralda, M. E., Kangas, M. & Rask, C. U. (2021). A new measure of excessive parental worries about children's health: Development of the Health Anxiety by Proxy Scale (HAPYS). *Nordic journal of psychiatry*, *75*(7), 523-531.

Law, D., & Jacob, J. (2015). *Goals and goal-based outcomes (GBOs): Some useful information*. CAMHS Press.

Miller, S. D., Duncan, B. L., Brown, J., Sparks, J. A., & Claud, D. A. (2003). The outcome rating scale: A preliminary study of the reliability, validity, and feasibility of a brief visual analogue measure. *Journal of brief Therapy*, *2*(2), 91-100.

PDA Society. (2024, November 11). *Helpful approaches with PDA – Children.* Retrieved November 11, 2024, from https://www.pdasociety.org.uk/i-am-a-parent-carer/resources/helpful-approaches-for-children/

Perrin, S., Meiser-Stedman, & R., Patrick, S. (2005). The children's revised impact of event scale (CRIES): Validity as a screening instrument for PTSD. *Behavioural and Cognitive Psychotherapy, 33*(4), 487–498. https://doi.org/10.1017/S1352465805002419.

Rodgers, J., Wigham, S., McConachie, H., Freeston M., Honey, E., & Parr, J.R. (2016). Development of the Anxiety Scale for Children with autism spectrum disorder (ASC-ASD). *Autism Research, 9*(11), 1205-1215.

Rolfe, G. Freshwater, D. & Jasper, M. (2001). *Critical reflection for nursing and the helping professions: a user's guide.* Palgrave MacMillan.

Rodgers, J., Wigham, S., McConachie, H., Freeston, M., Honey, E., & Parr, J.R. (2016). Development of the anxiety scale for children with autism spectrum condition. *Autism Research 9*(11), 1205-1215. https://doi.org/10.1002/aur.1603.

Schein, E. H. (1999). *Process consultation revisited: Building the helping relationship*. Addison-Wesley.

Stoltenberg, C. D., & McNeill, B. W. (2011). *IDM supervision: An integrative developmental model for supervising 22ounsellors and therapists*. Routledge.

Ware, J. Jr., Kosinski, M. & Keller, S.D. (1996). A 12-item short-form health survey: Construction of scales and preliminary tests of reliability and validity. *Med Care, 34*(3), 220-233. https://doi.org/10.1097/00005650-199603000-00003.

Welch, G. W., Jacobson, A. M., & Polonsky, W. H. (1997). The Problem Areas in Diabetes Scale: an evaluation of its clinical utility. *Diabetes care*, *20*(5), 760-766.

Chapter 2: Research from Design to Dissemination

2.1 Quantitative Study Manuscript

RESEARCH FROM DESIGN TO DISSEMINATION

JOURNAL ARTICLE

Max 3,000 words including references & tables
(Excluding Key words, Abbrev. Title, Key points, Abstract & Acknowledgements)

DOES HEALTH ANXIETY BY PROXY IN PARENTS OF TEENAGERS LIVING WITH TYPE 1 DIABETES, ASSOCIATE WITH PARENTAL QUALITY OF LIFE, RESILIENCE & BURDEN OF CARE?

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KEY WORDS

Type 1 Diabetes Mellitus, T1D, Health anxiety by proxy, HAP, parental quality of life, resilience, burden of care, teenagers.

ABBREVIATED TITLE: Does HAP associate with parental quality of life, resilience and burden of care, T1DM?

KEY POINTS

- Parental quality of life, and emotional burden of care were predictors of health anxiety by proxy.
- Parents with less resilience and a lower quality of life were found to have higher levels of health anxiety by proxy.
- Parents with higher levels of health anxiety by proxy were found to have higher levels of burden of care.
- There are implications of a need for parental support intervention, for the parents of teenagers with Type 1 Diabetes.

ABSTRACT

Previous research evidence links health anxiety by proxy (HAP) with parental quality of life in parents of children with Type 1 Diabetes (T1D). However, there is a lack of research around parents of *teenagers* with T1D. Teenage years are a time of necessary gradual transition of T1D management from parents to teenagers, which may result in high levels of HAP, negatively impacting parental quality of life and parent-teen relationships. This research conducted an online survey via social media with a self-selected sample of 75 parents of diabetic teenagers in the UK to establish associations between HAP, quality of life, resilience and burden of care. The survey comprised four previously validated questionnaires: 'Health Anxiety by Proxy Scale' (HAPYS), 'Parent Quality of Life Scale in Type 1 Diabetes' (PQOL-T1D), 'Connor-Davidson Resilience Scale' (CD-RISC-10) and 'Check Your Health by Proxy'. Findings showed that parental quality of life and emotional burden of care were predictors of HAP. HAP was positively correlated with parental quality of life (a higher score denotes lower quality of life) and with positively correlated with four subscales of burden of care (physical, emotional, social and quality of life). Health anxiety was negatively correlated with resilience. It was concluded from the linear regression that future trends of high health anxiety by proxy may be predicted where parents of teenagers with Type 1 Diabetes have low quality of life and high burden of care. This implies a need for therapeutic intervention for parents of teenage diabetic patients distressed by their child's condition.

INTRODUCTION

Parents of children with T1D experience a multitude of emotions relating to their child's diagnosis, including guilt, fear, anxiety, stress, hypervigilance, loss, and grieving for their previously healthy child[1]. This psychological distress can continue way beyond diagnosis[2]. Some of the impacts of the parental burden of caring for a child with a long-term condition, include parental exhaustion, lack of sleep, worrying about child's health, treatment or potential death, emotional impacts, social impacts due to limited freedom, and feeling an obligation to give care[3]. Impacts upon parents of children with T1D described the "monopolisation of life" reflecting the ever-present negative impacts of parenting children with T1D upon parental wellbeing, relationships, and finances[4].

Psychological impacts for parents of *teenagers* with T1D may be even greater, as this is a time of transition from parental management of the condition to the teenager's independent management of the condition. Family tensions can escalate during this transitional period[5], with increased conflicts between teenagers and their parents, and higher levels of parental stress. This situation may lead to lower levels of effective systemic family functioning and increased behavioural issues, impacting family relationships. There are a host of health implications and secondary health conditions that people living with T1D can develop, therefore, it is not surprising that parents of teenagers living with T1D, may experience high levels of health anxiety about their child, which may impact how they parent their teenager and how much independence they enable them to manage their condition, parent-adolescent relationships, and parental quality of life[6]. This psychological distress may impact parent-child relationships and the psychological health and behaviour of the child too[2]. It is therefore evident that parenting a child with T1D brings additional distress but parenting a *teenager* with T1D can bring additional challenges for the teenager and the parent, which potentially negatively impact parent-teenager relationships[7]. Although there has been one study which has explored 16–18-year-olds[7], there are no published studies which address the impact of parenting a wider age group of teenagers, that the current paper attempts to address.

Health anxiety by proxy, HAP, is a measure of when the excessive anxiety is about another person's health and often refers to a parent worrying excessively about a child's health[8]. HAP and quality of life were linked by Johnson and colleagues[9], who found that fear of hypoglycaemia in their child, was negatively correlated with quality of life. Fear of hypoglycaemia in children may be an expression of HAP. They found parents with the highest levels of fear of hypoglycaemia in their child, had the lowest levels of quality of life. Health anxiety-by-proxy has been referred to in the diabetes literature as 'diabetes-by-proxy'[10], regarding how parents of children living with T1D are often exceptionally engaged in their parenting duties as they worry excessively about potential negative outcomes of T1D for their child.

Parental perception of burden of care, parental resilience and quality of life are factors implicated with HAP[11]. Greater levels of resilience have been found to reduce mothers' HAP about hypoglycaemic episodes in their child[11]. Parents with high levels of resilience had better mental health and quality of life, as resilience served as a protective factor, outstripping the negative impacts of caregiver burden on quality of life[12].

The evidence base to date is lacking a focus on parents of *teenagers* with diabetes, that examines associations between health anxiety by proxy, parental quality of life, care burden and resilience. There is currently little recognition of the additional pressures highlighted above for parenting teenagers with T1D. The aim of this research was to establish if there were associations between health anxiety-by-proxy in parents of teenagers (aged 13-17 years) living with Type 1 Diabetes (T1D) in the UK, parental quality of life, resilience and burden of care.

Two research questions were addressed in this study:

Research question 1: What is the size and direction of correlations between health anxiety-by-proxy and i) parental quality of life, ii) burden of care, iii) resilience, in parents of teenagers living with T1D (aged 13-17 years)?

Research question 2: Do parental quality of life, burden of care, resilience, in parents of teenagers living with T1D (aged 13-17 years) predict health anxiety-by-proxy?

MATERIALS AND METHODS

Design: Quantitative cohort study with a cross-sectional design.

Participants: For a power level of 0.8 and a medium effect size of 0.5, for 3 variables, a minimum number of 30 participants would be needed. Over a two-week period, a self-selected sample of 75 parents of teenagers (13-17 years) living with T1D from the UK were recruited through social media: Facebook, LinkedIn, X, Instagram.

Survey:

A survey comprising socio-economic questions seeking age, sex, ethnicity, educational status, relationship of participants to child, and age and sex of teenager; were followed by validated measures and there was an open-ended question to finish the survey where parents could add comments:

Health Anxiety-by-Proxy Scale (HAPYS)[13] – a 26-item scale subdivided into thoughts, feelings and behaviours around health anxiety, measured on a 5-point Likert scale.

Parent Quality of Life Scale in Type 1 Diabetes for parents (PQOL-T1D)[14]- a 12-item scale subdivided into physical and functional wellbeing, and emotional and social wellbeing, measured on a 5-point Likert scale.

Connor-Davidson Resilience Scale (CD-RISC-10)[15]- a 10-item scale, measured on a 5-point Likert scale.

Check Your Health by Proxy[16], to assess for parental care burden (BoC). This scale uses 4 two-sided thermometer scales (physical, emotional, social, quality of life) to measure the difference between life with and without diabetes.

Procedure:

Posts were made on various social media platforms to recruit parents of teenagers 13-17 years living with T1D, during a 3-week period in September 2024, asking for participants to consent to complete a survey about health anxiety-by-proxy, quality of life, resilience and burden of care. The recruitment posts provided a link to an information sheet, consent form and Qualtrics survey, followed by a debrief. Full ethical approval was granted by the University of Staffordshire.

RESULTS

The mean age of participants was 46.43 years; the mean age of their teenagers was 15.03 years. Sixty-nine participants were mothers and 6 were fathers. All were white British, Irish or ‘other white’. Forty-two teens were sons, 32 were daughters, 1 teen was non-binary. Descriptive statistics from HAPYS ($\bar{x}$ = 32.853, SD = 21.456), suggested wide variance in participants’ experiences of HAP, whilst PQOL ($\bar{x}$ = 20.773, SD = 10.146), suggested a lower score for quality of life, with less variation. CDRISC ($\bar{x}$ = 25.013, SD = 6.392), suggested participants scored relatively highly in terms of resilience, with little variation. The construct for highest BoC was emotional ($\bar{x}$ = 17.467, SD = 15.821) with the greatest variance, followed by the BoC QoL construct ($\bar{x}$ = 11.533, SD = 12.765), physical construct ($\bar{x}$ = 10.973, SD = 10.601), and social construct ($\bar{x}$ = 10.000, SD = 12.304).

The Shapiro-Wilk tests for normality were significant for all four variables and there was not deviation from linearity, so parametric assumptions were met, and Pearsons’ correlations were conducted on the data. Correlations were found between HAP, parental quality of life (PQOL), resilience (CDRISC) and burden of care (BoC) (see Table 1). There was a positive correlation between HAP and PQOL (r =.777 $p < .001$) - meaning parents with higher levels of HAP had lower quality of life (high score on PQOL equates to lower quality of life). A negative correlation was found between HAP and CDRISC (r =-.384 $p < .001$) showing that parents with higher levels of HAP were less resilient. Positive correlations were found between HAP and the four subscales of BoC (physical r=.404 $p < .001$, emotional r=.747 $p < .001$, social r=.503 $p < .001$, quality of life r=.687 $p < .001$). This shows that parents with higher levels of HAP also had higher levels of BoC (physical, emotional, social, quality of life), with emotional BoC being the most strongly associated.

Table 1: **Means, standard deviations, and intercorrelations**

Variables	1	2	3	4	5	6	7	M	SD
(1)HABP	1.00	0.777**	-0.384**	0.404**	0.747**	0.503**	0.687**	32.853	21.457
(2)PQOL		1.00	-0.465**	0.524**	0.675**	0.656**	0.682**	20.773	10.146
(3)CDRISC			1.00	-0.313**	-0.424**	-0.369**	-0.418**	25.013	6.392
(4)BoC physical				1.00	0.493**	0.509**	0.476**	10.973	10.601
(5)BoC emotional					1.00	0.595**	0.747**	17.467	15.821
(6)BoC social						1.00	0.705**	10.000	12.304
(7)BoC quality of life							1.00	11.533	12.765

** $p < 0.001$

A multiple linear regression was conducted to test the extent to which PQOL, CDRISC and BoC variables predict HAP. A significant regression model was found (6,68), F=29.181, p <.001, which explained 72% of the variance in HAP. There were two significant predictors of HAP: PQOL (Beta = 0.554, p < .001) and emotional BoC (Beta = 0.378, p<.001). For every increase of 1 of HAP, there was an increase by the value of b (1.172) (SE .216) in PQOL, and for every increase of 1 of HAP, there was an increase by the value of b (0.513) (SE .141) in emotional BoC. Table 2 provides the results of the analysis and Figure 1 the scatterplot and Figure 2 the regression slope.

Table 2: Prediction of HAP using PQOL, CDRISC and BoC[a] (*N* = 75)

Variable	**Unstandardized B**	**Std Error**	**Beta**
Constant	-2.165	8.258	
PQOL	1.172**	.216	.554
CDRISC	0.100	.248	.030
Physical BoC	-0.136	.160	-.067
Emotional BoC	0.513**	.141	.378
Social BoC	-0.315	.171	-.181
Quality of life BoC	0.333	.190	.198
R	.849[a]		
R^2	0.720		
Adjusted R^2	0.696		
Model F	29.181**		

** p <0.001

DISCUSSION

Current findings demonstrate the complexity of the impact of diabetes on parents of teens living with the condition and justify the need for parental support, which may positively impact family relationships. Correlations between HAP, parental quality of life, resilience and burden of care show that greater HAP is linked to poorer quality of life and less resilience. The correlation between HAP and PQOL meant that parents with higher levels of HAP had lower quality of life. There was a positive correlation between HAP and BoC. This shows that parents with higher levels of HAP also had higher levels of BoC (physical, emotional, social, quality of life), with emotional BoC being the most strongly associated. A negative correlation was found between HAP and CDRISC meaning that parents with higher levels of HAP were less resilient. This all suggests these personality traits may be implicated, for example, some people may be inherently less resilient than others. Leys et al (2020)[17], suggest there is potential to improve upon resilience skills, in ways that could positively impact health. As parental quality of life got worse, perceptions of burden of care increased.

Regression analyses examined whether parental quality of life, burden of care and resilience predicted HAP in parents of teenagers living with T1D. It was found that parental quality of life and emotional burden of care were the strongest predictors of HAP. This means if parents had poorer quality of life, represented by lower physical and functional wellbeing and lower emotional and social wellbeing, they were more anxious about their child. Also, if they had higher emotional burden of care, they were more anxious about their child and these variables predicted higher HAP. This links with previous findings by Golics et al., (2013)[3] and Kimbell et al., (2021)[4.] This new information tells us that if paediatric diabetes services could screen parents of teenagers with T1D for emotional BoC and PQOL, they could identify parents at risk of having high HAP, and could create targeted preventative interventions to support parents, to reduce the impacts of high HAP for parents and teenagers themselves.

Strengths:

This research was the first of its kind to focus specifically on parents of teenagers with T1D, with a view to informing potential parental interventions. This research gained a better understanding of the associations between HAP, parental quality of life, resilience and subtypes of burden of care, using multiple linear regression, providing a more informed picture of the interrelation of their impacts, which had not been considered in previously published papers.

Limitations:

Most participants in the current study were mothers of teenage boys. It would have been interesting to understand perspectives from more fathers of teenagers, to establish if there were gender differences in HAP. Bassi et al. (2021)[18] highlighted angst-heavy perspectives of mothers of young people with diabetes. A self-selected sample was used, to gain cross-sectional data from parents of teenagers with T1D from around the UK. Using a self-selected sample is not representative of all parents of teenagers with T1D as the study may have attracted participants who were particularly anxious. A socio-economic question about working status of parents was not asked. Working status of parents may have impacted their quality of life, resilience and sense of care burden.

Implications:

Paediatric diabetes teams could screen parents of teenagers with T1D for PQOL and emotional BoC, to identify parents at risk of HAP. Targeted intervention could be formulated to support families, which may benefit parents and teenagers living with diabetes, as it may improve parent-child relationships and reduce health anxiety amongst parents. This may involve individual parental intervention, group parental support, or signposting parents for further support. Acceptance and Commitment therapy (ACT)[19] and/or systemic family therapeutic interventions[20] may help to reduce HAP, to lessen potential negative impacts. The linear regression representing that parental quality of life and emotional burden of care are predictors of HAP is useful as paediatric diabetes teams could work more proactively and preventatively. Further research is needed, including qualitative research, to explore in more depth if improving perception of emotional burden of care and parental quality of life, could support parents of teenagers with diabetes to have less health anxiety by proxy.

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Dr Rachel Povey: Supervision: Oversight and leadership responsibility for the planning and execution of the research. Writing: Critical review, commentary, and revision.

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REFERENCES

1. Rifshana, F., Breheny, M., Taylor, J. E., & Ross, K. The parental experience of caring for a child with type 1 diabetes. *J Child Fam Stud 2017*, *26*(11), 3226-3236.
2. Whittemore, R., Jaser, S., Chao, A., Jang, M., & Grey, M. Psychological experience of parents of children with type 1 diabetes: a systematic mixed-studies review. *Diabetes Educ 2012*, *38*(4), 562-579.
3. Golics, C. J., Basra, M. K. A., Finlay, A. Y., & Salek, S. The impact of disease on family members: a critical aspect of medical care. *J. R. Soc Med 2013*, *106*(10), 399-407.
4. Kimbell, B., Lawton, J., Boughton, C., Hovorka, R., & Rankin, D. Parents' experiences of caring for a young child with type 1 diabetes: a systematic review and synthesis of qualitative evidence. *BMC Pediatrics 2021*, *21*, 1-13.
5. Moore, S. M., Hackworth, N. J., Hamilton, V. E., Northam, E. P., & Cameron, F. J. Adolescents with type 1 diabetes: parental perceptions of child health and family functioning and their relationship to adolescent metabolic control. *Health qual life out 2013*, *11*, 1-8.
6. Holtz, B., Mitchell, K. M., Holmstrom, A. J., Cotten, S. R., Dunneback, J. K., Jimenez-Vega, J., Ellis, D. A. & Wood, M. A. An mHealth-based intervention for adolescents with type 1 diabetes and their parents: pilot feasibility and efficacy single-arm study. *JMIR mHealth and uHealth 2021*, *9*(9).
7. Dashiff, C., Riley, B. H., Abdullatif, H., & Moreland, E. Parents' experiences supporting self-management of middle adolescents with type 1 diabetes mellitus. *Pediatric Nursing 2011*, *37*(6), 304.
8. Salama, H. E. Z., Alnajjar, Y. A., AbuHeweila, M. O., Dukmak, O. N., Ikhmayyes, I., & Saadeh, S. Health anxiety by proxy disorder: A case report. *Cureus*, 2023, *15*(1).
9. Johnson, S. R., Cooper, M. N., Davis, E. A., & Jones, T. W. Hypoglycaemia, fear of hypoglycaemia and quality of life in children with Type 1 diabetes and their parents. *Diabetic medicine 2013*, *30*(9), 1126-1131.
10. Henderson, J. N., Carson, L. D., Tomette, A., Hass, A., & King, K. Diabetes-by-Proxy: Virtual Embodiment of Disease by Oklahoma Choctaw Parents of Children with Type 1 Diabetes. *Med Anthropol Q. 2021*, *35*(1), 25-42.
11. Cardinali, P., Rapetti, E., & Migliorini, L. Fear of hypoglycemia in Italian mothers of children with type 1 diabetes: the mediating role of resilience. *Health Psychology Research 2021*, *9*(1).
12. Luo, D., Gu, W., Bao, Y., Cai, X., Lu, Y., Li, R., Wang, Y. & Li, M. Resilience outstrips the negative effect of caregiver burden on quality of life among parents of children with type 1 diabetes: An Application of Johnson–Neyman Analysis. *J. Clin Nurs. 2021*, *30*(13-14), 1884-1892.
13. Ingeman, K., Frostholm, L., Frydendal, D. H., Wright, K. D., Lockhart, E., Garralda, M. E., Kangas, M. & Rask, C. U. A new measure of excessive parental worries about children's health: Development of the Health Anxiety by Proxy Scale (HAPYS). *Nord J. Psychiatry 2021*, *75*(7), 523-531.
14. Binay Yaz, Ş., & Çinar, D. Parent Quality of Life scale in Type 1 Diabetes: a scale development and validation study. *Eur. J. Pediatr 2023*, *182*(8), 3491-3499.
15. Campbell-Sills, L., & Stein, M. B. Psychometric analysis and refinement of the connor–davidson resilience scale (CD-RISC): Validation of a 10-item measure of resilience. *J. Trauma Stress 2007*, *20*(6), 1019-1028.

16. Brorsson, A. L., Lindholm Olinder, A., Wikblad, K., & Viklund, G. Parent's perception of their children's health, quality of life and burden of diabetes: testing reliability and validity of 'Check your Health'by proxy. *Scand. J. Caring Sci 2017*, *31*(3), 497-504.
17. Leys, C., Arnal, C., Wollast, R., Rolin, H., Kotsou, I., & Fossion, P. Perspectives on resilience: personality trait or skill? *Eur J.Trauma 2020*, *4*(2), 100074.
18. Bassi, G., Mancinelli, E., Di Riso, D., & Salcuni, S. Parental stress, anxiety and depression symptoms associated with self-efficacy in paediatric type 1 diabetes: a literature review. *Int J. Environ Res. 2021*, *18*(1), 152.
19. Byrne, G., Ghráda, Á. N., O'Mahony, T., & Brennan, E. A systematic review of the use of acceptance and commitment therapy in supporting parents. *Psychol Psychother T. 2021, 94*, 378-407.
20. Feldman, M. A., Anderson, L. M., Shapiro, J. B., Jedraszko, A. M., Evans, M., Weil, L. E., Garza, K.P. & Weissberg-Benchell, J. Family-based interventions targeting improvements in health and family outcomes of children and adolescents with type 1 diabetes: a systematic review. *Current Diabetes Reports 2018*, *18*, 1-12.

Figure 1: Regression Scatterplot

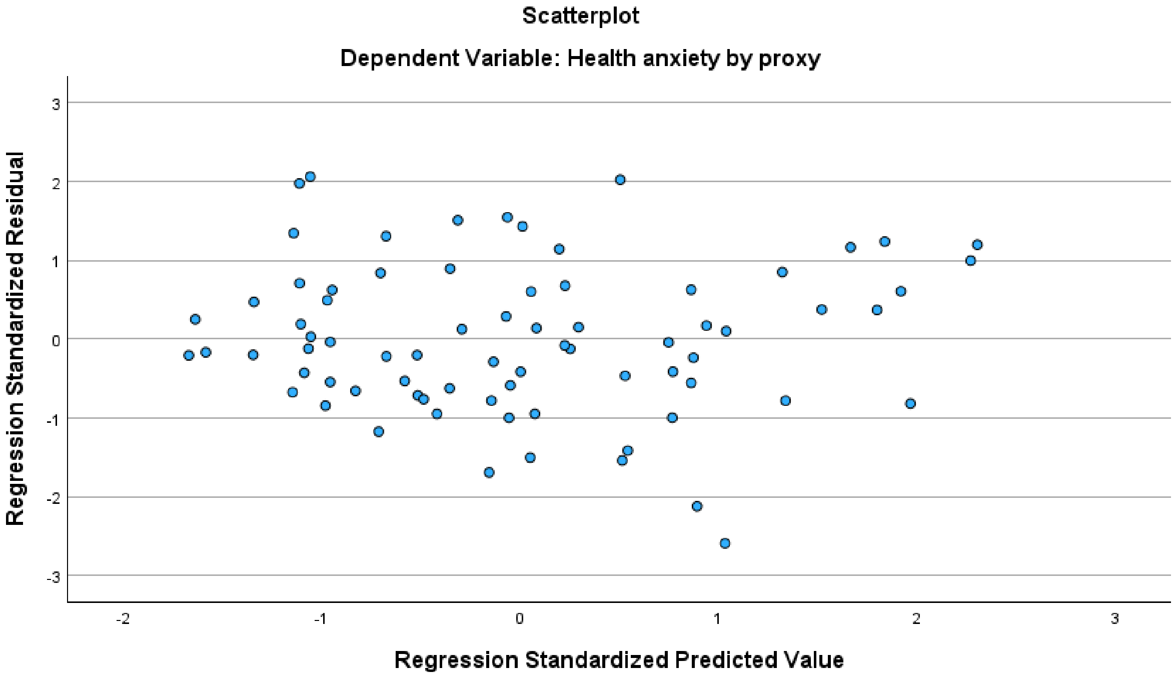
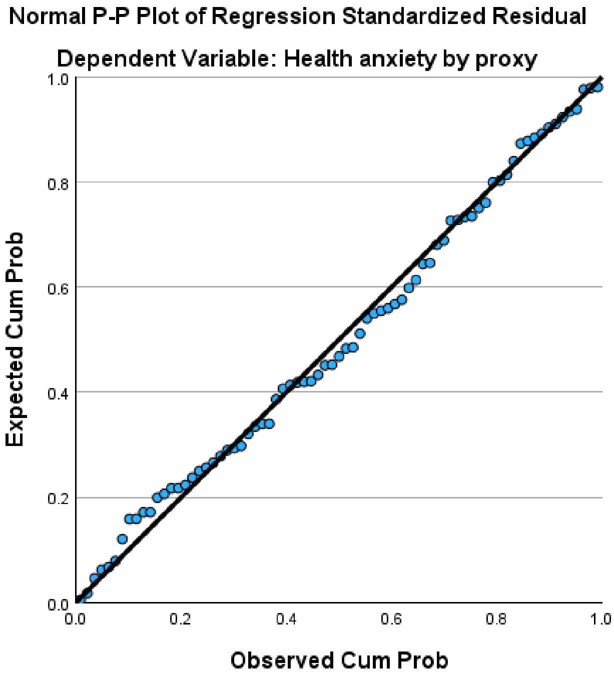


Figure 2: Regression Slope



2.2 Quantitative Study Commentary

RESEARCH FROM DESIGN TO DISSEMINATION
REFLECTIVE COMMENTARY

Protocol for Research

My research project journey started formally in March 2024, but I had kept notes of potential ideas that came to mind for the year preceding this. This was ahead of my Learning Plan schedule and thoughts about the topic I would choose were circulating in my head as I completed the write-up of my systematic review. I created a list of ideas and decided upon a ‘Pilot study/service review of an autism intervention service’ – the NHS service I worked for. This service was reaching its third birthday, and I have been with the service since the start. It seemed a good opportunity to review the impact of the service, using outcome measures already taken, and obtaining them at a third timepoint, post-closure of clients to our service. I ran the idea past my Academic and Workplace Supervisors and set up a meeting with our ‘Quality and Impact Support’ (QIS) team to seek their advice. I was surprised to hear that my idea may not be tenable and that I would need to make a ‘Data Impact Application’ initially. The issue was that I had not forewarned our service clients that we may contact them after they were closed to our service, with a view to conducting research. The QIS team felt that I had no legitimate reason to be re-opening clients for research purposes and shed doubt on the plausibility of the research idea. This was demoralising initially but raised an important point about ethical and professional boundaries, as it would have been in breach of these, to contact clients post-discharge to recruit to a study. As I was still completing the write-up of my systematic review, I began to wonder if I could do some research along the lines of this topic – health anxiety.

At the same time, I was offered an interview for a part-time role in a Paediatric Diabetes Service. The research I did in preparation for the interview piqued my interest in the dilemma that parents of teenagers with Type 1 Diabetes face about giving over the management of the condition to their teenager, resisting the urge to be continuously monitoring their Continuous Glucose Monitoring (CGM) data. I began to wonder if the burden of care parents felt about their teenager's health and the negative impact this may have on their quality of life, would cause them to worry excessively about their teenager's health – health anxiety by proxy. Hence the idea for my research was born. I researched the literature and put together a new proposal and presented it to my Academic and Workplace Supervisors. This was a topic for which they both had personal interest, and I felt pleased that their background knowledge and experience of the area could be helpful for me conducting the research. I set about creating an ethics proposal, relieved that I could do so without having to obtain NHS ethics approval, as I could conduct my research through participants obtained via internet support groups.

Development of Survey

When I started developing the survey, I knew that quality of life and health anxiety by proxy, were the two key variables I wanted to measure. As I read further about the topic, I realised that parental resilience and burden of care were also key factors. At first, I was not keen to expand the survey and research to include these, as I worried it would complicate matters, however, after discussion with my academic supervisor, I could see the value in doing so, to make the study more credible and publishable. I researched appropriate validated surveys that had been used in the field. The 'Health Anxiety by Proxy' Scale (Ingeman et al., 2024, Ingeman et al., 2021), had recently been validated and was based upon an earlier scale by Whittemore et al. (2012). It seemed the most relevant scale for measuring health anxiety-by-proxy.

There were several validated surveys around quality of life, and I narrowed it down to 3 potential surveys, the PQOL T1D (Yaz and Cinar, 2023), the WE-CARE (Cappelleri et al., 2008) and the T1DAL (Hilliard et al., 2021). All three surveys related to quality of life for parents of children with T1D. I opted for the PQOL T1D, a 12-item scale with 2 sub-dimensions, that would fit well into my survey. The WE-CARE survey was American and had a dimension about treatment satisfaction, so did not seem so relevant to NHS care in the UK. The American T1DAL included a dimension about 'financial considerations' which again, I felt would be different for UK NHS patients.

I found a parental care burden survey related to T1D in a paper by Brorsson et al., (2017). This had been validated as a 'by proxy' scale based upon an earlier scale by Wikblad et al., (2014) about the burden of diabetes. The survey had four dimensions about the care burden of diabetes: physical health, emotional health, social wellbeing and overall quality of life; and linked well with the other measures to fit in with survey.

Like 'quality of life', there were many outcome measures relating to 'resilience'. From previous papers, I narrowed my choice to the Connor-Davidson Resilience Scale (CD-RISC-10) (Campbell-Sills & Stein, 2007) and the Resilience Scale for Adults (Friborg et al., 2003). I felt the 10-item CD-RISC-10 would fit in well to the survey. This would also mean that the overall survey would not be too lengthy to put off potential participants.

I considered the socio-economic questions that would be relevant to ask, narrowing these to gender and age of the parent and the teenager, parental status, ethnicity and highest educational qualification. I thought socio-economic class may also be relevant, however, decided against asking this due to subjectivity of self-identifying class. I didn't consider adding a question about working status and upon reflection, this may have been relevant. Nor did I ask for the child's age at diagnosis or the duration of their diabetes, again these may have been relevant and would be questions I would add if I were to conduct a larger study.

The final survey had 65 items, including an option to complete a qualitative 'comments' question at the close. I felt satisfied that this was not too lengthy to sustain participant interest. The lengthy process of considering the different surveys for inclusion, had been worthwhile, as I had expanded my understanding through reading the different papers. If I were creating another survey, I would take a similar approach.

I had used Qualtrics for my Masters, and previously on the Professional Doctorate to create a survey for my Group Intervention in 2022 and I surprised myself with my Qualtrics survey-building skills. This was a confidence boost for me, and it felt good to use these previously acquired skills. Once created, I waited until the project had full ethical approval before I could publish it, in line with professional and ethical boundaries.

Ethical Application Process

I found the process of ethical approval very difficult. Having only previously sought ethical approval for MSc research and an ethics disclaimer for my systematic review, I had not envisaged how complex the process would be for this project. I submitted six drafts of my ethics application prior to my application being ready to submit formally. This was probably because I started the ethics process too soon, when I was still formulating ideas for the research. Although I found the process frustrating as I was keen to make a start on the project, I can see that this time and redrafting was necessary for me to build a robust doctoral-level study. It is good that my supervisor supported me to expand the study to include additional variables and surveys. When I received feedback from the Ethics Committee, the study was approved with minor amendments. The process of repeated drafts and ethics amendments took six months before I could make my survey live and collect data, and I realise now, that I had not set enough time aside for this planning and ethics process. I can now see how valuable this was. If I do further research, I will double the amount of time I predict for planning and ethical processes. I would also have a better idea about the amount of detail that is needed for a full ethical application.

Conducting the Study

I contacted Administrators of relevant Facebook support groups in the UK prior to submitting my ethical application, to check that I could gain consent to post a link to my survey. This was comforting, as many responded almost instantly to endorse that I could post the study. It felt as though there was a strong support network for parents of children with T1D in the UK. Unfortunately, my seldom-used Facebook account was hacked and deleted, and I had to set up a new Facebook account for the purposes of the research. Once I had ethical approval, I posted the study on my new Facebook, LinkedIn, X, and Instagram accounts. I contacted 89 UK-based Diabetes Facebook groups and was given permission to publish on 26 of these. The responses started slowly but with multiple reposts, I received 91 completed responses by the end of the third week. This was triple the amount I needed, so I was able to close the survey. I felt humbled and relieved that so many people had taken the time to complete the survey. It was good that I was pushed out of my comfort zone on social media. I reflected that my early posts were communicated too formally, and I had to adjust how I communicated. I feel I learned new skills on social media, and although, I have since deleted the accounts, I can see this was useful for me to learn and may be useful in the future, if I wish to reinstate my social media presence. Due to the far scope of my Facebook posts, I did not know if there were any parents of my current patients in the paediatric diabetes team I work, who had answered the survey. As survey answers were anonymous and only identifiable through a unique code set up by the participants, I would never know. I felt relieved not to know, as it would have been a conflict of interest and an ethical issue, had parents of a patient I was working with professionally participated.

Data Analysis

I feel I have learned new skills around data analysis. I had not set up a team on Teams before, so this was something new, setting up the team for the Module Leader and my Supervisor to see my data sets, as per the University's Research Policy. I am also not the most proficient at Excel, so my husband showed me a few tips which I was able to apply to my data sets, to mark the surveys on Excel. I am sure these skills will come in handy in the future.

I felt daunted at the prospect of the data analyses on SPSS, knowing I have never mastered SPSS, since my first undergraduate SPSS module in 1989. It is a system I rarely use and each time I do, I struggle to do so. I arranged a supervision session with the Module Leader to discuss my plans, prior to rereading old lecture notes, dusting off my 'SPSS Survival Manual' (Pallant) and watching countless YouTube videos about 'how to' for each step, which were particularly useful. I felt a sense of prior knowledge resurfacing from the depths of my brain, and I felt pleased that this set of analyses were the set I had most understood, since 1989! Although it is bad that it has taken decades, it is good that after decades of dipping periodically into SPSS, that I feel I am finally beginning to understand it a bit more. I was devastated when the Module Leader discovered that I had incorrectly scored one of my scales but also, relieved he had discovered this before I submitted the assignment. I went back and reread the original research papers, to ensure I rescored the scale correctly, resulting in four subscale totals, rather than an overall total score for burden of care. I learned from this the importance of not making assumptions that an outcome measure is totalled and reading scoring instructions in detail is imperative. I had to set up a new data file on SPSS and rerun the statistics again. I felt very pleased that the correlations in my new analyses mirrored my expectations and made more sense, it felt this justified that my research was necessary.

