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PROFESSIONAL DOCTORATE IN HEALTH PSYCHOLOGY

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For my family - my biggest champions.

Contents page

Acknowledgements

Completing the Professional Doctorate has been the most challenging, and rewarding, experience of my life. I owe my success to a number of people, too many to name all.

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Portfolio Abstract

Rebecca Rusheida Brown, Professional Doctorate in Health Psychology, 2024

This portfolio covers my journey through the Professional Doctorate in Health Psychology, including my academic, professional and personal growth. This portfolio documents the work I have undertaken to fulfil the competences of this Doctorate. This work was completed on placements in various workplaces.

The work outlines the five core competencies required when training to be a Health Psychologist: Professional Competence; Advanced Research Methods; Teaching; Consultancy Skills; and Psychological Interventions.

This portfolio is split into five chapters, each of which provides a written paper or case study alongside a reflective commentary about my experience of completing this work. Further detail regarding the contents of each chapter can be found in the introduction.

Introduction

As detailed in the abstract, this portfolio is divided into five chapters, each describing my experiences and work as a trainee Health Psychologist across the core competencies.

Professional Competence

This chapter provides an overview of my experiences throughout the course of this Professional Doctorate and covering a number of workplaces and roles. A reflexive report considers my skills development in relation to each of the core competencies and generic professional competencies integral to becoming a Health Psychologist. This chapter is supported by extracts from my reflective diary, which I've kept during my years of active study.

Advanced Research Methods

This second chapter details my research projects. I present my quantitative and qualitative studies which consider the impact of a community weight management program developed as part of my employment in a community interest company. The aim was to embed behaviour change theory into practice and design a course to support healthy eating in key cohorts of the local community. The quantitative research focuses on the measured outcomes of the program; the qualitative research considers the experiences of people who took part in the course and the wider impact of their learning and development. Both research studies are presented as journal articles. Following each of these is the respective reflective piece to accompany the empirical research where I discuss my experiences of designing, conducting and disseminating research. Finally, I present my systematic review. This

was conducted later in my journey, in my role as a trainee Health Psychologist in an Older Adults' Community Treatment Team. The review investigated group pain management programmes in older adults to inform best practice and pre-empt the design and/or implementation of a group program in my current patient group. Again, the paper is presented as a journal article and followed by a reflective commentary.

Teaching

My teaching competence was the first completed competence, as training was a regular ask of my role at the time. I developed and delivered 5 training sessions to varying audiences covering popular public health topics and behaviour change conversation techniques. I used the additional learning from the Doctorate course to enhance my planning, delivery and evaluation to meet the necessary learning objectives of this competence. The case study is accompanied by a multi-source evaluation of my training sessions.

Consultancy Skills

This chapter on consultancy covers how I identified a consultancy opportunity and conducted this work, including negotiating a contract and evaluating the work. This project was completed whilst I was working in a local authority public health team. I planned, carried out and reported on, an audit of long-acting reversible contraceptives delivered in primary care. This drew on my previous experiences and built on my data skills. This case study is accompanied by a working agreement and conditions document.

Psychological Interventions

In this final chapter I present two case studies, each accompanied by a reflective piece. The first case study details my work developing and distributing a leaflet around sleep hygiene practices in a group setting, whilst working in social prescribing. This submission was completed early on my journey. The second case study is my one-to-one work with a client in the same service, who was looking to be more active and lose weight. This case study was conducted towards the end of my Doctorate journey. Both case studies detail the process of intervention from assessment and formulation to delivery and evaluation.

CHAPTER 1:

PROFESSIONAL COMPETENCE

Reflexive report

Introduction

The portfolio I have submitted showcases the work I have completed towards the Professional Doctorate over the last eight years, including time on leave to start a family. Over that time period, I have been employed in five different roles, twice in the same community organisation at different time points.

I started the programme as a full-time employee at a community interest company (CiC) in the North East of England who specialise in supporting clients to make healthy behaviour change. This was also where I returned during my 4th employment in this course. My role in this workplace began working on a specific initiative to promote long acting reversible contraceptive (LARC) uptake across primary care practices in the area, which included training, auditing and effectively communicating with General Practice partners and the public. I was promoted from here to be the Training Manager, to develop and deliver a range of behaviour change skills and topics training to other health professionals and the general public. During this time, I completed the training module, as this was the bulk of my daily role. I became involved in the development of a social prescribing service, to provide behaviour change support and signposting to patients living with long term conditions, and which was being piloted across a particularly deprived area of a local city. From the experience of implementing another's vision, and the training I was receiving as a Trainee Health Psychologist, I worked closely with the management team to develop a social prescribing structure that would fill the gaps identified. We received funding from the Health Foundation to pilot this in another local area. During this role, I was able to complete my non-face-to-face intervention, using my experiences working with people living with long

term conditions. Before I left the company, I was able to grow this model from one condition in one GP practice, to three long term conditions in five GP practices. It has since become the primary social prescribing service across three local authority areas, using the model I supported and tested. I will reflect later in this report about the missed opportunities to complete more modules during my time here.

I left the position with the CiC and moved into XXX County Council - a large county on the borders with Scotland, with a mix of rural and town settings. As a Public Health Manager, my portfolio covered substance misuse, housing and health in all policies. A change of pace, I was able to complete a piece of consultancy work for a colleague working within a different portfolio, calling upon my experience with LARCs and sexual health in a previous role. After a year, I left this position to become part of the inaugural team working on the Violence Reduction Unit at the Police and Crime Commissioner's office. The opportunity presented for someone with an interest in behaviour change and public health and I thought this would be an ideal opportunity to introduce Health Psychology into a new role. Unfortunately, although my employment lasted for almost two years, my experiences here did not enable the Doctorate work to be completed and following maternity leave, I accepted a position back at the community interest company (CiC) where I started my Doctorate.

Going back to the CiC, as a member of the support team in their self-managing organisation, I was hopeful I could complete the remaining competencies. I was supported to work directly with patients once again to complete the face-to-face intervention work. As a member of the management team, I was involved in developing and delivering on large-scale projects, which allowed me to undertake both empirical research studies around a Tier 2 Community Weight Management Service contract we held at the organisation for a year. After a short period of ill health, I reflected on my aims in my career and the work that I wanted to do. I was finding it difficult to balance the stress of people management, with my home life and made the decision to look for a more patient-based role. I was successful in my application to work within the local Mental Health Trust. I am in this position currently and

am honoured to be the first Health Psychologist (in-training) employed by this large Trust. I work in the Community Treatment Team with older adults, many of whom have functional or organic issues, including dementia, Parkinson's and recovery from stroke or brain injury.

This report contains a summary of my experiences and reflections over the years and goes some way to documenting the journey I have been on, professionally and personally, in my pursuit of becoming a Health Psychologist.

Core Competencies

Teaching in Health Psychology

Before the Doctorate, I was already in position as Training Manager with a community interest company and had some experience developing and delivering training courses. However, through engaging with the Professional Doctorate sessions, I learned how to enhance the work I was delivering and make the most of my public speaking skills and opportunities. For example, I began to understand learners' needs prior to the session, so that I could address them in the learning outcomes (Biggs & Moore, 1993). This was the first competency I submitted and passed and during my experience I engaged in practices which were new at the time, but have remained with me since that point. I gathered evaluation of my training programme from multiple perspectives - learners, colleagues and my own reflection - so that I could build a clear insight into what was working and where development was needed and ensured the presentations had a clear structure to support learning (Race, 2007). Through some of the recommended reading, it was confidence-boosting to learn that some of the practices I undertook in training and teaching were evidenced-based - for example, I make my sessions interactive (Kearsley & Schneiderman, 1998). Appreciating the theory and evidence underpinning techniques I was using added to my understanding and confidence.

I enjoyed the development, delivery and evaluation of my teaching module; it felt natural to me to complete this module first and my confidence was boosted when I passed a module so early in the Doctorate course. I have continued to develop on the training and teaching I do in my professional career, furthering my knowledge and exploring the evidence base to design high quality training the trainer courses to support interventions I have developed.

Psychological Interventions

The next competence which I completed was psychological interventions. Before the Professional Doctorate my experience was in training and service development, so I have grown a lot in the delivery of psychological interventions. The teaching sessions we received supported me to recognise an opportunity in the work placement at the community interest company to fulfil the non-face-to-face element of this competency. Working with clients living with long term conditions, I noticed there was often presentation of sleep issues, which allowed me to develop an evidence-based leaflet to support me to have the same, quality conversation with multiple people. It also provided an opportunity to develop the company's take home resources, which were scarce at this point due to the social prescribing services being new. I noticed that this project allowed me to think deeply about the development of leaflets - in the past, I saw a leaflet as some information in a legible font on a page. After researching leaflet use in health psychology, I understood that leaflets provide much more opportunity and should be carefully thought out, from the language used; the information presented; and the intended audience. Upon reflection, the intervention itself was successful and I learned a lot about the power of the written word in supporting quality interventions and embedding behaviour change.

At this time, although I had clients, I did not take up the opportunity to complete the face-to-face intervention assignment. On reflection, I wasn't confident in my skills to ask for observation - I was trying to manage my own expectations of being a practitioner and had not had any formal training in behaviour change techniques, other than what was provided

on the Doctorate course. My main role was in service development and management and practitioner time was scarce, which did not help my confidence levels. Upon my return to my original workplace a few years later, following training in behaviour change skills such as motivational interviewing (Miller and Rollnick, 1995), I was determined to use the client facing time to complete the observation and intervention development portion of this module. The first step was to be observed - I was nervous to be observed by the Chief Executive of the company, a former GP. Despite the nerves impacting on my performance a little - I tried to showcase as many of my skills as possible, rather than focus on what was truly needed in the situation as an integrative practitioner - the observation session went well. Receiving the praise from my manager boosted my confidence and I quickly moved on to the intervention assessment, formulation and delivery phase. I noticed that in the social prescribing team, I and my colleagues did not take the time to assess and formulate the intervention well, partly due to time pressures of being in a front line primary care service and also due to the level of behavioural intervention typically delivered in social prescribing. It is something that I took forward in my role, both as a manager of the service and also into my current role as a practitioner in NHS services. I have noticed that taking the time to work through assessment and formulation thoroughly allows for a more tailored and successful intervention with clients. More recently, working with service users has helped me to appreciate that formulation is a process which serves a purpose for the service user as much as the practitioner; helping the individual to make sense of their experiences and helping the practitioner to support them to make informed choices for treatment.

Consultancy Skills

Prior to the Doctorate course, I had no experience of consultancy, nor how it connected to the role of a Health Psychologist. My initial response to the requirements of the consultancy competency was one of fear - of the unknown and of the temporary nature of consultancy work as part of my professional career. However, once I understood more about

consultancy and the processes involved (Cope, 2010), I felt more competent to be able to offer my skills to colleagues and other departments. At this time, I was working as a Public Health Manager for a local authority. A colleague was working on increasing the uptake of long acting reversible contraceptives (LARC) and with my prior experience in this sector, I offered my services to work as a consultant and complete the work on her behalf. I realised I have skills in relationship building which helped me to ensure I understood the needs of the client.

Upon reflection, this was a new experience for me and I hadn't considered the "business" side of a career in Health Psychology. I enjoyed the process of contracting and appreciating the value of the work and skills I have and continued to develop.
Initially my submission failed because of a missing Appendix: the costing calculator. Whilst the first news of this piece of work not passing was disappointing, and felt unfair, it was used as a learning experience for all involved and I felt valued to be asked to support how to re-word the module guide, so that others had a clear understanding of what was expected at submission.

Advanced Research Methods

This has been my final competence completed and was certainly the competence I found most challenging but also is the competence where I have learnt the most. My experience of research has only been in educational settings and I have had no experiences in the workplace as a research assistant, and felt at this point that it was a gap in my experience. I was starting the competence from a place of low confidence and I am grateful for the continual support from the team of professionals at the University and colleagues in my cohort. I have often struggled with the processes and statistics involved in research, partly due to my lack of experience. The ethics submission, design and delivery of this empirical research project has highlighted to me my own insecurities and coping strategies. The ethics is an ideal example of this - I didn't submit for a while (to my tutor or to the

committee) and yet it was approved quickly and with only minor amendments. I need to be invested in the work I'm doing and the opportunity to evaluate and better understand the impact of a service which I had recently designed and implemented seemed ideal. I was conscious of my previous missed opportunities, so upon my return to the community interest company, I was clear that my goal was to conduct useful research. There were a lot of nerves around the data analysis, and yet this has been the most exhilarating part of the process for me - seeing the impact and being able to evidence what I had hoped to achieve by designing the weight management service.

The qualitative element of the empirical research was my most enjoyable part - I enjoy client interaction and being able to discuss their experiences was enlightening. However, it was difficult at times to hear criticism of the course I designed and I was challenged to remember my role as a researcher, rather than intervention designer, and treat the feedback as an opportunity for development and improvement.

My systematic review has been the ultimate piece of work I have completed to fulfil this competency. I frequently scan the literature to keep up to date with research and evidence, and yet the methodical process of a systematic review has often paralysed me. I needed to break it down further and utilise my skills in behaviour change on my own behaviour. I chose to focus the systematic review on my newest role, as I completed it at a time when I was moving into the NHS as a trainee Health Psychologist and developing a pain management programme for people with cognitive decline. I enlisted support from my assistant psychologist colleague at my workplace who had more experience in delivering on systematic reviews and was able to guide me through the process.

Despite this being the last competency, it is certainly the area where I have grown the most and would look forward to the opportunity to complete research in my field again.

<u>Professional Competence</u>

Throughout my time in the Doctorate I kept a reflective diary of events - positive and negative - which impacted on my learning and development as a Health Psychologist. Although I had prior knowledge of reflective cycles, such as Gibbs' (1988), keeping the regular diary helped me to put changes into practice and remind myself of difficult situations that I managed well. I was also able to advocate more honestly for the role of reflection for practitioners I supported in the Social Prescribing Service, and I developed training and action learning sets to continue the practice.

Working to professional standards has been a new experience for me. The code of conduct has supported me to challenge myself in difficult situations and remind me how I can support my own practice and work with clients whilst maintaining appropriate boundaries.

In addition to work placements, I attended regular meetings with my Supervisor and completed monthly progress reports to document what was happening towards the Doctorate. Supervision was new to me and I found it to be a great resource, both personally and professionally.

As can be seen from the above, my professional skills have greatly improved from the beginning of the course until now. As my confidence has grown, I have learned to build strong professional relationships and improve my communication skills with clients. I would feel confident engaging in private practice and charging appropriately for my time.

Core Skills

Development and maintenance of systems for legal, ethical and professional standards in Health Psychology

I had some awareness of professional standards from my completion of a Masters and working in the healthcare industry. I have always held myself to account against the British Psychological Society (BPS) Code of Conduct (BPS, 2009) and had some awareness

of the Health and Care Professions Council (HCPC) Standards of Proficiency (HCPC, 2015), although had not been accountable against this until my roles in healthcare began. Both of these frameworks have supported me throughout my time as a Trainee and will continue to support me in my future career as a qualified Health Psychologist.

In my most recent role, I was initially referred to as “Dr Brown, Health Psychologist”. This made me uncomfortable as I have not yet completed the programme and this is a protected title. I was sure to correct the mistake and had my badge re-written with my correct title as a “Trainee”, without the “Dr” so that I could continue acting within the limits of my skills and knowledge (Michie, 2004).

Boundaries are also important when maintaining professional standards (BPS, 2009). An example of this would be when a friend had asked for support to adjust to a recent diagnosis. Whilst this was within my skill set, it was important for me to consider who the best person would be to deliver a therapeutic intervention. I was able to offer support and direction, without compromising my boundaries as a professional in training.

Completing ethics for my research project was a challenge - it had been a long while since I had completed a research project in my Master’s degree and I had not independently sought ethics before. I was able to complete the forms and felt confident to make decisions when those offering advice had conflicting opinions. I appreciate the value of ethical consideration, not only the process of achieving sign-off but also the process of thinking more deeply and carefully about the impacts of the work. I have been building behaviour change activities into the Wellness and Recovery Action Planning (WRAP) group for the local day hospital. Although there was no need for a full ethical review, I went through the process so that I could carefully consider the impact of the activities I was introducing and what steps I needed to take in order to minimise harm and maximise success.

Providing Health Psychology advice and guidance to others

There have been a number of times when I have offered Health Psychology advice and guidance to others. In my returning role in my first workplace, a large part of my work

was supporting the social prescribing team to deliver quality behaviour change interventions and I delivered and developed training to support other healthcare professionals. I offered supervision sessions to individuals and groups, where I facilitated a conversation designed to share my knowledge of working health psychology models and guide the colleague to find the best intervention. I often used the behaviour change wheel to advise colleagues around which interventions have the best evidence base for the change desired, for example, a colleague was feeling stuck helping an individual with their weight loss journey and we discussed the options they could present for more success with behaviour change. In my recent role, I am the first Health Psychologist working in the Trust and colleagues have come to me to discuss particular patients, where their physical health condition is presenting a barrier to progressing with treatment for a mental health condition. In these cases, I have considered where my boundaries lie, occasionally declining the referral and other times have completed an assessment appointment with the colleague to consider where behaviour change skills and techniques might be useful to support treatment (for a detailed example of this.

My training in Health Psychology has afforded me the 'big picture' view when it comes to understanding the wider determinants of health and where health psychology knowledge could have a positive impact on people's lives. For example, during my role in Public Health, I offered support with a needs assessment outside of my traditional role requirements to the housing team, as I could see the link between housing issues and health and wellbeing. I was encouraged to do this after completing the consultancy competency and realising that the impact of health psychology could be far reaching. This was received well and helped to promote the council's "Health in all policies" approach; public health was invited to meetings where they would previously have missed out on, for example, the town regeneration project which followed closely after this project. I evaluated this as a success.

In addition, I facilitated the relationship between the local universities' Health Psychology MSc programme and my workplace to support students to gain some real world experience of applied psychology roles. This work experience / placement programme has

now been running for over 4 years and has supported some individuals to go on to a Doctorate programme. It feels great to be able to offer opportunities that I would have enjoyed myself.

Communication skills in different contexts

Over the time spent completing the Doctorate, I have communicated with many different people: public health specialists, police commissioners and officers, patients, colleagues and medical staff.

Communicating with patients was new to me and the more I have learned and developed my intervention skills, the more confident I have become here. I noticed that I started to employ these skills in non-work settings - for example, I was out for dinner at a friend's birthday and met some new people. In general conversation, one individual mentioned they had started smoking again after a recent quit attempt and I took the opportunity to employ my very brief advice skills and discuss smoking cessation in a gentle way.

I use the same phrases and key words in my everyday interactions now and I've seen this change how people in other contexts respond to me too. As an example, my nephew is neurodivergent and I noticed my patience and language towards him was not how I would approach a client - it was much less compassionate. I changed the way I spoke and interacted with him and it has improved our relationship greatly.

My other communication skills have greatly improved also. I have had the opportunity to communicate over a range of mediums, including presentations at conferences (virtual and in person), posters, reports for commissioners and funders, financial bids and job applications.

I was able to work with new and innovative ways to share knowledge. As part of the work with the Health Foundation in the social prescribing role, the end-of-project conference asked for presentations to be delivered in the style of Pecha Kucha. This is a fast-paced style where you present 20 slides, with 20 seconds of commentary per slide and it has

gained popularity in business, teaching and the medical field (Byrne, 2016). It encouraged me to focus on the salient points and use slides to highlight or enhance the commentary rather than to be the main focus. I have used Pecha Kucha style a number of times since then, particularly when I want to freshen up a presentation or keep the audience engaged. When I joined the Doctorate, I attended a session by a previous student who spoke about the importance of Twitter (now X) and social media to build your brand as a health psychologist. I set up a Twitter account in 2015 and to date, I have only sent four tweets. Social media was not important to me and I didn't see the benefit to me or my potential clients. However, more recently, I have seen the impact social media can have, particularly on individuals who found themselves isolated during the pandemic and turned to the internet for support and advice. I have set up a professional Instagram and Facebook account to share my tips and tricks around pain management, growing older, and staying healthier. The posts have received interaction and I have been able to signpost people to support in their communities.

Development of team working skills

I thought I was relatively effective in team work prior to starting the Doctorate and as I have improved my communication skills, that notion has been challenged. I naturally lean towards leadership in group situations and I have been in positions of employment that required me to be working largely independently. I have also been a team colleague. During my time with Violence Reduction Unit, I was not in leadership and was part of a small team. I noticed myself using my conversation skills to share my strengths and collaborate with a colleague, where conflict could have arisen. We both had an interest in a social prescribing project - my colleague's interest was because their background was in the local area; mine because I had worked in social prescribing previously. I used motivational interviewing skills (Rollnick and Miller, 1995), to avoid conflict and support us both to find a way of combining our passion and knowledge, rather than competing.

In positions of management I have challenged myself to avoid my “rescuing” reaction and instead focus on the motivational interviewing principle that the resources are within the person I’m talking to, and my role is not to give the answer but to draw it out (Rollnick and Miller, 1995). The role required me to consider carefully which conversations are confidential and when they become necessary to share. The guidance from the BPS and HCPC has been useful to consider, alongside the boundaries and requirements of the role I have.

Involving service users and carers

I attended a conference training session in 2017 which supported co-design and I am always looking for opportunities for co-production, be it one-on-one with a client or for population level interventions.

At the Community Interest Company, the phrase “two experts in the room, you and the patient” is often used and I work by this, no matter who my patient might be (staff, colleague, and client). I believe that people deserve to be involved in their own care and should feel empowered to be involved. My role is to help them to feel confident enough, have the knowledge and recognise their skills. I had some experience of this working in the Violence Reduction Unit. Although I did not complete any doctorate competences during this time, I continued to develop my skills. I was tasked with working with young adults and children from a deprived area and developing the youth offer to prevent them from violence. I engaged a group of representatives from local schools and invited them for a short session, careful not to overload them with information and to generate some great discussion so that we can better understand which youth provisions are missing, from the youth who would use them. I was influenced by a previous experience in Public Health where I was asked to go and pin up posters about drinking around your children in local community centres. I chose to engage with the mum and child groups and understand which posters would appeal most and what message would have the best impact on their behaviours, using the service user perspective to inform the intervention. My qualitative research project gathered service user perspectives which were then fed into the next iteration of the weight management project.

Continuing Professional Development (CPD)

In my current role as a Trainee Health Psychologist, I am afforded time each month to concentrate on my development and ensure that my skills are up to date and consistently expanding. I have been using my CPD time over the years to attend conferences - both as speaker and as participant - and building my network of other Health Psychologists. I also seek to read relevant print, not only research based, but also from "popular" psychology which helps me to communicate in easy-to-understand terms. Where I identify gaps in my knowledge, I look to correct that by attending training sessions. Sometimes these are available locally or online; other times require self-funding. I have attended training which includes solution-focussed approaches, motivational interviewing and formulation work. I am also booked to attend Acceptance and Commitment Therapy (ACT) training in person through my employment, after self-directed study on ACT previously (Luoma, Hayes & Walser, 2007). Moving forward, I want to ensure I continue to develop and use my research methods skills by being involved in research for the NHS Trust and pursuing consultancy options locally.

Organisation and Systemic Issues

The Violence Reduction Unit gave me the opportunity to show how someone with health psychology training could add to the unit, particularly around interpretation of data and behaviour change techniques. However, I found it difficult to express the competencies and skills I had. Ultimately, I acknowledged when my place in an organisation wasn't working for me or them and had the confidence to change roles and look for other positions.

Support from University colleagues in CV writing was invaluable - I wasn't promoting my skills and those of health psychologists enough. Now, I confidently shout about the knowledge and skills that health psychology offers and it has allowed me to step into a role advertised for Clinical Psychologists and become the first employed Trainee Health Psychology in the Trust.

Summary - My personal development

The years on the Doctorate programme have not always been easy and I have developed my resilience by managing and overcoming a number of difficult situations. I have dealt with births and deaths, mental health and physical health issues to mention a few. Whilst I have grown to understand my stress responses and triggers, I have also learned to appreciate my strengths and abilities outside of the academic setting.

I believe I have developed into a professional and competent Health Psychologist who is keen to expand opportunities in my local area for more Health Psychologists to join me. I have forged a career as a practitioner psychologist, with a strong ability to deliver teaching and training to a wide range of audiences. Research is a continuing development opportunity for me, and one I intend to pursue.

I am grateful for the learning and support given to me by academic staff, peers and friends during this course. This Doctorate has been the most challenging experience of my personal and professional life to date and I am proud of the work I've done to succeed and continue to grow into the role of a Health Psychologist.

References

Biggs, J.B., & Moore, P.J. (1993). The process of learning (3rd Ed.). Sydney: Prentice Hall.

British Psychological Society. (2009). Qualification in health psychology (Stage 2): Candidate Handbook. Available at: http://www.bps.org.uk/sites/default/files/documents/candidate_handbook_for _the_qualification_in_health_psychology_stage_2_november_2009.pdf (accessed 20.10.2023).

Byrne, M. M. (2016). Presentation innovations: using Pecha Kucha in nursing education. *Teaching and Learning in Nursing*, *11*(1), 20-22.

Gibbs, G. (1988). Learning by doing: A guide to teaching and learning methods (1st Ed.). London: Further Education Unit.

Health and Care Professions Council. (2015). Standards of proficiency. Available at: http://www.hcpc-uk.org/standards/standards-of-proficiency/practitionerpsychologists (accessed 20.10.2023).

Kearsley, G., & Shneiderman, B. (1998). Engagement theory: A framework for technology based teaching and learning. Educational Technology, 38, 20-23.

Luoma, J. B., Hayes, S. C., & Walser, R. D. (2007). *Learning ACT: An acceptance & commitment therapy skills-training manual for therapists*. New Harbinger Publications.

Michie, S. (2004). A framework for professional practice. In S. Michie & C. Abraham (Eds.). Health psychology in practice (pp. 372-402). Oxford, UK: Blackwell Publishing Ltd.

Rollnick, S. & Miller W.R. (1995). What is motivational interviewing? Behavioural & Cognitive Psychotherapy, 23, 325–334.

Race, P. (2007). The lecturer's toolkit: A practical guide to teaching, learning and assessment (3rd Ed.). London: Kogan Page.

CHAPTER 2:

ADVANCED RESEARCH METHODS

Quantitative Research Manuscript

Active and Activated: Evaluating the success of a Community Tier 2 Weight Management Service in the North-East

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Abstract

This study evaluated a group multi-component weight management service, delivered over 12 weeks in a local authority area in the North-East of England, UK. The weight management service aims to reduce obesity in the local population by providing opportunity, capability and motivation for sustainable behaviour change. Unlike other weight management options currently available in the local area, this course was not prescriptive and used evidence-based behaviour change techniques to encourage participants to make

healthier choices and form new habits to support their weight loss. This study aimed to understand the impact and success of the course, firstly on improving patient activation (measured by the patient activation measure, PAM-13) as research suggests that improving PAM-13 scores can lead to sustainable behaviour change and reduced costs in healthcare use; secondly, the success of weight loss for participants. The data of forty-seven individuals who successfully completed the intervention course was analysed using multiple regression and results indicate that the program was significantly successful in improving activation scores and reducing weight for participants. However, the relationship between patient activation and weight loss success was not significant in this study. The discussion explores this non-significant result in more detail and makes recommendations for future research to better understand the role activation plays in the weight loss journey.

Introduction

In 2021, 26% of adults in the UK were classified as obese and obesity prevalence was highest in the most deprived areas (34%) (NHS Digital, 2022). By 2050, if present trends continue, 60% of men, 50% of women and 25% of children will be obese or overweight. Being overweight or obese increases the risk of morbidity and/or developing health conditions including cardiovascular disease, some cancers, disability during older age, and chronic conditions such as Type 2 Diabetes, Hypertension and Hyperlipidemia (the latter three are major risk factors for cardiovascular disease) (Sowers, 2003; World Health Organisation, 2003). We know from past research (Kolotkin et al., 2001; Fontaine & Barofsky, 2001; Rothburg et al., 2014) that a change in weight can impact directly and indirectly on wider health (e.g. directly impacting disease progression and indirectly supporting healthy behaviour choices through improving confidence to attend an exercise class regularly).

It is estimated that overweight and obesity related conditions across the UK are costing the NHS £6.1 billion each year (Department of Health, 2020). In England, there are stark differences in the health of the population between counties. One such county is a seaside

area in the North East of England. With an estimated population of 150, 265, this locality is an area historically built upon manual industries such as coal-mining and riverside activities like ship-building and fishing. The prevalence of obesity in the county is significantly higher than the national average for both adults and children (aged 10/11), as shown in the Active People Survey, 2020 and the National Child Measurement Programme, 2020. Physical inactivity costs the local authority around £4 million per year.

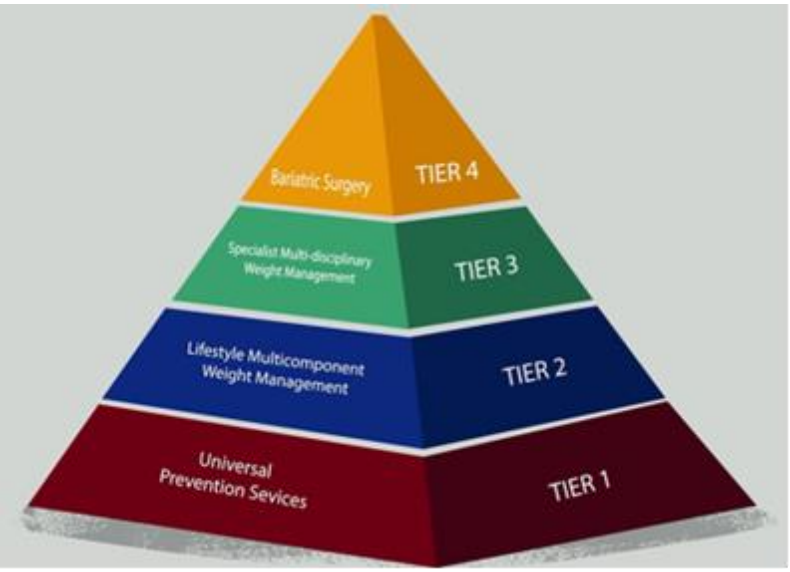

Figure 1: The four-tiered approach to obesity management in the NHS, as taken from local.gov.uk

There is good evidence that a behavioural approach to weight management works, incorporating diet, physical activity and behavioural components (Ramage et al, 2014; Jansson et al., 2013). In 2016, the National Health Service (NHS) designed a four-tiered approach to delivering weight management services (Figure 1), which aims to both treat and prevent high levels of obesity amongst the local population, and provide more opportunities for earlier behavioural intervention. The Local Authority - the locally elected governing body in the county - were offered short term funding for 12 months to test the delivery of such a model.

