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**PROFESSIONAL DOCTORATE IN
HEALTH PSYCHOLOGY**

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To my son, Nicholas

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Abstract

This portfolio documents the work I have completed whilst undertaking the Professional Doctorate in Health Psychology at Staffordshire University between 2022-2025. The work was conducted alongside full-time employment in a Dental Psychology service within the NHS.

This portfolio is divided into five chapters which represent the five core competencies of Health Psychology:

1. Professional Skills,
2. Research Methods,
3. Psychological Interventions,
4. Teaching and Training in Health Psychology,
5. Consultancy Skills.

Throughout each of the chapters, I present evidence of my development in the form of research manuscripts, case studies and reflective commentaries. These outlines both the work I have undertaken and the experience and knowledge I have developed in completing the work. Further details of the content of each chapter are provided in the introduction.

Introduction

This portfolio presents the work completed during my Professional Doctorate in Health Psychology at University of Staffordshire (formerly Staffordshire University) between 2022 and 2025. My placement was based within the Dental Psychology Service (DPS) at Guy's and St Thomas' NHS Foundation Trust, where I transitioned from a long-standing role as a Clinical Nurse Specialist (CNS) to that of a Trainee Health Psychologist.

My primary role was within the Dental Anxiety workstream, a psychology-led service embedded in Sedation and Special Care Dentistry. I delivered Cognitive Behavioural Therapy (CBT) to individuals with severe dental phobia, supporting them to reduce reliance on sedation and return to routine dental care. Under supervision from Consultant Health Psychologists, I managed a caseload, assessed and managed risk, and worked closely with the multidisciplinary team to ensure coordinated, patient-centred care.

In addition to clinical work, I have undertaken extended responsibilities that have supported my development across the five core competencies of the doctorate: Research, Behaviour Change Interventions, Consultancy, Teaching and Training, and Professional Practice. These include managing specialist nurses, delivering teaching to healthcare professionals and students, co-leading a pain management group, supporting service-level health promotion, and contributing to the development of the UK's first Dental Nursing degree.

Working within a supportive multidisciplinary team has allowed me to apply Health Psychology theory in a complex healthcare setting focused on behaviour change, access to care, and psychological wellbeing.

This portfolio outlines my progression across all competencies, with anonymised case material presented in line with ethical guidance.

Chapter 1: Professional Skills in Health Psychology

Chapter One presents a reflexive report of my professional development as a Health Psychologist over the last three years across reflective practice, supervision, and exposure to diverse clinical and academic experiences that have deepened my self-awareness, resilience,

and adaptability as a trainee practitioner. The first section focuss on the core competencies needed to become a Health Psychologist, whilst the second section focuses on a range of key professional skills outlined by British Psychological Society and Health and Care Professions Council.

Chapter 2: Systematic Review

Chapter Two presents my Systematic Review on the impact of sexual abuse on dental care experiences, providing a comprehensive synthesis of qualitative and quantitative evidence. The systematic review is accompanied by a reflective commentary which outlines my experiences undertaking the review.

Chapter 3: Research: from Design to Dissemination

Chapter Three reports my qualitative project exploring patients' reintegration into routine dental care following CBT for dental anxiety. This is accompanied by a reflective commentary that outlines my rationale for decisions made and the processes of undertaking the research.

Chapter 4: Psychological interventions

Chapter Four presents two different psychological intervention: a face-to-face CBT case study for dental phobia and a group-based ACT intervention for orofacial pain. Each case study is accompanied by a reflective commentary.

Chapter 5: Teaching and Training in Health Psychology

Chapter Five presents a case study of a teaching programme on the Application of psychology in Dentistry and its evaluation. This programme delivered to a range of leaners, including students and healthcare professionals at Guy's Hospital and King's College London (KCL).

Chapter 6: Consultancy

This final chapter outlines the identification and delivery of a consultancy opportunity in the Specialist Nurse-led Oral Health Clinic (SN-OHC) at my hospital. This opportunity involved designing and delivering a one-hour CPD teaching session to support dental nurses in

developing their oral health promotion skills through the introduction of relevant psychological principles and behaviour change techniques. The case study is followed by a contract that I developed, which outlines the terms of the project.

Table 1: Health psychology Competencies completion dates

Competencies	Date of Completion
Professional skills in Health Psychology	June 2025
Systematic Review	June 2025
Qualitative Manuscript	June 2025
Face to Face intervention	January 2025
Group intervention	January 2025
Teaching and training in Health Psychology	June 2023
Consultancy	June 2024
Consultancy Contract	July 2023

Chapter 1: Professional Skills in Health Psychology

1.1 Reflexive report

Introduction

Development as an autonomous, skilled, and knowledgeable professional is fundamental to becoming a qualified Health Psychologist. This reflexive report summarises my personal and professional development over the course of the Professional Doctorate in Health Psychology, started in September 2022. It includes reflections on my supervised placement and academic work, as well as critical personal insights and learning drawn from professional experiences and feedback. Throughout this journey, I have engaged with a wide range of activities designed to build competence across the five core areas required for qualification: Research, Professional Practice, Psychological Interventions, Teaching and Training, and Consultancy.

To structure my reflections effectively, I have used- Rolfe's (2011) reflective model, which is based upon three simple questions: What? So, what? Now what? I chose this model over others due to its clarity and practical applicability within my clinical role, enabling me to critically analyse experiences and translate learning into professional growth.

The report begins by evaluating my development across the five doctoral competencies, drawing on key experiences, critical incidents, and reflections maintained in my reflective logbook; such reflective practice is central to professional learning (Schön, 1983). The second section addresses the broader set of professional skills expected of a health psychologist, as set out by the British Psychological Society (BPS, 2021) and the Health and Care Professions Council (HCPC, 2022), including ethical practice, reflective capacity, cultural competence, and collaborative working.

1. Placement Overview

My doctorate placement is within the Dental Health Psychology Service (DPS) at Guy's and St Thomas' NHS Foundation Trust. I was initially employed here as a Clinical Nurse Specialist (CNS) for several years before transitioning to the role of Trainee Health Psychologist. Over

the course of my ten-year employment, my role gradually evolved from a specialist nursing position, to one that closely aligns with the training objectives and core competencies of Health Psychology.

My role is primarily based within the Dental Anxiety workstream, a psychology-led service integrated within Sedation and Special Care Dentistry, providing Cognitive Behavioural Therapy (CBT) for individuals with dental anxiety. This specialist service supports patients with severe dental phobia to reduce reliance on sedation and transition back into primary care dentistry. I manage a caseload of patients referred for severe dental anxiety, delivering CBT-based interventions under the supervision of Consultant Health Psychologists. My role encompasses a range of clinical responsibilities that have expanded throughout my doctoral training. Key clinical duties include delivering tailored CBT interventions, identifying and addressing co-occurring psychological difficulties including risk management and working with the multidisciplinary team to ensure coordinate care.

Alongside my core role, I have taken on extended responsibilities that broaden the scope of my placement and support development across additional Health Psychology competencies. I manage specialist nurses, deliver regular teaching to healthcare professionals and students, contribute to health promotion initiatives, and support student supervision. I have also helped design and implement a regular pain management group and contributed to the development of the first Dental Nurses degree in the UK. These experiences have expanded my skill set and strengthened my ability to practice autonomously as a Health Psychologist.

I feel fortunate to work within a supportive multidisciplinary team, collaborating to identify, assess, and address psychological barriers to dental and oral care. The service model reflects core Health Psychology principles, supporting behaviour change, psychological well-being, and improved access to care, while also fostering team development. I've had valuable opportunities to contribute to academic book chapters, support research, and promote others' development through role-modelling and mentoring.

2. Professional guidelines

Throughout my training, I have worked in accordance with the professional frameworks and codes of conduct set out by the Health and Care Professions Council (HCPC, 2022; HCPC, 2015), the British Psychological Society (BPS, 2021), and the General Dental Council (GDC, 2013), all of which are central to my role. These frameworks have shaped my professional identity, supporting ethical, evidence-based, and person-centred practice. In line with HCPC expectations for continuing professional development (CPD), I maintained a portfolio including formal training, supervision, peer reflection, and journaling. These activities enhanced my clinical skills and enabled me to critically examine and refine my values and practice. Importantly, I remained aware of my limitations as a trainee and sought appropriate supervision and guidance to ensure my practice remained safe, ethical, and professionally sound.

3. Core Competencies

A. Teaching

Teaching and training are core competencies in Health Psychology, supporting the dissemination of psychological knowledge across clinical and educational contexts. I entered the Doctorate with prior experience delivering educational sessions and informal mentoring to dental nurses. Combined with my background in primary school teacher-training, I felt I had a strong pedagogical foundation, which increased my confidence to begin fulfilling this competency early in my doctoral journey.

In the first year of the programme, I delivered a series of five sessions on the Application of Psychology in Dentistry, focusing on dental anxiety and behaviour change to support oral health. These were delivered to a range of learners, including students and healthcare professionals at Guy's Hospital and King's College London (KCL). These experiences enhanced my confidence in delivery and deepened my understanding of the theoretical foundations of effective teaching. My doctoral training developed my knowledge of learning models, including Kolb's (1984) experiential learning cycle, Bloom's (1956) taxonomy, and Race's (2007) concept of intrinsic motivation. I became more aware of how to structure teaching to accommodate diverse learning styles. Initially, I overestimated how much could

be covered in an hour, which taught me to prioritise depth over breadth—something I now apply when planning lectures.

I incorporated varied methods—including small group discussions, role-plays, and mixed-media activities—to support deep learning.

Feedback and reflective practice played a central role in my development. Through supervisor input, learner feedback, and structured self-reflection, I evaluated the effectiveness of my sessions and identified areas for growth—particularly in time management and pacing. Early sessions often felt rushed, but with repeated practice, visible timers, and improved content structuring, this has improved. Timing will remain a developmental need post-qualification and is something I plan to monitor in my ongoing professional development.

In my second year, I was invited to repeat and expand these sessions for Dental Care Professionals and Diploma students (including online delivery) and co-led a two-day CBT training course for dental nurses at Bristol Hospital. These opportunities allowed me to refine my delivery, gain confidence in online teaching, and experiment with digital tools to enhance engagement, for example, using interactive polls and breakout rooms.

I also contributed to the development and accreditation of the first Work-Based Learning degree for dental nurses through the Dental Nurse Academy at London South Bank University. This included co-designing a Level 6 module, Application of Health Psychology in Dentistry, for third-year students, and the Research Methods module for second-year students, where I served as module co-lead. Responsibilities included drafting descriptors, developing learning outcomes, delivering lectures, and coordinating assessments

This strengthened my skills in curriculum planning, outcome-based design, and adapting content for diverse learners. It gave me insight into aligning modules with academic frameworks and professional standards, emphasising constructive alignment (Biggs, 1996) and progressive learning. For example, when structuring the Research Methods module, I prioritised foundational, work-based curricula to help trainee nurses appreciate the real-

world utility of research. I am passionate about this approach, and from feedback, it seems my enthusiasm and commitment to applied teaching was recognised by colleagues and learners.

These experiences highlighted the importance of academic rigour, relevance to practice, and collaborative development; all aligning with BPS and HCPC standards for psychologists in education and training.

Mentoring and supervision have been equally rewarding. I've supported learners through formal academic placements (e.g. MSc Health Psychology and ACORN Internship) and informal mentoring (e.g. my direct reports). My aim has been to create a supportive and empowering learning environment that fosters confidence and meaningful development.

Looking ahead, I hope to build on these foundations by developing advanced online content, applying structured feedback mechanisms more systematically, and continuing to co-create educational materials that blend theory and practice. I feel increasingly confident in my teaching identity as a trainee health psychologist and see this as a long-term area of professional contribution.

B. Consultancy

While I had not completed formal consultancy before my Professional Doctorate and this was an initially daunting task, I have come to recognise how I am able to draw on my transferable skills and apply them in a new way. The consultancy element gave me the chance to use my health psychology knowledge in a clinical setting, offering evidence-based input to improve care delivery.

I identified a consultancy opportunity in the Specialist Nurse-led Oral Health Clinic (SN-OHC) at my hospital. The aim was to support dental nurses in developing their oral health promotion skills through introducing relevant psychological principles and behaviour change techniques. I designed and delivered a one-hour CPD teaching session, tailored to the clinic's patient group. Drawing on health psychology theory, particularly the COM-B model

(Michie et al., 2011) and NICE guidance (2014), the session focused on techniques such as goal setting personalised behaviour planning, and motivational interviewing elements. I drew on my own knowledge and enthusiasm for behaviour change, and attendees gave very positive feedback. The team reported that some techniques had been integrated into their ongoing practice, which felt really rewarding.

This project showed me the real-world application of health psychology in service development. I was able to link academic learning with practical clinical needs and gained confidence in the value of psychology-informed training. Delivering this session helped me understand the importance of clear communication, tailoring interventions to audience needs, and balancing evidence-based teaching with real-life relevance.

However, there were challenges. A delay in formalising the agreement to deliver the consultancy meant implementation was pushed back, and I was unable to use the session for my teaching competency, which was disappointing. This experience taught me the importance of forward planning and setting clear expectations early on—key aspects of effective consultancy, as described by Block (2011). I have also reflected on the impact of power dynamics of the ‘client’ ‘consultant’ relationship, particularly when former relationships exist; as demonstrated in my reflections, I reflected on this and discussed within my supervision. Despite this setback, I was able to adapt and later delivered a separate session to meet the teaching requirement. This experience boosted my confidence and showed me how transferable my skills are. I now feel more able to contribute to multidisciplinary teams and service innovation. I’ve become more aware of the need for clear roles, defined outcomes, and open communication, skills I know I’ll continue to build on.

Since then, I’ve applied these consultancy principles in other areas. For example, I contributed to a scoping review on burnout in dental professionals. Although there was no formal contract, I helped define the scope of my role, timelines, and deliverables. I made sure I was clear on what I could realistically commit to and communicated this to the wider group, which helped manage expectations.

These experiences have helped me work more flexibly and responsibly while advocating for my learning needs. I'd like to develop further in consultancy, especially in collaborative work and larger-scale projects, and continue building confidence in managing boundaries and planning for sustainable impact.

C. Health Psychology Interventions

Delivering structured psychological interventions is a core competency of a Practitioner Health Psychologist and has been central to my trainee role. I entered the Doctorate with experience delivering 1:1 support for patients with dental anxiety, but my placement has enabled me to deepen and diversify my skills across populations, settings, and psychological models. My work has included both individual and group-based interventions, drawing on CBT and third-wave approaches. I have increasingly supported patients with complex presentations, including persistent pain, neurodivergence, and trauma.

In my second year, I completed a one-to-one CBT intervention for a patient with dental phobia, drawing on NICE guidance and established protocols (NICE, 2014; Hare et al., 2023). This involved psychological assessments, interpretation of validated measures, co-formulating treatment plans, and delivering techniques such as graded exposure, relaxation, and cognitive restructuring. This work improved my ability to manage clinical risk, pace interventions appropriately, and maintain boundaries within an MDT.

Although the intervention received positive feedback, I had to resubmit the case study after unintentionally including identifiable patient information. This was a difficult but important lesson in the importance of confidentiality and best practice guidance.

As my confidence grew, I took on more complex cases, including patients requesting general anaesthetic (GA) due to high anxiety. For example, I worked with a neurodivergent patient with sensory sensitivities and trauma history, where traditional CBT needed significant adaptation. I collaborated with the dental team to design predictable, visually supported, paced strategies. These experiences taught me to flexibly modify interventions while upholding psychological theory and formulation-based practice .

In September 2024, I delivered a group-based ACT intervention as part of the Orofacial Pain Management stream. Facilitating this group developed my confidence with third-wave approaches. Drawing on input from colleagues at INPUT Pain Management and my own ACT training, I supported delivery and helped shape future session content. Feedback suggested the pilot was both clinically relevant and meaningful, offering an alternative to biomedical care. I have also integrated ACT principles into phobia work, broadening my skill set.

Beyond assessed interventions, I have supported oral hygiene behaviour change, using goal-setting and motivational interviewing adapted for varied developmental and cognitive profiles. My approach is increasingly informed by neurodiversity frameworks, emphasising predictability, sensory awareness, and communication preferences.

Supervision

Ongoing supervision has been critical in developing my intervention skills. Regular input from Consultant Health Psychologists has supported reflection, formulation refinement, and awareness of scope of practice. I've grown more confident in identifying when presentations fall outside my competence—such as unmanaged trauma or severe mental health difficulties—and escalating appropriately. My CNS background supports my understanding of clinical risk, MDT working, and safeguarding.

To strengthen my therapeutic practice, I have completed additional training during the Doctorate, including behavioural intervention workshops, an intermediate ACT course, and CPD on psychologically informed techniques relevant to dentistry. These opportunities have consolidated and extended my evidence-based skills.

These experiences have shaped my identity as a flexible, reflective practitioner. I've learned to adapt interventions to patient needs while staying grounded in theory and maintaining fidelity to psychological models.

Looking ahead, I aim to contribute to the design and delivery of group interventions and psychologically informed care pathways. I'm particularly interested in underutilised areas of support, including paediatric care, chronic oral conditions, and oral health promotion. I also

plan to build on my training in ACT and trauma-informed care to prepare for more complex presentations.

This part of my training has confirmed my motivation to pursue a career that blends clinical work with service innovation and education—grounded in the core competencies and values of Health Psychology.

D. Research Methods

My primary research project was inspired by clinical observations during my placement in the Dental Psychology Service alongside a long-standing personal and professional interest in how patients reintegrate in primary dental care following CBT treatment for dental anxiety. The study explored how adults with dental phobia experience the transition back to routine dental care following CBT. Using semi-structured interviews, it explored the post-treatment experiences of individuals who had completed CBT and were attempting to re-engage with routine dental care services. The analysis revealed a central theme of *transformative change*, reflective shifts in their thoughts, emotion, behaviour, and interactions with dental professionals. Information on attendance patterns and treatment completed at participants' local dental practices, along with data from validated scales measuring dental anxiety and current treatment-related beliefs, was also collected. This data will form the basis of a separate publication focused on quantitative outcomes

Parallel to this, I undertook a systematic review on the impact of sexual abuse on dental care experiences. This systematic review provides a comprehensive synthesis of both qualitative and quantitative studies, allowing for a better understanding of the multifaceted impact of sexual abuse.

Engaging in these research projects has strengthened my skills across multiple domains critical to health psychology practice. Designing and conducting mixed-methods research has enhanced my ability to integrate quantitative rigor with qualitative depth, supporting a holistic understanding of complex patient experiences. Navigating the challenges of literature searching, systematic review methodology, and topic refinement has increased my resilience, adaptability, and critical appraisal skills.

Importantly, these research endeavours have deepened my appreciation of how practitioner insight can shape meaningful research questions, which in turn have the potential to directly influence clinical practice and training. For example, my systematic review has stimulated early discussions within the clinical team regarding trauma-informed training.

Beyond these primary projects, I have contributed to other academic work, such as assisting in a scoping review on burnout in dental professionals. This collaboration allowed me to apply research skills, including task definition, timeline management, and collaborative communications, skills honed through my doctoral training and consultancy experience. These wider research involvements have enriched my understanding of academic teamwork, and the varied roles health psychologists play in knowledge generation and dissemination.

Moreover, integrating research with my teaching has enhanced my ability to translate evidence into educational content that is both accessible and relevant for learners. Moving forward, I intend to build on this foundation by expanding my research repertoire, exploring additional methodological approaches, and deepening my engagement with applied health psychology research. I plan to seek further opportunities to collaborate within multidisciplinary teams, contributing to projects that address clinically relevant questions and support service innovation.

I also hope to strengthen my dissemination skills, ensuring that research findings reach diverse audiences, from academic peers to healthcare practitioners and patients. I intend to present the qualitative paper findings at the Educational conference University of Staffordshire and enter the for the service evaluation competition at hospital.

This includes continuing to embed research insights in my teaching and training roles, facilitating evidence-based practice among dental professionals. Indeed, I intend to submit my research write-ups to well-established dental journals imminently.

Reflecting on my research journey, I recognise the importance of ongoing development in skills such as ethical protocol writing, data analysis, and mixed-methods integration. To

support this, I plan to continue engaging with further training opportunities, workshops, and supervision focused on advanced research methods and critical appraisal.

Ultimately, my research experiences have solidified my commitment to a health psychology career that balances clinical work with academic inquiry, grounded in service improvement and patient-centred care. This dual focus ensures that my work remains relevant, impactful, and responsive to the evolving needs of the populations I serve.

E. Professional Competence

My journey from being a dental nurse to trainee Health Psychologist has been a transformative process, both personally and professionally. Working as a dental nurse gave me a first-hand understanding of the emotional and psychological challenges patients face in dental settings, particularly those with dental anxiety. As I progressed through my training, I gradually developed greater competence and autonomy in my practice—shifting from a task-oriented clinical role to one that requires formulation, therapeutic intervention, and critical reflection. Supervised practice, academic learning, and clinical exposure have helped me build confidence in applying psychological theory in real-world contexts, particularly within multidisciplinary dental teams. This transition has shaped my emerging professional identity as a practitioner who bridges psychological insight and dental care.