I had never previously conducted a linear regression and found this daunting. I spent time on YouTube, Google and textbooks finding out more about simple and multiple linear regressions, to understand the justifications for running one, how to execute this on SPSS, how to interpret them and provide the statistical analysis. It is good I have learned a basic grasp of the complexity of regressions compared to correlations, that they are more in-depth, predictive and directional, a more advanced analysis, that supersedes correlations. I feel I understand why conducting a multiple linear regression with my data was a good idea, to establish whether my variables predicted health anxiety by proxy. It was interesting to find that if parents felt a heavy sense of emotional burden of care and had a low quality of life, they were more anxious about their teenager. I am, however, aware that my understanding is not very advanced, and I could improve upon this in the future. I feel I would be more confident to conduct future analyses on SPSS.

Writing up the empirical study

The journal I agreed upon with my academic supervisor had a small maximum wordcount of 3000 words (including references and diagrams). I had considered other diabetes specialist journals, but they had similar wordcounts. I also considered health psychology journals, which had larger word counts however, I felt these were too generic for the target audience I was trying to reach. I knew it would be a challenge to write such a short paper; however, I felt confident that it was the right journal as my focus was on informing interventions for parents of children with T1D. Writing the paper to such a short word count was not easy and I felt I had a lot of statistics to report on, but I honed my writing skills as I had to write in a concise manner. It was disappointing not to be able to include qualitative comments from participants in the article and I still struggled to meet the very tight wordcount. But, in the process, I developed my skills of writing a journal article in a more professional way.

Reflection on skills and knowledge developed

I feel I have honed many skills through the completion of this module: skills around designing a study, submitting formal ethical approval, using social media, using Excel more proficiently, creating and using Microsoft Teams, statistical analysis on SPSS, particularly linear regression; and how to write concisely for a journal. Developing my understanding of multiple linear regression was instrumental to me understanding the impact my study may be able to have to justify preventative psychological intervention in paediatric diabetes teams. I feel proud about the skills I have developed, and I know each of these will come in handy in my future as a Health Psychologist.

Implications of research and Dissemination

As I have a role in a Paediatric Diabetes team, I will be able to disseminate my research to our wider team. The findings suggest implications for the parental intervention I offer, justifying the screening of parents for high emotional burden of care and low quality of life, who are at risk of high health anxiety by proxy. It is necessary to address this to indirectly benefit their children. If parents can improve their own quality of life and lower their perception of burden of care, this may reduce their health anxiety by proxy. I think disseminating the research to a wider field of services within my Trust dealing with long term paediatric conditions could be inspirational to other services, to consider the impacts of health anxiety by proxy for families.

I intend to apply to the journal for publication of my research. This is a popular ‘light-reading’ journal read by many diabetes teams at least nationwide and will therefore be a good forum to spread my findings and potentially inspire further paediatric diabetes services. Through comments made by parents in response to the qualitative question on the survey, I understand that not all paediatric diabetes teams offer psychological support, and this is concerning, as NICE guidelines for diabetes management, suggest teams should include members who have training in mental health (National Institute for Clinical Excellence, 2023, section 1.5 Service provision). Perhaps my research could help to emphasise the importance of having a psychology service within paediatric diabetes teams for both children and their parents. There is also the possibility of disseminating my research at diabetes conferences. There is a Diabetes UK Professionals Conference held in April, an annual Trend Diabetes Conference for diabetes professionals held in June, and a Diabetes Professional Care Conference held in November (Diabetes UK, 2024), all of which could be good opportunities to disseminate my research to wider audiences, and I am excited to explore these opportunities.

Overall reflections

I feel my professional skills and knowledge have grown considerably throughout the course of this module. There have been many emotional ups and downs along the way and some procedures have taken longer than I expected, but I am completing the module more confident and armed with new skills that I will be able to use in my future roles as a Health Psychologist. I also reflect that I seem to get easily frustrated by things generally and perhaps I need to address this for my personal development.

REFERENCES

Brorsson, A. L., Lindholm Olinder, A., Wikblad, K., & Viklund, G. (2017). Parent's perception of their children's health, quality of life and burden of diabetes: testing reliability and validity of ‘Check your Health’by proxy. *Scandinavian Journal of Caring Sciences*, *31*(3), 497-504.

Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the connor–davidson resilience scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, *20*(6), 1019-1028.

Cappelleri, J. C., Gerber, R. A., Quattrin, T., Deutschmann, R., Luo, X., Arbuckle, R., & Abetz, L. (2008). Development and validation of the WEll-being and Satisfaction of CAREgivers of Children with Diabetes Questionnaire (WE-CARE). *Health and Quality of Life Outcomes*, *6*, 1-9.

Diabetes UK. (2024, October 21). *Professional diabetes conferences and events around the UK.* Retrieved October 21, 2024, from https://www.diabetes.org.uk/for-professionals/get-involved/conferences-and-events.

Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: what are the central protective resources behind healthy adjustment? *International journal of methods in psychiatric research*, *12*(2), 65-76.

Hilliard, M. E., Minard, C. G., Marrero, D. G., de Wit, M., DuBose, S. N., Verdejo, A., ... & Anderson, B. J. (2021). Health-related quality of life in parents and partners of people with type 1 diabetes: Development and validation of type 1 diabetes and life (T1DAL) measures. *Families, Systems, & Health*, *39*(2), 234.

Ingeman, K., Frostholm, L., Frydendal, D. H., Wright, K. D., Lockhart, E., Garralda, M. E., Kangas, M. & Rask, C. U. (2021). A new measure of excessive parental worries about children’s health: Development of the Health Anxiety by Proxy Scale (HAPYS). *Nordic journal of psychiatry*, *75*(7), 523-531.

Ingeman, K., Wright, K. D., Frostholm, L., Frydendal, D. H., Ørnbøl, E., & Rask, C. U. (2024). Measurement properties of the Health Anxiety by Proxy Scale (HAPYS): A new questionnaire to assess parents' worries about their child's health. *Journal of Psychosomatic Research*, *176*, 111555.

National Institute for Clinical Excellence. (2023, May 11). *Diabetes (type 1 and type 2) in children and young people: Diagnosis and management, Section 1.5 Service provision.* Retrieved October 21, 2024, from https://www.nice.org.uk/guidance/ng18/chapter/recommendations#service-provision.

Pallant, J. (2016). *SPSS Survival Manual* (6th ed.). McGraw Hill Education.

Wikblad, K., Smide, B., & Leksell, J. K. (2014). Check your health validity and reliability of a measure of health and burden of diabetes. *Scandinavian journal of caring sciences*, *28*(1), 139-145.

Yaz & Cinar (2023). *Parent quality of life scale in type 1 diabetes: A scale development and validation study.* European Journal of Pediatrics, 182:3491-3499.

Chapter 3: Systematic Review

3.1 Systematic Review Manuscript

SYSTEMATIC REVIEW MANUSCRIPT

The effectiveness of Acceptance and Commitment Therapy (ACT) for reducing Health Anxiety in adults: A systematic review.

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Highlights

- All papers found significant reductions in health anxiety following ACT intervention.
- Group or internet-based ACT is an effective short-term intervention for health anxiety.
- Significant reduction in health anxiety symptoms 6 months post intervention.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

ABSTRACT

Research has demonstrated a growing problem of adults experiencing health anxiety, which has negative impacts for individuals and for healthcare resources. This systematic review evaluates the effectiveness of Acceptance and Commitment Therapy (ACT) as a therapeutic intervention for Health Anxiety in adults. The following databases were searched for papers relating to the use of ACT for Health Anxiety, published between the years 2013-2023: EBSCO, APA PsycINFO, APA PsycARTICLES, Scopus, CINAHL, Medline. A grey literature search using 'Open Grey' was also conducted. 162 papers were identified, 130 papers were screened; 11 papers met all inclusion criteria and a further five were excluded due to the use of secondary data, leaving six papers included in the systematic review. All papers found significant reductions in health anxiety symptoms following group or internet-based ACT intervention. Studies had taken place in Denmark and Iran and most participants were female and were secondary referrals. Four of the studies were randomized-controlled trials and most studies had used the Whiteley-7 (WI-7) health anxiety scale (n=4). Half of the studies used group-based ACT (n=3) and the remainder (n=3) used internet-delivered ACT. Most follow-up outcome measures were mainly taken at six months post-intervention. Overall, the findings indicate that ACT is an effective short-term intervention to treat health anxiety in adults.

KEY WORDS: ACT, Acceptance and Commitment Therapy, health anxiety, Illness Anxiety Disorder, Somatic Symptom Disorder.

Abbreviations: *ACT – Acceptance and Commitment Therapy, WI-7 – Whitely Index -7, EPHPP – Effective Public Health Practice Project*

1. INTRODUCTION

Health anxiety is excessive anxiety or worry and reassurance seeking about one's health (Asmundson & Taylor, 2005). It was, formerly known as hypochondriasis in DSM-IV (American Psychiatric Association, 1994) and is still classified as hypochondriasis in ICD-11 (World Health Organization, 2022). ICD-11 is the eleventh edition of the 'International Classification of Diseases' published by the World Health Organization and used for mental illness diagnoses in some countries whereas the DSM-5, is published by the American Psychiatric Association. The DSM-5 reclassified hypochondriasis as 'Illness Anxiety Disorder' and 'Somatic Symptom Disorder' in 2013 (American Psychiatric Association, 2013). In addition to personal impacts in terms of discomfort, there are huge financial costs, due to people with health anxiety frequenting doctors/physicians' surgeries and having ongoing referrals for expensive and often unneeded further medical explorations (Barrett et al., 2012). The introduction of the internet has changed how patients engage in health anxiety behaviours, as they are now able to search symptoms and medical conditions with ease from phones and laptops. This increase in information accessibility has led to a surge in health anxiety behaviours, also known as 'cyberchondria' (Doherty-Torstrick et al., 2016). Whilst there are many peer-reviewed papers relating to health anxiety linked to specific physical or mental health diagnoses, e.g. spinal cord injury (Waldron-Perrine et al., 2022), or Post Traumatic Stress Disorder (PTSD) (Dutra & Sadeh, 2018), there are far fewer papers relating specifically to health anxiety as a disorder, as classified by the DSM-5.

Traditionally, interventions for health anxiety have focused on Cognitive Behavioural Therapy (CBT) (Cooper et al., 2017) and Exposure Response Prevention therapy (ERP) (Hedman et al., 2017), whereas ACT (Harris, 2019) has been used as a more recent intervention for health anxiety conditions (Eilenberg et al., 2013). CBT has been the most popularly used intervention for health anxiety until recently (Cooper et al., 2017). CBT has been a popular treatment for health anxiety since the 1990s (Eilenberg, 2016) and has a wide evidence base for treating health anxiety (Cooper et al., 2017), (Axelsson & Hedman-Lagerlof, 2019). But despite this, CBT has been found to vary greatly in terms of effectiveness for health anxiety, with recovery rates varying between 30%-50% (Olde Hartman et al., 2009), thus leaving room for alternative approaches.

There is an evidence base of ACT being used as an intervention for a variety of anxiety disorders (Dalrymple & Herbert, 2007) which have strong overlaps with health anxiety, but there has been far less research into the use of ACT specifically for health anxiety. ACT is known as a ‘third-wave therapy’. Third-wave therapies emphasize the importance of emotions, mindfulness, relationships, values, and self-reflection, which were mainly absent from traditional CBT (Hayes & Hofmann, 2017). ACT has been growing in popularity in recent years, with use for a range of disorders as highlighted by the plethora of papers published incorporating its use (Bai et al., 2020, Swain et al., 2013).

ACT was developed by Steven Hayes in the 1980s (Hayes et al., 1999) and has become popularized since the turn of the century. It is an evidence-based psychological intervention using mindfulness and behaviour-change strategies to develop psychological flexibility (Harris, 2019). The focus of intervention is being present, accepting situations and negative feelings as part of typical life, defusing from these to hold them lightly, and committing to spending time doing things that are of value and are meaningful. ACT differs from more traditionally used cognitive behavioural therapy, in that, it is not seeking to change patients’ cognitive beliefs per se but rather enabling them to understand that psychological pain is ubiquitous to human life and is exacerbated by psychological inflexibility. Therefore, finding ways to accept and feel at ease with this pain, staying in contact with unpleasant thoughts, feelings and/or bodily experiences as these may arise, without the urge to get rid of, or avoid these can aid development of psychological flexibility (Ciarrochi, et al., 2010). Psychological flexibility allows one to change behaviours with ease in varying contexts and enables one to be mindful and present to one's thoughts but also, able to 'de-fuse' from thoughts deemed to be unhelpful (Hayes et al., 2011). This is the catalyst for an individual being able to act in line with their values.

There is potential for short-term interventions using ACT to raise awareness and recognition of health anxiety along with reducing health anxiety behaviours, which will benefit patients and reduce unnecessary demand for healthcare systems. If patients can engage with ACT, to understand and accept the noises and sensations of their body more, they might feel more mastery in knowing if a bodily change might be a symptom of a disorder, or a natural change/bodily noise. This in turn, might alleviate some of the health anxiety, unnecessary medical appointments, and medically invasive procedures they might otherwise experience. Hoffman et al. (2014), found for health anxiety patients who had undergone a course of ACT, ACT was likely to cause an increase in psychological flexibility and decreases in 'illness worry'.

ACT can be delivered in a variety of ways, individually, or in groups, in-person or online. The use of internet-based ACT overcame barriers to accessing the intervention, as patients did not need to travel long distances, reducing geographical, financial, and time-limiting factors (Risor et al., 2022). This opened a cost-effective channel of intervention and has become particularly popularized since the Covid-19 pandemic (Barker & Barker, 2021). Internet-based ACT may be delivered via pre-set modules that clients complete at their own pace or through 'live' sessions. Benefits to group-delivered therapy include peer support and social interaction with others experiencing similar difficulties and can be a cost-effective format of intervention, compared to individual therapy (Skewes et al., 2015). ACT can also be delivered as an individual therapy online or face-to-face (Hayes et al., 2011). Hayes et al. (2011), suggest attempts to control internal thoughts, such as illness worry, which may form part of a CBT approach, are associated with increased psychological distress; whereas the process of 'acceptance' of thoughts of illness worry, are associated with psychological well-being.

Rationale:

To date, there has been no systematic review specifically addressing the effectiveness of ACT for reducing health anxiety in adults. Previous reviews have addressed ACT in relation to other psychological interventions for health anxiety, Maass et al., (2020), there has been no systematic review to date focusing specifically on ACT, as an intervention for health anxiety. Since the review by Maass et al., in 2020, which reported just one paper using ACT, interventions using ACT have been growing in popularity (Arch, et al., 2023), as too have recorded incidences of health anxiety (Bodner, et al., 2023). It is, therefore, timely to conduct a review specifically addressing the effectiveness of ACT for reducing health anxiety in adults.

2. MATERIALS & METHODS

The study protocol was published on PROSPERO ID *blinded for peer review.* This systematic review is written up in accordance with the PRISMA reporting guidelines (Liberati et al., 2009).

2.1 Search Strategy

A PICO framework was followed to identify the components of the systematic review, in line with Cochrane Collaboration recommendations (Thomas et al., 2023) (Table 1).

Table 1: Pico Framework

Participants	People with health anxiety
Intervention	Acceptance and Commitment Therapy (ACT)
Comparison	No ACT intervention or follow-up after ACT
Outcome	Reduction in health anxiety

A systematic literature search was conducted using the following databases in September 2023 and re-run in November 2023: EBSCO, APA PsycINFO, APA PsycARTICLES, Scopus, CINAHL, Medline. A grey literature search using 'Open Grey' was also conducted. Key search terms used were: ("acceptance and commitment therapy" OR ACT) AND ("health anxiety" OR "health anxiety disorder" OR "somatic symptom disorder" OR "Care avoidant health anxiety" OR "illness anxiety disorder" OR hypochond*). Search date criteria (2013-current time) reflected publication of the DSM-5 (2013) (American Psychiatric Association, 2013), when Health Anxiety conditions were reclassified from DSM-IV. Hypochondriasis was reclassified under the category 'Somatic Symptom and Related Disorders', which includes Illness Anxiety Disorder and Somatic Symptom Disorder in the DSM-5 (American Psychiatric Association, 2013). The systematic review included papers where health anxiety itself was the primary diagnosed disorder, papers using ACT as an intervention for health anxiety linked to a specific physical disorder, i.e. as a secondary disorder, were not included. The following inclusion and exclusion criteria were applied as shown in Table 2.

Table 2: Inclusion/Exclusion Criteria

INCLUSION	EXCLUSION
Individuals living with health anxiety disorder or Illness Anxiety Disorder or Somatic Symptom Disorder or care-avoidant health anxiety or Hypochondriasis as primary diagnosis	Individuals living with health anxiety disorder as a secondary diagnosis to an alternative primary health disorder
ACT	Studies where ACT has not been used as intervention
Adults aged 18 years and over	Children aged under 18 years
Pre-post, longitudinal, prospective, quasi-experiment, or controlled trial	Cross-sectional, case study, observational, qualitative
Quantitative measure of health anxiety	Qualitative measure of health anxiety
English language	Journals not accessible in English language
Relevant journal articles after 2013 (base year)	Relevant Journal articles before 2013

2.2 Selection and Exclusion

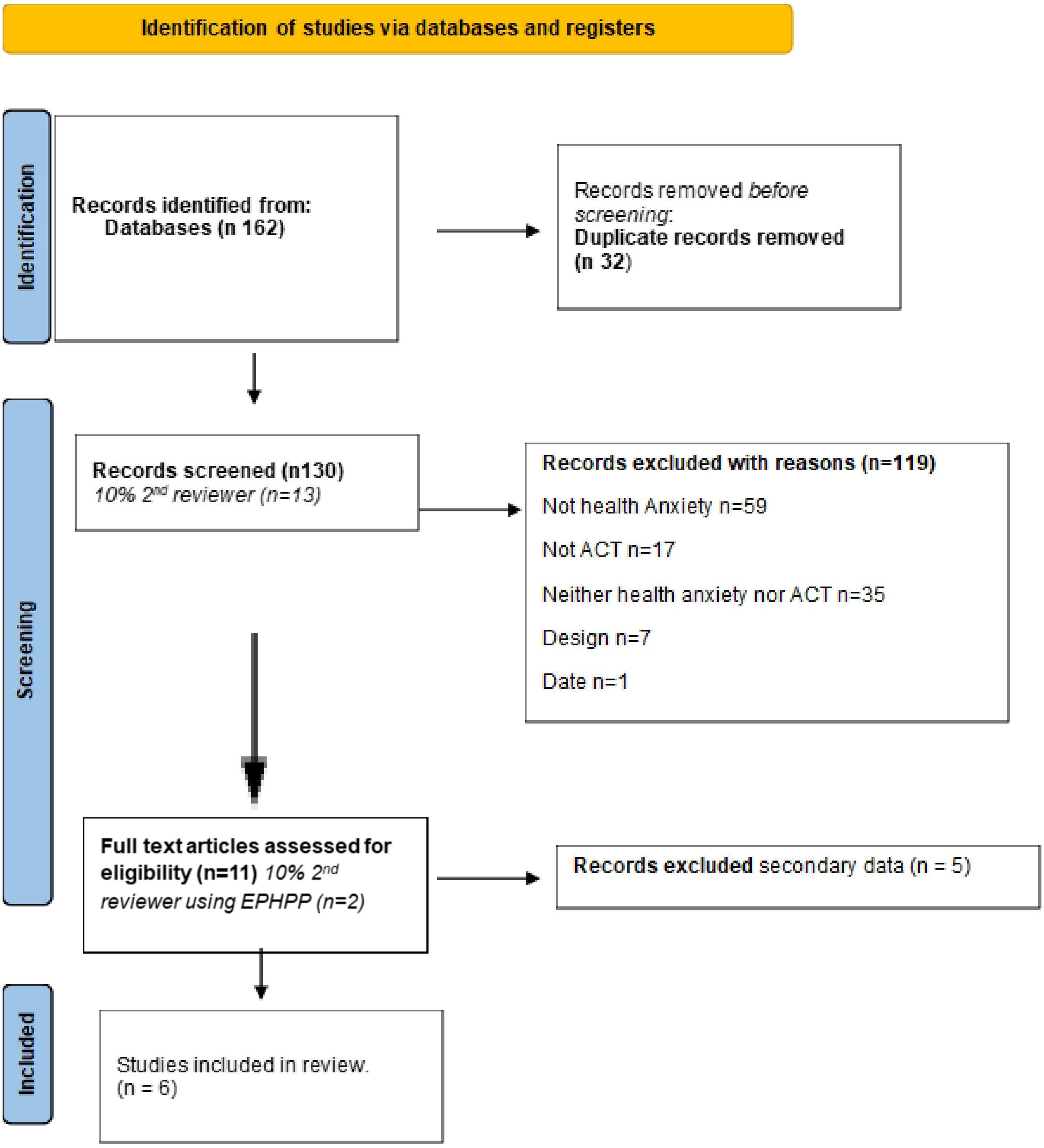
Extensive searches provided 162 records initially (Fig 1). 32 duplicate records were removed, then titles and abstracts of the 130 remaining papers were systematically reviewed against the inclusion/exclusion criteria by the main author (KL) and a randomly selected 10% (n=13) using a random generator (Random.org, 2023, November 25), were systematically reviewed by the second reviewer (PK). Cohen's Kappa was used to test for interrater agreement, to check if the probability of the model was better than random chance and resulted in k1, $p<0.05$, which is reported as 'almost perfect agreement' (McHugh,2012). A total of 119 papers were excluded. Following this, the 11 full papers which met the inclusion criteria and were assessed using the 'Effective Public Health Practice Project' (EPHPP) quality assessment tool (Thomas & Ciliska, 1999), with 10% (n=2) full papers also being assessed for quality and eligibility for inclusion by the second reviewer. There was a disagreement relating to ‘confounding’ on one of the papers and the reviewers discussed this and came to an agreement about the rating for the paper. Five papers were then removed due to them using secondary data from some of the remaining six papers; therefore, six papers were included in the final systematic review (Fig 1).

The EPHPP risk of bias tool was used as it assesses quantitative studies of different designs in a consistent manner on the same components, rating studies comparably and attributing a rating of ‘strong’, ‘moderate’ or ‘weak’ quality to each. To achieve an overall paper rating of ‘strong’, there needed to be no ‘weak’ ratings for any elements of the study, an overall rating of ‘moderate’ was awarded if there was just one ‘weak’ rating, and an overall rating of ‘weak’ was awarded if there were two or more ‘weak’ ratings. The following components for each paper were rated:

- Selection bias
- Study design.
- Confounders
- Blinding
- Data collection methods
- Withdrawals and dropouts
- Intervention integrity
- Analyses

Searches were re-run in November 2023, prior to final data being extracted for analysis. No further papers were added from this search.

Fig 1: Prisma Flow Diagram link



2.3 Data Analysis

Data were extracted (Table 3) with the view to conducting a meta-analysis. The remaining six papers used a variety of outcome scales and reported effect sizes in different ways; therefore, it was deemed that it was not appropriate to conduct a meta-analysis, and a systematic narrative synthesis was instead conducted around the outcomes of ACT intervention for health anxiety in adults.

3. THEORY

Health anxiety is the feeling that our physical good health is threatened, and we don't know what the outcome will be, thereby causing anxiety (Asmundson & Taylor, 2005). Bodily 'noises' can be mistaken as symptoms of physical illness; however, our bodies are always 'noisy' as they are constantly working to maintain homeostasis (Asmundson &Taylor, 2005). Health anxiety may occur in the presence or absence of physical disease (Tyrer & Fink, 2016). For the purposes of this review, health anxiety is only considered when it is the primary diagnosis and is presented not as a secondary diagnosis to an alternative physical disorder. The cycle of health anxiety can be maintained by behaviour such as: individuals repeatedly checking their body for symptoms, misinterpretation of bodily functions, seeking medical reassurance, internet researching, avoidance and 'security prop' behaviour, such as always carrying pain medication in case it might be needed (Asmundson & Taylor, 2005) and/or rumination (Tyrer & Fink, 2016).

Health anxiety is not classified as a disorder by DSM-5 or ICD-11, diagnosis of health anxiety is labelled as 'Somatic Symptom Disorder' or 'Illness Anxiety Disorder', which are both classified as somatoform disorders in DSM-5 (American Psychiatric Association, 2013); and labelled as 'Hypochondriasis' in ICD-11 (World Health Organization, 2022). Categorization of ‘health anxiety’ often occurs using reliable and well-validated surveys, such as the Whiteley Index (WI-7) (Fink et al., 1999) or HAI-18 (Salkovskis et al., 2002). The WI-7 is a standardized scale widely used to assess, measure and screen for health anxiety (Fink, et al., 1999). WI-7 is a seven-item scale with two subscales: ‘Illness conviction’ and ‘Illness Worrying Scale’. Items are scored on a five-point Likert Scale (0-28), with higher scores signifying more severe health anxiety. A score of five or over signifies health anxiety (Hedman, et al., 2015). The Whiteley-8 (WI-8) is an updated version of WI-7 (Carstensen et al., 2020), which includes an additional item relating to rumination. This was based upon Fink et al.’s research (2004), where they introduced an additional diagnostic criterion for *severe* health anxiety (which does not feature in DSM-5), which was characterized by “Rumination with intrusive thoughts and ideas, and fears of harbouring an illness” plus at least one other specified symptom of health anxiety. People with severe health anxiety are high users of healthcare (Eilenberg, 2016). Another widely used scale is the Health Anxiety Index (HAI-18) (Salkovskis, et al., 2002). HAI-18 is an 18-item scale with each item offering a range of four statements and scored out of 54, with participants choosing the statement that best represents how they have been feeling over the past six months. A score over 37.9 on HAI-18 represents health anxiety (Salkovskis et al., 2002). Reductions in health anxiety behaviour, because of ACT intervention, would produce lower scores on health anxiety scales, and potentially result in minimized body checking, reduced visits to doctors/physicians, reducing internet searching and confronting feared bodily sensations.

Health anxiety disorders are often under-diagnosed, and some doctors hold a negative view of patients with health anxiety (Rosendal et al., 2005). This negativity from healthcare professionals brings a level of stigma to the disorders for sufferers, which in turn may impact patients coming forward for diagnosis and potential treatment (Brown, et al., 2019).

4. RESULTS

Systematic searches provided 162 hits and through the process of screening, a final total of six papers were included in this review. A narrative synthesis was developed to consider the findings of the six papers used, as the papers comprised a collection of quantitative studies using a variety of methodologies, which rendered them unsuitable for meta-analysis. Table 3 highlights findings from the six papers included in the systematic review.

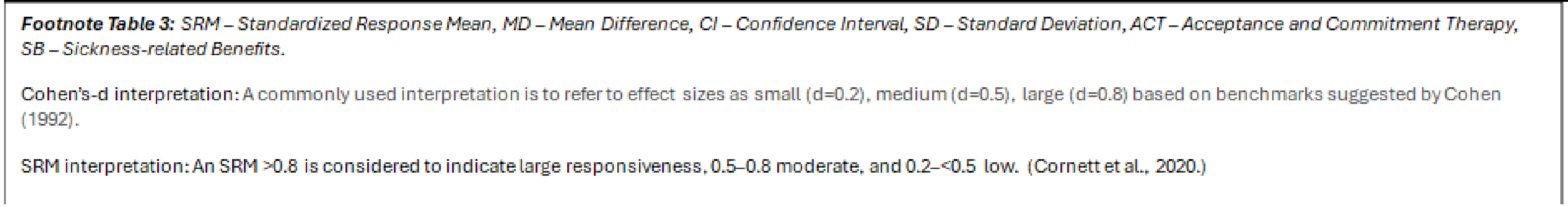
Table 3: Study Characteristics

STUDY	**COUNTRY**	**SAMPLE CHARACTERISTICS**	**ATTRITION**	**SCALE**	**DESIGN**	**FORMAT**	**NO. SESSIONS**	**FOLLOW-UP**	**RESULTS**	**EFFECT SIZE**
Hoffmann, D., Halsboe, L., Eilenberg, T., Jensen, J.S., Frostholm, L. (2014).	Denmark	Total 34 26% M (9) 74% F (25)	14.71%	WI-7	Cohort (1 gp pre & post)	Groups of 8/9 face-to-face	10 (each 3.5 hrs)	Base +End ACT 3 months + 6 months	*"Patients reported statistically significant reductions in health anxiety symptoms after treatment…"* 40% @ end ACT, 49% @ 6 mths Base Mean (SD) 67.2 (26.8) End ACT Mean (SD) 40.6 (26.0) +6 mth Mean (SD) 34.5 (26.9)	Standardized Response Mean large responsiveness. SRM=1.20 CI (.74;1.66) end ACT SRM=1.32 CI (.82;1.82) @ 6 mths Effective? Yes
Eilenberg, T., Frostholm, L., Schroder, A., Jensen, J.S., Fink, P. (2015).	Denmark	Total 126 63 ACT & 63 wait list 29% M (37) 71% F (89)	15.08%	Sickness related benefits	RCT	Groups of 9 face-to-face	10 (each 3 hrs)	@ 10 mths + sickness-related benefits (SB) at 0mth,6 mth, 12 mth, 18 mth + 24mth post-ACT	*Reduction in sick benefits was significant 1 year & 2 years after ACT. Comparisons were made to years prior to ACT intervention also.*	ACT gp 4.64 weeks SB at 6 mths prior to ACT (95% CI 3.34-5.93, p<0.0001) 12 mth -0.99 weeks SB (95% CI -1.87; -0.11, p=0.028) 24 mth -1.97 weeks SB (95% CI -3.74; -0.21, p=0.028)

										Control gp 7.10 weeks SB at 6 mths before start (95% CI 5.81-8.38) 12 mths 0.19 weeks, (95% CI -1.59-1.97, p=0.834) No figures reported for control gp at 24 mths Effective? Yes
Eilenberg, T., Fink, P., Jensen, J.S., Rief, W., Frostholm, L. (2016)	Denmark	Total 126 63 ACT & 63 wait list 29% M (37) 71% F (89)	15.08%	WI-7	RCT	Groups of 9 face-to-face	10 (each 3 hrs)	End ACT 4 mth + 7mth +10 mth	ACT group: Base Mean 56.9 (52.0:61.8) 10 mths Mean 34.8 (29.0:40.7) Wait list group: Base Mean 57.7 (51.3:64.0) 10 mths Mean 56.1 (49.7:62.6)	Standardized Response Mean large responsiveness. ACT group SRM (CI) Base>end. SRM -0.86(-1.18:-0.54) Wait list group SRM (CI) Base>end. SRM -0.07 (-0.33:0.2) Effective? Yes
Hoffman, D., Rask C., Hedman-Lagerlof, E.,	Denmark	Total 15 33% (3)M	20%	WI-7	Cohort (1 gp pre & post)	Internet independent working	7 modules (10-15 pgs content)	End ACT + 3 mth	"*Improvements post-treatment & at 3 months*"	Standardized Response Mean large responsiveness.

Ljotsson, B., Frostholm, L. (2018).		67% (12)F			Feasibility study				Base>End ACT Mean Diff 37.2, (95% CI)24.1 to 50.4, p<0.001 Base>+3 mth MD 33.9, (95%CI) 13.6 to 54.3, p<0.004 Base Mean (SD) 80.9(18.5) End ACT 43.6(13.0), +3 mth 45.5(29.6)	Base>End ACT Mean Diff SRM1.63 Base>+3 mth, SRM 1.06 Effective? Yes
Hoffmann, D., Rask, C., Hedman-Lagerlof, E. Sondergaard Jensen, J., Frostholm, L. (2020).	Denmark	Total 101 53 ACT & 48 control. ACT gp 36% M (19) 64% F (34) Control 33% M (16) 67% F (32)	23.76%	WI-7	RCT	Internet web app clinician-guided self-help	7 modules opened consecutively over 12 weeks	End ACT + 6 mth	ACT group base Mean (SD)75.5 (14.6) +6mth Mean 31.2 *No SD provided.* Control group base Mean (SD)74.3 (16.5) +6 mth Mean 49.0 *No SD provided*	Standardized Response Mean large responsiveness. ACT group SRM (95% CI) 2.16 (1.65-2.67) Control gp SRM (95% CI) 1.07 (0.7-1.45) Between gp 6-month follow-up Cohens-d, large effect size: 0.8 (0.38-1.23), unadjusted diff of improvement 19.0 (10.8-27.2) Effective? Yes
Shahidi, S., Zargar, F., Khajelangi,	Iran	Total 72 36 ACT & 36 control.	4.17%	HAI-18	RCT	Whats App (groups of 4)	9 weekly sessions	Base & end ACT	ACT group sig decreases in HAI-18	ACT group CI 6.15 (4.62-7.68) p<0.001

H.A., Tarrahi, M.J. (2023).		ACT 34.38% M (19) 65.63% F (21) Control 46.88% M (15) 53.13% F (17)							ACT Group Mean (SD) Pre:31.78 (3.85) Post: 25.62 (4.93) Control group Mean (SD) Pre-time: 32.28 (3.49), post-time: 32.35 (3.93),	Control group: CI 0.03 (-1.22-1.29) p<0.96 Mean differences (95% CI) *Between groups not reported* *Effective? Yes*



Footnote Table 3: *SRM – Standardized Response Mean, MD – Mean Difference, CI – Confidence Interval, SD – Standard Deviation, ACT – Acceptance and Commitment Therapy, SB – Sickness-related Benefits.*

Cohen's-d interpretation: A commonly used interpretation is to refer to effect sizes as small (d=0.2), medium (d=0.5), large (d=0.8) based on benchmarks suggested by Cohen (1992).

SRM interpretation: An SRM >0.8 is considered to indicate large responsiveness, 0.5–0.8 moderate, and 0.2–<0.5 low. (Cornett et al., 2020.)

4.1 Synthesis – Participants

A total number of 474 participants were included in the review. 259 participants received ACT as an intervention. The majority, 68.77% of participants were female and 31.23% were male. 116 participants self-referred to take part in the studies but the majority, 358 participants, were secondary referrals from clinics or GPs.

4.2 Synthesis – Location of Studies

Most of the studies in the review were based in Denmark, with just one based in Iran. A team of researchers at Aarhus University Hospital in Denmark have published several papers over the last decade researching the use of ACT as an intervention for health anxiety (Eilenberg, et al., 2013, Hoffman et al., 2014, Eilenberg, et al., 2015, Eilenberg, et al., 2016, Hoffman, et al., 2018, Risor, et al., 2022). Five of the studies in this review came from this group of researchers in Denmark. The remaining paper in the review came from outside of Denmark, Shahidi et al. (2023) researched the use of ACT as an intervention for health anxiety in Iran.

4.3 Synthesis – Scales

Overall, most of the studies used well-validated outcome measures of health anxiety. Four of studies in the review used the Whiteley-7 (WI-7) health anxiety scale, with just two papers using alternative measures. Shahidi et al (2023) use the Health Anxiety Index (HAI-18), which is another well-known validated health anxiety scale. Eilenberg et al. (2015) used sickness related benefits claimed because of participants being unable to work because of their health anxiety.