The guidance issued to Local Authorities asked for pilots of Tier 2, a multi-component lifestyle course which aimed to tackle the behaviours which contribute to rising levels of obesity. Previous interventions use popular theories of behaviour change, such as the transtheoretical model of change (Prochaska and DiClemente, 2005), but this has been questioned in more recent times for a lack of clarity about how behaviour change comes about. This research chose to use theory grounded in behaviour change - the COM-B model (Michie et al., 2011) and the subsequent Behaviour Change Wheel Framework (Michie et al., 2014) to design suitable interventions. The COM-B theory suggests that behaviour change only occurs when three corresponding constructs are present: 1) Capability - the ability, physical and/or psychological to achieve the desired result e.g. knowledge and skills needed; 2) Opportunity - the environment needed to thrive e.g. social support, physical environmental factors; and 3) Motivation - intrinsic or extrinsic, e.g. the task should be important and self-belief present. If all three components are fulfilled, behaviour change is more likely and sustainable. The Behaviour Change Wheel Framework builds upon this theory and offers behaviour change functions that are likely to result in success by targeting specific components, for example education and persuasion. This is further detailed in the Behaviour Change Taxonomy (Michie et al., 2013) which details standardised, evidence-based behaviour change techniques to employ in interventions. There is evidence to support that multi-component lifestyle interventions are the most effective for encouraging long term weight loss in those identified as overweight or obese. In addition, NICE Guidance PH53 suggests that effective weight loss programmes will be multi-component and address "dietary intake, physical activity levels and behaviour change". In this way, it is important in an evaluation that we consider all of those factors and so this present study considering behaviour change (activation) is complemented by a qualitative evaluation of the same T2WMS, which interprets the data around changes in diet and physical activity, and more.

The Intervention

The Tier 2 Weight Management Service (T2WMS) was designed to provide attendees with the capability (through knowledge and skills building), the opportunity (through specific exercises and goal setting) and the motivation (time to reflect on intrinsic motivation and external results) to succeed on their weight management journey. Over 12 weeks, participants are expected to attend for two hours each week and all of the sessions offer an opportunity to measure progress against goals, a knowledge session and time for a form of physical activity. Participants were encouraged to set themselves achievable and realistic goals, that may have been about weight directly, and also could have included other related hopes such as an activity target, size measurements, or wearing a particular outfit. The design of the program used the Behaviour Change Taxonomy to select behaviour change techniques (BCT) that would support specific behaviours. For example, using the technique of graded tasks (8.7 in the Taxonomy), the level of physical activity gently progresses throughout the course from gardening to structured workouts. This allows participants to build their confidence by achieving increasingly difficult activities. Another example of the use of the Taxonomy is the use of the group setting, which allows for social comparison (BCT 6.2) - highlighting the benefits of the desired behaviours with others. In some cases, participants were grouped by certain factors (e.g. long term condition or lifestyle factors such as carers) so that they were most able to benefit from group peer support and knowledge exchange. The program used a family approach to health and wellbeing, encouraging participants to bring along members of their support network to provide emotional support, and sometimes practical support also, BCTs 3.2 and 3.3. Some sessions allowed for multiple opportunities to encourage behaviour change - for example, in week 8, participants are cooking a healthy recipe, which demonstrates the behaviour (BCT 6.1), offers instruction on the behaviour (BCT 4.1) and practice (BCT 8.1).

Patient Activation

In addition to a grounding in behaviour change theory, the program was designed to affect patient activation. Patient activation is a validated concept that considers the knowledge,

skills and confidence someone has in managing their own health and wellbeing (Hibbard et al., 2004). There is overwhelming evidence that improving patient activation levels leads to an improvement in health and wellbeing outcomes (Greene & Hibbard, 2012; McNamara et al., 2019) and a reduction in associated healthcare costs over the next 2 years (Greene et al., 2015). Research suggests that people with higher activation are more likely to engage in healthy weight management behaviours, such as regular activity and balanced diet (Greene & Hibbard, 2012); suggesting that patient activation may be an especially important component when we consider the treatment and prevention of obesity. If activation relates to knowledge, skills and confidence, it could be theorised that people who are higher activated have more knowledge, as well as the skills and confidence to be able to effectively manage their weight. Recent research suggests that people with obesity have a higher relative risk of scoring low on confidence indicators (Chang et al., 2022) in the patient activation measure (PAM-13-13) than those of a normal BMI category, which indicates that activation may be lower for those individuals. This was considered in the development of the program, which was designed to not overwhelm the participants with information and goal setting, but instead sought to build confidence using techniques as previously described. The Patient Activation Measure, owned by Insignia Healthcare, has been commissioned by the local authority for use across healthcare services in this local authority area. Many providers of health and social care services use PAM-13 as an indication of sustainable behaviour change, value and cost effectiveness - including the community interest organisation who were responsible for designing and delivering this program.

The aim of this quantitative study is to understand the impact the intervention program had on its participants. Firstly, was the programme effective in supporting participants to lose weight? Did the programme have a significant impact on participants' activation levels? Secondly, this study considers the relationship that may exist between activation and weight loss. It seeks to understand whether pre-intervention activation levels can successfully

predict weight loss for participants and whether a change in activation predicts, or was necessary for, a change in weight during the programme.

Method: Materials

Height and weight were recorded by the facilitators of the sessions and using calibrated equipment which measured in metres and kilos respectively. This would allow for accurate body mass index (BMI) calculations for participants.

The Patient Activation Measure (PAM-13; licensed product through local authority and NHS England) was used to assess a sustainable change in behaviour and is approved by the NHS and initially designed by Insignia Health. For the purposes of this intervention and evaluation, the Patient Activation Measure 13 item version was used. Initially released in 2000, numerous studies have not only proven its reliability and validity (with Cronabach's □ consistently above 0.80 to demonstrate high internal validity) for multinational use (Prey et al., 2016; Kephart et al., 2018; Skolasky et al., 2011) but have also shown an improvement in PAM-13 can be linked to a healthcare system saving (Hibbard et al., 2013).

PAM-13 questionnaire was used to collect measures of patient activation pre- and post-intervention. This 13 statement questionnaire asks participants to rate their agreement to statements on a likert scale from Strongly Disagree to Strongly Agree, with an option for not applicable. Statements are deliberately vague to be open to some subjective interpretation and are validated to measure the underlying constructs of activation (knowledge, skills and confidence to manage health and wellbeing). For example, "I know what each of my prescribed medications do" and "I have been able to maintain (keep up with) lifestyle changes, like eating right or exercising". The statements are ordered with increasing difficulty to agree, in order to avoid pattern marking, and recommended delivery requires for statements to be read as they appear, and not embellished with any interpretation or change

in language which could impact on the response. The scoring algorithm produces a PAM-13 Score along an empirical, interval-level scale from 0-100 that is categorised into one of four levels of patient activation. A lower score and PAM-13 Levels 1 and 2 indicate lower patient activation, while a higher score and PAM-13 Levels 3 and 4 indicate higher patient activation.

A power analysis prior to the research commencement has indicated a required sample size of 80 (Clark-Carter, 2010), to achieve a medium effect size (R^2=.13) and recommended power of 80% (Cohen, 1988).

Parametric Assumptions

Skew and kurtosis z-scores for weight, BMI and PAM-13 scores pre- and post-intervention were <1.96 so meet the assumption of normal distribution as evidenced by skew and kurtosis. The Shapiro-Wilk's test is not statistically significant so meets the assumption of normal distribution as evidenced by the Shapiro-Wilk's test.

Participants

A total of 146 individuals had a registered start date on the T2WMS management information system. Of those, 58 shared informed consent and were eligible to be included in the analysis. Exclusion of consenting participants was due to age being under 18 years (n = 2), registered as having a Learning Disability or Cognitive Impairment (n = 3), pre-intervention PAM-13 score of 100 (n=4) and incomplete data sets (n=6). The data set analysed was from 43 participants.

For those with age recorded at referral (n=31) the range was from 19 years to 81 years (Mean = 55.71 years; SD = 14.46) and 23.4% of participants identified as Male (n=11). Employment status was recorded for all individuals and 29.79% of the sample was in employment; 12.76% were retired and the remaining 57.45% of participants were not in any form of employment. This is representative of the local population, where 56.6% of homes

are living in deprivation. At the point of recruitment to the intervention, BMI was recorded for 39 participants. The average pre-intervention BMI was 38.35 (classified as obese) and BMI ranged from 25.2 to 56.07.

All data was anonymised and entered into the management information system by administrative staff or course facilitators not associated with this research.

Method: Procedure

Participants were required to attend a 12 week intervention program; baseline data was collected in week 1 and outcomes data in week 12. This data is collected using written questionnaires, consisting of the PAM-13, demographic questions (e.g age at referral, ethnicity, gender), as well as having a trained person to support them to accurately record their height and weight measurements. Ethical approval was gained from University of Staffordshire Ethics Committee. Participants for whom there was an incomplete data set, were excluded from the final data set for analysis.

Method: Data Analysis

Tests of difference

Initial analysis of the variables (dependent and independent) was conducted by paired samples t-test to ascertain whether the programme had significantly achieved a change in weight for participants, and/or a change in activation levels.

Variance prediction

Following the t-test results, regression was used to understand the relationship between weight loss (outcome) and activation (the predictor), as well as how much variance in weight loss can be accounted for by changes in activation.

Results

Descriptive Statistics

Data was analysed from 43 participants, who had full data sets and shared informed consent. Age of participants ranged from 19 - 81 years (M = 55.71, SD = 14.46). Where given, 23.4% of participants identified as male and 57.45% were not in any form of employment.

Weight

All participants were weighed pre-intervention, with starting weight ranging from 58.96 kg to 184.16 kg (Mean = 112.72; SD = 21.95). Post-intervention, all participants had a final weight recorded and this ranged from 54.55 kg to 176 kg (Mean =101.92; SD = 27.54). Where height was also recorded, Bodyweight Mass Index (BMI) was calculated for 42 of the 47 participants at pre-intervention, BMI ranged from 25.2 to 56.07 with a mean of 38.35 and SD = 7.93 (see Table 1 below for information on BMI categories). Following the course, BMI was calculated with the post-intervention weight and ranged from 21.8 to 55.5 with a mean of 36.91, SD = 8.12 (a reduction of 1.44) . Table 1, below, shows the categorisation of participants based on BMI pre- and post-intervention.

BMI value	**Category**	**Pre-intervention (% of participants)**	**Post-intervention (% of participants)**
≤ 18.4	Underweight	0	0
18.5 - 24.9	Normal	0	5.1
25.0 - 29.9	Overweight	10.3	10.3
≥ 30	Obese	89.7	84.6

Table 1. BMI Categorisation pre- and post-intervention.

Overall, 87% of participants reported a weight loss (n=41) totalling 170.5kg. Two individuals reported a maintained weight. Individual weight loss ranged from 0.43kg to 18.76kg (Mean = 3.57; SD = 4.38).

Primary analysis sought to determine whether there was a significant difference between pre- and post- weight and pre- and post- PAM scores. The results of a paired samples t-test indicated that participants had a significantly lower weight after the intervention, than before ($t(46) = 5.48$, $p<.001$). The effect size, as measured by Cohen's d is d=0.814, indicating a large effect size.

Patient Activation Measure

Participants with pre-intervention PAM-13 scores of 100 (maximum levels of activation) were excluded from analyses (n=4) because there would be no improvement on this maximum score (and sensitivity analysis showed that including these participants would have significantly impacted on the outcome).

PAM-13 scores pre-intervention ranged from 30.40 to 77.70 (M=54.00; SD=11.3), with 60.45% of participants categorised with lower activation levels 1 or 2 (see Table 2 below for PAM categorisation pre- and post-intervention). PAM-13 scores post-intervention ranged from 42.20 to 84.80, with a mean of 60.03 (SD = 10.59), an increase of 6.03 on the mean. In addition, post-intervention, 37.2% of participants were categorised in lower activation levels 1 and 2, a decrease of 23.25%.

PAM Level	**Pre-intervention (% of participants)**	**Post-intervention (% of participants)**
1	27.9	11.6
2	32.55	25.6

3	32.55	51.2
4	7.0	11.6

Table 2. Percentage of participants at each PAM-13 Level pre- and post-intervention

A paired samples t-test indicated that participants had a significantly higher activation score post-intervention than they did before ($t(42) = -4.04$, $p<.001$). The effect size, as measured by Cohen's d was d=0.617, indicating a medium effect size.

Once established that there was a significant change in weight pre- and post- intervention, regression analyses were conducted to understand whether patient activation scores could predict weight loss.

A regression analysis found that pre-intervention PAM-13 score significantly predicts pre-intervention weight ($R^2 = 0.0965$, $F(1,41) = 4.38$, $p=<.005$, SE = 0.364), suggesting that individuals with a higher PAM-13 score - higher levels of activation - had a lower starting weight.

Regression analysis indicated that pre-intervention PAM-13 score did not significantly predict post-intervention weight ($R^2 = 0.00114$, $F(1,43) = 0.0491$, $p=.826$, SE = 0.375).

A multiple regression was run to see if there is a relationship between PAM-13 scores, age group, employment status and gender. These variables did not statistically significantly predict a change in PAM score over time ($R^2 = 0.454$, $F(9,14) = 1.29$, $p=.321$, SE = 5.65).

Another multiple regression analysis was used to investigate the relationship between change in weight, age group, PAM level pre-intervention and pre-intervention BMI category. These variables did not predict a change in weight ($R^2 = 0.271$, $F(8,21) = 0.978$, $p=.479$, SE = 3.70).

A MANCOVA analysis was also used to see if there were any differences between groups in the impact on PAM-13 scores or in resulting weight change. The independent variables used were age group and gender; the covariates considered were pre-intervention BMI and re-intervention PAM-13 score, with the dependent variables being change in weight and change in PAM-13 score. There was no statistically significant difference found between groups.

Discussion

Overall, the findings of this research suggest that use of evidence-based techniques to support behaviour change and affect weight loss was successful in this intervention. There was a significant difference in weight for people pre- and post-intervention, with 43 people reporting a total weight loss of 170.4kg. Individual weight loss ranged from 0.43kg to 18.76kg (Mean = 3.57; SD = 4.38). .Research shows that a weight reduction of just 5% of starting weight can significantly improve health outcomes and prevent long term conditions. Alongside successful weight loss, improvements in BMI are also seen, with 5.1% of participants categorised within the normal range of BMI post-intervention (compared with 0 participants in the normal category pre-intervention). Research shows that life expectancy from age 40 for people with a normal range BMI is 3.5 years longer (females) and 4.2 years longer for males, than those living with an obese BMI (Bhaskaran et al., 2018). In addition, research confirms that a healthy BMI carried much lower risk of mortality from all major long term conditions.

In addition to success in weight loss, this study also finds that people had a statistically significantly higher PAM-13 score post-intervention (M = 60.03, SD = 10.59) than pre-intervention (M=54, SD = 11.3). Individual PAM-13 score changes ranged from -21.30 to 25.20, with 19% of participants reporting a drop in activation scores; 11% of participants remaining constant; and 70% of participants reporting an improved activation score post-intervention. That indicates that over the course of the programme, activation improved or

was maintained for 81% of participants. Higher activation scores as measured by PAM-13 have been linked to increased healthy behaviours associated with healthy weight, including eating more fruit and vegetables and regular exercise (Greene & Hibbard, 2012). Whilst it is likely therefore that the programme design and delivery was conducive to supporting improvements in activation levels, it is difficult without further analysis to understand which elements of the programme were most successful in achieving this. The PAM-13 is designed to measure underlying constructs around knowledge, skills and confidence to manage healthcare through a series of specific statements. More analysis of participants' responses to statements categorised as measuring either knowledge, or skills, or confidence, could indicate which component/components were most impacted upon by the programme. This would lead to further understanding about which behaviour change techniques employed in the programme were most successful as they were included to support an improvement in knowledge, skills and confidence respectively.

A higher PAM-13 score, and therefore higher levels of activation, are positively associated with sustainable healthy behaviours. A longer term follow-up on participants to identify whether weight loss continued or was maintained would support this theory further.

Pre-intervention PAM-13 scores significantly predicted pre-intervention weight, but not post-intervention weight; that is, those with lower activation levels were more likely to have higher starting weights. Literature supports the prediction of pre-intervention weight as those with lower activation levels are less likely to be engaging in healthy behaviours which encourage healthy weight, such as regular exercise and adhering to treatment plans, and so would be more likely to be categorised as overweight or obese. PAM-13 scores at the beginning of the programme were not significantly linked to post-intervention weight. Given that there was a significant impact of the programme on PAM-13 scores, it is likely that those who lost weight, also improved their PAM-13 scores and level of activation and therefore their low level of activation at the beginning is not related to their weight loss, which could have been achieved through a corresponding change in PAM-13.

A surprising result of this study was the indication that there is no relationship between changes in weight and activation levels, even when other descriptives are taken into consideration, such as age, gender and employment status. This counters previous research which finds a mediating effect of activation on weight loss (Barnason et al., 2016).This could indicate that PAM is not as significant as literature has previously suggested in weight loss support - other factors may play a more important role. Evidence has suggested that activation is inconsistently associated with positive health behaviours (AuYoung et al., 2016) so it may not be the best predictor of weight loss. Perhaps the time period in this study was too short to demonstrate and impact - a change in PAM may require longer to impact upon weight that the 12 weeks of this programme.

Limitations and Future Research

Where a non-significant result was delivered, the effect size was also small and this is a limitation of the current study, meaning that the sample size may be too small to reasonably report on the relationship between activation and weight loss. Weight management programs typically experience difficulties with low engagement (Volpp & Mohta, 2018) so more effort from the programme into engaging those most at need of the service would be useful. Given that all of the participants were initially classified as overweight or obese, it is clear that the programme did attract and engage some of the right community and understanding what worked for individuals to maintain their participation would support a larger recruitment sample in the future. Further analysis of this T2WMS could include a larger sample size as the program continues to deliver.

Future research could also consider measuring and analysing data around specific positive health behaviours that affect weight, such as physical activity, mental wellbeing and healthy eating habits. This would aid understanding about which behaviour(s) in particular contributed towards weight loss and are therefore the most effective in this programme. Measuring the other variables quantitatively using trusted resources such as IPAQ (Craig et

al., 2003) and analysing the interaction between those components and weight loss; and the interaction between the components themselves, including activation would enhance understanding about the benefits to this programme and how it breeds success in weight loss.

The Tier 2 Weight Management Service is a successful multi-component lifestyle intervention that has supported participants to achieve a reduction in weight and an improvement in BMI, which will in turn improve health outcomes and life expectancy. In addition, the programme has shown an increase in patient activation, which is also positively associated with better health outcomes for those with higher activation levels. Further research with participants of the T2WMS will only enhance our understanding and development of future community weight management interventions.

References

AuYoung, M., Ponce, N. A., Duru, O. K., Bustamante, A. V., Mangione, C. M., & Rodriguez, H. P. (2016). Patient activation is inconsistently associated with positive health behaviors among obese safety net patients. *Journal of immigrant and minority health*, *18*, 1489-1497.

Barnason, S. A., Young, L., Kupzyk, K., Zimmerman, L., & Pullen, C. (2016). Examining Self-Efficacy and Patient Activation Mechanisms in a Weight Management Intervention for Overweight and Obese Cardiac Rehabilitation Patients. *Circulation*, *134*(suppl_1), A18101-A18101.

Bhaskaran, K., dos-Santos-Silva, I., Leon, D. A., Douglas, I. J., & Smeeth, L. (2018). Association of BMI with overall and cause-specific mortality: a population-based cohort study of 3· 6 million adults in the UK. *The lancet Diabetes & endocrinology*, *6*(12), 944-953.

Clark-Carter, D. (2010) *Quantitative psychological research: The complete student's companion.* Hove: Psychology Press

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 & science in sports & exercise*, *35*(8), 1381-1395.

Greene, J., & Hibbard, J. H. (2012). Why does patient activation matter? An examination of the relationships between patient activation and health-related outcomes. *Journal of general internal medicine*, *27*, 520-526.

Greene, J., Hibbard, J. H., Sacks, R., Overton, V., & Parrotta, C. D. (2015). When patient activation levels change, health outcomes and costs change, too. *Health affairs*, *34*(3), 431-437.

Hibbard, J. H., Stockard, J., Mahoney, E. R., & Tusler, M. (2004). Development of the Patient Activation Measure (PAM-13-13): conceptualizing and measuring activation in patients and consumers. *Health services research*, *39*(4p1), 1005-1026.

Hibbard, J. H., Greene, J., & Overton, V. (2013). Patients with lower activation associated with higher costs; delivery systems should know their patients''scores'. *Health affairs*, *32*(2), 216-222.

McNamara, R. J., Kearns, R., Dennis, S. M., F Harris, M., Gardner, K., & McDonald, J. (2019). Knowledge, skill, and confidence in people attending pulmonary rehabilitation: a cross-sectional analysis of the effects and determinants of patient activation. *Journal of patient experience*, *6*(2), 117-125.

Skolasky, R. L., Green, A. F., Scharfstein, D., Boult, C., Reider, L., & Wegener, S. T. (2011). Psychometric properties of the patient activation measure among multimorbid older adults. *Health services research*, *46*(2), 457-478.

Volpp, K. G., & Mohta, N. S. (2018). Patient engagement survey: the failure of obesity efforts and the collective nature of solutions. *NEJM Catalyst*, *4*(5).

Quantitative Study Commentary

To accompany paper: *Active and Activated: Evaluating the success of a Community Tier 2 Weight Management Service in the North East*

Introduction

This reflective paper comments upon the process and outcomes of the quantitative research conducted as part of my Doctoral submission. The research was an evaluation of the Tier 2 Weight Management Service (T2WMS) which I developed as part of my employed role. The T2WMS is a 12-week multi-component intervention which aims to educate and motivate individuals to lose weight. The program is held in community venues and is delivered to groups, consisting of a knowledge exchange (education session), physical activity and group support. The validity and success of the course was evaluated by analysing whether it successfully influenced a reduction in weight and an improvement in patient activation, and to what extent is there a relationship between weight and activation for this cohort.

Rationale

My current employment is within a not-for-profit organisation in a borough located in the North East of England. In this locality, obesity rates amongst adults and primary school children are much higher than the rest of England and are continuing to rise. The Local Authority was awarded National funding to tackle the obesity problem by building a 4 tier weight management and the Tier 2 Community-based service was procured by the company I work for. Although the organisation's main service delivery is social prescribing, they also develop and deliver behaviour change training and part of my role is to support this with my knowledge and expertise as a Trainee Health Psychologist. I was asked to develop the program in accordance with the contract from the Local Authority and NICE guidance about the management of obesity. My role developed further once the program was delivered and

it became necessary to evaluate the program and find out whether it was meeting the needs of the contract and the local community, and so the opportunity to complete Doctoral level research as part of my paid role was offered. I was invested in the outcomes of the program, having developed much of it from the evidence base, and looked forward to being able to deliver my research skills in the workplace environment. However, managing the requirements of both my research and the company's needs, although a rewarding experience, did cause tension (for example, during data collection and analysis).

The use of the Patient Activation Measure to show change was a natural decision, given that the local authority and company I work for use PAM-13 in their work to demonstrate cost savings and impact. There is an abundance of research around PAM, although I became aware through this process that the research is often from the introduction of PAM in the early 2000s, and its use in research and proving validity in the current climate seems to be less available. There is a movement amongst local authorities to find an alternative measure of impact and I wonder if there is increasing research suggesting PAM is not as crucial to health behaviours as initially thought.

Planning

I have had very little involvement with formal research, particularly none since completing my Masters Degree in 2015. Thus, research, and statistics / quantitative research in particular was not amongst my strengths. I notice that I did not actively seek out research opportunities prior to this and believe this was because my confidence with statistics and research methodology was low. However, the process of this quantitative research project has not only broadened my skills in research and taught me lessons for future use, it has also boosted my confidence and helped me to see the importance of structured and thorough evaluation of projects such as this. Previously, I might have looked at very shallow data as part of my evaluation, to see whether the work I had done was achieving its goals - I often used the Kirkpatrick Levels of Evaluation as a guide (for example, in my teaching and training module which was completed earlier in my career).

However, being able to conduct robust data analysis has shown me the gaps in Kirkpatrick evaluation and the benefit of interrogating the data further to better understand the relationships behind the outcomes.

As per recommended guidelines from the University, the British Psychological Society and the Health Care and Professions Council, I submitted an application for ethics with the University. My last Ethics submission was at a different University, almost 7 years prior as part of my Masters, so a lot of thought and effort was put into this part of the process. I procrastinated about the ethics documentation for a long while but once I entered the cycle of feedback and adjustment to the document I became more confident. In addition, the experience of thorough planning and seeking ethical consideration allowed me to become very confident and comfortable with the aims of the project and how I would achieve this. Once submitted, the application was processed and approved with minor amendments, which confirmed my abilities to write strong research proposals and ethics applications for the future.

Method: Data Collection

The data collection methodology and subsequent available data set were not as intended and this resulted in a change to the planned analysis. During planning, the proposal was to measure a change in weight as well as "a change in activation levels (using Patient Activation Measure - PAM), any changes in wellbeing (using the short Warwick-Edinburgh Mental Wellbeing Scale - SWEMWBS) and physical activity levels (using the Short International Physical Activity Questionnaire - IPAQ)" [taken from the submission to the University Ethics Committee].

Initial data collection was overseen by the delivery arm of the T2WMS and not the primary researcher. At this point, I was aiming to remove myself from the delivery situation as much as possible to prevent biases in the consent and data later. The collection forms were standard practice and an expected part of the delivery facilitator role; the data collection was also part of the contractual obligations of delivering the project on behalf of

the Local Authority and using National funding. The data set should have included an extensive list of demographics (as dictated by the National funding stream), as well as PAM, SWEMWBS, IPAQ, height and starting weight. However, upon accessing the data set for the evaluation, there were missing data points which resulted in the exclusion of participants, even where informed consent had been given to analyse the data.

Some of the final data set was collected under my presence, although this did not result in a change to the integrity of the data. The collection method proposed was to attend a T2WMS session in person to introduce myself, the project and the consent sheet; leave for a short period of time to allow people to consent/not consent without added pressure from the researcher and then to return and collect the consent forms. Where this was the final week of the intervention, the consent forms were attached to the data collection forms, again looking at weight, PAM, IPAQ and SWEBWMS. Where consent was sought before the final week, the facilitators were once again asked to collect the data set and submit to the delivery team. I found, again, that data was incomplete and thus excluded a number of participants, even where consent for inclusion in the study had been given. For this final data set, it is a hard balance between not putting undue pressure on individuals by remaining present during consent and data collection and also ensuring as full a data set as possible. With this, my data set was smaller than I had hoped for and did not give a true representation of the people who completed the course. For future reference, I would work more closely with the facilitator team to impress the importance of a full data set to understand the success of the project, and I would also ensure that I was attending the final session and ensuring completion of all sides of the forms. This was unfortunate and a valuable lesson to learn at this point in the Doctorate course. It has also been a learning exercise in my paid employment as the lack of data could impact on future funding opportunities for the program, which is disappointing.

Method: Data Analysis

I was apprehensive about conducting a quantitative data analysis due to my lack of familiarity with statistical analysis and software. In addition, I work from a Chromebook and SPSS is not available for download on that operating system, so there was a practical problem to overcome. I discussed this with my Supervisor, who recommended I use Jamovi software and avoid the download problems with SPSS on my Chromebook. I procrastinated about conducting the analysis despite having the data available because of my concerns, however, once I was using Jamovi and was able to work through the data, I was much more confident that I could correctly interpret the results. Due to my unfamiliarity with the software, I utilised their online guide to ensure I was making the most of the software available and found it easy to use and follow. For future statistical analysis, I will continue to use this software.

Initially, my analyses were basic and showed non-significant results, which I found difficult to expand upon and interpret. Following advice from my Supervisor, I have improved my data analysis skills and now understand that I can consider the full range of statistics available to me, and not narrow the analyses to a few components too quickly.

Conclusion and Recommendations

Conducting the research and interpreting the data was a rewarding exercise, considering the effort, skills and time I had put in to develop the program. I felt a sense of joy and accomplishment when I was able to see that the T2WMS program had significantly supported a reduction in weight, and also affected patient activation. I was disappointed to learn that there was not a significant relationship between PAM and weight loss, but have found the discussion of this enlightening and the process of researching reasons why this might be has been methodical and supportive. I had not considered a non-significant result and finding that both of my main predictions are null was disappointing. However, being able to discuss the limitations of this research and my learning about the process has made this a valuable experience. I feel much more confident in my ability to conduct quantitative research, analyse data and offer this as part of my skills as a Health Psychologist in the

future so that I may continue to develop. I have understood that this is my weakest area of the work we do and with that, there will be clear focus for CPD events over the coming year.

Dissemination

When considering where to submit this article, I was considering Obesity initially. Although Obesity focuses on quantitative data and I didn't feel the topics were aligned with this particular study. I then considered other journals which I had cited or read when designing the T2WMS and the evaluation project. I decided upon Social Science and Medicine. This journal published a mix of qualitative and quantitative work, and covers topics pertinent to health psychology and public health, which fits with this project. This journal has a h-index rating of 270 and the 2022-2023 impact factor is 5.379 and a Q1 ranking for Social Science on SCImago Journal and Country rank website (2023). With Q1 being the highest rating and the scope of this journal, it is a good choice for submission of both my qualitative and quantitative work, which complement each other.

Timescale

The timescale for completion of the Professional Doctorate has been tight this year, and feeling less familiar with research methods, I had left the hardest work (in my opinion) to the end. With this in mind, if I was to conduct research in the future, I would offer myself a much greater time period so that I could fully immerse myself in the process and not feel rushed. The collection of the data was also time-dependent due to funding ending - had the program continued for longer, I would have been able to recruit more participants.