Professional Skills

In addition to completing the Doctoral competencies discussed above and outlining the key professional frameworks I have been working within (section 3: Professional Skills and Frameworks), I have reflected on the various professional skills required to work as an effective Health Psychologist.

A. Legal, Ethical & Professional Standards

Adherence to the legal, ethical, and professional standards outlined by the British Psychological Society (BPS, 2018) and the Health and Care Professions Council (HCPC, 2015) has been integral to all aspects of my clinical and research practice throughout my Doctorate. The core principles of respect, competence, responsibility, and integrity form the

foundation of my professional identity as a Health Psychologist. Since starting the Doctorate, I have increasingly reflected on and embedded these standards into my everyday work, ensuring that my practice remains safe, ethical, and client-centred which was recognised by the trust in an NHS Care Award.

Example 1: Managing Clinical Risk and Ethical Decision-Making in Dental Anxiety

Interventions

In my role delivering Cognitive Behavioural Therapy (CBT) to patients with severe dental anxiety, ethical practice has been paramount, particularly in managing clinical risk and safeguarding patient wellbeing. Many patients present complex histories, including trauma and comorbid mental health issues, which necessitates careful assessment and risk formulation. I have consistently used standardised measures such as the Modified Dental Anxiety Scale (MDAS) and Generalised Anxiety Disorder questionnaire (GAD-7), alongside clinical interviews, to guide my judgements about risk and readiness for intervention (BPS, 2018, Principle of Competence).

Throughout my intervention delivery, I have maintained clear therapeutic boundaries, regularly reviewed risk with supervisors, and ensured informed consent processes are thorough and ongoing. For example, when working with patients fearful of general anaesthesia (GA) for dental treatment, I balanced respect for patient autonomy with my duty of care, using collaborative risk management plans and multidisciplinary team input to uphold ethical standards (HCPC, 2015, Standards of Conduct, Performance and Ethics). I recognise the importance of knowing my professional limits and engaging with colleagues, such as consultant psychologists and dental specialists, when cases exceed my expertise. This was particularly vital in one complex case where I sought additional MDT input to ensure the patient's safety and best outcome.

Example 2: Ethical Research Practice and Participant Protection

Conducting research alongside clinical practice has deepened my understanding of ethical responsibilities to research participants. My mixed-methods study with discharged CBT patients required rigorous adherence to confidentiality, informed consent, and participant autonomy (BPS, 2018, Principle of Respect). I developed detailed patient information sheets

and combined consent forms, following National Research Ethics Service (NRES) guidance, to ensure participants were fully informed of their rights and the study's aims.

I maintained data security through password-protected databases and anonymised transcripts, and I designed participant feedback procedures to validate interview accuracy, thus respecting their contributions and privacy (HCPC, 2015, Principle of Confidentiality). Working with vulnerable populations has enhanced my confidence in applying the Mental Capacity Act (2005) to assess participants' ability to provide consent. These measures ensured that my research complied with legal and ethical frameworks and reinforced my professional commitment to protecting participant welfare.

Reflection on Professional Standards and Supervision

Supervision has been central to my development in legal, ethical, and professional standards. Through regular reflective supervision sessions with experienced practitioners, I have been able to openly discuss ethical dilemmas, clinical uncertainties, and research governance issues. This reflective space has allowed me to critically appraise my competence and boundaries, enabling me to make informed decisions about when to seek additional support or refer on (BPS, 2018; HCPC, 2015).

I have also proactively engaged in professional development opportunities, including training in research governance, quality assurance, and behavioural interventions, which have reinforced my understanding of statutory and professional obligations. These activities have contributed to a holistic approach to ethical practice that integrates legal requirements with person-centred care and ongoing professional growth.

Moving forward, I am committed to continuing this reflective and supervised approach to ensure that my practice remains ethically sound, legally compliant, and aligned with the evolving standards of the profession.

B. Health Psychology Advice

A key aspect of my placement involved providing health psychology-informed advice to multidisciplinary teams and colleagues, which I found to be both rewarding and valuable for

my professional development. Regularly supporting CNS and other healthcare professionals, I contributed behaviour change strategies tailored to the needs of high-risk patients presenting with complex psychological and social challenges. This collaborative approach was instrumental in developing holistic oral health care plans that integrated psychological principles to improve patient outcomes.

In addition to supporting clinical colleagues, I took on supervisory responsibilities, mentoring assistant psychologists, Stage 1 Health Psychology students, and fellow trainees. These supervisory roles enabled me to consolidate my own knowledge and skills while facilitating the growth of others within the professional community. Providing guidance in this way highlighted the importance of clear communication, adapting advice to the learner's level of experience, and fostering a supportive learning environment.

One notable contribution was co-authoring a CBT manual focused on dental anxiety. This practical resource was designed to translate psychological strategies into accessible and usable tools for clinicians working directly with patients. The process of developing the manual deepened my understanding of intervention design and reinforced the value of evidence-based practice in health psychology.

Throughout these experiences, I have learned the importance of tailoring advice to the specific context and recipient, ensuring that guidance is relevant, understandable, and actionable. Whether providing informal support in team discussions or more formal input in supervisory or educational settings, I strive to promote autonomy, encourage reflective thinking, and foster collaborative problem-solving. This reflective approach ensures that the advice I provide is both ethically sound and professionally appropriate.

These opportunities to advise and support colleagues have been pivotal in developing my professional identity as a health psychologist and have equipped me with the skills to communicate psychological knowledge effectively across diverse healthcare settings.

C. Communication Skills

Effective communication has been fundamental to my development throughout placement. I honed my clinical written communication through preparing clinical records, letters, and therapy discharge summaries. Ensuring clarity, accuracy, and sensitivity in these documents was essential, particularly when conveying complex psychological and medical information to diverse audiences. For example, writing letters to General Practitioners or summarising risk assessments. I have had to balance professional detail with patient accessibility – i.e. by asking myself, what will the patient gain from this letter? This way, I have been able to communicate sensitive topics, whilst holding the patient in mind and ensuring they are central to their care (whilst of course respecting patient confidentiality and autonomy).

My verbal communication skills (and confidence) have evolved considerably, fostered through interprofessional discussions, teaching sessions, and direct clinical feedback. One notable challenge I have experienced, is navigating complex “patient conversations” within busy multidisciplinary teams, where time pressures and competing priorities sometimes threatened to obscure patient needs. To address this, I initiated brief, focused multidisciplinary team (MDT) huddles with our hygiene therapists. These mini-meetings provided a space for concise updates and shared decision-making, enabling clearer communication and quicker consensus on care plans. Another example which demonstrates improvement in my confidence, is to speak-up and advocate for patients with colleagues who do not always share the same opinion [example patients requiring dentures or about patients declined dental care by general dental practitioners; these huddles allowed me to advocate effectively for patient needs and ensure their voices were represented.

I also refined documentation practices by creating structured, clear notes that could be easily interpreted by different professionals, which improved continuity of care. This approach supported better understanding across teams and reduced miscommunication risks.

Teaching opportunities further strengthened my communication abilities, compelling me to tailor information creatively and accessibly, especially when working with non-psychology clinicians. Delivering training sessions encouraged me to engage audiences by making

psychological concepts relevant and practical. For example, when explaining behaviour change techniques to oral health staff, I used relatable case studies and simple language to enhance understanding and uptake.

Reflecting on these experiences, I recognise that communication is not only about conveying information but also about active listening, adapting messages to the audience, and fostering collaborative relationships. Moving forward, I aim to continue refining these skills, particularly in high-pressure clinical settings, by seeking feedback and evaluating the impact of my communication strategies.

D. Service User and Career Involvement

Throughout my placement within the Dental Psychology Service, actively involving dental patients and their carers was a vital aspect of my role. I regularly engaged with families and carers, particularly when supporting vulnerable dental patients with complex psychological and social needs requiring multi-agency collaboration. Ensuring their perspectives were acknowledged in treatment planning helped promote holistic care, while carefully balancing patient autonomy and confidentiality.

Beyond individual cases, I contributed to Patient and Public Involvement (PPI) initiatives by collaborating with the DPS team to work towards the creation of a service user “pool”. This group aimed to provide ongoing feedback and actively participate in co-designing future improvements to dental psychology services. While the work is still ongoing, liaising with the Trust’s PPI team to plan this in line with appropriate processes, has reinforced my understanding of the importance of collaborative, user-led approaches in health psychology, and highlighted the value of incorporating lived experience into service development within the dental context.

E. Teamwork and Leadership

During my placement, I developed important teamwork and leadership skills through active participation in multidisciplinary teams. I chaired meetings, organised study days, and coordinated cross-disciplinary teaching sessions, roles that required maintaining

professionalism, fostering collaboration, and balancing diverse responsibilities. These experiences deepened my understanding of team dynamics and the value of clear communication and defined roles within healthcare settings (Borrill et al., 2000; BPS, 2017).

Balancing my dual roles as a Clinical Nurse Specialist and trainee Health Psychologist presented challenges around confidentiality and role clarity. Reflecting on this, I recognised the importance of explicitly communicating my role to avoid confusion and support effective interprofessional collaboration (Katz & Kahn, 1978). For example, during multidisciplinary discussions, I ensured colleagues understood my scope of practice, which helped build trust and respect.

I also gained confidence in contributing to speciality meetings, where I adopted a facilitative leadership style, combining active listening with assertiveness, enhanced team engagement and decision-making (Rogers, 1961). This approach supported collaborative working across dental and other healthcare professionals, including establishing MDTs and steering groups to improve integrated care.

Receiving a Trust Award in July 2022 for my service contributions affirmed my development in leadership and teamwork, motivating me to seek further opportunities to lead and support teams in healthcare settings.

Overall, my placement highlighted that effective teamwork and leadership in health psychology rely on ongoing self-reflection, clear communication, and professional boundaries. I am committed to building on this foundation by pursuing supervisory roles and contributing to service development initiatives that require strategic leadership and team facilitation (West & Lyubovnikova, 2013; Goleman, 2000).

F. Equality, Diversity & Inclusion

Throughout my placement and training, I have actively engaged with equality, diversity, and inclusion (EDI) principles, recognising their vital role in delivering equitable and culturally sensitive care. I participated in Trust-wide anti-racism and unconscious bias training (evidence), which deepened my awareness of structural inequalities and personal biases (NHS England, 2021). These learning opportunities informed my own contributions to the

Dental Psychology Service's "Positive Action Charter", a process of reflecting our team commitments to EDI and anti-racism agenda.

Clinically, I have been attentive to the diverse needs of dental patients, particularly those facing structural access challenges, including patients with severe physical disabilities, learning difficulties, and language barriers (Williams et al., 2020). In several cases, I took on an undesignated role of care coordinator, liaising across multiple departments and NHS Trusts to facilitate seamless, accessible care pathways (NICE, 2016). This highlighted the importance of practical inclusivity, ensuring patients' diverse needs are met within complex healthcare systems.

Working in a multicultural context has prompted ongoing reflection on my own professional practice, particularly regarding unconscious bias and the predominance of Eurocentric frameworks within the healthcare setting and across health psychology (Bhui et al., 2018). I have attended and read some thought-provoking talks, which have made me reappraise my initial stance. I recognise this is an evolving journey—from a place of discomfort and uncertainty toward growing cultural competence and confidence as a trainee and future practitioner.

These experiences have reinforced my belief that embedding EDI principles is not only an ethical imperative but also enhances the quality and effectiveness of psychological care. I am committed to continuing this work throughout my career, fostering environments where all patients and colleagues feel respected, heard, and supported.

G. Continuing Professional Development

Throughout my training, I have recognised that ongoing Continuing Professional Development (CPD) is vital to maintain and enhance my competence as a health psychologist. I have actively engaged with a range of learning opportunities, including attendance at professional conferences, participation in internal CPD events, and completion of mandatory training requirements. In addition, I have dedicated time to reflective reading to keep abreast of current theory and practice.

A key focus of my CPD has been the development of my therapeutic skills. I have undertaken formal and informal training in evidence-based techniques such as Motivational Interviewing (MI), Behaviour Change Techniques (BCTs), and Acceptance and Commitment Therapy (ACT). These have strengthened my ability to support behaviour change and manage psychological difficulties effectively within clinical settings. Furthermore, observational learning through shadowing at the INPUT Pain Management Service offered valuable insights into the delivery of third-wave therapies, reinforcing my clinical skills and understanding.

Engaging in CPD has not only broadened my knowledge but has also encouraged ongoing reflection on my practice, highlighting areas for growth and consolidation. This commitment to lifelong learning aligns with professional standards (BPS, 2017) and supports my development as a competent, reflective practitioner capable of adapting to the evolving demands of health psychology.

H. Organisational/Systemic Issues

My placement deepened my understanding of how health psychology is shaped by systemic and organisational factors. One critical systemic challenge I encountered during training was the launch of a new electronic health record (EHR) system in our organisation, known as “EPIC”. This required both technical adaptation and a shift in my clinical communication habits. I reflected on how these changes influenced clinical workflows, interdisciplinary coordination, and patient experience, some positively, and others presenting ongoing challenges.

Working across a range of organisational settings, including the NHS, King’s College London, and undergraduate dental nursing programmes, allowed me to appreciate how different environments and hierarchies influence team dynamics and service delivery. Within the NHS, I encountered variability in how psychological roles are understood and valued. At times, my job title created ambiguity around my scope of practice, particularly when navigating established hierarchies. This required careful advocacy for the role of Health Psychology and clear articulation of competencies. It has strengthened my appreciation for

role clarity and the importance of raising the visibility of psychological contributions within complex healthcare systems.

Conclusions and Reflections

Reflecting on my journey from dental nurse to Trainee Health Psychologist, I am struck by the significant growth in my professional identity and confidence. When I started the doctorate, I brought with me strong clinical instincts, grounded in patient-centred care. Over time, I have developed greater autonomy in my role—now confidently managing complex cases, leading meetings, and acting as an ambassador for the Dental Psychology Service both within and beyond the Trust.

Through opportunities in teaching, dissemination, and co-authoring clinical resources, I have established myself as a source of expertise within the team. This progression has deepened my understanding of how psychological principles can be effectively integrated into dental care and multidisciplinary working.

I have learnt to navigate complex systems with flexibility and ethical clarity, advocating for service users' voices and bringing psychological insight to varied clinical contexts. This evolving role has reinforced my appreciation for reflexivity, cultural humility, and leadership, especially as I balance the boundaries between psychology and dentistry. Importantly, I have come to value the complexity of being in a “bridging” role—between psychology and dentistry, academia and clinical care. Rather than viewing this as a limitation, I have grown to see it as a strength. I feel better equipped to navigate these boundaries, and to help others do the same.

Moving forward, I am committed to further developing my professional autonomy and leadership skills, continuing to contribute to psychologically informed dental care, and supporting colleagues and trainees as they embark on similar journeys of growth and integration.

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Chapter 2: Systematic review

2.1 Systematic Review Manuscript

The impact of sexual abuse on the receipt of dental care: A systematic review.

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Running Title: Sexual Abuse and Dental Care

ABSTRACT

Objective: To systematically review and synthesise the published literature on the relationship between a history of sexual abuse and oral and dental health, including access to dental care, oral health outcomes, dental phobia, and experiences of dental treatment.

Methods: A structured search was conducted, including all study types, of published studies between 2011 and 2024 across five databases. A total of 17 articles were identified, which reported 12 unique studies. Quantitative and qualitative findings were analysed separately and then integrated to identify overarching themes.

Results: Findings from quantitative and qualitative studies were synthesised separately before being integrated into three core themes: Dental anxiety and the avoidance of care; Difficulties during treatment experience; Physical and social impacts. Across the studies, the history of sexual abuse was consistently associated with difficulties in accessing dental care, negative treatment experiences, and adverse oral health outcomes.

Conclusion: There is clear evidence of a significant relationship between a history of sexual abuse and a range of oral health challenges. These findings underscore the need for trauma-informed approaches in dental settings to better support affected individuals and improve access and oral health outcomes.

Keywords: Dental Anxiety; Dental Health, Dental Care; Sexual Abuse

Introduction

Sexual abuse (SA) is defined by the World Health Organisation as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work" [1]. It occurs across all communities, ethnicities, religions, cultures, and socioeconomic backgrounds, affecting both males and females [2].

Sexual abuse is alarmingly common, with prevalence estimates suggesting that 8 to 31% of females and 5-10% of males have experienced some form of SA [3]. The Crime Survey for England and Wales estimate that 3.1 million people have been subject to child sexual abuse (CSA): 7.5% of adults aged 18–74. The consequences of SA are significant and can include chronic psychological, social, and physical difficulties [4]. A meta-analysis found that individuals who experienced SA as children are more likely to develop mental health problems, such as depression, anxiety, and Post-Traumatic Stress Disorder [5]. Adverse physical health outcomes have been reported in individuals with a history of child SA, specifically gynaecological issues, chronic pain, gastrointestinal difficulties, and chronic fatigue [6-8]. These difficulties may be exacerbated by challenges experienced by individuals with a history of SA in accessing care.

Dental health and interactions with dental healthcare professionals form a specific subset of the broader healthcare challenges in individuals with a history of SA [9]. The dental setting may be particularly challenging due to its interpersonal and sensory stimuli, which may trigger memories of past abuse [10,11]. Patients with a history of SA may feel a heightened sense of helplessness during dental visits, experiencing intense emotional reactions without fully understanding their origins, especially when they find themselves in a reclined position, unable to speak, and with instruments placed in their mouths [12,13].

Several authors have suggested that among individuals with a history of SA there is an increased prevalence of dental phobia, manifesting both as avoidance of dental treatment (frequently cancelling appointments, skipping routine check-ups, or avoiding dental care

altogether) [14,15] or as physiological, cognitive and behavioural manifestations during dental treatment (heightened anxiety, panic, fear, and dissociation) [16,17].

As a consequence of healthcare avoidance, but perhaps also related to the initial SA, individuals with a history of SA are at an increased risk of poor oral health [18-19].

Studies examining the relationship between a history of SA and oral health have employed a range of methodologies, including epidemiological studies of general populations and those accessing healthcare, and qualitative studies with individuals with a history of SA. Despite a narrative review identifying the growing awareness of this impact of the history of SA on dental anxiety [17], there has been no systematic synthesis of empirical studies exploring the wider impact. Therefore, this study sought to determine the relationship between the history of SA and oral and dental health including access to dental care, oral health, dental phobia, and the experience of dental treatment.

Methods

The protocol for this review was pre-registered with PROSPERO (CRD42024605491). No modifications were made to the protocol following publication. The review has been conducted and reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [20].

Search strategy

The search strategy was developed in collaboration with an information specialist. Two search streams were combined to derive the search results: (1) terms related to SA, and (2) terms related to dental healthcare. The strategy incorporated both Medical Subject Headings and free text keywords. The full search strategy is given in Supplemental File 1.

Searches were conducted across the following databases between January 2011 and March 2025: CINAHL; EMBASE; MEDLINE; PsycINFO; and Scopus. In addition, citation tracking in Web of Science and Google Scholar, plus screening of the reference lists included studies was undertaken but did not identify additional articles for inclusion.

Eligibility criteria

Primary research studies, written in English, published between 2011 and December 2024 using any methodology (qualitative, quantitative, mixed methods) were included if they: (1) Reported the experiences of individuals with a history of sexual abuse and (2) reported oral and dental health outcomes including: access to dental care; oral health; dental phobia; and the experience of dental treatment (including coping strategies adopted by individuals with a history of SA).

Study Selection

All studies identified through databases and other relevant sources were imported into RefWorks reference management software. The selection process comprised two phases:

A. Title and Abstract screening: titles and abstracts for relevance based on the pre-defined inclusion criteria by the first reviewer.

B. Full-Text Screening: Full texts of potentially eligible studies were screened by the first author (GB) with an independent check of 10% of the articles conducted by the second author (JH). Discrepancies in judgements of eligibility were found for two studies; a consensus meeting was held and both studies were subsequently included in the review.

Data extraction process

For each manuscript, data were extracted using a standard form. This included details such as study design, country, sample characteristics (e.g., age, gender, sample size), measures used (for example, Modified Dental Anxiety Scale for dental anxiety or the use of the CASP checklist for quality appraisal), and key findings. Data extraction was undertaken by the first author.

Risk of bias assessment

A critical appraisal of the risk of bias of studies included was undertaken as follows:

- For quantitative studies, the CASP (Critical Appraisal Skills Programme [21]) Checklist for the appropriate study design (Cross-sectional, Case-control, Longitudinal cohort) was used.
- For qualitative studies, the CASP checklist for qualitative studies was adopted.

Data analysis

The convergent segregated approach was adopted [22] which involves independent synthesis of quantitative evidence and qualitative evidence that were then integrated. Data from the quantitative elements of studies were summarised where possible and converted into textual description when necessary [23]. For qualitative studies, the themes identified by authors were inductively categorised into domains by clustering based on conceptual similarity.

The following are available upon request from the corresponding author: template data collection forms; data extracted from included studies.