4.4 Synthesis – Design

Four of the studies used randomized controlled trials (n=4), where participants had been randomized to conditions. The control conditions differed between the studies. For two of the studies, participants in the control condition were put on a 10-month waiting list for ACT intervention later. One other study (Hoffman et al., 2020) assigned control group participants to ‘iForum’, which involved seven discussion forums over a 12-week period about topics related to health anxiety but with no clinician intervention or guidance. Discussions were monitored by clinicians for ethical reasons only. The fourth study (Shahidi et al., 2023), gave the control group follow-up education by telephone. Two of the systematic review studies were cohort studies, where outcome measures for participants were taken prior to receiving ACT and post-ACT.

4.5 Synthesis – Mode of Delivery

Half of the studies used group-based ACT (n=3), and half (n=3) used internet-delivered ACT. ACT was typically delivered for ten sessions for group-based ACT (Table 3). For five of the studies, ACT was delivered, or modules designed, by psychologists trained in ACT. For one study, it was stated that ACT had been administered by health professionals with participants assigned a personal clinician for guidance, the exact professions of the clinicians were not stated (Hoffman et al., 2018).

The internet-delivered ACT contained seven or nine modules for participants to complete, individually at their own pace, with seven modules being the more common format. Two of the studies based their content on an existing manual for group-based ACT (Eilenberg et al., 2016), delivering it to individuals via a web app with a responsive design, with the seven modules being opened consecutively over a 12-week period. App contents were a mix of fixed content and interactive worksheets, about ACT and health anxiety, experiences of managing health anxiety, challenging, and accepting anxiety, values, barriers, de-fusion, mindfulness, bodily symptoms, and relapse prevention. Participants had access to a clinician who would answer any queries within 48 hours. The fixed content included text, audio and video clips and illustrations. One study used WhatsApp to deliver ACT via the 'Broadcasting Option', which is a WhatsApp function that enables information to be sent individually and privately. The group instructor would also communicate with each participant as they completed sessions. Sessions were weekly over a 9-week period and were based on ACT protocol (Harris, 2020). They included mindfulness in daily life, recording thoughts and feelings, attention to body, meditation training, committed action, acceptance, and willingness, identifying goals and resources and distancing.

All group-delivered ACT studies contained intervention groups of eight or nine people, and each session lasted three or three-and-a-half hours. The content of one study's intervention was to focus on identifying unhelpful ways of responding to health anxiety and behaviour change guided by individual values, with mindfulness practice and non-judgmental self-observation (Eilenberg et al., 2016). Another was similar, empowering coping with health anxiety, using an acceptance-based approach by Hayes et al. (1999) (Eilenberg et al., 2015). The third took an approach using three themes: creative hopelessness including behaviour analysis, unwillingness and de-fusion, and valued action.

All six studies reported giving participants 'mindfulness homework' to do between sessions to expand the therapeutic impact but there was a lack of detail provided about the contents of this.

4.6 Synthesis – follow-up

Overall, follow up outcome measures were mainly taken at six months post-intervention, however, there was some variety between the studies at the time follow-up measures were collated. Three papers, Hoffman et al. (2020), Eilenberg, et al. (2016), and Hoffmann, et al. (2014); took post-intervention outcome measures, then follow-up measures six months later. Hoffmann, et al. (2018), took post-intervention outcome measures, then follow-up measures at three months. Eilenberg, et al. (2015) had a different approach, as their focus was on measuring the number of weeks participants were on sickness benefits. They took measurements five years prior to the intervention, then at the start of the intervention, then at six, twelve, eighteen and 24 months after the intervention. Shahidi, et al. (2023), did not specify when their follow-up outcome measures were taken, and it is assumed these were taken at the end of the intervention.

There was a 15.47% attrition rate across the six papers, 21 participants were not in final follow-up data (Table 3). The mean attrition rate for the group-delivered ACT studies was 14.96%, compared to the mean attrition rate for the internet-delivered ACT studies, which was slightly higher at 15.98%. If control groups were excluded, the mean attrition rate across all ACT groups was 10.28%. The smallest attrition rate from a single study was from the study using WhatsApp-delivered ACT (11.11%). For control groups, the mean attrition was 3.82%.

4.7 Synthesis – Intervention Effect sizes

Statistical analysis methods varied between studies, half (n=3) of the papers had used 'standardized response mean' (SRM) in their calculations as opposed to 'Cohen's d' - Hoffmann, et al. (2014), Eilenberg, et al. (2016) and Hoffman, et al. (2020). SRM is calculated in a different way to Cohen's d, as average differences are divided by the standard deviations of the differences between paired measurements, as opposed to being divided by a pooled standard deviation (Medcalc, 2024, Responsiveness). Therefore, a meta-analysis was not possible, however, overall effect and heterogeneity are considered for the papers. Overall significant effects were reported for the studies, with effect sizes reported ranging from 0.8 to 1.32 for more than half of the studies (n=4). These results suggest that ACT is an effective intervention to treat health anxiety in adults, although data were only from four studies mainly conducted in Denmark. Shahidi, et al. (2023), found a significant effect pre- and post-intervention within their intervention group, however, no significant effect within their control group; and effect sizes between groups were not provided.

4.8 Quality Assessment

Quality assessment was conducted using the EPHPP (Ciliska et al., 1998) (Thomas & Ciliska, 1999). Both reviewers used the risk of bias measure and agreed outcomes as detailed in Table 4. One of the papers was rated overall as ‘strong’, two as ‘moderate’ and three as ‘weak’ overall. All the papers recruited participants who were secondary referrals or self-selected participants, and this negatively impacted selection bias throughout, leading to half the studies being rated ‘weak’ for selection bias, with the other half being rated as ‘moderate’. ‘Study design’ was rated as ‘strong’ for four of the studies using randomized controlled trials and ‘moderate’ for the cohort studies. Three of the studies rated ‘strong’ for confounders, one as ‘moderate’ with the remaining two studies rated ‘weak’. Blinding was rated as ‘moderate’ for two of the studies and ‘weak’ for four of the studies. Data collection was rated as ‘strong’ for all six studies and attrition was rated as ‘strong’ for five of the six studies: the final study being rated as ‘moderate’.

Table 4: Risk of Bias Measure EPHPP

Studies included in review	**Selection Bias**	**Study Design**	**Confounders**	**Blinding**	**Data Collection**	**With-drawals**	**Overall rating**
Eilenberg, Fink, Jensen, et al. (2016)	2 Mod	1 Strong	2 Mod	3 Weak	1 Strong	1 Strong	**2 Mod**
Hoffmann, Halsboe, Eilenberg et al. (2014)	2 Mod	2 Mod	3 Weak	3 Weak	1 Strong	1 Strong	**3 Weak**
Eilenberg, Frostholm, Schroder et al. (2015)	3 Weak	1 Strong	1 Strong	3 Weak	1 Strong	1 Strong	**3 Weak**
Hoffmann, Rask, Hedman-Lagerlof et al. (2018)	3 Weak	2 Mod	1 Strong	3 Weak	1 Strong	2 Mod	**3 Weak**
Hoffman, Rask, Hedman-Lagerlof et al. (2020)	3 Weak	1 Strong	1 Strong	2 Mod	1 Strong	1 Strong	**2 Mod**
Shahidi, Zargar, Khajelangi et al. (2023)	2 Mod	1 Strong	1 Strong	2 Mod	1 Strong	1 Strong	**1 Strong**
Studies excluded for using secondary data.							
Rostami & Borzorgi (2019)	2 Mod	1 Strong	1 Strong	2 Mod	1 Strong	1 Strong	**1 Strong**
Risor, Hoffman-Frydendal, Villiemoes et al. (2022)	3 Weak	3 Weak	1 Strong	2 Mod	1 Strong	1 Strong	**3 Weak**
Hoffman-Frydendal, Rask, Jensen et al. (2023)	3 Weak	1 Strong	3 Weak	3 Weak	1 Strong	3 Weak	**3 Weak**
Eilenberg (2016)	3 Weak	1 Strong	1Strong	2Mod	1 Strong	1 Strong	**2 Mod**
Eilenberg, Kronstrand, Fink, et al. (2013)	2 Mod	2 Mod	1 Strong	3 Weak	1 Strong	1 Strong	**2 Mod**

Key: Strong = no weak ratings, Moderate (Mod) = 1 weak rating, Weak= 2 or more weak ratings

5. DISCUSSION

5.1 Discussion of Findings

This systematic review highlights the development of the research around the use of ACT for health anxiety carried out over the last decade. The aim of the review was to examine the effectiveness of ACT for reducing Health Anxiety in adults. The overall findings of the studies were that short-term interventions of ACT, whether delivered through group or online intervention; were significantly effective in reducing symptoms of health anxiety for adults suffering from health anxiety. This was evident from the findings at the end of the intervention and at follow-up.

Most studies in the review had used the WI-7 or the HAI-18 outcome measures, which are well-known validated, reliable measures for health anxiety. Eilenberg et al. (2015) used sickness-related benefits, which is an objective outcome measure, which was considered a result of an increase in health anxiety. This combination of self-reported outcome measures and objective outcome measures is a strength of the review, sickness related benefits reduced following ACT intervention. All studies, excluding the study by Shahidi et al. (2023), had also used Schedules for Clinical Assessment in Neuropsychiatry (SCAN) interviews (World Health Organization, 1998), in addition to health anxiety outcome measures. Uptake rates of eligible participants were reported for all studies. Uptake rates ranged from 78.4% to 92.3% with a mean of 85% with a variety of reasons reported as to why eligible participants decided to withdraw prior to the start of the studies, such as lack of motivation, improvement in symptoms and lack of time availability. However, not all studies reported reasons behind lack of uptake of eligible participants.

As mentioned earlier, Olde Hartman et al (2009), in their systematic review, found 30-50% recovery rates for those with health anxiety in interventions using CBT. The studies in this review varied slightly more, all found significant recovery rates, ranging from 19-59%, with a median of 46% for health anxiety reduction when ACT was used as the mode of intervention. Unlike CBT, which focuses around helping patients to change their cognitions, ACT by contrast, is focused more around developing psychological flexibility around one's cognitions, which may involve reflecting and accepting them. The decrease in health anxiety that Hoffman et al. (2014) found following a course of ACT is also reflected in the studies in this review. The effect of intervention for studies using internet-based ACT was slightly higher than for those using group-based ACT. This could be a result of patients working at their own pace during internet-based ACT as opposed to the group-based medium. It is interesting that the internet, which may serve as a protagonist increasing rates of health anxiety (Doherty-Torstrick et al., 2016), 'cyberchondria'; may also serve as a solution to reducing health anxiety. The mean rate of attrition for internet-delivered ACT (15.98%) was higher than for group-delivered ACT (14.96%). This may be suggestive that ACT delivered in-person, or with support from peers, is more effective than internet- or WhatsApp-delivered ACT. The mean attrition across all control groups was 3.82% which reflects the fact that many control groups comprised participants passively waiting on waiting lists. Whereas the attrition rate of 10.28% for ACT participants is perhaps reflective that they were in a role that required more active engagement on their part.

5.2 Limitations of studies

Included studies were only conducted in Denmark or Iran, which potentially limits the generalizability of findings included in this review as adults in these countries may not have the same experiences of health anxiety as those in other countries. Effect sizes were reported differently in the studies, making comparison of findings difficult, as some studies used Standardized Response Mean and others, regular Means.

According to the EPHPP ratings of studies (Table 3), the Iranian study was rated as ‘strong’, yet it was void of many details in comparison to other studies, such as details about the profession of the administrators of the outcome measures, labelling them just as ‘experts’. Also, the format of ACT delivery through WhatsApp. It was not clear whether this had been via video or phone call. Such procedural details were not absent from the Danish studies, which scored lower on the EPHPP ratings overall. Selection Bias was present for all the studies, as participants were recruited from secondary referrals or self-selection. This meant that they were not necessarily representative of the target population of adults with health anxiety. This selection bias impacted overall study ratings, as did ratings for ‘blinding’. Due to the nature of the studies, participants were either receiving ACT or a different intervention (for example, iForum), or were on a waiting list for ACT, the researchers would have known which group participants were in, as too would participants, whether they were receiving ACT or not. The use of a waiting list as a control group is a commonly used method in research. It would have been almost impossible to conduct the studies fully blinded. There were proportionally more female participants involved in the studies than male participants. Reflecting previous findings from MacSwain et al. (2009) that females have more health anxiety than males but differing from findings from Weck et al. (2014), who found no gender differences in rates of health anxiety. The study by Shahidi et al. (2023), used ‘mindfulness-based stress reduction’(MBSR) strategies alongside the ACT intervention, making it difficult to know if the positive effects were because of ACT or MBSR, or the combination of the two. The study by Hoffman et al. (2018) only involved 15 participants receiving ACT as it was a feasibility study, in comparison to a mean number of 48.8 intervention participants in the other studies. All studies reported providing homework activities for participants between sessions but none of the studies provided clear detail about the tasks given, nor the completion rates of the homework. The only study to report on long-term follow-up after ACT intervention was Eilenberg et al. (2015), who found a significant decrease in claims for sickness-benefit two years after ACT intervention. The other studies only provided follow-up data for up to six months after the end of the ACT intervention.

5.3 Strengths and Limitations of the Systematic Review

This review is the first of its kind to focus solely on the effects of ACT for adults living with health anxiety, as previous systematic reviews have also considered other psychological interventions. The review is up to date as it focuses on studies published since the change of DSM-5 diagnostic criteria for health anxiety. The review excludes studies where health anxiety is related to a specific other condition, thereby focusing on health anxiety itself perse, and the effectiveness of ACT for this condition. The papers in this review cover a critical period around health anxiety, as they cover the period prior to, during and soon after the Covid-19 pandemic, a time when rates of health anxiety increased (Dennis et al. 2021), (Ferreira et al. 2021).

The term ‘ACT’ proved problematic in searches, as ‘ACT’ was taken to mean more than Acceptance and Commitment Therapy. This led to a vast number of searched hits being removed during the screening process, as they did not relate to ACT but rather to ‘acts’ of law, criminal ‘acts’ or ‘acts’ relating to ‘actions’. The variety of effect sizes and lack of homogeneity reported in studies meant that a meta-analysis could not be conducted to test data more rigorously, nor clarify positions of publication bias.

5.4 Implications for practice and research

It is known that health anxiety places a burden not only on the individual with the symptoms and their families, but due to its longevity, also a healthcare burden and a societal burden, due to occupational disability (Eilenberg et al., 2015). ACT as an intervention for health anxiety has the potential to reduce healthcare and societal burdens. Studies showed that both group and online self-directed interventions were effective at reducing symptoms of health anxiety. Effectiveness was still apparent for follow-up periods six months later. Group interventions and online self-directed interventions are relatively low cost, compared with individual one-to-one interventions so would be a cost-effective way to reduce health anxiety. This evidence suggests short-term interventions of ACT for adults diagnosed with health anxiety, would not only be beneficial for the individuals but also for the wider healthcare systems, as it may save money and resources that would otherwise be spent on unnecessary health tests and visits. Further research could be conducted to establish whether there were longer-term positive impacts of ACT intervention, perhaps at one- or two-years post-intervention. Given that the studies in this review were based in Denmark and Iran, it would be necessary to do further research with wider populations, to find out if there were similar positive impacts of ACT for health anxiety in adults in other countries with different healthcare systems. It would also be useful for future research around the use of ACT for health anxiety, to include the use of the Whiteley-8 index (WI-8) (Carstensen et al., 2020), as opposed to the WI-7 used in the studies in this review, as the WI-8, also includes the concept of rumination as a symptom of health anxiety. As ACT is very much about reflection and mindfulness, it would be helpful to see how effective the interventions were at addressing rumination as a symptom of the disorder.

This review will potentially inform health trusts regarding business models to bid for resources to fund treatment programmes using ACT for health anxiety conditions, particularly as interest in cognitive behavioural therapy has waned in recent years (Dalal, 2018).

6. CONCLUSION

This systematic review found significant reductions in health anxiety symptoms following group and internet-based ACT interventions. Overall, the findings indicate that ACT is an effective short-term intervention to treat health anxiety in adults. This has implications for the development of new treatment pathways to deal with the ever-growing rates of health anxiety across many countries and implications for further research into health anxiety disorders and their treatment.

Authors' Contributions:

Kerry Lum: Conceptualization: Ideas, formulation of research goals and aims. Methodological Design. Investigation: Conducting research investigation and data/evidence collection. Project administration: Management and coordination of the research including planning and execution. Writing original draft and revisions pre-publication. Preparation, creation, and presentation of the completed work.

Dr Rachel Povey: Supervision: Oversight and leadership responsibility for the planning and execution of the systematic review. Writing: Critical review, commentary, and revision.

Paige Karadag: Validation: Verification as part of the systematic review, of inter-rater reliability of the included research papers.

Professor Richard Cooke: Supervision: Oversight and leadership responsibility for the planning and execution of the systematic review. Writing: Critical review, commentary, and revision.

REFERENCES

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). American Psychiatric Publishing, Inc.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing, Inc.

Arch, J. J., Fishbein, J. N., Finkelstein, L. B., & Luoma, J. B. (2023). Acceptance and commitment therapy processes and mediation: Challenges and how to address them. *Behavior therapy*, *54*(6), 971-988.

Asmundson, G. J. G., & Taylor, S. (2005). *It's not all in your head.* The Guilford Press.

Axelsson, E., & Hedman-Lagerlof, E. (2019). Cognitive behavior therapy for health anxiety: Systematic review and meta-analysis of clinical efficacy and health economic outcomes. *Expert Review of Pharmacoeconomics & Outcomes Research,* 19(6), 663-676. https://doi.org/10.1080/14737167.2019.1703182

Bai, Z., Luo, S., Zhang, L., Wu, S., & Chi, I. (2020). Acceptance and commitment therapy (ACT) to reduce depression: A systematic review and meta-analysis. *Journal of affective disorders*, *260*, 728-737.

Barker, G. G., & Barker, E. E. (2021). Online therapy: Lessons learned from the covid-19 health crisis. *British Journal of Guidance and Counselling, 50*(1). https://doi.org/10.1080/03069885.2021.1889462

Barrett, B., Tyrer, P., Tyrer, H., Cooper, S., Crawford, M. J., & Byford, S. (2012). An examination of the factors that influence costs in medical patients with health anxiety. *Journal of Psychosomatic Research*, *73*(1), 59-62.

Bodner, E., Shrira, A., & Palgi, Y. (2023). Attitudes to aging mediate the reciprocal effects of health anxiety and physical functioning. *Psychology & Health*, *38*(2), 190-208.

Brown, R. J., Skelly, N., & Chew-Graham, C. A. (2019). Online health research and health anxiety: A systematic review and conceptual integration. *Clinical Psychology Science and Practice, 27*(2). https://doi.org/10.1111/cpsp.12299

Cartensen, T. B. W., Ornbol, E., Fink, P., Pedersen, M. M., Jorgensen, T., Dantoft, T. M., Benros, M. E., & Frostholm, L. (2020). Detection of illness worry in the general population: a specific item on illness rumination improves the Whiteley Index. *Journal of Psychosomatic Research*. 138:110245. https://doi.org/10.1016/j.jpsychores.2020.110245

Ciarrochi, J., Bilich, L., & Godsell, C. (2010). Psychological flexibility as a mechanism of change in acceptance and commitment therapy. *Assessing mindfulness and acceptance processes in clients: Illuminating the theory and practice of change* (pp.51-75). New Harbinger Publications.

Ciliska, D., Miccuci, S., Dobbins, M., & Thomas, B. H. (1998). *Understanding EPHPP and quality assessment tool.* Effective Public Healthcare Panacea Project. Retrieved December 14, 2023, from https://www.ephpp.ca/quality-assessment-tool-for-quantitative-studies/

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155–159. https://doi.org/10.1037/0033-2909.112.1.155

Cooper, K., Gregory, J. D., Walker, I., Lambe, S., & Salkovskis, P. M. (2017). Cognitive behaviour therapy for health anxiety: A systematic review and meta-analysis. *Behavioural and Cognitive Psychotherapy,* 45, 110-123.

Cornett, K. M. D., Menezes, M. P., Bray, P., Shy, R. R., Moroni, I., Pagliano, E., Pareyson, D., Estilow, T., Yum, S. W., Bhandari, T., Muntoni, F., Laura, M., Reilly, M. M., Finkel, R. S., Eichinger, K. J., Herrmann, D. N., Shy, M. E., Burns, J., & CMTPedS Study Group. (2020). Refining clinical trial inclusion criteria to optimize the standardized response mean of the CMTPedS. *Annals of Clinical and Translational Neurology*, 7(9):1713-1715. https://doi.org/10.1002/acn3.51145

Dalal, F. (2018). *CBT: The cognitive behavioural tsunami: Managerialism, politics, and the corruptions of science*. Routledge.

Dalrymple, K. L., & Herbert, J. D. (2007). Acceptance and commitment therapy for generalized social anxiety disorder: A pilot study. *Behavior Modification, 31* (5), 543-568.

Dennis, D., Radnitz, C., & Wheaton, M. G. (2021). A perfect storm? Health anxiety, contamination fears, and COVID-19: lessons learned from past pandemics and current challenges. *International Journal of Cognitive Therapy*, *14*(3), 497-513.

Doherty-Torstrick E. R., Walton K. E., & Fallon B. A. (2016). Cyberchondria: Parsing health anxiety from online behavior. *Psychosomatics*. 57(4):390-400. https://doi.org/10.1016/j.psym.2016.02.002

Dutra, S., & Sadeh, N. (2018). Psychological flexibility mitigates effects of PTSD symptoms and negative urgency on aggressive behavior in trauma-exposed veterans. *Personality Disorders: Theory, Research and Treatment. 9*(4), 315-323.

Eilenberg, T. (2016). Acceptance and commitment group therapy (ACT-G) for health anxiety. *Danish Medical Journal.* 63 (10).

Eilenberg, T., Fink, P., Jensen, J. S., Rief, W., & Frostholm, L. (2016). Acceptance and commitment group therapy (ACT-G) for health anxiety: a randomized controlled trial. *Psychological Medicine*, 46, 103-115.

Eilenberg, T., Frostholm, L., Schroder, A., Jensen, J. S., & Fink, P. (2015). Long-term consequences of severe health anxiety on sick leave in treated and untreated patients: Analysis alongside a randomized controlled trial. *Journal of Anxiety Disorders,* 32, 95-102.

Eilenberg, T., Kronstrand, L., Fink, P., & Frostholm, L. (2013). Acceptance and commitment group therapy for health anxiety–Results from a pilot study. *Journal of anxiety disorders*, *27*(5), 461-468.

Ferreira, L. N., Pereira, L. N., Da Fe Bras, M., & Ilchuk, K. (2021). Quality of life under the covid-19 quarantine. *Quality of Life Research, 30,* 1389-1405.

Fink, P., Ewald, H., Jensen, J., Sorensen, L., Engberg, M., Holm, M., & Munk-Jorgensen, P. (1999). *Whiteley-7 Scale* (Database Record). APA PsycNet. https://doi.org/10.1037/t19582-000

Fink, P., Ornbol, E., Toft, T., Sparle, K. C., Frostholm, L., & Olesen, F. (2004). A new, empirically established hypochondriasis diagnosis. *American Journal Psychiatry 161*(9), 1680-1691.

Frydendal, D. H., Rask, C. U., Jensen, J. S., Wellnitz, K. B., & Frostholm, L. (2023). Mindful non-reactivity and psychological flexibility mediate the effect of internet-delivered acceptance and commitment therapy for health anxiety. *Journal of Contextual Behavioral Science, 28,* 71-78. https://doi.org/10.1016/j.jcbs.2023.03.011

Harris, R. (2019). *ACT made simple: An easy-to-read primer on acceptance and commitment therapy*. New Harbinger Publications.

Harris, R. (2020). FACE COVID: How to respond effectively to the corona crisis. *US: University of Louisville*.

Hayes, S. C., & Hofmann, S. G. (2017). The third wave of cognitive behavioral therapy and the rise of process-based care. *World Psychiatry, 16*(3), 245-246. https://doi.org/10.1002/wps.20442

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy: An experiential approach to behavior change.* The Guilford Press.

Hayes, S. C., Villatte, M., Levin, M., & Hildebrandt, M. (2011). Open, aware, and active: Contextual approaches as an emerging trend in the behavioral and cognitive therapies. *Annual Review of Clinical Psychology, 7,* 141-168.

Hedman, E., Lekander, M., Ljotsson, B., Lindefors, N., Ruck, C., Andersson, G., & Andersson, E. (2015). Optimal cut-off points on the health anxiety inventory, illness attitude scales and whiteley index to identify severe health anxiety. *PlosOne.* https://doi.org/10.1371/journal.pone.0123412

Hedman, E., Ljotsson, B., Axelsson, E., Andersson, G., Rück, C., & Andersson, E. (2017). Health anxiety in obsessive compulsive disorder and obsessive-compulsive symptoms in severe health anxiety: An investigation of symptom profiles. *Journal of Anxiety Disorders*, *45*, 80-86.

Hoffmann, D., Halsboe, L., Eilenberg, T., Jensen, J. S., & Frostholm, L. (2014). A pilot study of processes of change in group-based acceptance and commitment therapy for health anxiety. *Journal of Contextual Behavioral Science,* 3, 189-195.

Hoffmann, D., Rask, C. U., Hedman-Lagerlof, E., Ljotsson, B., & Frostholm, L. (2018). Development and feasibility testing of internet-delivered acceptance and commitment therapy for severe health anxiety: A pilot study. *JMIR Mental Health,* 5 (2).

Hoffmann, D., Rask, C. U., Hedman-Lagerlof, E., Jensen, J. S., & Frostholm, L. (2020). Efficacy of internet-delivered acceptance and commitment therapy for severe health anxiety: Results from a randomized controlled trial. *Psychological Medicine.* https://doi.org/10.1017/S0033291720001312

Hoffmann-Frydendal, D., Rask, C. U., Jensen, J. S., Wellnitz, K. B., & Frostholm, L. (2023). Mindful non-reactivity and psychological flexibility mediate the effect of internet-delivered acceptance and commitment therapy for health anxiety. *Journal of Contextual Behavioral Science,* 28, 71-78. https://doi.org/10.1016/j/jcbs.2023.03.011

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gotzsche, P. C., Ioannides, J. P. A., Clarke, M., Devereux, P. J., Kleijnen, J., & Moher, D. (2009). The prisma statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *Annals of Internal Medicine.* https://doi.org/10.7326/0003-4819-151-4-200908180-00136

Lum, K., Cooke, R., & Povey, R. (2023). *Systematic Review: The effectiveness of Acceptance and Commitment Therapy (ACT) for reducing Health Anxiety in adults.* NIHR Prospero. Retrieved September 25, 2023, from https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=46189

MacSwain, K. L. H., Sherry, S. B., Stewart, S. H., Watt, M. C., Hadjistavropoulos, H. D., & Graham, A. R. (2009). Gender differences in health anxiety: An investigation of the interpersonal model of health anxiety. *Personality and Individual Differences*, *47*(8), 938-943.

Maass, U., Kühne, F., Maas, J., Unverdross, M., & Weck, F. (2020). Psychological interventions for health anxiety and somatic symptoms. *Zeitschrift für Psychologie*.

McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica*, *22*(3), 276-282.

Medcalc. (2024, January 4). *Responsiveness.* Retrieved January 4, 2024, from https://www.medcalc.org/manual/responsiveness.php#:~:text=Effect%20size%20(ES)%20using%20pooled,differences%20between%20the%20paired%20measurements.

Olde Hartman, T. C., Borghuis, M. S., Lucassen, P. L., Van de Laar, F. A., Speckens, A. E., & Van, W. C. (2009). Medically unexplained symptoms, somatization disorder and hypochondriasis: Course and prognosis. A systematic review. *Journal of Psychosomatic Research, 66,* 363-377.

Random.org. (2023, November 25). *What's this fuss about true randomness?* Retrieved November 25, 2023, from www.random.org

Risor, B. W., Hoffman-Frydendal, D., Villiemoes, M. K., Nielsen, C. P., Rask, C. U., & Frostholm, L. (2022). Cost effectiveness of internet-delivered acceptance and commitment therapy for patients with severe health anxiety: A randomized controlled trial. *Pharmacoeconomics,* 6, 179-192. https://doi.org/10.1007/s41669-021-00319-x

Rosendal, M., Bro, F., Sokolowki, I., Fink, P., Toft, T., & Olesen, F. (2005). A randomized controlled trial of brief training in assessment and treatment of somatization: Effects on GPs' attitudes. *Family Practice, 22,* 419-427.

Rostami, R., & Borzorgi, Z. D. (2019). Effectiveness of acceptance and commitment therapy on resilience and alexithymia of somatic symptoms. *Practice in Clinical Psychology.* https://doi.org/10.32598/jpcp.7.2.87

Salkovskis, P. M., Rimes, K. A., Warwick, H. M. C. & Clark, D. M. (2002). The health anxiety inventory: The development and validation of scales for the measurement of health anxiety & hypochondriasis. *Psychological Medicine 32*, 843-853.

Shahidi, S., Zargar, F., Khajelangi, H. A., & Tarrahi, M. J. (2023). The effect of internet-delivered mindfulness stress reduction combined with acceptance and commitment therapy on health anxiety and quality of life of caregiver of patients infected by covid-19: A randomized clinical trial. *International Journal of Community Based Nursing and Midwifery.* https://doi.org/10.30476/IJCBNM.2023.97271.2172

Skewes, S. A., Samson, R. A., Simpson, S. G., & Van Vreeswijk, M. (2015). Short term group schema therapy for mixed personality disorders: A pilot study. *Frontiers in Psychology, 5,* 1592-1598. https://doi.org/10.3389/fpsyg.2014.01592

Swain, J., Hancock, K., Hainsworth, C., & Bowman, J. (2013). Acceptance and commitment therapy in the treatment of anxiety: a systematic review. *Clinical psychology review*, *33*(8), 965-978.

Thomas, H., & Ciliska, D. (1999). *Effective public health practice project (EPHPP).* Retrieved January 5, 2024, from https://merst.healthsci.mcmaster.ca/ephpp/

Thomas, J., Kneale, D., McKenzie, J. E., Brennan, S. E., & Bhaumik, S. (2023, November 30). *Cochrane Training: Chapter 2: Determining the scope of the review and the questions.* Retrieved November 30, 2023, from https://training.cochrane.org/handbook/current/chapter-02.

Tyrer, P., & Fink, P. (2016). Health anxiety – the silent epidemic. *British Medical Journal.* https://doi.org/10.1136/bmj.i2250

Waldron-Perrine, B., Kisser, J., Robinett, E., Hanks, R., & Kratz, A. (2022). Association between acceptance and commitment therapy (ACT) processes and depressive symptoms and pain interference in persons with spinal cord injury. *Rehabilitation Psychology, 67*(4), 602-609.

Weck, F., Richtberg, S., & Neng, J. (2014). Epidemiology of hypochondriasis and health anxiety: comparison of different diagnostic criteria. *Current Psychiatry Reviews*, *10*(1), 14-23.

World Health Organization. (1998). *SCAN. Schedules for clinical assessment in neuropsychiatry, version 2.1.* Geneva: World Health Organization, Division of Mental Health.

World Health Organization. (2022). *ICD-11: International classification of diseases (11th revision).*

3.2 Systematic Review Commentary

SYSTEMATIC REVIEW REFLECTIVE COMMENTARY

INTRODUCTION

I had trouble when starting to identify an area of interest I wanted to focus on. Initially I decided upon the topic of 'Avoidant Restrictive Food Intake Disorder (ARFID) in people with autism', however, I undertook some training in July 2023 around interventions for 'Health Anxiety' and this piqued my interest more so, therefore, I decided to focus my review on this instead. I felt excited to read around this topic as it was a different field to that of autism in my work placement. Expanding my understanding of interventions for health anxiety would be good to expand my doctoral portfolio and expand opportunities for potential future job opportunities, however, I didn't have as much background reading around this area under my belt. I looked forward to learning more about health anxiety. I created a spider-gram of areas of interest I had around health anxiety and this led me to decide to focus on 'intervention for health anxiety'. The training I had along with initial reading led me to understand that interventions for health anxiety, particularly in the US, had used cognitive behavioural therapy (CBT) (Cooper et al., 2017) or Exposure Response Prevention therapy (ERP) (Hedman et al., 2017). Having qualified to Level 3 in delivering Acceptance and Commitment Therapy (ACT) (Harris, 2019), I was curious about whether ACT had been successfully used for health anxiety. I started a scoping search and found papers that suggested this was the case over the last decade and this led me to search whether a systematic review of these papers had been conducted, which it had not. This led to my decision to focus my systematic review on:

'The effectiveness of ACT for reducing health anxiety in adults.'

ESTABLISHING A PROTOCOL

I arranged a meeting with a librarian specializing in systematic reviews and attended training: 'Improving your search strategy', and 'RefWorks'; to brush up my skills, as it had been three years since the mini-systematic review of my MSc. I was aware the technology had changed and felt daunted about the task ahead. This helped me to start creating synonyms and inclusion and exclusion criteria. I decided to use PICO framework (Richardson et al, 1995) as I had used this previously in my MSc and it was an appropriate framework as the systematic review would be about an intervention. I used Boland et al.' (2017) guidance to help me to create an organized system for the project and build my confidence and created a Gantt chart for my intended timeline for the systematic review. Although the task ahead felt challenging, as I was feeling "rusty" after three years, I knew it was right to have sought help at this early stage, as it helped me to create a confident plan of action. As a result of this, I would feel more confident preparing to start a systematic review in the future.

PROSPERO APPLICATION

I researched how to complete a Prospero application, via the Prospero website, downloading their guidance, and looking at completed applications, prior to starting a Word version of my Protocol. I had not registered a systematic review on Prospero before, so this was all new to me and I felt very unsure and daunted about the process. The feedback I received on the initial draft of my protocol was not too extensive, which gave me confidence, and I made the changes and resubmitted. There were a few more minor adjustments needed after this, and I felt frustrated that feedback on my protocol was delayed over the summer. I felt keen to get started on the actual literature search. The slow start enabled me time to read more around the area which developed my understanding further and this steady start paid off, as my protocol was accepted by Prospero on the first submission. It felt like a real sense of achievement, just getting this far, and it was a good psychological boost for me to see my systematic review protocol published online. However, the bad thing was that the process of the epic task ahead sank in. I know I am a highly organized person, so I set to using this nervous energy by organizing laptop files for myself to keep on-top of the progression of the review, to write it up clearly. I think if I were to do another systematic review, I would have a more confident start to it.

ETHICS

I submitted my Ethics Disclaimer, however, did not hear back. A response to a chase-up email a month later suggested I had completed the wrong form, so I resubmitted using an on-line form. I chased this new form up again a month later as I hadn't heard back. It turned out that there had been a technical issue at the University and the process had been delayed. I felt relieved when this was finally approved, and it was good I could officially start the literature search. I was aware I had been frustrated by bureaucratic delays that were beyond my control. I am very aware now of the importance of submitting ethics applications with plenty of time and will do so when I start my research for the Research module.

CARRYING OUT LITERATURE SEARCH

I used my Protocol to guide me through the literature search, systematically recording in a reflective journal the outcomes of each search. A peer suggested I add brackets around my search terms and this tip really helped. I felt grateful for the support from my more-technically-able peer. It is bad that I lack confidence so much in my IT skills but good that I am learning more through my peers, as these tips will really help with a future systematic review.