General

This module has allowed me to build on my limited research experiences. An area where I had the most to learn, I have gained new skills in my use of Jamovi and new confidence in my ability to conduct this level of research and explain the results.

With the challenges I came across in this experience, I can see the importance in continually developing my skills in research and becoming involved in research opportunities as my career progresses. I enjoyed the experience overall, and it has been positive for my development.

Qualitative Study Manuscript

Lightening the load: Evaluating the success of a Community Tier 2 Weight Management Service in the North East

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Abstract

This study forms part of an evaluation of a group multi-component weight management service, delivered over 12 weeks in a local authority area in the North-East of England. The weight management service aims to reduce obesity in the local population by providing opportunity, capability and motivation for behaviour change. Unlike other weight management options available, this course was not prescriptive and employed evidence-based behaviour change techniques to encourage participants to make healthier choices

and form new habits to support their weight loss. This study aims to understand participants' experiences of the course and the impact that the course has had on their lifestyle behaviours, including which aspects of the course had the most positive and negative influence in their behaviour change journey. Following semi-structured interviews with seven participants, three prominent themes were identified in the data: barriers to change, facilitators to change, and sustaining change after the course. Each theme is discussed in detail, including sub themes which include the age of the participant, motivations, responsibility, social support and the role of the facilitator. The study concludes with recommendations for future research and recommendations for weight management courses to achieve the most efficient and sustainable behaviour change.

Introduction

Almost two thirds of adults and one third of children in the UK are either overweight or obese (NHS Digital, 2020). By 2050, if present trends continue, 60% of men, 50% of women and 25% of children will be obese or overweight. Being overweight or obese increases the risk of morbidity and/or developing health conditions including cardiovascular disease, some cancers, disability during older age, and chronic conditions such as Type 2 Diabetes, Hypertension and Hyperlipidemia (the latter three are major risk factors for cardiovascular disease) (Sowers, 2003; World Health Organisation, 2003). We know from past research (Kolotkin et al., 2001; Fontaine & Barofsky, 2001; Rothburg et al., 2014) that a change in weight can impact directly and indirectly on wider health (e.g. directly impacting disease progression and indirectly supporting healthy behaviour choices through improving confidence to attend an exercise class regularly).

It is estimated that overweight and obesity related conditions across the UK are costing the NHS £6.1 billion each year (Department of Health, 2020). In England, there are stark differences in the health of the population between counties. One such county is a seaside area in the North East of England. With an estimated population of 150, 265, the area is historically built upon manual industries such as coal-mining and riverside activities like ship-

building and fishing. The prevalence of obesity here is significantly higher than the national average for both adults and children (aged 10/11), as shown in the Active People Survey, 2020 and the National Child Measurement Programme, 2020.

There is good evidence that a behavioural approach to weight management works, incorporating diet, physical activity and behavioural components (Ramage et al, 2014; Jansson et al., 2013). The National Health Service (NHS) designed a four-tiered approach to delivering weight management services (Figure 1), which aims to both treat and prevent high levels of obesity amongst the local population, and provide more opportunities for earlier behavioural intervention. The Local Authority - the locally elected governing body in the county - were offered short term funding for 12 months to test the delivery of such a model.

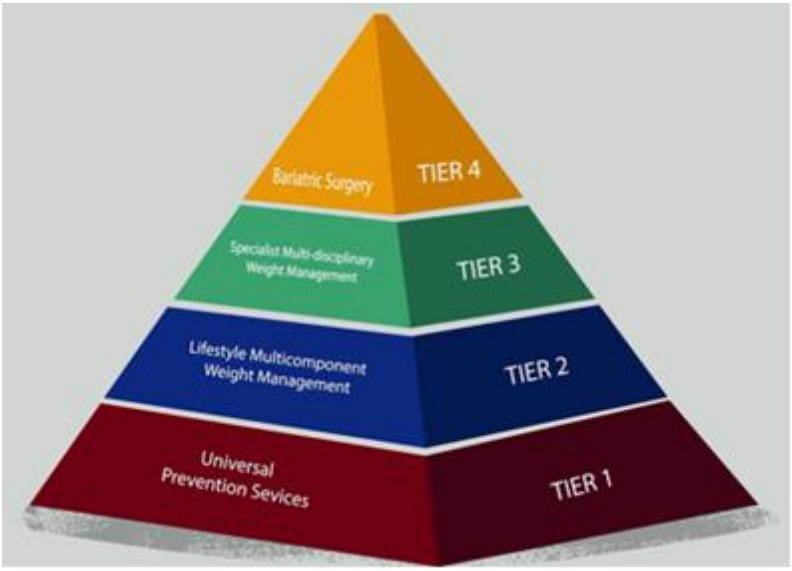

Figure 1: The four-tiered approach to obesity management in the NHS, as taken from local.gov.uk.

The guidance issued to Local Authorities asked to test Tier 2 of the model, a multi-component lifestyle course which aimed to tackle the behaviours which contribute to rising levels of obesity. Previous interventions use popular theories of behaviour change, such as the transtheoretical model of change (Prochaska and DiClemente, 2005), but this has been questioned in more recent times for a lack of clarity about how behaviour change comes about. This research chose to use theory grounded in behaviour change - the COM-b model

(Michie et al., 2011) and the subsequent Behaviour Change Wheel Framework (Michie et al., 2014) to design suitable interventions. The COM-b theory suggests that behaviour change occurs when three corresponding constructs are present: 1) Capability - the ability, physical and/or psychological to achieve the desired result e.g. knowledge and skills needed; 2) Opportunity - the environment needed to thrive e.g. social support, physical environmental factors; and 3) Motivation - intrinsic or extrinsic, e.g. the task should be important and self-belief present. If all three components are fulfilled, behaviour change is more likely and sustainable. The Behaviour Change Wheel Framework builds upon this theory and offers behaviour change functions that are likely to result in success by targeting specific components, for example education and persuasion. This is further detailed in the Behaviour Change Taxonomy (Michie et al., 2013) which details standardised, evidence-based behaviour change techniques to employ in interventions.

The T2WMS was designed to provide attendees with the capability (through knowledge and skills building), the opportunity (through specific exercises and goal setting) and the motivation (time to reflect on intrinsic motivation and external results) to succeed on their weight management journey. Over 12 weeks, participants are expected to attend for two hours each week and all of the sessions offer an opportunity to measure progress against goals (not necessarily in weight), a knowledge session and time for a form of physical activity. The design of the program used the Behaviour Change Taxonomy to select behaviour change techniques (BCT) that would support specific behaviours. For example, using the technique of graded tasks (8.7 in the Taxonomy), the level of physical activity gently progresses throughout the course from gardening to structured workouts. This allows participants to build their confidence by achieving increasingly difficult activities. Another example of the use of the Taxonomy is the use of the group setting, which allows for social comparison (BCT 6.2) - highlighting the benefits of the desired behaviours with others. In some cases, participants were grouped by certain factors (e.g. long term condition or lifestyle factors such as carers) so that they were most able to benefit from group peer support and knowledge exchange. The program used a family approach to health and

wellbeing, encouraging participants to bring along members of their support network to provide emotional support, and sometimes practical support also, BCTs 3.2 and 3.3. Some sessions allowed for multiple opportunities to encourage behaviour change - for example, in week 8, participants are cooking a healthy recipe, which demonstrates the behaviour (BCT 6.1), offers instruction on the behaviour (BCT 4.1) and practice (BCT 8.1).

The aim of this evaluation is to understand the impact the T2WMS program had on the lives of patients. The program's main aim was to reduce obesity by providing the capability, opportunity and consideration of motivation (the COM-b model) and using BCTs to impart knowledge about diet, improve physical activity and encourage confidence. Whilst quantitative research can indicate success of the BCTs in achieving weight loss, qualitative study is needed to fully understand the experiences of participants and replicate the elements they found had the most impact. Firstly, the study sought to understand participants' general experiences. Secondly, the impact the course had on diet and physical exercise. Thirdly, on the wider determinants of health - the lifestyle factors that impact or are impacted upon by health status, such as self-efficacy, housing, financial control, diet etc. Finally, the study sought to identify the elements of the program which are most and least valued by patients. This study makes recommendations for consideration in future iterations of the T2WMS. The study aims to answer the research question: What are participants' experiences of taking part in the intervention and what impact has the intervention had on their lifestyle behaviours?

Participants

The T2WMS was offered to small groups in various locations and times. The first cohort began in January 2021 and the last cohort ended in March 2023. Participants were recruited on a voluntary basis from four groups of the T2WMS, across 4 sites and each group with a different facilitator. Following ethical approval, the researcher attended the groups before their final sessions, and offered the informed consent form to participants and the

opportunity to ask any questions about the research. People who expressed an interest in taking part were asked to complete the informed consent form and contacted by telephone once their course was completed to arrange a convenient interview time. In addition, individuals from previous cohorts who had expressed a willingness to be interviewed for evaluation purposes were called on the telephone and offered the information sheet and an opportunity to engage or decline. Overall, 11 participants volunteered; seven interviews were completed (four were unable to attend the arranged interview, or withdrew their consent for participation).

Of the interviewed participants, four were female and three were male. They ranged in age between 19 and 76 years (mean = 43.85 years, SD = 20.73) and were predominantly White British ethnicity (n=6; 85.71%). This is representative of the population who were registered on the Tier 2 Weight Management course.

Semi-structured interviews were conducted with participants. Semi-structured interviews offered the opportunity to address potentially sensitive and personal issues (such as weight) and to explore participants' individual experiences of a common situation (e.g. the weight management program) (Newcomer et al., 2015). The aim had been to recruit 10-15 participants as per the suggested guidelines from Braun and Clarke (2013). However, participant numbers were adjusted during the early analysis period and reduced, ensuring a sample size that was both ideal in terms of being data rich and also practical for the researcher and participants (Robinson, 2014; Braun and Clarke, 2021).

Method: Materials

Interviews were conducted in person (n=5), online via Microsoft Teams (n=1) or over the telephone (n=1). Patients were free to choose their preferred method and all interviews were

recorded on dictaphone. The researcher was guided by an interview schedule of 11 questions and began by asking participants to share their experience of the Tier 2 Weight Management Service. The discussion was allowed to flow naturally and was guided to remain on topic and understand the impact of this particular course on lifestyle, behaviours and wellbeing. Where needed, prompts were used to encourage more detail from participants. Example questions used to facilitate the interview include: "*Is there anything you feel was missing from the course, or you'd have liked to be different?"* and *"Has the course made a difference to you?"* with an additional prompt of, *"In what way?".* The researcher found that participants were less forthcoming with answers to questions 4 to 7 of the schedule (where the focus was on their lifestyle and wider determinants of health) and so focussed on experiences of the course and the impact on the direct behaviours such as diet and lifestyle.

Method: Reflexivity

The primary researcher has paid employment in the Community Interest Company that was awarded the contract to design and deliver the T2WMS and so played a key role of the development team who designed the program and delivered the training to facilitators, although she did not deliver the weight management course to any participants. In addition, the primary author is a young female Trainee Health Psychologist, of mixed race ethnicity, with previous experience of weight management services both as an attendee and developing training for healthcare professionals. The area from where participants were recruited, is diverse in terms of age, gender, ethnicity and socioeconomic status and thus the sample interviewed often differed in background from the researcher. The research was conducted blindly, in that the researcher was not given information about the candidates' journey e.g. which cohort, or whether weight loss was achieved. This was in order to reduce bias from the interviewer. The researcher kept a reflexive diary during this process to identify areas of bias.

Method: Procedure

Ethical approval was sought from University of Staffordshire Ethics Committee. The primary author conducted all interviews and was not known to the participants, so each interview began with an introduction of the researcher, the research aims and the information sheet was handed to participants again. They were reminded that they could withdraw their consent at any time, without reason or judgement, and it would not affect the care and support they would be offered by the company facilitating the course (who also run other services in the local are e.g. Social Prescribing teams). In addition, participants were reminded that their data would be anonymised and they would be referred to only by pseudonym in the transcripts and final research.

Interviews conducted on the telephone or via Teams were carried out in a private room at the offices of the primary researcher's paid employment (who had designed and delivered the course). Where interviews were held in person, there was bookable space within the hosting organisation's office venue which was quiet and private so that participants could be open and speak honestly. Some individuals were interviewed within 2 weeks of their course ending; for others, they had volunteered from a previous cohort and it was almost 6 months since they had ended the course. Semi-structured interviews were conducted, lasting between 13 and 43 minutes (mean = 22.55 minutes, SD = 12.48). After the interview conversation had finished, the recording was stopped and participants were thanked and handed a debrief form with information about local support services and how to contact the researcher. Following each interview, the audio was transcribed verbatim before analysis.

Method: Data analysis

Once transcription was completed, the data was analysed using Reflexive Thematic Analysis following Clarke and Braun's (2013, 2021) recommendations. Transcripts were uploaded to

Taguette open-source coding software (Rampin & Rampin, 2021) to support analysis. The transcripts were read multiple times to aid familiarisation and deeper understanding. Coding began with line-by-line coding to interpret the data and regular reflection on the codes being identified (Braun & Clarke, 2019; 2021) allowed for challenges and refinement from the data. Following the initial coding, the researcher tabled codes alongside their prevalence in the transcripts, then grouped similar codes together. These cluster codes were then grouped together as themes on a board using post-it notes. The themes identified were reviewed and refined using this method until the three themes discussed below were remaining.

During the whole process, the first author kept a reflexive journal and this was used to ensure continuous and thorough engagement with the data, and recognise where their position has influenced the interview process, themes and coding processes (Braun & Clarke, 2021). Reflexive thematic analysis allows the subjectivity of the researcher to be recognised and viewed as an asset (Gough & Madill, 2012) and is complementary to applied research where interpretation is necessary (Campbell et al., 2021). This was particularly important given the primary author's involvement in the development (but not the delivery) of the program being evaluated.

Findings and Discussion

The research wanted to understand participants' experiences of the T2WMS intervention and what (if any) impact the course had on their lifestyle behaviours. Three main themes were developed: 'barriers to change', 'facilitators to change' and 'sustaining change beyond the course'. Each theme and a number of sub themes will be discussed below, including relevant quotes. Participants are referred to by their pseudonyms throughout to protect anonymity.

Theme 1: Barriers to change

All interviewed participants shared aspects of the course that challenged them in their weight management journey, either before beginning the program or whilst on T2WMS. The

identified sub themes in barriers include age, medical issues and expectations of the course, and they all suggest a lack of self-belief and confidence that behaviours can be changed.

Too old for this

There is research that suggests that older adults are less likely to have intentions to engage in weight loss behaviours, such as physical exercise, than their younger counterparts (Alley et al., 2018) although the reasons for this are unclear. In this study, age seemed to be a factor in lack of change for some people, with a perception that *"the older you get, the harder it is [to lose weight]"* (Gina) and with people living with "*problems with my weight for years*" (Adam), there was an unwillingness to change. There was a lack of belief that ingrained behaviours performed for a long time could be changed, which might explain why older adults have lower intention to engage in physical activity than others:

> Dorothy: "it's harder for older people to change their ways. You know if you're younger, there's more for it … you can't change old people when they've got their own way of doing this".

I'm not well enough

Medical issues were shared as having a negative impact on attempts to change, both before the intervention and during. Some participants shared the impact that the recent COVID-19 pandemic had on previous attempts to lose weight, with participants sharing they "*had put all that weight on*" (Gina) and lost some of the control they had over their lifestyle.

For some, medical issues were given as a reason why someone wasn't able to be active and join in in with the course or any extra-curricular physical exercise:

> Dorothy: "I'm not an active person really. I've got, I've had three knee replacements"

Medical issues also prevented an individual from attending the full course as they "*missed some sessions because I had an operation"* (Eve). As the course was designed to build on

the previous week's learning, skills and activity, this may have had a detrimental effect on confidence building and knowledge awareness.

There is some tension in the data around medical issues, with some individuals finding it supported their motivation to change, in order to prevent worsening or development of new conditions. This is discussed in Theme 2.

Done this before

Previous experiences of weight loss or diet and physical exercise change were common for all participants. For some, who had more prior knowledge and understanding of behaviour change, they were looking for a structured *"habit-changing environment"* (Colin) and didn't feel they found it in the course, although they acknowledged that they may have been "*in a different ball game to everyone else"* (Colin). There was an expectation of this course that, like previous experiences, the instructor was *"gonna shout down your face, saying what you're doing is wrong"* (Adam). Participants shared an expectation that they would be told what to eat and how much to eat, in a strict calorie-controlled diet, and they found the lack of this refreshing. For most participants, the course exceeded expectations and when asked for advice they would give to others considering the weight loss support, participants highlighted not to let past experiences cloud your expectations of this service:

> Eve: "Just do it! It's mint, compared to what you think it would be"
>
> Adam: "it's not like what other weight management things do"

When followed up in the interview, participants shared why the course was different: the facilitators were relatable and offered practical solutions to weight management problems. This is discussed further in Theme 2.

The nature of previous weight loss attempts can affect the success of the next: research has indicated that those who are most successful at maintaining weight loss have fewer previous attempts with supplements and a greater loss in previous attempts (Myers et al., 2013) so understanding more about past experiences and highlighting the ways in which this course is different, could reduce the barrier for people to join the course and engage with it.

Theme 2: Facilitators to change

All participants shared examples of what supported them to make meaningful changes which impacted upon their weight and wellbeing. Facilitators to change included a sense of responsibility, motivation, emotions and the course being practical and relatable.

Why am I here?

Many of the participants cited external factors as their motivation for joining the T2WMS and engaging in the program. For many, a medical professional was their reason for signing up: *"once that nurse put the idea in my head"* (Gina); or the need to lose weight for a health condition treatment option e.g., orthopaedic surgery. For others, stopping the progression of medical problems such as *"diabetes, stroke, you know, things when you're overweight"* (Gina) was an important motivation to join. Colin had recently had a health check by his primary care Nurse, and the results indicated he was at risk of a number of long term conditions, primarily due to his weight. He was motivated to change when he got those results.

> Colin: "I will do something about that because I've had my arse kicked by the [test] results".

Once on the course, the facilitator played an important role and was "*so enthusiastic, it was hard not to keep going*" (Gina). In addition, the structure of the class gave people encouragement:

> Becky: "About half the lessons was about how many calories we are burning and what we eat and stuff and then half of the lesson we went out for a walk, a walk round. So that was nice in the group because we walked about, burnt the calories *giggles*"
>
> Gina: "I liked the way it was done each week was a different topic"
>
> Fred: "I liked to learn, I loved being at school"

As the course progressed, success in weight loss motivated people to return and continue changing their habits: "*it's lovely to go into a class and get weighed and be told you've lost a pound and you know that was the main motivation"* (Fred). This proved tricky to maintain when the group ended (discussed further in Theme 3).

Whose responsibility is it?

Interviewees talked about responsibility in two ways: the responsibility of the course to provide what's needed for change, and their personal responsibility for their weight. Sometimes these two ideas overlapped.

Firstly, some individuals shared their sense of personal responsibility in taking that first step towards losing weight: *"I don't want surgery…I've got myself this size, I need to learn how to get myself back"* (Gina) and "*I know it's up to me to manage"* (Colin). Others found that fellow course attendees were expecting a *"miracle food … like the clouds are gonna part and there was gonna be a ray of sun and then there's gonna be a change"* (Fred) or they were expecting to be told *"yeah…no, eat this one"* (Eve). This lack of personal responsibility placed the burden of motivation to change with the program and risked disappointment:

> Fred: "You're only gonna get out of it what you're putting in so if you're just gonna turn up and ask for everything to be given to you to change your life, that's not gonna happen".

In addition, participants shared the importance of the program and facilitators fulfilling their role to *"deliver a program which is going to have the necessary impact"* (Colin), preparing well using the resources and knowledge at their disposal. When the course was *"really planned out"* (Gina), it supported people to make and achieve their goals.

Impact of emotions

Weight management is an emotive subject *"obviously like weight has a lot to do with your mental health"* (Eve). When considering weight management, people took the opportunity to reflect on feelings and thoughts about their lifestyle following the course: *"...am I being on my*

own because subconsciously I think, well I'm overweight, who would want us?" (Gina). Interestingly, negative feelings of guilt and shame played a part in participants starting new behaviours or trading off one behaviour for another, for example:

> Fred: "Somebody bought me an ice cream yesterday and I thought, eeh I shouldn't be eating this, but so. I'll pay for that today by having just a bit less at a meal."
>
> Gina: "I used to beat myself up at the end of the day if I'd done like, you know only 1000 steps and [the facilitator would] say well do something every other day, set yourself a realistic goal"

This would suggest that the course was successful in supporting people to keep going with their weight loss goals and plan more effectively for challenges that they will face in the future. Fred's quote is an example of compensatory health beliefs - where we believe that one health behaviour can compensate for another - and the research suggests that this is only predictive of intentions (Radtke et al., 2014) and more commonly linked to making unhealthy food choices (Amrein et al., 2017). So it is likely that Fred's compensatory health beliefs have led him to eat the ice cream, and he will be unlikely to change his next meal as he had justified himself. Facilitating understanding of this belief with participants may facilitate more sustainable and successful behaviour change around diet and exercise. Participants found that *"even the littlest drop of weight [the facilitator] praised you"* helped them to "*[lose] weight every time"* (Eve), indicating that the presence of positive emotions was as much a driver for change as the negative.

Being practical and relatable

Interviewees shared that it was important the knowledge and advice they received was *"quite realistic…everyday living basically"* (Gina) to encourage them to make changes. Gina expanded to explain that she means relatable to the average person - without using words and constructs that seem alien and considering food choices being made in the average environment (with cost and access taken into account). Given the current economic climate, it was important that changes *"weren't expensive stuff"* (Gina). Information around portion

sizes was particularly valued as people are *"not going to let it go to waste."* (Fred). Some participants found visual props, like being shown "*how much portion rice we eat"* (Becky), were useful to cement their learning and they got "*a shock of how small the portions were"* (Fred).

Humanising the facilitator and being seen as part of a *"group of like minded people"* (Colin) helped to add credibility to the information being shared. Eve shares her recollection of a portion size activity below, where the course participants were asked to pour themselves a bowl of cereal, as if they were making breakfast at home. This was then compared to the recommended portion size of 30g.

> Eve: "...this is how much you're meant to eat [30g portion] and this is how much you eat…you know, pouring it and we were telling her when to stop, and she was like 'to be honest I'd have that [participant portion] compared to that [recommended portion]', you know, 'I do have that one [larger, participant portion]'…just brutally honest, yeah I did have that one. It just makes it a lot er easier as well, just from that, cos like normally when you think of people [facilitators] who would like do weight management stuff you just think they'll be turning round to you and just saying like yeah…no, eat this one [recommended portion] and they wouldn't admit that they would do that."

The activity itself was not alarming, but the way in which the facilitator engaged with the group and held themselves accountable for their eating habits supported Eve to feel understood and humanised the facilitator to the group. Relating to the expectations of weight management courses discussed in Theme 1, the friendly and relatable nature of the facilitator encouraged change and helped the course to stand apart from its predecessors. Participants needed to have faith in the knowledge and skills being shared with them. When they felt the facilitator was *"woefully unskilled"* and *"had not…been prepared for their lessons"* (Colin), the impact of the course was dulled. This is a contrast to the other interviewees, who "*did like it the way she was em, the teacher was explaining [portion sizes]"*

(Becky); they viewed the information as novel and useful - *"I did find out more [about healthy food swaps], and that's good"* (Dorothy).

In addition to knowledge, the practical skills imparted were valuable to those who didn't have them before, with one participant noting they *"would really rather have had a cooking lesson, because you know things have changed since being a kid".* (Dorothy, who missed the cookery lesson one week). When skills were new, participants were sometimes sceptical, *"thinking eurgh, what's this, but I love the idea…that really worked"* (Fred, in relation to a mindful eating exercise) and enjoyed seeing the results of those skills in their everyday life:

> Gina: "I managed to get up to three mile so I'm seeing a bit of a difference" (talking about goal setting and trying to do better her previous performance)

When participants left the course with new and knowledge and skills, they were able to share continued motivation - *"it actually give me some skills, like to move on trying to improve yourself"* (Adam) - and stories of continued success *"after leaving the course, I lost I lost quite another stone and a little bit"* (Fred). The features of the course that were the most practical, delivered by someone relatable, have made the most difference to being able to succeed in making lifestyle changes,

Theme 3: Sustaining change beyond the course

Continuing new behaviours beyond the timeframe of the course posed a challenge for all, and participants shared what had helped them to continue and what had hindered them. Once people had developed the confidence and ability to change behaviours, the question of sustainability arose. The data indicated several factors were important to improve the sustainability of successful weight loss and maintenance of healthy behaviours. We discussed managing life events, social support and boosts to confidence.

Bumps in the road

Where new experiences were enjoyed as part of the course, it was important that these new experiences found a convenient home in the everyday lifestyle of the participants. In

particular, structured physical exercise was one such experience participants had to find a way to fit it into their life:

> Gina: “I’ve been working away and I come back on Thursday night and I do PT on Friday morning”

Managing life challenges also stopped people from continuing their new habits or hard work, with almost all of the individuals mentioning they had “*lost my way as well, I just slipped back*” (Gina), which implies that when resilience is low, it’s easy to fall back into previous habits. Research suggests that people who lose weight and maintain the weight loss have clear strategies in place for managing with challenging life situations (Chambers & Swanson, 2012) and more use of these strategies in lifestyle interventions will support people to maintain weight management behaviours post-course. A resource pack was handed out as part of the course, including goal setting work sheets and decision making aids such as popular food swaps for lower calories / higher protein content. Some interviewees found these resources useful to maintain changes they had made on the course:

> Fred: “it was always good to get them out and have a check”.

Support and socialising

The data suggests people were motivated to attend and continue attending the course *“for company…so it gets them out the house”* (Fred) and that there were benefits to being “all in the same boat” (Borek et al., 2019) such as being able to “*say look this is what I’m doing, there's no more weight coming off and I’m worried about it.”* (Fred) and just to *“have a chat like”* (Becky).

This was made clearer when people shared how they were impacted by lower numbers when *“it did go to very few and that was a shame”* (Fred) and this is consistent with recent research which suggests a group weight management program supports success in weight loss by providing a more intense intervention alongside social support (Saul & Gursul, 2021):

Dorothy: “You couldn’t really get to know people, there was only one person who was there every week .. I couldn’t connect, you know what I mean?”

Interviewees stated that they would have liked the course to continue in some way, *“I think if I had of had that for another, maybe three or four weeks, or even two months it might have been a big difference”* (Gina) or Fred suggested a drop-in style approach or *“another level to go back to”.*

The intervention promoted a family approach, encouraging participants to bring along members of their support network and through this, some participants were able to “*even got my Mum to sign up*” (Adam) and boost their social support both in and out of the group, as well as widening the impact of the course.

Like what you see - the confidence factor

When looking for ways to integrate new skills into life, participants shared challenges to maintaining changes in their lifestyle for example, *“at work, eating on the go and trying not to live in garage forecourts. I mean, my partner has started to make me some packed lunches, which is good.”* (Fred). Fred has a busy work schedule and this quote suggests false confidence - he feels confident that he’s found a solution to eating while on the road and that solution is to have someone else prepare his meal. This could be interpreted as a lack of confidence in food preparation and planning; a topic covered in the course and where there is room for improvement.

Participants were largely reluctant to explore deeper issues relating to weight management, with many claiming that their “*weight never bothered [them]*” (Gina). However, there were also some key examples of improved confidence through the course, with people building the confidence to try new experiences outside of the group setting, such as *“not [being] afraid to like get running”* (Adam) and stepping into structured gym environments, which they would not have previously. More directly, people shared ways in which their confidence has grown:

Eve: I never used to look myself in the mirror but now I can look myself in the mirror and I actually like it sometimes. (*Laughs)*. Not always!

Fred: “It's nice being able to buy clothes. Going into a shop and being able to buy within clothes they have for sale in the shop”

It was important to Fred to be able to buy from a high street store and being able to achieve this non-scale victory boosted his confidence and supported him to maintain the lifestyle changes he had made.

Limitations to this research

The research showed limited impact in the wider determinants of health and wellbeing and participants focussed on behaviours specific to weight loss - healthy eating and physical exercise. The conversation did not always explore the wider impact of those behaviours. It is known that obesity is influenced by the wider determinants of health (Elinder & Jansson, 2009), in particular, our environment (where we live, deprivation, accessibility) and social circles (upbringing and experience of healthy eating and exercise). This study had the potential to consider whether the relationship between the wider determinants and obesity runs the other way - does a change in weight management behaviours influence changes in the wider determinants of your health and wellbeing? Future research could better understand the impact that new behaviours adopted from the course have had on other areas of life and build on the experiences shared around new-found confidence, relationships and social circles.

Recommendations for the weight management program

It’s clear that because obesity is a complex, multi-faceted problem it requires a complex, multi-component response. There was some success on the T2WMS, with people reporting weight losses which were sustained beyond the 12 week timetable, even when they didn’t attend the full 12 week program. The structure of the sessions, with the educational

exchange, the opportunity for new physical activity and the support of a group worked well to boost motivation and encourage successful behaviour changes.

However, the data also shows areas where improvements could be made to increase sustainability and magnify the impact. Recommendations for this, and similar weight management courses would be:

1. Including a module addressing pain management and the benefits of physical activity on pain levels could support those who have medical conditions and are living with chronic pain to engage in all aspects of the program.
2. The role of compensatory health beliefs in behaviour, or at least intentions of behaviour, was shared by several participants. This could be useful to address and draw attention to decision making to support participants to consider choices more carefully.
3. The role of the facilitator is key in providing an environment conducive to behaviour change. Courses should be organised to ensure that facilitators are trained, capable and prepared to deliver a session, with relevant resources from the beginning.
4. Promote the benefits of group learning and support, making more of the shared experiences of participants to improve retention through the program. Consider a community-based peer support program to run concurrently and provide ongoing support to participants without the need for facilitation and funding.
5. Consider extending the program to include more support with forward planning and coping (using evidence-based strategies such as if-then plans) to promote individuals' abilities to manage life challenges post-course.