Results

Figure 1 summarises the identification, selection and inclusion of studies in the review. Database searching yielded 539 hits. After removal of duplicates, 355 studies remained for title screening; 224 were excluded at that stage, and 33 full texts retrieved for assessment. From these, 15 were excluded resulting in 17 articles which reported data from 12 independent studies (see Tables 1 and 2 for details).

FIGURE ONE ABOUT HERE

The 12 studies were conducted across a range of countries: Brazil (2 studies, 2 manuscripts); India (1); Israel (1); Nigeria (1); Norway (2 studies, 5 manuscripts); New Zealand (1); Sweden (1 study, 4 manuscripts); United Kingdom (2 studies, 2 manuscripts) and United States (1). Nine studies (10 manuscripts) adopted quantitative approaches, and three studies (7 manuscripts) employed qualitative methods.

Characteristics of the studies

Characteristics of Quantitative studies

Table 1 describes the characteristics of quantitative studies.

TABLE ONE ABOUT HERE

The total sample of 10,577 participants included adolescents, students, adults and clinical patients. Across the nine studies, the age of participants ranged from 10 to 60 years. The prevalence of SA varied across the studies with a range of 5.9 to 30% of participants reporting SA, depending on the study's focus and participant characteristics. Seven of the nine studies used cross-sectional designs; one study adopted a longitudinal cohort design, and another was a case control study.

The measures used in these studies are summarised in Table 1. History of SA was most commonly determined by self-report, except for one study where official records were used as the basis of the assessment. For the assessment of the presence of Temporomandibular Joint Dysfunction (TMD) in one study, an examination was undertaken, while in the second study a standardised self-report was used. Dental anxiety was assessed in three studies, in one case by a single item self-report, and in the other two studies the Modified Dental Anxiety Scale (MDAS) was used. For all three studies that explored the oral health of people with a history of SA, oral examination was undertaken. Gagging was assessed by self-report (1 study), as was oral health related behaviour (2 studies).

Characteristics of the Qualitative studies

Participants were recruited through various methods; snowball sampling; purposive sampling of individuals with a history of SA attending support organisations; and private care. Across the three studies there was a total of 46 participants (range 11 to 17 participants). The majority of participants comprised women. Age was reported in all studies, participants ranged in age from 19 to 56. Ethnicity was only reported in the Alyce [34] study, which included 15 participants (13 British and 2 Swedish) and two Black British women. The characteristics of the qualitative studies identified in the search are described in Table 2.

TABLE TWO ABOUT HERE

Quality Appraisal

After the screening and selection process, assessment of quality was undertaken using the Critical Appraisal Skills Programme tools [21].

Appraisal of Quantitative studies

All included studies were appraised using the CASP checklist for quantitative studies (Table 3). All were judged to have a clear research focus and appropriate design. Higher-quality studies, such as Guiney et al. [26] and Widom et al. [33] used robust sampling, validated measures, and controlled for confounders. In contrast, several cross-sectional and case-control studies provided limited detail on sampling strategies and confounding adjustment. While outcomes were generally reported clearly, some relied on self-reported, unvalidated measures. Overall, three studies were rated high quality, with the rest ranging from moderate to low-moderate due to methodological limitations.

TABLE 3 ABOUT HERE

Appraisal of Qualitative studies

The qualitative studies were universally of high quality as judged by the CASP criteria (Table 4). This may reflect the relatively recent publication dates of the studies (the earliest being 2019). The CASP programme commenced in 1993 with the checklists being developed progressively over the next 7 years and subsequently updated. It seems probable that the authors of the paper were guided by the checklists into good reporting practice. The impact of guidelines on reporting practice has been found to be positive [42].

TABLE 4 ABOUT HERE

Key themes identified across studies

1) Dental anxiety and avoidance of care

Avoidance of dental care consistently emerged across studies. Quantitative evidence reveals a strong association between history of sexual abuse and heightened dental anxiety; across four studies, there was consistent evidence of a significant association between SA and higher levels of anxiety (Folayan et al. [24]; Humphris and King [27], Nermo et al. [30] and Uziel et al. [32]). All studies demonstrate that individuals with a history of SA report significantly higher levels of dental anxiety compared to those without such a history. Additionally, Humphris and King [27] found that among a sample of UK university students, SA was the only traumatic experience that significantly predicted high dental anxiety. Similarly, Nermo et al. [30] found that 20.8% of participants with scores suggestive of dental phobia, on a standardised questionnaire (the MDAS), reported a history of SA, compared to 9.2% of those with a score that did not suggest dental phobia. The odds ratios for increased risk of dental phobia in the presence of a history of SA ranged from 1.81 [24] to 2.5 [27].

Qualitative papers provide details that help us to understand these findings. Participants reported that the experience of attending dental treatment triggered memories associated with SA, as well as being associated with cognitions (such as feeling out of control and powerless) resulting in behaviours typical of the fight or flight response [34,35,41]. Participants' responses in these studies indicated that the distress associated with dental care led many to avoid dental appointments, with some describing how even discussing dental appointments triggered physical responses. Participants reported that their fear made dental treatment unthinkable, often leading to self-treatment [34]. This is discussed further in Theme 2 below.

"It's been really difficult...I think, um, so for quite a long time, I think I just avoided, I didn't go to the dentist". Participant quoted in Alyce et al [34]

Avoidance behaviours included repeated cancellations or missed appointments, leaving the waiting room before being seen, or only seeking care for emergency treatment, often

resulting in more extensive treatment. Fredriksen et al. [35] highlighted how anticipatory anxiety, driven by the expectation of danger, causes individuals with a history of SA to dread appointments well in advance, often leading to cancellation or incomplete treatment; the informants talked about a mental fight to mobilise enough willpower to do the opposite of what the body dictated.

Similarly, Wolf describes avoidance as a contributor to long-term neglect of oral health, driven by intense dental fear; in extreme cases, individuals with a history of SA may avoid care entirely.

“But I also need to like replace the teeth that I’ve pulled out myself....they are going to come out no matter how much it hurts.” Participant quoted in Wolf et al [39]

They reported becoming physically ill prior to scheduling an appointment. A visceral fear response was described, including nausea, dissociation, and acute anxiety when anticipating or attending appointments, or acute physiological anxiety responses in the dental chair, such as increased heart rate, hyperventilation, and holding their breath [38 – 41]. Wolf et al [41] also noted that where an individual with a history of SA was able to establish a positive supportive relationship with the dental team, they often then feared changing dentists, concerned that a different dentist would not be as supportive, or that it would take a long time to re-establish a good relationship with a different team. As a consequence, they would often travel long distances to see the same dentist if they or the dentist had moved.

2) Difficulties during treatment experience

A core theme across qualitative studies was that dental care environments often triggered intense responses and reactivated traumatic memories, affecting individual’s ability to engage with or complete dental treatment and causing emotional distress.

Emotional distress

Dental procedures were frequently experienced as emotionally distressing or re-traumatising due to their sensory and physical resemblance to abuse experiences [35,37].

“Likewise, when a person is breathing close to you, the sound of heavy breathing from people working, it is awful to me. I can sit in the dental chair and remember what happened...I can be brought back in a way that makes me feel it is happening all over again.” Participant quoted in Kranstad et al. [36]

Somatic reactions were reported to be triggered by stimuli such as reclining in the dental chair, instruments in the mouth, physical contact, or sensory cues (smell, sounds, the texture of gloves). Individuals with a history of SA described acute bodily reactions similar to trauma responses that involve a combination of fight (aggression), flight (avoidance), freeze or collapse reactions. Behaviourally, this distress would manifest as a persistent urge to sit close to an exit and a frequent wish to spit [34]. Fredriksen et al. [35] and Kranstad et al. [36] reported responses more marked than those typically seen in response to anxiety, such as gagging, difficulty swallowing or breathing, vomiting and panic attacks being common when objects approached or entered the mouth. These reactions reflect the body’s instinctive response to perceived threats, as the environment and the physical contact with the dentist gave many informants memories/recollections of distressing or violating experiences and a strong sense of someone transgressing their boundaries. Multisensory triggers, such as the sound of heavy breathing, rubber smells, and physical closeness induced fear more powerfully than pain itself; Alyce et al. [34] describe how an individual with a history of SA may interpret unexpected proximity caused by a normal procedure or physical touch from dental professionals as invasive or inappropriate, due to an association with previous trauma:

“One dentist used to put a mat over my chest and be grappling...and I thought his touching was inappropriate, but because of what happened as a child”.

Participant quoted in Alyce et al [34]

Even oral hygiene tools or oral sensations, such as saliva or water in the throat, were experienced as triggering. Sometimes, difficulty in tolerating objects in the mouth and feeling powerless in the dental setting, led to total avoidance or choosing to undergo the treatment by themselves. Dental encounters frequently recreated feelings of being objectified and invaded, with some individuals with a history of SA perceiving the dentist as the abuser personified during treatment [36].

The dental chair position was reported as important as several informants had previously been held down physically or experienced the feeling of being restrained in the chair.

*‘But it’s like this, just want to get away from there. And one is trapped there and so....’
Laughs” ...yes, one comes, one can’t really get out...because the dental chair is like this. And you are on the spot, in some way. Then it is in fact ...yes, it is the bracket table you are talking about?*

Yes, precisely. With the tubes and it is...yes...so one feels really....Really trapped.”

Participant quoted in Wolf et al [38]

Dental care as a trauma-reactivating experience

Results from the synthesised studies indicate a link between participants’ trauma history and dental care. Dental procedures frequently acted as triggers for trauma memories among individuals with a history of CSA [35, 39, 40]. The dental setting – with its invasiveness, loss of control, and sensory stimuli, mirrors elements of past abuse, making routine care difficult and exhausting. Procedures that involve physical proximity, bodily invasion, or unpredictability, replicate aspects of abuse and are often perceived as threatening or intolerable. Several aspects of dental procedures/situations had direct links to abusive situations, resulting in participants reliving and re-experiencing certain aspects of their past whilst undergoing treatment [36-38]. Alyce et al. [34] highlighted that oral contact during dental procedures can evoke traumatic memories; traumatic responses are felt in the present moment, mirroring the experience of abuse. This “double exposure” simultaneously reliving abuse-related emotions while undergoing dental treatment serves to intensify emotional distress [40].

The physical nature of the procedure was analysed as intrusive; Fredriksen [35] metaphorically described dental treatment as ‘a battle’, emphasising the individual’s perception of vulnerability and strain during treatment. Similarly, Sjøftestad [37] describes participants’ feelings of helplessness and lack of control, suggesting a strong link between perceived powerlessness and emotional distress in dental environments. Participants frequently reported experiencing a lack of control during dental care, which often echoes

the dynamics of their past abuse experience. Sometimes, individuals feel silenced or ignored when trying to express their needs; some clinicians fail to seek consent or explain procedures [34].

Disclosure and trust in a dental setting

Disclosure of a history of SA in the dental setting emerged as a conflicted issue, as participants reported that they struggle to trust dental professionals, fearing judgement or re-traumatisation [34]. While many participants expressed a desire for their trauma to be understood, this was set against an inability or reluctance to disclose it directly. The decision not to disclose was often driven by fear of judgment, shame and lack of disclosing opportunities. The absence of disclosure was characterised as reinforcing a cycle of fear, avoidance and mistrust but also obscuring the need for support [41].

A sense of shame and the experience of stigma were identified as present amongst the participants in all the qualitative studies. This shame is compounded by feelings of humiliation where the individual feels unable to care for their teeth. It is suggested that individuals with a history of SA view their dental issues as a reflection of personal failure, or a visible marker of their trauma, signalling to others they are “unworthy of care” [34,41]. Dentists’ lack of understanding or empathy exacerbate this sense of shame, particularly when the dental healthcare professional assumes that the individual is fully responsible for their oral conditions, without considering that the trauma has contributed to their neglect [34. 35].

All the qualitative studies reported that in order to navigate these experiences, participants employed a variety of both adaptive and maladaptive responses, often misunderstood or overlooked in a clinical context. Some respondents engaged in self-help strategies, such as breathing techniques, visualisation, listening to music, emotional detachment, and behavioural compliance despite their internal distress. The use of dissociation as a strategy was described, which Wolf et al. [39,40] conceptualised as a protective mechanism against the perceived danger.

“I shut everything down. So that I am neither in an abuse situation and I am not in.... the dental surgery. I am just away because it becomes too sensitive”. Participant quoted in Wolf et al. [38]

Communication Challenges

Informants reported instances of mixed messages, such as verbally agreeing to treatment while showing visible emotional distress; the patient would say yes to the dental procedure but had tears in her eyes. Additional communication difficulties included aggressive or violent behavioural responses or pronounced fear of physical contact [35].

“When he did this (the dentist pulled the cheek), that was when I became angry. I thought: “No, I’m not going to sit still and let this happen again”, and that was when I hit him. Pure reflex “

Participant quoted in Wolf et al. [41]

Sedation Responses Linked to Sexual Abuse Histories

Patients with sexual abuse histories showed mixed responses to sedation [34]. Nitrous oxide was sometimes ineffective due to past drug use or avoided because it triggered memories of vulnerability and loss of control. General anaesthesia was occasionally preferred to avoid distress but could backfire if treatment exceeded prior agreement, leading to a breakdown in trust. While some required sedation to cope, others found it re-traumatising due to the associated loss of control [41].

3) Physical and social impacts

Both quantitative and qualitative studies found that survivors of sexual abuse often experience long-term oral health problems, stemming from prolonged neglect of oral care or the lasting effect of trauma.

Acute and chronic pain

Participants in qualitative studies [35,40] frequently reported experiencing long-term dental problems, including acute and chronic pain, recurrent sores, oral blisters, gagging and difficulty opening the mouth, conditions often linked to histories of avoidance and trauma. These issues sometimes result in severe pain and the need for extensive dental treatment [34]. For some, pain was normalised or even internalised as a form of self-punishment:

“I’ve actually suffered from toothache since I was 18. I am a destructive person. I love to suffer...it has become a part of life in a way”.

Participant quoted in Sjøftestad et al. [38]

Quantitative findings support this narrative, particularly in relation to physiological expressions of trauma, such as heightened gag reflex sensitivity [32] and temporomandibular disorders (TMD). Two studies [25,29] identified SA as a contributing factor in the development of TMD, suggesting a possible somatic expression of trauma. Grossi et al. reported higher rates of both emotional and SA among women diagnosed with TMD compared to the TMD-free control group; indicating a strong association between abuse history and musculoskeletal pain. Similarly, Nascimento et al. [29] found that forced sexual intercourse was significantly associated with specific TMD symptoms, particularly jaw locking, among female adolescents.

Social Consequences and Quality of Life

Trauma-related dental issues had profound social consequences. A theme emerging from the qualitative studies suggested that individuals with a history of SA find that the aftermath of dental treatment is often marked by mental and physical distress extending beyond the dental appointment, with delayed emotional reactions, exhaustion and disturbances in daily life following an appointment. Sjøftestad et al. [37] reported experiencing restlessness, sleep disturbance and muscle tension related to their oral health, including grinding teeth or difficulty removing dentures at night. For some, eating difficulties, such as gagging, vomiting or problems with swallowing, become part of their daily routine [39,40].

“Eating is complicated, because the food sticks in the throat, so I’m often throwing up. A vacuum is established (laughing). I call it a vacuum because I can manage to open up the vacuum by drinking quickly. Then I manage swallowing. It is painful, but I manage. If not, I throw up”. Participant quoted in Wolf et al. [39]

Additionally, many informants spoke of how oral health problems affected their social interactions, consequent to the poorer oral health associated with their avoidance of dental treatment. They described limitations on smiling, laughing, and talking, with some also

avoiding intimate situations due to concerns about bad breath on the appearance of their teeth [34].

Oral health behaviours, cognitions and health outcomes

Individuals with a history of trauma appear to value their oral health, however, past difficult experiences can hinder them from receiving the care they need and deserve [39,40].

Everyday oral tasks, such as tooth brushing, flossing and even the sensation of having something in the mouth, can serve as triggers for trauma, complicating their ability to maintain their dental hygiene. Sjøftestad et al. [37] noted that some individuals completely avoided brushing their teeth due to the negative association with objects being placed inside their mouth during abusive experiences. Consequently, toothbrushes were perceived as repulsive, leading many to skip brushing for extensive periods due to the sensory discomfort they provoked, both physically and emotionally. For others, oral care may transform into an obsessive ritual.

One study noted that individuals with a history of SA also experience a sense of injustice surrounding their dental health, particularly where their effort to maintain oral hygiene was not reflected in the condition of their teeth:

“It is shameful...that the teeth are bad; it is common knowledge that it is possible to see if you are living a healthy life by looking after the teeth. I have felt like (breathing heavily) I live unhealthily...and I feel so embarrassed having bad teeth like mine. It’s like...when one has bad teeth, it is embarrassing to open the mouth. And, no, it is of no help when the dentist says “I have seen worse cases”.

Participant quoted in Sjøftestad et al. [37]

The evidence was less consistent when linking SA to oral health outcomes such as caries or periodontal disease. Folayan et al. [24] found no association between SA and oral health indicators, including caries or poor oral hygiene, in a sample of Nigerian adolescents. In contrast, Guiney et al. [26], drawing on data from the Dunedin longitudinal study, reported that individuals with a history of childhood SA were 1.5 times more likely to experience

poorer oral health (defined as either periodontal disease and/or the presence of caries in more than 25% of teeth).

Similarly, Kundu et al. [28] study found that women experiencing domestic violence, including SA, exhibited poorer oral hygiene behaviours, higher levels of periodontal disease and increased tooth loss due to injury. The specific contribution of SA was not calculated separately in the analysis. Additionally, Widom et al. [33] found that SA was a predictor of oral health problems in adulthood.

Discussion

This synthesis integrates findings from quantitative and qualitative studies to explore the impact of a history of sexual abuse on the experience of accessing and undergoing dental care. Thematic analysis revealed three main themes: Dental anxiety and the avoidance of care; Difficulties during the treatment experience; Physical and social impacts. Underlying these themes are the intersecting emotional, behavioural, and physiological dimensions that shape individuals' dental care. Quantitative data establish significant associations of sexual abuse with dental anxiety, oral health outcomes, and experiences within dental settings, while qualitative insights offer depth into the lived realities behind these patterns.

The findings confirm and extend the existing literature, suggesting that a history of SA has a significant impact on the experience of dental care [17,22]. Furthermore, the impact extends beyond the experience of care to include poor oral health and self-care, associated with feelings of shame and embarrassment. A consistent finding across both data types is the association between SA and dental anxiety; quantitative studies demonstrate significantly higher levels of dental fear for individuals with a history of sexual abuse [18,19].

The integration of quantitative data with the qualitative data describing the experiences of individuals with a history of SA revealed the role of fear of stigma and judgement following disclosure of a history of SA. Individuals with a history of SAs' concerns about disclosure of their history and their reports of the coping strategies they adopt have important implications for those caring for patients with dental fear and anxiety. While it cannot be

assumed that all patients with such fear are individuals with a history of SA, a sensitivity to the issue, openness to discussion, and establishing a foundation of trust in the professional relationship will ensure the optimum environment for working in partnership with an individual with a history of SA. Similarly, clinicians should seek to gain an understanding of the context of an individual's difficulty in maintaining their oral health and avoid assigning blame.

Dental care, while understood to be necessary, represented a major challenge for many participants because of its interpersonal and sensory parallels with SA, including CSA. Based on these findings, dental treatment presents a risk of triggering a psychological trauma response impacting access to oral healthcare for many individuals who have experienced any type of SA, in childhood or adulthood.

Strengths and limitations

This systematic review provides a comprehensive synthesis of both quantitative and qualitative studies, allowing for a better understanding of the multifaceted impact of sexual abuse. The quantitative component of the review contributes by identifying a statistically significant association between sexual abuse and several dental outcomes, including increased dental anxiety and somatic symptoms such as TMD and gag reflex sensitivity. The diversity of quantitative study designs included, ranging from cross-sectional surveys to longitudinal cohort studies, provides insights into the long-term oral health consequences of sexual abuse; the use of standardised measures and large samples support the consistency of findings across different populations. In parallel, the qualitative synthesis enriches the data insight into lived experiences, uncovering the risk of trauma being reactivated in dental settings and how shame, fear and powerlessness shape interactions with dental professionals.

However, several limitations must be acknowledged. First, multiple studies appeared to report overlapping data from the same participant samples, particularly in qualitative research. This duplication can potentially inflate the perceived volume of evidence and introduce bias in the analysis. While these studies often provided unique analytical angles or

focused on distinct aspects of the data, the repetition may have led to the overrepresentation of specific perspectives or findings.

Second, among the quantitative studies included, there was a high degree of heterogeneity in outcome measures. Many studies employed differing definitions and assessments of both exposure (e.g., type, timing, or severity of sexual abuse) and outcome variables (e.g., dental anxiety, oral health status, treatment avoidance), which limited the ability to compare or aggregate findings. The absence of standardised measures across all studies also reduces the consistency and reliability of reported associations and complicates efforts to synthesise data quantitatively.