I realized early on that I was not sure how I was going to transfer hundreds of references to a format I could organize. I had completed RefWorks training, so turned to this software. Despite this and seeking further help from librarians, I couldn't transfer the references. I felt helpless to know what to do. A peer suggested Mendeley software, so I downloaded this and tried again, but again couldn't transfer references. Whilst at university one day in June, a chance encounter with a very helpful Professor of Biomechanics at the coffee shop, established the error that was stalling my reference transfers; I needed to unzip files before transferring them. My troubles with referencing software were very anxiety provoking however, the good thing about it was that I learned how to use two different types of referencing software, RefWorks and Mendeley. The solution to my problems only came when I had a face-to-face meeting with another human, as the online help I had received had not resolved things. In future, I think it would be important to arrange a face-to-face meeting with someone, if I am really stuck on something.

Some months after I had completed my systematic searches, my Academic Supervisor cast doubt on my low numbers of hits. This rocked my confidence, especially as I had previously discussed my relatively low number of hits with the systematic review specialist librarian. As a result, I reran the searches and came up with marginally more hits from a couple of databases. This left me with a dilemma about what to do. I had already completed screening and started data extraction but was now worried that I might need to start the process again with the new set of hits. I checked with the Module Leader, and he confirmed I should carry on with my original set of hits. I had been very worried about this and was relieved by his response. I may have had a 'filter' difference when doing the second set of searches, as there hadn't been mass publication around the topic in the preceding months. I learned that in future, I need to double-check all filters each time before running searches.

SCREENING

I was not comfortable finding a 'second reviewer' as I don't like asking people for favours. I mentioned needing a second reviewer to my peers, but they did not seem interested. I asked my supervisor, but she pointed out that it would be beneficial for one of my peers to do it, for their publication record; and if I could reciprocate the favour, it would also be good for my publication record. I felt awkward asking one of my peers again, but I am glad I plucked up the courage to do so. At the time, the plan for one of my peers was to also do a systematic review around health anxiety, and she could see the sense in us being the second reviewer for each other. Her plans then changed, and her new topic was psychological distress in patients awaiting an organ transplant. The good thing is that I learned a lot about this new topic from being her second reviewer; and we will both benefit from the process if the papers are published. I know in future; I need to be bolder about asking for things.

I found an online random generator to use to select the papers for second review. This was an update on methods I had used previously (literally numbers from a hat) and I appreciated finding this handy tool, that I will use in the future. The second reviewer reviewed titles and abstracts of 10% of my papers (n=13) and we agreed on the papers which met the inclusion criteria.

DATA EXTRACTION

I felt very unsure about my abilities starting the data extraction process but had a supervision session with the Module Leader, who confirmed I was on the right tracks, which boosted my confidence. I had doubted my abilities as I had only previously completed one mini systematic review. It is bad that I instinctively think I must be doing things wrong, however, good that the Module Leader confirmed otherwise. I need to have more faith in my abilities in the future. I found some of the statistical findings difficult to follow in some of the papers and this made data extraction more difficult. I requested a Jamovi training session with the Module Leader for our doctorate cohort, and his explanations around some of the more obscure statistics helped me to figure out how to complete the remainder of the data extraction. His clear explanations of doing a meta-analysis were comforting and I was confident that I would be able to complete one once I had all my data. However, when I had extracted my data, I was left with a quandary about whether I had sufficient data to conduct a meta-analysis and sought guidance with this decision. It turned out that I did not, and I would need to do a narrative synthesis.

QUALITY ASSESSMENT

I did some research into different quality assessment tools, having previous familiarity with CASP tools (Critical Appraisal Skills Programme, 2018), and discussed tools in supervision with my Academic Supervisor. After consideration, I chose the Canadian Effective Public Health Practice Project (EPHPP) tool (Thomas & Ciliska, 1999), as it is suitable for quantitative health intervention studies with different methodologies. When I started using the EPHPP risk of bias tool, it felt 'clunky' as it was new to me, and the first paper took some time to assess. As I became more familiar with it, I began to increase in confidence and speed and could see how it was an effective tool that could help me summarize the papers. In the end, I preferred this tool to the CASP tool I had used previously. It's good that my knowledge of tools and confidence in using this tool have increased through the process. If I do a systematic review in the future, I know I will have a wider understanding of the different tools available now.

The second reviewer reviewed 10% of the full papers using the quality assessment tool (EPHPP, n=2). We agreed on the outcome of one of the papers but on the second, she had scored it ‘2 Moderate’ and I had scored it ‘1 strong’. I reviewed the difference of opinion, looked at the paper closely, and agreed with her review, which highlighted a lack of clarity around confounders prior to the intervention in the study. I could see that I had perhaps made assumptions around the study that were not clearly stated. I brought my score down to match hers and emailed her to confirm. I felt it had been a useful process to have a second reviewer and was clearly a more professional practice, and this helped me to realize how important this would be if I were to do another systematic review.

I also used a Kappa calculation to assess inter-rater reliability between myself and the second reviewer. I had not come across this statistic before and struggled to know which data to enter to the grid, prior to the calculation. The Module Leader was able to support me with this. I can see how important this statistic can be to add credibility to the reliability of the review process and would use this again in a future systematic review.

DATA ANALYSIS

The data extraction process led me to a position where I did not have adequate data to perform a meta-analysis. I had mixed feelings; I was somewhat relieved but also disappointed, as I had been looking forward to using my new Jamovi skills. I found the process of starting a narrative synthesis daunting. After discussion with my Academic Supervisor and looking through completed systematic reviews, I developed more confidence and split the data into relevant categories. This made it much easier to synthesize and make sense of it. I feel I learned a lot about how to go about synthesizing data which is quite diverse. This has developed a skill that will be useful for me for future systematic reviews.

When the Module Leader looked at the draft of my review, he pointed out that including studies with primary and those with secondary data, lead to a confusing read and suggested I remove the studies with secondary data. Although I felt unsure, once I had done this, the review flowed and read much more clearly, so this had been very good advice. I can appreciate how important it is to have a fresh pair of eyes looking over my work, to improve it.

RECOMMENDATIONS FROM THE REVIEW

The review found that ACT as an intervention for health anxiety in adults has the potential to reduce personal distress, healthcare and societal burdens caused by health anxiety. The synthesized evidence suggests short-term interventions of ACT for adults diagnosed with health anxiety, would not only be beneficial for the individuals but also potentially cost-effective for wider healthcare systems. Further research could be conducted to establish whether there are long-term positive impacts of ACT intervention for health anxiety. Also, further research from a wider selection of countries than those included in this review (Denmark, Iran), to establish if there would be similar findings. I feel it is good that I have a wider awareness around health anxiety, as it can impact perceptions of physical disorders and as a Trainee Health Psychologist, this feels like an important thing to keep in mind for future roles I may have. It also inspires me to consider how I might incorporate health anxiety into the research for my Research module.

INTENT TO PUBLISH & DISSEMINATE

When selecting a journal to attempt to publish my systematic review my supervisor suggested the website scimagojr.com and I found this helpful as I hadn't realized such websites existed. Below are some of the journals I considered.

Table 1: Potential Journals with Psychology rankings scimagojr.com 31/08/2023

Journal	Country	Psychology ranking	Quartile ranking
Journal of Anxiety Disorders	UK	37	Q1
Journal of Contextual Behavioral Science	Netherlands	40	Q1
International Journal of Behavioral Medicine	USA	51	Q2
Behavioural and Cognitive Psychotherapy	UK	73	Q2
Journal of Psychosomatic Research	USA	170	Q1
Behaviour Research and therapy	UK	204	Q1

I downloaded some ‘Author Guidelines’ to help me decide and chose the ‘Journal of Anxiety Disorders’ (JAD), as it specifically listed that it published studies on health anxiety and also systematic reviews, and it had high rankings on scimagojr.com. Upon close inspection, I found JAD had an unusual article format within their guidelines. After ‘introduction’ and ‘method’ sections, they require a ‘theory’ section containing new information to that already included in the ‘introduction’. This is a highly unusual format and concerned me. I discussed it with my Academic Supervisor and the Module Leader, who had also not seen such an article format before. It felt appropriate to include information about health anxiety measures in this separate theory section, as the introduction had covered information relating more generally to health anxiety. I felt pleased to have learned about journal ranking searching websites and to have come to a decision about my journal of focus. I will use journal ranking websites again in the future. I have the potential to disseminate my systematic review at the Staffordshire University Health Psychology Conference 2024, which is a good place for dissemination of a wide range of topics to a wide-ranging audience.

OVERALL CONCLUSIONS & REFLECTIONS

Overall, the findings of the systematic review indicated that ACT is an effective short-term intervention to treat health anxiety in adults, and this has implications for the development of new treatment pathways. I lacked confidence at the start of the process but with good strategic planning, and the support I sought to overcome technical issues, approaching a peer to be my second reviewer, I ended up finishing the assessment two months ahead of my schedule. I learned a lot about health anxiety in the process, especially as the amendments to the final draft gave me opportunities to drill down even deeper into the papers. I feel I have developed confidence to seek help from others, developed my systematic review skills, and learned skills for using online referencing systems, random generators, databases and Jamovi software. I would feel more confident if starting another systematic review. I would still like to develop more confidence doing database searches and will have an opportunity to do this with the research module. I am grateful for the support I received through supervision, which helped me to achieve my goals on this assignment.

REFERENCES

Boland, A., Cherry, M.G., & Dickson, R. (2017). *Doing a systematic review: A student's guide (2nd Ed).* Sage.

Cooper, K., Gregory, J. D., Walker, I., Lambe, S., & Salkovskis, P. M. (2017). Cognitive behaviour therapy for health anxiety: A systematic review and meta-analysis. *Behavioural and Cognitive Psychotherapy,* 45, 110-123.

Critical Appraisal Skills Programme. (2018). *CASP Checklist.* Retrieved November 14, 2023, from https://casp-uk.net/casp-tools-checklists/

Harris, R. (2019). *ACT made simple: An easy-to-read primer on acceptance and commitment therapy*. New Harbinger Publications.

Hedman, E., Ljotsson, B., Axelsson, E., Andersson, G., Rück, C., & Andersson, E. (2017). Health anxiety in obsessive compulsive disorder and obsessive-compulsive symptoms in severe health anxiety: An investigation of symptom profiles. *Journal of Anxiety Disorders*, *45*, 80-86.

Richardson, W., Wilson, M., Nishikawa, J., & Hayward, R. (1995). The well-built clinical question: A key to evidence-based decisions. *ACP Journal Club*, *123*, A12–A13.

Thomas, H., & Ciliska, D. (1999). *Effective public health practice project (EPHPP).* Retrieved January 5, 2024, from https://merst.healthsci.mcmaster.ca/ephpp/

University of York Centre for Reviews and Dissemination. (2016, May). *Guidance notes for registering a systematic review protocol with PROSPERO.* Retrieved August 4, 2023, from www.crd.york.ac.uk/prospero

Chapter 4: Health Psychology Interventions

4.1 Individual Face-to-Face Intervention Case Study

APPLICATION OF DNA-V WITH A CLIENT IN AN NHS AUTISM SERVICE IN ORDER TO REDUCE ANXIETY AND DEPRESSION, THEREBY IMPROVING RESILIENCE

INTRODUCTION

I work as a Band 7 Clinician (Practitioner of Specialist Behaviour Support) for ‘Family Intensive Support Service - Autism Spectrum Condition’ (FISS-ASC), in an East Sussex NHS Trust; aligned with Children’s and Adolescents Mental Health Service (CAMHS). We accept secondary referrals where a child with ASC has challenging behaviours, putting themselves or others at risk of harm. This client, a 14-year-old boy ‘Ray’ *(pseudonym)* was frequently physically and verbally aggressive, punching and kicking parents, throwing items, damaging property and school refusing as an expression of high levels of anxiety. High levels of anxiety represent a health behaviour, thereby highlighting Ray as a good case study for my Health Psychology Doctorate.

ASC is a pervasive neurodevelopmental condition (American Psychiatric Association, 2013), involving deficits in social communication and interaction, plus restricted/repetitive patterns of behaviour (APA, 2013). Symptoms are usually present from early developmental stages; however, diagnosis may be confirmed later. Ray was diagnosed with ASC at age 11. Diagnosis of ASC necessitates acculturation to identify as a neurodiverse person, which may differ from prior perceptions of ‘self’ as a ‘neurotypical’ person (Adreon and Durocher, 2007). This adjustment can be particularly difficult for young people navigating adolescence. This can negatively impact self-esteem and self-efficacy, resulting in increased anxiety (Van der Cruijsen & Boyer, 2021). Increased anxiety can lead to challenging behaviour, as the young person may struggle to communicate effectively with those around them. Challenging behaviour may be self-harm, physical or verbal aggression, inappropriate sexualized behaviour or school refusal and may serve the function of inappropriately communicating anxiety and fears (Hattier et al, 2011).

Ray is the youngest child of three neurodiverse siblings. His father is also neurodiverse, and his mother is neurotypical. At the time of intervention, Ray's brother was a psychiatric inpatient, due to repeated suicide attempts and Ray had not seen him for months. The family were in the process of relocating to a neighbouring county.

ASSESSMENT

Assessing the needs of a client is essential prior to formulating and planning intervention. Assessment is the collation of information and measurement of the client's current situation and difficulties, to understand a baseline from which to formulate a plan of intervention together (Johnstone & Dallos, 2014). It involves understanding the function and maintenance of challenging behaviour.

The process of assessment in FISS-ASC is through completion of an 'Initial Assessment Form' including a Risk Assessment, conducted over two meetings with parents, followed by an initial meeting with the young person. In the initial meeting with parents, ethical principles and confidentiality were discussed and consent was given for Ray's case to be used as this case study.

At my initial meeting with Ray, along with rapport-building activities, I selected the baseline tool 'Revised Children's Anxiety and Depression Scale' (RCADS CORC, 2022), to measure Ray's anxiety and depression, as the referral and assessment meetings had suggested anxiety as the underpinning issue linked to Ray's challenging behaviour. RCADS, and the other outcome measures selected for this intervention are 'CORC' approved measures. 'CORC' is the ‘Children’s Outcomes Research Consortium’. NHS England commissioned CORC to find measures being used by CAMHS departments in England, to ensure best practice as standard across CAMHS (CORC, 2022, Outcome Measures in Child and Youth Mental Health Services). RCADS was found one of the most used measures, used by 47% of survey practitioner respondents. Montazeri et al (2019) found RCADS as a valid measure of anxiety in children living with Autism. My targeted outcome would be to reduce Ray’s anxiety and depression, thereby increasing his resilience, resulting in reduced aggressive outbursts. Ray self-completed RCADS. This was a good baseline measure to select, to quantify the success of the outcome, as it measures five aspects of anxiety: social phobia, separation anxiety, obsessive compulsive anxiety, generalized anxiety and panic disorder anxiety.

I also selected a baseline measure of Ray’s mother’s perceived stress as additional evidence of the impact of intervention with Ray on the wider family using the Parental Stress Scale (PSS, Berry & Jones, 1995). I chose to measure Ray’s mother’s stress because FISS-ASC try to positively impact the family, although focus is on the outcome of the young person referred. Parental stress may directly impact the young person’s stress experience due to shared environmental living. Berry and Jones (1995) demonstrated reliability and validity of PSS with 1276 parents. Shepherd et al (2018) site the usefulness of PSS with parents of autistic children. Ray’s father was unavailable to take part in the intervention due to work commitments.

Standard service outcome measures SPFT use are Children’s Global Assessment Scale (CGAS, Shaffer et al, 1983) and Sheffield Learning Disabilities Outcome Measure (SLDOM, CORC, 2022). CGAS is a rating of psychological and social functioning designed for children aged 6-17 years, measured by clinicians. CGAS scores fall into 1 of 10 categories of functioning. SLDOM is a measure of parental perception of a child’s symptoms and their ability as a parent to cope with these.

Table 1 shows Ray was experiencing borderline normal levels of anxiety: ‘Separation Anxiety’, ‘panic disorder’ and ‘Major Depression’ sub-sections of RCADS. These scores, plus discussions with Ray and his parents, suggested Ray’s aggressive attacks may serve the function of communicating anxiety, which was preventing him attending school and theatre club. Ray’s mother’s PSS score ‘54’ (Table 1) reflected she was experiencing relatively high levels of stress. (PSS scores range from 18-90, higher scores signifying higher levels of parental stress.) CORC suggest an SLDOM score above 25 predicts positive outcomes for intervention (CORC, 2022, Further information on SLDOM). Ray’s mother’s SLDOM score was 27/40. The CGAS score of 51 represented Ray had ‘Variable psychological and social functioning with sporadic difficulties/symptoms in several but not all social areas’.

Table 1: Selected Baseline (outcome) Measures

Measure	**Score at start of intervention**	**Normal Range RCADS** Representing 92% of Year 10 children*
RCADS (Ray): - Major Depression - Social Phobia Anxiety - Panic Disorder Anxiety - Separation Anxiety - Generalised Anxiety - Obsessive Compulsive Anxiety	49 Total 37 Overall Anxiety 12 16 8 5 4 4	0-65 0-48 0-12 0-19 0-8 0-5 0-12 0-8
Aggressive episodes	Physical – weekly Verbal – daily	
PSS (mother)	54	
SLDOM (mother)	27	
CGAS (clinicians)	51	

**(CORC, 2022, Interpretation Aid: RCADS self-report compared to other young people in the reference group, how high is a score, school years 10 & 11)*

Ray and his mother chose a goal of reducing Ray's anxiety and depression, in order that Ray may develop more resilience for dealing with challenging situations and act upon these challenges in alternative ways to physical aggression.

FORMULATION

Formulation is a Health and Care Professions Council (HCPC) professional skill requirement for health psychologists (HCPC, 2009). It is an essential step in psychological intervention, "… used by clinicians to relate theory to practice…. Formulations can best be understood as a hypothesis to be tested" (Butler, 1998, cited in Johnstone, 2013, p260). Formulations are a structured process enabling clinicians to understand client's starting position, and with the client's goal in mind, to work out how to get from one to the other, to plan intervention.

Ray was aggressive as an expression of his anxiety and depression; his behaviour was linked to his thoughts and emotions. Due to this, I used 'Five Ps formulation approach' (5Ps Model) (MacNeil et al, 2012). 5Ps approach is often used as formulation for Cognitive Behavioural Therapy (CBT). It is an appropriate model for this intervention as it considers how Ray's life was shaped by his thoughts and feelings, impacting his behaviour (Bladon-Wing, nd). 5Ps formulation comprises: Presenting issues, Predisposing diagnoses, Precipitating/triggering factors, Perpetuating/maintaining factors, Protective factors (Table 2). 5Ps model is also a service standard model for SPFT.

Table 2: 5Ps Formulation -detail from initial assessment interviews & measures

Presenting issues	Physical and verbal aggression towards parents, throwing items and damaging property, school refusal & unable to attend theatre group, due to anxiety
Predisposing diagnoses	Ray was diagnosed with ASC at age 11
Precipitating factors	Sensory overload, overwhelm of demands, sibling jealousy, the need to seek attention from mother, anger, frustration, perfectionism, boredom
Perpetuating factors	Heightened anxiety, an inability to ask for help, getting locked in circular thought processes, lack of sleep, difficulty making and maintaining friendships
Protective factors	Ray is part of a loving family who are supportive and sensitive to his needs, he is very bright & able to focus on his special interest Dr Who & has advanced research skills. Ray has a good sense of humour & enjoys theatre club when he can attend.

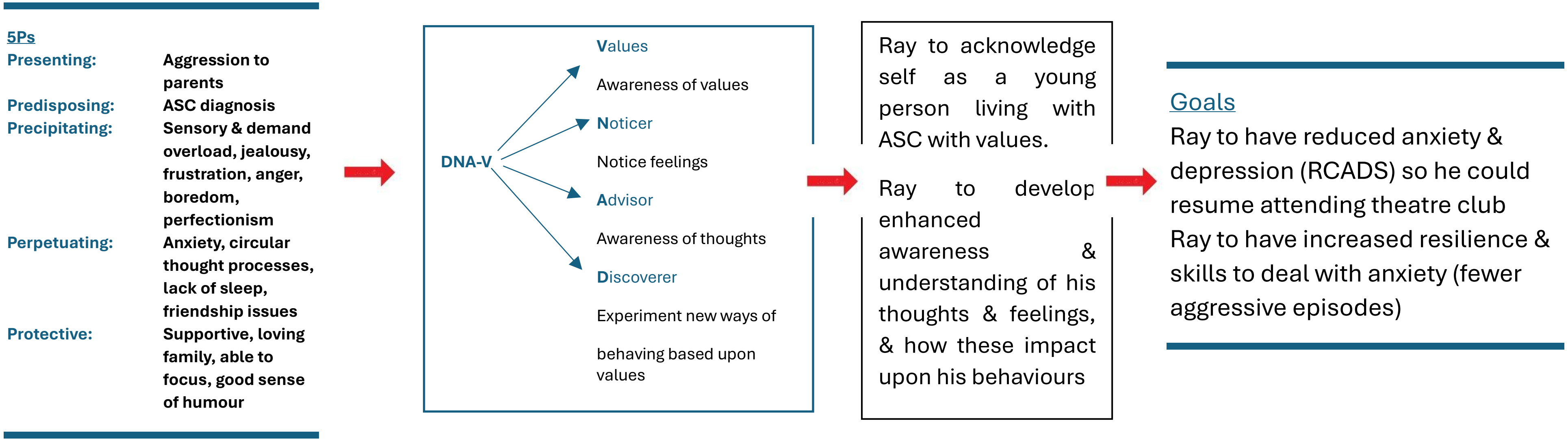
The assessment with Ray and his mother and the formulation process, lead to an intervention plan to address Ray's anxiety, which he expressed was underlying feelings of depression. If I could help Ray understand himself as a teenager with ASC, understand his anxiety and associated actions, he may be able to find non-aggressive solutions for anxiety, increasing his resilience, leading to fewer aggressive episodes.

DNA-V is a therapeutic approach designed for children, to develop psychological strength and flexibility; reframe difficult situations in line with values, and take positive action (Hayes &

Ciarrochi, 2015). DNA-V is a form of Acceptance and Commitment Therapy (ACT) based upon Positive Psychology and CBT. Chapman and Evans (2020) used DNA-V with ASC adolescents experiencing heightened anxiety. The process of formulation led me to conclude DNA-V may be a suitable approach for Ray (Figure 1). This decision was endorsed as Marino et al. (2019), had used DNA-V with adolescents to build resilience and increase psychological flexibility; and Casu et al. (2021) had found DNA-V to promote good mental health in adolescents. I previously completed DNA-V training and training in Cognitive Behavioural Coaching, Positive Psychology Coaching and ACT.

A reduction in anxiety and depression for Ray (RCADS) would signify improvement in psychological health, a reduction in aggressive episodes would signify positive behavioural change. Following initial assessment and formulation, I shared details of the formulation with Ray and his parents and wrote a service Initial Assessment report shared with Ray, parents, GP, social worker and initial referrer.

Figure 1: Formulation map for DNA-V intervention with Ray



5Ps

Presenting:	**Aggression to parents**
Predisposing:	**ASC diagnosis**
Precipitating:	**Sensory & demand overload, jealousy, frustration, anger, boredom, perfectionism**
Perpetuating:	**Anxiety, circular thought processes, lack of sleep, friendship issues**
Protective:	**Supportive, loving family, able to focus, good sense of humour**

DNA-V

Values

Awareness of values

Noticer

Notice feelings

Advisor

Awareness of thoughts

Discoverer

Experiment new ways of

behaving based upon values

Ray to acknowledge self as a young person living with ASC with values.

Ray to develop enhanced awareness & understanding of his thoughts & feelings, & how these impact upon his behaviours

Goals

Ray to have reduced anxiety & depression (RCADS) so he could resume attending theatre club

Ray to have increased resilience & skills to deal with anxiety (fewer aggressive episodes)

INTERVENTION PLAN

The formulation process led to the following therapeutic goals:

Table 3: Therapeutic Goals

• Using DNA-V to help Ray become more aware of his strengths, values, feelings & thoughts, to unpick his triggers and develop options for how to respond to situations that are challenging for him
• The process of DNA-V will enable Ray to experience less anxiety & depression (outcome lowered RCADS), so he can engage in activities he enjoys - resume attending theatre club
• The process of DNA-V will help Ray to develop resilience, so he has less aggressive outbursts (outcome fewer aggressive outbursts)
• The outcomes as a result in DNA-V will lead to a more harmonious household with fewer aggressive outbursts (outcome lowered Mother PSS)

DNA-V training suggests intervention should be in the following order: Values, Noticer, Advisor, Discoverer. I introduced DNA-V to Ray to familiarize him about it before starting on the different elements over weekly sessions, culminating in a summary session, drawing skills together and a progress check session. Content for sessions were drawn from DNA-V resources (DNA-V, 2021). Ray also worked separately with the FISS-ASC occupational therapist. Between clinicians, our service is commissioned for up to 12 intervention sessions, therefore, I liaised with her about the number of sessions I would need.

Table 4: Overview of intervention sessions

Session *(1 hr each)*	**Intervention**	**Homework**
1	Introduction to DNA-V as a model & how it can positively impact psychological wellbeing (Mind, 2022, Five ways to Wellbeing)	Check out DNA-V website to read about DNA-V
2	Exploring Values using 'My Valued Journey' worksheet to then create a spider gram of Ray's values	Reflect how your values impact your daily life, try to do an activity you value this week
3	Notice your feelings, where these happen in your body, naming them. Exercises used: 'Who are you' worksheet	Notice how it feels in your body when you do something you value & if you feel anxious
4	Explore your Advisor, the voice in your head telling you good and bad things – your thoughts, using 'Would you rather' activity	Try to catch your Advisor telling you negative things & take action to change this
5	Think about your Discoverer – how you might experiment around situations you find challenging by using your strengths & values	Create a couple of Discoverer experiments to try over the coming week
6	Summarizing DNA-V and how you can use it moving forward	
7	Progress check session and final outcome measures	

Session 1

Having previously met Ray; this first intervention session was about DNA-V familiarization. I gave web-links to Ray and his mother about DNA-V for after the session and I talked through the model, it's basis and how it aims to build psychological flexibility. We did an activity using the 'Five Ways to Wellbeing' to think about activities that help Ray feel psychologically well. 'Five Ways' is a cognitive model to help people think about improving mental wellbeing (Ng et al., 2015) and was a model Ray was already familiar with. We discussed things Ray couldn't do now due to anxiety - attending school and theatre club. Sessions were mainly based at Ray's home, due to anxiety around leaving the house, enabling Ray to be relaxed, with family pets joining us. Ray was able to engage in activities, giving brief answers and avoiding eye contact, due to his ASC. At the end of each session, Ray was invited to explain to his mother what we had been doing, in his own words, reinforcing the learning, and so his mother could understand the process and support Ray during the week.

Session 2

We started by discussing if Ray had checked out the DNA-V website – he hadn't. This didn't matter too much as I recapped what we had done previously. The focus of this session was establishing Ray's 'values and strengths'. Ray completed a 'My Valued Journey' worksheet (DNA-V, 2022) and was able to reflect on many strengths and values.

Session 3

We started by reviewing Ray's 'Values' spider-gram and talking about whether he had engaged in activities he valued over the past week. He had - managing dog walks to observe other people and completing some research about BBC archives. He was able to reflect how this made him feel good.

I explained the 'Noticer' - DNA-V. We looked at DNA-V literature (Ray had created a file of handouts and worksheets from our sessions). We used Noticer activities, 'Your Noticer Skills' (Ciarrochi & Hayes, 2020), and 'Who are you' (DNA-V, 2022) to explore how Ray felt and how his feelings were experienced in his body, to increase emotional literacy. We talked about, noticing how we feel, especially when anxious, and how we can choose how to react behaviourally, rather than just flipping aggressively.

Session 4

This session observed by my Workplace Supervisor, took place at CAMHS clinic (Communication Skills assessment submitted separately). Ray and his mother attended and took part in the session, a little tensely to start but Ray was able to engage, although, I was aware he may be masking.

Ray was able to reflect upon an occasion over the previous week, where he had felt annoyed at his father, he noticed he wanted to hit him in anger but had refrained, name-calling instead and taking himself to his bedroom, distracting himself by downloading a film. This was an improvement upon previous responses of physically aggression towards parents.

The focus for this session was the 'Advisor', recognizing what you are thinking, good or bad. We used DNA-V literature to guide discussions about 'accepting' what the Advisor is telling you, then 'taking action' to either follow the Advisor's advice or ignore the Advisor's advice if it is negative, not helpful or leads to overthinking about the past. This encouraged Ray to step out of negative thought cycles. We did a 'Would you rather' activity (DNA-V, 2022), where we all (Ray, mother, me, Workplace Supervisor) made choices about 2 different activities, expressing what our 'Advisor' was telling us about our choice. The intention of us all joining in was to 'normalize' that we all have an unhelpful 'Advisor' sometimes.

Session 5

Session 5 also took place at CAMHS, with my Workplace Supervisor observing and Ray's mother joining. We each recapped a time over the previous week when our 'Advisor' thought something unhelpful and what action we took.

The focus for this session was the 'Discoverer' – how we might experiment around situations we find challenging using our strengths and values. We did an activity where we each thought of a time we tried something new, and it didn't go well and a time when something new did go well. This normalized that sometimes things go well and other times they don't, both are ok but need reflection around how this made us think and feel; so, we can take action to change the potential success of new 'discoverer experiments' in the future, using our strengths to help us. Ray was able to reflect he had successfully been to a local archive library for the first-time last week but had been unable to start a new online ‘script writing’ course due to fears of failure. Ray ambitiously chose 3 ‘Discoverer’ experiments to try as homework:

1. To start the script writing course
2. To text a friend about attending theatre club this week
3. To try a new art course for teenagers with ASC at a local college

Session 6

The final two sessions were held at Ray’s home with just me, Ray and the family pets. We discussed outcomes of Ray’s Discoverer experiments. He had succeeded texting a friend but had not managed the first or third experiments to due to anxiety. I endorsed his success, and we combined ‘Discoverer’, ‘Noticer’, ‘Advisor’ and ‘Values’ to help him break down anxieties around attending the new art group and come up with plan ‘B’s for each of his anxieties. The aim being to help Ray develop strategies to attend this art group over the coming week. Ray had been anxious about the new group – what others would think of him. We used a ‘Cognitive Distortions’ worksheet to identify unhelpful thoughts and plan how to deal with these.

We also talked about this session being the penultimate intervention session.

Session 7

There was a longer gap between sessions 6 and 7, to allow Ray time to experiment with his new DNA-V skills. Ray had successfully started the online script course, attended the new art group, attended his theatre group reconnecting with his friends; and had been shopping twice with his mother! Ray reflected he felt proud about these achievements. I reinforced how it would be important to continue using DNA-V as he moved forward in his life. Ray and his mother completed end of intervention outcome measures.

After this session, a final service report was written for Ray, his parents and GP, summarizing our work and how to continue to implement DNA-V moving forward. FISS-ASC provides the opportunity for Ray to have a one-off consultation with me over the next 12 months if he feels he is struggling.

EVALUATION AND COMMUNICATION OF HEALTH PSYCHOLOGY BEHAVIOUR CHANGE INTERVENTION

Feedback and end of intervention outcome measures reflected the intervention had helped Ray (Table 5). His levels of anxiety and depression were lower on all sub-sections of RCADS, as too was his mother's perceived stress measure (PSS). Ray had no further physical aggression outbursts, reflecting improved resilience, and episodes of verbal aggression had reduced from 'daily' to 'weekly'. His mother's final SLDOM score and qualitative comments, were evidence of intervention success. A final SLDOM score >30 is considered reflective of positive outcomes (CORC, 2022). The increase in CGAS score reflected positively that Ray had improved psychological and social functioning slightly.

Table 5: Final Outcome Measures

Measure	**Score at end of intervention**	**Score at start of intervention**
RCADS (Ray):	31 Total 21 Overall Anxiety	49 Total 37 Overall Anxiety
- Major Depression	10	12
- Social Phobia Anxiety	8	16
- Panic Disorder Anxiety	5	8
- Separation Anxiety	2	5
- Generalised Anxiety	3	4
- Obsessive Compulsive Anxiety	3	4
Aggressive episodes	Physical – 0 Verbal – weekly	Physical – weekly Verbal - daily
PSS (mother)	43	54
SLDOM (mother)	36	27
CGAS (clinicians)	53	51

Table 6: Ray's mother's SLDOM qualitative comments

"The initial assessment report and formulation was really good and pulled out the key areas. Formulation and intervention reflected what we said and what we needed to focus on. It was reassuring that FISS worked closely with other services*. I felt access to FISS supported onward referral to Family Therapy Services which is really needed. I am grateful and happy with the service provided by FISS. This is not a criticism but a suggestion, a brief training on DNA-V process and how parents can implement would be helpful. Would help to know how to apply this to XXXX in the future."

**Inclusion Service for School)*

Ray's family were in the process of relocating and at the end of the intervention, Ray and his mother had been researching a school, with a view to Ray resuming education in September. Ray had resumed attending theatre club, enabling him to reconnect with friends. The final report summarized progress achieved: reduced anxiety, depression and increased resilience, reflected by the reduction in physical and verbal aggression.

I communicated outcomes of this health psychology behaviour change intervention, doing a presentation about the case to a team of psychiatrists who work with young ASC people, to demonstrate how DNA-V can be used as a clinical tool. I also communicated outcomes of the health psychology behaviour change intervention, presenting a poster about it at 'Staffordshire University Health Psychology Conference 2022', as an effective way to spread awareness of how DNA-V can be used to help young people.

SUMMARY

It was a pleasure working with Ray and his mother through this intervention. This was my first opportunity since DNA-V training to use it in clinical practice, so I gained invaluable experience. Ray's challenging behaviour which had led to the initial referral to the service, was greatly reduced, highlighting how important health psychology interventions are for an ASC population. Ray had developed resilience, evidenced by the reduction in physical and verbal aggression; and a better understanding of himself through the DNA-V intervention. Ray was able to acknowledge his strengths and values, reflect on his thoughts and feelings; and plan strategies for dealing with challenging situations, using his strengths and values to guide him. He had reduced anxiety.

REFERENCES

Adreon, D., & Durocher, J. S. (2007). Evaluating the college transition needs of individuals with high-functioning autism spectrum disorders. *Intervention in school and clinic*, *42*(5), 271-279.

American Psychiatric Association. (2013). *DSM-5 Diagnostic and statistical manual of mental disorders* (5th ed*).* American Psychiatric Publishing

Berry, J. O., Jones, W. H. (1995). The parental stress scale: Initial psychometric evidence. *Journal of social and personal relationships*, *12*(3), 463-472.

Bladon-Wing, D. (nd). *An introduction to psychological formulation.* Retrieved July 7, 2022, from https://www.bild.org.uk/wp-content/uploads/2020/07/An-introduction-to-psychological-formulation.pdf

Casu, G., Hlebec, V., Boccaletti, L., Bolko, I., Manattini, A., Hanson, E. (2021). Promoting mental health and Well-being among adolescent young carers in Europe: a randomized controlled trial protocol. *International journal of environmental research and public health*, *18*(4), 2045.

Chapman, R., & Evans, B. (2020). Using Art-Based Acceptance and Commitment Therapy (ACT) for an Adolescent With Anxiety and Autism. *Clinical Case Studies*, *19*(6), 438-455.