Conclusion

This study was an evaluation of the Tier 2 Weight Management Service, a weight loss intervention that was conducted through semi-structured interviews with 7 participants. The study aimed to understand participants' experiences of the intervention and the impact the

course had on their lifestyle behaviours. Three main themes were identified by the researcher: barriers to change, facilitators to change and sustaining change after the course. Barriers to behaviour change centred on a lack of confidence that ingrained behaviours could be changed, because of age, previous experience of weight loss courses and medical conditions. Facilitators to impactful change on the course included the practical and relatable aspects of the course, managing emotions, taking responsibility and understanding motivation. When discussing the sustainability of lifestyle changes following the course, resilience and ability to manage life events, social support and boosting confidence were key. There is room for further research and improvements to the current iteration of the T2WMS to build on the experiences of participants.

References

Amrein, M. A., Rackow, P., Inauen, J., Radtke, T., & Scholz, U. (2017). The role of Compensatory Health Beliefs in eating behavior change: A mixed method study. *Appetite*, *116*, 1–10.

Borek, A. J., Abraham, C., Greaves, C. J., Tarrant, M., Garner, N., & Pascale, M. (2019). 'We're all in the same boat': A qualitative study on how groups work in a diabetes prevention and management programme. *British journal of health psychology*, *24*(4), 787-805.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, *11*(4), 589-597.

Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern- based qualitative analytic approaches. *Counselling and Psychotherapy Research*, *21*(1), 37-47.

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative research in sport, exercise and health*, *13*(2), 201-216.

Campbell, K. A., Orr, E., Durepos, P., Nguyen, L., Li, L., Whitmore, C., ... & Jack, S. M. (2021). Reflexive thematic analysis for applied qualitative health research. *The Qualitative Report*, *26*(6), 2011-2028.

Chambers, J. A., & Swanson, V. (2012). Stories of weight management: factors associated with successful and unsuccessful weight maintenance. *British journal of health psychology*, *17*(2), 223-243.

Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The psychologist*, *26*(2).

Fontaine, K. R., & Barofsky, I. (2001). Obesity and health- related quality of life. *Obesity reviews*, *2*(3), 173-182.

Elinder, L. S., & Jansson, M. (2009). Obesogenic environments–aspects on measurement and indicators. *Public health nutrition*, *12*(3), 307-315.

Gough, B., & Madill, A. (2012). Subjectivity in psychological science: from problem to prospect. *Psychological methods*, *17*(3), 374.

Jansson, S. P., Engfeldt, P., Magnuson, A., Pt, G. L., & Liljegren, G. (2013). Interventions for lifestyle changes to promote weight reduction, a randomized controlled trial in primary health care. *BMC research notes*, *6*, 1-8.

Keaver, L., Xu, B., Jaccard, A., & Webber, L. (2020). Morbid obesity in the UK: A modelling projection study to 2035. *Scandinavian journal of public health*, *48*(4), 422-427.

Kolotkin, R. L., Meter, K., & Williams, G. R. (2001). Quality of life and obesity. *Obesity reviews*, *2*(4), 219-229.

Michie, S., Atkins, L. & West, R. (2014). *The Behaviour Change Wheel, A Guide to Designing Interventions.* Silverback Publishing. (UK).

Michie, S., van Stralen, M.M. & West, R. (2011). The behaviour change wheel: new method for characterising and designing behaviour change interventions. . *Implementation Science,* 6:42.

Morse, J. M. (1995). The significance of saturation. *Qualitative health research*, *5*(2), 147-149.

Myers, V. H., McVay, M. A., Champagne, C. M., Hollis, J. F., Coughlin, J. W., Funk, K. L., ... & Brantley, P. J. (2013). Weight loss history as a predictor of weight loss: results from Phase I of the weight loss maintenance trial. *Journal of behavioral medicine*, *36*, 574-582.

Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (2015). Planning and designing useful evaluations. *Handbook of practical program evaluation*, 7-35.

Prochaska, J. O., & DiClemente, C. C. (2005). The transtheoretical approach. *Handbook of psychotherapy integration*, *2*, 147-171.

Radtke, T., Kaklamanou, D., Scholz, U., Hornung, R., & Armitage, C. J. (2014). Are diet-specific compensatory health beliefs predictive of dieting intentions and behaviour?. *Appetite*, *76*, 36–43.

Ramage, S., Farmer, A., Apps Eccles, K., & McCargar, L. (2014). Healthy strategies for successful weight loss and weight maintenance: a systematic review. *Applied Physiology, Nutrition, and Metabolism*, *39*(1), 1-20.

Rampin, R., & Rampin, V. (2021). Taguette: open-source qualitative data analysis. *Journal of Open Source Software*, *6*(68), 3522.

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative research in psychology*, *11*(1), 25-41.

Rothberg, A. E., McEwen, L. N., Kraftson, A. T., Neshewat, G. M., Fowler, C. E., Burant, C. F., & Herman, W. H. (2014). The impact of weight loss on health-related quality-of-life: implications for cost-effectiveness analyses. *Quality of life research*, *23*, 1371-1376.

Sowers, J. R. (2003). Obesity as a cardiovascular risk factor. *The American journal of medicine*, *115*(8), 37-41.

World Health Organization. (2003). *Diet, nutrition, and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation* (Vol. 916). World Health Organization.

Qualitative Study Commentary

To accompany paper: *Lightening the load: Evaluating the success of a Community Tier 2 Weight Management Service in the North East*

Introduction

This reflective paper comments upon the process and outcomes of the qualitative research conducted as part of my Doctoral submission. The research was an evaluation of the Tier 2 Weight Management Service (T2WMS) which I developed as part of my employed role. The T2WMS is a 12-week multi-component intervention which aims to educate and motivate individuals to lose weight. The program is held in community venues and is delivered to groups, consisting of a knowledge exchange (education session), physical activity and group support. The impact of the course on individuals who attended was researched through semi-structured interviews and reflexive thematic analysis (Braun & Clarke, 2006; 2021).

Rationale

My current employment is within a not-for-profit organisation located in the North East of England. In this locality, obesity rates amongst adults and primary school children are much higher than the rest of England and are continuing to rise. The Local Authority was awarded National funding to tackle the obesity problem by building a 4 tier weight management and the Tier 2 Community-based service was procured by the company I work for. Although the organisation's main service delivery is social prescribing, they also develop and deliver behaviour change training and part of my role is to support this with my knowledge and expertise as a Trainee Health Psychologist. I was asked to develop the program in accordance with the contract from the Local Authority and NICE guidance about the management of obesity. My role developed further once the program was delivered and it became necessary to evaluate the program and find out whether it was meeting the needs of the contract and the local community, and so the opportunity to complete Doctoral level

research as part of my paid role was offered. I was invested in the outcomes of the program, having developed much of it from the evidence base, and looked forward to being able to deliver my research skills in the workplace environment. However, managing the requirements of both my research and the company's needs, although a rewarding experience, did cause tension (for example, during data collection and analysis).

Planning

During my career in psychology, I had not yet had the opportunity to conduct any qualitative research, so I was less familiar with the process and I had not completed University Ethics for quite a while before the ethics process for this piece of work. I looked into the different qualitative methods available to me and asked the Module Leader and my Professional Doctorate supervisor for support in making this decision.

Weight loss and the associated impact of weight management can be an emotive and difficult topic, so I decided to use semi-structured interviews to encourage openness and remove any hesitancy participants might have found in a group setting (Newcomer et al., 2015). Given my role in the development of the program initially, and my practice as a Trainee Health Psychologist, reflexive thematic analysis seemed to lend itself to the work I was conducting (Braun & Clarke, 2021).

As per recommended guidelines from the University, the British Psychological Society and the Health Care and Professions Council, I submitted an application for ethics with the University. My last Ethics submission was at a different University, almost 7 years prior as part of my Masters, so a lot of thought and effort was put into this part of the process. I procrastinated about the ethics documentation for a long while but once I entered the cycle of feedback and adjustment to the document I became more confident. In addition, the experience of thorough planning and seeking ethical consideration allowed me to become very confident and comfortable with the aims of the project and how I would achieve this. Once submitted, the application was processed and approved with minor amendments,

which confirmed my abilities to write strong research proposals and ethics applications for the future.

Another area which was given thought and attention was the interview itself. I had no prior experience of conducting semi-structured interviews with participants for a formal research project, so it was important to me to fully understand the reasons behind the questions I was having and how they linked back to the original aims of the project (Galleta, 2013), to enable me to be confident in guiding the conversation to reveal rich and useful data. When discussing options for the questions with the Module Leader and my Supervisor, I found myself frustrated at differences of opinions. When I leant into this more, I took the opportunity to read more around the semi-structured interview and was able to support my own decision making based on the opinions I had been offered by two expert voices. I would feel very able to develop and deliver questions for another qualitative research project following their advice and this experience.

Method: Recruitment

Initially, I took guidance from the literature around suitable sample sizes for semi-structured interviews, settling on 10-15 as a goal. This would provide a good sample size for data saturation to potentially occur and indicate a good time to stop (Morse, 1995). In the end, there were 7 semi-structured interviews which were used in this research. The decision to end recruitment was reached by considering a number of factors: firstly, more recent research suggests that guideline numbers can be misleading and when the interpreted data follows the same themes, further analysis is futile (Braun & Clarke, 2021). I transcribed each interview almost immediately after and this allowed me to begin the coding and analysis, whilst still conducting interviews. I was therefore able to see easily when I was hearing the same themes emerge and not recognising any new data. In addition, I had booked interviews to coincide with the end of the latest cohort of the program. Initially, I thought this might offer more opportunities for participants, but it also happened to be the Easter holidays and many people did not attend pre-booked appointments or called to cancel. I was not able

to reschedule all of the participants at a time that would allow me to comfortably and thoroughly analyse the data and still submit the final piece of work. In the future, I would look to set a more suitable timescale for recruitment. I would also continue the quick cycle of transcribing and coding, as this was useful for me to be familiar with the data.

Method: Data Collection

Participants were offered multiple options for the mode of the interview: telephone call, online videocall via Microsoft Teams, or in-person meeting. There was only one telephone call preferred and one Teams call preferred. On reflection, I found it more difficult to build rapport and engage the client fully in the questions when they were on the telephone. The call didn't last as long as the other interviews and I didn't feel as though it was as data-heavy as other interview modes. If I was to conduct more qualitative research in the future, I would like to consider how I might best be able to engage with the client without visual cues. I found this was a reflection of my client-facing work also; I feel more confident and comfortable with engagement and coaching skills in a face-to-face environment.

My role as a developer of the program caused some tension during the interview process. In one particular interview, I was faced with a participant who had not completed the full course and was sharing their negative experience. It was disheartening to hear the experience of the program was not as intended, and I was overcome with the need to defend the structure or delivery of the program. I was able to challenge myself in the moment and remind myself of my role as a researcher - I was listening to understand, not to defend - and this helped me to see the value in the feedback. I can see the challenge with evaluating your own intervention design and in hindsight, having a less invested colleague to support the data collection might have ensured consistency in the interviews, regardless of the experience individuals were sharing.

Method: Data Analysis

Transcribing the data took considerably more time than I had initially thought, although with more research I can see that it is expected to take around 3 times longer than the interview length to transcribe. I did try to speed up the process by employing digital voice recognition software, as suggested by Matheson (2007) but found that this was not accurate due to the strong Northern accents of some participants, and at times, me. It would have sped up the process but I chose to return to transcribing by hand to improve the accuracy and offer more opportunity to familiarise myself with the data.

I chose to use thematic analysis as I felt it would best answer the questions about what elements of the program worked well and what was the most impactful. I used Braun & Clarke's (2006) 15-point checklist to support me during the analysis, as I had not formally researched in this manner before. I found the repetitive nature of line-by-line coding challenging, particularly having transcribed the interviews by hand, but I did find it useful to really improve my engagement with the data. By the time I was writing up the discussion points, I was able to identify which participant said what and knew where to find it.

Although I have a preference for working from printed material, I wanted to use digital software to facilitate quality qualitative analysis to save paper and time. Initially I considered QSR International NVivo 12. However, I work from a Chromebook and NVivo does not work; I found it difficult to find software that would support analysis and run on the Chrome Operating System. After researching alternatives to NVivo, I did use Taguette (Rampin & Rampin, 2021), which is a secure, online software platform enabling coding and themes. I was not familiar with this software and feel I did not use it to its full potential. I did make time to read the user guide and made use of the sorting feature to arrange the codes and access quotations easily. I would like to understand more about the features to support future qualitative research opportunities and see this as an area for my ongoing Continuous Professional Development in the future.

Conclusion and Recommendations

Concluding the research and developing recommendations for the improvement of this or future weight management services was a rewarding exercise. I felt a sense of joy and accomplishment when I was able to see that the T2WMS program had impacted positively on people's lives and improved their ability to manage their health. The recommendations that came from the individuals' experiences will only seek to further strengthen the impact of the course and hopefully attract more funding to continue delivering. It was at this stage that I was able to fully appreciate the benefit of having a more difficult interview experience with the participant who felt negatively towards the course. This balanced view gave me focus and I believe it impacted on how I interpreted the data following - I was able to address where there were gaps without personalising that to me, as one of the developers of the program.

Dissemination

When considering where to submit this article, I was considering Obesity initially. However, on further investigation, Obesity focuses on quantitative data and I didn't feel the topics were aligned with this particular evaluation. I then considered other journals which I had cited or read when designing the T2WMS and the evaluation project. I decided upon Social Science and Medicine. This journal published a mix of qualitative and quantitative work, and covers topics pertinent to health psychology and public health, which fits with this project. This journal has a h-index rating of 270 and the 2022-2023 impact factor is 5.379 and a Q1 ranking for Social Science on SCImago Journal and Country rank website (2023). With Q1 being the highest rating and the scope of this journal, it is a good choice for submission.

Timescale

The timescale for completion of the Professional Doctorate has been tight this year, and feeling less familiar with research methods, I had left the hardest work (in my opinion) to the end. With this in mind, if I was to conduct research in the future, I would offer myself a

much greater time period so that I could fully immerse myself in the process and not feel rushed. I do think some of my decisions may have been different, had time not been a pressure - for example, I may have continued with recruitment and looked at a larger sample.

General

This module has allowed me to build on my limited research experiences. Any experience I had, was with literature reviews or quantitative data and time had passed since I last engaged with the experience. I have gained new skills, particularly in the interview process and writing up, and I have become more confident. It allowed me to challenge myself around my role and consider how my views and relationship with the project can influence the interpretation of the data.

With the challenges I came across in this experience, I can see the importance in continually developing my skills in research and becoming involved in research opportunities as my career progresses. I enjoyed the experience overall, and it has been positive for me and my development.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative research in sport, exercise and health*, *13*(2), 201-216.

Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern- based qualitative analytic approaches. *Counselling and Psychotherapy Research*, *21*(1), 37-47.

Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication* (Vol. 18). NYU press.

Matheson, J. L. (2007). The Voice Transcription Technique: Use of Voice Recognition Software to Transcribe Digital Interview Data in Qualitative Research. *Qualitative Report*, *12*(4), 547-560.

Morse, J. M. (1995). The significance of saturation. *Qualitative health research*, *5*(2), 147-149.

Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (2015). Planning and designing useful evaluations. *Handbook of practical program evaluation*, 7-35.

Rampin, R., & Rampin, V. (2021). Taguette: open-source qualitative data analysis. *Journal of Open Source Software*, *6*(68), 3522.

Systematic Review

Understanding the efficiency of multi-component group psychosocial self-management and physical activity interventions for chronic pain management in older adults: A Systematic Review.

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Abstract

Background: Chronic pain is commonly experienced by older adults (over 65 years). Group psychosocial interventions for pain management can be a cost-effective alternative to pharmacological options, yet most studies assessing the effectiveness of these programmes focus upon working age adults. This review aims to understand the efficacy of multicomponent psychosocial self-management interventions for chronic pain in a population of older adults, who are more at risk from chronic pain and other confounding conditions. Methods: Searches of three databases (PubMed, PsycInfo and Scopus) yielded 362 results and 4 studies were ultimately included. Studies were included if the population was over 65 years, diagnosed with chronic pain, and if the intervention included physical activity with behaviour change techniques, and outcomes of quality of life and pain intensity. Included studies were written in English.

Results: The review suggests group psychosocial interventions for pain management lead to reductions in pain intensity and pain interference, and improvements in function for most older adults.
Discussion: Older adults can participate in complex behaviour change interventions and reap rewards. Included papers reported an improvement in pain intensity, pain interference and functioning post-intervention in comparison to controls. Consistent with research in younger populations, physical activity is an effective component in interventions which reduce or manage chronic pain. Limitations include the low number of included studies and further research is necessary to understand the impact of co-morbid cognitive decline on participation and outcomes, and to consider in more detail which behaviour change techniques have the biggest impact.

Background

Chronic pain, defined as pain lasting longer than 3 months or that continues past the expected healing time [1] was declared a national strategic priority in the United Kingdom [2,3] due to the widespread nature, high impact on daily living and effects on the economy. Chronic pain can be a standalone long term condition (LTC) with an unidentified source(s), or it can be a symptom of other LTCs common in later life, such as cancers, musculo-skeletal conditions and fibromyalgia. Chronic pain is one of the most common diagnoses in older adults; usually defined by the National Institute of Aging as those over the age of 65 years [4]. In the UK, it is estimated that 43% of adults are living with chronic pain and in a population of those over 75 years of age, this rises to 62% [5]. Many studies globally indicate a rise in prevalence of chronic pain as age rises above 65 years [6,7] and with an increasingly ageing population [8] we can expect to see more people living longer with chronic pain.

Activities of daily living (ADLs) are activities which are deemed fundamental to independence and include dressing, personal hygiene, communication with others, and

more [9]. Research [10] indicates that maintaining ADLs is an important factor in older people's quality of life and loss of ADLs is associated with higher healthcare costs and death. People living with chronic pain can experience issues with mobility, fatigue, psychological wellbeing and social isolation. In older adults in particular, chronic pain is associated with disability, loss of function and social isolation [11], which are risk factors for dementia and other LTCs.

As the numbers of people reporting chronic pain and the financial pressures on our National Health Service increase, we need to develop more effective treatments for older adults with chronic pain conditions (also highlighted in the National Health Service Long Term Plan, 2019). Despite the research available and the impact of chronic pain in older adults, it remains "underassessed, underdiagnosed, and undertreated" [12]. A medical model of treatment dominates with pharmacological options explored fist, despite exercise and psychological support being recommended in the NICE guidelines. Prevalence rates for pain are set to continue rising with an ageing population, which will continue to increase the financial burden on national healthcare services. In addition, if we consider the medicines shortage in the aftermath of the Covid-19 pandemic and an ongoing opioid epidemic, alternatives and/or enhancements to pharmacological solutions are in greater demand. Pain management programs which offer a self-management focus and use physical activity and psychosocial interventions [13] to support living well with pain are becoming more widespread as a complement to pharmacological treatment [14,15,13] although medication remains the primary treatment option [16]. As we age, we are more at risk of developing other conditions, including cognitive decline, which affects sensitivity to pain and receptiveness to common pain medications [11,7]. The existence of chronic pain itself increases the risk of cognitive decline [17] and mortality [18] and we become trapped in a spiral of disability and pain. Non-pharmacological interventions, including exercise and mindfulness-based techniques, have been shown to positively impact cognitive decline in older adults [19], so it is possible that these techniques might also indirectly improve pain

management. However, research on the efficiency of psychosocial interventions for pain management is often focussed on younger, working age adults and does not tend to address the complexities of ageing. A recent review of pain management in a population living with Dementia [20] indicated that psychosocial interventions could significantly reduce the level of pain (observed and reported) but the limited studies, risk of bias and heterogeneity means we should consider this cautiously. For these reasons, searches excluded populations living with dementia and focussed on older adults with no reported dementia or cognitive impairment. Research has found no significant difference in outcomes between individual and group therapy options [21,22], although recommends that preference is often decided on by practical constraints e.g. therapist time and cost. As we are looking to minimise cost and maximise pain reduction in the future, this review focussed on interventions that were delivered to groups.

This review aimed to consider the effectiveness of psychosocial pain management interventions in older adults who are living with chronic pain. The objectives of this review are to identify studies of non-pharmacological, multicomponent psychosocial interventions for the management of chronic pain in older adults; collate the evidence around content, mode of delivery and outcomes of these studies; and to develop recommendations for future research and implementation of pain management interventions in specialist older adult and mental health services.

Methods

This systematic review was conducted using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement and submitted to PROSPERO (560443).

Search Strategy

A systematic search of the literature was conducted using three electronic databases: PSYCInfo, PubMed and Scopus. Searches were conducted in February and March 2024.

Search terms were developed to account for a population of older adults with chronic pain, psychosocial and non-pharmacological interventions and outcomes which included quality of life and pain related distress. For example, search terms included “chronic pain” and “old* age”, with Boolean operators used.

Inclusion criteria

Studies were included in this review of literature if they:

1. Targeted adults over the age of 65 years in any setting
2. Specified that participants were diagnosed with chronic pain (lasting 3 months or more) or a specific chronic pain condition
3. Delivered interventions which included an element of physical activity, for the purpose of pain management
4. Delivered interventions as above, and which also included identifiable behaviour change techniques
5. Included outcome measurements of functioning, pain interference and pain intensity
6. Were written in English

Studies were excluded from this review if interventions were delivered to care staff or caregivers; or if participants were diagnosed with a form of dementia or other cognitive impairment. For this review, any populations which had a diagnosis of dementia were excluded because a recent review has looked at the evidence in this particular population [20] and self-management programs are largely impeded by the severity of the decline.

Search Outcomes

The three databases produced a total of 362 individual results. After screening by title and abstract, there were 16 full texts assessed for eligibility. A total of 6 texts met the inclusion criteria and the study flow is shown in Figure 1 about here. Although there were 2 papers which met the inclusion criteria for psychosocial interventions, they did not include physical activity and were subsequently discarded, leaving 4 texts ultimately included (Table 1)

Data extraction

The first and second author independently screened the same databases for results. Data was extracted independently using a purpose built excel form and the extraction is seen in Table 1 following.

Quality appraisal

Quality appraisal of the four studies was based upon the Cochrane Collaboration's Tool for Assessing Risk of Bias in Randomised Trials [27]. The first and second author independently assessed each study and no disagreements were recorded. No studies were judged to have a high risk of bias.

Data Synthesis

Due to the small numbers of included studies, the small sample sizes and the vast difference in specified outcome measures, meta-analysis was not indicated. Instead, a narrative synthesis was completed. The narrative synthesis included consideration of relationships between studies, tabling data to present visually, and developing theories of how, why and for whom the interventions work [28].

Results

Sample Characteristics

Most participants were female (87.3%) and the mean age ranged from 70.1 to 85 years. Of the four studies, only two [24,25] reported ethnicity; 56.5% were recorded as African American, with the remainder recorded as White.

Intervention characteristics

Papers were eligible for inclusion if they contained a physical activity and a behaviour change intervention, and all included studies combined a number of behaviour change

techniques (BCTs). Table 2 indicates which BCTs were included in each study's intervention and the corresponding coding from the Behaviour Change Taxonomy [26].

All four studies included elements of physical activity in their intervention to manage pain, although the duration and intensity of the physical activity varies and only one study [24] explicitly notes that the physical activity was graded to increase in intensity; with Hirase et al [23] notably keeping the exercise consistent. The other interventions shared some commonalities, with three studies including SMART goal setting [12,23,24] and three focussing on education [12,24,25]. One study chose to include mindfulness as a stress management technique [25], although another [23] used unidentified cognitive behaviour techniques for coping, which could not be coded. Three studies included self-monitoring of activity [23,24,25] and offered participants data collection gadgets (pedometer or activity monitor).

Fanning [25] and Janevic [24] used instructional exercise videos; the latter to reduce the pressure on the community health workers and allow them to focus on the psychosocial intervention. There are no coded BCTs which are common across all four papers.

Pain Intensity

To measure pain intensity, Cederbom's study [12] used items from the Brief Pain Inventory (BPI) whilst Hirase [23] and Janevic [24] used a numerical rating scale. Fanning [25] used items from the Patient-reported Outcomes Measurement Information System (PROMIS).

Three studies [12,23,25] reported a reduction in pain intensity; for Cederbom [12] and Hirase [23], this was statistically significant. However, Janevic [24] saw an increase in pain intensity, albeit by a small figure in absolute values (0.3). There is no commonly used BCT between Cederbom, Hirase and Fanning's studies which might account for this, although Janevic's intervention contained more BCTs and focussed on cognitive change.

Pain Interference

All papers considered the impact of pain on daily living, pain interference, and again, chose to measure this outcome differently. Janevic [24] and Fanning [25] used items from PROMIS as a measure of functioning. Cederbom [12] once again used items from the BPI and Hirase et al., [23] chose the Pain Disability Assessment Scale (PDAS).

Three studies [12, 23, 24] reported a decrease in pain interference absolute values – for Cederbom [12] this decrease was statistically significant in comparison to the control group. The common BCT with these three studies was goal setting and action planning, which was not present in Fanning's intervention [25]. Fanning's [25] was the only study which saw an increase in pain interference absolute values; that is suggestive that post-intervention, the intervention group reported an increase in the negative impact pain had on daily living. The absence of goal setting may have caused participants to focus on the present, rather than the future benefits of the exercise. However, the control group of this study had a higher increase in pain intensity in comparison. Fanning's study had the youngest mean age and one previous study suggests that this might produce lower reported pain interference, as pain interference tends to rise consistently with age [29].

Functioning

As a measure of functioning, Cederbom [12] and Fanning [25] udse the Short Physical Performance Battery (SPPB) score which is often used to consider frailty and functioning in older populations [30]; while Janevic [24] chose to use items from the PROMIS. Hirase [23] used the Timed Up and Go Test (TUG) as well as the chair stand test (CST) to indicate functioning. For the purposes of this review, the data reported the TUG, which has been shown to have a better predictive function [31].

Cederbom [12], Fanning [25] and Janevic [24] reported a post-intervention increase in functioning for intervention participants. This improvement was non-significant for Cederbom [12] and Janevic [24]. These studies chose to offer information about health consequences as part of their education and Hirase did not; Hirase [23] reported a decrease in functioning. Another explanation is the chosen outcome measure, which is more objective compared to the self-reported scales used by the other studies.

The majority of studies in this small review have found that education, particularly around health consequences, and goal setting with action planning yield results with functioning and pain interference when combined with exercise.

Discussion

This systematic review identified four studies that used different combinations of BCTs in group pain management programs for older adults. Overall, the results were positive for the interventions groups, with all studies reporting improvements in at least one outcome measure when compared with the control.

This synthesis shows that older adults are able to participate in complex psychological and physical interventions and see positive impacts on their chronic pain. This is important to note for future research given that we have a globally ageing population and need to be able to develop new and impactful interventions targeted to the older adults. In addition, this could have an impact on clinical practice. Although recommended in the NICE guidelines for chronic pain exercise programs and psychological therapy are not first line treatments in the management of chronic pain for older adults, and there is a bias towards pharmacological treatment. This review recommends that pain management programs delivered to older adults could improve functioning, reduce pain intensity and reduce the impact of pain by combining psychological and physical interventions. Only one included study [24] considered the implications of its intervention upon pain medication use and future research into this could impact on the cost and use of pharmacological interventions.

The most consistent improvements are in reduction of pain intensity which is consistent with previous research that increasing physical activity and psychosocial support is successful in reducing reports of pain [32,33]. Janevic [24] was the only study to report a small increase in pain intensity following intervention - further investigation would be necessary to ascertain why although one theory could be that this study had a large (93%) African American sample. Research suggests that African American individuals report higher levels of pain, or feel pain more intensely, than non-African Americans [34,35]. Research also indicates that people living with chronic pain often report higher levels of pain in the short-term after activity [36] and this was one of two studies where there was no staff in person to correct form during exercise.

None of the included studies were based in the UK and so more research is needed to see generalisability. Cultural and healthcare provision differences, particularly between the USA and UK, could account for any difference seen.

The majority of participants were female, and although this supports research which indicates that women are more likely to volunteer participation in health-related projects [37], a recent paper suggests that women are less likely to volunteer for research with a pronounced physical activity component [38]. Males and older adults are also more difficult to motivate [39] so the question remains whether these samples are representative of the target population of older adults. In addition to gender bias, there was an uneven balance of ethnicities and we know that ethnicity impacts on reports of pain and accessibility to psychosocial interventions.

Research within older adults can be limited due to the incidence of cognitive decline that is often present in this age group. No study screened participants for undiagnosed cognitive decline or impairment, and this may have impacted on an individual's ability to engage and understand the course, particularly where we see an increase in pain following exercise or complex self-reporting requirements. Some studies have started to consider the effects of

programs on those with a diagnosed cognitive dysfunction (for example mild cognitive impairment or dementia), and a feasibility trial in 2022 showed promising results with some adaptations to the protocol [40] so the successful interventions delivered in the included studies could have success in wider older adult populations with some adjustment.
The first author is conducting further research in this area, building upon the conclusions from this review and using the protocol from an Acceptance and Commitment based pain management program to understand the efficacy of a pain management program on a cohort of older adults with diagnosed cognitive decline or dementia.

In conclusion, this systematic review found four papers which successfully used a combination of behaviour change techniques to improve the quality of life for older adults living with chronic pain. Improvements varied across the papers, although consistently reported improvements to pain intensity, pain interference and functioning in comparison to control groups. The limited number of papers and heterogeneity are shortcomings of these conclusions and as such, further research is needed. Future research would be beneficial to explore the impact of comorbid cognitive decline on chronic pain self-management programs and to understand which elements of the pain management programs - and specifically which behaviour change techniques - have the best outcomes in this older adult population.