Additionally, in some quantitative studies, sexual abuse was not analysed separately from other forms of abuse (e.g., physical or emotional abuse or general domestic violence), making it difficult to isolate the specific effects of sexual abuse on dental outcomes.

Recommendation for future research

1. Exploration of any relationship between specific forms of SA and Dental Health. There is currently little evidence that differentiates specific forms of abuse, and its relationship with dental health, though Uziel et al. [32] suggested (without supporting data) that an exaggerated gag reflex was more common in women with a history of forced vaginal penetration.
2. Identifying causal networks in the relationship between SA and oral health. The causal relationship may be behavioural through inability to perform oral healthcare behaviours or the result of avoidance of treatment. At present, the data are insufficient to explore such causal relationships.
3. Testing and refining interventions to support individuals with a history of SA in managing their oral health. This could include CBT-based interventions addressing specific issues such as PTSD, gag reflex, and dental phobia. In addition, behaviour change interventions to support oral self-care may be useful in ameliorating the impact of avoidance of dental treatment.

In conclusion, integrating the findings across both quantitative and qualitative studies has identified a consistent finding across 12 studies and 18 manuscripts that a history of SA is

associated with an increased prevalence of dental anxiety, challenges in receiving dental care and poorer oral health. These impacts have their foundations in the cognitions and behaviours triggered by dental treatment which are echoes of the SA. These findings provide compelling evidence and support for embedding trauma-informed practice (Scottish Government, 2021) [43, 44] within dental care pathways, to enhance access and improve patient outcomes.

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Authorship contribution statement

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Writing – original draft: Bruj G; Cooke R;

Writing – review and editing: Bruj G

All authors confirm that they meet the following criteria for authorship

- i) substantial contributions to conception or design of the work; or the acquisition, analysis or interpretation of data for the work; AND
- ii) drafting the work or revising it critically for important intellectual content; AND
- iii) final approval of the version to be published AND
- iv) agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Conflicts of interest

The authors have no interest to declare.

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Figure 1: PRISMA Flowchart for Systematic review of the impact of sexual abuse on the receipt of dental care

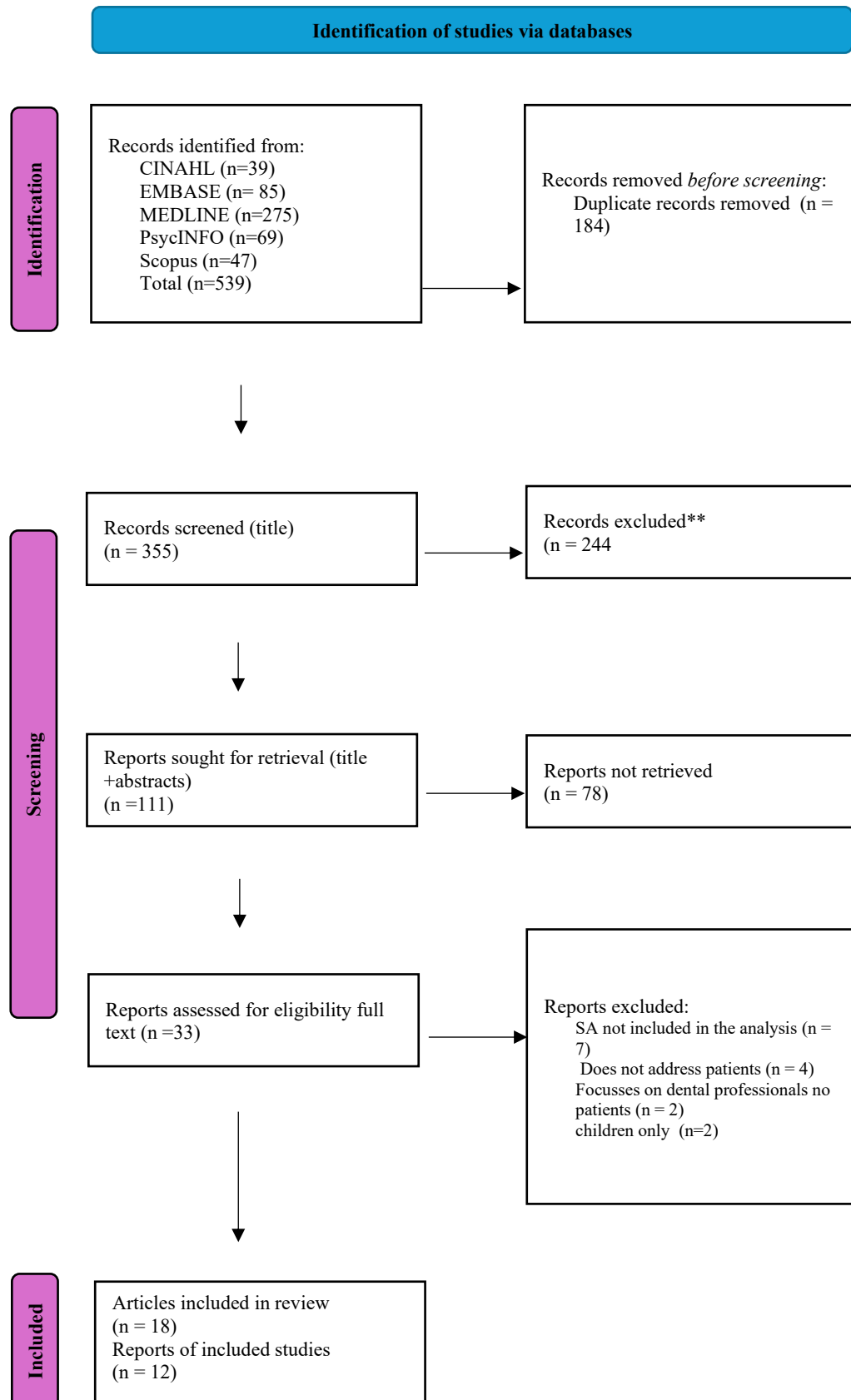


Table 1: Summary characteristics of quantitative studies exploring the impact of sexual abuse on experience of dental treatment.

<i>Author country</i>	<i>Study design</i>	<i>Sample</i>	MEASURES					
			<i>History of SA</i>	<i>Dental anxiety</i>	<i>Temporo- mandibular Joint dysfunction (TMD)</i>	<i>Oral health</i>	<i>Gagging</i>	<i>Other measures</i>
Folayan et al. [24] Nigeria	Cross- sectional; community-based household survey with clinical examination	Adolescents (N=1506) Age 10-19	SRQ	DAS		SRQ CE: • DMFT • OHI-S		
Grossi et al. [25] Brazil	Retrospective case control study; Occlusion clinic, Faculty of Dentistry	Adult women (N=80) 40 TMD cases ;40 control Age 16-45	S/PAHQ		RDC/TMD			Interview: • Impact • Social support
Guiney et al. [26] New Zealand	Longitudinal birth cohort Dunedin study: birth to age 45 years	Adults (N=937) Age 0-45	SRQ			CE: • Periodontal status • Dental caries		
Humphris & King [27] UK	Cross-sectional survey; University setting	University students (N=1024) Age 16-60	LOE-DEQ	MDAS				
Kundu et al. [28] India	Cross-sectional; Community outreach programs	Women experiencing domestic violence (N=304)	SRQ			CE: • Periodontal status • Dental caries		OH behaviour: • Frequency of brushing
Nascimento et al. [29] Brazil	Cross- sectional; school-based study	Female adolescents (N=2431) Age 14-19	SRQ: Experience of violence		TMD symptoms: pain and jaw locking			

Nermo et al. [30] Norway	Cross-sectional Tromsø 7 study	Adults (N=21,083) Age 40 years	SRQ	MDAS				PTE
Uziel et al. [32] Israel	Cross -sectional; patients in treatment	Adults (N=448)	SRQ	DAS			GAS	Dentist preference
Widom et al. [33] USA	Prospective study; follow-up abuse and neglect cases	Adult (N=754) 30-year follow -up from childhood	Official records			CE: <ul style="list-style-type: none"> • Periodontal condition • Caries • Soft tissue condition 		

Key to Abbreviations:

SRQ: Self-Report Questionnaires

S/PAHQ: Sexual Abuse History Questionnaire

LOE-DeQ: Level of Exposure-Dental Experience Questionnaire. A 23-item questionnaire of experiences thought to be related to development of dental anxiety. Sixteen items relate to dental experiences, Seven to Life experiences, including sexual abuse.

DAS: Corah Dental Anxiety Scale (4 item measure of Dental Anxiety)

MDAS: Modified Dental Anxiety Scale (5 item modified version of the DAS)

RDC/TMD: The Research Diagnostic Criteria for Temporomandibular Disorders Axes I and II

CE: Clinical Examination performed by dental healthcare professional

DMFT: Assessment of dental decay experience; Decayed, Missing, and Filled Teeth

OHI-S: Measurement of presence of debris and calculus on tooth surfaces, Oral hygiene index

GAS: Gagging Assessment Scale (4 item measure)

PTE: Potentially Traumatic Events during dental treatment

Table 2: Summary characteristics of qualitative studies exploring the impact of sexual abuse on experience of dental treatment.

Author (Year)	Study country	Methodology	Sample
Alyce et al. [34]	United Kingdom	Semi-structured interview Thematic analysis	Sample: snowball methods 17 CSA survivors from UK and Sweden 13 women; 4 men 15 White (13 British, 2 Swedish) 2 Black British
Fredriksen et al. [35]; Kranstad et al. [36]; Søftestad et al. [37]	Norway	Semi-structured interview Grounded theory	16 adults from 4 Centres against Sexual Abuse (SMSO) SMSO employees recruited informants they thought would be psychologically strong enough to elaborate on this topic. 12 women; 4 men Age range: 26-59
Wolf et al [38]; Wolf et al. [39]; Wolf et al. [40]; Wolf et al. [41]	Sweden	Semi-structured interviews Content analysis	Purposive sample recruited via private psychologist and midwives. 13 sexually abused individuals 11 women/ 2 men Age: 19-56

Table 3: Appraisal of Quantitative studies using the CASP criteria.

Author [Reference] country	Was the study question focused?	Appropriate methodology	Appropriate Recruitment	Data collection clearly described	Validity	Confounding factors	Adequate follow-up	Clear results presented	CASP overall appraisal
Folayan et al. [24] Nigeria	Yes	Yes	Partially	Partially	Partially	Yes	N/A	Yes	Moderate
Grossi et al. [25] Brazil	Yes	Yes	Partially	No	Partially	No	N/A	Yes	Moderate
Guiney et al. [26] New Zealand	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	High
Humphris & King [27] UK	Yes	Yes	Partially	Yes	Partially	Partially	N/A	Yes	Moderate
Kundu et al. [28] India	Yes	Yes	Partially	No	Yes	Yes	N/A	Yes	Low-moderate
Nascimento et al. [29] Brazil	Yes	Yes	Yes	Partially	Yes	No	N/A	Yes	Moderate
Nermo et al. [30]	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Yes	High
Uziel et al. [32] Israel	Yes	Yes	Partially	Partially	Yes	No	N/A	Yes	Moderate
Widom et al. [33] USA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	High

Table 4: Appraisal of Qualitative studies using the CASP criteria.

Paper	Aim	Methods	Design	Recruitment	R partnership	Ethics	Analysis	Findings	Value	Outcome
Alyce et al [34]	√	√	√	√	√	√	√	√	√	√
Fredriksen et al. [35]	√	√	√	√	√	√	√	√	√	√
Kranstad et al. [36]	√	√	√	√	√	√	√	√	√	√
Softestad et al. [37]	√	√	√	√	√	√	√	√	√	√
Wolf et al [38]	√	√	√	√	√	√	√	√	√	√
Wolf et al. ([39]	√	√	√	√	√	√	√	√	√	√
Wolf et al. [40]	√	√	√	√	√	√	√	√	√	√
Wolf et al. [41]	√	√	√	√	√	√	√	√	√	√

Supplemental file 1: Search terms used:

1. Sexual abuse
2. Child abuse/sexual
3. Sexual violence
4. Sexual assault
5. ("adult survivor*" and "sexual abuse")
6. ("Adult victim" and "child sex)
7. ("Child* abuse" and "Sex)
8. (child* adj3 abus*)
9. Dental Care
10. Dental treatment
- 11 Dentistry.
- 12 Oral care
- 13 Dental visit
- 14 Dentist*
- 15 Dental appointment*

Limited to 2011 present, English

Supplemental file 2: Table of excluded articles

Study, author	Reason for exclusion
Aardal et al. (2024)	Compare dental anxiety for those who reported a history of abuse, but SA not included
Afifi et al., 2016	Cross sectional study, examining relationship between child abuse and poor mental health, includes sexual abuse but no dental experiences reported.
Alapulli et al. (2024)	Focuses on perceptions of dental professionals regarding child physical abuse; no sexual abuse data.
Barbi et al. (2021)	Population: children aged 5 to 16, focuses on orofacial injuries in abuse cases but does not isolate or analyse sexual abuse.
Berry & Rutledge (2016)	Explores disclosure of sexual assault to healthcare providers generally, not specific to dental care.
Birungi et al., (2024)	Examines impact of training on reporting child abuse; does not address sexual abuse or dental outcomes.
Bjørknes et al. (2019)	Identifies barriers to reporting child maltreatment; sexual abuse not a focus; no dental care outcome data.
Bright et al. (2015)	Analyses adverse childhood experiences (ACEs) and dental health but does not isolate sexual abuse.
Crouch et al. (2018)	Assesses ACEs and childhood dental care retrospectively, but sexual abuse not separately analysed.
Ford et al. (2020)	Examines ACEs and oral health but does not focus specifically on sexual abuse.
Guha et al. (2020)	Links child sexual abuse with long-term dental care utilization, no patient experience included
Kvist et al. (2018)	Focuses on oral health outcomes in abuse cases but not on sexual abuse.
Mahajan et al. (2024)	Examines dentist knowledge and attitudes; no patient experience included.
Myran et al. (2023)	Assesses childhood abuse and adult tooth retention; does not isolate sexual abuse.
Nakamura et al. (2024)	Quantitative study on dental caries by abuse type; does not analyse sexual abuse separately.
Simon et al. (2021) children	Analyses ACEs and oral health in children; population does not meet inclusion criteria (children only).

2.2 Systematic Review Reflective Commentary

Introduction

Systematic reviews are a key method for synthesising research and form the foundation of evidence-based practice. By critically analysing existing studies, they support informed decisions in clinical, research, and policy settings (Hoffman et al., 2021). They also help manage the growing volume of literature and highlight effective interventions and influencing factors (Khan et al., 2003). As a Trainee Health Psychologist, gaining experience in this process is essential for developing strong research and critical thinking skills.

This commentary outlines my personal and academic journey in conducting a systematic review of the impact of sexual abuse on dental care experiences. It describes the stages of the process, the challenges I faced, the knowledge I gained, and my critical reflection. As a student and practitioner new to systematic reviews, this experience not only enhanced my research skills but also broadened my clinical insights into a highly sensitive area. I hope this will also benefit my practice as a psychological practitioner supporting patients who may have experienced sexual abuse.

Identifying the Research Area

The first challenge I faced was selecting a feasible and relevant topic. My initial attempt at conducting a systematic review was in a different subject area, however, this was unsuccessful due to a lack of papers. I was very excited when I was invited to collaborate with a research group for the Office of the Chief Dental Officer (OCDO) exploring the relationship between wellbeing indicators (including burnout, anxiety, depression and performance) among dental professionals. The topic's focus on dentistry aligned with my interests, whilst its emphasis on healthcare professionals allowed me to explore beyond direct patient care, pushing me out of my comfort zone and broadening my perspective. Therefore, I volunteered to lead the project, with the condition that it could meet the requirements of a systematic review assignment. I drafted a protocol and began developing a structured search strategy. Unfortunately, scoping searches revealed a scarcity of eligible studies, making the review unviable. Although it was difficult to abandon the project after

considerable time and effort, the experience gave me a solid grounding in formulating research questions, building search terms, and the processes for identifying relevant literature. I remained involved with the team at a more limited capacity and refocused my attention on finding a suitable topic.

With the support of my workplace supervisors, I identified a topic of growing relevance in my clinical setting: the impact of sexual abuse (SA) on dental care. During supervision, we discussed a clinical case of a patient who disclosed the impact of sexual abuse on her dental anxiety, and I reflected on previous work with patients reporting gagging reflex problems because of previous experiences of sexual abuse. My work placement supervisor also reported increasing inquiries from dental professionals, seeking training on how to support patients with abuse histories. Together, we identified the potential for the review to inform practice, raise awareness, and provide future CPD training for dental professionals, and therefore, I decided to explore this topic.

My first step was to identify what was already published and if a protocol had been recently registered. Scoping searches suggested a growing body of relevant literature but no recent systematic review. The last published review on this topic dated to 2015, and it focused only on the association between dental fear and the history of sexual abuse. I proposed broadening the review's scope to include both qualitative and quantitative outcomes and all potential impacts including oral health, dental anxiety, service use, and trust in providers. After consultation with my academic supervisor, we agreed this was a suitable and timely topic that fulfilled both the academic brief and my clinical aspirations. I was reassured of the topic relevance within my field and had the support of both my clinical supervisor (TN) and placement supervisor (JH), both of whom volunteered to be part of the reviewing team.

Developing the Review Strategy

My previous work on the burnout project had introduced me to the importance of systematic search planning. Building on that experience, I developed a structured review strategy by identifying relevant controlled vocabulary and synonyms. Following guidance from the Centre for Reviews and Dissemination (CRD, 2009), I developed a robust search strategy that included both medical subject heading (MeSH) terms and free-text keywords.

These were tailored to capture variations in terminology related to SA (e.g., CSA, rape, sexual trauma), dental care, and psychological outcomes. With support from the university's specialist librarian, I refined the search terms to ensure they were comprehensive and aligned with the review question and adapted search terms across databases.

To ensure that there were enough relevant published papers to synthesise and analyse, I conducted preliminary scoping on PubMed, identifying at least five studies meeting my tentative inclusion criteria. This reassured me that a review was achievable.

Developing the review protocol

Contributing to the previous protocol helped me develop key skills and gain a solid understanding of the review process. I drew on this foundation when preparing my own protocol, closely following the Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2024) and the Centre for Reviews and Dissemination (CRD, 2009) guidance to outline the review's objectives, methods and criteria in advance.

I developed the protocol over several drafts with supervisory input before finalising it. My research question was deliberately broad to include all forms of sexual abuse across diverse populations. To build on the previous review, I decided to include both qualitative and quantitative studies. Eligibility criteria focused on primary research studies (qualitative, quantitative, or mixed methods) published in English between 2011 and 2024. Included studies had to report the experiences of individuals with a history of sexual abuse and relate to dental and oral health outcomes such as dental phobia, access to care, or coping strategies in treatment. While this mixed-methods approach added complexity to the review process, I hoped that this would capture the full scope of the topic and help ensure there would be enough relevant studies to meet the review's assessment criteria.

The 2011 baseline was chosen to complement an earlier review by Lariajany (2015), which included studies up to that date. I then registered the protocol with PROSPERO, where it was accepted following a short peer-review process and minor revisions. In line with Staffordshire University's Research Ethics Review Policy (2019) and General Data Protection Regulation (GDPR, 2018), I also completed an ethics disclaimer.

Database Searching and Technical Challenges

I ran searches across five databases: CINAHL, EMBASE PsycINFO, Scopus, and Ovid Medline. I also completed citation tracking in Web of Science and Google Scholar, as well as reference list screening of the included studies, to support electronic database searches, but no additional articles were identified.

Studies identified through the five databases were imported into RefWorks and assessed for relevance based on title and abstract. I tested several reference management programmes, including EndNote, Mendeley, and RefWorks, and settled upon RefWorks due to my previous experience and familiarity.

Reflecting on database selection, I realised I should have double-checked which databases my institution subscribed to before finalising my search strategy and registering the protocol. Although Embase is important for systematic reviews, I couldn't access it via my university account. I had access through NHS credentials, but working across platforms created practical challenges, complicating result integration and de-duplication. This highlighted my inexperience and the need for early, systematic planning.

Screening and Study Selection

The search yielded 539 results, which were reduced to 355 after removing duplicates. I followed a two-stage screening process, first by title/abstract and then full-text review, as recommended by the CRD (2009) guidance. I developed and piloted a screening sheet based on my inclusion and exclusion criteria and discussed it with the researchers involved in the review to ensure consistency. To ensure reliability, the second reviewer (JH) screened the results from Ovid Medline, as this platform generated the largest number of titles; we then compared our selections. Fortunately, there was strong agreement across our choices, validating the reliability of the process; I continued independently screening the remaining databases, with the second reviewer available for discussion if needed.

When the papers were discussed with the second reviewer (JH), two of the selected papers were initially challenged for inclusion; however, I was able to discuss this in supervision and

defend my decision to include them, which the second reviewer agreed with. I finally checked with the third reviewer (TN), who further endorsed the decision to include the papers.

Due to time and resource constraints, it was not possible for two reviewers to independently extract data from all papers, however, the data extracted were discussed in supervision and agreed by all reviewers. In the second stage, I reviewed 33 full-text articles and identified 16 studies that met the inclusion criteria: comprising 9 quantitative and 7 qualitative studies.