Childrens Outcomes Research Consortium (CORC), (2022). *Outcome Measures in Child and Youth Mental Health Services: Results from NHS England Survey.* Retrieved July 1, 2022, from https://www.corc.uk.net/media/2131/nhse_report_corc.pdf

Childrens Outcomes Research Consortium (CORC), (2022). *Parental Stress Scale.* Retrieved July 7, 2022, from https://www.corc.uk.net/outcome-experience-measures/parental-stress-scale-pss/

Childrens Outcomes Research Consortium (CORC), (2022). *RCADS.* Retrieved December, 2021, from https://www.corc.uk.net/outcome-experience-measures/revised-childrens-anxiety-and-depression-scale-rcads/

Childrens Outcomes Research Consortium (CORC), (2022). *SLDOM.* Retrieved December, 2021, from https://www.corc.uk.net/outcome-experience-measures/sheffield-learning-disabilities-outcome-measure-sldom/

Ciarrochi, J., Hayes, L. (2020). *Your Life Your Way.* New Harbinger Publications.

CORC. (2022). *Further information on SLDOM.* Retrieved July 14, 2022, from https://www.corc.uk.net/media/1464/sldom_furtherinformation.pdf

CORC. (2022). *Interpretation aid: RCADS self report compared to other young people in the reference group, how high is a score?, school years 10 & 11.* Retrieved September 02, 2022, from https://www.corc.uk.net/media/1228/rcads_interpretationaid.pdf

DNA-V. (2022). *Free DNA-V resources.* Retrieved January 02, 2022, from https://dnav.international/downloads/

Hattier, M. A., Matson, J. L., Belva, B. C., & Horovitz, M. (2011). The occurrence of challenging behaviours in children with autism spectrum disorders and atypical development. *Developmental Neurorehabilitation*, *14*(4), 221-229.

Hayes, L. L., & Ciarrochi, J. V. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. New Harbinger Publications.

Health and Care Professions Council. (2009). *Standards of Proficiency: Practitioner psychologists.* London: Health Professions Council.

Johnstone, L. (2013). Controversies and debates about formulation. In *Formulation in psychology and psychotherapy* (pp. 280-309). Routledge.

Johnstone, L. Dallos, R. (2014). *Formulation in psychology and psychotherapy* (2nd ed). Routledge

MacNeil, C. A., Hasty, M.K., Conus, P., Berk, M. (2012). Is diagnosis enough to guide interventions in mental health? Using case formulation in clinical practice. *BMC Medicine, 10,* 111

Marino, F., Crimi, I., Carrozza, C., Failla, C., Sfrazzetto, S. T., Chilà, P., Pioggia, G. (2019). A novel third wave contextual approach of positive behavior support in school for adolescent at high psychosocial risk: rationale, feasibility, and first pilot outcomes. *Frontiers in psychology*, 2635.

Mind. (2022). *Five ways to Wellbeing.* Retrieved December 14, 2021, from https://www.mind.org.uk/workplace/mental-health-at-work/taking-care-of-yourself/five-ways-to-wellbeing/

Montazeri, F., de Bildt, A., Dekker, V., Anderson, G. M. (2019). Network analysis of anxiety in the autism realm. *Journal of Autism and Developmental Disorders*, *49*(6), 2219-2230.

Ng, S. S., Leung, T. K., Cheng, E. K., Chan, F. S., Chan, J. Y., Poon, D. F., Lo, A. W. (2015). Efficacy of 'Five Ways to Well-Being Program' in promotion of mental wellbeing for persons admitted to acute psychiatric service. *Journal of Psychosocial Rehabilitation and Mental Health*, *2*(2), 143-151.

Shaffer, D., Gould, M.S., Brasic, J., Ambrosini, P., Fisher, P., Bird, H., & Aluwahlia, S. (1983). A Children's Global Assessment Scale (CGAS). Archives of General Psychiatry, 40, 1228-1231.

Shepherd, D., Landon, J., Taylor, S., Goedeke, S. (2018). Coping and care-related stress in parents of a child with autism spectrum disorder. *Anxiety, Stress, & Coping*, *31*(3), 277-290.

Van der Cruijsen, R., & Boyer, B. E. (2021). Explicit and implicit self-esteem in youth with autism spectrum disorders. *Autism*, *25*(2), 349-360.

4.2 Individual Face-to-Face Case Study Reflective Report

REFLECTIVE REPORT

Reflections after each session:

Session 1

This was my first case using DNA-V approach, since completing the training last year. Having re-read course notes in preparation, I felt excited but also sceptical about how successful the approach would be with a child with autism, as the approach was not specifically designed for this cohort.

I felt pleased Ray was able to engage well with activities during the session, despite engaging in minimal eye contact and giving very brief answers to my questions about the ‘5 ways of wellbeing’, what he likes to do, what makes him happy and his current challenges. Using DNA-V communication cards for Ray to point out his answers aided communication. The family pets being present added to our rapport-building, as we petted them together. Overall, I felt communication and rapport-building during the session went well. I am hopeful for potential progress with Ray.

Session 2

I felt a little disappointed Ray had not checked the DNA-V website I had agreed with him last session as homework but at least he was honest about this. The paper-based activity ‘My Valued Journey’ diminished any awkwardness that either of us may have felt as there were long silences due to his ASC. Petting the cat and dog also helped ease tension in these silent moments. I felt really pleased Ray was able to identify his strengths and values, as some young people with ASC I work with, are not so able. I felt heartened by this progress at the end of the session but knew to set my expectations low for him having completed the homework for next session.

Session 3

I felt really pleased to hear Ray recount the valued activities he had engaged in over the past week. It felt like he had committed more to the therapeutic process and homework tasks. I had printed a Word document of Ray's strengths and values identified last week and presented it to him. He seemed pleased with this, and it was touching to see him smile. Ray was able to engage in the 'Noticer' skills activities and seemed more relaxed this session. I decided not to photograph completed worksheets this session, as I had done last session, as I didn't want to jeopardize his relaxed state with me.

Session 4

This was the first of two sessions held at our clinic, and I felt nervous before the session as I was being observed. My nerves came from previous 'observations' in academic roles, where I had been graded for my performance. I knew I was not being graded in this observation and often conduct clinical practice with my workplace supervisor, so my nervousness was illogical. I was aware that my nerves along with Ray's, coming into CAMHS, and with his mother present too; made for an initial atmosphere that felt less relaxed than last session. I had created activities about 'Advisor' that all four of us could engage in and this lessened the anxiety in the room. Ray even made humorous comments about his mother's answers to activities, which allayed my fears that he may be masking to cope in this clinic situation. Afterwards, my workplace supervisor said she hadn't noticed my tension at the start and was very complimentary about the Communication Skills I had met in the session.

Session 5

I was not sure if Ray would be able to attend the clinic again this week and I felt genuinely proud of him when he did, as I know he sometimes finds it difficult leaving the house. I felt impressed by Ray's ability to reflect on what he had and had not been able to do over the last week. At the end of the session, Ray chose 3 goals to work on over the next week. I felt this was over-ambitious and was perhaps him masking to please those of us present, but I didn't point this out because I didn't want him to leave the session thinking I doubted his ability. I decided instead I would start the next session discussing his achievements and the importance of setting realistic goals.

Session 6

Now we had completed sessions on the separate aspects of DNA-V, this session was about consolidating skills learned. Ray had not managed to complete all three of the goals he set himself last session, only managing one, I felt this provided an opportunity to talk about setting achievable goals and not being too self-critical. I was impressed how Ray was able to come up with different strategies for coping with anxiety that prevented him completing two of his goals – that he would try out before our final session. I worried how Ray would take the fact we were nearing the end of our sessions and gently pointed out that this was our penultimate session to manage expectations. I had been more worried about his reaction to sessions ending than he had.

Session 7

Our final session was two weeks after our last session, to enable Ray to continue experimenting dealing with his anxieties and enable him to partake in activities he wanted to. I was proud to hear he had succeeded with the two goals he had previously had difficulty with. Ray and his mother completed end of intervention outcome measures, and we said our goodbyes. I felt sad to be closing his case and had a real sense of curiosity about how he would cope in the future, whether he would remember to apply DNA-V skills. As a result, I wrote a reminder to him about these in my final report.

What went well – Evaluation:

Ray and I developed good therapeutic rapport, and Ray was able to attend and engage in all the sessions. I planned well for each session and used session starts to recap the previous session. This aided Ray's memory and the flow of sessions. I asked Ray to explain what we had done in sessions to his mother at the end of home visit sessions. This gave Ray an opportunity to consolidate key points of each session. I felt DNA-V activities being paper-based displaced any awkwardness that might have otherwise been felt, due to Ray's lack of eye contact and communication difficulties. Incorporating our interaction with family pets aided a relaxed atmosphere on home visits. Outcome measure improvements were greater than I had hoped for. This endorsed for me that DNA-V can be a beneficial approach to use with some of our service clients. Ray's behavioural improvements surpassed what I thought would be possible over a 3-month period (no physical aggression, attending theatre club, tried new online course, new art club; and showed willing to try to re-engage in education in the future). This really made me reflect that I should not set ceilings of my expectations with clients.

Challenges – Evaluation:

The two clinic appointments felt a little awkward at the start of the sessions, we were in an unfamiliar location for Ray, his mother and my Clinical Supervisor were present.

My disappointment when Ray had not completed the first homework. I am more aware about not setting 'expectations' of client's performance and the challenge that sometimes client's may not be ready to commit to action.

Areas to improve – Evaluation:

I would use ASC-ASD (Rodgers et al, 2016) outcome measure instead of RCADS in future, as it is designed specifically as an anxiety measure for people with ASC, is based on RCADS and is a shorter outcome measure to complete. I discovered this measure online and highlighted it to my Clinical Service Lead and we have started to use this in our service in place of RCADS.

I would have a separate session with the young person at the end to compile and go through all the worksheets we have completed, their successes, and summarize their learned strategies, to consolidate the learning further, and so they had a tangible compilation for future reference.

As Ray had successfully attended the clinic on two of our middle sessions, I could have reinforced this success of him leaving the house, by scheduling our final sessions in the clinic also. Ray's mother highlighted in her SLDOM feedback that training on DNA-V for parents would have been helpful.

Summary:

I felt using DNA-V with this young person with ASC was a success, despite DNA-V not being designed specifically for an ASC cohort. DNA-V could be used in other clinical settings with young people with ASC. I communicated the outcomes of this health psychology behaviour change intervention - doing a presentation to a team of psychiatrists working with young people with ASC, to demonstrate how DNA-V can be a useful clinical tool. This went well, generating further enquiry from the team. I also communicated outcomes of the health psychology behaviour change intervention by presenting a poster at 'Staffordshire University Health Psychology Conference 2022', an effective way to spread awareness of how DNA-V can be used to help young people. Another speaker at the conference was also presenting about DNA-V, so the presentations together really endorsed DNA-V as an emerging clinical tool.

Reference:

Rodgers, J., Wigham, S., McConachie, H., Freeston, M., Honey, E., Parr, J. (2016). *Anxiety scale for children – autism spectrum disorder (ASC-ASD) guidelines for use.* Retrieved July 29, 2022, from https://research.ncl.ac.uk/cargo-ne/Scoring%20Guidelines%20ASC-ASD%20Parent%20%20Child%20versions.pdf

4.3 Group or Remotely Delivered Intervention Case Study

GROUP CASE STUDY

ON-LINE CASE STUDY: HEALTH PSYCHOLOGY INTERVENTION WITH A GROUP OF MID-LIFE WOMEN, USING HEALTH PSYCHOLOGY AND COACHING PSYCHOLOGY TO IMPROVE PERCEPTIONS OF MENOPAUSAL QUALITY OF LIFE, LEADING TO PSYCHOLOGICAL AND/OR BEHAVIOURAL CHANGE

INTRODUCTION

The aim of this group online intervention was to improve clients' perceptions of their menopause, to enable action to improve quality of life through making psychological and/or behavioural changes. The intervention used COM-B formulation and a coaching psychology approach - Positive Psychology Coaching (PPC) (Green and Palmer, 2018).

Menopause has been associated with a decline in perception of physical and psychosomatic domains of quality of life (Mishra and Kuh, 2006), highlighting the need for intervention. Taebi et al. (2018) found psychological and physical interventions were successful in improving quality of life in menopausal women in Iran. They concluded that interventions involving educational and counselling sessions may be useful in improving quality of life. Yazdkhasti et al. (2012) compared the usefulness of support groups to a control group without support, to help post-menopausal women reduce symptoms of menopause and improve quality of life. The support groups consisted of 10 weekly face-to-face sessions of 120 minutes each, which covered topics including several menopause symptoms, effects of menopause on happiness and sex life, relaxation techniques and the importance of exercise. They found improvements in vasomotor symptoms, and psychosocial, physical, and sexual quality of life for women exposed to the support group. There is currently little support available for women in the UK (Harper et al, 2022), hence the need for the intervention in this case study. Yazdkhasti et al. (2012) included ten themes in their intervention, hence the current intervention, which was shorter in duration, was developed with fewer themes. The studies above were conducted in Iran and menopausal experience in Iran may differ than for women in the UK. Bochantin (2014) researched how online menopausal support groups were being used in America to good effect, however, these were self-elicited as opposed to structured intervention, hence the need to consider structured intervention, as in the current case study.

This Health Psychology intervention uses a Coaching Psychology approach. Coaching Psychology is an evidence-based field of applied psychology, which implements coaching models through interventions to enable clients to enhance wellbeing and performance (International Society for Coaching Psychology (ISFCP), 2022). Coaching Psychology is a stand-alone applied field of psychology but can also play an integral part in other applied fields: clinical psychology, health psychology, sports and exercise psychology, counselling psychology, academic psychology, and occupational psychology (British Psychological Society BPS, 2022). Health coaching and psychoeducation have been used to improve health related behaviour, helping menopausal women improve quality of life (Koyuncu, Unsal, & Arslantas, 2018). For example, Shokri-Ghadikolaei et al (2022) demonstrated the benefit of health coaching in a randomized controlled study with 94 menopausal women, who engaged in five biweekly health coaching sessions compared to a control group. The coaching was conducted by a midwifery coach and although it is unclear which coaching approach she was using, the evidence supports coaching as an appropriate intervention method to enhance psychological and behavioural change.

As I am a British Psychological Society (BPS) Chartered Coaching Psychologist on the BPS Register of Practising Coaching Psychologists, I wanted to use this experience to inform my health psychology intervention. Coaching Psychology uses many different models, of which

Positive Psychology Coaching (PPC) is one (Passmore and Oades, 2014). PPC draws upon positive psychology (Seligman & Csikszentmihalyi, 2000), empowering people, using their strengths and values to build resilience and resourcefulness (Passmore & Oades, 2022); and is particularly good for group interventions, as resourcefulness from group members can motivate others, hence it was an appropriate model to use in this group intervention. As PPC specifically uses resilience and resourcefulness of group members to build on individual empowerment, it was deemed more suitable than generic cognitive behavioural coaching approaches (Palmer and Szymanska, 2018). PPC also has an evidence-base for helping clients increase wellbeing and quality of life (Boniwell, Kauffman, Silberman, 2014).

The client group for the current intervention responded to an advertisement on a menopause Facebook support group. They were four mid-life professional women aged 45-60 years (Table 1). Inclusion criteria were for clients to be mid-life women interested in seeking support around menopause.

ASSESSMENT OF NEEDS

The assessment process gathers information to reach an understanding of problems, which guide planning of intervention (Johnstone & Dallos, 2014). I advertised for female clients interested in taking part in a 5-week intervention focusing on psychological and/or behavioural change to improve perceptions of menopausal quality of life; on the Facebook support group ‘Healthy Menopause’, in January 2022, after seeking permission from Administrators. Inclusion criteria were for clients to be mid-life women interested in taking part in a group online menopause support group. Very quickly 21 women expressed an interest, reflecting the need for such an intervention. I asked respondents to private message me their email address and availability days/times – 11 did so. Eight were available at the same time, and I emailed them with a combined 'Information, Consent and Initial Assessment' form. Four women completed this, meeting ethical requirements (British Psychological Society, 2021) (Table 1). I emailed the three women who had not been available at the same time as the others, to let them know they had been unsuccessful gaining a place on the intervention this time, to exclude them and to thank them for their interest. Ideally, I would have liked the group to contain a few more clients, to cover in case of attrition. Alternative client inclusion-exclusion criteria might have led to a different client base.

Table 1: Client Group

	A	**C**	**J**	**E**
Menopausal status	Peri*	Pre*	Peri	Peri
Currently taking HRT	No	No	Yes	No
Age	60	45	47	45
Location in UK	South-East	South-East	Midlands	South-East
Employment status	Part-time Counsellor	Full-time CEO charity	Part-time Coach	Part-time Coach
Highest educational level	Level 4	Level 7	Level 7	Level 6
Dependents under 18 yrs	No	No	Yes	No
Smoker status	Non-smoker	Non-smoker	Non-smoker	Non-smoker
Diagnosed health conditions	Hiatus hernia	None	None	Endometriosis, Doverticultis

**Key: Pre-menopausal = regular periods, Peri-menopausal = irregular/missed periods*

The initial assessment form comprised socio-economic questions, Utian Quality of Life Scale (Utian et al., 2022), International Physical Activity Questionnaire (IPAQ – SF; Hagstromer, Oja, & Sjostrom, 2006), a strength-training question, Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) and a list of potential focus areas for intervention based on UQOL sub-sections.

The outcome was to improve perceptions of menopausal quality of life (QOL) leading to psychological and/or behavioural change; therefore, health psychology measures that would assess this were used. Quality of life is multi-faceted and UQOL is the validated scale used as it is designed specifically for menopausal women (Utian et al, 2018). UQOL measures occupational, emotional, health and sexual QOL. As it is a recent measure, there is limited evidence available of its reliability, however, it has been validated and was felt to be the most appropriate measure for this intervention.

Due to the link between quality of life and physical activity in women aged 45-55 years (Lum & Simpson, 2021), physical activity, measured by IPAQ, were also measured. IPAQ is an established, reliable, and well-validated measure of physical activity (Craig et al., 2003). The UK Government's Physical Activity Guidelines (Office for Health Improvement & Disparities, 2022) recommend minimum weekly physical activity for adults and older adults, including strength-training, which is not measured by IPAQ (American), therefore an additional question regarding this was added to the assessment, following practice in previous research (Lum and Simpson, 2021). As people often become less physically active as they age (OHID, 2022), this was considered important to measure.

Low levels of perceived stress have been linked to good quality of life in menopausal women (Lum and Simpson, 2021). Ak Sözer, Güdül Öz, and Yangın (2022), found a positive correlation between menopausal symptoms and perceived stress, using PSS-14; hence this measure was appropriate to use with the current clients. PSS-14 is a well-established, reliable, validated measure that has been used internationally.

Table 2: Client assessment results

Utian QOL*	**E**	**A**	**J**	**C**
Emotional	21 >$\dot{x}$*	17 < $\dot{x}$	27 > $\dot{x}$	26 >$\dot{x}$
Occupational	31 >$\dot{x}$	23 < $\dot{x}$	33 > $\dot{x}$	31 > $\dot{x}$
Sexual	7 < $\dot{x}$	6 < $\dot{x}$	10 > $\dot{x}$	10 > $\dot{x}$
Health	24 >$\dot{x}$	22 > $\dot{x}$	22 > $\dot{x}$	32 > $\dot{x}$
IPAQ*	Low 0 Met*	Low 594 Met	Moderate 1626 Met	Moderate 2133 Met
Strength	0	1	2	3+
Meeting Minimum PAG*	No	No	Yes	Yes
PSS-14*	36 High	26 Mod	25 Mod	23 Mod

**QOL – quality of life, $\dot{x}$ - Utian QoL Scoring Summary Means, IPAQ -International Physical Activity Questionnaire, Met – Met minutes, PAG – Physical Activity Guidelines, PSS-14 – Perceived Stress Scale 14*

Finally, I provided clients with a list of 15 potential focus areas for the intervention based upon sub-factors measured by UQOL, to establish areas clients were motivated to work on. It would not be possible to include all 15 areas of focus in the 5-week intervention, so the four most popular choices were selected (Table 3).

Assessment data revealed client 'A' scored below UQOL mean for normal population, for emotional and occupational QoL, and clients 'A' and 'E' scored below the mean for sexual QoL (Utian et al., 2018). Clients' 'A' and 'E' did not meet minimum physical activity guidelines, with 'E' not doing any physical activity. PSS-14 highlighted three clients experienced 'moderate' stress ('A', 'J', 'C'), 'E' experienced 'high' stress. Assessment data gathered highlighted issues in some areas for all clients, thereby supporting their suitability for this intervention.

FORMULATION

Working formulation is an essential part of therapeutic intervention, linking the needs assessment to desired outcomes, and it helps you to plan the intervention. Assessment needs obtained can be represented by a Vicious Flower (Moorey, 2010). Vicious flower is a conceptualization tool which can identify maintenance cycles which perpetuate unhelpful behaviours (Moorey, 2010). These behaviours can then be targeted by plucking off each petal and addressing it through intervention. Fig 1 highlights behaviours and attitudes from assessment impacting the clients' menopausal quality of life. The petals also represent clients' choices of goal areas they were motivated to change *(table 3).*

Fig 1: Vicious Flower formulation, representing client needs due to menopause

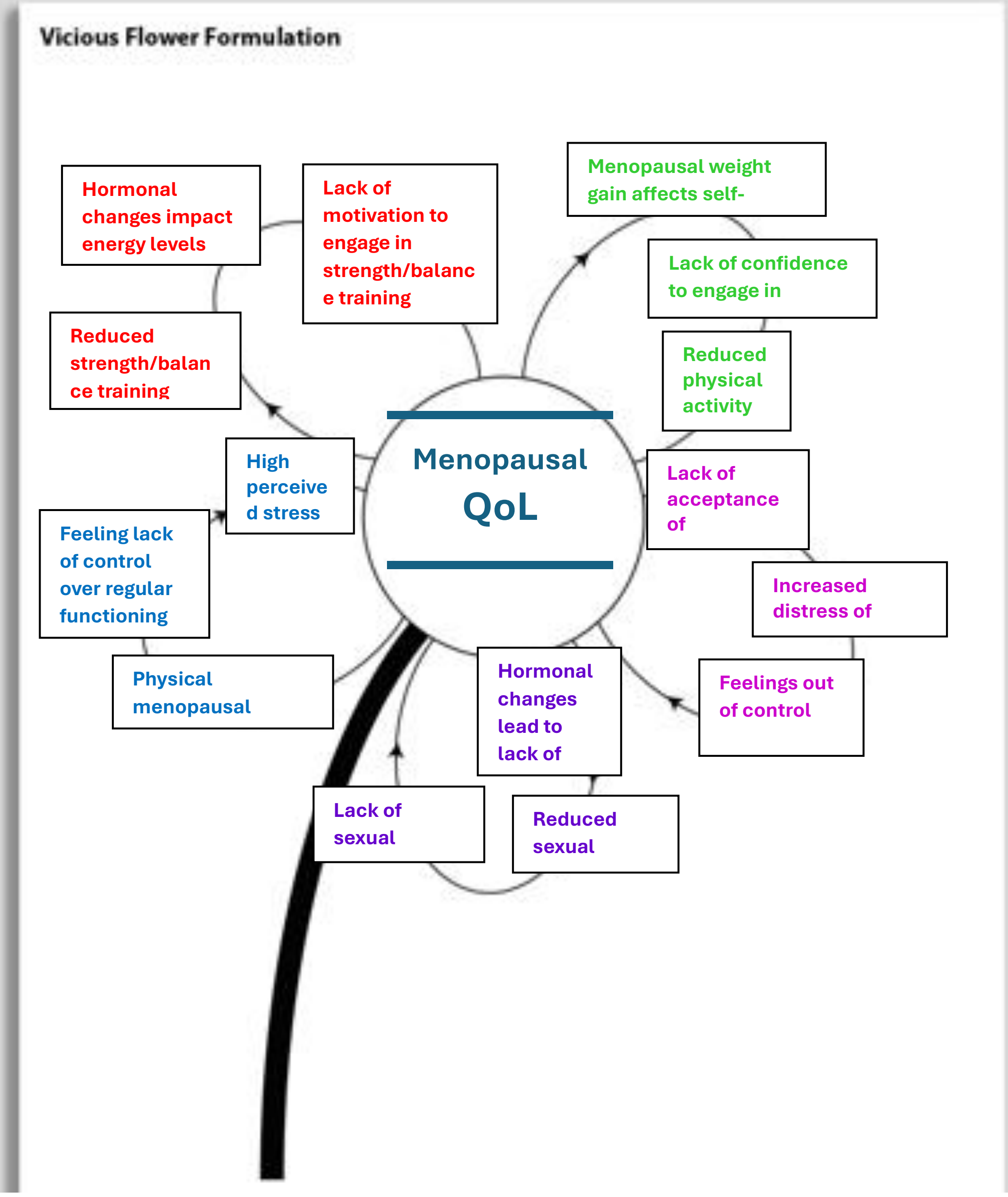


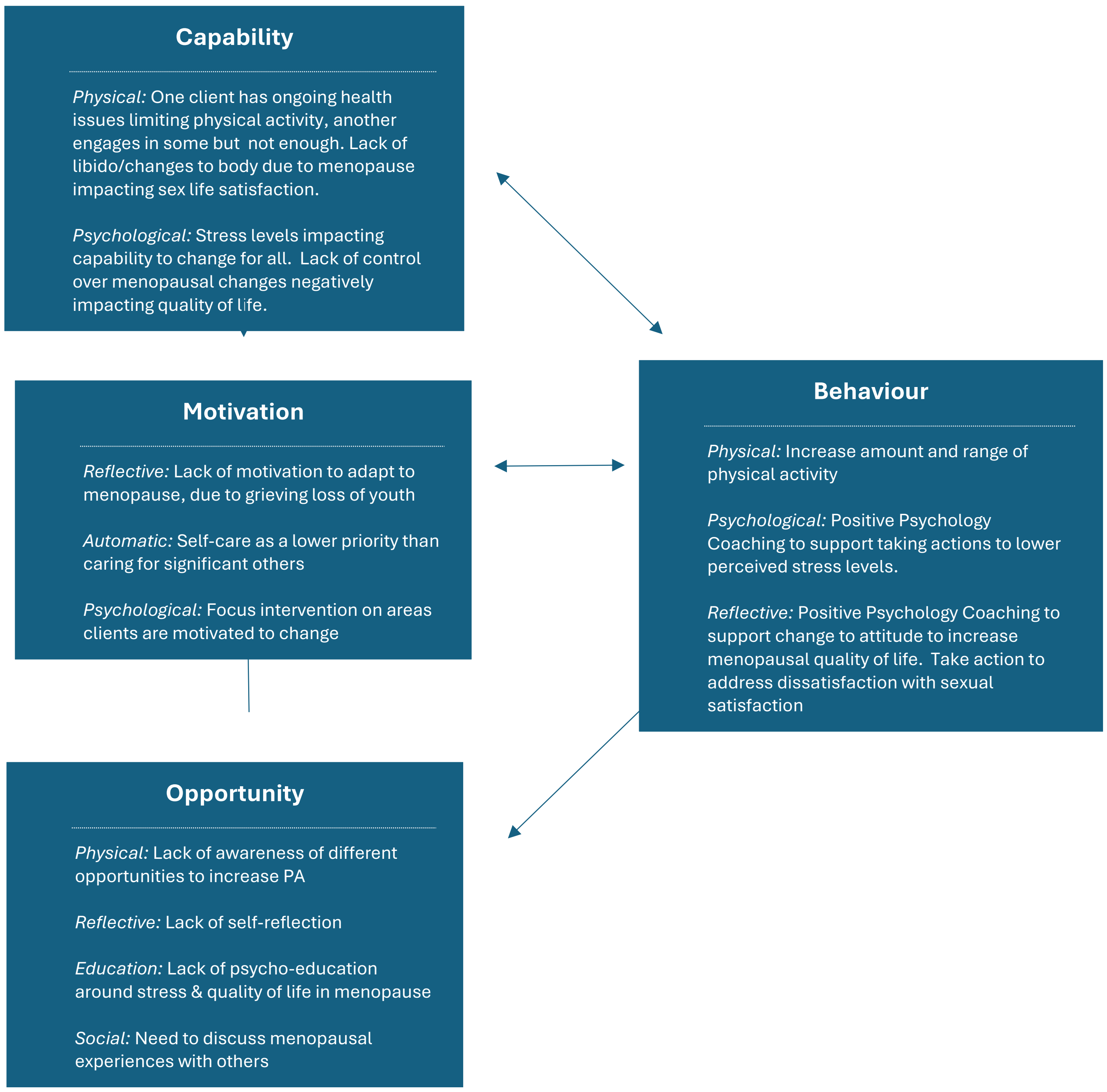
Table 3: Summary of clients' preferred goal focus choices

Behavioural	**Clients**	**Psychological**	**Clients**
Increase physical activity	E, A, C	Improve quality of life	E, A, J
New exercise opportunities	E, A, J	Increase happiness	E, A
Improve nutrition	A, J	Take charge of menopause	E, J
Less alcohol	E, C	Improve relationships	E
Smoking cessation		Deal with stress/anxiety	C
Improve Sex life	E, J, C	Mindfulness	A, C
Give to others		Effective coping	E, A
New challenges	C		

Key: most popular choices

I might have used a coaching formulation model - '3Ps' (Lane & Corrie, 2009), focusing on Purpose, Perspective and Process in this intervention. However, I considered COM-B more appropriate as the intervention would incorporate both behavioural *and* psychological change, 3Ps coaching formulation focuses mainly on psychological change. COM-B considers capability, opportunity, and motivation as factors for successful change (Michie, Van Stralen & West, 2011). Also, COM-B has been used with a group of mid-life women to successfully increase physical activity (Anderson et al., 2020). Figure 2 represents how COM-B was used in the working formulation.

Fig 2: COM-B Working formulation



Capability

Physical: One client has ongoing health issues limiting physical activity, another engages in some but not enough. Lack of libido/changes to body due to menopause impacting sex life satisfaction.

Psychological: Stress levels impacting capability to change for all. Lack of control over menopausal changes negatively impacting quality of life.

Motivation

Reflective: Lack of motivation to adapt to menopause, due to grieving loss of youth

Automatic: Self-care as a lower priority than caring for significant others

Psychological: Focus intervention on areas clients are motivated to change

Opportunity

Physical: Lack of awareness of different opportunities to increase PA

Reflective: Lack of self-reflection

Education: Lack of psycho-education around stress & quality of life in menopause

Social: Need to discuss menopausal experiences with others

Behaviour

Physical: Increase amount and range of physical activity

Psychological: Positive Psychology Coaching to support taking actions to lower perceived stress levels.

Reflective: Positive Psychology Coaching to support change to attitude to increase menopausal quality of life. Take action to address dissatisfaction with sexual satisfaction

I formatted five intervention sessions, based upon Shokri-Ghadikolaei et al. (2022), who successfully used a health coaching format over 5-sessions with menopausal women. A longer intervention may have led to attrition and a shorter intervention would have meant clients received less support.

I chose to focus on physical activity in the first couple of sessions to foster this behaviour change from the start, whilst the clients were freshly motivated. This increase in levels of physical activity would then hopefully be maintained throughout and beyond the intervention. I focused session 3 on emotional quality of life and taking charge of menopause to bring a more introspective lens. Sex life satisfaction was delivered in session 4, to enable the clients to have got to know one another first through earlier sessions, to facilitate ease addressing this sensitive topic. Stress reduction and continuation plans were the focus of the final session, to round off the short programme of intervention, and emphasise how perceived stress links with menopausal quality of life (Mishra & Kuh, 2006). Fig 3 details a summary diagram of the working formulation process.

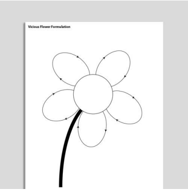
Fig 3: Summary diagram of working formulation process

Assessment results from Vicious Flower highlight need to:

Increase physical activity

Reduce stress

Increase sexual, occupational & emotional Quality of Life



Health Psychology Intervention using COM-B:

Capability: Increase physical activity within capabilities. Gain control of menopause & stress levels.

Motivation: Increase motivation using Positive Psychology Coaching & psychoeducation **sessions 1-5**

Opportunity: Increase awareness of opportunities for physical activity. Increase social experience of menopause through group intervention & WhatsApp group. Reflect & learn more about stress, motivation & quality of life in menopause

Focus of sessions

Health QoL (increase physical activity) **sessions 1-4**

Emotional QoL (take charge of menopause & reduce stress) **sessions 1, 3 & 5**

Improve perceptions of sexual QoL **session 4**

Goals – Psychological and/or behavioural change to:

-Improve menopausal quality of life

-Increasing physical activity

-Reduce stress

INTERVENTION

The intervention was delivered on-line over 5 consecutive weeks March-April 2022 (1 hour per session) and included addressing COM barriers, using positive psychology coaching through group discussion about capability and opportunities; psychoeducation and a coaching WhatsApp support group to enhance motivation (Sabilla et al., 2020). Psychoeducation serves a function in the behaviour change process, highlighted by the Behaviour Change Wheel (Michie, Van Stralen, West, 2011), as too does goal setting. Psychoeducation around motivation was supported by PowerPoint slides and sessions ended with agreed homework goals. Progress on goal achievement was reviewed at the start of sessions 2-5.

Table 4: Intervention Plan based on assessment of needs, preferred goal focus areas in relation to COM-B

Session	Intervention	Key Developments
1	Introduction to intervention and confidentiality agreement. **Focus**: Increasing physical activity without exercise – increasing opportunities within capabilities Psychoeducation Motivation: Musturbation (Ellis, 1913) re internal reflection and how this can impinge upon internal motivation (Ellis, 1913) to help clients reflect whether they were thinking in this way, to understand how 'musturbation' can be demotivating, to enable them to be mindful to avoid it. **Homework:** Individual goal for increasing physical activity this week	Clients came up with 9 activities as potential opportunities: walking the dog/friends, climbing stairs instead of taking lift, squats during a kettle boil, balancing on one leg whilst brushing teeth, playing with dog, sitting on an exercise ball instead of chair, dancing to music whilst preparing food, stretching whilst talking on phone, carrying heavy shopping bags.
2	**Focus**: Capability & opportunities for new exercise Psychoeducation Motivation: Intrinsic & extrinsic motivators. (initial assessment demonstrated all women had good educational levels, so this felt appropriate to introduce). Vallerand (2007) highlighted the importance of intrinsic and extrinsic motivators in relation to physical activity and I felt it important to encourage clients to reflect on their own situations.	Reflect in breakout rooms whether they were more or less motivated when exercising with others, as this may impact their goal choices for today. We came back as a group to share the 11 ideas they had come up with and discussed how these could also help combat stress: pole dancing, clubercise, synchronized swimming, ballet, ping pong, Latin salsa dancing,

	Homework: Individual goal to try a new form of exercise this week (physical activity)	beach running, skipping, parkour, Lindy hop, Go Ape.
3	**Focus**: Capability & opportunities to improve emotional QoL by taking charge of your menopause Psychoeducation Motivation: Applying COM-B **Homework:** Group goal to each try to complete a 'yoga flow' activity 3 times this week (improve strength & balance physical activity). As there had been limited goal success since the last session, this session I set clients a common goal to engage in a Yoga Flow Strength activity online, taking a more prescriptive health psychology approach. Strength activity forms part of the Physical Activity Guidelines (NHS, 2022, physical activity guidelines for adults aged 19-64).	Using Positive Psychology coaching we discussed what 'taking charge of menopause' meant and what 'effective coping' looked like in relation to biological, psychological and social areas of life; with a focus on emotional QoL and stress reduction. Clients shared effective coping. One spoke about her perception of menopause being a transient stage that she would get over and this was positive for other clients to hear.
4	**Focus**: Capability & opportunities to improve your sex life Psychoeducation Motivation: Applying COM-B **Homework:** Group goal to each complete some 'balance' exercises 3 times this week (improve strength & balance physical activity) & optional additional individual goal around improving sex life	One client was unable to attend due to a hospital appointment and asked me to record the session. I decided this was not appropriate and explained I could not due to candid discussions clients have and our confidentiality agreement. The focus of the group discussion was around improving sex life during menopause, coping effectively with stress and empowering oneself. The mood of the conversation dropped as clients discussed their losses during menopause in relation to their sex lives. Using Positive Psychology Coaching, we discussed biological, psychological, social and behavioural strategies, reflecting on personal capabilities, opportunities and motivations tying these to the COM-B model to assess how we could change behaviours to feel more sexually satisfied.
5	**Focus**: Capability & opportunities to improve your quality of life moving forward and reduce stress Psychoeducation Motivation: Applying COM-B	One client was unable to attend the final session, due to a work commitment. One had taken action to reduce her menopausal weight-gain by joining Slimming World.