References

1. Treede, R. D., Rief, W., Barke, A., Aziz, Q., Bennett, M. I., Benoliel, R., & Wang, S. J. (2015). A classification of chronic pain for ICD-11. *Pain*, *156*(6), 1003-1007.
2. Chief Medical Officer (2009). 150 years of the Annual Report of the Chief Medical Officer (p33 *ff.*) http://webarchive.nationalarchives.gov.uk/20130107105354/http:/www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_096231.pdf, accessed on 12th December 2023.
3. NHS Confederation, Major conditions strategy: case for change and our strategic framework; 2023. https://www.gov.uk/government/publications/major-conditions-strategy-case-for-change-and-our-strategic-framework/major-conditions-strategy-case-for-change-and-our-strategic-framework--2 Accessed 27 May 2024
4. Jack Jr, C. R., Albert, M. S., Knopman, D. S., McKhann, G. M., Sperling, R. A., Carrillo, M. C., & Phelps, C. H. (2011). Introduction to the recommendations from the National Institute on Aging-Alzheimer's Association workgroups on diagnostic guidelines for Alzheimer's disease. *Alzheimer's & dementia*, *7*(3), 257-262.
5. Fayaz, A., Croft, P., Langford, R. M., Donaldson, L. J., & Jones, G. T. (2016). Prevalence of chronic pain in the UK: a systematic review and meta-analysis of population studies. *BMJ open*, *6*(6), e010364.
6. Hadjistavropoulos, T., Herr, K., Prkachin, K. M., Craig, K. D., Gibson, S. J., Lukas, A., & Smith, J. H. (2014). Pain assessment in elderly adults with dementia. *The Lancet Neurology*, *13*(12), 1216-1227.
7. El Tumi, H., Johnson, M. I., Dantas, P. B. F., Maynard, M. J., & Tashani, O. A. (2017). Age-related changes in pain sensitivity in healthy humans: A systematic review with meta-analysis. *European Journal of Pain*, *21*(6), 955-964.
8. World Health Organization. (2021). *Decade of healthy ageing: baseline report*. World Health Organization.

9. Edemekong, P. F., Bomgaars, D., Sukumaran, S., & Levy, S. B. (2019). Activities of daily living.
10. Covinsky, K. E., Palmer, R. M., Fortinsky, R. H., Counsell, S. R., Stewart, A. L., Kresevic, D., & Landefeld, C. S. (2003). Loss of independence in activities of daily living in older adults hospitalized with medical illnesses: increased vulnerability with age. *Journal of the American Geriatrics Society*, *51*(4), 451-458.
11. Domenichiello, A. F., & Ramsden, C. E. (2019). The silent epidemic of chronic pain in older adults. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, *93*, 284-290.
12. Cederbom, S., Leveille, S. G., & Bergland, A. (2019). Effects of a behavioral medicine intervention on pain, health, and behavior among community-dwelling older adults: a randomized controlled trial. *Clinical Interventions in Aging*, 1207-1220.
13. National Guidelines Centre, UK, (2021). Evidence review for pain management programmes for chronic pain (chronic primary pain and chronic secondary pain). https://www.ncbi.nlm.nih.gov/books/NBK569980/ Accessed 18 December 2023
14. Kress, H. G., Aldington, D., Alon, E., Coaccioli, S., Collett, B., Coluzzi, F., & Sichère, P. (2015). A holistic approach to chronic pain management that involves all stakeholders: change is needed. *Current medical research and opinion*, *31*(9), 1743-1754.
15. Wilson, I. R. (2017). Management of chronic pain through pain management programmes. *British Medical Bulletin*, *124*(1), 55-64.
16. Abdulla, A., Adams, N., Bone, M., Elliott, A. M., Gaffin, J., Jones, D., & Schofield, P. (2013). Guidance on the management of pain in older people. *Age and ageing*, *42*, i1-57.
17. Whitlock, E. L., Diaz-Ramirez, L., Glymour, M., Boscardin, J., Covinsky, K. E., & Smith, A. K. (2017). Chronic pain predicts accelerated memory decline and dementia. *Innovation in Aging*, *1*(Suppl 1), 467.

18. Macfarlane, G. J., Barnish, M. S., & Jones, G. T. (2017). Persons with chronic widespread pain experience excess mortality: longitudinal results from UK Biobank and meta-analysis. *Annals of the rheumatic diseases*, *76*(11), 1815-1822.
19. Hallam, B., Petersen, I., Cooper, C., Avgerinou, C., & Walters, K. (2022). Time trends in incidence of reported memory concerns and Cognitive decline: a Cohort Study in UK Primary Care. *Clinical Epidemiology*, 395-408.
20. Pu, L., Moyle, W., Jones, C., & Todorovic, M. (2019). Psychosocial interventions for pain management in older adults with dementia: A systematic review of randomized controlled trials. *Journal of Advanced Nursing*, *75*(8), 1608-1620.
21. Turner-Stokes, L., Erkeller-Yuksel, F., Miles, A., Pincus, T., Shipley, M., & Pearce, S. (2003). Outpatient cognitive behavioral pain management programs: a randomized comparison of a group-based multidisciplinary versus an individual therapy model. *Archives of physical medicine and rehabilitation*, *84*(6), 781-788.
22. Sobell, L. C., Sobell, M. B., & Agrawal, S. (2009). Randomized controlled trial of a cognitive–behavioral motivational intervention in a group versus individual format for substance use disorders. *Psychology of Addictive Behaviors*, *23*(4), 672.
23. Hirase, T., Kataoka, H., Inokuchi, S., Nakano, J., Sakamoto, J., & Okita, M. (2018). Effects of exercise training combined with increased physical activity to prevent chronic pain in community-dwelling older adults: A preliminary randomized controlled trial. *Pain Research and Management*, *2018*.
24. Janevic, M., Robinson-Lane, S. G., Murphy, S. L., Courser, R., & Piette, J. D. (2022). A pilot study of a chronic pain self-management program delivered by community health workers to underserved African American older adults. *Pain Medicine*, *23*(12), 1965-1978.
25. Fanning, J., Brooks, A. K., Ip, E., Nicklas, B. J., Rejeski, W. J., Nesbit, B., & Ford, S. (2020). A mobile health behavior intervention to reduce pain and improve health in older adults with obesity and chronic pain: the MORPH pilot trial. *Frontiers in digital health*, *2*, 598456.

26. 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).
27. Higgins, D. M., Martin, A. M., Baker, D. G., Vasterling, J. J., & Risbrough, V. (2018). The relationship between chronic pain and neurocognitive function: a systematic review. *The Clinical journal of pain*, *34*(3), 262-275.
28. Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., ... & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version*, *1*(1), b92.
29. Thomas, E., Mottram, S., Peat, G., Wilkie, R., & Croft, P. (2007). The effect of age on the onset of pain interference in a general population of older adults: prospective findings from the North Staffordshire Osteoarthritis Project (NorStOP). *Pain*, *129*(1-2), 21-27.
30. Laurentain, F., Ticinesi, A., Gionti, L., Prati, B., Nouvenne, A., Tana, C., & Maggio, M. (2019). Short-Physical Performance Battery (SPPB) score is associated with falls in older outpatients. *Aging clinical and experimental research, 31,* 1435-1442.
31. Prastowo, N. A., Budiarta, M. O., Suryawinata, K., & Haryono, I. R. (2020). Comparing tools of balance tests in assessing balance of middle-aged women with or without exercises. *JKKI: Jurnal Kedokteran dan Kesehatan Indonesia*, 18-26.
32. Umeda, M., Lee, W., Marino, C. A., & Hilliard, S. C. (2016). Influence of moderate intensity physical activity levels and gender on conditioned pain modulation. *Journal of sports sciences*, *34*(5), 467-476.
33. García-Correa, H. R., Sánchez-Montoya, L. J., Daza-Arana, J. E., & Ordoñez-Mora, L. T. (2021). Aerobic physical exercise for pain intensity, aerobic capacity, and quality of life in patients with chronic pain: a systematic review and meta-analysis. *Journal of Physical Activity and Health*, *18*(9), 1126-1142.

34. Riley III, J. L., Wade, J. B., Myers, C. D., Sheffield, D., Papas, R. K., & Price, D. D. (2002). Racial/ethnic differences in the experience of chronic pain. *Pain*, *100*(3), 291-298.
35. Park, J., Engstrom, G., Tappen, R., & Ouslander, J. (2015). Health-related quality of life and pain intensity among ethnically diverse community-dwelling older adults. *Pain Management Nursing*, *16*(5), 733-742.
36. Bishop, M. D., Horn, M. E., & George, S. Z. (2011). Exercise-induced pain intensity predicted by pre-exercise fear of pain and pain sensitivity. *The Clinical journal of pain*, *27*(5), 398-404.
37. Ding, E. L., Powe, N. R., Manson, J. E., Sherber, N. S., & Braunstein, J. B. (2007). Sex differences in perceived risks, distrust, and willingness to participate in clinical trials: a randomized study of cardiovascular prevention trials. *Archives of internal medicine*, *167*(9), 905-912.
38. Nuzzo, J. (2021). Volunteer bias and female participation in exercise and sports science research. *Quest*, *73*(1), 82-101.
39. Resnick, B., & Spellbring, A. M. (2000). Understanding what motivates older adults to exercise. *Journal of gerontological nursing*, *26*(3), 34-42.
40. Doorley, J. D., Mace, R. A., Popok, P. J., Grunberg, V. A., Ragnhildstveit, A., & Vranceanu, A. M. (2022). Feasibility randomized controlled trial of a mind–body activity program for older adults with chronic pain and cognitive decline: the virtual “Active Brains” study. *The Gerontologist*, *62*(7), 1082-1094.

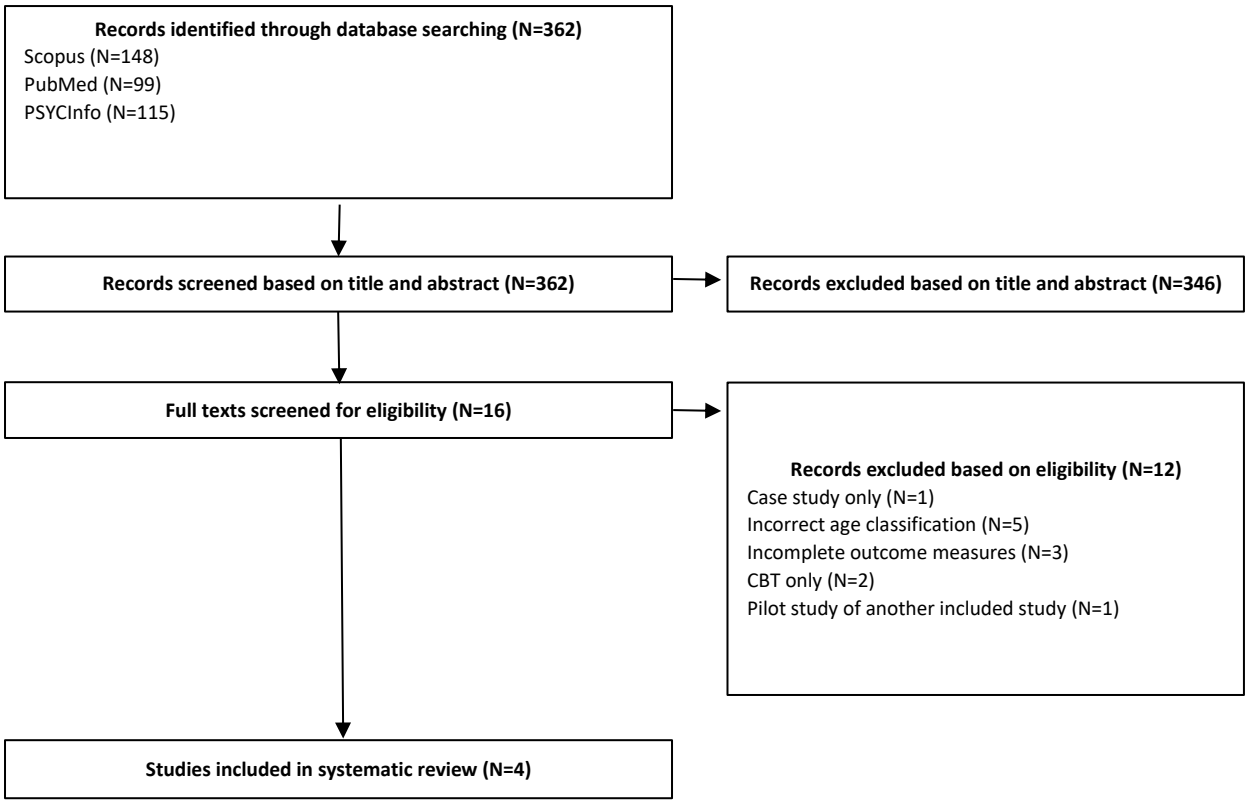

FIGURE 1: Flow of study selection

Table 1. Extraction table showing the important characteristics of the studies.

Author / Date	Research question	Sample	Setting	Intervention***	Statistical results	Findings
Cederbom, S., Leveille, S. G., & Bergland, A 2019	Evaluate the effects of a behavioural medicine in physical therapy approach on pain-related disability	M age = 85 (6.1) 87.6% Female No ethnicity recorded C, N=60; I, N=70	Community dwelling, living at home Norway	Goal setting (1.1; 1.4) Functional behaviour analysis (4.2; 4.3) Education (5.1) Progressive exercise (8.7; 1.5) Physical activity	Intensity: reduced 0.8 Interference: reduced 0.8 Function: increased 0.5	Increase in physical function* Decrease in pain interference** and pain intensity**
Hirase, T., Kataoka, H., Inokuchi, S., Nakano, J., Sakamoto, J., & Okita, M. 2018	Evaluate whether psychosocial intervention combined with exercise training improves pain more than physical activity alone	M age = 78.1 (5.9) 85.9% Female No ethnicity recorded C, N=62; I, N=63	Community dwelling, living at home Japan	Video exercise instructions (4.1) Self-monitoring – pedometer (2.3) Daily outcome diary (2.4) Goal setting (1.1; 1.4) Addressing thoughts (4.3; 11.2) Physical activity	Intensity: reduced 1.1 Interference: reduced 1.1 Function: reduced 0.9	Reduction in pain intensity** Reduction in functioning, unexpected? Reduction in pain interference*
Janevic, M., Robinson-Lane, S. G., Murphy, S. L., Courser, R., & Piette, J. D. 2022	Test the effects and feasibility of a cognitive-behavioural self-management program for chronic pain, delivered by community health workers	M age = 72.1 (7.2) 89% Female 93% African American C, N=24; I, N=22	Community dwelling, living at home USA	Goal setting (1.1; 1.4) Education videos (4.1; 5.1; 5.3; 6.1) Skills practice (8.1) Pleasant activity scheduling (10.3; 10.9) Progressive exercise (8.7) Problem solving (9.2) Sleep hygiene (5.1) Self-monitoring – pedometer (2.3) Physical activity	Intensity: increased 0.3 Interference: reduced 4.3 Function: increased 2.2	Improvements in function* Improvements in pain interference* Improvements in pain intensity (following analysis) Over 90% completion rate Considered self-efficacy as mediator in improvements around pain management
Fanning, J., Brooks, A. K., Ip, E., Nicklas, B. J., Rejeski, W. J., Nesbit, B., & Ford, S. 2020	Examine the initial effects of the MORPH intervention (evidence based group mediated intervention) on pain and physical function.	M age = 70.1 (5.43) 86.7% Female 80% White; 20% Black C, N=13; I, N=12	Community dwelling, living at home USA	Self-monitoring - activity monitor (2.3) Daily weigh through bio-technology (2.4; 2.6) Badge (10.4) Mindfulness (4.1; 6.1; 11.2) Education about nutrition and exercise (5.1; 5.3) Feedback (2.7) Physical Activity	Intensity: reduced 10 Interference: increased 4 Function: increased 0.5	Medium-large effect in reducing pain intensity** Moderate effect on improving function*

C – Control

I – Intervention

** statistically significant result favouring the intervention group

* not significant result favouring the intervention group

*** Behaviour Change Techniques are coded from the Behaviour Change Taxonomy [26]

Table 2. Behaviour Change Techniques coded from each study's intervention design.

Study Behaviour Change Technique	Cederbom, et al.,2019	Hirase et al., 2018	Janevic et al., 2022	Fanning et al., 2020
1.1 Goal setting (behaviour)	Y	Y	Y	
1.4 Action Planning	Y	Y	Y	
1.5 Review behaviour goal(s)	Y			
2.3 Self-monitoring of behaviour		Y	Y	Y
2.4 Self-monitoring of outcome(s) of behaviour		Y		Y
2.6 Biofeedback				Y
2.7 Feedback on outcome(s) of behaviour				Y
4.1 Instruction on how to perform a behaviour		Y	Y	Y
4.2 Information about antecedents	Y			
4.3 Re-attribution	Y	Y		
5.1 Information about health consequences	Y		Y	Y
5.3 Information about social and environmental consequences			Y	Y
6.1 Demonstration of the behaviour			Y	Y
8.1 Behavioural practice / rehearsal			Y	
8.7 Graded tasks			Y	
9.2 Pros and Cons			Y	
10.3 Non-specific reward			Y	
10.4 Social reward				Y
10.9 Self-reward			Y	
11.2 Reduce negative emotions		Y		Y

Y indicates positively coded as included in intervention delivered.

Systematic Review Commentary

A reflective commentary to accompany “Understanding the efficiency of multi-component group psychosocial self-management and physical activity interventions for chronic pain management in older adults: A Systematic Review.”

Introduction

This reflective paper comments upon the process and outcomes of the systematic review completed as part of my Professional Doctorate submission. The systematic review centred upon group interventions delivered to older adult populations with the purpose of improving their pain management skills, reducing pain and improving quality of life. In my current professional role (2024) as a Trainee Health Psychologist, I am working with older adults and have anecdotal evidence from nursing colleagues that pain in this age group is often a barrier to function and quality of life. Part of my professional role is to build and deliver a group intervention to support people living with chronic pain through a cost-effective intervention so the opportunity to conduct a systematic review of the literature was timely and appropriate.

Planning

I have little experience of conducting systematic reviews and found the process daunting. In hindsight, I could have completed this element of the module earlier in my Doctoral journey and would then have afforded myself the time to get to understand the process, reasoning, and analyses behind the systematic review. However, I left this to last due to my lack of experience, and low confidence in this area.

Although the timing of the systematic review I completed tied in with the demands of my professional role, I initially struggled to find a niche in a saturated area of health

psychology literature. I had attempted to start this piece of work on two previous occasions, as far back as 2022 and I had considered building upon my literature review completed for my quantitative and qualitative research methods papers, but the world of weight loss is heavily populated with new research in the wake of the COVID-19 pandemic. Even when I changed topics to focus on older populations, I either found there was already an ongoing systematic review registered or there were too few papers to consider a successful review, which was incredibly frustrating and added to my procrastination. For example, I conducted soft searches around psychosocial interventions designed to support pain management in older adults who were living with a diagnosed cognitive impairment and found very few papers, later finding a review that was published in 2019 with the exact papers I had found. This is a specific area of interest to me, so it was disappointing that I had to amend the search to widen the net to older adults without a comorbid cognitive diagnosis. I managed this disappointment by speaking to my supervisors, both academic and in work, to understand how this systematic review might contribute to the work I'm doing. Once I understood the benefits of starting with what works in older adults and how I could build on that to tailor a program, and co-develop, with my patient group, I was much more comfortable with taking this topic forward.

Method:

Even using a PICO framework, refining the search terms was an exercise in patience and learning new skills. A reminder of Boolean phrases from my supervisor was helpful and I tested and adapted the search terms in an iterative process for a while before I was able to ensure I was getting relevant search results. By the time I approached my second reviewer, I felt confident that the search terms would improve the speed and efficiency of the search process.

Registering on PROSPERO became the biggest barrier for me during this process. I found the form complicated and hard to understand, mostly due to my lack of experience with the terminology and process around systematic reviewing. It felt insurmountable at some points, and I made mistakes with the form, which led to me shying away from completing. Upon completion of my paper, I was adding the appendices and last information and came to realise that the form I had submitted was for a previous iteration of the systematic review I wanted to complete. There was a moment of panic that this would delay the submission of the systematic review, and indeed completion of the Doctoral program. Instead of letting this anxiety consume me, I used my problem-solving skills and completed the form as a matter of urgency and requested a meeting with my supervisor to discuss any next steps that would help to minimise the impact of this. I would be devastated if I put off a minor (in the bigger picture) administrative task and it cost me the Doctorate. I should have used the available support from supervisors to address this early on, but my pride got in the way, and I kept putting off the task. It is important to recognise where our weaknesses are so we can develop them into strengths, and I know that I find it difficult to acknowledge when I might not be able to do something and need assistance from another. This is something I will continue to work on in my own therapy and apply to other areas of my life.

I initially asked an assistant psychologist from my workplace to assist me in the review and at first, this relationship was symbiotic. However, the assistant psychologist moved on from their post in my workplace shortly after we started the searches. We had competing motivations for completing the work and this led to a need for different outcomes, and shortly after this realisation, communication broke down. I was disappointed about this outcome; both in the actions of the assistant psychologist and lack of support, and in myself as I my lack of experience with systematic reviewing (and my worries about completing one) meant I was not able to confidently explain and lead that individual at the time. Having now been through the process, I would feel much more

able to be sure about the steps and tasks for the second reviewer. I turned to a friend of mine for support and found a new candidate for a second reviewer - we both work in the same geographical area and cohort of older adults, so our outlook and needs aligned. This became a successful partnership between two professionals working in different community treatment teams, each of us able to take back the results of this paper and apply the learning to our own areas. I was relieved to have found someone who was able to offer support and pleased that this individual has known me for a long time and so understood how I worked and what was needed.

I have learned a lesson about the time it takes to methodically search, exclude, obtain full papers, and read them. I had often heard people say that this process is underestimated and I fell foul of that. It felt as though every time I read the papers again, I would spot something new or interpret a result differently, in some cases, realising the paper did not meet my inclusion criteria and having to discard it. It was frustrating when this happened, particularly considering the time and energy I had put into reading and annotating. This also impacted on submission – I went back to the drawing board with my search criteria on a number of occasions to see if I could find any additional papers, but this was not fruitful. At times I felt lost in the process and would take time out to remind myself of the aims of the review and my aim of Doctorate completion. I have also learned the benefits of fully immersing yourself into a paper and have been able to apply new learning from reading to my professional practice. If I were to complete another systematic review in the future, I would be certain of my protocol and organise the data differently; more visually as I tend to learn more easily in that way.

Data Synthesis

There were only four papers which fully met the criteria and were included in the synthesis. I was concerned that the validity and reliability of the results would be impacted by the low numbers of studies, and again, I held back on completion as I tried to find a

way to widen the search. For example, there were 2 papers which delivered a psychosocial intervention for pain management that could be coded by the behaviour change taxonomy (Michie et al., 2015) but did not include physical activity as part of the intervention. I considered widening the inclusion criteria, which would allow for these papers to be included and strengthen the validity of the review. However, the background research leading to this topic indicated that (in working age adults at least) the inclusion of physical activity lessened pain and I wanted to ensure that this was captured for the older adults also, as physical activity has so many benefits. As I read the papers, I used coloured post-it notes to record valuable information and then I captured all the information from the papers in an Excel spreadsheet and the draft process was useful to support me to include much more information in the paper itself, in a clear table.

In preparation for this paper, I attended an online lecture given by a member of staff who walked through the meta-analysis statistics, and I found this to be especially useful. It helped me to understand what I was looking for and built my confidence when I was able to complete the maths by hand and check it on computer software. When it came to my own meta-analysis, my included papers used vastly different measures which led me to try a more complicated analysis. Feedback from a supervisor share that this analysis was not only time consuming – which was a worry of mine – but was also not as reliable because of the differences between the outcomes measures used. I had spent weeks completing this part of the review and having received the feedback on my draft that the meta-analysis would not add value because of the low numbers and method used, I was disappointed. It was disheartening to have worked on something and to have overcome action paralysis to not use it at all. I removed it from the paper altogether and concentrated on the positives – no more statistical analysis to do and there was positive feedback on the analysis I had completed; I had done it well. If I were completing a systematic review again, I would firstly extend the time I dedicate to this work and secondly, I would offer myself the time and opportunity to build further on my skills. I

would particularly like to learn how to conduct a repeated measures meta-analysis and generate meaningful results in the future, where appropriate.

Focusing on the narrative synthesis played to my strengths with language and interpretation, and I was aware of how much more comfortable I was discussing the papers without the focus on numbers. However, it was also a challenge as I had not completed a systematic review without a meta-analysis to report and this gave me an opportunity to further my learning, so I read more papers with a narrative synthesis to better understand how I could deliver this.

I had not included a full narrative synthesis in my writing previously and used a guidance paper (Popay et al., 2006) to support a process to follow, which offered the structure of a quantitative-based systematic review. I used some of their suggested techniques to support me, including tabling the data and using visual aids to support developing relationships between papers. I learn well visually so this was useful to me and helped me to relax into the process and build the discussion points.

Discussion

Once I had decided to remove the meta-analysis, my discussion felt bare. However, once I looked again at reporting on the relationships between papers and concentrating on the behaviour change techniques gave me plenty to discuss. Feedback had suggested that I overlooked the value of the narrative analysis and so this became my focus. I found this much easier to interpret than the statistics and easier to draw similarities and spot the gaps in the chosen literature. I did not find it overly easy to draw conclusions until I represented the information visually and it became more obvious where the similarities or differences were in the papers. It is certainly a technique that I now know works well for me and I will use in other situations where I can visually represent data for analysis.

Dissemination

When considering where I might submit this journal, I considered journals focussed on health psychology practice; pain; and ageing. I decided to focus on Age and Ageing, as this was a key characteristic of the cohort I was interested in. This journal has published systematic reviews where older adults have been the focus and articles have been published by Health Psychologists. Age and Ageing has a large medical readership, although it prints medical and psychological-based work; given the focus of the systematic review is on the psychosocial interventions to complement the medical route, I thought this was an appropriate readership and broad focus. This journal has a h-index rating of 168 and the impact factor was 12.782 in 2022, which was the highest ranked Geriatrics and Gerontology journal (Journal Citation Reports, Clarivate, 2022)

General

My professional practice has improved throughout this process as I was able to apply new learning and intervention skills directly to my clinical practice. I read further around the protocol for an included study which saw positive results and have used this protocol to firstly support individuals with whom I am working, and to formulate a proposal to the NHS Trust for a group pain management program to support a larger cohort of our current patients.

In my professional practice now, I work with a large cohort of older adults who are living with chronic pain and comorbid cognitive decline. The research on this group is scarce, particularly with regards to the effectiveness of psychosocial interventions on pain management. This is certainly an area of research where there is a gap and I have already explored how my current role could present opportunities to further research in this area.

This was my last piece of work completed for the Doctorate portfolio and with that, I felt an immense pressure to get everything right and a fear that I would not pass and progress to viva. This fear and pressure became reluctance and procrastination throughout this process, and I suffer from action paralysis when I feel overwhelmed, which delayed my submission further. On days when I was able to make progress, I got lost in the activity and found the time passed quickly and I enjoyed seeing the progress I was making in those moments. Knowing and understanding more about my response to stress and overwhelm, I can focus on preventing overwhelm and breaking down tasks into manageable and smaller chunks.

Overall, despite my reluctance to complete a systematic review, I have enjoyed the learning over this process, both academic learning and personal progression in understanding myself. Being able to focus on the narrative synthesis has taught me not to overlook the value of narration to support quantitative data in the future and I hope I get the opportunity through my professional career to complete another, where I can put into practice the skills I have and build upon them.

References

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).

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., ... & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in systematic reviews. *A product from the ESRC methods programme Version*, *1*(1), b92.

CHAPTER 3:

TEACHING IN HEALTH PSYCHOLOGY

Case Study

Introduction to Taught Programme

My current role in the workplace is as Training & Education Manager and this involves a great deal of negotiation, development, delivery and evaluation of all the training courses we offer. We have a number of training contracts I co-ordinate, develop and deliver; I have chosen five separate units from my training work as evidence in this case study. The programme is not a set of five related modules as they come from different contracts; however, all of the modules contain a portion dedicated to learning effective behaviour change skills for the self or for others.

Session	Title of Session	Student Group	Number of Students	Length of Session	Commissioners	Date
1	Substance Misuse: Alcohol and Drugs	Peer Mentors	6	3 hours	Internal training programme	23rd November 2015
2	SCIP Conversation	Peer Mentors	6	3 hours	Internal training programme	23rd November 2015
3	Substance Misuse: Multi-agency Training	Health & Social Care Workers	22	3 hours	Council	15th December 2015

4	Healthy Weight	Health and Social Care Workers	5	3 hours	Local Authority Initiative	10th November 2015
5	Sexual Health	Professionals	14	2 hours	Local Authority Initiative	13th October 2015

Table 1. Planned session details

Sessions 1 and 2 were part of an internal training exercise for our new cohort of peer mentors. These students are members of our substance misuse service who have either completed their recovery journey, or are part of the way through that journey but are largely stable. The peer mentors will go on, after training, to assist the employed recovery workers in their role and support others recovering from substance addiction.

The Health and Social Care professionals who attended Session 3 were mostly social workers or youth workers, with little to no experience working directly with addictions clients. Those who attended Sessions 4 and 5 were a mixed population of anyone working directly with members of the public. This included volunteers in social enterprises, school nurses, fitness centre staff and health care assistants.

Assessing students' training needs

The important of assessing student needs to inform the content of training has been well documented (Hedrick, 2012; Michie & Abraham, 2008). As someone who delivers training, it is important to ensure I am helping my students to learn (Fowler, 2012) and one way in which I can begin to do this is through assessing their training needs.

Biggs and Moore (1993) suggested a 3-stage model of learning – presage, process and product – and I adopted this model to assess the needs of my students. In each module, I considered prior knowledge of the students; learning and teaching styles; the structure of the session and how the skills taught would fit into the roles preset in the

audience. These factors influenced the design and the materials as explained in the relevant sections.

As sessions 3, 4, and 5 would be delivered as part of external contracts, access to the audience before the training sessions was restricted. With that in mind, I had to assess student needs by proxy, speaking with the Commissioners and Management teams at those organisations. For session 3 (“Substance Misuse: multi-agency training”) the needs assessment was conducted prior to the contract award and was delivered to me to inform content. It came directly from those who would later attend the course on offer, so I was confident that this assessment was a true reflection of the needs and wants of the learners and therefore this session would have students who were motivated to learn. Students for this course also self-identified, meaning that they showed some interest in the topic and were more intrinsically motivated, therefore more likely to process the learning deeply (Marton & Saljö, 1997) and use it in the future, meeting the needs of the commissioning officers.