I created a detailed exclusion table, noting specific reasons for exclusion, such as the absence of abuse-specific data or lack of dental outcomes.

Searching papers from databases and screening these against my review criteria took longer than anticipated, possibly because of the challenge in accessing some databases and finding solutions that supported the process described in the protocol. Reflecting on this stage, I found that the volume of reading and decision-making required a high level of focus and organisation. As this coincided with the recruitment phase of my empirical research project, I found it helpful to maintain my enthusiasm by alternating the projects in weekly blocks.

Data Extraction and Appraisal

Data extraction was completed by me and discussed in supervision. This was my first experience creating a data extraction form, and I was initially unsure what to include, but I aimed to extract the information specified in the protocol.

The forms captured:

- Study characteristics (author, year, country, design, sample size, measures)
- Participant details (age, gender, type and history of abuse)
- Dental care experiences
- Other reported impacts

As data were extracted more details were added, especially for qualitative papers, such as the key themes and author-reported codes.

I found that most papers provided clear information; however, one area that was often less well reported was the specific nature of the abuse. In several cases, sexual abuse was described alongside or embedded within other forms of abuse, making it difficult to isolate and interpret its distinct impact. Another notable issue encountered was a discrepancy in the reported results. In the paper by Folayan et al., an odds ratio of 1.81 was presented, suggesting that individuals who had experienced sexual abuse were more likely to report high levels of anxiety. However, a closer examination of the results section raised concerns about a potential misinterpretation of the data. Specifically, the claim that the odds of high or severe anxiety were significantly higher among survivors of sexual abuse did not appear to be fully supported by the data as presented. To address this discrepancy, I revisited the statistical data and consulted with my supervisor to ensure an accurate interpretation, reinforcing the importance of critical appraisal when reviewing published findings.

With hindsight, I realised I initially collected more data than necessary, fearing I might miss important details. In future, especially for larger reviews, I would define inclusion criteria more strictly, focusing on key variables to improve extraction efficiency. Balancing nuances across study designs was challenging, often requiring me to revisit and revise extracted data for consistency.

Quality Appraisal

I referred to the CRD (2009) guidance to support my approach in selecting appropriate appraisal methods and applying consistent criteria for judging study quality. In supervision, we agreed that the CASP (Critical Appraisal Skills Programme, 2018) tools were most suitable; primarily because they are widely recognised frameworks for assessing the validity, results, and relevance of both qualitative and quantitative research in systematic reviews. My previous experience with this tool, along with support from the third reviewer (TN), provided reassurance; particularly as I initially felt inexperienced in making decisions about excluding papers.

For quality appraisal, we used the CASP tools tailored to each study design. Qualitative studies were assessed using the CASP qualitative checklist, with quantitative studies appraised using the appropriate CASP checklists for cohort, cross-sectional, or case-control

studies. I had planned to use the Mixed Methods Appraisal Tool (MMAT); however, none of the included studies met the criteria for this tool.

Following CRD (2009) guidance, each study was reviewed independently by me and a second reviewer (TN), and results were compared. Although I felt intimidated at first by the responsibility of quality appraisal, working alongside an experienced supervisor helped build my confidence. We appraised one paper together before proceeding to independent review. No studies were excluded from the final review based on quality appraisal.

Data Analysis

A convergent segregated approach was used to synthesise the findings, following guidance from Hong et al. (2017). This approach allows for the separate analysis of quantitative and qualitative data, which are then brought together during the interpretation phase. This was particularly appropriate given the review's inclusion of mixed-methods studies and the aim to preserve the integrity of different data types while enabling meaningful integration.

For quantitative data, findings from each study were extracted and summarised. Where feasible, similar outcomes (e.g., prevalence of dental anxiety, rates of dental avoidance) were converted into textual summaries. This narrative synthesis allowed for the incorporation of quantitative trends into the broader conceptual understanding of the topic (Lizarondo et al., 2020). For the qualitative studies, thematic data were extracted based on the authors' interpretations and findings. These themes were then inductively categorised into broader conceptual domains. This process involved clustering themes based on their underlying meaning, relevance to the research question, and recurring patterns across studies. Domains reflected overarching constructs such as *trust and fear in the dental setting*, *coping mechanisms*, *impact of trauma on dental behaviours*, and *communication and control*. This allowed for a nuanced understanding of how experiences of sexual abuse shape oral health behaviours and perceptions of dental care.

Following independent analysis of each data stream, integration was carried out by comparing and mapping the qualitative domains with the quantitative findings. This enabled

the identification of points of convergence, divergence, and complementarity. For example, qualitative accounts of dental avoidance due to trauma triggers were supported by quantitative evidence showing high levels of non-attendance among those with a SA history.

One challenge I encountered during this stage was how to report findings from qualitative papers that drew on the same participant group but were published as separate studies. Although these papers had different research objectives and presented distinct analyses, they were based on data from the same underlying study. I found this confusing and initially struggled with how to present the findings clearly without duplicating or misrepresenting the data. As a result, I revised my approach to reporting the qualitative data, choosing not to present each paper's themes separately, but instead to summarise shared insights across the related publications.

Synthesising data across diverse methodologies presented a significant challenge. Initially, I planned to present findings from qualitative and quantitative studies separately. However, deeper analysis revealed overlapping themes, such as dental anxiety, avoidance of care, treatment-related difficulties, and physical and social impacts, which supported a more integrative approach.

After supervisor feedback on my first draft, I clustered studies reporting different aspects of the same dataset to avoid double-counting. I then developed an overarching thematic synthesis, guided by both narrative and descriptive methods. The final report presented three analytical themes: (1) Dental anxiety and avoidance of care; (2) Difficulties during treatment; and (3) Physical and social impacts.

Write-Up and Dissemination

Before writing the report, I explored suitable journals for potential submission. Given the focus on the psychological and behavioural impacts of sexual abuse within dental care, I prioritised journals that publish empirical studies in dental or trauma-informed practice. I reviewed where similar studies had previously been published and, based on relevance and readership, selected European Journal of Oral Sciences, which welcomes qualitative and mixed-methods research with clinical application. I consulted their author guidelines to

ensure the report met submission requirements, including structure, referencing, word limits, and figure formatting. Writing with a specific journal in mind helped me shape a focused, publishable narrative from the outset.

The write-up stage was intensive, as I was committed to completing it by the PROSPERO deadline. This phase significantly refined my academic writing skills: I learned to craft a narrative that balanced analytical rigour with clarity, while drawing out implications for research, training, and clinical practice. Writing for a targeted journal sharpened my ability to communicate findings in a format that would resonate with both clinical and academic audiences.

Reflections and Learning Outcomes

I believe I achieved the aims outlined in my protocol and produced a review that offers meaningful insight into the multiple impacts of sexual abuse in dental care.

At the outset, I was anxious about the possibility of not finding sufficient literature or being unable to synthesise diverse findings effectively. However, with the support and guidance of my supervisors and collaborators, I developed skills in systematic searching, critical appraisal, thematic synthesis, and academic writing; all of which I now recognise as highly transferable.

This process also highlighted the importance of collaboration: my supervisor's mentorship, the librarian's expertise, and the input of multiple reviewers were invaluable throughout. The experience has deepened my understanding of research, enhanced my clinical awareness, and opened up new possibilities for future contributions to academic and healthcare communities.

Crucially, this work has strengthened my appreciation of how practitioner insight can shape meaningful research questions; questions that have the potential to directly inform clinical practice and training. For example, this review has already sparked early discussions within the clinical team around the need for trauma-informed training. In this way, it demonstrates

how research can bridge the gap between evidence and service development, and I look forward to applying the learning in my clinical role.

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Chapter 3 Research: From Design to Dissemination

3.1 Qualitative Study Manuscript

Reclaiming dental care: a qualitative study of patients re-engaging with primary dental services after Cognitive Behaviour Therapy for dental anxiety

written for submission to the British Dental Journal

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Abstract

Introduction: Cognitive Behaviour Therapy (CBT) for Dental Phobia is an evidence-based approach to helping individuals overcome their fear.

Aim: To explore the experiences of accessing primary care dentistry among adult patients who previously received CBT.

Design: Qualitative interview study with 15 participants.

Setting: All participants were recruited from a tertiary care CBT service.

Methods: Online Interviews. Data was analysed using Inductive Reflexive Thematic Analysis.

Results: Three core themes were identified: Transformational shifts reclaiming the self and behaviour; Transformation of relationships: shifting the dynamic with dental care; Shadows that follow: Barriers to transformation.

Discussion: Accessing dental treatment in primary care was enabled by shifts in the participants' cognitions and behaviours to a position of greater trust, predictability and lower perception of risk in dental settings. In addition, access was supported by improved interactions towards a collaborative, trusting relationship. Barriers to the transfer to primary care included individual and systemic factors.

Conclusion: Cognitive Behaviour Therapy provides patients with a range of skills and beliefs that support the transition to primary dental care from tertiary care. Barriers to the transfer included systemic issues such as the funding of dental treatment in the UK, as well as individuals' perceptions of a low need for dental treatment.

INTRODUCTION

Regular dental check-ups are crucial for enhancing and maintaining oral health, as well as addressing various dental care needs. The General Dental Council [1] and National Institute for Health and Clinical Excellence [2] recommend routine dental examinations, which include clinical assessments and providing preventive advice on oral hygiene, diet, and behaviours that may increase the risk of oral diseases and cavities. Regular dental care improves quality of life and reduces health issues related to dental decay, periodontal disease and oral cancer [3].

Dental phobia, one of the most common specific-phobias, affects approximately 11% of the UK population and significantly contributes to delaying or avoiding dental care [4]. Strong evidence of the relationship between dental fear and dental avoidance has been confirmed in several studies [5-7]. Patients are caught in a 'vicious circle' where fear and anxiety are maintained by negative expectations about treatment [8].

Individuals with severe dental fear tend to overestimate the likelihood of negative experiences during dental procedures, often anticipating more pain and discomfort than they experience, and a low ability to cope with such situations [9]. Low levels of trust in dentists and negative beliefs about dental professionals are associated with not having a regular dentist [10]. Negative expectations about treatment and perception of threat encourage patients to protect themselves by avoiding the situation. However, avoidance of the feared situation prevents an opportunity to potentially disprove catastrophic thoughts/predictions, which maintains the anxiety and avoidant behaviour pattern [11]. As a result, patients often require more invasive and potentially traumatic treatment, which can further reinforce or exacerbate their fear, leading to continued avoidance and poorer oral health [12,13].

In the UK, patients with dental phobia unable to access treatment in primary care (referred to as 'High Street dentistry') may be referred to specialist clinics in secondary care (Special Care Dentistry/SCD). These SCD settings typically offer adapted dental care; including pharmacological intervention (i.e. sedation) or non-pharmacological intervention (i.e. Cognitive Behavioural Therapy/CBT). The goals of these services are to help patients

complete dental treatment, develop coping skills and establish a pattern of regular attendance [14,15].

CBT is the recommended treatment modality [16] for managing simple phobias, including dental phobia. Its goal is to help modify unhelpful behaviours and thoughts that contribute to anxiety. This process aims to increase feelings of control and self-efficacy in communicating needs to the dentist, as well as develop skills and techniques for managing anxiety and accompanying physiological reactions. After completing CBT and any required dental treatment, patients are discharged and transferred back to primary care with the recommendation to register with a local dentist and attend regular check-ups [17]. Patients who have received CBT for dental fear report a significant and lasting reduction in fear, enabling regular attendance and acceptance of primary dental care [18].

Although the benefits of CBT and its long-term effectiveness in reducing anxiety have been well documented [15,19], little is known about anxious patients' actual experience of returning to primary dental care. It remains unclear whether reductions in negative cognitions are maintained, and whether dental teams offer appropriate support to ensure a positive experience.

While CBT outcomes have been explored among dentally anxious children [20,21], to the researcher's knowledge, no equivalent research has been conducted with adult populations.

This study seeks to explore the following research questions:

- How do dentally anxious adults experience the transition back to routine primary dental care following CBT for dental phobia?
- What factors do they perceive as facilitating or hindering their continued engagement with dental services?
- How have their perceptions of dentistry and dental care changed since completing CBT treatment?

METHODS

Ethical approval was granted by Guy's and St Thomas' NHS Foundation Trust and Staffordshire University.

Design

A mixed recruitment approach was employed, comprising an initial online survey, followed by semi-structured interviews with a purposively selected sub-sample of respondents. The primary focus of the study was the qualitative interview data, which sought to understand the experiences of patients returning to primary dental care following CBT treatment. Semi-structured interviews allowed in-depth exploration of individual experiences, with flexibility to probe relevant and emerging issues.

Sample

Participants were adults (aged 18 and over) who had completed a face-to-face, structured CBT programme for dental anxiety at a specialist dental psychology service in a tertiary care setting. The provision of CBT in this setting consists of 10 planned sessions, with flexibility to increase or decrease the number [22]. Following CBT, all had received dental treatment without sedation, been discharged from the service within the previous five years, and been referred back to primary care for ongoing dental care.

Recruitment

Eligible participants were identified through the service database. A total of 117 individuals were invited by letter containing study information and a QR code linking to an online survey and a request for participation in an interview. Participation was voluntary, with an information sheet provided and explicit consent obtained.

Fifteen participants (8 male and 7 female) were purposively selected to take part in interviews. Selection aimed to ensure diversity across age, gender, self-reported attendance, MDAS scores, and previous diagnoses. Twelve of the 15 participants reported being registered with a dentist. When asked about their patterns of dental attendance, eight participants described attending regular check-ups, while six stated they visited the dentist only in cases of emergency. One participant reported not attending the dentist at all.

TABLE 1 ABOUT HERE

Data Collection

Semi-structured interviews were conducted online via Microsoft Teams by the lead researcher (GB). Questions explored participants' experiences of returning to general dental practice following CBT, including registering with a dentist, attending check-ups and receiving treatment. Participants were asked about emotional and practical challenges, support received, and communication with their dental team. Conducting interviews remotely enabled inclusion of participants who continued to experience avoidance related to the dental setting. Interviews were audio-recorded with consent and transcribed verbatim, before being checked for accuracy. Interviews lasted an average of 70-minutes (range 25 – 133 minutes).

Data Analysis

Qualitative data were analysed using Inductive Reflexive Thematic Analysis (RTA), following the six-phase framework outlined by Braun and Clarke [23–25]. This method was selected for its flexibility and accessibility in identifying and interpreting patterns of meaning across participant narratives. Sentences were treated as the unit of analysis, enabling identification of discrete thoughts, emotions, and behaviours. Analysis was conducted inductively, with themes generated from the data rather than imposed a priori. This approach allowed participants' experiences of returning to dental care after CBT to emerge naturally, supporting the study's aim to explore nuanced, real-world perspectives without preconceived assumptions.

Transcripts were read multiple times, with initial observations noted by the lead researcher (GB). The analysis was predominantly inductive, beginning with semantic coding to capture explicit content, followed by latent coding to explore underlying meanings. Coding was conducted manually, with initial codes such as "building trust with new dentist" and "fear of relapse" noted in the margins. Similar codes were grouped into broader categories and developed into initial themes. These were reviewed and refined through iterative re-reading of the data to ensure internal coherence and clear distinctions between themes. Final themes and sub-themes were developed to address the research questions and are supported by illustrative participant quotations (using pseudonyms) in the final manuscript.

Reflexive practice was maintained throughout data collection and analysis. The lead researcher (GB), who conducted the interviews and led the analysis, had prior clinical experience with anxious patients and had treated some participants. This dual role was actively reflected upon acknowledge potential influence on interpretation. Regular discussions with the wider research team supported critical reflection on emerging codes and themes, enhancing analytical rigour.

RESULTS

Analysis of the interview data revealed a central organising concept of '*transformative change in dental care engagement*'. This overarching theme captures psychological, behavioural, and relational shifts following CBT, with varying degrees of success. It is comprised of three main themes:

Each theme is explored in detail below, supported by direct quotations that illustrate how participants made sense of their experiences, expressed changes in cognition and emotion, and described ongoing challenges in maintaining engagement with dental care.

FIGURE 1 ABOUT HERE

Theme 1: Transformational shifts: reclaiming the self and behaviour

The theme focuses on the cognitive and emotional changes that participants experienced after attending the CBT programme, as they moved from avoiding the dentist out of fear to approaching care with confidence and new coping strategies. Within this theme, two main subthemes were identified: *Redefining the Self Through New Narratives*, which reflects how participants perceived and experienced fear, control, and change in cognition. *Crafting Personal Blueprints to reclaim dental care*, which illustrates some unique strategies that participants adopted to manage their treatment.

1.1 Redefining the self through new narrative

Before engaging in CBT, participants shared a common experience of severe dental anxiety and avoidance that significantly disrupted their access to dental care and contributed to emotional and physical distress. Their experience was shaped by deep

mistrust, emotional vulnerability, and a fear of disempowerment. They felt passive, powerless, and silenced during appointments and feared upsetting or annoying the dentist. Jack shared his experience:

"I did feel that there was something very deeply missing in the character of people who practice dentistry... My emotional and psychological landscape was such that I would never seek to be associated with anyone in that profession because it would feel so intimidating; I would be very unhappy." [Jack]

The therapy helped them recognise and reframe irrational thoughts and emotional reactions related to dentistry.

Another participant described himself as emotionally overwhelmed by the thought of dental treatment, to the point that distress related to his oral health escalated into self-harm ideation. Tim discussed the severity of distress he faced in relation to dental issues, emphasising the intervention's critical role in preventing further harm and enabling safe access to care:

"It has been a vital service for me; otherwise, things would be quite different. I would have self-harmed; I would have taken my own teeth out. Basically, I was getting quite drastic." [Tim]

CBT served as a turning point, as participants transitioned from rejecting and avoiding dental care to engaging with it, in a more emotional and rational manner. Participants reflected on how they "made sense of their anxiety", recognising how CBT addressed deeply ingrained fears and helped them manage their emotions:

"I think I've accepted my fear of dentistry more, and I have found ways of handling it better, rather than avoiding my fear by avoiding the dental care," [Jay]

Additionally, they noted that their anxiety lessened as the mystery surrounding dental procedures diminished, and predictability increased. Patrick summarised this change, stating:

"One of the biggest things is the mystery... I now know what the dental tools are... Before, they were just these metal things, and I knew nothing about them..."

it was just a scary, alien environment, I didn't trust any person in that room, I didn't know what they're doing. It was all fear, it was just a scary environment." [Patrick]

As participants gained a greater sense of control over their dental care, they reported increased confidence. Many initially perceived a lack of control as a source of anxiety, describing overwhelming feelings of vulnerability. Jay reflected on how the feeling of losing control contributed to his distress:

"It was definitely about control... the loss of control and feeling very vulnerable was overwhelming." [Jay]

As they became more involved in decision-making, they began to redefine their roles as patients and reframe control as empowering. Tim elaborated on this transformation:

"I'm able to go into the room and say what I want and what I need... I'm able to be more in control of the scenario where I didn't feel in control before." [Tim]

Small acts of autonomy contributed to their sense of control, as one participant shared:

"I choose when I sit down, and I choose when I go up the stairs to the dental room. It just puts me in control a little bit more. It makes me feel a little bit stronger."
[Patrick]

Over time, this perspective evolved into a sense of normalisation and acceptance of dental care. Rebecca encapsulated this change, stating:

"After CBT, I felt like a normal person because normal people go to the dentist, so I booked my check-up, and I went." [Rebecca]

1.2 Crafting Personal Blueprints to reclaim dental care.

This sub-theme highlights the agency and creativity participants used to tailor coping strategies post-CBT. Participants shared how they utilised their learning to employ a variety of skills to manage their anxiety and presented personalised coping strategies ranging from mental dissociation to proactive communication and strategies in building trust. They discussed techniques and cognitive strategies learnt in the CBT programme, which the dental team understood and implemented. One participant noted:

“They talked me through the steps involved, allowed me to stop when I raised my hand, helped me remember to breathe, described what was happening, and showed me the tools.” [Mike]

Many participants highlighted the importance of communication in reducing anxiety and fostering trust, particularly using the CBT tool known as the “Letter to the Dentist.” This strategy empowered individuals to express their needs in advance, set expectations, and take an active role in shaping their care experience.

Jonathan used the letter to screen potential dental practices, selecting a provider who responded with openness and understanding.

“We discussed me writing to a few local dentists to ask specific questions about whether they would be willing to accommodate my needs. I sent letters to about nine or ten dentists, and only two or three replied. I reached out to those dentists, chose one, and he has been great.” [Jonathan]

For others, the letter served not only as a communication aid but as a means of advocacy—a way to clearly explain their anxiety, treatment history, and preferred approaches. For Tim in particular, the letter symbolised a validation of the psychological work he had done, reinforcing the idea that his dental phobia was legitimate and that his progress mattered.