	Homework: Individual goal to maintain psychological and/or behavioural change Final outcome measures were emailed to clients, and they were offered the opportunity of an individual follow-up session a month later.	They each committed to a goal going forward: 'C' to check-in with herself mindfully, be authentic, live according to her values, with strength maintaining a balanced life. 'A' maintains social connections and through laughter. 'J' to take control, living a balanced life according to her values.

The Positive Psychology Coaching approach facilitated clients' reflection on their own resourcefulness, which through sharing with others, helped build upon individuals' resilience. Prescribed balance and strength activity tasks (yoga), focused on UK Physical Activity Guidelines. These are important for women to prevent/delay osteoporosis and maintain balance skills to prevent falls (Aartolahti et al, 2020). Goal setting supported clients to take action to change behaviourally. A combination of individual goal setting and agreed prescribed goals were used to maximise potential engagement from clients. Therapeutic coaching support was provided via a WhatsApp group between sessions, whereby I offered supportive comments to clients' posts. The WhatsApp group enabled clients to discuss behaviour change successes and barriers.

EVALUATION

Positive Psychology Coaching worked well in this intervention, facilitating drawing upon and sharing, the resourcefulness, experience and resilience of group members. Had I used a different coaching model such as 'S.P.A.C.E.', a Cognitive Behavioural Coaching model (Williams, Edgerton, Palmer, 2014), would also have been more difficult to conduct within a group setting.

All four clients achieved slight improvements in sub-factors of Menopausal Quality of Life (table 5), three improving their overall UQOL score.

Table 5: Client Outcome Measures

Utian QOL	E start	E end	A start	A end	J start	J end	C start	C end
Emotional	21	22*	17	21	27	29	26	30
Occupational	31	32	23	24	33	32	31	33
Sexual	7	7	6	5	10	9	10	10
Health	24	18	22	27	22	24	32	33
Total UQOL	**83**	**79**	**68**	**77**	**92**	**94**	**99**	**106**
IPAQ physical activity	Low 0 Met	Low 231 Met	Low 594 Met	Mod 2388 Met	Mod	Mod	Mod	Mod
Strength	0	2	1	3+	2	2	3+	3+
Meeting Minimum PAG physical activity	No 0	No 70	No	Yes 600 + strength	Yes	Yes 460 + strength	Yes	Yes 380 + strength
PSS-14 stress	36 High	46 Very high	26 Mod	22 Mod	25 Mod	20 Mod	23 Mod	20 Mod

improvement since start *decline since start

Clients' 'A' and 'E' increased levels of physical activity. Clients' 'A', 'J', and 'C' also achieved lowered stress scores by the end of the intervention. Client E had a decline in health and an increase in stress, unrelated to the intervention, receiving confirmation of the need for surgery for a pre-existing condition but despite this, she managed to increase her levels of physical activity and her emotional and occupational quality of life. These are all positive outcomes, however, as the improvements were slight, and as this was not a piece of controlled research, one cannot know whether these improvements would have occurred naturally without the intervention.

It is disappointing that there were a few slight declines for some clients in some areas and with the exception of 'E', the reasons behind these are not known. The slight decline in sexual QoL for ‘A’ and ‘J’, may have reflected their increased attentional focus to this area of life. On reflection, I could have planned another session on this, to allow them to safely explore feelings and solutions further and have provided further links and reading around this topic.

It is not known if any clients maintained improvements in the long term. Individual follow-up interviews were offered to all clients. One client opted for a follow-up session a month later but later cancelled due to her unrelated decline to her health. I could have asked all clients to complete outcome measures again a month later instead to establish the longer-term impact of the intervention. Qualitative feedback about the intervention was positive.

Table 6 – Client Qualitative responses

“I feel better informed about menopause and more aware of my body and what menopause means, as well as a heightened awareness of physical and mental health”
“I felt supported by Kerry and the other participants and also because I started to do more exercise.”
“Chatting with like-minded women on this matter lifted my spirits.”
“I felt heard, and it was great to share experiences of my menopause with others that understand or want to understand. It is something I have only spoken to a few people about. I have realized its not a forever state as I was feeling it was and knowing it will pass has helped me to see it as a phase of life rather than life. I have made a decision to improve my physical appearance due to conversations I have had about control and feel more in control of me and therefore my menopause because of it.”

The WhatsApp group enabled clients to share successes between sessions and they continued communicating and sharing links for 10 weeks after the intervention ended, suggesting a maintenance of client motivation.

It was noted that not all clients completed chosen goals between sessions. Whilst we reviewed goal successes in sessions 2-5, I did not want to exert pressure to complete goals on the clients, negatively impacting our therapeutic relationship but I could have included the need to attend all sessions and commit to completing goals in the inclusion criteria at the start. Instead, I tailored goals adapting them to include prescriptive as well as chosen goals, which seemed to work.

There were four clients taking part in the intervention. This felt like a good number for them to experience an intimate intervention with the opportunity for all voices to be heard. Had there been more clients, this might have meant a less intimate experience, however a slightly larger group size may have sustained a more consistent ‘group’ feel to the intervention when some clients attended late. Had there been fewer than four clients initially, this too would have impacted the ambience of the intervention, as there would have been less clients to share experiences, resourcefulness, and resilience.

Although I gathered detail about client’s menopausal status, HRT status, employment status, dependency status, smoker status and health conditions, I could have refined inclusion criteria to exclude those with pre-existing health conditions, which may have impacted their likely success with the intervention. As all women had some improvements despite pre-existing health conditions, this had not appeared too impactful on this occasion. I could have chosen to exclude clients who were already above the means for sub-sectors of the outcome measures and focus instead solely on client recruitment from those measuring below the means, to perhaps have a greater intervention impact.

I incorporated four elements into the intervention to satisfy clients’ focus choices, which was quite a complex format. I could have simplified the intervention and spent all five sessions focused on the two highest ranked elements, which may have been less challenging. This may have intensified positive impact in these two areas for the clients, however, the fact I did not include *all* clients’ focus choices could have negatively impacted their perceptions and commitment to the intervention.

One of the clients was ‘unable’ to activate her camera for any sessions, preventing peers getting to know her visually. I was not sure if this was a technical fault or her preferred choice. Giving clients a choice about camera visibility is a more inclusive approach for clients’ however, it may negatively impact client relationships. Had the intervention been face-to-face, this would not have been an issue and clients’ may have developed a better rapport with each other. I felt embarrassed and anxious to have technical issues myself, preventing me putting clients into breakout rooms after the second session and I know use of technology is an area I need to improve on.

In sessions 3-5, there were issues with clients joining unexpectedly late (sessions 3 & 4) or not at all (sessions 4 & 5), which lead to me texting them reminders. This lateness/absence impacted the dynamics of the group, and I worried they were not enjoying the intervention enough to be committed. This may have been due to the intervention being free-of-charge, however there was no attrition. I was aware this made me feel annoyed, as it does when I have DNAs in my NHS role and is something I need to be mindful of.

SUMMARY

This group online intervention showed all clients achieved some improvement to their perceived menopausal quality of life (the desired outcome), thus the intervention appeared to have been helpful to clients. Feedback from clients highlighted appreciation and benefit gained through the intervention. I developed my formulation skills as a Health Psychologist, using Vicious Flower and COM-B models in practice, which helped me develop confidence in my abilities as a Health Psychologist. I feel the Vicious Flower formulation is visually very clear and have explained it to my NHS team, and we have decided we will use it in some of our clinical formulations going forward, so this learning is already impacting my practice. I also developed my intervention skills by running an on-line group intervention.

REFERENCES

Aartolahti, E., Lönnroos, E., Hartikainen, S., & Häkkinen, A. (2020). Long-term strength and balance training in prevention of decline in muscle strength and mobility in older adults. *Aging Clinical and Experimental Research*, *32*(1), 59-66.

Ak Sözer, G., Güdül Öz, H., & Yangın, H. (2022). Relationship between menopausal symptoms and perceived stress during the COVID-19 pandemic. *Journal of Women & Aging*, *34*(5), 675-686.

Anderson, A. S., Craigie, A. M., Gallant, S., McAdam, C., Macaskill, E. J., McKell, J., Mutrie, N., O'Carroll, R. E., Sattar, N., Stead, M., Treweek, S. (2020). Optimisation of the ActWELL lifestyle intervention programme for women attending routine NHS breast screening clinics. *Trials*, *21*(1), 1-12.

Bochantin, J. (2014). "Long live the mensi-mob": Communicating support online with regards to experiencing menopause in the workplace. *Communication Studies*, *65*(3), 260-280.

Boniwell, I., Kauffman, C., & Silberman, J. (2014). The positive psychology approach to coaching. *The complete handbook of coaching*, *2*, 157-169.

British Psychological Society. (2021). *Code of ethics & conduct.* Retrieved February 2, 2022, from https://cms.bps.org.uk/sites/default/files/2022-06/BPS%20Code%20of%20Ethics%20and%20Conduct.pdf

British Psychological Society. (2022). *Division of coaching psychology.* Retrieved December 8, 2022, from https://www.bps.org.uk/member-networks/division-coaching-psychology

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396.

Cohen, S., Kamarck, T., & Mermelstein, R. (1994). Perceived stress scale. *Measuring stress: A guide for health and social scientists*, *10*(2), 1-2.

Craig, C. L., Marshall, A. L., Sjöström, M., Bauman, A. E., Booth, M. L., Ainsworth, B. E., Oja, P. (2003). International physical activity questionnaire: 12-country reliability and validity. *Medicine and science in sports and exercise*, *35*(8), 1381-1395.

Ellis, A. (1913). *Musturbation.* Retrieved December 15, 2022, from https://psychologydictionary.org/musturbation/

Green, S., Palmer, S. (2018). Positive psychology coaching: Science into practice. In *Positive psychology coaching in practice* (pp. 1-15). Routledge.

Hagstromer, M., Oja, P., Sjostrom, M. (2006). The international physical activity questionnaire (IPAQ): a study of concurrent and construct validity. Public Health Nutrition, 9 (6), 755-762.

Health and Care Professions Council. (2009). *Standards of Proficiency: Practitioner psychologists.* London: Health Professions Council.

ISFCP. (2022). *What is coaching psychology.* Retrieved August 05, 2022, from https://www.isfcp.info/what-is-coaching-psychology/

Johnstone, L., Dallos, R. (2014). *Formulation in psychology and psychotherapy (2nd ed).* Routledge.

Koyuncu, T., Unsal, A., & Arslantas, D. (2018). Evaluation of the effectiveness of health education on menopause symptoms and knowledge and attitude in terms of menopause. *Journal of epidemiology and global health*, *8*(1-2), 8.

Lane, D., Corrie, S. (2009). Case formulation and the coaching psychologist. *Educational Psychology Review, 4,* 193-205

Lum, K. J., Simpson, E. E. A. (2021). The impact of physical activity on psychological well-being in women aged 45-55 years during the covid pandemic: A mixed-methods investigation. *Maturitas, 153,* 19-25. https://doi.org/10.1016/j.maturitas.2021.07.012.

Michie, S., Van Stralen, M. M., West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*, *6*(1), 1-12.

Michie, S., Wood, C. E., Johnston, M., Abraham, C., Francis, J., & Hardeman, W. (2015). Behaviour change techniques: the development and evaluation of a taxonomic method for reporting and describing behaviour change interventions (a suite of five studies involving consensus methods, randomised controlled trials and analysis of qualitative data). *Health technology assessment*, *19*(99).

Mishra, G., Kuh, D. (2006). Perceived change in quality of life during the menopause. *Social science & medicine*, *62*(1), 93-102.

Moorey, S. (2010). The six cycles maintenance model: growing a “vicious flower” for depression. *Behavioural and cognitive psychotherapy*, *38*(2), 173-184.

National Health Service. (2022, September 09). *Physical activity guidelines for adults aged 19-64.* Retrieved September 09, 2022, from https://www.nhs.uk/live-well/exercise/exercise-guidelines/physical-activity-guidelines-for-adults-aged-19-to-64/

Office for Health Improvement & Disparities (OHID). (2022). *Guidance physical activity: Applying all our health.* Retrieved August 11, 2022, from https://www.gov.uk/government/publications/physical-activity-applying-all-our-health/physical-activity-applying-all-our-health

Office for Health Improvement & Disparities (OHID). (2022). *Why promote physical activity in your professional practice.* Retrieved August 11, 2022, from https://www.gov.uk/government/publications/physical-activity-applying-all-our-health/physical-activity-applying-all-our-health

Palmer, S., Szymanska, K. (2018). Cognitive behavioural coaching: An integrative approach. In *Handbook of coaching psychology* (pp. 108-127). Routledge.

Passmore, J. & Oades, L.G. (2014). Positive psychology coaching–a model for coaching practice. *The Coaching Psychologist, 10* (2), 68-70.

Passmore, J., & Oades, L. G. (2022). Positive psychology coaching–a model for coaching practice. *Coaching Practiced*, 447-455.

PSS-14. (2015). *Perceived Stress Scale – 14.* Retrieved February 4, 2022, from https://s3.amazonaws.com/sidearm.sites/sdstate.sidearmsports.com/documents/2016/3/24/Perceived_Stress_Scale.pdf

Sabilla, M., Mustakim, F. S., Ariasih, R. A., Efendi, R., Febrianti, T. (2020, October). Community services in pandemic situation: Preparing quality of life in middle age group through social media education “Kulwap”(Kuliah Whatsapp). In *International Conference on Health Science* (pp. 20-25).

Seligman, M.E.P., Csikszentmihalyi, M. (2000). Positive psychology: an introduction. *American Psychologist 55* (1), 5-14. https://doi.org/10.1037/0003-066X.55.1.5.

Shokri-Ghadikolaei, A., Bakouei, F., Delavar, M. A., Azizi, A., Sepidarkish, M. (2022). Effects of health coaching on menopausal symptoms in postmenopausal and perimenopausal women. *Menopause*, *29*(10), 1189-1195.

Taebi, M., Abdolahian, S., Ozgoli, G., Ebadi, A., Kariman, N. (2018). Strategies to improve menopausal quality of life: A systematic review. *Journal of education and health promotion*, *7*.

Utian, W. H., Janata, J. W., Kingsberg, S. A., Schluchter, M., & Hamilton, J. C. (2018). The Utian Quality of Life (UQOL) Scale: development and validation of an instrument to quantify quality of life through and beyond menopause. *Menopause*, *25*(11), 1224-1231.

Utian, W. H., Janata, J. W., Kingsberg, S. A., Schluchter, M., & Hamilton, J. C. (2022). *Utian Quality of Life Scale.* Retrieved February 4, 2022, from https://www.menopause.org/docs/default-document-library/uqol.pdf?sfvrsn=ae91953a_2

Vallerand, R. J. (2007). A hierarchical model of intrinsic and extrinsic motivation for sport and physical activity.

Williams, H., Edgerton, N., & Palmer, S. (2014). Cognitive behavioural coaching. *The complete handbook of coaching*, 34-50.

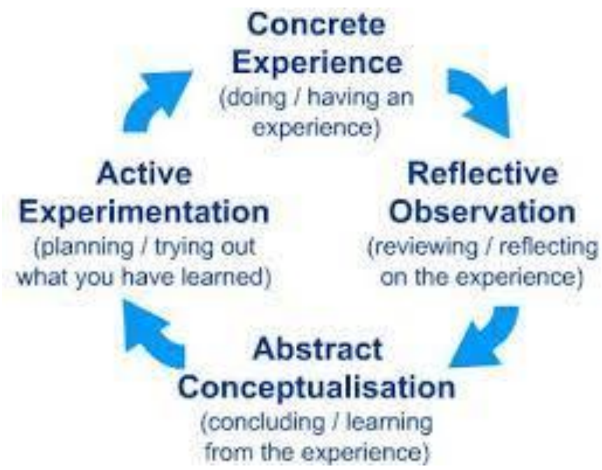
Yazdkhasti, M., Keshavarz, M., Merghaati Khoei, E.S., Hosseini, A.F., Esmaeilzadeh, S., Amiri Pebdani, M., Jafarzadeh, H. (2012). The effect of support group method on quality of life in post-menopausal women*. Iran Journal of Public Health*, *41* (11), 78-84

4.4 Group Case Study Reflective Report

REFLECTIVE REPORT

Reflection is a necessary part of professional practice for a health psychologist (HCPC, 2022). Reflective practice is the appraisal and reflection on one's own practice, to enable growth, and is an expectation of BPS Chartered Psychologists (BPS, 2008). Kolb suggested Experiential Learning Theory to highlight stages involved in reflection *(Fig 1)* and I have used these in my reflections.

Fig 1: Kolb's Experiential Learning Theory



SESSION BY SESSION REFLECTIONS ON THE EXPERIENCE

Session 1

I felt nervous at first about how the intervention would go and how well the clients would gel with one another. The session went well; therefore, I chose to follow a similar format for the next session – discussion, psychoeducation, and goal setting and finished feeling optimistic about the intervention.

Session 2

I felt pleased to hear clients' progress completing homework, reflecting their motivation. I was relieved to successfully put clients into breakout rooms during the session, as I find such technical manoeuvres challenging. After the session, I met with the Module Leader about my intervention, and she suggested I try *setting* a physical activity for clients, to facilitate behaviour change – I felt unsure how this would work, as I had chosen a coaching approach to the intervention, where clients would set their own goals; but decided I would try this in session 3.

Session 3

Only two clients had completed their chosen goals over the week, so the decision to prescribe a goal this week seemed justified and timely. The client discussion around 'taking charge of menopause' felt powerful. We discussed biological, psychological, social and behavioural actions to 'take charge of menopause', clients came up with over 20 different activities. I felt this endorsed my decision to use Positive Psychology Coaching, using the resourcefulness of the group to build individual resilience. I was embarrassed to have technical issues preventing me putting clients into breakout rooms. It felt odd to set a joint goal of 'Yoga flow' for homework, rather than their individual goals, and I wasn't sure this was the right approach to take, but I highlighted the need to engage in strength and balance activities (Physical Activity Guidelines) to justify it.

Session 4

One of the clients was unable to attend due to a hospital appointment and asked if I could record the session discussions to send her. It felt awkward but I explained I could not do this due to our confidentiality agreement but promised to send her the PowerPoint. She accepted my explanation, and I felt assured I had acted professionally. The focus for this session was ‘strategies to improve sex life through menopause’ and I was sceptical about how the discussion would flow around this personal topic. We discussed issues that may arise in menopause and one client went into detail about her own personal ‘loss’ and how alone she felt with this. I felt this highlighted the lonely silence some women face through menopause, and this made me feel angry, wondering how many women were silently suffering. I responded empathically, thanking her for sharing, before refocusing the session around effective biological, psychological, social and behavioural coping strategies. I was disappointed to hear only one client had completed last session’s yoga activity; therefore, I gave a new goal: a choice of two ‘balance activities’, plus the option to create independent private goals around improving their sex life; hoping this blend of goal choices would be more motivating.

Session 5 – Final session

I felt disappointed one client had prioritized a work event and could not attend. It felt sad to be ending as the women had shared so much together. One client described an “epiphany”, having previously felt lost to menopause, she spoke of how she now realized this phase of life will end and she will come out of the other side, and this felt powerful for the group to hear. I was heartened to hear clients comment on how useful they had found the intervention.

WHAT WENT WELL

Using a Coaching Psychology approach, I created a useful health psychology intervention, resulting in slight positive change for all clients, which felt satisfying.

My experience as a Chartered Coaching Psychologist and an NHS Practitioner helped me assess needs, plan a working formulation; and deliver the health psychology intervention, building confidence in my abilities as a Health Psychologist.

My previous MSc Health Psychology research experience helped me to select appropriate baseline assessment tools for menopausal clients.

DEVELOPMENT OF MY SKILLS AS A HEALTH PSYCHOLOGIST

I developed my formulation skills, using Vicious Flower and COM-B models in practice. Academic supervision supported me to push my understanding of different models as my previous experience had been mainly using 5P's formulation, 3Ps Coaching formulation and ACT formulation. Learning more about using COM-B and Vicious Flower in practice has deepened my understanding and widened my horizons for future interventions. I feel the Vicious Flower formulation is visually very clear and have explained it to my NHS team, who have decided to use it in some of our clinical formulations going forward, so this learning is already impacting my practice.

I developed my intervention skills further by running the on-line group intervention. Whilst I facilitate group workshops on-line through my NHS role, I had not run an on-line group intervention over several consecutive sessions previously, and I feel my confidence has grown in this technique as a result.

Having regular supervision with my Academic Supervisor and once with the Module Leader, helped me to shape the intervention. I value this ongoing supervision for my development. I expanded my knowledge of assessment tools, with UQoL, having previously used a generic quality of life tool with menopausal women. I adapted the format of goal setting within the intervention as it progressed, to better impact behavioural and psychological change for clients.

I learned from the clients themselves about the power of their voice to influence psychological change in others – it wasn't all down to what I had planned in the intervention. I learned how important the WhatsApp group was for client relationships to develop between sessions through the WhatsApp group and how this support appeared to positively impact them.

CHALLENGES

My understanding of working formulation was less clear when I started the intervention and although I had formulated extensively in the past, this had not been through applying specific models. I feel I may have over-complicated my formulation for the intervention.

I realized the intervention structure was more complex than it needed to be. The complexities of the intervention may have negatively impacted what might have been a greater success. It was challenging to fit so many different focus areas into 5 sessions.

There was a time delay between expressions of interest (January), and the intervention starting (March), due to my lack of availability, (I was completing Teaching competency commitments). I may have lost some initial client motivation as a result, impacting outcomes. Clients may have felt more motivated at the start of the new year in January.

I noticed my annoyance when some clients attended some sessions late or not at all and I am aware I also feel this frustration with ‘Do Not Attends’ (DNA) in my regular role as a practitioner in the NHS. This annoyance is something I need to be more mindful of, as there could be legitimate reasons for clients not attending.

My anxiety around technology impacted proceedings somewhat and I had trouble putting clients into ‘breakout’ rooms from the third session.

I felt concerned that two of the women had a slight decline in their sexual quality of life by the end of the intervention. This challenged me to consider what I could have done differently with this topic area.

AREAS TO IMPROVE

When offering an intervention, I would ensure I could start the intervention soon after clients express an interest, rather than after a two-month delay, which might negatively impact client motivation. I look forward to experimenting with alternative models of formulation going forward in my practice. I would reduce the number of topics in the intervention if I conducted it again, focusing on one or two areas of focus; and I would change the format of goal setting, to client-generated goals throughout, to be less prescriptive, and to encourage self-development. I should perhaps have had a session just about the importance of goal setting and how to set SMART goals. I should improve my confidence using technology, so I can succeed better facilitating breakout room activities and other online techniques. I could have provided links for further reading and signposting support, particularly regarding sexual quality of life. I would need to look into ensuring I had a more expansive set of resources for clients in future interventions.

SUMMARY

The intervention resulted in slight improvements for all clients which felt satisfying and rewarding. I learned a lot through the process, particularly regarding using different formulation models. If I were to do such an intervention again, I would simplify the format. Overall, I felt I have developed further as a Health Psychologist and was able to reflect on my resilience through some of the more challenging aspects of the intervention.

REFERENCES

British Psychological Society (BPS). (2008). Criteria for the accreditation of postgraduate training programmes in clinical psychology. Leicester: British Psychological Society.

Currie, H., Moger, S.J. (2019). Menopause – Understanding the impact on women and their partners. *Post Reproductive Health*. *25*(4),183-190. doi:10.1177/2053369119895413

Harper, J.C., Phillips, S., Biswakarma, R., Yasmin, E., Saridogan, E., Radhakrishnan, S., Davies, M.C., Talaulikar, V. (2022). An online survey of perimenopausal women to determine their attitudes and knowledge of the menopause. *Womens Health, 18*. Doi:10.1177/17455057221106890

HCPC. (2022, October 07). *What your standards say.* Retrieved October 07, 2022, from https://www.hcpc-uk.org/standards/meeting-our-standards/reflective-practice/reflection-and-meeting-your-standards/

Kolb, D.A. (1984) Experiential Learning: Experience as the Source of Learning and Development. New Jersey: Englewood Cliffs, Prentice-Hall.

Chapter 5: Consultancy in Health Psychology

5.1 Consultancy Case Study

CONSULTANCY IN HEALTH PSYCHOLOGY CASE STUDY

CHILDREN'S CENTRE NORTHWEST MIDLANDS

INTRODUCTION

Consultancy is an integral part of the Health Psychology profession, which Earll and Bath (2004) define as "a formal relationship where one party seeks help from another, the consultant's role being to facilitate the process whereby both the consultant and client arrive at a mutually acceptable solution" (Earll & Bath, 2004, p230-231). Whilst synonymous with the business world, consultancy is also prevalent in health psychology. Health psychologists bring significant skills to effect change for organizations in relation to health psychology (Hilton & Johnston, 2017).

This consultancy case study uses the 'Expertise Model' (Schein, 1999) to provide a children's centre in the northwest Midlands with two Continuing Professional Development (CPD) training sessions for clinical staff and a parental workshop for their clients. The Client is a charity which helps children with disabilities and/or with autism to live their fullest lives. With the 'Expertise Model', the Client gives away the power to be involved in solution generation, relying on the 'Expert' to create solutions. The Consultant is working '*for*' the Client, rather than '*with*' the Client as an equal, such as in the 'Process Consultation Model' (Schein, 1999), where they work collaboratively on solution generation. The 'Expertise Model' is like the 'Doctor-Patient Model' (Schein, 1999), where again there is a power imbalance, the emphasis being on the 'doctor' (consultant) to fix the Client's problems. This case study is written up using the framework of Earll and Baths' four stage Consultancy Model (2004).

Table 1: Earll and Baths' Consultancy Model

Assessment of request for consultancy
Plan the work and negotiate the contract
Undertake and monitor the work
Evaluate the impact of the consultancy

ASSESSMENT OF REQUEST FOR CONSULTANCY

Identify the Client, Understanding the background and organizational context.

The Client has an existing relationship with Staffordshire University. Their services include autism assessments, post-diagnostic telephone support, and parental workshops. My Academic Supervisor gave me the Clinical Lead's contact, for me to offer consultancy services. I prepared for the scoping meeting to pitch my ideas, checking their website for information, so I could generate additional offerings. Assuming they would have Continuing Professional Development (CPD) provision, I decided upon two CPD sessions about strategies my Workplace team have embraced in our service for young autistic people and their families, 'Tree of Life' (Ncube, 2006) and 'DNA-V' (Hayes & Ciarocchi, 2015). Two sessions seemed a good number, to enable me to complete my consultancy within a manageable space of time and to be more appealing than the offer of just one session.

Clarifying the question – Initial meeting with the Client

I learned from the Contact Client in the online scoping meeting about other services they offer, not listed on their website and it became apparent that the CPD sessions I had in mind, would be a good opportunity for them to consider expanding their intervention offer to families. This scoping meeting to clarify the consultancy question (Earll & Bath, 2004), is also the first stage of the consultancy process identified by Lippitt and Lippitt (1994) 'engaging in initial contact'. The Client has a monthly CPD slot and was happy for me to fill two of these. She asked me to also offer a novel parental workshop. I explained the six parental workshops my workplace offers, and the Client decided they would like a workshop around ‘Demand Avoidance’, a topic very popular with parents.

Confirm what the consultant can offer.

Post-meeting, I emailed the written proposal to the Client (Earll & Bath, 2004), including the timeline of events with dates of proposed sessions. The Client confirmed they were happy with the plan, so I set to writing the contract.

PLAN THE WORK AND NEGOTIATIONS INCLUDING CONTRACT

I emailed the Client fortnightly updates during the contract creation period. I could have phoned her, but it felt more professional to keep a written trace of our communications. In hindsight, I should have clarified with her, the regularity, and her preferred method of communication.

I found the process of writing the contract quite difficult. We had many examples of contracts from university, all differing in content and formalities. My previous private practice contracts had been much shorter and simpler, and I struggled understanding some of the formal phrases, rewriting my contract many times, prior to submission for marking. I learned legal phrases that are useful to include and phrases that protect my position as a consultant, in addition to those relating to the services for the Client, something I had not considered previously. The contract writing process was useful and I now feel I have a comprehensive proforma of a contract for future consultancy work. The Client was happy to sign the contract (and Consent Form) without asking for modifications.

Establishing and maintaining a relationship

The working relationship started wobbly, as the Client forgot to attend the first online scoping meeting, leaving me feeling sceptical about how things might progress. After ten minutes waiting online, I emailed her to politely and professionally point out that we had a meeting arranged and ask if she would like to reschedule. This was well-received, and she wrote an apologetic email rescheduling. The subsequent scoping and planning video calls went well, with the working relationship establishing.

The Client asked for my phone number, in case of technical issues during sessions. I gave her my personal number, however, was surprised when she passed this on to two of her colleagues without first checking with me; and, when she texted me after the first workshop around 10pm. I felt professional boundaries had been breached. On reflection, I should have given her my work mobile number instead of my personal number, as I turn this off at the end of the working day. I could have clarified my work number and hours of availability in the contract.

Negotiations and Renegotiations

Schein (1999) identified six types of clients involved in the consultancy process and it was important to identify these to plan the work (Table 2). The third session I delivered, the Primary Client was on annual leave and her colleague stepped in as an 'Intermediate Client'.

Table 2: Types of Clients

Schein (1999)		**Current case study**
Contact	Approaches consultant with request	Clinical Lead ASC
Intermediate	May be involved in interviews, meetings or activities as the consultancy progresses	Clinical Lead Disabilities
Primary	The individual who ultimately owns the issue at the heart of the consultancy	Clinical Lead ASC
Unwitting	Members in lateral relationships to the primary client, who will be affected by interventions but who are not aware that they will be impacted	Children and parents who use the centre

Ultimate	The community or occupational group whose welfare must be considered in the consultancy intervention	Staff and parents of the centre
Involved 'non-clients'	A person who is not a client	*Not relevant to current case study*

My original offer of two CPD sessions was renegotiated in the scoping meeting, when the Client asked if I could also provide a parental workshop. I agreed to keep her happy, and to be perceived as accommodating, however, if I were in a similar position again, I might negotiate swapping one of the CPD sessions instead to manage my workload. If I were paid, I would probably agree to the extra session. I have learned from this that I do not need to decide immediately, I could have taken time to consider my commitments. I reflected that I find it difficult to say 'no' to people. The parental workshop provided me the opportunity to showcase how I deliver these differently to CPD sessions.

Table 3: Objectives of the Consultancy

• To provide training for children's centre staff to introduce two potential interventions they might consider future training in, for their clinical staff.
• To provide a parental workshop, different to those currently offered by CICC, on a topic that could be helpful to parents of CICC clients.

Planning the work

Earll & Baths' (2004) planning process helped break the consultancy into stages enabling me to reflect upon each (Fig 1). In creating session content, I was mindful of 'Equality, Diversity and Inclusion', endeavouring to uphold Standards of Proficiency for Practitioner Psychologists (Health and Care Professions Council, 2023), to be aware of the impact of equality and diversity on practice. I had not checked with the Client but considered some of the attendees may be neurodiverse, particularly in the parental workshop, due to familial patterns of neurodiversity (Tsang et al., 2013). I used pictorial content on my PowerPoint slides with clear language, as this can be helpful for neurodiverse people. In future situations, I would check with the Client for known neurodiversity beforehand.

Outcome Deliverables

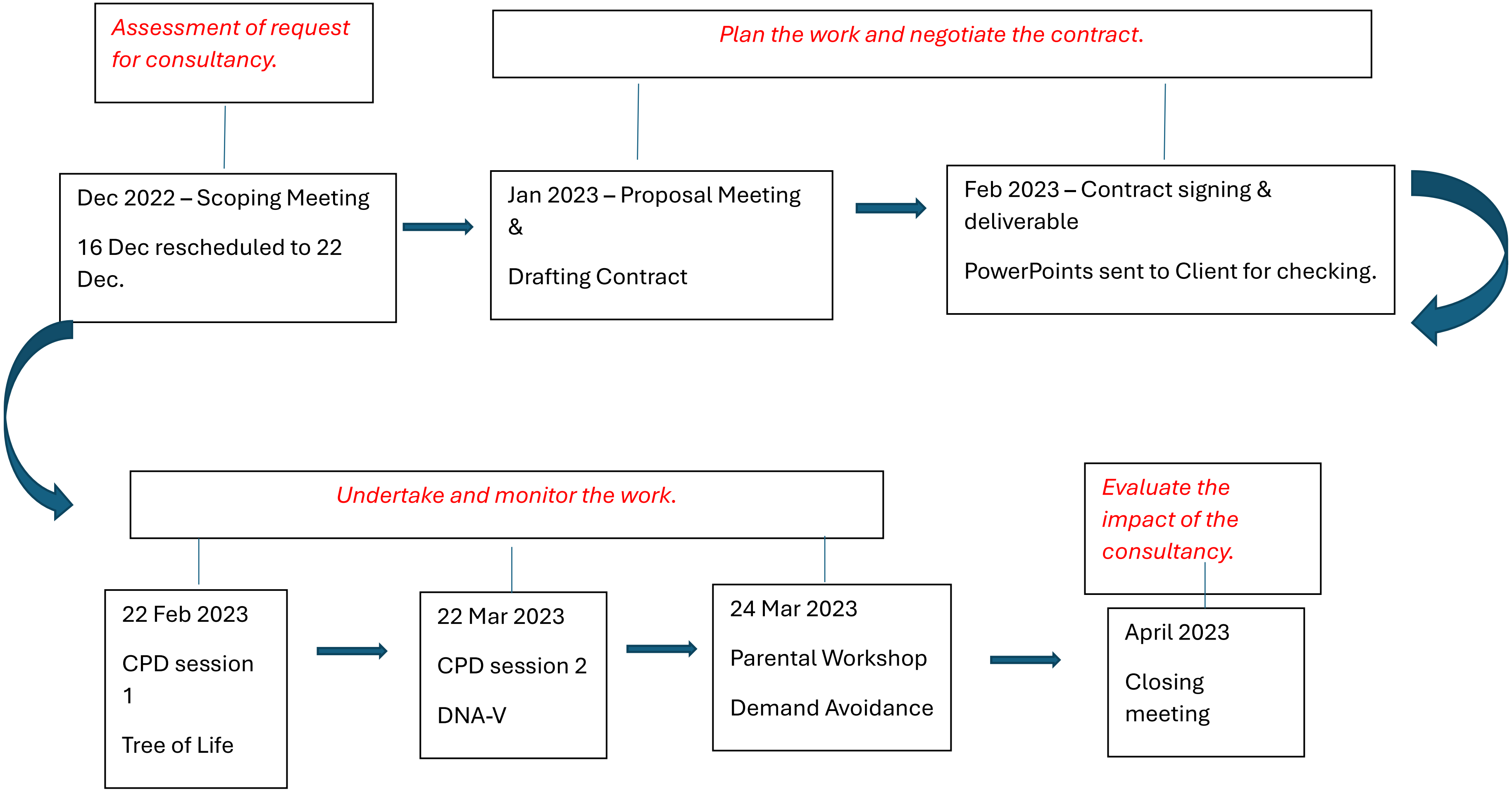
Write and deliver two, 1 hour-45-minute CPD on-line training sessions and one, 2-hour parental workshop (Table 4).