Discussing how the group present in sessions 1 and 2 will apply the skills and knowledge taught will be relatively simple as they were all attending on a course to become qualified in particular role. As sessions 3, 4 and 5 were of mixed audiences, there was no one specific job role present. Teaching to mixed groups can prove more difficult so I did have to generalise in some of my content. For example, developing skills learning through “examples, demonstrations and discussions” ca be positive (Stigler et al., 2000) but should be contextually relevant to influence learning (Parsons et al., 2015). With a group of mixed roles, applying direct examples of context was more difficult and so the scenarios used had to be generalised to apply to all.

The audience in sessions 1 and 2 were current or ex-substance abuse service users and it was crucial to assess their learning styles in order to offer the most effective learning environment (Robotham, 1999). Robotham had also suggested that a match between learners’ preferred learning styles and teaching styles is essential to encourage

learning, but this was not possible in this situation and some research suggests it is also not necessary (Pashler et al., 2009). The group had mixed abilities in terms of reading and writing abilities and thus responded differently to writing and verbal tasks, presentations and discussions. Other research has suggested that students often have more than one preferred learning style (Lujan & DiCarol, 2006; Alkhasawneh et al., 2008) and so catering to all abilities and styles would be an appropriate reaction to the lack of direct information (Prithishkumar & Michael, 2014). With this in mind, the workshops will contain some elements of visual, auditory, reading and kinaesthetic activities.

Assessment of learning needs is not a static process completed before the session, but an iterative process which needs a constant assessment of students and adaptation by the teacher to meet those needs (Hedrick, 2012) and throughout all of the sessions, I find myself re-assessing the situation and adapting accordingly. At times, this could mean the discussions may deviate from the teaching plan depending on the questions asked by the students or recent events; for example, during Session 1 we discuss the aspects of alcohol addictions in much more detail than other substances. This is because all members of the audience had first-hand experience of another substance addiction (in this case, heroin) but only one of the group had recovered from an alcohol addiction and they were eager to learn from one another and asked many questions.

Identifying the programme structure and content

When planning the structure and general content of the modules I taught, I adopted a systematic approach (D'Andrea, 2003) and worked backwards from the learning outcomes developed through work with commissioners and needs assessments. The structure of these sessions fitted a workshop training session, incorporating some time for knowledge transfer through lecture, activities and group learning, despite there being little evidence to support the efficiency of this type of training (Callaham & Schriger, 2002). I chose this structure because it offered a balance between suggested lecture

elements (Race & Brown, 2007) and interactive participation to stimulate attendees and encourage deeper learning (Trigwell et al., 1999; Bligh, 1998).

In addition, as I was teaching practical conversation skills, it was important to combine factual knowledge, psychomotor performance and the learners' attitudes (Michie & Abraham, 2008). The lecture style of some of the knowledge transfer helped with the former and latter aspects and the activity section helped learners to see how they could improve their work with these skills (Bligh, 1998). Following Bligh and Brice's RIFLE principles of teaching quality (2010), the integration of activity into a real world situation helps to cement learning in the medical profession. It also slows the opportunity for feedback to the students on their performance so they feel confident in using the skills outside of the workshop environment. Although role-play tends to be the least anticipated part of a training programme, theory and practice agrees, it is essential in any communication skills training (Lane and Rollnick, 2007).

Theories of learning suggest a break for reflection and feedback is useful (Bligh & Brice, 2010; Boud & Walker, 1998; Northedge & Lane, 1997). With that in mind, I planned to schedule a small break in the shorter sessions and a longer break in the lengthy sessions to allow attendees time to consider their learning so far and to talk in confidence about any questions they may have and may not want to raise. Initially the longer sessions had 2 short breaks planned to allow reflection after the context setting and the skills teaching, but feedback from the commissioners after the first session asked for just one break to utilise the time more efficiently, despite my recommendation that more time was needed to for reflection of the more difficult topics and skills. For members of the peer and service user group, it was vital to allow for a longer break mid-way through than in other sessions I offer, due to the need for some of the audience to attend a pharmacy. Failure to allow for a convenient and timely break would cause disruption to the session and could jeopardise the recovery journey the service users have been on so far.

All sessions will begin with an introduction and an icebreaker activity. I begin sessions with an introduction to my job role, my experience and me. I have previously delivered a session on behaviour change to a group of General Practitioners and was asked how I was qualified to offer advice on the subject given my young age. It is hard to justify yourself when asked unexpectedly so I now introduce myself correctly at the beginning to alleviate any concerns over my abilities. It is at this point that I also work with the group to set the ground rules for behaviour to limit disruption, improve learning opportunity and keep to time (Fry, 2008; Back et al., 2003). Following this, the icebreaker activity gives opportunities for those who do not know each other to learn more and for me to understand more about the current knowledge of those in the room (Guth & McDonnell, 2004). For example, sexual health is often a taboo subject and learners who attend the sessions are often uncomfortable. An ice breaker which requires them to say 'taboo words' such as "sex", aloud in a group setting makes them feel more at ease when I start to say those words as part of the teaching.

Delivery methods of the sessions will differ depending on the audience. For example, in a small audience of peer mentors (sessions 1 and 2) my delivery style is more informal. When working with the health professionals' audience, my choice of outfit will reflect the role I take as 'lecturer' and I will wear professional work outfits. I also stand at the front of the room and move around during activity times, but will not sit nor address the class informally. Research has suggested that first impressions, including appearance, can alter the trust attributed to the training delivered (Veletsianos, 2010) and so it was important to consider hoe my appearance suited the audience.

With the structure in place, I drew up a plan for each session, which the stakeholders (the commissioners in Table 1) agreed to before I designed the training materials. At times, the commissioners would attend some of the sessions, but overall, the commissioners were ot the same as the student group receiving the teaching.

Selecting training material

When selecting the materials to include in the sessions I taught, it was imperative that I used the resources around me to ensure the knowledge presented to students was of a high quality. This included talking to experts in the relevant fields (particularly around substance misuse etc.) and ensuring that the materials were relevant to the audience, for example, selectin anecdotes or examples from particular job fields to engage the students (Bligh & Brice, 2010).

When researching content for the course, it was crucial to take information from accredited or trusted sources only. The internet provides people with a minefield of information, with very few limitations on who can contribute, meaning that learners often come to the session with untruths about the topic (Gibson & Tranter, 2000), which need to be addressed and not reinforced. For sessions commissioned by a particular Local Authority or geographical area, it is important to have information that is relevant to the workforce and patient groups. I used the local area's Public Health Joint Strategic Needs Assessments to find statistics that were up to date, relevant, and gave the audience the opportunity to learn more about their area.

Using Farrow's (2003) basic principles for developing training materials (Links, Intelligibility, General Style, Highlighting and Targeting), all of the sessions included a Powerpoint presentation and presenter's notes and a resource book for the student. The handbook we prepared for participants aimed to reduce writing, increase attention on tasks and the screen and offered information to help in practice (Bligh, 1998). As can be seen in the example handbook this allows attendees to read along, refresh their memory after and make any notes they feel would add to their knowledge scope. In addition, the style of the Powerpoint was such that I was not reading directly from the slides, as this has been shown to decrease attention and learning (Strauss et al. 2011), but I elaborated on the information presented on the slides. The style of the presentation is consistent and

simple (Murray, 2002) to avoid distraction and reinforce the knowledge transferred to the students (Yu & Smith, 2008).

All of the handbooks, slides and resources used during the sessions are designed to aid understanding. For example, sample drugs are used to show the audience in session 3 what sort of evidence to look out for when visiting clients and students will have to move around the room to visit different 'stations'. This practical exercise targeted their use of the knowledge outside of the classroom, aided learning and was more powerful than writing or reading a description (Studdy et al., 1994; Baid & Lambert, 2010).

These elements combined can be mapped onto Biggs and Moore's (1993) model of deep learning – the 3Ps of presage, process and product to encourage deeper learning in the students.

Assessing learning outcomes

With all of the modules I teach, I ask students to complete a simple learning tool to measure understanding. The tool was designed to be completed by students at the beginning of the session and again at the end, with the evaluation of learning coming from the change in learners' self-assessment of their knowledge. This learning tool is a great way to evaluate learning over the course of the session and to check that I have met the session aims, but it can also be used to flag up any areas where I may need to direct attention during the session. For example in session 3 it was clear that the learners has very little knowledge about Stockton's vision for their substance misuse services and so this was something I made sure to mention several times throughout the training module.

At the end of every session, I revisit the learning outcomes slide and go through all of the points with the audience. It gives them a chance to ask questions, clarify anything they are unsure about, and for me to see whether the learning outcomes have been met.

As I am often teaching a practical conversation skill, learning is not always embedded in the classroom environment and so further evaluation is often needed to

ensure that learning has been put into practice in the real world. As an organisation, we follow Kirkpatrick's levels of evaluation for higher education (Kirkpatrick, 1978; Praslova, 2010) to assess whether our training courses meet the need of the commissioners, students and the problem it is trying to alleviate. The levels are reaction, learning, behaviour and results.

Reaction and learning are integral to the teaching session and are assessed on the day through the learning tool to show whether any transfer of knowledge or skill has taken place. As feedback given in a group environment may not be accurate due to perceived teacher pressures, we also ask attendees to complete an anonymous feedback from. The feedback cards are my way of measuring reaction to the session, looking solely at satisfaction and confidence ratings for reasons of brevity (Race, 1999; Michie et al,. 2008). Changes to behaviour and overall results require longer-term evaluation and are often more difficult to assess. With some of the modules I have taught in this programme, I go on to offer Action Learning Sets (McGill & Beatty, 2001) with the students to evaluate whether people have successfully used their new sills. The overall results, the highest level of Kirkpatrick evaluation, are about return on investment and are often dealt with by the commissioning teams or person requesting the training. Although we have internal meetings in the workplace to discuss the return on investment for our time, the commissioners do not always share their long-term finding. Over the course of this programme, we were not able to find out any of the Commissioning Team's evaluation of their results.

Conclusion

The process of designing and developing this training programme has given me the opportunity to improve and expand the training I offer. I will discuss this more in the evaluation.

In addition, I have noticed a change in the way I tend to work in offering training sessions, from teacher-focussed to student-focussed. At the beginning of the contract (and before this course), I drew up the session aims and objectives; these are very teacher-focused and concentrate on the transfer of knowledge from teacher to student. However, after researching in more detail and adapting my teaching to a more student-centred approach, although from a different module, clearly show a move towards learning outcomes, rather than aims and objectives. This will only enhance the teaching sessions I offer and help to promote deeper learning with my students.

References

Alkhasawneh, I. M., Mrayyan, M. T., Docherty, C., Alashram, S., & Yousef, H. Y. (2008). Problem-based learning (PBL): assessing students' learning preferences using VARK. *Nurse education today*, *28*(5), 572-579.

Back, A.L., Arnold, R.M., Tulsky, J.A., Baile, W.F., & Fryer-Edwards, K.A. (2003). Teaching communication skills to medical oncology fellows. *Journal of clinical oncology,* 21 (12), 2433-2436.

Baid, H., & Lambert, N. (2010). Enjoyable learning: The role of humour, games, and fun activities in nursing and midwifery education. *Nurse education today*, *30*(6), 548-552.

Biggs, J. B., & Moore, P. J.(1993). The process of learning. (3rd edition). Sydney: Prentice Hall.

Bligh, D., & Cameron, B. J. (2000). What's the use of lectures?. *The Canadian Journal of Higher Education*, *30*(1), 192.

Bligh, J., & Brice, J. (2006). Course design. *Learning and Teaching in Medicine*, *31*, 6.

Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in higher education*, *23*(2), 191-206.

Callaham, M. L., & Schriger, D. L. (2002). Effect of structured workshop training on subsequent performance of journal peer reviewers. *Annals of emergency medicine*, *40*(3), 323-328.

D'Andrea, V. M. (2003). Organizing Teaching and Learning. *Handbook for Teaching and Learning in Higher Education*, 26.

Farrow, R. (2003). Creating teaching materials.(ABC of learning and teaching in medicine). *British Medical Journal*, *326*(7395), 921-924.

Fowler, J. (2012). Professional development: from staff nurse to nurse consultant. Part 6: Master and PhD degrees. *British Journal of Nursing*, *21*(4).

Fry, H., Ketteridge, S., & Marshall, S. (2008). *A handbook for teaching and learning in higher education: Enhancing academic practice*. Routledge.

Gibson, S., & Tranter, J. (2000). Internet information: the whole truth?. *Canadian social studies*, *34*(4), 77.

Guth, L. J., & McDonnell, K. A. (2004). Designing class activities to meet specific core training competencies: A developmental approach. *The Journal for Specialists in Group Work*, *29*(1), 97-111.

Hedrick, K. A. (2012). Differentiation: A strategic response to student needs. *The Education Digest*, *78*(4), 31.

Lane, C., & Rollnick, S. (2007). The use of simulated patients and role-play in communication skills training: a review of the literature to August 2005. *Patient education and counseling*, *67*(1-2), 13-20.

Lujan, H. L., & DiCarlo, S. E. (2006). First-year medical students prefer multiple learning styles. *Advances in physiology education*, *30*(1), 13-16.

Kirkpatrick, D. L. (1978). Evaluating In-House Training Programs. *Training and Development Journal*, *32*(9), 6-9.

Marton, F. (1997). Approaches to learning. *The experience of learning*, 39-58.

McGill, I. (2001). *Action Learning, A Guide for Professional, Management and Educational Development*. Psychology Press.

Michie, S., & Abraham, C. (Eds.). (2008). *Health psychology in practice*. John Wiley & Sons.

Murray, B. (2002). Tech enrichment or overkill. *Monitor on Psychology*, *33*(4), 42.

Northedge, A., & Lane, A. (1997). What is learning. *Northedge, A., Thomas, J., Lane, A. and Peasgood, The Sciences' Good Study Guide, Milton Keynes, Open University,(20-22)*.

Parsons, K., MacDonald, S., Hajek, A., & Moody, J. (2015). Increasing attitudes and interest in caring for older adults in first year nursing students using innovative teaching and learning strategies. *Journal of Nursing Education and Practice*, *5*(9), 63-71.

Peasgood, A. (1997). *The Sciences Good Study Guide*. Open University Press.

Prithishkumar, I. J., & Michael, S. A. (2014). Understanding your student: using the VARK model. *Journal of postgraduate medicine*, *60*(2).

Praslova, L. (2010). Adaptation of Kirkpatrick's four level model of training criteria to assessment of learning outcomes and program evaluation in higher education. *Educational assessment, evaluation and accountability*, *22*, 215-225.

Race, P. (2013). *2000 tips for lecturers*. Routledge.

Race, P., & Brown, S. (1998). *The lecturer's toolkit*. London: Kogan Page.

Stigler, J. W., Gallimore, R., & Hiebert, J. (2000). Using video surveys to compare classrooms and teaching across cultures: Examples and lessons from the TIMSS video studies. *Educational Psychologist*, *35*(2), 87-100.

Strauss, J., Corrigan, H., & Hofacker, C. F. (2011). Optimizing student learning: Examining the use of presentation slides. *Marketing Education Review*, *21*(2), 151-162.

Studdy, S. J., Nicol, M. J., & Fox-Hiley, A. (1994). Teaching and learning clinical skills, part 1—development of a multidisciplinary skills centre. *Nurse Education Today*, *14*(3), 177-185.

Trigwell, K., Prosser, M., & Waterhouse, F. (1999). Relations between teachers' approaches to teaching and students' approaches to learning. *Higher education*, *37*(1), 57-70.

Veletsianos, G. (2010). Contextually relevant pedagogical agents: Visual appearance, stereotypes, and first impressions and their impact on learning. *Computers & Education*, *55*(2), 576-585.

Yu, C., & Smith, M. L. (2008). PowerPoint: Is it an answer to interactive classrooms?. *International Journal of Instructional Media*, *35*(3), 271-283.

Evaluation

This assignment reflects on the training sessions descried in the case study, as in Table 1 below.

Session	Title of Session	Student Group	Number of Students	Length of Session	Commissioners	Date
1	Substance Misuse: Alcohol and Drugs	Peer Mentors	6	3 hours	Internal training programme	23rd November 2015
2	SCIP Conversation	Peer Mentors	6	3 hours	Internal training programme	23rd November 2015
3	Substance Misuse: Multi-agency Training	Health & Social Care Workers	22	3 hours	Council	15th December 2015
4	Healthy Weight	Health and Social Care Workers	5	3 hours	Local Authority Initiative	10th November 2015
5	Sexual Health	Professionals	14	2 hours	Local Authority Initiative	13th October 2015

Evaluating my teaching

Evaluation of a teaching session and its effectiveness is vital when considering quality assurance. It allows me to check that we are fulfilling the contractual obligations of the teaching contracts, build on the strengths of our trainers (including myself) and improve the quality of our training division. Moreover, a thorough evaluation helps to

understand whether we are meeting the needs of our students. Following Hounsell's evaluation cycle (2009), this includes mixed methods of feedback, rather than relying solely on one source. For the purpose of this teaching programme, I used 3 sources of evaluation: self-reflection, peer observation, and student feedback. Housell's evaluation cycle consists of six stages:

1. Clarify motives and focus
2. Decide focus and timing
3. Choose sources of feedback
4. Blend methods of feedback
5. Analyse and interpret feedback
6. Decide on action and implement changes

This continuous cycle formed the basis of the evaluation I undertook as part of the programme development and delivery. The motives and focus for this feedback was to check that I am delivering in accordance with the learning outcomes suggested, to check that I affected learning positively and to look for areas of improvement for future sessions. It also offers a way o checking whether any changes implemented following feedback improved the quality of the teaching.

Deciding motives, focus and timing

Within the organisation, the Kirkparick levels of evaluation (Kirkpatrick, 1978; Praslova, 2010) are used to consider students' reaction, learning, behaviour and results. In the real world this is equal to: Did they like it? Did they learn anything? Did they alter their behaviour? Can we see the results we wanted? I used these four levels of evaluation to influence the choice of sources for my feedback.

Choosing the sources of evaluation

To study reaction (level of the evaluation hierarchy), I asked students to complete a feedback questionnaire rating their satisfaction and confidence and offering opportunities for further comments. In the feedback from the student group, the questionnaire used is rather long winded and not very succinct but the use of this questionnaire was stipulated by the management in charge of the internal training programme. As my session was only part of their whole programme, I agreed to use the longer questionnaire, allowing for consistency within the management's feedback analysis. Although longer than I would have designed myself, the questionnaire was thorough and we were able to gain a lot from the responses. For sessions 4 and 5, a shorter version was utilised, asking only 4 questions to guide the students in their evaluation (Race, 1999; Micihe & Abraham, 2008).

Student evaluations are considered highly (Iqbal, 2013) and I ensured feedback was gathered at all of the teaching sessions I delivered in some form, although for session 3, this feedback went directly to the commissioning team rather than to me. I think this could be an area for change; Ballantyne et al., (2000) suggests that although student feedback is highly regarded and useful, it's the teacher's reaction to this feedback that is key. Although I have no copy of the feedback directly, the general verbal feedback I received from students as they were leaving suggested they had learned something ad were pleased with the content of the workshop. Without the feedback from the students I am unable to make changes as a direct result from the students' opinions. However, I did collect feedback from the Commissioner who attended the session and will be using that to make improvements to the course.

Student feedback is widely used by tends to be unreliable (Waithanji, Ngware & Ndirangu, 2005). With this in mind, although student feedback should be collected and evaluated, other forms of feedback can be used to corroborate observations and direct changes. I did not have student feedback from session 3 but I did have peer and commissioners' feedback. These other forms of feedback yielded useful results, as there

are some clear common threads and areas for improvement. When writing this report, I considered all of the feedback sources including my own reflections, to develop actions to be completed for future teaching. Research has shown that teacher reflection is an important part of the feedback and improvement cycle (Nielsen, 2014). I used Gibbs' reflective cycle (Gibbs, 1988) to structure my self-reflection after each session, working through the session looking at what happened, how I felt, an evaluation and analysis, what else could I have done and what could I do if the situation arose again. This level of self-reflection was hard at first but as the programme progressed I found it easier and more productive.

Returning to the Kirkpatrick levels of evaluation, level 2 is learning. In order to assess whether the students gained any knowledge during the sessions, I asked all students to complete a learning tool before and after the teaching sessions. This is a simple table in which students are asked to use a Likert scale 1-10 to self-assess their knowledge and confidence in dealing with a particular subject. This is repeated at the end of the session with the aim of showing an improvement (increase) in the scores.

The final two stages of the Kirkpatrick evaluation – behaviour and results – are harder to obtain feedback from and certainly, in the timescale of this report, that didn't happen. However there are plans to further the assessment of learning through Action Learning Sets for participants to see if longer-term behaviour change has occurred as a result of these teaching sessions (McGill & Beatty, 2001). In addition, the results level of evaluation is an end-term evaluation of whether I have delivered on the contract and provided the results the commissioning team wished to see from the training e.g. an increase in sexual health referrals or an increase in weight management programme referrals. These results are not instantaneous and stand external to the training programme. The methods of evaluation I was able to use for this programme – self-reflection, peer observation and student feedback – provided a good estimation of effectiveness and changes in behaviour.

Blending methods of feedback

As feedback was coming from different sources and most of these sources were singular i.e. a single person or organisation, it was imperative that I didn't make every suggested amendment. Catering to each person's foibles would be futile as many changes would be counter-productive - what pleases one person would be disproved of by anther. Instead, I used triangulation method to seek out common threads and to improve the validity of the positive feedback and of any subsequent changes made (Ghrayeb et al., 2011).

As part of this process, I looked at common feedback in successes, weaknesses and areas for improvement in the evaluations submitted by myself, the students, peer and commissioners where possible. If the various sources corroborated each other that would suggest there was enough evidence to make a change and I would then implement this. If there was a lack of evidence, I would not change the status quo. The approach I took was similar to that of thematic analysis (Braun & Clarke, 2006), grouping together frequently used words in feedback or areas commented upon, which allowed me to collate the feedback and identify successes and areas for change easily.

Analysing and Interpreting Feedback

Successes

There were many elements of my training programme that appeared to be successful. I would consider the module successful if I could show some immediate learning at least, through the learning assessments taken on the day; if the course received positive feedback; and if people felt confident in applying those new skills and knowledge to their everyday roles.

From the student feedback using the (longer and shorter versions of) questionnaires which were returned in sessions 1, 2, 4 and 5, the evidence presented in

Feedback suggests that all of the attendees were satisfied with the training and felt confident in using the skills outside of the classroom environment. These Likert scales were accompanied by written feedback such as “very informative”, “interesting” and “easy to understand”.

There are also comments made about me personally, in my role as a teacher. Shevlin et al., (2000) suggested that when students offer evaluations of teaching time, they don’t simply rate the effectiveness of the teaching, but they rate the lecturer themselves. I think this has happened here with comments on my skills and abilities such as “excellent in her presentation” and “handled with much more confidence and clarity, as this is an area you obviously know a great deal about”.

My self-reflections support the suggestion that I had confidence, delivered well and the course content was suitable in most cases. The use of peer learning in session 1 with the substance misuse clients was well received and the students “enjoyed this session, hearing everyone’s storey’s” (SIC).

The learning tools from sessions 4 and 5 clearly show an improvement in student learning from the beginning to the end of the session, suggesting that on a surface level at least learning was achieved. To analyse whether deeper learning has occurred, as I would hope for through the reflection time and practical exercises built into the programme (Bligh & Brice, 2010; Boud & Walker, 1998; Northedge & Lane, 1997), I can refer to my self-reflection and any peer observation of students throughout the sessions. As students were engaged in the session and applying the learning to the activities and discussions – “got trainees talking”, “small group work for discussion” – then I can be confident that deeper learning has occurred.

Weaknesses and areas identified for improvement

Although the majority of the feedback was positive, there were definitely some areas for consideration where changes could be made. Where possible, I implemented those changes immediately or in time for any repeat sessions being ran.

A theme that came up in my self-reflection and in the feedback comments was that of rushing. I find myself speaking faster for two reasons: either I'm overly comfortable with the topic or I'm uncomfortable with the topic. I cases where I was overly familiar with the topic i.e. sexual health (session 5), students commented on the speed at which I went through the slides when they were trying to make notes. I'm not sure whether their attempts to make notes came from the enthusiasm to learn or concern that some members of the group already had this information. This could lead to changes in two things: firstly, the speed ar which I talk – I need to be mindful of getting overly excited on comfortable topics and secondly, the handbook can be updated to require less note taking and include more information to be used as a reference post-training. This should decrease the strain on students' attention (Bligh, 1998). These changes to the handbook were also suggested by the Commissioners in their evaluation of session 3 and the peer evaluation of the same session. Since this process, I have made changes in the handbook and removed most of the note-taking spaces, replacing them with pre-populated information boxes, thus removing the distraction and temptation to write down the basic information from the session. This has been well received in sessions since this change and students have commented that the handbooks make a useful reference tool and allowed them to direct their attention to the discussion occurring outside of the workbook activity.

Although I consider myself a confident speaker, there e times when my own knowledge of a topic is shaky and thus my confidence wanes. This was noted in session 3; in my self-reflection I was not happy with my performance and was feeling more nervous than usual due to the presence of a peer (and expert in the topic) and one of the commissioners who holds the contract. Both of the independent evaluations picked up on

my lack of confidence and how this made me rush through the lecture in comparison to the session's second half on behaviour change where I obviously felt more comfortable and knowledgeable. I find it difficult to hear criticisms of my work and often take it personally (Shakeshaft et al., 1991), and this was my initial reaction. However, with time to reflect on my own learning and behaviour, I am in agreement with these reflections and have made arrangements to undergo some additional training with the professionals from the substance misuse team. Hopefully this will improve my confidence and the training session as a whole. In addition to that, I wasn't to use the peer mentors – who were my audience in sessions 1 and 2 – to co-deliver the first part of the training with me as I can use their experiences and expertise to improve the session where I lack confidence and knowledge.

One of the feedback comments from session 4 was that one barrier to implementing this change conversation technique in this area of healthcare would be up to date knowledge in the area. Although not a direct response to this feedback, shortly after this session, a famous celebrity figure publicly announced that they were HIV positive. I updated the presentation to include this news and used it to spark discussions around HIV, risk takin and the law in future sessions. Tis resonated well with the audiences in those subsequent sessions and feedback suggests that students appreciated this 'real world' translation of risk taking behaviours and HIV.

Not mentioned in any other feedback but an unforeseen important feature commented upon in my self-reflection is the incident that occurred in session 4. Where I consider a session to be particularly emotive of touching on some disturbing content I will warn the audience and offer opportunities to excuse themselves whenever necessary. However, with the healthy weight session I did not do this and it was an emotional subject for one of the audience members. It reminded me that sometimes working in the Healthcare industry, I forget topics may be painful to others when they are not painful to me. As a change, I will now issue a warning at all future modules.

Deciding on action and implementing change

There is also some feedback, particularly for session 3, which needs to be taken into further consideration before implementation. As agreed in the contract before the first session was delivered I offered the commissioning team the opportunity to read through the slides and handbook and suggest any changes or improvements they felt necessary. This is an important part of assessing the trainees' needs and deciding on the content for the course. One of the instructions was to remove some of the additional substance misuse information and to focus only on the 3 substances requested. However, this was not communicated internally by the commissioning team and the representative who was observing me was unaware of the previous discussions and ensuing instructions. Thus her feedback suggests the opposite. It is difficult to weigh up such contradictory feedback and my conclusion has been to hold back on making any changes and redirect the session plans to the commissioning team for further comments. Sometimes too little direction is given, sometimes too much, when planning a session and this leaves me feeling frustrated when feedback later suggests I haven't met the objectives of the commissioners.

During my time spent reflecting on the feedback and evaluation received, it occurred to me the feedback cards we use could be improved. The card only asks for negative comments – what could we do better and what barriers might you face – and doesn't give the opportunity for positive commentary to be written. Occasionally we see this happening anyway – "I don't think you could make it better"; "Thank you, very interesting and informal"– but we don't offer the explicit opportunity to gather this feedback. With this in mind, I am adapting the feedback cards with the team at work to expand on the satisfaction and confidence ratings and to include some positive reinforcement of our training performance.

Conclusion

By considering a number of sources for evaluation, I have been able to make some pertinent changes to the programme which improves its ability to embed learning in students and meet the needs of both commissioners and students. There is also room for further improvement and I look forward to seeing more positive feedback about the sessions following changes to our standard feedback cards.

Overall the programme of 5 modules I delivered was a success, with students learning new knowledge and skills. I was also given the opportunity to learn and grow and have made changes to the way I plan, deliver and evaluate my sessions to enhance them in the future. I hope that I can make further improvements and continue to use my skills in evaluation, planning and delivery to enrich students' learning experiences. Before undertaking this process of development and evaluation, I was an experienced trainer, particularly in the healthcare field. However the process has allowed me to further develop and challenged some of the perceptions I held and the norms I had adopted. For example, I was accustomed t working through 'aims and objectives' and have now moved away from this teacher-led approach towards student-focussed 'learning outcomes'. As well as personal improvements, this process has led to organisational improvements in the workplace evaluation methods used and I look forward to seeing the results of the new feedback form.

References

Ballantyne, R., Borthwick, J., & Packer, J. (2000) Beyond student evaluation of teaching: Identifying and addressing academic staff development needs. *Assessment & Evaluation in higher Education, 25(3)*, 221-236.

Bligh, D., & Cameron, B. J. (2000). What's the use of lectures?. *The Canadian Journal of Higher Education*, *30*(1), 192.

Bligh, J., & Brice, J. (2006). Course design. *Learning and Teaching in Medicine*, *31*, 6.

Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. *Studies in higher education*, *23*(2), 191-206.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101.

Gibbs, G. (1988). Learning by doing: A guide to learning and teaching methods. Further Education Unit.

Ghrayeb, O., Damodaran, P., & Vohra, P. (2011). Art of triangulation: an effective

Hounsell, D. (2008). Evaluating courses and teaching. In *A handbook for teaching and learning in higher education* (pp. 216-230). Routledge.

Iqbal, I. (2013). Academics' resistance to summative peer review of teaching: questionable rewards and the importance of student evaluations. *Teaching in Higher Education*, *18*(5), 557-569.