“I think the letter helped. It established a foundation of value regarding my experiences at Guys. The work we did together was significant and bringing that into the dental practice helped ensure they valued continuing from that point. It demonstrated that what I went through was serious.” [Tim]

Some participants expressed a desire to gradually acclimatise to the dental environment and procedures, inspired by graded exposure techniques. Although some clinicians found this concept challenging to understand, most dental staff adapted to it effectively. Elena shared her request for minimal treatment during her first visit:

“When I went the first time, I literally said to her, ‘Can you just look in my mouth and barely touch me?’ She did just that.” [Elena]

Other individuals aimed to build trust gradually, by beginning treatment with short, non-clinical visits:

"I visited her just to sit in the room for 15 minutes, not to have any treatment. We were building trust, and I was willing to pay for that, doing it several times so we could discuss my needs, and I could feel comfortable." [Tim]

However, maintaining this gradual approach was not always easy and required reinforcement from the patients.

"Luckily, I'm quite assertive, because sometimes she tries to push me beyond my comfort zone. I told the hygienist, 'No, I don't want the whole side of my mouth anesthetized; you can do the bottom, but not both the top and bottom, in case I start to feel panicky.'" [Elena]

Although participants were encouraged to pause or slow down during treatment, many preferred to manage their discomfort in a more strategic way. Jay, for example, described coping strategies focused on minimising the time spent in the dental chair. He chose to tolerate a certain level of pain to "get it over with" quickly, while Jack used a form of mental distancing or "zoning out" to help him endure treatment by breaking it down into a predictable sequence of steps.

"I want to spend as little time in the chair as possible. I say, 'Oh, I can handle a little pain... let's just do it and finish it up.'" [Jay]

All these approaches highlight how some individuals exert control not by slowing down, but by mentally preparing themselves to endure the experience efficiently and on their own terms.

Theme 2: Transformation of Relationships: Shifting the Dynamic with Dental Care

This theme captures how therapy enabled participants to reconstruct their relational dynamics with dental professionals, leading to improved trust, communication and continuity of care. It comprises two interconnected subthemes: **Building the Bridge to the Chair**, captures internal transformation from feeling powerless and overwhelmed by dental fear to developing a sense of personal capability and resilience; and **Co-Producing Care**,

reflects a relational transformation marked by a shift from mistrust and fear of dental professionals to cautious collaboration and mutual respect.

2.1 Building the bridge to the chair

Participants described a significant shift in their ability to engage, moving from fear and avoidance to active participation and a sense of relational trust. One participant used a vivid metaphor to illustrate this transformation:

"It is a bit like a baby bird being able to leave the nest. They might fear flying, would not leave the nest, and therefore would never get to fly. With the help and care from [clinician's name], I was able to fly quite high and far." [Tim]

Experiences that were once objectified, transformed into ones where participants felt acknowledged and involved:

"I used to feel like I was just the person in the chair, but now I'm part of what's going on—and that's a huge mind shift." [Patrick]

Change took place at various levels, enabling patients to become knowledgeable about their treatment needs. They were able to identify factors that affected their communication and interaction with their dentist. For instance, Jack preferred to discuss any concerns before reclining in the dental chair.

"I want to talk first, before I lie down. Then I can sit down, and they can see what needs to be done." [Jack]

Many participants described a noticeable shift in how they experienced dental procedures after CBT, particularly in relation to previously feared stimuli like the dental drill. Through exposure, explanation, and increased understanding, the drill no longer triggered panic but was reclassified as merely "unpleasant."

"I don't like the feeling of the grinding drill, but it's just an unpleasant feeling now—not something that makes me want to run away." [Jack]

This desensitisation process highlights how fear was reduced not by removing the threat entirely, but by reinterpreting it through knowledge and predictability.

More broadly, participants began to see their ability to tolerate these procedures as personal achievements, symbolic of how far they had come. Jack's growing confidence, even with more complex treatments, was a source of pride, reinforcing his coping and resilience.

"I'm not just confident dealing with the mirror, probes, and drills—I feel I could handle more complex work now... I felt very proud thinking, 'Well, I've done that.'"

[Jack]

This increased confidence was often described as hard-won and personally significant even when talking about a negative experience with the dentist.

"And so, to some extent, all these other problems are just small compared with the truth that I can actually go to the dentist, and I can have a problem with the dentist. So, there's an element that I cannot be defeated. Now that I've overcome those fears that I had, I always walk to the dentist for the lightest step then you might expect, because it is so good to be able to know, that my teeth are being looked after, that I can go and have my teeth cleaned." [Jack]

This shift reflects a key therapeutic outcome: patients no longer saw themselves as helpless or fearful, but as individuals who had overcome something significant. In this way, treatment success became more than clinical, it became emotional and identity-affirming.

A significant outcome of improved treatment experiences was a meaningful shift in oral health behaviour and mindset. Participants reported that overcoming dental fear not only enabled regular attendance but also led to better oral hygiene habits, fewer emergencies, and a stronger sense of control over their dental health.

This change was reflected by Pit:

"Because I'm going more often, my teeth are in better condition. I'm cleaning them better, so I'm having fewer dental emergencies." [Pit]

Participants can have the treatment that help maintain their oral health and began to see themselves as active contributors to their own oral health:

"I'm part of it getting better now, rather than just being the person with bad teeth."

[Jack]

Routine check-ups, once loaded with anxiety, were also reinterpreted. The realisation that some appointments could be brief and uneventful helped reduce anticipatory fear and challenge long-held assumptions that every dental visit would be distressing:

"I went in for the check-up, and there was nothing to do. Learning that sometimes you just go in and out in 10 minutes helped me stop anticipating everything as negative." [Pit]

Still, for some, underlying fears about dental health remained:

"I don't mind physically having the check-up, but what worries me is if they say I've got an abscess or need a filling—that's going to hurt at some point. I still don't have confidence in my teeth being okay." [Patrick]

There was also a cognitive shift—from scanning the environment for danger to observing with curiosity and confidence:

"I noticed she got a new chair and some new lights. I'm not frightened of it anymore; I'm interested now. That's a shift—from checking for danger to comparing and observing." [Pit]

2.2 Co-producing care

Participants highlighted the importance of their relationship with the dental team in engaging with dental care, especially considering past trauma and ongoing anxiety. Many spoke about the significance of establishing a trusting, collaborative relationship with their dentist. Jack illustrates how feeling “in partnership” with his dentist enhanced his confidence and sense of safety during treatment.

"I feel very confident that if it hurts or there's some sudden pain, I will let her know because I feel like we're in partnership now... I'm with a dentist that I feel comfortable with... I feel that the two of us are working together on this for the same objective." [Jack]

The ability to speak up, particularly if something became painful, was rooted not only in having coping strategies, but in trusting the clinician to respond appropriately. This shift from passive, fearful patient, to active, engaged partners was echoed by others.

Clear communication and shared decision-making were emphasised frequently, with participants valuing being informed and involved in their treatment decisions:

"Yes, by telling me what she's going to do, explaining the steps, and telling me how I can stop anything..." [Jay]

Elena and Jonathan both spoke about developing trust in their dentist's judgement and professionalism, with Jonathan highlighting the value of clear communication, shared decision-making, and feeling informed.

"I do trust her judgment... She's talked through options with me, explained what is available, shared her recommendations, and because I trust her, I've generally followed her advice." [Jonathan]

Jack reinforced this view by expressing faith in his dentist's ability to identify and explain problems with transparency and professionalism:

"If there was something... I feel confident the dentist will spot it and will tell me what the problem is..." [Jack]

Positive interpersonal interactions also extended to the hygienist, who was often seen as a trusted extension of the dentist.

"I feel the hygienist is an extension of my dentist in some way." [Jack]

Like the dentists, the hygienists' clear explanations of procedures were appreciated, reinforcing a sense of control and predictability for the patients:

"She just took me through the steps that she was going to do again..." [Roni]

Jay also appreciated how the hygienist checked for sensitive areas and adapted her treatment accordingly:

"Twice she's asked me whether there's any particular sensitivity or anything I would like to let her know I'm anxious about." [Jay]

Theme 3: Shadows that follow: Barriers to transformation

This theme recognises that, despite therapeutic progress, some participants faced ongoing barriers, such as practical challenges, relationship issues, and lingering psychological fears, which limited their ability to fully engage with dental care.

3.1 Interrupted Intentions: Ambivalence, Barriers, and the Fragility of Momentum

This subtheme acknowledges both internal ambivalence and external/systemic disruptions to care-seeking. Some participants still believed in symptom-driven dental attendance, having the personal conviction that regular check-ups are unnecessary unless a problem exists:

"I don't have check-up, for me, it's if I feel something goes wrong in my mouth, then obviously I will. ... if I do feel something wrong, which I haven't luckily, then I will obviously make that appointment because I don't want to go back". [Thomas]

Others, such as Sophie and Georgia, experienced disruption in care due to external factors, most notably the COVID-19 pandemic. Sophie's highlights how an abrupt discharge, without follow-up dental treatment, left her feeling stalled in her progress.

"I finished CBT, but I did not have any more treatment with the dentist after our final session. No, that was it. I was discharged then because of COVID, I think everything then came to a grinding halt. They sent a letter." [Sophie]

Georgia expressed regret over a missed opportunity to act while she was still feeling motivated, illustrating how momentum in mental health recovery can be fragile and time-sensitive:

"I was just so happy, obviously that it had finished but everything I'd hoped for had happened, so I just was so happy that I've done it and I didn't really feel in rush. I should have taken that excitement, that enthusiasm and book something signed up

somewhere straight away. But I didn't and in hindsight that was silly because there was no fear then." [Georgia]

Perception of inadequate NHS treatment affected their registration. Rebecca elaborates on her view about NHS provision and Private services:

"I think it might be something around anecdotal feeling that if I go to an NHS dentist, I might not get the treatment. They'd cancelled the appointment a few times. They didn't have people there, another time I felt they didn't really treat me with care. So that's kind of built up my anxiety: it reinforced any stereotypes or prejudices I had around the NHS. So, I wanted a private dentist where I felt I might have more control over my treatment". [Rebecca]

Cost was identified as a barrier for several participants. Despite feeling motivated and identifying a potentially suitable dental practice, one participant described ongoing delays in seeking care, influenced by cost:

"My husband went to a chain of dentists and it's very light and bright and nice, and it seemed very friendly ...I thought, I could be comfortable here... but I have put it off, and partly it's because it's expensive. I would probably endure the pain because I just don't want to put myself back in a negative position." [Rebecca]

3.2 "Will They Listen?": Persistent Fear of Being Dismissed

This subtheme reveals how persistent mistrust, power imbalances, and past negative experiences continued to shape participants' beliefs and behaviours, even after receiving CBT.

Despite positive experiences, some participants, like Jonathan and Sophie, retained deep-seated assumptions that dentists were unlikely to listen, be flexible, or act in the patient's best interest unless actively challenged.

"To be honest, I don't think it did [change in the view of dentists]. I still have this general feeling that, unless one is lucky enough to come across a sympathetic dentist and unless one continues to make the relevant points at each session the dentist will do things their way." [Jonathan]

Sophie describes how her beliefs and expectations of negative experiences stopped her from attending appointments:

"I've not even given them a fair shot at proving to me that they not going to hurt, it's probably just me assuming they're going to be as they were." [Sophie]

Others highlight how perceived powerlessness and mistrust of care impacts attendance, even when motivation is present:

"I would go... but it's just, as I say, I still have that... I think it's more the fear that I'll tell them to stop and they don't sort of listen to me." [Kate]

These beliefs were unfortunately reinforced by some negative experiences. One participant described feeling patronised during interactions with their dentist, which contributed to discomfort and reluctance to return, further exacerbating his distress:

"I also felt that he treated me more like I was an old man that was frightened than just an ordinary person... there was a certain element of trying to make things simple in a way that I didn't need... So, yes, was a bit condescending I think is probably the word. I got more and more upset and depressed about this and I thought well, I just must go to the dentist and make an appointment and tell them that I'm not happy."
[Jack]

Similarly, Kate describes a discouraging experience when seeking urgent care after a period of absence, highlighting how rigid policies and dismissive attitudes from dental staff can severely impact willingness to return:

"I did go back to the dentist afterwards and everything was fine for a little while... I went back because I had an abscess on my tooth, and he wouldn't see me because I had not been there for a year... he said no, he came out and he just looked at me he said no, and then just walked back in. And I thought, I ain't going back in there. I had to find another dentist." [Kate]

This interaction was not just about policy; it conveyed rejection. Kate's decision to seek a new provider reflects a rupture in trust that can be difficult to repair. For participants like

her, the fear of not being heard, believed, or respected remained a significant barrier to transformation, even after CBT. Such accounts highlight the need for systems that respond with empathy and flexibility, particularly as individuals begin to reclaim agency in their dental care.

DISCUSSION

This study explored, through semi-structured interviews, the post-treatment experiences of adults who had completed CBT for dental phobia and were re-engaging with routine dental care. Analysis revealed a central theme of transformative change, encompassing shifts in cognition, emotion, behaviour, and interactions with dental professionals. While many described meaningful improvements, some continued to face significant barriers to ongoing care.

These findings build upon existing literature that examined the lived experiences of individuals with severe dental fear. Abrahamson et al. [8] previously, identified the theme “existential threat”, a profound sense of violation and loss of autonomy during treatment, as a key factor in the maintenance of dental anxiety. In the current study, participants echoed these sentiments during their pre-treatment phase, describing overwhelming fear, mistrust, and a sense of helplessness. However, following CBT, many reported a transformative shift in perspective; previously held catastrophic beliefs were reinterpreted and reframed, control was gradually reclaimed, and dental appointments were increasingly viewed as manageable, or even routine. Dental care was reclaimed.

The subthemes of *Redefining the self-in new narratives* highlight the transition from emotional overwhelm and helplessness to increased self-efficacy, confidence, and autonomy. Participants employed various coping strategies that they had learnt during their CBT including distraction, stepwise exposure, and communication strategies to enhance assertiveness. The “Letter to the dentist” emerged as a particularly valuable tool, bridging psychological progress from therapy into real-world dental care, facilitating trust, continuity, and clear communication [21].

For many individuals, gaining control and predictability over dental encounters was described not just as behavioural change, but as a transformation from being a fearful outsider to an empowered patient. Similar findings have been observed in studies involving children. Shahnava et al. [20] discovered that CBT helped young patients develop more positive attitudes toward dentistry and improved their ability to cope with dental procedures. Rodd et al. [21] similarly reported that CBT promoted the maintenance of positive thoughts, behaviours, and emotional responses, supporting long-term engagement with dental care. These findings align with broader evidence supporting CBT's effectiveness in reducing dental anxiety [15-19].

The theme *Transformation of Relationships: Shifting the Dynamic with Dental Care* illustrates a move from passive, fear-driven engagement, to one characterised by collaboration, mutual respect, and shared decision-making. This transformation, described as “partnership” or “working together for the same objective,” reflects a significant change in attitude away from the core cognitions in the maintenance of dental phobia which have been identified as perceptions of a lack of control; lack of predictability and perceptions of danger [10].

While many participants made progress, others continued to face psychological and structural barriers. Some felt unready to return to routine care, particularly when disrupted by events like COVID-19 or premature discharge. Others reverted to emergency-only attendance or held persistent beliefs that dentistry is unsafe or disempowering. Power imbalances, negative encounters, and lack of continuity hindered progress. As Berggren and Meynert [12] observed, without consistent support, anxiety can resurface, reinforcing avoidance. Structural issues such as cost and rigid NHS policies further impeded re-engagement.

This study is the first to provide an in-depth account of adults' experiences after receiving CBT for dental phobia. While benefiting from diverse participant experiences and rich thematic depth, the study is not without limitations. The sample was drawn from a single specialist psychology service in the UK, and the findings may not fully generalise to other populations or services. Although the study aimed to recruit participants with a range of

post-CBT experiences, the majority of those who volunteered to take part appeared motivated to share favourable views of the intervention. Self-selection bias may have resulted in an over-representation of positive experiences, making it unclear whether those who found CBT less effective would have reported similar themes of transformation and engagement.

Additionally, the primary interviewer was a CBT therapy-provider for some participants. This dual role may have fostered trust and openness but also introduced potential bias in questioning and responses. Shared therapeutic history may have influenced how experiences were discussed and interpreted. Reflexivity was employed throughout to acknowledge and manage these influences, though the risk of bias remains an important consideration.

Future research should explore the longitudinal outcomes of CBT interventions for dental phobia, and evaluate specific interventions designed to assist the transition from CBT to primary dental care. Previous research has suggested that the management of anxious patients is experienced as stressful by the dental care team [26], it would be valuable to understand dentists' perspectives on accommodating previously phobic patients and whether the interactions are more positive for the dental team as a result of the patients' experiences.

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Figure 1: Map of themes identified in the interviews.

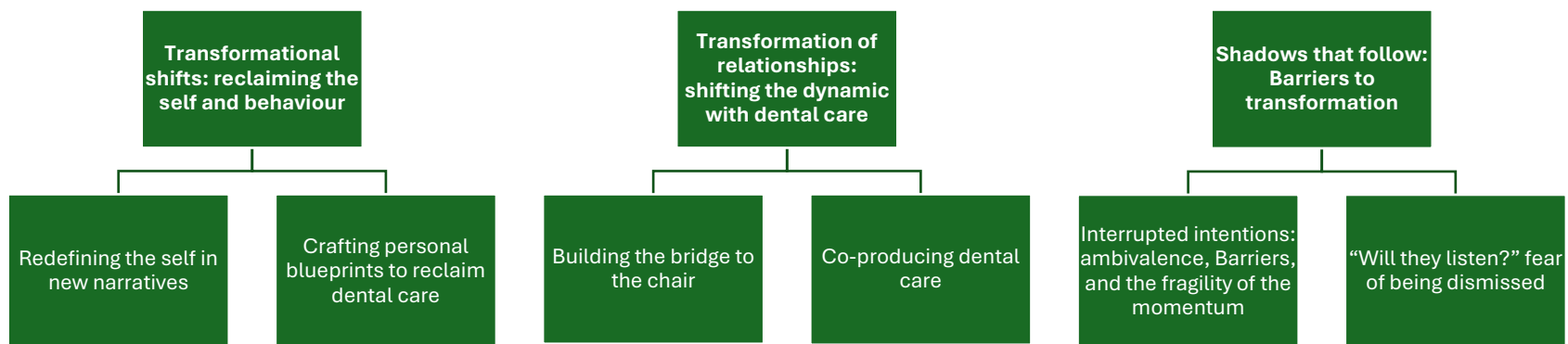


Table 1 Interview participant's profile:

	Pseudonym	Age/gender	MDAS/ attendance	Diagnostic referral
1	Jay	56 y.o. M	MDAS:15 regular attender	Dental Phobia
2	Pit	62 y.o. M	MDAS:6 regular attenders	Dental Phobia
3	Elena	65 y.o F	MDAS:8 regular attender	DA/Needle Phobia
4	Milla	27 y.o F	MDAS:14 Emergency only	Needle Phobia
5	Sophie	55 y.o. F	MDAS:12 Not registered	DA/ Gagging
6	Jack	71 y.o M	MDAS:6 Regular attender	Dental phobia
7	Patrick	60 y.o. M	Regular attender	Dental phobia
8	Georgia	59 y.o. F	MDAS:11 Not registered	Dental phobia
9	Jonathan	74 y.o M	MDAS :7 Regular attender	Gag reflex
10	Roni	53 y.o. F	MDAS: 11 Regular attender	DA
11	Thomas	19 y.o. M	MDAS :17 Not registered	DA/ Fear of brushing
12	Mike	52 y.o M	MDAS:6 Not registered	Needle phobia
13	Kate	60 y.o. F	MDAS:14 Emergency only	Dental Phobia
14	Tim	52 y.o. M	MDAS:6 Regular attender	Dental Phobia
15	Rebecca	59 y.o. F	MDAS :10 Emergency only	Dental Phobia
<p>NOTE:</p> <p>MDAS: Modified Dental Anxiety Scale: Scores range 5 to 25. Scores above 19 are recognised to be clinically significant for dental phobia</p>				

3.2 Qualitative Study Reflective Commentary

Introduction

This reflective report focuses on the research process of designing, conducting and writing up my qualitative study exploring patients' experiences of returning to primary dental care following cognitive behavioural therapy (CBT) for dental phobia. It also reflects on methodological, ethical, and dissemination decisions, and how these shaped both the challenges and learning opportunities.

Identifying and defining the research topic

The research topic emerged from a clinically relevant and personally meaningful question: what happens to our patients after discharge? As a CBT provider, working in a hospital-based dental psychology service, I often wondered what happens to patients after completing our programme, specifically, how they manage the return to general dental practice (GDP) and whether they sustain the progress made during therapy. This research opportunity felt like a natural extension of several years of my clinical work, and a way of exploring whether treatment goals were maintained. In our service, we routinely observe short-term improvements in patients undergoing CBT, yet we have a limited understanding of their longer-term outcomes after discharge and the transitional process to primary care services.

I proposed my research idea in supervision session (October 2022) and it was well received by both my placement and clinical supervisors, who saw potential service level benefits. Patients are discharged after achieving their therapy goals and completion of all necessary dental treatment under our care, so we know many patients make significant progress during therapy and can engage with our team for dental procedures. At the end of the treatment, they are encouraged to register with primary dental services, but there is no consistent follow-up, so we know little about their longer-term experiences and whether

they sustain treatment once they re-enter primary dental care. Understanding what happens after discharge would improve our discharge process.