Table 4: Sessions

Session 1 (15 February 2023, 9-10.45am)	'Explanation of how Family Intensive Support Service – autism spectrum disorders (FISS-ASC), use Tree of Life narrative therapeutic approach with young people with ASC' (to include case study and outcome measures)
Session 2 (22 March 2023, 9-10.45am)	'Explanation of how FISS-ASC use DNA-V therapeutic approach with young people with ASC' (to include case study and outcome measures)
Session 3 (24 March 2023, 10-12 noon)	Parental Workshop for parents of Children's centre clients diagnosed with ASC for an audience of 2-8 families 'Demand Avoidance in ASC'

PDFs of PowerPoint presentations were emailed to the Client, in good time prior to the session dates, for the Client to conduct in-house quality assurance checks, and relay back if changes were required, no less than 48 hours prior to the session. This quality checking process had been requested by the Client in the planning meeting and was a way for her to confirm her satisfaction, which was also reassuring for me. No changes were requested for any of the PowerPoint presentations. I provided links to attendee evaluation surveys for each session.

Fig 1: Earll & Bath Model of Consultancy (2004) in relation to case study timeline



UNDERTAKING AND MONITORING THE WORK

In the contract, the Client agreed to organize Zoom links, but forgot to send me them. I had to email requests two days before two of the sessions. I worried about potential impacts for the sessions due to the Client's apparent lack of organization. I learned that even though something may be agreed in the contract, it does not mean it will be executed; my good organizational skills had enabled me to ensure I was able to access the sessions. I emailed the Client after each session, to check she was happy with how the session had gone; rather than phoning, so I had a written trace.

Twenty minutes before the first session, the Client texted a request to record it. I declined this, as there were pictures and names of my colleagues in my PowerPoint presentation and I would not have time to check with them for consent, from a General Data Protection Regulation (GDPR) perspective (Data Protection Act, 2018). I emailed the Client after the session to offer to ask my colleagues' permission for the other sessions and if they consented, I could issue an addendum to the contract to cover this. She accepted this offer, however, my service Clinical Lead didn't consent to sessions being recorded, so I emailed the Client to explain, and she was fine with this. I felt I had acted responsibly and professionally in this situation, in line with legal GDPR requirements. In a future situation, I would include a clause in the contract for clarity, to state that sessions cannot be recorded.

Some attendees requested more case studies in their evaluation feedback after session one. In the planning meeting, the Client had asked for "*a* case study" in each CPD session, therefore, this is what I had provided, and she had confirmed the PowerPoints. I emailed the Client to highlight the feedback and offer to add a couple more case studies to the second CPD session, which she accepted, so I resent the amended PowerPoint for checking, and she confirmed her satisfaction.

There was a change of Client for the delivery of the Parental Workshop, with the Primary Client on annual leave. The Intermediate Client had different expectations. I was surprised when several staff attended the parental workshop. When the session started, the Intermediate Client's camera showed a table with six staff seated. I could have asked who they were and why they were attending the parental workshop, but I did not want to negatively impact the atmosphere at the start of the session. I think if this situation arose in future, I might pause the session to speak with the Client privately; before then checking with attendees if they were happy for staff to attend. After, the Client asked for training certificates for staff attendees. I explained the contract did not include certificate provision. Although it might have pleased the Client, providing certificates would have generated additional work for me. The Primary Client had not asked for these for the previous CPD sessions, so it felt inappropriate to provide them on this occasion. I feel this was the right decision but would consider including training certificates in a future contract. I discussed the request at the 'closing meeting' with the Primary Client and she confirmed she would provide these. This highlighted how the different clients had differing expectations and it is likely the Intermediate Client had not seen my contract to know what was included.

Table 5: Conducting and managing the consultancy session by session.

CPD Session 1 – Tree of Life - 22 FEB 2023
I logged on to the link 10 minutes early but as the time to commence the session came and went, I decided to contact the Client by email and phone. The Client was having technical problems and could see and hear me, but I could not see nor hear them. Despite this they asked me to start the presentation. I did so but 5 minutes in they phoned me asking me to stop, as they would need to move to another room. I did so and patiently waited until their technical issues were resolved before resuming the session. Having already been a bit nervous at the start of the session, this unexpected situation impacted me, leaving me feeling tearful and struggling to maintain my composure. I could have arranged with the Client earlier in the negotiation process, that it would be a necessity to test the technology prior to the start of the session on the day, however, she had texted me 15 minutes prior to the session to state that she was running late. I dealt with the situation with professionalism and calmness, despite how I was feeling. I had been expecting that attendees at the on-line session would be visible to me as several screens on Zoom, however, all the attendees were in one large room together with a large screen to view me. This meant I did not know how many attendees were present as the view I had was just of the people sitting directly in line with the camera shot. This made it very difficult for me to develop any rapport with the audience. I could have clarified with the Client in earlier negotiations whether the attendees would all be located together or whether they would be in separate rooms. I could have spent some time at the beginning of the session getting to know who was present, what their roles were etc; however, I was aware the session was starting late and felt pressured to get on with the content. During the session, there were 2 interactive parts, where I invited comments from the audience, after I had guided them through how to draw their own trees of life individually, and questions at the end. Perhaps because all the attendees were in a room together and not in private rooms, no-one volunteered to engage with these, therefore, I finished the session 20 minutes early. In hindsight, I should have had an extension task available in the event this might happen, that they could complete individually, such as summarizing next to their tree how they had found the exercise. I had been surprised all the attendees were sitting together in one room and therefore assumed they were comfortable with each other. The Client later texted me to explain they were a “shy lot and apologize for the lack of engagement”. Upon reflection, when attendees failed to engage, I could have asked them to discuss the interactive sections in pairs/groups of 3, and then asked for specific volunteers from each group that I could see from my camera shot. The feedback from attendees suggested that they really benefitted from the activity to create their own ‘Trees of Life’ and found the session fun, relevant and informative however, one attendee commented that they would have preferred the session to have been face-to-face. I felt proud that the session had gone well, and that people felt they had got something of value from it. The

Tree of Life activity was about personal life reflection, so this session was more than just a work CPD session for their professional roles.

I did feel disappointed at the lack of organization and the lack of engagement in the interactive sections, from attendees. 13 attendees completed the evaluation survey after the session, the overall average score for the session was 4.92/5, but some attendees made comments that they would have liked more case studies in the presentation. I had included one as agreed with the Client, so this felt a little frustrating. I emailed the Client to offer to expand the number of case studies in the second CPD session, allowing her to recheck the updated presentation prior to delivery.

CPD Session 2 – DNA-V - 22 MARCH 2023

We were a few minutes late starting the training, due to technical problems again at the Client's end - they could not lose an echo when I was speaking. As I was about to start, the Client mentioned that students from a local University and members of their Family Support Team were also present for the session, in addition to the clinical team agreed. As there was the same large room full of attendees set up as in session 1, I was unable to see how many more extra people there were, as I could only see those people sat within the camera shot. I felt there was nothing I could do about this situation and the sudden late announcement of a larger, more diverse audience. I felt concerned to learn so late there were additional people joining, as I had designed the session for clinical staff and not for students. The Client told me later at the Closing Meeting there had been more students than clinicians present. I wasn't sure how large the audience was, and assumed the different groups of people did not know each other, which made me worry about how well they would engage in some elements of the planned session. I was also worried that the level of my presentation may not be as suitable for students as it had been designed for the professionals originally expected.

A few minutes into the session, after I had introduced what we would be doing, it became apparent that none of the attendees had come prepared with laptops or phones, despite this being stated on the first PowerPoint slides which the Client had confirmed. This felt frustrating, as it was yet another issue from the Client's end. As these would be needed for the session, I paused the presentation whilst attendees went to get these. In hindsight, I could have sent the Client an email reminder the day before to ensure attendees came to the session prepared. The Client later explained that staff are not normally allowed mobile phones on them during shifts and most use stationary PCs rather than laptops.

Due to the lack of interactivity in the last session, I had decided to remove some of the interactive questioning, just reserving a 'question point' for the end of the session. I was pleased that this time, there were a couple of questions which filled some time but still I finished 10 minutes earlier than intended. I think the timings were more difficult to predict as the audience was not face-to-face but online in a room together. One attendee commented in their feedback that they would have liked more interactive elements! I felt the session had gone well overall, especially as I had added three case study examples, modifying the PowerPoint, following the feedback from the first session. This was well received in the feedback from attendees, one commented, *"Learning* *about the intervention and how it has been applied to real life cases, including the outcome of this, to show the reality that it does work."*

I could have invited discussion of the case studies after presenting them but did not want to use the time for this, as I had reserved time for questions at the end of the presentation. As it turned out, I would have had the time to do this, as we finished a little early. I wondered if I had too few slides in my presentation and that is why I ended a little early. I should perhaps have expanded the number of PowerPoint slides I had, so that we wouldn't have finished early. I decided that for the third session, I would have more slides.

In the evaluation form (Table 8), one attendee commented there had been, "A lot of information. personally prefer more interactive learning." I found this a little upsetting, as there had been a 20-minute activity as part of the workshop, where attendees completed an on-line quiz to establish their own values. The other 7 attendees commented how much they enjoyed the interactive part. I reflect from this that it is very difficult to please everyone in a group setting. When asked if there was anything else they would have liked in the workshop, an attendee suggested script-form examples, and another suggested a structural overview of how DNA-V sessions may be run. In future, I could consider creating an accompanying workbook for such a session, that might include these suggestions. Another attendee suggested a face-to-face format would have relinquished the technical difficulties that occurred.

I was disappointed that the 8 attendees who completed the evaluation after the session rated it as an average of 4.25/5, slightly lower than the first session. I discussed this with the Client in the closing meeting, and it was felt that this topic was less relatable to their client base than the first workshop topic.

After the session, I had an email from one of the attendees asking for my PowerPoint slides. I politely responded that the PDF of the slides had been given to the Client for distribution, and they should ask her for this. I was concerned they had specifically asked for the PowerPoint slides and was not sure if this was for them to reuse, hence I redirected them to the PDF that had been shared. I directed them to the Client, rather than share the PDF myself, as I felt the Client should maintain the control of who the PDF had been shared with. I did not want to share with this one attendee, only to discover I had multiple such requests sent to me from other attendees. It seemed sensible to direct them back to the Client, who could share the PDF with everyone she felt suitable to, and I do not think I would have reacted differently if in this situation again.

Parental Workshop – Demand Avoidance - 24 March 2023

The contract said the workshop was for up to 8 families, but the Client said only four would be joining, only three did. This felt like a missed opportunity for other families who might have attended. It had been agreed in the contract that the Client would recruit families, but she commented in the Closing Meeting that she usually found it was 'hit or miss' whether families attended their workshops and that she did not like to 'prompt' families to attend.

There were technical issues yet again at the start of the session and I wasn't let into the session until 8 minutes after the start. I had emailed, phoned, and texted the Client in the meantime.

The Client had phoned me in the hour prior to the session to check all was ok and to tell me that they had invited some family support worker staff to the session also, which had not been agreed in previous negotiations. There were half a dozen support workers sitting around a table on one camera and I wondered if this negatively impacted the experience for some of the parents who were attending, as they had been told it was just a workshop for parents. I think some of the misunderstanding in this situation, came from the Client being different in this session – the Primary client was on annual leave and there was a stand-in Intermediate client.

None of the families turned their cameras on, despite me inviting them to. I did my best to engage with the families despite the lack of visual images, I took note of their names, child's names, ages, and interests from the interactive parts of the session, which they all engaged in. I wondered if the presence of a room full of professionals had been off putting for them. The format of this session was very different from the format designed for the previous professionals' sessions. This session was designed to be far more personal and interactive, as it was not a session about me teaching them about demand avoidance, but rather a session where they would have the opportunity to discuss how demand avoidance played out in their family situation and hear from other parents too. This meant there was far better engagement in this session than in the previous sessions for professionals, despite cameras being turned off. In hindsight, I could have asked the Client to let families know prior to the session, that it would be a requirement for them to turn their cameras on, to be even more engaged with one another. I wondered if the room full of professionals present, had been off-putting for them to turn cameras on. I later learned from the Client that the professionals present were the key workers for some of the families present and not knowing the relationships they had with these people, can only wonder if this may have been an additional factor for cameras being turned off. I wondered if they felt somewhat judged by the room of professionals sitting silently, not contributing to discussions. When I facilitate such parental workshops in my work placement, I do not have issues with parents keeping cameras off and neither is there a room of professionals present. I felt a little sad that the professionals had attended, as the families may have had an even richer experience of the session if perhaps the professionals had not been there.

I finished 15 minutes early because we didn't have the planned tea break. This was because the Intermediate Client had suggested their preference to work straight through, rather than offering a formal break. In the workshops I facilitate at my work placement, we always give parents a short break, as it gives them time to process the content we are covering, get more comfortable and think about questions they want to ask. In hindsight, I could have insisted we take a short break. However, I did not want to upset the Intermediate Client, whom I had had no contact with prior to this session.

I felt the workshop went well and the feedback said it had been helpful, from the attendee evaluation form. Sadly, only one of the three families completed this. I wondered if the 'QR' code provided for the evaluation form might have been problematic for some families to access this. I could have requested the Client email the other families after with the URL link, for them also to complete the evaluation. I didn't do this, as the Primary Client was on annual leave and the Intermediate Client was stepping in for just that day. I hoped that in the few days following the workshop, the other families would complete it, however they did not. I could have emailed the Primary Client when she was back from leave, to request she send a prompt to the other two families however, it felt that too much time had passed since the workshop and also, I am always mindful that feedback is an optional process, and the families should not be pressured into completing the form if they had chosen not to. The evaluation I received was positive; the family rated the session as five stars and said there were no changes they would have wanted. They said, "*We found the change of words/questions useful and the treat meltdowns as panic attacks was an eye opener." (sic), "Thank you for running the course, it has been helpful."* I felt really pleased the workshop had been well received and had been helpful. It felt as though this session had been worthwhile.

I was surprised the Client had technical issues for each session, but I feel I dealt with each of these calmly and professionally, despite the anxiety they provoked. I told the Client I would log on prior to each session in good time, to test technology, however, each time, the Client was unable to log on until the start of the session due to other commitments. The Client raised the technology issues apologetically in the Closing Meeting I organized to evaluate the impact of the consultancy (Earll & Bath, 2004), saying it had been a real learning curve for her. I responded politely and professionally but felt she had not been very organized. I think problems could have been resolved, had the Client logged on earlier. I had not included a 'closing meeting' in the contract, this is something I would amend in future. I had stated the contract would end on 24th March, the date of the final session, however, the Client was on annual leave, so I was fortunate she agreed to a closing meeting later.

EVALUATE THE IMPACT OF CONSULTANCY

My previous experience teaching and delivering parental workshops in my work placement gave me confidence in my presentation abilities. I am a very organized person and knew I would prepare well ahead of time for the sessions. I have developed my awareness to be prepared for unpredictable events, such as technical issues at the Client's end, and attendees not engaging in interactive parts of sessions. I enjoyed delivering the parental workshop because it felt more like facilitating a group intervention and intervention work is the reason for me doing a Doctorate in Health Psychology. I did not enjoy delivering the CPD sessions as much, as they felt like teaching/training, and this is a career of my past. This distinction is important for me to note for future consultancy opportunities. I learned to be flexible during consultancy work, to be open to changes even after the contract signing, keeping communication open; and maintaining the Client-Consultant relationship. Going forward, I am mindful I need to give myself thinking time before agreeing, if clients' make additional requests.

I was surprised that the Client passed on my mobile phone number to colleagues without my permission, also texting me late at night, and when the Intermediate Client invited staff to the workshop designed for parents. The phone number issue felt as though a professional boundary had been breached, but I maintained a professional relationship with the Client despite this. It felt the Client had a different understanding of professional boundaries to me. On reflection, I could have included more detail around boundaries in the Contract. I worried the lack of confidence in my technical abilities could be a barrier delivering the sessions; however, I surprised myself that I managed, despite the difficulties at the Client's end. This has given me more confidence to deliver future on-line formats.

At the closure meeting in April, the Client expressed their experience of the consultancy, and I shared attendee feedback, asked about impacts of my consultancy, and thanked them for the opportunity. She was very polite saying things had gone well. I think I should also have given her an online survey to complete about my consultancy services, which may have made it easier for her to make any constructive comments. I would do this in future consultancy opportunities. She suggested the sessions could have been improved had they been face-to-face, and I will bear this in mind for the future, to opt for face-to-face wherever possible. She felt everybody had benefitted from attending the sessions and said she had reflected she needed better communication with her IT department, to avoid technical difficulties. I felt pleased with the feedback and proud of the work I had done.

She requested I send a completion email, summarizing the consultancy, for her to make a business argument to her seniors, to support future honorary consultancies, which I did. The client said the sessions had been interesting for staff, echoing attendee feedback, however, said they did not intend to pay for formal training in the techniques used (Tree of Life and DNA-V), as felt they may not be accessible to their clientele. I understand this to be because their clients have learning disabilities as well as autism, whereas clients in my workplace service do not. It is possible that some attendees may not have engaged in interactive parts of the sessions if they felt they would not be able to access future training in the techniques. I had discussed in the original scoping meeting with the Client about presentation topics, and she felt these techniques would be useful for her staff. In hindsight, I could have sent her literature links about the techniques before she decided. The closure meeting felt a fitting end to conclude the consultancy relationship.

The 'Ultimate Client' (Schein, 1999) in the consultancy work, were the attendees to the sessions. They provided online feedback after sessions. This was positive and qualitative comments made after session one lead to modifications to session two as described above.

Table 6: Qualitative Feedback from attendees

What did you find most useful from the Tree of Life session?
"I really enjoyed seeing my own tree of life." *"Seeing the how we can focus on positive."* *"I found it useful that we were encouraged to have a go ourselves to draw a tree of life."* *"The positive psychology perspective - helping a child to see that they are not the problem and to explore the positives in their life. Appreciated being given a chance to put the approach into practice."* *"The detail of information and the images that aided delivery of information."* *"Reflecting on previous experiences."* *"The CPD (in particular the interactive session) was a useful insight into the interventions currently used in the NHS for young people with ASC."* *"Creating my own tree of life."* *"Completing the tree of life tree ourselves as this made it easier to understand and remember and was interactive which made it enjoyable."* *"I thought this would be a very useful resource to use with some of the young people who access the service"*
What did you find most useful from the DNA-V session?
"*The value quiz, it was a lot of fun."* *"Finding out my own values as it's not something I've thought about before."* *"Relating it to ourselves and finding out our own personal values."* *"Images, use of values website and chance to have a go ourselves."*

“For me it was the noticer and how starting with taking notice of the body can facilitate identifying emotions.” *“Learning about the order of delivery and recognizing the importance of values and how this can help young people with ASC.”* *“Learning about the intervention and how it has been applied to real life cases, including the outcome of this, to show the reality that it does work but not necessarily for everyone.”* *“A lot of information. personally prefer more interactive learning.”*
What did you find most useful from the Demand Avoidance Parental Workshop?
“*We found the change of words/questions useful and the treat meltdowns as panic attacks was a an eye opener.”(sic)*
Was there anything else you would have liked to see in the workshop?
Tree of Life Session 1: “*Maybe more case studies? Find them very interesting how you approach it.”* *“More focus on case studies and the success of implanting the tree of life.”* *“A few more examples of this technique being used for example another case study.”* *“Perhaps another case study as the one that was presented was so interesting and inspiring.”* *“None, it was great.”* *“No - I thought the session covered everything very thoroughly.”*
DNA-V Session 2: *“A structural overview of how the sessions might run.”* *“More in-depth examples (script form) of DNA-V in practice.”* *“Perhaps some more interactive activities, asking the listeners questions to get them really thinking.”*
Demand Avoidance Parental Workshop: “*We are happy with the context of the course.”*
Any other comments about the session?
Tree of Life Session 1: *“It was so fun that I got to make my own tree of life.”* *“Thank you for the session.”* *“Really well presented, relevant.”* *“I think engagement would've been better if it was in person. I know that would be a very far distance to travel but speaking to a TV was really odd.”* *“Really good, engaging CPD session. The way in which it was delivered made it enjoyable, and memorable.”* *“A very informative and interesting CPD session.”*
DNA-V Session 2: *“In person would have been better due to technical difficulties.”* *“I found it very interesting!”* *“Thank you!”*
Demand Avoidance Parental Workshop: “*Thank you for running the course, it has been helpful.”*

For future consultancy work, I would have more confidence writing the contract and following Earll & Bath’s (2004) phases of consultancy, which I found organized and logical. Changes I would make include, insisting the Client log on prior to sessions with me, to test for technical issues. I would also recommend sessions designed for parents, should not have large numbers of staff present, and that a formal break (for bathroom, refreshment, reflection, movement) should be included. I would include these details and confirmation that sessions cannot be recorded, in the Contract. Also, attendees will be required to have web cameras on to facilitate enhanced engagement, as this was a barrier in the parental workshop.

CONCLUSION

My consultancy skills have developed through the process, especially as I had started a consultancy opportunity with Wolverhampton City Council initially, which later fell through due to organizational issues, leading me to progress instead with this opportunity. I learned skills around creating a legally worded contract and ensuring my rights are protected within it. My preference for future consultancy work would be around intervention rather than training. I learned the skill of creating a financial breakdown and hypothetical budget, something valuable for future paid consultancies. I also learned to apply different models and approaches of consultancy. Attendee evaluation feedback reflected the positive impact of the sessions. Having completed the consultancy, I feel more confident to engage in consultancy processes from negotiation through to completion.

REFERENCES

Data Protection Act. (2018). Retrieved May 11, 2023, from https://www.gov.uk/data-protection#:~:text=The%20Data%20Protection%20Act%202018,Data%20Protection%20Regulation%20(GDPR).

Earll, L., & Bath, J. (2004). Chapter 12 Consultancy: What is it, how do you do it, and does it make any difference?. In: S. Michie, C. Abraham (Eds.), *Health Psychology in Practice*. (pp. 233-250). Oxford: Blackwell UK.

Hayes, L. L., & Ciarrochi, J. V. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. New Harbinger Publications.

Health and Care Professions Council (HCPC). (2023, May 11). *The standards of proficiency for practitioner psychologists.* Retrieved May 11, 2023 from https://www.hcpc-uk.org/standards/standards-of-proficiency/practitioner-psychologists/

Hilton, C.E., Johnstone, L. H. (2017). Health psychology: it's not what you do, it's the way that you do it. *Health Psychology Open,* 1-10. http//doi.org/10.1177/2055102917714910

Lippitt, G.L., Lippitt, R. (1994). *The consulting process in action* (2 ed.). Pfeiffer.

Ncube, N. (2006). The tree of life project: Using narrative ideas in work with vulnerable children in southern africa. *The International Journal of Narrative Therapy and Community Work,* 1, 3-16.

Newton, W. P., Lefebvre, A., Donahue, K. E., Bacon, T., & Dobson, A. (2010). Infrastructure for large-scale quality-improvement projects: Early lessons from North Carolina improving performance in practice. *Journal of Continuing Education in the Health Professions*, *30*(2), 106-113.

Schein, E. H. (1999). *Process consultation revisited: Building the helping relationship*. Reading, MA: Addison-Wesley.

Tsang, K. M., Croen, L. A., Torres, A. R., Kharrazi, M., Delorenze, G. N., Windham, G. C., ... & Weiss, L. A. (2013). A genome-wide survey of transgenerational genetic effects in autism. *PloS one*, *8*(10), e76978.

5.2 Consultancy Contract and Working Conditions Agreement

CONSULTANCY IN HEALTH PSYCHOLOGY

CONTRACT AND WORKING AGREEMENT CONDITIONS DOCUMENT

THIS AGREEMENT is made the 1st day of February 2023 BETWEEN

CONSULTANT Kerry Lum whose principal address is Staffordshire University, Leek Road, Stoke-on-Trent, ST4 2DF ("the Consultant")

CLIENT Dr [redacted], whose administrative offices are [redacted] International Children's Centre, [redacted] ("the client")

1.Definitions

In this agreement the following words shall have the following meanings:

"Consultant"	means the professional providing 1-1 consultancy with a core member of [redacted] International Children's Centre.
"Client"	means the person nominated to represent [redacted] International Children's Centre for the purposes of the consultancy.
"Consultancy Period"	means a period of anticipated time from the start of date of this Agreement, to the end date of the Project.
"Project"	means a package of consultancy time to conduct duties as specified below as 'Services'.

2. Background

2.1 - The Client is of the opinion that Consultant has the necessary qualifications, experience and abilities to provide Services to the Client.

2.2 - The Consultant is agreeable to providing such Services to the Client on the terms and conditions set out in this Agreement.

2.3 - In consideration of the mutual rights and obligations contained in this Agreement the parties HEREBY AGREE AS FOLLOWS:

3. CONSULTANCY SCOPE AND DESCRIPTION

3.1 Consultancy Period

3.1i – The Consultant shall provide Services to the Client as detailed unless and until this agreement is terminated by either party giving to the other not less than 14 days prior written notice or as otherwise provided in this Agreement.

3.1ii - The Consultancy Period is from the date of this Agreement, finishing on 24 March 2023.

The term may be extended with the agreement in writing of both the Client and the Consultant.

3.1iii - The Client will use its reasonable endeavours to procure that the Consultant will complete the Project during the Consultancy Period.

3.2 The Services

3.2i - The Consultant shall use their best endeavours to promote the interests of the Client in a timely manner and, unless prevented by ill health, accident, or force majeure, to carry out the Services.

3.2ii - To write and deliver 2 x 1 hour 45-minute CPD on-line training sessions via Zoom for [redacted] International Children's Centre Clinical Team and Family Support Team.

3.2iii - To write and deliver 1 x 2 hour on-line Parental Workshop via Zoom for [redacted] International Children's Centre parents of young people diagnosed with ASC.

3.3 Deliverables including Timescales

3.3i - Session 1 (22 February 2023, 9-10.45am) – entitled 'Explanation of how FISS-ASC use Tree of Life narrative therapeutic approach with young people with ASC' (to include case study and outcome measures).

3.3ii - Session 2 (22 March 2023, 9-10.45am) - entitled ‘Explanation of how FISS-ASC use DNA-V therapeutic approach with young people with ASC’ (to include case study and outcome measures).

3.3iii - Note these sessions do not constitute formal training in Tree of Life or DNA-V.

3.3iv - Parental Workshop (24 March, 10-12 noon) for an audience of a maximum of 8 families (minimum 2 families) – entitled **‘**Demand Avoidance in ASC’.

3.3v - A PowerPoint presentation resource will be used in each session and will be emailed to the Client, no less than 7 days prior to the specified delivery dates, for the Client to conduct in-house quality assurance checks of contents.

3.3vi - The Consultant will provide a link to an evaluation survey for each session for attendees to complete if they so choose.

3.4 Client Role and Responsibilities

3.4i - The Client will recruit staff for Sessions 1 & 2, and families for the Parental Workshop.

3.4ii - Ensure Zoom invitations and links to the 3 sessions are set-up and sent to attendees.

3.4iii - Gain written consent from attendees to attend sessions, as part of the Client’s normal course of business.

3.4iv - The Client will relay back to the Consultant if changes to PowerPoint presentations are required, no less than 48 hours prior to session delivery.

3.4v - Any follow-up care of families attending the workshop will be carried out by the Client.

4. Absences

4.1 - If the Consultant is unable to provide the Services due to illness or injury, they shall notify the Client as soon as reasonably practicable.

5. Ethical and Professional Standards

5.1 - The Client understands that the Consultant is bound by British Psychological Society (BPS) and Health and Care Professions Council (HCPC) Codes of Conduct, and the Client agrees the Consultant may discuss the Consultancy during supervision and write a reflective report about the Consultancy and include it as part of their portfolio for a Professional Doctorate in Health Psychology at Staffordshire University.

5.2 – The Consultant will comply with the Client's policies on social media, anti-harassment, anti-bribery, anti-corruption and bullying.

5.3 - The completion of the delivery of the final session on 24 March 2023, will constitute the end of this contract.

6. Fees and expenses

6.1 - The Client will not pay the Consultant fees or expenses for the provision of the Services.

7. Intellectual Property

7.1 - All Intellectual Property and related material that is developed or produced under this Agreement, will be the property of the Consultant. Title, copyright, intellectual property rights and distribution rights of the intellectual property remain exclusively with the Consultant.

7.2 – The Consultant will provide the Client with PDF versions of PowerPoint presentations used in the Services for their dissemination.

7.3 - The Consultant shall have freedom to publish in accordance with normal academic practice as first author and freedom to discuss the Project's results, and in pursuance of the Consultant's functions, including as submission towards their Professional Doctorate in Health Psychology portfolio and at conferences.

8. Confidential information and Client property

8.1 - The Consultant shall not use or disclose to any person either during or at any time after engagement by the Client, any confidential information about the business or affairs of the Client or any of its business contacts, or about any other confidential matters which may come to the Consultant's knowledge while providing the Services.

8.2 - The restriction in clause 8.1 does not apply to: Any use or disclosure authorised by the Client or as required by law; or any information which is already in, or comes into, the public domain otherwise than through the Consultant's unauthorised disclosure.

9. Data protection (Data Protection act 2016)

9.1 - The Consultant will comply with the Client's data protection policy when processing personal data relating to any employee or patient of the Client and to GDPR laws. The Consultant is ICO registered ZB[redacted].

10. Insurance and liability

10.1 – The Consultant shall have personal liability for and shall indemnify the Client for any loss, liability, costs (including reasonable legal costs), damages or expenses arising from any breach of the terms of this agreement, including any negligent or reckless act, omission, or default in the provision of the Services and this shall remain in force during the period of this agreement only. This is capped in relation to the consultancy work contract only and is limited to the value of the contract. The Consultant has adequate insurance cover with [redacted] Professional Civil Liability Insurance.

10.2 - Although the Consultant will use all reasonable endeavours to procure the performance of the Consultancy, the Consultant does not undertake that work carried out under or pursuant to this Agreement will lead to any particular result, nor is the success of such work guaranteed. Any Project results are provided 'as is'.

10.3 - The Client undertakes to make no claim against the Consultant in connection with this agreement.

10.4 - Neither party shall act or describe itself as the agent of the other, nor shall it make any commitments on the other's behalf.

11. Other activities

11.1 - The Consultant may be engaged, employed or concerned in any other business, trade, profession or other activity.

12. Dispute Resolution

12.1 - If the Client or Consultant believes that the Services provided are in any way deficient, they must notify the other party in writing, clearly indicating and providing detail as to how the Services have been unsatisfactory. Parties will attempt to resolve the dispute through negotiations before any further action is taken.

13. Severability

13.1 - This Agreement shall remain in effect in the event a section or provision is unenforceable or invalid. All remaining sections and provisions shall be deemed legally binding unless a court rules that any such provision or section is invalid or unenforceable, thus, limiting the effect of another provision or section. In such case, the affected provision or section shall be enforced as so limited.

14. Termination

14.1 - Either party may at any time terminate the Consultancy Agreement within 14 days if:

14.1i – The Consultant is in material breach of any of the obligations under this agreement; or other than because of illness or accident, after notice in writing, if the Consultant wilfully neglects to provide, or fails to remedy any default in providing the Services.

14.1ii - The Client is in material breach of any of their roles and responsibilities under this agreement; or other than because of illness or accident, after notice in writing, if the Client wilfully neglects to provide, or fails to remedy any default in completing the stated roles and responsibilities.

14.1iii – Negotiations following any dispute arising, fail.

14.2 - Clause 7 shall survive termination or expiry of this agreement.

15. Variation

15.1 - This agreement constitutes the entire understanding between the parties relating to the Project and may only be varied by a document signed by both the Consultant and the Client.

16. Third party rights

16.1 - The Contracts (Rights of Third Parties) Act 1999 shall not apply to this agreement and no person other than the Consultant and the Client shall have any rights under it. The terms of this agreement or any of them may be varied, amended or modified or this agreement may be suspended, cancelled or terminated by agreement in writing between the parties or this agreement may be rescinded (in each case), without the consent of any third party.

17. Governing law and jurisdiction

17.1 - This agreement and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the laws of England.

17.2 - The courts of England shall have exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this agreement or its subject matter or formation (including non-contractual disputes or claims).

As witness the hands of the authorised representatives of the parties on the dates below:

Signed for and behalf of	Signed for and behalf of
CONSULTANT	CLIENT
Kerry Lum CPsychol	Dr [redacted] CPsychol
Signature Date 01/02/23	Signature Date

Chapter 6: Teaching and Training in Health Psychology

6.1 Teaching Case Study

TEACHING IN HEALTH PSYCHOLOGY
A CASE STUDY

INTRODUCTION

This report describes a series of 5 teaching sessions that I have planned, designed and delivered and a sixth careers session. It will highlight how I assessed teaching needs, structured the teaching programme, content, how I implemented teaching strategies; and how I assessed learning outcomes. The theme for this teaching programme is ‘health psychology interventions to manage stress including coaching psychology’.

The groups of students are third year BSc Psychology students from the University of [redacted] (large group), MSc Health Psychology students from [redacted] University (small group) and health professionals from [redacted] Foundation Trust Family Intensive Support Service for Autism Spectrum Conditions team ([redacted] FISS-ASC). The sessions were delivered between February-April 2022.

I have been fortunate to have worked as a psychology lecturer for twenty years in further education (1995-2015) and have a PGCE (PCET) (Post Graduate Certificate in Education – Post Compulsory Education & Training) teaching qualification. I have been a Chartered Psychologist in the BPS DART (British Psychological Society - Division of Academics, Researchers and Teachers) since 2005 and was awarded Associate Fellow status in the BPS in 2014 in recognition of my longstanding contribution to the teaching of psychology. Teaching at higher education level has been a new opportunity for me. I have used the Systematic Approach (D’Andrea, 2001, Stefani, 2009) to create my teaching programme as this is an organized approach with a learner-centred focus around creating and achieving learning outcomes to enable deep learning.

Table 1: Teaching Programme Plan

Session No.	Location	Session Title	Student audience	No. of students	Time	Format
1	University of [redacted]	Mental health & identity in autistic adolescents: Health psychology interventions to manage stress	BSc 3rd Yr Psychology	38	2 hrs	Face-to-face Flipped learning session
2	University of [redacted]	Maternal autism – health psychology interventions to reduce stress	BSc 3rd Yr Psychology	32	2 hrs	Face-to-face workshop
3	[redacted] University	What has health psychology contributed to the field of stress management?	MSc Health Psychology	4	1 hr	Asynchronous lecture on-line
4	[redacted] University	Health psychology intervention: How coaching models have been used to reduce stress in an NHS ASC service	MSc Health Psychology	4	2 hrs	Face-to-face Workshop
5	NHS [redacted]	How health psychology & coaching psychology can be used in our service to impact stress management & well-being in client families	Health Professionals	5	1 hr	Face-to-face interactive session
6	*University of* [redacted]	*Health Psychologist Careers*	*Mixed levels Psychology*	*12*	*1 hr*	*Live on-line Zoom session*

ASSESSMENT OF TEACHING NEEDS OF STUDENTS

In order to assess the needs of students, teachers must understand what learning is and how best to facilitate learning. Learning may be defined as, “a process which leads to change, which occurs as a result of experience, and increases the potential for improved performance and future learning” (Ambrose et al, 2010). D’Andrea (2001) emphasizes the importance of assessing learning needs and baselines of students.