Kirkpatrick, D. L. (1978). Evaluating In-House Training Programs. *Training and Development Journal*, *32*(9), 6-9.

McGill, I. (2001). *Action Learning, A Guide for Professional, Management and Educational Development*. Psychology Press.

Michie, S., & Abraham, C. (Eds.). (2008). *Health psychology in practice*. John Wiley & Sons.

Nielsen, L. D. (2014). Teacher evaluation: Archiving teaching effectiveness. *Music Educators Journal*, *101*(1), 63-69.

Northedge, A., & Lane, A. (1997). What is learning. *Northedge, A., Thomas, J., Lane, A. and Peasgood, The Sciences' Good Study Guide, Milton Keynes, Open University,(20-22)*.

Praslova, L. (2010). Adaptation of Kirkpatrick's four level model of training criteria to assessment of learning outcomes and program evaluation in higher education. *Educational assessment, evaluation and accountability*, *22*, 215-225.

Race, P. (2013). *2000 tips for lecturers*. Routledge.

Shakeshaft, C., Nowell, I., & Perry, A. (1991). Gender and supervision. *Theory into practice*, *30*(2), 134-139.

Shevlin, M., Banyard, P., Davies, M., & Griffiths, M. (2000). The validity of student evaluation of teaching in higher education: love me, love my lectures?. *Assessment & Evaluation in Higher Education*, *25*(4), 397-405.

Waithanji Ngware, M., & Ndirangu, M. (2005). An improvement in instructional quality: can evaluation of teaching effectiveness make a difference?. *Quality assurance in education*, *13*(3), 183-201.

CHAPTER 4:

CONSULTANCY SKILLS

Case Study

Considering the provision of Long Acting Reversible Contraception (LARC) from Primary Care Centres in a rural county

Introduction

I have recently moved placements and now work in a Public Health Team for a large, rural county in Northern England. Previously, I had a role which encompassed health promotion and training, as well as one-to-one support for people living with long term health conditions. Having moved to a new area and working in public services for the first time, I was eager to use my skill set as well as enhance it. Lippitt & Lippitt (2004) refer to consulting as the process of "seeking, giving and receiving help" - with this in mind, I was looking for ways in which I could use my current skills and experience to support work for other members of the Local Authority. When I was told there was a need for an audit exercise on LARC provision in the area, I believed this could be an ideal opportunity to complete the Consultancy competency as I had worked in sexual health previously. My Client is a senior manager in Public Health, responsible for overseeing work around children and young people, and sexual health services. The Client has given permission to be included anonymously in this report.

Approach: Request and Identification

As part of my induction period within Public Health, I was invited to talk to key staff in linking departments, such as the Planning team, Integrated Wellness Service (NHS), and other Public Health teams. Being new to the organisation allowed me to see things from an outsider's perspective and identify opportunities during these short interactions

with potential clients (Clark, 1995). During my induction to my new role, I met with the Client and explained my previous experience and skills, including those I had developed on the Doctorate program and which competencies I had left to complete. My Client is the portfolio holder for Children and Young People and Sexual Health Services across the County. Having previously worked in this field, sexual health remains an area of interest for me and the Client was pleased to hear this as she noted not many people in the organisation were keen to work in this area. According to Schein (1999), my Client identifies as a 'contact client' as she first approached me about undertaking the work following our initial meeting. The Client explained that there was a need to complete an audit and report exercise centred around Long Acting Reversible Contraceptives (LARC) provision in the county. The task required a desktop audit of LARC provision in the area between 2015 - 2018, with an accompanying report visually presenting the data and noting any trends. There was nobody suitable within her team to complete the work in a short timeframe and the Client thought I would be ideal for this task because I was familiar with the subject terminology and the rationale behind LARC provision in the community. Research often refers to the helpful nature of the Client - Consultant relationship (Schein, 1999; Earll & Bath, 2004; Lippitt & Lippitt, 2004) and it was important for me as a new member of a team to feel as though my skills and attainment of my personal goals (the completion of consultancy) also helped others, so I was keen to accept this piece of work.

Initially I considered using Cope's (2010) Seven C's of Consulting process to support me through the Consulting opportunity. However, I decided against this once I had discussed the opportunity in detail with the Client as my role was to provide a report and recommendations, but as a time limited task, I would not have the opportunity to follow through and 'confirm' and 'continue' the changes at the end of the process. Instead, I chose to work with Michie's (2001) stages to consultancy: approach from the client, refining the question, developing the methodology, implementing the methods, and reporting back. These fit well with my situation although reflecting back, I could have used

a combination of the two to support with elements such as ‘clarifying’ (Cope, 2010) which would have strengthened the working agreement (and perhaps prevented any time pressures.

Refining the Question: Building Working Relationships

It was important to establish a strong relationship with the Client, both as a new member of staff in the Department but also as a Consultant. This was particularly difficult as I tried to navigate the new teams and understand the current working relationships. Whilst I was keen to show my helpful nature to the staff I was working with, I am also aware that trust is key to building new relationships in business (Solomon & Flores, 2003; Reina & Reina, 2006) so I didn’t want to over-promise or under-deliver. It was therefore important for me to show integrity - being honest about my abilities and following through on what was agreed (Nikolova et al, 2015).

The process for consultancy within the workplace is similar to that of a consultant from an outside source (Earll & Bath, 2004), so I tried to follow their consulting process as closely as possible. Acting as a Consultant was a new role to me and one which was complicated by a perceived power imbalance - I was a new member of staff and the Client is an established senior manager. Block (2011) refers to the Consultant role as being on the same level as the Client, where requests are not the same as orders from management. This was important to recognise and also quite difficult to put into practice at times.

After discussing the opportunity in greater detail, I agreed that this would be a piece of work I was interested in and also had the analysis and writing skills to complete. It is important to be “transparent and inclusive” during the Consultancy process (Earll & Bath, 2004) and so I asked to seek permission from my line manager to go ahead with this as my employment portfolio did not cover this specific area of work. If it was feasible

to spend the time required on this project, I would draw up a working agreement and come back to her to agree the terms.

Developing the Methodology: Negotiation and Contract Particulars

The work required me to provide a service (the analysis and report of LARC data) which was unavailable elsewhere and for which I had the relevant knowledge and skills, so I was following a purchase model according to Schein (1999), as opposed to doctor-patient or process consultation approaches. This afforded me a level of independence and expertise in delivering the report, which was beneficial in some ways but also presented some challenges. The benefits included offering me the opportunity to be creative and offer recommendations in the report - however, I had no prior knowledge of how the Client liked to present data or format a report, so I was required to redesign some elements of the report following a feedback meeting.

I am used to working independently and as such, I have good time management skills. As a new member of staff, my own employment portfolio was growing and I wanted to ensure that the time needs of the consultancy project were achievable without impacting on my day-to-day role. I therefore needed to negotiate involving other people (my line manager) and use the principle of transparency (Earll & Bath, 2004) with all involved about how I would spend my time. It was important to me to complete this work to a high standard and build relationships based upon skill, integrity and respect. During a discussion with my line manager, it was agreed that I could step away from my day-to-day work and offer my skills to the Client, so I returned to the Client's office to accept the work and make further arrangements.

I estimated the work would take around 6 hours, dependent upon the data being available from the analysts and my having access to them during working hours; the final working agreement stipulated around 8 hours, as I gave myself extra time to allow for any

delays, although on reflection, this was still an underestimation of the time that was actually spent on the project.

The client and I verbally agreed to proceed with the project and I outlined the resources that I would require to complete the report; access to data, and an introduction to and support from the analysis team (mentioned in the Working Agreement). We agreed action points and expectations and I produced a working agreement which was agreed and signed. Later that day, the Client emailed me to confirm her agreement with the contract and an introduction to the analyst team.

I agreed with the Client that there could be an opportunity to request edits before the final report was agreed and submitted. However, I did not seek any clarification of a final date by which this would no longer be possible and this did cause an issue as edits were requested by the client with less than 24 hours until the final report was required. I now have a greater understanding of the importance of setting firm deadlines and expectations in writing before undertaking the work and this is something I would ensure in future.

Implementing the Consultancy: Planning and Managing

The client was very hands-off and did not give me specific guidance on how they wanted things done. In some ways, this independence allowed me an opportunity to show my report writing skills and use some creativity. However, there was also a level of concern that the work wouldn't be suitable or may not be what was expected. On reflection, if I had chosen to follow Cope's (2011) 7 C's model, I may have been prompted to 'clarify' the timescales and details of the final report more readily. The requirements were to produce a report from a desktop audit of LARC data collected by the Public Health Data team over the last 3 years, which could then be presented to internal and external stakeholders. I understood the background as to why this was necessary from previous working roles in the Sexual Health field. The aim of the consultancy was to

identify whether LARC provision in Primary Care for this County had remained consistent in the last 3 years. There had been a change to the standard working agreement between the local authority and the primary care practices preceding this period and so it was necessary to understand the effects of those contractual changes on provision (if any). I was asked to deliver a written report - the only request for the layout was that the data was presented in charts which could be easily understood.

To undertake the data collection I had to liaise with the analyst team who could provide the raw data and for this to work efficiently, I needed to know what data was available and then decide what data I needed to see and in what format. Following my introduction to the analyst team, I requested the relevant data sets but I did not specify a required timeframe. As such, there was a delay in receiving the data and starting on the project, which was compounded when the data set was made available to me as it required a lengthy cleansing exercise. At its source, the data is entered by various staff in multiple Primary Care practices and there were inaccuracies and inconsistencies which needed to be addressed before I could use the information to complete the agreed work. For example, if a patient was having a LARC removed and replaced, this was being recorded in different ways: as a ‘removal’ and then an ‘insertion’; or as a ‘replacement’. I asked for support from an analyst to cleanse the data quickly and easily but due to the nature of the figures, we were unable to do this; I completed the cleansing exercise by hand, which took a considerable amount of time. The hours I had estimated in the working agreement were not enough to include a data cleansing exercise of information from ~30 Primary Care Practices. There were brief conversations with the Client to reflect this - in hindsight, I would be eager to get these discussions in writing, rather than orally. This issue caused a delay in finishing the report and although this was not a problem this time, a written record of these conversations in the future would support me if a Client were to complain that I was taking longer than originally agreed. Since there was no final due date

agreed at the stage of contract negotiations, I did not make any amendments to the original working agreement, though this is something I would do going forward.

Communication is key and whilst we had some brief conversations at times, I felt there would have been a more timely and efficient response from myself if I was in more regular contact with the Client. It was difficult to get in touch with the Client at times due to their workload and in hindsight, I would have liked to agree an arrangement for regular communication during the consultation period. This didn't seem possible at the time due to time restraints with other work and lack of amendments to the working agreement.

Reporting Back: Evaluation and Reflection

Once the report was completed, I sent the first draft to the Client. As with other communications, there was a short wait between sending this and receiving the request for a feedback meeting. I responded quickly to the meeting request and spoke with the Client about the draft report later that day.

It was at the resulting feedback meeting that the Client noted the final report would be shared at a meeting the next day. Aside from the timing, the notes from the draft feedback meeting were positive and gave clear indications of any changes the Client required for the final report. It was empowering to know that I had created work which was of the right standard, but also frustrating that the amendments were simple oversights and could have been avoided. I would allow for more time to consider drafts before submitting in future working agreements. I think the main learning from this is to clarify deadlines and details to keep communication relevant and timely. In future pieces of Consultancy work I undertake, I will endeavour to get as much of the detail agreed in writing, even following verbal discussions. Due to my eagerness to complete the work, I did not push to get everything in writing and feel that this would have been helpful.

I asked the Client to offer feedback on my work as a Consultant. The Client's response had little in the way of constructive criticism, but perhaps this wasn't specifically

requested. In future, I would create a standard feedback form, clearly asking for comments on particular aspects of the consultancy process such as communication, integrity and outcomes. The client has referenced the lack of communication about what was required, although she has taken some of the responsibility for this. It was good to see that we both felt communication was lacking - it signals that this was an issue we both feel could be resolved in projects moving forward and it allows me to be less self-critical about it. The feedback is positive and suggests there may be future opportunities for consultancy arising from this work which is a good outcome from the original piece of work. This would give me an opportunity to learn from this first venture into consultancy, and to put into practice the learning I have had.

Summary

This process was novel to me, not having offered myself as a Consultant before and it has been a key learning and development experience for me. I was nervous to initiate the consultancy process in a new, unfamiliar environment and there was an underlying fear of not being able to complete the work to a high standard. As the process went on and I was able to deliver the work as agreed and manage my time when barriers appeared, my confidence grew. I have learned the importance of communication (written in particular) and will be taking this learning forward in any future consultancy project and my work as a whole.

References

Block, P. (2011) *Flawless Consulting: A Guide to Getting Your Expertise Used: 3rd Edition.* San Francisco: Jossey-Bass/Pfeiffer.

Cope, M. (2010) *The seven Cs of consulting: Third Edition*. Harlow: Prentice Hall.

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

Lippitt, G. & Lippitt, R. (1994) *The Consulting Process in Action: Second Edition.* San Francisco: Jossey-Bass/Pfeiffer.

Nikolova, N., Möllering, G., & Reihlen, M. (2015). Trusting as a 'leap of faith': Trust-building practices in client–consultant relationships. *Scandinavian Journal of Management*, *31*(2), 232-245.

Reina, D. S., & Reina, M. L. (2006). *Trust & betrayal in the workplace: Building effective relationships in your organization*. Berrett-Koehler Publishers.

Schein, E. (1999) *Process Consulting Revisited: Building the Helping Relationship.* Addison-Wesley/Pearson.

Solomon, R. C., & Flores, F. (2003). *Building trust: In business, politics, relationships, and life*. Oxford University Press.

Contract and working conditions agreement

THIS CONSULTING AGREEMENT (the “Agreement”) dated this ___ day of _____, ____.

BETWEEN:

XXXXX, Senior Public Health Manager, XXXXX Council

(the “Client”)

-AND-

Rebecca Brown, Trainee Health Psychologist

(the “Consultant”)

BACKGROUND:

A. The Client is of the opinion that the Consultant has the necessary qualifications, experience and abilities to provide consulting services to the Client.
B. The Consultant is agreeable to providing such consulting services to the Client on the terms and conditions set out in this Agreement.

IN CONSIDERATION OF the matters described above and of the mutual benefits and obligations set forth in this Agreement, the receipt and sufficiency of which consideration is hereby acknowledged, the Client and the Consultant (individually the “Party” and collectively the “Parties” to this Agreement) agree as follows:

Deliverables

1. The Client hereby agrees to engage the Consultant to provide the Client with the following consulting service (the “Services”):
    a. Conduct a desktop audit of LARC activity in Primary Care between 2015-2018
    b. Produce a report of the audit results to be presented to key stakeholders in the Sexual and Reproductive Health Teams at XXXXX Council.
    c. Allow for amendments to the report by the Client before submitting the final version for presentation to key stakeholders.
2. The Services will also include any other consulting tasks which the Parties may agree on. The Consultant hereby agrees to provide such Services to the Client.

Term of Agreement

3. The term of this Agreement (the “Term”) will begin on the date of this Agreement and will remain in full force and effect until the completion of the Services, subject to earlier termination as provided in this Agreement. The Term of the Agreement may be extended with the written consent of the Parties.

Performance

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

Budget

5. Except as otherwise provided in this Agreement, all monetary amounts referred to in this Agreement are in GBP.
6. The Consultant will provide the Services detailed in this Agreement, free of charge to the Client.
7. The Consultant will not be reimbursed for any expenses incurred in connection with providing the Services of this Agreement.

Confidentiality

8. Confidential information (the “Confidential Information”) refers to any data or information relating to the Client, whether business or personal, which would reasonably be considered to be private or proprietary to the Client and that is not generally known and where the release of that Confidential Information could reasonably be expected to cause harm to the Client.
9. The Client authorises the Consultant to use the report created, and the contents of this Agreement, to support work required as part of the Professional Doctorate in Health Psychology.
10. The Consultant agreed that they will not disclose, divulge, reveal, report or use, for any purpose, any Confidential Information which the Consultant has obtained, except as authorised by the Client or as required by law. The obligations of confidentiality will apply during the term of this Agreement and will survive indefinitely upon termination of this Agreement.
11. All written and oral information and material disclosed or provided by the Client to the Consultant under this Agreement is Confidential Information regardless of whether it was provided before or after the date of this Agreement, or how it was provided to the Consultant.

Ownership of Intellectual Property

12. All intellectual property and related material, including any trade secrets, moral rights, goodwill, relevant registrations or applications for registration, and any rights in any patent, copyright, trademark, trade dress, industrial design and trade name (the “Intellectual Property”) that is developed or produced under this Agreement will be the sole property of the Client. The use of the Intellectual Property by the Client will not be restricted in any manner.
13. The Consultant may not use the Intellectual Property for any purpose other than that contracted for in this Agreement except with the written consent of the Client. The Consultant will be responsible for any and all damages resulting from the unauthorised use of the Intellectual Property.

Return of the Property

14. Upon the expiry or termination of this Agreement, the Consultant will return to the Client andy property, documentation, records or Confidential Information which is the property of the Client.

Resource Planning

15. The Client agrees to support the Consultant to access resources necessary to complete the Services detailed in this Agreement.
16. The Consultant agrees to provide one draft copy of the report to the Client to allow for feedback before a final written report is submitted at completion of this task.
17. The Consultant agrees to dedicate time to completing this Service in a timely and efficient manner, and confirms that they have the capability and capacity to provide such Services at this time.

Capacity/Independent Contractor

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

Notice

18. All notices, request, demands or other communications required or permitted by the terms of this Agreement will be given in writing and delivered to the Parties via electronic mail at the following addresses:

Rebecca Brown

rebecca.brown@XXXXX

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

Indemnification

19. Except to the extent paid in settlement from may applicable insurance policies, and to the extent permitted by applicable law, each Party agrees to indemnify and hold harmless the other Party, and its respective affiliates, officers, agents, employees and permitted successors and assigns against any and all claims, losses, damages, liabilities, penalties, punitive damages, expenses, reasonable legal fees and costs of any kind or amount whatsoever, which result from or arise out of any act or omission of the indemnifying party, its respective affiliates, officers, agents, employees, and permitted successors and assigns that occurs in connection with the Agreement. This indemnification will survive the termination of this Agreement.

Modification of Agreement

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

Timescales

21. It is estimated that the Consultant will require around 8 hours of working time to complete this exercise.
22. Time is of the essence in this Agreement. Extensions or variations of this Agreement must be made in writing and agreed by both Parties.

Assignment

24. The Consultant will not voluntarily, or by operation of law, assign or otherwise transfer its obligations under this Agreement without the prior written consent of the Client.

Entire Agreement

25. It is agreed that there is no representation, warranty, collateral agreement or condition affecting this Agreement except as expressly provided in this Agreement.

Enurement

26. This Agreement will enure to the benefit of and be binding on the Parties and their respective heirs, executors, administrators and permitted successors and assigns.

Titles/Headings

27. Headings are inserted for the convenience of the Parties only and are not to be considered when interpreting this Agreement.

Governing Law

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

Severability

29. In the event that any of the provisions of this Agreement are held to be invalid or unenforceable in whole or in part, all other provisions will nevertheless continue to be valid and enforceable with the invalid or unenforceable parts severed from the remainder of this Agreement.

Waiver

30. The waiver by either Party of a breach, default, delay, or omission of any of the provisions of this Agreement by the other Party will not be construed as a waiver of any subsequent breach of the same or other provisions.

SIGNED AND AGREED BY BOTH PARTIES ON _____ DAY OF _____, 2018.

_____

XXXXX, (the “Client”)

_____

REBECCA BROWN, (the “Consultant”)

CHAPTER 5:

PSYCHOLOGICAL INTERVENTIONS

Group / Non-face-to-face Intervention: Case Study

Introduction

The aim of this group intervention was to test tailored, evidence-based leaflets designed to support clients living with long ter respiratory conditions in improving their sleep quality. The participants in this brief intervention all have a primary diagnosis of Chronic Obstructive Pulmonary Disorder (COPD) as well as raising the issue of sleep disturbances in one-to-one therapeutic sessions.

For over a year now I have been working in primary care supporting people living with long term conditions (LTCs). This has mostly been in the field of respiratory disease, although many clients have co-morbidities and we have recently started working in the local Diabetes management clinics. Anecdotal evidence from my work has suggested that many people living with a long term condition also suffer form poor sleep quality and this often goes unrecognised as healthcare has a tendency to focus on the physical and biological elements of their disease (Dyas et al., 2010). In addition, many clients accept sleep problems as a symptom of their condition(s) or a natural part of ageing (Jean-Louis et al., 2001). This often results in low reporting of sleep disturbances and research suggests up to 70% of individuals living with a sleep problem do not seek treatment (Gallup, 1995). However, many of my clients have mentioned sleep problems during one-to-one therapeutic sessions and these problems tend to fall into two categories: getting to sleep and staying asleep. Despite exploring the information readily available in online resources with clients, there was an agreement amongst the cohort that this information was not applicable or helpful, so I wanted to tailor the support to the specifics of a group living with a respiratory-based long term condition and disturbed sleep.

Assessment & Formulation

Assessment and formulation processes occur in two ways in this intervention: firstly, in the understanding of my clients' needs in terms of sleep intervention, and the subsequent assessment of the currently available information which led to the development of the leaflets. Secondly, the assessment of participants to determine their specific issues and how we may be able to support them, including measuring their sleep disturbances – and nay potential improvement – on the Pittsburgh Sleep Quality Index (PSQI; Buysse et al., 1999).

Understanding needs and leaflet development

Working with a population living with COPD from a deprived area of the North East for over a year, it was clear that the individuals complaining of sleep problems were not benefitting from the self-care advice that had received from traditional and online resources .Feedback from clients who were offered print-outs from popular online resources was negative and suggested that the information was irrelevant, unhelpful and did not take into account the additional stressors of living with a long term condition. Many associated their problems with exacerbations of their disease in the night, waking with a cough or breathlessness or being unable to sleep due to other symptoms associated with their conditions, such as pain, discomfort and breathing difficulties. Insomnia is widely reported in people living with long term conditions, second only to complaints of pain (Gallup, 1995) and there is a wealth of information available to the tech-savvy patient to support initiating o maintaining sleep. However, these solutions tend to focus on principles of sleep hygiene (including the use of technology later at night and temperatures of the room), building sleep inducing routines for the average human and often neglect the additional features of older age, having a long term condition and living in a deprived area of the UK. For example, the advice to keep windows open to cool the room can be detrimental to those with a respiratory condition, whose breathlessness is exacerbated

with cold air. I have therefore previously found the information available to be unsuitable for the population I am working with and feedback from using available resources such as the NHS Choices website information, has supported this. When writing the leaflet, I made an effort to keep the language friendly, colloquial and asset-focussed to boost motivation and help people to focus on what could be achieved with a little effort.

Links have also been made between poor coping strategies and sleep disturbance behaviours (Ellis & Cropley, 2002) and between coping strategies and health related quality of life in long term conditions (Ketelaars et al., 1996; Hesselink et al., 2004). Sleep hygiene techniques alone have been shown to make little difference to sleep problems (Chesson et al., 1999) suggesting therefore that we need a more complex intervention, incorporating coping strategies and boosting self-efficacy to achieve better quality of life and sleep. This is certainly truer when we consider more complex patients, for which sleep disturbance is one of many symptoms which are exacerbated during normal sleeping hours. Research has concluded that there are little differences between sleep routines in those not reporting sleep disturbances and those reporting them (Ellis et al., 2002) supporting the idea that sleep hygiene is not an effective solo intervention, particularly in older adults. Thus I was looking to create tailored sleep advice which not only takes into consideration any precipitating and perpetuating factors, but also offers a delivery method which allows for brief conversation based around motivational interviewing techniques to occur and support a change in behaviour. Using a range of sources, I collated information in leaflets which could support my clients to change their behaviour relating to getting to sleep or remaining asleep. All resources were from reputable sources which offered information specific to the client group I am working with – mostly elderly population, with respiratory conditions and frequent breathlessness. Given the previous feedback and above research, I avoided using the sleep hygiene techniques typically found online.

Client Assessment and Formulation

All participants were patients of the Behaviour Change Service, based in primary care centres in the local area. Psychosocial behaviour change support is becoming a more 'normalised' part of the LTCs pathways in this area and patients of participating practices are routinely seen by the coaching service during their annual review appointment. The initial assessment with a Link Worker covers questions about lifestyle and habits, including diet, exercise and sleep. For the purpose of this intervention, if someone identified during that time as having poor sleeping patterns or trouble with sleep in some way, they were assigned to my case load and I followed up on this with a more formal assessment. I chose to use the PSQI to offer a starting point to measure any change in sleep quality that may arise from the intervention as it is quick to do and can help identify any specific factors in sleep disturbance. In addition, qualitative discussion helped me to formulate the exact nature of the problem and guide the individuals through the leaflet in a brief intervention. If someone identified as having problems falling asleep through the PSQI or the discussion, I offered them the leaflet for initiating sleep and if people related more to problems maintaining their sleep, they were offered a different leaflet. There was one individual who was offered both leaflets and this individual did not complete the second evaluation and thus no further data was collected from this participant. In total, 11 participants were recruited; 9 completed the intervention with 5 assigned to sleep maintenance and 4 assigned to initiating sleep.

<u>Implementation</u>

All participants were asked to sign a consent form and those unwilling to participate in the intervention before and/or after the intervention were still offered the leaflet(s) as part of their care plan. The leaflet was developed independently using a range of evidence-based sources. It was not co-designed with patients, but instead I chose to collect qualitative feedback as part of the evaluation process to help with ay re-

design of the leaflets or conversation moving forward. The leaflets were given to participants during a one-to-one appointment. There was an introduction to the leaflet and patients were encouraged to read it in their own time and design a plan to support their sleep. In an attempt to keep things relatively simple, I followed the same brief conversation structure when introducing the leaflet. I followed up the intervention in subsequent appointments (frequency varied from one week to three weeks apart), to offer some accountability for patients participating in the intervention and to offer any additional goal setting support. The PSQI was repeated and qualitative feedback requested between 3 and 5 weeks after the leaflet was first offered.

Evaluation

Measures of PSQI were compared before and after to monitor any changes in quantitative manner. The intervention was offered over the festive period and this went some way to accounting for the 2 participants who chose not to follow up after the intervention period. In addition, the festive period can induce stress in some participants and this can change sleeping patterns – which can in turn induce further stress (Van Reeth et al., 2000). The results from the PSQI assessments how that 3 of the 9 engaged participants did not show an improvement; 2 of whom were in the initiating sleep group. However, the qualitative feedback does not suggest any direct reason for this related to the leaflet although it's interesting to note that two of those participants began new medication during the intervention phase. The other individuals improved their PSQI scores, with an average change of 4.5 points. This suggests that goa setting using the leaflet as an intervention tool has some success for this small sample.

Two of the sample reported in their follow-up PSQI that they had used medication to aid sleep – neither patient F nor G showed an improvement in their PSQI scores. The evaluative discussion afterwards indicated that they had chosen to seek over the counter support tather than adopt nre behaviours. Both also reported that the medication "hadn't

really helped" (Participant G). It may be that a more in-depth conversation is required to support people to make a choice about medication compared to self-care behaviours which may boost sleep quality.

I designed a qualitative evaluation form to allow for feedback on each leaflet, covering the conversation which introduced the leaflet, the design, the readability and whether the information was understood. Some of this qualitative information was gathered as part of patient appointment notes where participants were unwilling or unable to take home and o=complete themselves. Collated qualitative feedback suggests that the brief conversation was useful for most individuals and helped to promote a sense of responsibility and "that there was something that could be done" (Participant J). There were 3 participants who did not feel as though the conversation was needed to introduce a leaflet so perhaps this requires more consideration in the future.

The feedback also suggests that the leaflet information was relevant and useful to those using it who acknowledge that it "didn't have too many medical words" (Participant A) and "was relatable and written in a speaking way" (Participant C). This is positive feedback as I had tried to keep the tone colloquial and prevent confusion by not using medical phrases. However, there were negative comments about the style of the leaflet including difficulty reading it due to small text size and large bodies of text. In addition, people felt the leaflet "wasn't very exciting, but these medical things aren't!" and I would like to avoid a leaflet that appears medical. The use of the blue colour may have given this impression. This will be taken into account in any future re-design. Most participants seemed to understand the aim of the leaflet and knew they were being asked to "think about how I could help my bedtime patterns" (Participant D) as well as to "try and change something" (Participant D). On the whole, feedback was positive and seemed to have a positive influence on the sleep patterns of the majority of the participants.

Conclusion

In conclusion, this was a successful trial combining written information with behaviour change conversations. Although the numbers were small, it offers a platform to improve and feedback can be considered in other settings where leaflets and conversations could be offered together.

References

Buysse, D. J., Reynolds III, C. F., Monk, T. H., Berman, S. R., & Kupfer, D. J. (1989). The Pittsburgh Sleep Quality Index: a new instrument for psychiatric practice and research. *Psychiatry research*, *28*(2), 193-213.

Chesson Jr, A. L., Anderson, W. M., Littner, M., Davila, D., Hartse, K., Johnson, S., ... & Rafecas, J. (1999). Practice parameters for the nonpharmacologic treatment of chronic insomnia. *Sleep*, *22*(8), 1128-1133.

Dyas, J. V., Apekey, T. A., Tilling, M., Ørner, R., Middleton, H., & Siriwardena, A. N. (2010). Patients' and clinicians' experiences of consultations in primary care for sleep problems and insomnia: a focus group study. *British Journal of General Practice*, *60*(574), e180-e200.

Ellis, J., & Cropley, M. (2002). An examination of thought control strategies employed by acute and chronic insomniacs. *Sleep Medicine*, *3*(5), 393-400.

Ellis, J., Hampson, S. E., & Cropley, M. (2002). Sleep hygiene or compensatory sleep practices: an examination of behaviours affecting sleep in older adults. *Psychology, health & medicine*, *7*(2), 156-161.

Gallup. (1995). *Sleep in America.* Princeton NJ: Gallup

Hesselink, A. E., Penninx, B. W. J. H., Schlösser, M. A. G., Wijnhoven, H. A. H., van der Windt, D. A., Kriegsman, D. M. W., & Van Eijk, J. T. M. (2004). The role of coping resources and coping style in quality of life of patients with asthma or COPD. *Quality of life research*, *13*, 509-518.