Literature review:

To be able to focus my research question, I conducted a review of the literature concerning CBT outcomes within dental settings. The research evidence in support of the use of CBT for dental phobia is compelling (Gordon et al 2013). Both cognitive and behavioural interventions have been shown to be successful in reducing dental anxiety and increasing dental attendance (Gordon et al 2013; de Jongh et al 1995; Berggren & Hakeberg 2010; Willumsen et al 2001a). These positive effects have been shown to be maintained over time (Willumsen & Vassend 2003). Additionally, prior research (Kani et al., 2015) examined the outcomes of patients with dental phobia attending our service, revealing that 79% were able to receive dental treatment without sedation after completing the course of therapy, which is comparable to the findings by Kvale et al (2004) and Wide Boman (2013). However, the experience following discharge has been relatively underexplored, with only a small number of qualitative studies directly addressing this transitional phase, underlining the necessity for my proposed research.

Following guidance from supervisors and discussions with specialist colleagues, I refined my focus to the long-term impact of therapy. I aimed to explore whether patients who completed our CBT programme were able to maintain progress by attending routine dental care, and how they experienced this. This led to the development of my proposed research question:

Are patients who completed CBT for dental anxiety able to maintain regular care with their GDP, and how do they experience this transition? How does CBT influence their engagement with primary care?

Study design and methodological consideration

A mixed-method design was selected to explore both attendance patterns and personal experience. A survey was sent to patients who had successfully completed CBT and received dental treatment without sedation over the past five years. This generated data on attendance patterns and current anxiety levels. A sub-sample of 15 participants was then

invited to take part in semi-structured qualitative interviews, allowing for an in-depth understanding of individual trajectories. By integrating both quantitative and qualitative approaches, I hoped to capture both broad trends of attendance patterns and nuanced individual experiences.

Ethical Consideration and Protocol Development

Adhering to ethical standards is a crucial aspect of being a health psychologist, ensuring the protection of research participants from potential harm. Therefore, I followed the British Psychological Society's Ethical Codes (2009 & 2014) and the Health and Care Professions Council Standards of Conduct Performance and Ethics (2016). While drafting the research protocol and preparing the documentation for ethical submission, I sought advice from local Equality, Diversity and Inclusion (EDI) advisors to ensure my approach was both compliant and sensitive to participants' diverse backgrounds and needs. With guidance from clinical and academic supervisors, and in close collaboration with the hospital's Research & Development team, I carefully addressed key ethical considerations.

Two issues required particular attention. First, safeguarding participant anonymity while allowing for longitudinal comparison of anxiety scores posed a challenge. To assess changes in dental anxiety over time, I needed to link individual scores from discharge and follow-up. However, this conflicted with anonymity requirements and the hospital's survey support company was not equipped to hold identifiable data. To resolve this, I introduced unique identification codes for participants, enabling confidential linkage of their data.

Second, I considered the emotional risks for participants revisiting potentially distressing memories or the possibility that some participants who had been unable to access care might be in pain or require urgent treatment. Recognising this, I included information in the Patient Information Sheet about accessing psychological support and provided contact details for our psychology team. I also prepared guidance on emergency dental care to share at debrief if necessary.

The ethics approval process proved smoother than anticipated, with hospital approval granted within a week and only minor amendments requested by the university committee.

The study was classified as a service evaluation, receiving hospital approval in December 2023 and university approval in April 2024. Feedback from the ethics committee led to improved participant access, prompting me to offer Zoom as an alternative to the Teams platform for interviews, demonstrating how small adjustments can enhance ethical rigour and participant experience.

Reflexivity and Researcher Positioning

Whilst designing and conducting the study, I aimed to adhere to the '4Rs criteria' for qualitative research, described by Finlay and Evans (2009) which comprise:

Rigour - whereby I ensured my study was systematically and competently carried out and accurately and comprehensively described. I followed Braun and Clarke's (2013) steps methodically to ensure my themes conveyed a meaningful narrative.

Relevance This research extended beyond personal curiosity; it addressed a gap in our service by offering insights into how our CBT programme could be improved. It also reflected patients' voices, highlighting both challenges and successes in accessing treatment.

Resonance: I felt I was able to connect with participants at both an emotional and intellectual level and share empathy and recognition. My dual role as a clinician and researcher enriched the interviews but also posed challenges. I was affected by stories of relapses or dental avoidance. I had to resist the urge to advise participants, which I managed effectively through supervision and conscious bracketing of my clinical role. The use of a well-written Participant Information Sheet also helped this process – pointing participants to sources of support or enquiry where relevant.

Reflexivity: Through the entire research process, I was self-aware of my role, assumptions, and impact on the research and explored how my background and emotions influenced the research process and interpretation. For example, when participants spoke positively about

my colleagues or myself, I felt pride but also became aware of my concern that this might bias my analysis.

This heightened self-awareness enhanced the integrity of my analysis and deepened my understanding of the therapeutic alliance as a key mechanism of change. Reflecting on how my interpretations may have been shaped by my emotional investment reaffirmed the need for continual reflexive practice in health psychology.

Methodological consideration

This has been my first experience of accepting responsibility for the methodology, as I have previously only conducted research designed by others. I realise that this is demanding because there are unintended consequences of using a certain technique or rationale. This highlights for me the critical importance of consulting with colleagues; in future I would seek peer review at an earlier stage in the process, as others are likely to make insightful and useful suggestions. One major challenge in this research endeavour was the decision to proceed with a mixed-method design throughout the research project, only deciding towards the end on the necessity to focus entirely on the qualitative component. Whilst the overall process and data collection were rich and meaningful and will certainly support the service evaluation for the service, it did impact my time significantly.

Data Collection

Recruitment Challenges and Lessons Learned

Despite careful planning, recruitment proved more challenging than anticipated. Identifying eligible participants required a time-intensive review of clinical notes to extract dental anxiety scores. The decision to use a unique participant identifier added complexity, as each invitation letter had to be printed and coded individually. This also limited the use of automated text reminders, as participants could not easily input the code themselves.

After the initial four-week period, only 19 of the 117 participants contacted by post had responded. I followed up by phone with 57 individuals, an effort that, while valuable, was labour-intensive. Some participants expressed enthusiasm and requested digital re-sends of

the survey but ultimately did not complete it. As a novice researcher, I initially felt frustrated by this apparent drop-off. However, I came to recognise the importance of respecting participants' autonomy; my role was to offer the opportunity, not to ensure uptake.

This experience taught me key lessons about recruitment: the importance of flexibility in timelines, the emotional and logistical demands of participant follow-up, and the value of pragmatic systems for tracking engagement. In future, I would consider streamlining recruitment through secure digital platforms and planning for realistic attrition rates; especially when working with clinical populations where engagement may be variable.

Selecting Participants for Interview

Of the 41 participants who completed the questionnaires, 26 expressed interests in taking part in an interview.

As I was working clinically in both services while conducting the research, I was aware of potential 'dual relationships' with some participants, having previously met them in a clinical context (Braun & Clarke, 2013). I reflected carefully on this when selecting the final interview sample.

I noticed that some participants were particularly keen to share positive outcomes, often replying enthusiastically to the invitation email with messages such as, "I would love to take part and tell you about my success." I was mindful of this potential response bias and made efforts to select a diverse sample across variables such as age, gender, perceived treatment outcomes, and levels of dental anxiety reduction. I also ensured representation across clinicians, selecting participants who had been supported by different members of the team.

Privately, I recognised moments of professional pride when hearing positive feedback from patients I had worked with as a CNS. At times, I found myself informally comparing these outcomes with those of senior colleagues, such as CBT therapists and clinical psychologists. Rather than undermining the therapeutic process, this reflection deepened my belief in the importance of the therapeutic relationship as a central mechanism of change; highlighting

that core conditions such as authenticity, trust, and emotional congruence can be powerful regardless of professional title.

I completed my interview data collection within six weeks, which exceeded my expectations and left me feeling energised, especially after the slower pace of earlier recruitment stages.

Data Analysis and Interpretation

Working with both quantitative survey and qualitative interview data initially felt overwhelming, as I had a large and rich dataset. I found it difficult to let go of the survey findings when focusing on developing a qualitative paper. However, following supervisor guidance, I decided to dedicate this piece solely to qualitative analysis, with plans to return to the quantitative data for a separate paper in the future.

I chose thematic analysis as it allowed for a data-driven approach, particularly because I had not set out with a predetermined framework like COM-B. As I began engaging in the interviews, I realised that the richness and depth of the narratives required an inductive reflexive thematic approach, allowing the themes to emerge naturally from participants' lived experiences.

One challenge I faced was moving beyond description to meaningful interpretation—trying to capture what was being inferred, not just what was said. This was made more difficult by the time pressures of completing the project to deadline. To improve my skills in this area, I studied published qualitative papers, analysing how authors moved from data to interpretation, and summarised key learning points for myself.

A new experience for me was developing personalised experience themes, including creating theme tables for each transcript. Initially, I struggled to see the benefit of this, but once I moved into synthesising group experiential themes, I came to value this process and appreciated both the collective patterns and individual distinctions across participants. Presenting these themes alongside illustrative extracts in supervision helped deepen my understanding and refine my interpretation.

I completed the analysis manually rather than using software like NVivo. While this was labour-intensive, creating theme maps and grouping codes on large surfaces helped me visualise the data and strengthened my sense of ownership and immersion. For future projects, I plan to attend NVivo training to improve efficiency and broaden my analysis skills.

I adopted a bottom-up, inductive approach (Boyatzis, 1998; Patton, 1990), but found naming and refining themes and subthemes under time constraints particularly challenging. I also struggled to meet word limits. To address this, I've started reflecting more critically on the structure and purpose of each paragraph when drafting and revising, asking what a reader or reviewer might need to see, and studying how other authors write concisely in published qualitative work.

Feedback from my qualitative supervisor was extremely valuable, especially as she brought the perspective of a non-dental reader. This helped me reflect on how to make my findings accessible and impactful beyond the immediate clinical context.

Dissemination

I am planning to share my findings through an oral presentation at the Research and Evaluation Conference at Staffordshire University in June 2025. This will be my first time presenting the study, and I feel somewhat nervous as the audience will not be primarily from a dental background. I have also registered to present at my workplace audit day in September.

Journal Selection

Selecting a suitable journal was a new experience, as previous publications I had been involved in were led by senior researchers who made those decisions. For this project, I aimed to target a dental-specific journal that accepts empirical qualitative research with clinical and behavioural relevance. I selected the British Dental Journal due to its broad dental readership and its openness to qualitative submissions. My rationale was based on the belief that dental professionals are the audience who most need to learn from this paper. I therefore prioritised dissemination in a dental journal over a psychology-specific one. I followed the journal's author guidelines carefully, ensuring that structure, word limits,

formatting, and style requirements were adhered to. Although word count constraints posed a challenge, I confirmed with the editor that qualitative submissions are welcomed. I also plan to develop a second paper based on the survey findings for future submission.

Skills and Knowledge Gained

This project has significantly enhanced my research skills, particularly in study design, ethical governance, qualitative interviewing, and thematic analysis. I learned that designing and piloting measurement tools is a complex, iterative process. I also developed greater confidence in managing ethical issues and navigating the approvals required from both NHS and university systems.

I believe I have a strong interview technique. I was able to establish effective rapport with participants, who appeared at ease during interviews. This was reflected in the richness of the data. I think my therapeutic background and ability to build trust helped enhance my qualitative interviewing. On reflection, I did notice that some of my follow-up questions were closed, and I would like to reduce this in future interviews. I am confident this will improve with practice, especially now that I am more aware of it.

This was my first experience conducting an independent qualitative research project. It affirmed my preference for qualitative methods and the richness they bring to understanding lived experience. The process also deepened my appreciation for reflexivity, both as a methodological tool and as part of my own development.

Reflecting on the research process, I have also come to better understand the emotional labour involved in qualitative work. I was deeply moved by some participants' stories; particularly those who found their own way forward after discharge. Supervision played an important role in helping me process this. It also confirmed the significance of empathy and therapeutic understanding not only in clinical care but also in research.

Conclusion

Although I began developing this project early in my training, following an initial discussion in October 2022, the design process evolved over a two-year period. This extended timeline was shaped by the complexity of data selection and occasional pauses while I focused on developing other required competencies. In hindsight, these interruptions allowed space for deeper reflection, refinement, and learning. While the process was far from linear, each stage, from identifying the topic to analysing the data, offered rich opportunities for professional and personal growth. I navigated ethical dilemmas, methodological uncertainties, and emotional complexities with increasing confidence.

In the final stages, I worked under pressure and tight deadlines. Despite this, I developed new competencies and further clarified my values as a reflective, person-centred researcher. Most importantly, I hope this work contributes meaningfully to understanding the long-term impact of CBT for dental anxiety and informs future improvements in patient care.

These research endeavours have also deepened my appreciation of how practitioner insight can shape meaningful research questions; questions that have the potential to directly influence clinical practice and training. This reciprocal relationship, where clinical experience informs research and research enhances practice, has been central to my development and emerging identity as a practitioner–researcher.

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Chapter 4 Health Psychology Interventions

4.1 Individual Face to-face Case Study

Background

Dental phobia affects approximately 11% of the UK population and often leads to avoidance of dental care (Humphris et al., 2011). This fear can have wide-ranging consequences, from negative impacts on oral health to less visible outcomes such as self-imposed restrictions on social activities, feelings of shame, and reduced self-confidence (Cohen et al., 2000; Armfield et al., 2009). Many individuals with dental phobia avoid seeking care until they experience pain from untreated dental conditions (Heidari et al., 2015). As a result, they often require more intensive and potentially traumatic treatment, which can reinforce their fear, perpetuate avoidance, and further compromise oral health.

This case study details a Cognitive Behavioural Therapy (CBT) intervention provided to a woman who had lived with dental phobia and avoided treatment for nearly sixty years. CBT is widely recognised as an evidence-based treatment for dental anxiety (Gordon, 2013). Patients completing CBT often report a significant, and in many cases lasting, reduction in fear, enabling them to attend appointments regularly and accept dental treatment (Boman et al., 2013).

The intervention included assessment, formulation, collaborative goal setting, treatment planning with the dental team, graded exposure, cognitive techniques, and approaches to manage the physiological anxiety response. Specific strategies were tailored to the patient's needs, with the overall aim of enabling her to engage with and receive dental treatment.

Assessment and Formulation

The patient, Maria (pt pseudonym), is a 65-year-old white British woman who works as a textile artist. She is married and has three children. Maria was referred by her general dental practitioner following emergency dental treatment under intravenous sedation. The dental team requested psychological input to address her longstanding avoidance of routine care due to dental phobia.

Assessment is a central component of therapy, allowing clinicians to understand the factors that contribute to and maintain a patient's difficulties (Townend & Grand, 2018). It also serves several functions: building rapport, exploring the patient's perspective, assessing severity with validated measures, and identifying co-morbidities that may influence intervention (Westbrook et al., 2011).

In Maria's case, the assessment covered both her dental needs and psychological support requirements. She presented with chronic periodontitis, an inflammatory condition affecting the supporting tissues of the teeth. If left untreated, periodontitis can cause bone destruction and tooth loss. Symptoms such as swollen, painful, bleeding gums, were interpreted by Maria as signs that toothbrushing was harmful and, consequently, she avoided brushing. Paradoxically, toothbrushing and practicing good oral hygiene behaviours are key to managing the disease. Professional treatment and management involve regular professional cleaning, which Maria had not been able to benefit from because of her dental phobia.

The patient was assessed in one of our joint assessment clinics. I led the assessment session, whilst my placement supervisor observed me. I followed the structured approach outlined in our departmental protocol (Hare et al., 2023), which supported me to gather the required information systematically and confidently. I introduced both myself and my consultant, clearly explaining our names, job titles, and roles. I clarified Maria's expectations for the appointment and explained the purpose of the assessment.

During the session, I explored her dental history and experiences, with particular attention to what she believed triggered her fears and how her responses had maintained her phobia. We discussed her dental anxiety, her thoughts and feelings about visiting the dentist, and the wider impact of her avoidance on daily life. The time spent on attentive listening and empathic understanding was vital in building a therapeutic relationship—an essential foundation for effective intervention (Orlinsky et al., 1994).

Maria described a history of distressing dental experiences, including a particularly traumatic memory from age six. As a result, she avoided routine care for decades, only attending sporadically when in pain, usually opting for sedation. This pattern of avoidance

led to deteriorating oral health, which in turn contributed to feelings of embarrassment and pain when attempting self-care. After around ten years of complete avoidance, Maria sought help from a dentist, who then referred her to our hospital for psychological support.

Assessment Measures:

During the assessment, Maria completed several standardized measures routinely used within the service. The questionnaires assessed dental anxiety, general psychological well-being, and oral health-related quality of life (Table 1). Her score on the Modified Dental Anxiety Scale (MDAS) was 24, which is above the threshold of 19 and therefore indicative of dental phobia. This finding was consistent with her clinical history and met the diagnostic criteria for Specific Phobia according to both the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* and the *International Classification of Diseases (ICD-10)* (see Table 2).

Table 1: Description of Outcome Measures

MDAS (Modified Dental anxiety) Humpris et al., 1995	5-item self-report questionnaire assessing anxiety related to specific aspects of dentistry -5- points Likert scale response, score range 5-25 > 19 indicates dental phobia
PHQ-9 (Patient Health questionnaire) (Kroenke et al., 2001)	9-item self-report measure for depression (0-3 scale) -assessing depression symptoms. Range 0-27 <u>Symptom severity index:</u> 0-4 no depression; 5-9 mild depression :10-14 moderate depression;15-19 moderate-severe depression; 20-27 severe depression Score ≥ 10 indicate clinically significant symptoms.
GAD-7 (Generalised Anxiety Disorder) (Spitzer et al., 2006)	7-item self-report measure for anxiety (0-3 scale) – assessing anxiety symptoms. Range 0-21 <u>Symptom severity index:</u> 0-4 no anxiety; 5-10 mild anxiety; 11-15 moderate anxiety; 15-21 severe anxiety Scores > 8 indicate clinically significant symptoms.

Table 2: DSM-V and ICD-10 Diagnostic Criteria for Specific Phobia

<p>DSM-V criteria for the diagnosis of a simple phobia (APA 2000)</p> <ul style="list-style-type: none">A. Marked and persistent fear in response to the presence or anticipation of a specific object or situation.B. Exposure to the phobic stimulus almost invariably provokes an immediate response, which may take the form of a situationally predisposed panic attack.C. The person recognises that the fear is excessive or unreasonable.D. The phobic situation(s) is avoided or else endured with anxiety or distress.E. The avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with the person's social or occupational functioning or daily routines or there is considerable distress about having this phobia.F. The phobia must be of a duration greater than six months.G. The symptoms cannot be better explained by any other diagnosis
<p>ICD-10 criteria for the diagnosis of a specific phobia (WHO 1992)</p> <ul style="list-style-type: none">A. Either(1)or(2): (1) marked fear of a specific object or situation not included in agoraphobia (F40.0) or social phobia (F40.1); (2) marked avoidance of such objects or situations.B. Symptoms of anxiety in the feared situation at some time since the onset of the disorder, as defined in criterion B for F40.0 (Agoraphobia).C. Significant emotional distress due to the symptoms or the avoidance, and a recognition that these are excessive or unreasonable.D. Symptoms are restricted to the feared situation, or when thinking about it.

Maria's scores on depression and anxiety scales indicated moderate depression and severe anxiety. On discussion, the patient confirmed that she was already under the care of her GP for these conditions, and they were both well managed and unlikely to interfere with the intervention. No other risks or contraindications were identified; therefore, the patient was considered suitable for CBT.

Goal Setting

Short and long-terms goals were collaboratively agreed. Maria wished to overcome her fear of dentistry so she could care for her teeth. Her CBT goals were:

- 1) To have an examination with a dental mirror.
- 2) To attend dental appointments regularly.

3) To have gum treatment with no sedation.

At assessment, Maria reported being in pain from her teeth, therefore we agreed to prioritise preparation for immediate treatment necessary to manage this pain. I offered to help with booking the next appointment and to accompany her at the next dentist appointment for support. On the same day, due to a cancellation, Maria was able to see a dentist and plan an extraction under sedation. Attending the joint appointment was a valuable opportunity to continue building rapport, provide emotional support, and observe her a behaviour in a dental situation. Two days later, Maria attended and successfully underwent the extraction with sedation.

Case formulation:

In the first session a formulation was co-created with the patient. Formulation, as defined by Persons (1989), involves developing a hypothesis about the underlying psychological difficulties linked to the patient's problems. It provides a shared understanding of how the problems may have developed and the key patterns believed to maintain them (Westbrook et al., 2011).

A collaborative diagram was drawn with Maria using a simplified version of Kirk and Rouf's (2004) model of specific phobia, adapted from Westbrook et al. (2011). This identified the historical development of her phobia and hypothesised maintenance cycles.