Over the last half a century, there has been a pedagogical shift from didactic teacher-lead higher education, which often resulted in surface learning; to flexible student-focused education, enabling deeper learning (Simon 1981, as cited in Murphy, 2003). The latter involves a constructivist, more interactive approach with students, engaging their interest, so that learning can lead to change and enhancement of knowledge and skills. Constructivism relates to the active construction of knowledge through the learning process (Hyslop-Margison & Strobel 2007). This active process of learning can be explained through Kolb's Learning Cycle (1984, as cited in McLeod, 2017). Kolb suggested a cyclical process of learning, whereby experience during learning, followed by reflection of the experience, and abstract conceptualization of the experience, leads to an ability to generalize what has been learnt to new situations, thus the learning leads to deep understanding and meaningful knowledge construction (McLeod, 2017).

Another pedagogical shift over the last half century has been from learner models such as Bloom's Taxonomy (Bloom et al, 1956) to models such as Bigg's 3P Model of Learning (Biggs,1993). Bloom's taxonomy is a six-tier hierarchical explanation of different cognitive depths of student learning and was popularized in teacher education programmes over the latter half of the 20th century. Whilst Bloom's taxonomy is still relevant, more systemic models, such as Bigg's 3P model have since become more popular. Bigg's 3P model emphasizes Presage, Process and Product. 'Presage' relates to the characteristics and interaction of the student-teacher environment. 'Process' relates to the creation of learning activities to motivate and inspire deep learning. 'Product' relates to the achievement of learning outcomes. Learning outcomes are the quantifiable evidence that learning has taken place (Allan, 2006).

For a teacher to create appropriate learning activities for their students and ensure an optimum teacher-student environment (presage), one must assess the characteristics of the students. It is important to know what educational level the students are at, what the curriculum requirements are, what prior knowledge or experience students have, to build upon this; and if any of the students have special educational needs. This informs the creation of the learning activities (Process).

Regulated Qualifications Framework (RQF) levels in England, categorise qualifications based on their difficulty ranging from RQF1-8. The students involved in this teaching programme were BSc 3rd year (RQF Level 6), MSc (RQF Level 7) and healthcare professionals (RQF Levels 5-8). To understand the curriculum requirements, I had email exchanges and meetings with Module Leaders from the University of [redacted] and [redacted] University. I also had access to the universities' websites to read about the BSc Psychology degree at [redacted] and the MSc Health Psychology degree at C[redacted] (which is in its first year). The module I would teach on at [redacted] was 'Autism across the Lifespan' (I work for an NHS autism service), (also later giving a 'Health Psychologist Careers' session); and the module I would teach on at [redacted] was 'Stress & Health'. The meetings with the Module Leaders were an important source of information about the students I would be teaching including special educational needs. The [redacted] group contained a few students who were living with autism and one who was selectively mute. This enabled me to ensure I prepared sessions that were 'autism-friendly' making sure they were clearly structured, with clear instruction and without unnecessary demands. From my experience working with young people with autism, I know these strategies can often help. I also found out how best to communicate with the mute student and learned information about the sizes of the groups. There were 50 students enrolled on the module in the [redacted] group and four in the [redacted] group. This was the first module that [redacted] students were receiving face-to-face teaching for, having had their previous first and second years teaching on-line due to Covid. The Module Leader warned me that only around 30-40 students were attending face-to-face. Knowing the RQF level of the students and their previous syllabi gave me an idea of their prior learning in relation to the topics I would be teaching. I also learned about gender diversity within the Sussex group. This was important to know as my first lecture with them included information on 'identity' and I wanted to ensure my lectures acknowledged equality and diversity. I also sent out a 'Therapeutic Skills' survey on-line for both university groups prior to their Workshop session, to understand if any of the students had prior therapeutic experience in order to help with my planning (Table 2).

Table 2: Prior experience in therapeutic skills survey	[redacted] **18 respondents**		[redacted] **4 respondents**	
	Yes	**No**	**Yes**	**No**
Do you have experience communicating with a person with an autism diagnosis?	13	5	NR*	NR
Do you have experience working in a mental health, health or social care setting?	10	8	3	1
Are you, or have you been a carer?	1	17	2	2
Have you had any therapeutic training previously, eg counselling, coaching?	2	16	2	2

**NR = Not Relevant*

The Health Professionals group comprised five students, one at RQF Level 5 (Trainee Occupational Therapist), one at Level 6 (Occupational Therapist), one at Level 7 (Assistant Psychologist) and two at Level 8 (Clinical Psychologist & Trainee Clinical Psychologist). As the group comprised my NHS team colleagues, I knew one of the students had attention deficit hyperactivity disorder (ADHD) and I ensured he felt comfortable to ‘fidget’ during the session (peeling oranges), as I had prior knowledge that he finds it difficult to sit without fidgeting.

PROGRAMME DESIGN, CONTENT & IMPLEMENTATION OF TEACHING STRATEGIES

I used my previous experience in teaching to help me structure this teaching programme and to ensure sessions were tailored for the different audiences of students, as well as incorporating a systematic approach of setting clear objectives and developing the educational plan (D’Andrea, 2001; Stefani, 2009). The sessions for [redacted] were RQF Level 6 for a large audience, for [redacted] were RQF Level 7 for a small group and for healthcare professionals, a small group with a mix of educational levels. The modules I was teaching on at [redacted] and [redacted] were also very different ‘Autism across the Lifespan’ and ‘Stress & Health’ and I had to ensure my overall theme of ‘health psychology interventions to manage stress including coaching psychology’ was interwoven seamlessly within all 5 sessions. Having agreed upon titles for the sessions with the Module Leaders, I created overall aims and S.M.A.R.T. learning outcomes for each session (Table 3). The aim of each session is the overall purpose of a piece of learning (Imperial College London, 2022). S.M.A.R.T. learning outcomes refer to statements of evidence that learning has taken place that are ‘Specific’, ‘Measurable’, ‘Achievable’, ‘Realistic’ and ‘Timed’ (Chatterjee & Corral, 2017). I have also detailed whether learning outcomes are addressing ‘declarative’ or ‘functional’ knowledge. Declarative knowledge refers to factual knowledge learned through

Table 3: Session Aims and Learning Outcomes

Session No.	Aim	Learning Outcomes	Declarative Knowledge	Functional Knowledge	Type of assessment
1	Students understand how health psychology interventions can be used with young people diagnosed with ASC* – to empower them to understand & accept their identity, reduce anxiety & manage stress.	Students able to distinguish between the role of a Health Psychologist compared to a Clinical Psychologist Students contributed to a group exercise around the challenges faced by young people with ASC Students able to identify theory & application of a range of intervention strategies used by health psychologists with young people diagnosed with ASC – to empower them to understand and accept their identity, reduce anxiety and manage stress, and were able to summarise their understanding by completing a 300-word portfolio task.	Factual Summarise factual understanding	Team working and problem-solving skills	Questions to students & class discussion of group activity Summative portfolio task (copy emailed to KL)
2	Students understand how health psychologist intervention and communication can be tailored when working with mothers with an ASC diagnosis, to reduce stress levels of parenting	Students contributed to an activity to demonstrate their knowledge of the skills of an ASC mother Students understood how intervention & communication could be modified for ASC parents and planned a hypothetical intervention as part of a group exercise		Awareness of learning from earlier in module Therapeutic skills group activity & presentations	Questions to students & class discussion of group activity Students create A1 paper plan of intervention (compiled into workbook)
3	Students understood the breadth of contribution from health psychology to the field of stress management	All students able to identify 3 ways in which health psychologists can work in the field of stress management Students able to research & summarise in 400 words 3 ways in which health psychologists have contributed to the field of stress management	Factual understanding Summarise factual understanding		Feedback in session 4 Complete formative assessment on Microsoft Form
4	Students understood how coaching models can be used as part of	Students were able to identify 3 coaching models that can be used by Health Psychologists to reduce stress		Therapeutic skills group activity using	Students create paper plan of intervention

	interventions by health psychologists to reduce stress	Students will understood stages of an intervention and had an opportunity to plan a hypothetical intervention in pairs		coaching models & presentations	(compiled into workbook)
5	Gained an understanding of what health psychology & coaching psychology are & how they could be used in our service	Identified 3 differences/similarities between Clinical Psychologists & Health Psychologists Understood how health psychology & models of coaching psychology could be used as intervention tools in our service	Factual understanding	Understanding team skills	Application to clinical practice & assessment on Microsoft Forms
6	Students understood how Health Psychologists work & the process of entering the profession	All students were able to identify 5 professional fields which a health psychologist can work in Students had an opportunity to ask about the 10 types of Chartered Psychologist in the UK	Factual understanding Summarise factual understanding		Student questions Completion of a LO Microsoft Form after

**ASC = Autism Spectrum Conditions*

memorization whereas functional or procedural knowledge, refers to knowledge related to practical skills acquisition (Ten Berge & Van Hezewijk,1999).

Sessions 1 and 2 were flipped learning sessions. This was the format required by the University of [redacted] for this module. Flipped learning sessions are a type of blended learning that involves students actively acquiring knowledge about the session topic, prior to the session to engage the learners in the subject matter before the taught session (Brewer & Movahedazarhouligh, 2018). This meant I prepared reading before the sessions for students, which the Module Leader posted on their learning platform a week prior to each of my sessions. Flipped learning is an example of a socially constructed learner-centred approach (Fry, Ketteridge & Marshall, 2001). The students had already completed the first four sessions of the module with the Module Leader prior to my sessions. I created a PowerPoint presentation for the first session in the style I had used previously in teaching, with some pictorial content to engage student interest, aid memory and put the information into context (Apperson, Laws & Scepansky, 2008). The room I was teaching in had a problem with sun reflecting onto the whiteboard, so for my second session, I changed the background of my presentation to a darker colour to make it clearer for students to read. The second session was a mainly workshop session, with students working in small groups of 4-6 to create hypothetical health psychology interventions for case studies that I had presented them with. The case studies were based on real clients from the NHS autism service I work for. I had received permission to use them from my Workplace Supervisor (anonymized and with any identifying details changed). Using the flipped learning approach, enabled me to incorporate activities early on in each session, whereby students could demonstrate their learning from the pre-lecture reading which was weaved into the learning for the session.

My third and fourth teaching sessions were for [redacted] University. Due to Covid, they were still using a blended style of learning, whereby they alternated between asynchronous lectures and face-to-face lectures. This meant that my third session was a pre-recorded lecture, which was available on-line to students at the time of their lecture. I designed this lecture so that I could assess the learning outcomes with the students at the start of the face-to-face lecture with the students the following week. The asynchronous lecture was a new experience for me as it was a narrated PowerPoint and I needed to be mindful about the clarity and speed of my narration, as well as ensuring the reading material was appropriate for RQF Level 7 students and motivational for their learning. Ferrer et al. (2020) have highlighted how successful on-line learning necessitates a level of internal motivation on the part of the student.

Upon meeting the students for the first time face-to-face in my second session with them, I started with an introduction icebreaker. This was appropriate as the group was small, and I wanted to connect with them. I used a workshop approach to build therapeutic skills for my fourth session, again asking students to complete a 'Therapeutic Skills' survey prior to the lecture. From this, I was able to ascertain that two of the four students had therapeutic skills experience, and I was able to weave their prior knowledge into the session, to enhance the learning for their peers. I created a PowerPoint presentation, modifying my presentation to ensure the most important points were in the largest font, rather than the titles being in the largest font (Phillips, 2014). I created case studies for students to create hypothetical intervention plans for in pairs, which they then presented to each other.

My fifth session was to my NHS team colleagues, comprising a clinical psychologist, trainee clinical psychologist, assistant psychologist, occupational therapist and trainee occupational therapist. The team has only been working together for less than a year and three of the members have a clinical psychology focus. I wanted the session to be interactive, looking at similarities and differences between health psychology and clinical psychology; so, I could shine a light on the health psychology and coaching psychology strategies that I used in my interventions, so the team could appreciate more than clinical psychology strategizing. I created activities around similarities and differences between health psychologists and clinical psychologists and discussion points around our caseload and health and coaching psychology interventions.

The sixth session I taught was additional to my teaching programme - ‘Health Psychology Careers’ to a mixed group of psychology students at Sussex. This was a live on-line Zoom session, and I took questions from students throughout the session as well as at the end.

ASSESSMENT OF LEARNING OUTCOMES

Assessment plays a crucial role in education as it is a way of finding out how much students have learned and increased their knowledge around a topic area (Struyven, Dochy & Janssens 2005). The Quality Assurance Agency (QAA) is an independent body in the UK which ensures the quality of higher educational programmes. The QAA has expectations around evidence that the appropriate standard of learning has taken place through UK university programmes (University College London, 2004).

Summative assessment is the formal evaluation of learning on a module which is usually graded, whereas formative assessment is less formal and is a record of learning that has occurred through a module (Taras, 2008). Assessment of learning outcomes during my sessions involved mainly formative assessment, including questioning students to gauge learning through the sessions. The assessment after my first session involved students completing a 350-word summative portfolio task for their module, which they emailed to me. This was compulsory for the students to complete and marked by their Module Leader. I had to ensure that the task I set matched those set previously by the Module Leader for word length and task difficulty. The assessment learning outcomes for the second session were formative and took place during the session, with students working in small groups to plan a hypothetical health psychology intervention. Each group of students presented their plan to the rest of the group, justifying their therapeutic choices. The presentations are another way I could assess learning, as students will have had to have understood enough, to present. I collated these at the end of the session to create a workbook of them which I forwarded to the Module Leader for the students to use in preparation for their future summative assessment of the module at the end of their semester.

My third teaching session was assessed by students completing an optional 400-word formative assessment of learning outcomes via a Microsoft Forms link at the end of the narrated PowerPoint. This was followed up in my next teaching session with them the following week. The word length of this assessment was slightly longer for these MSc students, in comparison to the BSc RQF Level 6 students of the [redacted] sessions. Not all students completed these tasks.

My fourth teaching session had a workshop basis, and students worked in pairs to create hypothetical intervention plans for case studies as formative assessment of learning outcomes. Each pair completed two different cases, presenting these to the other pair. I gave feedback on these during the session and collated them at the end of the session to create a workbook of them which I forwarded to the Module Leader for the students, including information about the intervention my NHS service had provided for each. This was something students from my second session at University of [redacted] had requested in their feedback, so I ensured I included it here for the [redacted] students also.

Assessment for session 5 was through discussions of how as a team we could embrace the usefulness of a holistic health psychology perspective and that of coaching psychology. There was also an optional short Microsoft Forms assessment question of the learning outcomes too for the team to complete.

For the sixth session students were given a link to an optional Learning Outcome question on Microsoft Forms.

CONCLUSION

The theme for this teaching programme was ‘health psychology interventions to manage stress including coaching psychology’ and this threaded through the five sessions, with health psychology careers being the topic of the additional sixth session. A Systemic Approach (Stefani, 2009; D’Andrea, 2001) was followed. This is a popular approach used in higher education over the last fifty years. It focused on identifying learning needs and assessing baselines, setting learning outcomes, developing and implementing an educational plan with differing teaching strategies to suit the different audiences; achieving and evaluating the learning outcomes to assess the learning; and a revision cycle of reflection in order to amend future teaching. This enabled me to adjust my sessions as I progressed, based upon feedback from earlier sessions.

Having previously taught psychology at RQF Levels 2-3 (GCSE, A’Level, Access to Higher Education), I have grown as a lecturer through the teaching competency by embracing updated teaching models and expanding my experience to address audiences RQF Levels 6-8.

REFERENCES

Allan, J. (2006). Learning outcomes in higher education. *Studies in higher education, 21(*1), doi:10.1080/03075079612331381487

Ambrose, S.A., Bridges, M.W., Lovett, M.C., DiPietro, M., Norman, M.K., (2019). *How learning works: 7 research-based principles for smart teaching.* Tantor Audio

Apperson, J. M., Laws., & E. L., Scepansky, J. A. (2008). An assessment of student preferences for PowerPoint presentation structure in undergraduate courses. *Computers & Education*, *50*(1), 148-153.

Biggs, J. (1993). What do inventories of students' learning processes really measure? A theoretical review and clarification. *British journal of educational psychology*, *63*(1), 3-19.

Bloom, B. (1956). Bloom's taxonomy.

Brewer, R., Movahedazarhouligh, S. (2018). Successful stories and conflicts: A literature review on the effectiveness of flipped learning in higher education. *Journal of Computer Assisted Learning*, *34*(4), 409-416

Chatterjee, D., Corral, J. (2017). How to write well-defined learning objectives. *The Journal of Education in Perioperative Medicine, 19*(4), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5944406/#:~:text=An%20effective%20learning%20objective%20should,a%20well%2Dwritten%20learning%20objective.

D'Andrea, V.M., Organizing teaching and Learning, (2001), cited in Fry, H., Ketteridge, S., Marshall, S., *A handbook for teaching & learning in higher education.* Kogan Page.

Ferrer, J., Ringer, A., Saville, K., Parris, M.A., & Kashi, K. Students' motivation and engagement in higher education: the importance of attitude to online learning. *High Education.* 83**,** 317–338. https://doi.org/10.1007/s10734-020-00657-5

Fry, H., Ketteridge, S., Marshall, S. (2001). *A handbook for teaching and learning in higher education.* Kogan Page.

Hyslop-Margison, E. J., Strobel, J. (2007). Constructivism and education: Misunderstandings and pedagogical implications. *The Teacher Educator*, *43*(1), 72-86.

Imperial College London. (2022, April 28). *Aims Objectives Outcomes – What's the difference.* Retrieved April 28, 2022, from https://www.imperial.ac.uk/staff/educational-development/teaching-toolkit/intended-learning-outcomes/aims-objectives-outcomes---whats-the-difference/

McLeod, S. (2017). Kolb's learning styles and experiential learning cycle. *Simply psychology*, *5*.

Murphy, P. (2003). Defining pedagogy. In *Equity in the classroom* (pp. 17-30). Routledge.

Phillips, D.J.P. (2014, April 14 Ted Talks). *How to avoid death by powerpoint*. Retrieved April 28, 2022 from https://www.youtube.com/watch?v=Iwpi1Lm6dFo

RQF (Regulated Qualifications Framework). (2022, May 19). *What do the RQF levels mean?* Retrieved from May 19, 2022, from https://www.iqualifyuk.com/What-do-the-RQF-levels-mean#:~:text=The%20UK's%20Regulated%20Qualifications%20Framework,level%20of%20challenge%20or%20difficulty.

Stefani, L. (2009). *A handbook for teaching and learning in higher education enhancing academic practice, 3rd edition.* New York: Routledge.

Struyven, K., Dochy, F., & Janssens, S. (2005). Students' perceptions about evaluation and assessment in higher education: A review. *Assessment & Evaluation in Higher Education*, *30*(4), 325-341.

Taras, M. (2008). Summative and formative assessment: Perceptions and realities. *Active learning in higher education*, *9*(2), 172-192.

Ten Berge, T., & Van Hezewijk, R. (1999). Procedural and declarative knowledge: An evolutionary perspective. *Theory & Psychology*, *9*(5), 605-624.

University College London (UCL). (2004). *Quality Assurance Agency for higher education.* Retrieved from May 20, 2022, from https://dera.ioe.ac.uk/4500/6/COP_complaints.pdf

6.2 Teaching Evaluation and Reflective Commentary

EVALUATION & REFLECTIVE COMMENTARY

INTRODUCTION

This report evaluates and reflects upon the teaching programme I have delivered *(Table 1)*. The theme was 'health psychology interventions to manage stress including coaching psychology'. My personal teaching philosophy is based on lifelong learning and my evolution as an educator.

Table 1: Teaching Programme Plan

Session No.	Location	Session Title	Student audience	No. of student	Time	Format
1	University of [redacted]	Mental health & identity in autistic adolescents: Health psychology interventions to manage stress	BSc 3rd Yr Psychology	38	2 hrs	Face-to-face Flipped learning session
2	University of [redacted]	Maternal autism – health psychology interventions to reduce stress	BSc 3rd Yr Psychology	32	2 hrs	Face-to-face workshop
3	[redacted] University	What has health psychology contributed to the field of stress management?	MSc Health Psychology	4	1 hr	Asynchronous lecture on-line
4	[redacted] University	Health psychology intervention: How coaching models have been used to reduce stress in an NHS ASC service	MSc Health Psychology	4	2 hrs	Face-to-face workshop
5	NHS [redacted]	How health psychology & coaching psychology can be used in our service to impact stress management & well-being in client families	Health Prof-essionals	5	1 hr	Face-to-face interactive session
6	University of [redacted]	Health Psychology Careers	Psychology students Levels 6-7	12	1hr	Real time lecture on-line

Evaluation and reflection are important processes in teaching. Ramsden (1992) refers to evaluation as an “analytical process that is intrinsic to good teaching”. Evaluation and reflection enable improvement and future teaching to be more effective, enhancing student learning. To evaluate, one must first reflect. The planning and delivery of this teaching programme followed a systematic approach (Stefani, 2009). The final stage of this approach being the ‘Revision Cycle’. This involves the teacher reflecting upon the teaching, collating evaluative evidence, including from students and peers; and incorporating feedback changes into future teaching planning.

Hounsell (2009) suggested an ‘Evaluation Cycle’ which emphasized ‘timely’ evaluation gathering multiple sources of feedback to enable objective, rather than purely subjective reflection. Fry et al., (2001) suggested feedback may be self-generated, from students, from peers and incidental feedback. The feedback I gathered included self-generated feedback after each session, feedback from students; from a peer at [redacted] University; and incidental feedback in noting varying attendance levels at University of [redacted].

WHAT WENT WELL - SUCCESSES

As a qualified teacher with twenty years’ experience teaching psychology, and as a British Psychological Society Chartered Psychologist in the Division of Academics, Researchers & Teachers for 17 years (BPS-DART), I have experience of planning, delivering and evaluating psychology teaching sessions. This meant I had confidence in my abilities as a lecturer, although I had felt reluctant to teach again, as I had made the deliberate move away from my career in education to focus on clinical work. My previous teaching experience with students aged 14-77 years (mainly 16-25), equipped me with a holistic understanding of educational settings, and although I had not taught in higher education previously, having been a student myself at 6 universities, I had some appreciation of teaching in higher education. I felt confident when experiencing situations where I had to change flexibly where the environment needed, such as session 4 at [redacted] University, and the Module Leader getting dates muddled for the session 6 at [redacted] *(see Challenges section);* and dealing with challenging student behaviour. This teaching programme enabled me to develop my experience further, by delivering education to RQF Levels 6-8 (Regulation Qualifications Framework – RQF), having previously taught psychology at RQF Levels 2-3; and to teach a group of healthcare professionals for the first time.

I used my networks to secure teaching at [redacted] and [redacted] Universities. I successfully weaved health psychology and coaching psychology across the teaching programme, with my theme, despite teaching on a variety of modules, 'Autism through Lifespan', 'Stress & Health', 'Careers in Psychology'.

Prior to planning my teaching, I had planning meetings with Module Leaders from both universities. This enabled me to assess needs for my sessions, finding out about the course, module, environment, prior learning of students, size of cohorts; and enabled me to view some previous lectures. This was valuable for me to pitch my sessions as I was teaching in higher education for the first time. These meetings were also an opportunity to find out about special educational needs (SEN) and plan inclusively for their diversity. In the Sussex group (sessions 1 and 2), there were students living with autism, selective mutism and trans-gender students. I used my previous experience teaching SEN students and working with young people living with autism to plan resources and sessions that were free from unnecessary distractions, with clear instructions. The Module Leader explained how the selectively mute student preferred to communicate, so I could do so. Due to student feedback being anonymous, I am not sure how these modifications were received by the SEN students. One of my NHS colleagues has attention deficit hyperactivity disorder (ADHD) and finds it difficult to sit in meetings without fidgeting. I ensured he felt comfortable to peel oranges and use his laptop during the healthcare professional's session. *(See 'Challenges' regarding adjustments made for trans-students.)* I communicated clearly with Module Leaders and sent my resources ahead of time to ensure they were aimed at the appropriate level and allow them to be released to students before sessions.

[redacted] required flipped learning sessions for sessions 1 and 2 and I used my prior experience preparing for these. I prepared reading and an activity for students to complete prior to attending the sessions, so we could build upon this prior learning. This contrasted with 'further reading' I prepared for after sessions 3 and 4 at [redacted], which were not flipped sessions. Before sessions 2 and 4, I asked students to complete a 'Therapeutic Skills Experience' survey on-line, so I could gauge how many students had prior experience in preparation for the skills-based workshops. This knowledge of prior experience meant I could target workshops according to existing skills experience.

This programme afforded me opportunities to deliver teaching through a range of teaching styles: sessions 1 and 2 - flipped learning sessions, sessions 2 and 4 - workshop sessions, session 3 was a pre-recorded asynchronous lecture, session 5 an interactive session with healthcare professionals and session 6 a live on-line Zoom session. I am a keen advocate of social constructivism in teaching (Hyslop-Margison & Strobel, 2007) and always encourage student activity in sessions and enjoyed delivering workshop sessions the most, as you can literally see students developing skills and applying knowledge through case study challenges, to scaffold their learning through a growth mindset (Nottingham, 2017). I found the on-line sessions the least satisfying to teach as it's more difficult to gauge student learning through this format, whether real-time or pre-recorded (Kebritchi, Lipschuetz, & Santiague, 2017). If I teach again and have choice, I favour interactive workshop sessions.

Every teaching opportunity is unique, and I reflected how I modified my presentation and communication style in the healthcare professional's session, discussing how health psychology can be applied in our NHS service as part of our clinical practice.

Communicating is key to developing new knowledge and I modified my communication with the different audiences, verbally, non-verbally, through my resources and adapting to the environment. Due to my experience, I was relaxed teaching, facilitating a relaxed atmosphere in my sessions, enabling students to ask questions throughout sessions. Where possible, I took opportunities to walk amongst students and develop a dialogue with those who had been less forthcoming to check learning. In my Zoom session (session 6), I answered questions from students who used the 'raise hand' icon, as well as taking questions from the 'chat' facility at the end. Using a variety of communication strategies with students throughout sessions, aids understanding of how well the session is 'landing' with students.

I used group work, pair-work, brief Youtube clips and questioning activities in face-to-face sessions (1, 2, 4 and 5), to maintain student engagement and culture knowledge development.

After each session, I wrote timely personal reflections and gathered student feedback via paper or on-line evaluation forms, containing Likert style and open-ended questions. Anonymized paper feedback was collected in envelopes to enable truthfulness.

Students at [redacted] completed a summative learning outcomes assessment after session 1, towards their module portfolio, whereas assessment of learning outcomes for other sessions was through formative assessment. [redacted] students emailed me copies of their summative assessment for my evidence. Their Module Leader marked this work. I had evidence of learning outcomes from all sessions, either through activities completed after the session (sessions 1, 3 & 5) or through questioning during the sessions (sessions 1, 2, 4, 5, 6) and workshop activities (sessions 2 & 4), to reflect on the learning that had taken place.

I received formal peer evaluation from [redacted] which aided my reflection, and student feedback after each session. Generally, very positive comments were made about my sessions.

CRITICALLY EVALUATED CHALLENGES

At [redacted] the Module Leader queried the phraseology of my PowerPoint slides and made suggestions to shape them, suggesting 'gender identity disorder' be changed to 'Gender Diversity', due to a couple of trans-students. At the time, I felt this was 'picky' but upon reflecting, I am grateful. I learnt from this experience that I should not have felt defensive because the points she was making helped shape the slides and prevented me offending some of the students. In future if I am teaching around gender diversity, I will be particularly sensitive around wording. This attention to detail contrasted with the Module Leader from [redacted], who afforded me autonomy to prepare my resources.

[redacted] use 'Padlet' with students in some activities, which I found I was unable to access as guest lecturer, meaning I had to change planned Padlet activities to traditional group activities within the sessions, thinking on my feet.

I had a technical problem at [redacted] in session 1, when the computer mouse wouldn't click off Youtube, after a short clip, instead taking me down a YouTube wormhole. I felt embarrassed to be challenged by the technology. A student volunteered to intervene to solve this. I took note I need to improve my skills around technology in teaching. The lecture room had lighting and heating issues. Sun on floor-to- ceiling windows made it difficult to see some of the slides on my PowerPoint – I amended the background contrast for my second session to counter this. The room was extremely warm, and windows didn't open, making it uncomfortable for me teaching and for the students. I opened the door to cool it down when there was no noise from the corridor but had to close it again when other lectures were noisily spilling out. The environment can have a real impact on the success of a teaching session. I didn't experience much challenging behaviour, however, there were students arriving late. I knew from experience that challenging late arrivals can negatively affect the atmosphere in a session, so was mindful to let them sneak in. I did have to ask a couple of latecomers to move though, as they had pulled a desk in front of the only exit of the room – thereby blocking the fire escape!

Session 1 feedback highlighted some students wanted more interactive case study activities; therefore, I ensured my second session was workshop based. Feedback suggested this was very successful and students were very engaged and presented their plan to their peers. After session 1, only around half of the students emailed me a copy of their learning outcome assessment, presumably because this was an additional task after the session. As a result, I ensured evidence of formative assessment was gathered *during* other sessions and would consider options such as incorporating a quiz at the end of sessions to check learning outcomes in future. Although I wasn't marking assessments emailed to me, I did reply to each with a few encouraging comments but one student mis-read my comments and thought I was being critical of her work. She emailed apologizing that her work was not good enough. I responded pointing out she had mis-read my message, which had only contained positive comments and emailed the Module Leader to explain, so she could check on the student's wellbeing. The Module Leader reported the student was high achieving and had not been happy with *her* completion of the assessment and was embarrassed to have 'got hold of the wrong end of the stick'.

During session 2, I had a terrible cough & could barely speak at various points during the session. This made me feel vulnerable and embarrassed – in future I would try to rearrange the session rather than put myself through that again. I noted incidental feedback from session 2 that 6 students less attended than session 1 but am not sure why. A student expressed disappointment there was not time to hear how my NHS service had dealt with case studies in session 2 as I ran out of time to explain this – I dealt with this, by adding detail to the student handbook I created for them after, also collating their work from the session. I created a similar student workbook for the [redacted] workshop too. I ran short of time in both [redacted] lectures, due to preparing too much content, noticed by some student feedback – As a result I reduced the content for [redacted] sessions, so I could give feedback about my NHS service's actions.

The asynchronous lecture at [redacted] was a first for me. I narrated a PowerPoint and altered it to MP4 format, googling my way through the technology and sought tips from peers and the Module Leader, learning a lot on the way. I could not monitor student engagement as I was not present when students watched the session. It later turned out the Module Leader had not managed to make my session 'live' when it should have been, and students had not watched this session prior to my second session with them. They were instead asked to watch it after session 4. I felt annoyed students had not watched the session due to reasons beyond my control. In future, in this situation, I would ask the Module Leader to double check students had gained timely access. At the face-to-face session, one student was isolating due to Covid and appeared in virtual form on a laptop. I was surprised by this and slightly challenged to remember to involve her actively throughout the session. She was able to engage fully, answering questions and taking part in the paired activity. This was a learning point for me about being adaptable with technology use during a session. Students at [redacted] were not as engaging as at [redacted] despite being master's students. I dealt with this by learning their names and addressing them personally throughout the session to draw out their engagement.

Session 5 was with my NHS workplace team. Three of the five attending work in clinical psychology and I was proud to show them how health and coaching psychology shape my clinical interventions in our team. Through discussions in the session, they maintained their attitude of clinical psychology being the 'real' psychological intervention. This saddened me and is a systemic issue I predict will be ongoing in my future health psychology career. I realize promoting health psychology is a necessary part of the role of a health psychologist! One of my team did write positive reflections about health psychology enhancing the team in his feedback.

Session 6 was a live on-line session on 29th April to be recorded. I was shocked to receive emails when on holiday in France on 22nd April from the Module Leader, giving me the link for my session that day! Then another email from her to explain she had got her dates confused realizing after the students joined the Zoom call and therefore told them I had been suddenly taken ill, and the session would be rescheduled for 29th! I felt angry she had 'thrown me under the bus' to save her own embarrassment, following her mistake. I was grateful she emailed me to own up but felt she had potentially tarnished my reputation from the students' perspective. I remained professional but didn't reply to her email, as I felt angry. I reflected on this in supervision and am proud of how I dealt with it. I sent her my slides for the students ahead of time and joined the call early on 29th. The session went well and comments from the students in the chat were very positive.

Overall, Microsoft forms feedback completed after lectures 3 and 6 yielded fewer responses than paper-based feedback from other sessions, completed before students left the room. I think in future, if using an electronic link, I would ensure students complete it before they leave the session. As not all students gave feedback, I am not sure what they all thought of the sessions.

I was not paid by [redacted] as there was no funding for this but was paid the highest available guest lecturer fee [redacted] University, in recognition of my previous teaching experience. This impacted how valued I felt for my efforts and my opinion of that university.

AREAS TO IMPROVE

I have always been critical of my teaching and spend too long preparing materials. This teaching programme reminded me how aggrieved I feel spending weekends preparing. My diligent preparations lead to successful sessions but if I were to teach again, I would spend preparation time more wisely, perhaps creating more student lead sessions.

I learned to master new teaching technologies in this programme (narrated PowerPoint and live Zoom session) and feel proud to have updated my teaching skills. Overcoming my reluctance of new technology in teaching would be an ongoing challenge for me.

Teaching in higher education did not seem very different for me compared to teaching in further education – teaching skills and students were virtually the same age range, although different RQF level. If I were to teach again in higher education, I would investigate updating my teaching accreditation through ‘Advance HE’.

SUMMARY

When I started the Doctorate, I hoped my prior experience teaching psychology would allow me to apply for prior accredited learning for this competency, teaching again felt like a step backwards in my career. In hindsight, I am glad I completed this teaching programme, as I now see it as a step forward in my professional development as a Health Psychologist. It was a new opportunity for me to teach in higher education and teach healthcare professionals. I reflect now how I have developed my teaching skills over this teaching programme with new technology, updated models, and teaching different RQF levels of students.

REFERENCES

Advance HE. (2022, May 13). *Advance HE Home.* Retrieved May 13, 2022, from https://www.advance-he.ac.uk/

Fry, H., Ketteridge, S., Marshall, S. (2001). *A handbook for teaching and learning in higher education.* Kogan Page.

Hounsell, D. (2009). Evaluating courses and teaching. *A handbook for teaching and learning in higher education*, 198.

Hyslop-Margison, E. J., & Strobel, J. (2007). Constructivism and education: Misunderstandings and pedagogical implications. *The Teacher Educator*, *43*(1), 72-86.

Kebritchi, M., Lipschuetz, A., & Santiague, L. (2017). Issues and challenges for teaching successful online courses in higher education: A literature review. *Journal of Educational Technology Systems*, *46*(1), 4-29.

Nottingham, J. (2017). *The learning challenge: How to guide your students through the learning pit to achieve deeper understanding*. Corwin Press.

Ramsden, P. (1992). *Learning to teach in higher education.* Routledge

RQF (Regulated Qualifications Framework). (2022, May 12). *What do the RQF Levels Mean?* Retrieved May 12, 2022 from https://www.iqualifyuk.com/What-do-the-RQF-levels-mean#:~:text=The%20UK's%20Regulated%20Qualifications%20Framework,level%20of%20challenge%20or%20difficulty.

Stefani, L. (2009). *A handbook for teaching and learning in higher education enhancing academic practice, 3rd edition.* New York: Routledge.