Jean-Louis, G., Magai, C. M., Cohen, C. I., Zizi, F., von Gizycki, H., DiPalma, J., & Casimir, G. J. (2001). Ethnic differences in self-reported sleep problems in older adults. *Sleep*, *24*(8), 926-933.

Ketelaars, C. A., Schlösser, M. A., Mostert, R., Abu-Saad, H. H., Halfens, R. J., & Wouters, E. F. (1996). Determinants of health-related quality of life in patients with chronic obstructive pulmonary disease. *Thorax*, *51*(1), 39-43.

Van Reeth, O., Weibel, L., Spiegel, K., Leproult, R., Dugovic, C., & Maccari, S. (2000). Physiology of sleep (review)–interactions between stress and sleep: from basic research to clinical situations. *Sleep medicine reviews*, *4*(2), 201-219.

Individual case study

Background

It is estimated that around 15 million people in the UK are living with at least one Long Term Condition (LTC) which costs around 70% of health and social care expenditure (Department of Health, 2012). Evidence shows that health and wellbeing is often determined by social, environmental and economic factors (Whitehead and Dahlgren, 2006) and the inequities people experience in these areas, so treatment of multiple Long Term Conditions (LTCs) requires more than the traditional model of medical and pharmaceutical intervention. Social prescribing, in the various forms in which it has been adopted, aims to offer a community solution to a health problem and support individuals to take a more active role in their health and wellbeing (Buck & Ewbank, 2020). I have been working in a Community Interest Company whose purpose is to enable healthy change in the people and places that need it the most, through social prescribing, proactive identification of key cohorts (e.g. in areas of deprivation, living with multiple LTCS) and evidence-based psychological interventions.

This case study details the work I conducted with an individual (SC) whilst in employment with this social prescribing team. Although my role at time did not include direct client contact, the Executive Team understood the needs of the course and agreed that I should hold a small caseload temporarily. The opportunity arose to work with clients as part of a team working in a specific area of deprivation in the North East of England, as they had a large number of waiting referrals and new staff. I used this chance to complete my Professional Doctorate work and to model best practice to the teams.

Assessment

The referral for SC to the Social Prescribing Service came from a local General Practitioner and had very little information: “this lady has problems medically and also her mother is quite unwell with cancer - has changed her routine and finding it hard to get

back to normal - wondering if she could have some support re options for her to start getting back to normal". At first glance, with this level of information, I agreed that this kind of referral was appropriate for me as a Trainee Health Psychologist to support SC to become more active and less isolated. I planned to call SC and invite them in for an assessment consultation, with a view to being able to refer them to a colleague if the case was more complex. With very little information from the primary care provider, the main aim of the assessment appointment was to understand what was going on for the individual and establish rapport.

I chose to do the assessment in person, as body language and proximity can help to build rapport and encourage openness, both of which are important with an initial assessment and can lead to positive client outcomes (Barkley, 2016). However, during my initial telephone conversation, intended only to make contact and book an appointment, SC was very open and shared lots of valuable information without prompting - particularly about their previous weight management activity and how the recent pandemic had impacted on their physical and mental health. They also shared that the pandemic had changed their relationship with the GP and had left them feeling not in control of their physical health conditions. We also discussed some of the social and environmental factors impacting on physical health, including home environment, family relationships and finances.

Once SC started to open up, I quickly took the opportunity to continue the telephone conversation and use this as the assessment, explaining to SC that I didn't want to lose any of the conversation and so would capture notes which would support me to work with her - any additional information and changes to the formulation could be added after the next appointment if needed. As I didn't have the benefit of body language and some other non-verbal cues in a telephone assessment, I used my Motivational Interviewing core skills to support building a good therapeutic relationship, including asking permission to further discuss a topic, reflecting back their words and summarising

the conversation at regular intervals to check my understanding (Rollnick et al., 2008). It was important to begin building our relationship from this early stage in order to promote positive outcomes and engage the client in their own care. After our phone conversation, I determined that the wellbeing wheel would be a good fit to monitor progress and act as a supporting tool for our first meeting. Usually in the initial assessment I would look to complete this tool. However, as this conversation happened unexpectedly, I decided to leave this to complete collaboratively with SC when we met for our first appointment. This could have a negative consequence if SC had started to make improvements following our phone call.

Although the above details the initial assessment appointment, I continuously questioned myself throughout my time with SC; this helped to clarify whether this service was the correct one, when to collaborate with community assets (referring into external services)and to understand when my skill set was no longer needed to support the client.

Formulation

Having gained an insight into SC's circumstances and what was important to them, I took some time before the first session to formulate and plan for the intervention. Once I started to capture all the elements SC had mentioned in the assessment, it was clear how interconnected the issues were which SC had shared with me. I first started to identify and prioritise the behaviour(s) that SC wanted to change. From the assessment notes (Box 1 below), the repeated mention of symptoms and a desire to manage them well and weight management suggested these would be priority behaviours to change.

Female, >60y
Well educated, previous position as social worker
Motivated/activated
Previous LA weight loss program client, pre-pandemic, no longer eligible
Found group exercise useful, did not use the gym alone,
Wants to manage weight, has been sedentary since pandemic
Caring responsibilities for mother, strained relationship with sister
Mother in hospital, offering some space for SC to concentrate on herself
Tremors, feels as though Dr tel appointments are rushed
Doesn't feel valued by GP, bothering them
Tremors are worsening and more noticeable, embarrassing, stress related?, steroids for other condition, rheumatology involved
Tremors stopping daily meaningful activities, can't stand to cook anymore,
Would like support managing weight, anything in local area?

Box 1. Brief notes of assessment conversation, taken by telephone

I chose the COM-B model (Michie et al., 2011) to inform my approach to formulation and support my intervention plan, to highlight what changes were desired and how we might be able to affect them. The COM-B model is illustrated below (Figure 1) and shows the interaction between capability, opportunity and motivation to achieve successful behaviour change. Once the desired outcome behaviours are identified, the COM-B model is used to design an intervention to target one or more of these components. As all of the components (capability, opportunity and motivation) interact to generate the desired behaviour, there is no firm priority and so I was able to be person-centred and tailor the approach to SC. This reflects my usual practice, where I tend to draw on different approaches to suit the client and their needs and improve outcomes (Lambert & Barley, 2001). During the impromptu assessment I had followed guidance from Michie et a., (2014) around collecting information to inform intervention design, including asking open-ended questions.

From the initial assessment, initiating exercise and improved symptom management were the main behaviours SC desired. I then considered the capability, opportunity and motivation to perform those behaviours and identified techniques that

would support, for example, using If-Then plans to support routine building and increase opportunities.

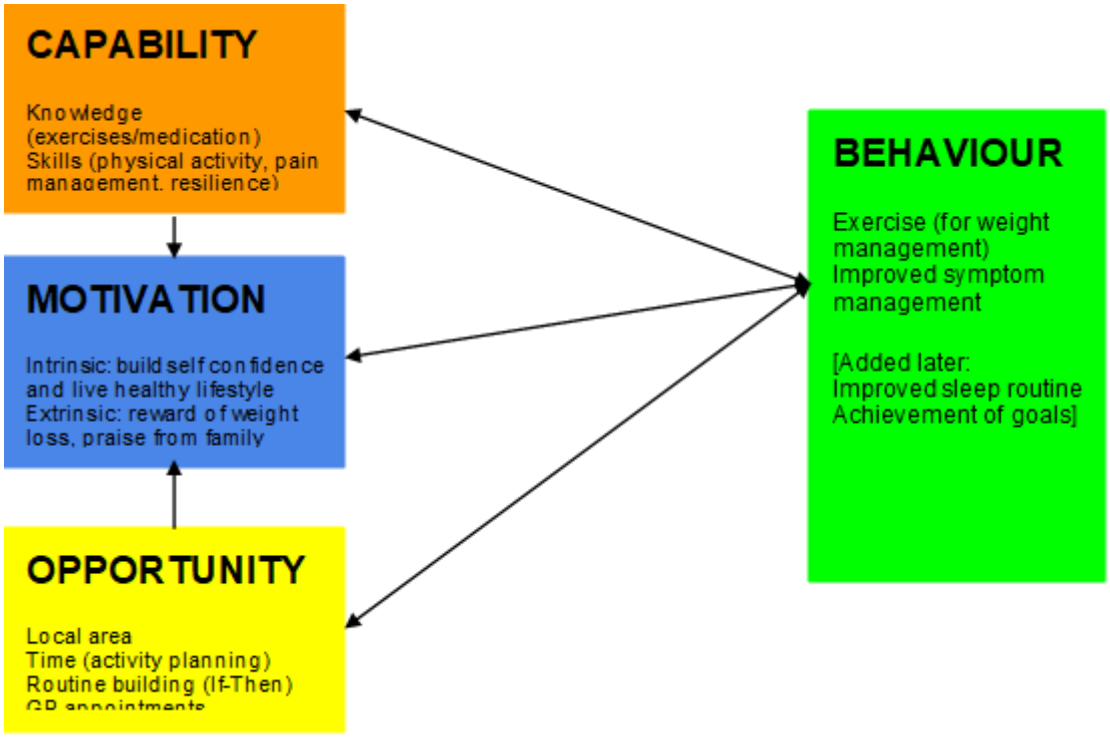

Fig. 1. The COM-B model for intervention development with SC, adapted from Michie et al., 2011

I knew that I would be working with SC for at least 4 sessions, an hour every fortnight, before I needed to return to my regular working pattern and facilitate a handover to a colleague who would continue support if needed. With this in mind, I formulated a plan for each of the sessions, as shown in Table 1. (Table 1 shows the original formulation in standard text and my added comments and thoughts in *italic text* as I adapted my approach following client sessions with SC which offered new assessment information).

SESSION	AIMS	NOTES
1	Establish boundaries of role Confirm assessment and formulation Complete wellbeing wheel to establish baseline Small goal setting around priorities – COM (share the knowledge, plan opportunity and understand the motivation) Action planning - opportunity	Understand what's going on and establish boundaries for service Use reflection to confirm priorities: symptoms and physical activity (identify the behaviours) Use solution focused approaches to understand what success looks like (The Miracle Question (Trepper et al., 2010)) Complete quantitative measure to establish baseline before moving on to goal setting Set small, sustainable goals for next week - one new thing (what's the opportunity? What do you need to complete? What will you gain from success?)
2	Check in on goals and progress Next steps in goals Acceptance and Commitment approaches re relationship with family	What are the next steps? Referrals to activities Support client to go to activities Stress management techniques (breathing, body mapping, grounding) *Referrals aren't enough, need to build on motivation and action planning. Perhaps use SFA and visualisation to support*

3	Follow up on small goals Active modelling of weight management techniques	E.g. walk and talk appointment to model Follow up on capability – what else is needed to achieve success? Opportunity – action planning Motivation – reminder of the why, what's to gain *Sleep raised as important at the last appointment, need to begin developing routine. Build on one new thing tried last time - has it worked? What else could SC try?* *Challenge unhelpful thoughts and comments* *Share 5 areas, links between thoughts and other processes*
4	Evaluation, ending of relationship and handover	Wellbeing wheel assessment tool Goals continuing - what's the next step? Keep momentum with new worker. *Reminder of where started and where now, asset approach to boost confidence with new worker - being referred to specialist weight management worker to give 1-1 exercise support*

Table 1. Session Plan for working with SC

At the initial formulation, I had not yet completed my communication skills assessment with my line manager. Once I had been assessed I took on board some of the advice and amended the plan for SC so that I wasn't trying to do too much as this could overwhelm the client.

<u>Intervention Delivery</u>

Although I had a plan for every session, which was revisited and updated regularly during my time with SC, the delivery of the intervention did not always follow the plan. The initial assessment appointment was made for a face-to-face meeting and unfortunately I tested positive for COVID-19 so was unable to attend in person. I sent a text to SC explaining the situation and asking if they would be happy with a telephone or video call instead and they agreed to speak on the phone. All of the subsequent appointments were able to go ahead in person, which I much prefer not only for therapeutic relationship building, and also acts as a gentle step to meeting people again - an important introduction to face to face support following the pandemic period where many found themselves isolated.

NICE guidelines suggest using an asset-based approach in behaviour change conversations and I used this to build on tactics and utilise core conversation skills, particularly OARS (open questions, affirmations, reflection and summarising), (Miller & Rollnick, 2012) to share the client's strengths back to her. I adapted to the conversation we had at the time and focussed on the skills I was using to support SC. In particular, I was engaging in active listening in order to build my therapeutic relationship with SC and respond to what really mattered to her (Stickley & Freshwater, 2006). For example, in our second appointment, SC raised sleep as an issue. I believe this came about later in the conversation as we were building a good relationship and rapport and the reasons for poor sleep were personal in nature.

SC had worked with the service before (pre-COVID) and so had a good understanding of how we might work together, although I continued to share the service specification and set some boundaries around our working. This was particularly important to revisit when SC later brought up concerns about managing grief and handling conflict within the family. I was able to refer to a colleague within the service who could support some non-health-related issues, including financial affairs, family conflict and grief. In a similar sense, when SC shared her low mood in one session, we planned for

the coming weeks and I made sure that she had all of the emergency contact numbers should her low mood progress and/or develop - it was important here to remind her of my role and that of the service for which I worked.

I used the environment to support different conversations and encourage small steps towards some of SC's goals. For example, one of our appointments was held in a community cafe, offering the opportunity for SC to engage with others and see what community assets there are to support her weight loss journey. In another of our appointments, I had intended to get some fresh air with SC in a "walk and talk", and model some of the behaviours she was looking to make her habits - walking in her local environment with company. However, SC asked for another home visit as she was not feeling able to get out and about that day. She shared that she felt "down" and unable to leave the house.

During that particular appointment, I took the opportunity to share some theories and techniques in a visual manner. I found that worked well for SC as she was able to understand more as I drew out the situation and we could set some goals together. For example, using some Cognitive Behavioural Therapy based techniques I challenged unhelpful thinking (SC felt unable to confide in friends and as though they had somewhere better to be and were rolling their eyes at her) and drew the 5 areas model (Williams, 2013) to highlight the links between the low mood, thoughts, emotions and following behaviours. Also, when SC shared that her sleep routine was not working, the bedroom was cluttered with her sister's belongings (recently deceased) and she was struggling with fatigue, I shared the impacts of this in a visual manner with SC to support her to see the connections between her physical and mental health and lifestyle.

In all sessions, I used goal setting and motivation interviewing skills (Vallis et al., 2018) throughout my conversation to elicit change talk and plan "one new thing" with SC to try between appointments. I also pulled on other relevant techniques, for example, I shared a compassion therapy technique to help SC to use kinder words when talking

about herself. I developed some discrepancy when SC was saying it was important to her to get her tremors under control and yet she wasn't setting aside the time to consider the medication. We discussed the barriers and what we could do to prevent them from getting in the way of the right treatment.

At the end of each session, I used summarising to remind ourselves of the conversation and we had agreed actions for both of us. With SC, we set small, SMART goals to improve her chances of success at completing the actions before our next meeting. This didn't always work - there were times when SC shared that she had not attended the groups we had planned for, but she had attended the groups she had stopped going to previously. Using a positive approach, I affirmed the actions that SC had taken, and acknowledged when they weren't what we had planned for so that we could learn and adjust next time.

During my final appointment with SC, I was joined by a colleague who would continue to support SC around some of the issues which lay outside of my remit (addressing grief, and supporting with housing and financial issues). I used the session to wrap up the work around physical activity and sleep routine, affirming to SC the progress she had made and asking to understand if she had seen an impact from the actions she had taken. I revisited the evaluation tool to monitor any progress in a quantitative way and then asked SC to share her progress over the last few weeks since our previous appointment.

Evaluation

The evaluation of this case study forms in two ways: a quantifiable evaluation of progress through the Wellbeing Wheel; and anecdotal evidence from SC to share the benefits of our work together.

The organisation in which I was working, was trialling a ‘wellbeing wheel’ which looked at various topics from the wider determinants of health and measured movement through the stages of change model. I thought this worked well as a measure for changes achieved with this patient. The wellbeing wheel covers a range of the wider determinants of health and scores these domains based on the stages of change model and their application to behaviour change interventions (Prochaska et al., 2013).SC appeared quite well motivated, with some need for support to prioritise and goal set. I felt she had a good understanding of where she was in the stages of change, having worked with the model in her previous role as a social worker. The wellbeing wheel is designed to be a collaborative tool, and so I continued the conversation with SC as normal and came back to the assessment at the end, to share understanding and agree scoring with the client.

During my final appointment with SC, following the intervention to improve exercise, sleep and socialising, we revisited the wellbeing wheel. I did not share SC’s initial scores with her at this point. Once the second wellbeing wheel was completed, I used the change in scores to highlight the areas in which the impact could be seen.

SC’s score on the Wellbeing Wheel increased by 7 points over our time together and showed progress over a number of the areas. The biggest changes came in accessing help and support and managing physical health. There was still some progress to make in lifestyle changes.

Key: 1 - Precontemplation, **2** - Contemplation, **3** - Preparation, **4** - Action, **5** - Maintenance

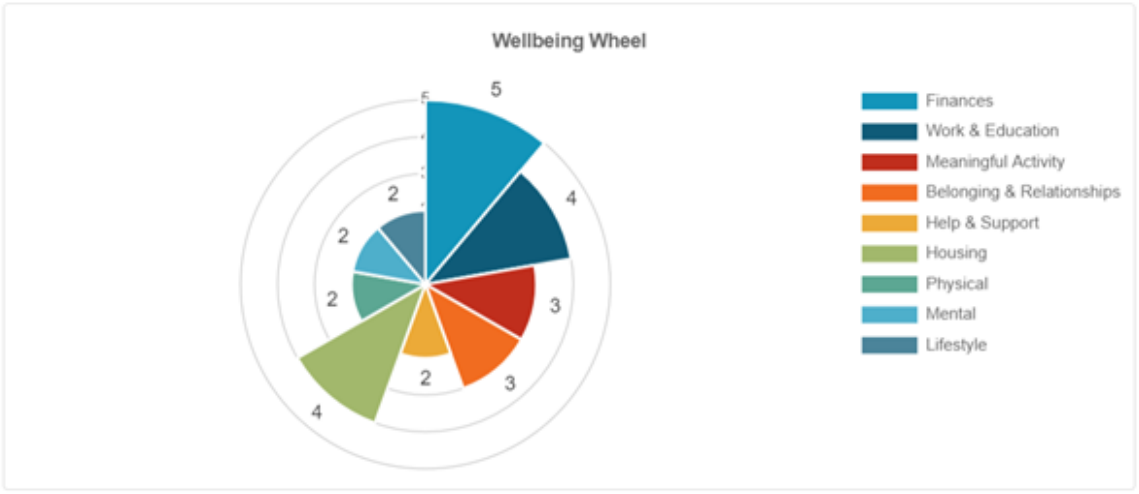

Image 1, Wellbeing wheel scores pre-intervention

Key: 1 - Precontemplation, **2** - Contemplation, **3** - Preparation, **4** - Action, **5** - Maintenance

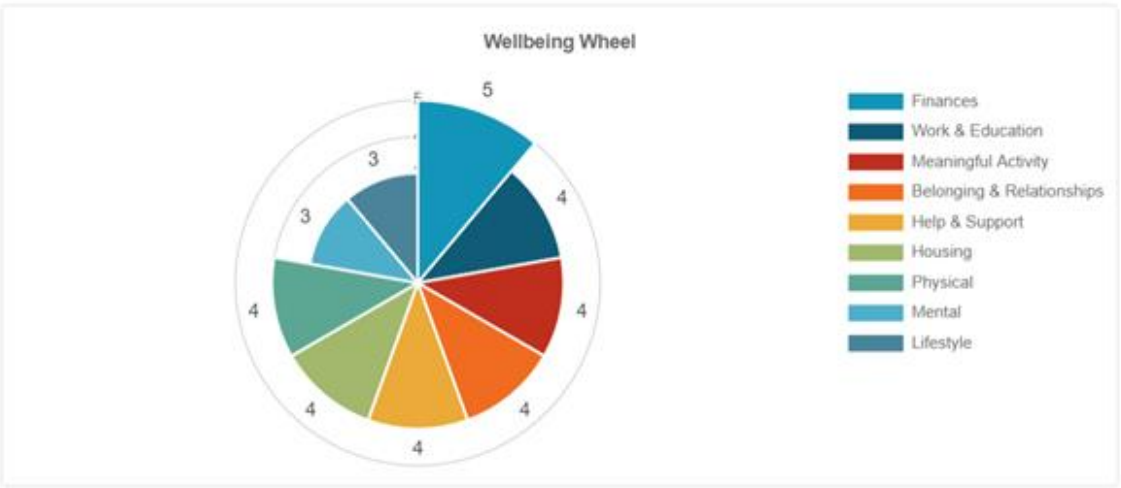

Image 2, Wellbeing wheel scores post-intervention

In addition, I observed some changes in behaviour from SC. Initially, there was an expressed desire to engage with others and join in physical activity and yet those behaviours were not happening with any consistency when SC was referred to the

service. SC was reluctant to leave the house and in some weeks, did not engage with anyone outside of necessary interaction. There was little to no physical activity, often attributed to the impact of tremors and physical ailments.

Towards the end of our time together, SC was regularly engaging in walks around her local area with a friendship group she met through a local app. She was thankful for the support to engage with new groups and had made progress towards managing her symptoms, although these weren't fully under control. SC could see the link and the need for both medical and social support in order to have the best quality of life. She had made progress with her sleep, initially not attributing it to any of the behaviours she had been trying and with my support, she was able to see the cause and effect. In addition, she had successfully booked and attended a GP appointment, sharing all the things on her list which had been causing her anxiety.

Conclusion

The evaluation of the intervention would suggest there was some success. The movement through the stages of change on the wellbeing wheel shows progress towards, and achievement of, some of the desired behaviours identified at assessment and beyond. Anecdotally, SC made positive changes on the progress they made and the support received through the intervention. In particular, being able to see the impact that social walking had on her lifestyle, including supporting her to feel less isolated, and "get the blood flowing again".

I enjoyed working with SC and seeing her progress. I have no doubt that my colleague can support her further to manage her grief and address some of the financial and legal issues she shared. These elements are outside of my boundaries and I am pleased that my intervention was able to support SC's wellbeing and get her moving more and sleeping a little better.

References

Barkley, P. S. (2016). Building rapport with your patient: Positive case management outcomes.

Buck, D. & Eubank, L. (2020). What is Social Prescribing? *2nd ed.* Retrieved from https://www.kingsfund.org.uk/publications/social-prescribing on 16th April 2022.

Department of Health. (2012). Report. long-term conditions compendium of information. *3rd ed*. Retrieved from https://www.gov.uk/government/publications/long-term-conditions-compendium-of-information-third-edition on 14th April 2022.

Lambert, M. J., & Barley, D. E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, research, practice, training*, *38*(4), 357.

Michie, S., Atkins, L. & West, R. (2014). *The Behaviour Change Wheel, A Guide to Designing Interventions.* Silverback Publishing. (UK).

Michie, S., van Stralen, M.M. & West, R. (2011). The behaviour change wheel: new method for characterising and designing behaviour change interventions. . *Implementation Science,* 6:42.

Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change*. Guilford press.

Rollnick, S., Miller, W. R., & Butler, C. (2008). *Motivational interviewing in health care: helping patients change behavior*. Guilford press.

Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (2013). Applying the stages of change. *Psychotherapy in Australia*, *19*(2), 10-15.

Stickley, T., & Freshwater, D. (2006). The art of listening in the therapeutic relationship. *Mental health practice*, *9*(5).

Trepper, T. S., McCollum, E. E., De Jong, P., Korman, H., Gingerich, W., & Franklin, C. (2010). Solution-focused therapy treatment manual for working with individuals. Solution-focused brief therapy: A multicultural approach, 14-31.

Whitehead, M., Dahlgren, G., & World Health Organization. (2006). *Levelling up (part 1): a discussion paper on concepts and principles for tackling social inequities in health* (No. EUR/06/5062293). Copenhagen: WHO Regional Office for Europe.

Williams, E. (2013). Connect 5.

Individual Intervention Reflexive Report

This reflexive report relates to the one-to-one case study with SC and the associated assessment of communication skills.

I currently work at a Community Interest Company specialising in health behaviour change and social prescribing, and I have worked here since November 2021 although I previously left their employment in 2018. My current role is to support practitioners to deliver high quality, effective and safe interventions with clients, through training and coaching. Previously my role in this company was as a lead practitioner and delivering interventions was the bulk of my daily work. Despite the experience developing and delivering interventions with a range of patients, I was reluctant to complete the module previously. I recognise now this was due to my own self-confidence, or lack of, and imposter syndrome which is often associated with women in caring and intellectual positions (Bravata et al., 2020). The nervousness I felt then, I did not have this time despite the gap in time since I was last in a practitioner role. I did frustrate myself at the missed opportunities I had to complete this module earlier! One of my main areas for learning and development is around procrastination and understanding the underlying emotions that act as barriers to action for me. This is a perfect example of this – I gained a lot from the experience of writing a case study and being observed.

I was offered the opportunity to complete this module and supported by the organisation to hold a small caseload. I realised early on that I get a lot of my energy from working with people and I enjoyed the practitioner experience again. I also gained confidence from the experience of being observed, although nervous. I had asked SC to be observed and she declined, so the observation is with another client (HM).

The assessment session was not my usual style with SC. I prefer to make contact with the client and then book in a face-to-face assessment appointment, which helps to build the relationship and encourages openness. However, I found SC to be very forthcoming with her current situation on the telephone and made the decision to use the booking call as the assessment appointment. I was missing the initial assessment tool (wellbeing wheel) which would have been completed in this session - there was a risk in not completing the tool in this assessment that the baseline results are not accurate, particularly if SC was activated and started to make changes to her behaviour following our chat. If this situation arose again, I would consider completing the assessment tool over the phone to ensure a true baseline.

My first session following assessment was on telephone with SC, due to catching COVID the week before. This was disappointing, as I much prefer face-to-face interaction to read body language, and to support clients with my body language and non verbal cues too (Barkley, 2016).

The observation of my communication skills came part way through my time working with SC. I was nervous that my Line Manager, an experienced General Practitioner and CEO of the company, was observing my skills and I felt out of practice. I had sessions with clients (SC being one) before the observed session with HM so was able to build some of my confidence again. I thought the comments by my observer were fair and accurately reflected the situation. There were times when I became acutely aware that there was someone recording my communication and so I tried to fit as many skills as possible into the one session! I have been able to reflect on my pace and acknowledge that ordinarily, I would allow the client to set the pace and work with me through their goals in a manner that suited them best.

The observer's report shared some positive skills, such as being able to successfully reframe some of the client's negative attitudes and my use of empathy to

build rapport. Reading these positive observations boosted my confidence and this has been felt across all aspects of my work. It has been useful to remind myself of the skills I possess and I noticed that when I delivered skills training to external staff shortly after the observed session, I had a renewed passion and confidence in what I was sharing.

I also now recognise the difference between being observed and being assessed. Looking back, I treated this like an assessment, a test, which increased my nerves. I appreciate that I often shadow staff in my role and if they feel similar about being "assessed" this could impact on their wellbeing and practice. The observation process and opportunity for constructive feedback was useful and something I would like to make more of for others. The communication skills sheet completed by the observer is one that allows for any number of techniques to be observed and focuses on the relational skills, which are more natural to me. Some of the comments surprised me as I realised I had completed an aspect of the assessment without thinking, reiterating that the skills I have are part of who I am and how I conduct conversations.

Following feedback, I was able to change how I worked with SC. I recognised that I sometimes tried to do too much in one session, and that could be overwhelming and contribute to becoming stuck. I challenged myself around the righting reflex and my desire to change and fix all the problems for my client (Miller & Rollnick, 2004). I was able to take a step back, remind myself of the COM-B model and collaborate with the client to identify one or two small goals to take forward. The observation session had helped me to recognise the power of relational skills and my ability to draw upon different therapeutic techniques to support clients. I had achieved this with SC around their symptom management and physical activity engagement. I had also offered techniques which had begun to improve sleeping habits. Reminding myself of these things was supportive in ending the therapeutic relationship well for both myself and SC.

I found writing up the case study quite difficult as I feel the process is more fluid and responsive, often occurring during client meetings. When that happens, there is little time to appreciate the evidence base behind the techniques I choose and writing the case study has allowed me to appreciate that. It has allowed me to become more efficient at the assessment and formulation stages of the intervention development and this is something I would like to take forward into my practice and share with others. I don't usually get the chance to formally formulate a plan for the whole intervention time and my current role with the organisation is to support best practice for our practitioners, so this is something I want to challenge with the staff. If they can't spend time planning and formulating, how can we be sure we offer the best intervention to our clients?

It has also been interesting to reflect on the boundaries of health psychology and the cross-over with other branches of psychology within the context of social prescribing. The wider determinants of health cover social, mental and physical areas of life and the behaviour change techniques associated with health psychology often require acknowledgement of mental wellbeing and the interaction between physical and mental health. At times, I supported SC with her anxiety and low mood, which allowed us to work towards more healthy and sustainable behaviours which would affect her physical health. The situation challenged my boundaries and I was able to acknowledge when things were outside of my skills and abilities – for example, I chose to support SC's journey with another colleague as they had more ability around some of the non health-related issues, including management of grief and support around financial matters. It supported me to end the relationship with the client and pass on to a colleague who could address some of these needs for SC in a timely manner.

Overall, the experience has been a positive one. I have been able to connect with my passion and share my skills, not only with my colleagues and management, but also with myself. I have some actions to take forward in my current employed role which will

support the practice of others and have been able to understand and evidence the practice I delivered.

References

Barkley, P. S. (2016). Building rapport with your patient: Positive case management outcomes.

Bravata, D. M., Madhusudhan, D. K., Boroff, M., & Cokley, K. O. (2020). Commentary: Prevalence, predictors, and treatment of imposter syndrome: A systematic review. *Journal of Mental Health & Clinical Psychology*, *4*(3).

Miller, W. R., & Rollnick, S. (2004). Talking oneself into change: Motivational interviewing, stages of change, and therapeutic process. *Journal of Cognitive psychotherapy*, *18*(4), 299-308.