Consistent with classical conditioning / learning models (Hakeberg & Lundgren, 2013) Maria associated distress and feeling out of control with all situations in the dental environment and the experience of dental procedures. She described a number of unhelpful cognitions, including:

- Hypervigilance to perceived threat.
- Selective attention to negative dental events.
- Intrusive memories of past experiences (e.g. fighting to escape from getting in the chair when she was '*physically manhandled onto the chair*' as a child).
- Pessimistic views of dentists, linked to lack of trust.

She recounted a particularly negative experience in which, after making the effort to attend, she was shamed by a dentist who told her he could not provide treatment:

'The dentist made me feel ashamed and literally said he could not give me treatment'.

Her most recent experience reinforced these beliefs:

'the dentist I saw was quite brisk and not greatly sympathetic ... I was too nervous to let her get instruments in my mouth she got a bit frustrated, so she referred me to your hospital'.

The prospect of visiting a dentist typically triggered catastrophic thoughts and strong avoidance. She explained:

'it took a lot to go. I ignored this for few years, rather than going to the dentist I went to the doctor to get antibiotics.

This pattern of overestimating threat and underestimating coping ability fueled avoidance, which in turn prevented her from testing her fears and reinforced the phobia:

'I ignored for few years rather than go to the dentist, so naturally it got worse until the pain returned was so bad I had to find a dentist.'

Maria viewed her avoidance as a rational response to a perceived dangerous situation. Various stimuli (events, situations, thoughts, images) experienced in the past led to a negative interpretation of all aspects involved in dentistry and made it difficult to trust the dentist.

These cognitions were associated with a marked physiological and physical response experienced as unpleasant:

'I remember the fear and panic I felt when my sister came out and I had to go;

Even when she received treatment with sedation she reported:

'Each trip to the dentist was panic filled'.

Course of therapy

Intervention Planning:

The unhelpful cognitions identified at assessment were recognised by Maria as underpinning her avoidance behaviour. Therefore, the primary goal of the intervention was to address her negative thoughts and feelings about the dentist and dental situations, while providing corrective experiences and coping strategies to restructure these cognitions. Subsequently, the sessions progressed to behavioural interventions, including graded exposure, to reduce and desensitise the anxiety response. Both cognitive and behavioural components were supported by strategies aimed at alleviating the physiological aspects of the anxiety response.

The structure of the sessions followed the standardized treatment approach to dental phobia employed within the department (Hare et al., 2023) but was adapted to accommodate Maria's individual characteristics and the specific nature of her anxiety.

Table 3 summarises the intervention planning, outlining the goals alongside the specific treatment techniques and their underlying rationale.

Table 3: Summary of the components of the intervention

Category of Intervention	Goal of interventions	Range of techniques
Cognitive Interventions	Interventions designed to: <ul style="list-style-type: none"> • Challenge Unhelpful thoughts. • Restructure cognitions • Provide information and evidence to challenge thoughts. • Enhance confidence in coping with dental treatment. 	Identifying and rehearsing strategies and skills to handle anxiety in dental setting, such as STOP-START signal, communication strategies. Socratic questioning Behaviour experiments Providing information about dental procedures and equipment Explaining the anxiety response
Behavioural interventions	Interventions designed to habituate the anxiety response through repeated and graded exposure to the feared stimulus Interventions designed to enhance oral health related behaviours.	Graded Exposure Goal setting Implementation intentions Self-monitoring Modelling
Physiological Interventions	Interventions designed to alleviate the physiological response to anxiety, which is experienced as negative.	Breathing exercises, prior to and during treatment. Applied Tension. Progressive Muscular Relaxation

Implementing the intervention:

The range of techniques outlined in Table 3 were incorporated into the planning of each session as outlined in Table 4. In addition, each session concluded with the setting of 'Homework' tasks designed to consolidate the knowledge, skills and experiences gained during each session. These tasks also provided opportunities to rehearse strategies between sessions, strengthening learning and promoting skill generalisation.

As the management of dental phobia involves addressing fears specifically related to dental equipment and procedures, joint sessions with input from dental therapists were integrated into the intervention plan. The initial assessment and formulation sessions were held in a non-clinical setting, while the exposure sessions and treatment took place in a dental surgery. In these settings, elements of exposure and treatment were delivered in collaboration with a dental therapist. The involvement of the dental team offered Maria opportunities to interact directly with dental professionals in a supportive environment, gradually rebuilding trust in dentists. At the same time, this approach enhanced her sense of control and self-efficacy, particularly in communicating her needs and preferences during dental care.

Table 4: Overview of CBT Sessions

Session 1	<p>Psychoeducation: explained fight/flight response – impacting physical sensations, thoughts and behaviours.</p> <p>-explained habituation; introduced role of exposure</p> <p>Generate the hierarchy for exposure using Dental situation card</p> <p>Introducing STOP signal.</p>
	<p>Homework: a leaflet: relaxation techniques that help reduce physiological responses (Controlled breathing/PMR/distraction strategies): patient was advised to practice them in a non-anxious situation and identify techniques that she prefers.</p>
Session 2 Dental room	<p>-Graded exposure to dental examination</p> <p>Steps: entered a dental room sat in the dental chair, held a dental mirror and practiced self-examination.</p> <p>SUDS monitored throughout each step and drawn on board graph (SUD:7/8 -> 2 at end).</p>
	<p>Homework: Practiced self-examination with a dental mirror every day.</p> <ul style="list-style-type: none"> - To watch a video of a dentist performing a dental examination to a patient.
Session 3 Dental examination	<p>ABC model- to illustrate the role of beliefs about the event in causing anxiety response.</p> <p>Introduction to check-up kit, education and exposure to dental tools (Mirror, probe, perio probe)</p>
Session 4	<p>Check -up with the DT; full examination received</p> <p>conversation on Marias' barriers to improve OH using COM-B framework.</p> <p>BCT; self- monitoring</p>
	<p>Homework: diet sheet and brushing</p>
Session 5 Dental injection	<p>Graded exposure to injection kit</p>

	Steps: photos, live equipment, looking at dental injection on table, needle exposed moving to Maria touching/holding equipment, demonstration of liquid leaving needle.
	Homework: Daily viewing of photos of dental needle photos and actual syringe provided.
Session 6 Dental injection	Graded exposure joined with DT from live-equipment, application of topical anaesthetic, holding capped needle in mouth, uncapped needles held in mouth, brief injection (to pierce skin), 5-second injection (needle-inserted), 10-second injection
	Homework: Write-up experience of today's dental injection
Session 7	Graded exposure to scale and polish Steps: hand scaling and ultrasonic scaling Completed scaling using hand instruments BCT: create a coping plan to maintain regular use of TePe brushes.
	Homework: listen to the dental drill and suction sounds
Session 8	Graded exposure to drilling Behaviour experiment: Testing predictions and feared catastrophe
	Homework: listen to the dental drill while using electric toothbrush
Session 9	Letter to the dentist - Review skills and coping strategies that found helpful.
	Homework: book dental appt for exam. Request to have teeth polished by dentist.
Session 10	Review of dental appt with dentist. Revised therapy goals; completed measures; planned discharge. Completed evaluation and feedback form.

Graded exposure was a central behavioural component of the intervention. Maria was progressively exposed to different dental situations, with the primary goal of achieving habituation and increasing tolerance of phobic stimuli by reducing both physiological arousal and anxiety. Graded exposure is a well-established CBT technique and is recognised as the most effective treatment for specific phobias (Craske et al., 2016). The process involved collaboratively constructing a hierarchy of feared situations and gradually progressing through them in a systematic way (Benito & Walther, 2015).

To enhance Maria's sense of predictability and control, we developed communication strategies, including a *STOP signal* and *START signal*. Maria strongly believed that dentists would not stop treatment if she needed them to, leaving her unable to cope. To address this, we introduced and rehearsed:

- STOP signal – an agreed communication gesture (e.g., raising her hand) to request a pause, reassuring her that she could communicate her needs (e.g., if in pain or requiring a break).
- START signal – paired with short, planned breaks to give Maria time and space to recover. This allowed her to feel safer in the dental setting and empowered her to make choices about her care.

Practising these strategies during therapy and treatment sessions helped Maria develop new feelings of control and safety, directly counteracting her previous helplessness.

Guided discoveries and behavioural experiments were also integrated, offering Maria opportunities to test out her catastrophic predictions and form more realistic appraisals of dental situations—opportunities she had previously missed due to avoidance, distraction, or escape. For example, in our fourth session Maria expressed a belief that any water from dental instruments would damage her fragile teeth and cause excruciating pain. Together, we designed a behavioural experiment to test this belief, which provided corrective learning.

Finally, the 'Letter to the Dentist' technique, developed by our clinical lead and also used in CBT with children (Rodd et al., 2019), was employed to support Maria's communication with her dentist. In her letter, Maria explained the coping strategies she had learned, her

preferences for managing anxiety, and her wishes for future dental treatment. This exercise not only prepared her for discussions with the dentist but also helped her rehearse expressing her needs in a clear and structured way.

Evaluation and Outcomes

Following Maria's final follow-up appointment with her local dentist, a comprehensive evaluation was conducted. This encompassed treatment attendance, outcome assessment scores, review of her goals, feedback from clinicians, and Maria's own reflections on the skills she has developed.

After nine sessions (excluding assessment and formulation appointments), Maria no longer displayed a phobic response to dental treatment, and her outcome measures validated this clinical improvement. She successfully accomplished all her stated goals, undergoing dental treatment, including an examination and extensive cleaning with dental therapist, as well as a dental checkup with the referring dentist. Clinical outcomes further demonstrated progress. Her periodontal scores improved, with the hygienist treating her gum disease, noting significantly enhanced oral health. Her MDAS score dropped below the threshold for dental phobia, while her general anxiety (GAD-7) and depression (PHQ-9) scores fell within the normal range.

Table 5 presents Maria's assessment and follow-up scores illustrating the trajectory of her progress throughout the intervention:

Table 5: Summary of Assessment and Follow-up scores

	MDAS (scores of 19 or above are indicative of dental phobia)	OHIP	PHQ9 Depression	GAD 7 Anxiety
Assessment	24	7	15	16
Follow-up	8	2	3	4

Furthermore, Maria no longer relied on unhelpful coping strategies, and her behavioural changes led to cognitive changes, challenging her earlier beliefs. The patient has been discharged from our service and now plans to regularly attend the dentist.

Conclusion:

A multifaceted CBT intervention enabled Maria to rehearse the coping skills and new behaviours, helping her re-learn that dentistry is safe and facilitating a long-term rehabilitation.

A central factor that contributed to the treatment's success was a strong relationship with the patient which supported restoring trust with the dental team. Trust is a fundamental element of any effective relationship, particularly in healthcare, and in this case, establishing trust not only supported Maria's engagement but also helped restore her confidence in the dental team. From the initial assessment appointment, I felt I had developed a good rapport with the patient, and this rapport continued to develop throughout our sessions. Establishing a therapeutic alliance influenced her engagement, her openness in communication, and, ultimately, her health outcomes. She was comfortable opening up and disclosing her experiences and anxieties, while also accepting my support during exposure and dental treatment. I always aimed to ensure she felt safe and in control.

However, trust needed to be restored with the dental team. Maria did not trust 'the dentist', which caused increased anxiety, dissatisfaction, and avoidance of the interaction. Based on her previous experiences, Maria had a negative view of the dentist, believing they couldn't be trusted that they would listen to the patient or try to help her. This mistrust fueled her anxiety, avoidance and created barriers to preventive treatment. Oral hygiene was a particularly sensitive topic, as Maria felt ashamed by the dentist's comment when it was commented on in her oral health. She felt guilt when discussing this issue and felt embarrassed to ask for help.

In our joint session, I introduced the therapist as someone I trust to look after my teeth, but I encouraged Maria to use her own judgment without feeling biased by my view. In our joint sessions, I advocated what the patient needed by discussing the plan of each step and emphasising the importance of the patient sharing her views. The therapist encouraged using STOP signal, communicating that she has time for the patient. Gradually, treatment

included sessions with the dental team only, so the patient experienced treatment on her own. Maria was able to feel safe and in control but also trusted and followed the advice provided by the dentist.

Overall, Maria's CBT treatment has been beneficial through building her cognitive and behavioural strategies to address her dental phobia. It has also been a valuable learning experience for me as a therapist.

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4.2 Individual Face to Face Case Reflective Commentary

Reflective practice is a cornerstone of effective therapy. It supports continuous improvement by helping practitioners identify our strengths and weaknesses, while facilitating the identification of areas that need development. For psychologists, reflective practice enhances self-awareness, strengthens patient care, and fosters professional growth. Importantly, it directly impacts therapeutic outcomes, by ensuring that practice remains patient-centred and responsive to individual needs.

This report covers my reflections on two key areas that significantly enhanced both the patient's progress and my own professional development. The first is Working in partnership, where the multidisciplinary team played a vital role in the success of the intervention by combining expertise and resources to deliver truly integrated care. The second is the process of disclosing my trainee status which, although initially challenging, ultimately strengthened transparency, trust, and my confidence in navigating dual professional identities.

Working in partnership: the multidisciplinary team's role in the intervention's success.

Our management model delivers CBT-based intervention within the Department of Sedation and Special Care Dentistry, enabling interdisciplinary collaboration and support. Maria's treatment took place within the Department of Sedation and Special Care Dentistry, where CBT-based interventions are integrated into routine dental care. This was an important aspect that contributed to the success of the intervention, as I benefitted from access to an environment suitable for exposure and support from the dental team. Such interdisciplinary work was pivotal to Maria's progress. Having access to the services gave my patient immediate access to treatment when she was in pain and allowed me to actively support and coordinate her care.

As treatment for patients with severe dental phobia has exposure as the main component of the treatment, I included several sessions in dental surgery and with the therapist. The graded exposure central to CBT could not have been delivered without access to a dental

setting and the expertise of dental professionals. Having the available service and expertise of the dental team significantly contributed to the success of the CBT treatment, as the delivery of evidence-based treatment for specific phobia is gradual exposure. Initial psychoeducation and formulation were undertaken in a non-clinical environment, but subsequent exposure tasks and behavioural experiments required collaboration with dental therapists. These sessions enabled Maria to experience “the real thing”—handling instruments, undergoing examinations, injections, scaling, and eventually drilling—in a safe and graded manner. Without this partnership, exposure would have remained theoretical rather than practical.

The psychological intervention for my patient was integrated into dental care. The primary focus was to reduce dental anxiety, enabling her to engage with the dental team and supporting her ability to allow dental treatment. In a non-threatening graded approach, she had an opportunity to face her fear, spend time in the dental environment and slowly acclimate to the dental environment. The patient gradually moved from experiencing anxiety-provoking conditions to the actual performance of the treatment, but modelling treatment in a gradual way when she did not have the pressure of completing the therapy allowed her to realise the treatment was safe. Completing the treatment in the hospital allowed her to gradually complete an entire course of treatment before being discharged to dental care as proof of her progress.

Working in partnership also meant that increased access to a multidisciplinary team brought increased access to resources and expertise. Each professional contributed with unique knowledge and skills, which benefited both Maria and the team. For example, Maria’s chronic gum disease was exacerbated by her avoidance of treatment and difficulties with brushing due to anxiety. The dental hygienist provided tailored oral health education, integrating behaviour change techniques, while I supported this with graded behaviour goals (e.g., brushing one side at a time, using implementation intentions). Weekly feedback from the dental therapist, reinforced by improvements in periodontal scores, validated Maria’s efforts and boosted her self-efficacy. Positive external reinforcement—such as comments from her sister noticing cleaner teeth—further strengthened these behaviour changes. This progress enhanced her self-efficacy beliefs about oral hygiene behaviours.

Collaboration also required reflection on our assumptions. At times, our views of treatment “success” risked overshadowing Maria’s experience. For example, I joked that my goal was to “make sure the patient keeps coming back,” whereas the dental team focused on completing treatment, sometimes at the expense of patient willingness to return. Similarly, when I suggested a behavioural experiment involving brushing only one side of the mouth, the dental therapist initially questioned its usefulness. Openly discussing and justifying these rationales helped align our perspectives and contributed to Maria’s progress.

The impact of disclosing my trainee status and requesting patient consent to write her intervention as a case study.

Patients with dental phobia are a regular group of patients seen in our service, and I frequently deliver CBT for dental anxiety, I therefore felt confident that my skills and experience were appropriate for Maria. However, disclosing my role as a Trainee Health Psychologist and seeking consent to use her case for my portfolio, introduced unexpected challenges.

Although I routinely work in a multidisciplinary team and I am observed by colleagues and supervisors, telling Maria about my trainee status created feelings of unease and self-doubt. At the initial assessment, I introduced myself as both a Clinical Nurse Specialist and Trainee Health Psychologist working under consultant supervision, but I hesitated to ask for written consent to use her case. This hesitation reflected an internal shift—from identifying primarily with my established CNS role, to positioning myself as a learner in training.

In supervision, I explored these feelings and discussed Maria’s suitability for inclusion as a case study. My supervisor reinforced Maria that, although I was a trainee, I had substantial experience in delivering this intervention. This reassurance was valuable, yet I noticed that the awareness of my trainee status made me less spontaneous in some aspects of my clinical work. Despite this, Maria’s progress and positive evaluation of therapy reassured me that the intervention had been effective. More importantly, the clinical outcomes—her reduced MDAS scores, improved oral health behaviours, and completion of treatment—validated her progress.

Concluding Reflections

This case has highlighted to me the privilege of working within a well-resourced service, with access to specialist facilities and regular supervision. The multidisciplinary model not only enabled Maria's recovery but also enhanced my own learning through collaboration and reflection.

The treatment spanned several months, with intentional spacing between exposure sessions to allow Maria to rehearse CBT skills and consolidate her confidence.

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4.3 Group intervention case study

This report details a group intervention programme designed and delivered for patients with orofacial conditions at Guy's Hospital. The need for such an intervention was identified in consultation with the clinical team, who frequently observe psychological distress and poor emotional well-being for this patient population, as well as long waiting lists for one-to-one intervention. The group intervention was designed to be suitable for patients with range of orofacial conditions, including persistent pain, temporomandibular disorder (TMD), Burning Mouth Syndrome (BMS) and was based on principles of Acceptance and Commitment therapy (ACT), the therapeutic model used within the department.

Background:

Chronic pain is a long-term condition that is defined as pain which cannot be resolved by available medical or other treatments (The British Pain Society, 2018). Chronic orofacial pain (COFP) is a long-term condition characterised by discomfort in the face, mouth, or jaws lasting longer than three months in the absence of identifiable underlying pathology. (Peters et al. 2015).

COFP significantly impacts sufferers, causing functional and psychological consequences such as social isolation, sleep disturbance, reduced daily functioning, occupational disability and reduced quality of life (Barker et al., 2022). Many individuals adjust their lifestyles to accommodate their perceived limitations arising from the pain, which can further impact on their well-being.

Psychological distress is common in those with orofacial conditions. Recent reviews by Karamat et al. (2022) have highlighted the high prevalence of psychological distress, often related to the impact of pain on quality of life, fear of the future and feeling disbelieved about their condition (Barker et al., 2022).

Acceptance and Commitment Therapy (ACT) recommended by NICE (2021) guidelines for persistent pain, is an evidence-based psychological intervention that has been shown to improve pain acceptance and overall functioning (Hughes et al., 2017). ACT focuses on helping people live in alignment with their values while managing discomfort. (Johnson &

Bennett, 2023). A distinctive feature of ACT is the focus on psychological flexibility, defined as “the ability to fully connect with the present moment and act in line with personal values, despite the presence of discomfort “(Hayes et al., 2006; Soler et al., 2018). Chronic pain often leads to avoidance behaviours, fear and negative thought patterns, which increase distress and reduce quality of life (McCracken, 2005). Rather than prioritising pain control, ACT promotes acceptance of difficult thoughts and emotions, enabling individuals to engage more fully in life (Mathias et al., 2014).

Psychological flexibility comprises six interrelated processes, often summarised as behaviour that is “open, aware and engaged” (Hayes et al., 1999), commonly referred to as the “Triflex” (Table 1).

Table 1: Components of Psychological Flexibility

(Concept descriptions adapted from Harris, 200) and Feliu-Soler et al.,2018)

Triflex domains	ACT concept	Brief description
OPEN	Acceptance	“Making room for painful feelings, sensations, and emotions”.
	Cognitive defusion	“Stepping back and detaching from thoughts, images and memories”.
AWARE	Attention to the present moment	“Bringing attention to the present moment and tracking moment-to-moment experiences”.
	Self-as-context	“Experiencing a distinction between observed thoughts and feelings and the person who observes ”.
ENGAGED	Values	“Freely chosen directions connected with desired aims and goals that guide actions”.
	Committed actions	“Choosing a course of action guided by values and persisting with it or changing direction when this is no longer helpful”.

Planning and designing the intervention

Planning an intervention requires an in-depth assessment of needs, a clear understanding of the target audience and consideration of existing services to ensure compatibility and successful implementation (NICE, 2007). A stepped-care approach (NICE 2012) was adopted to match patients’ identified needs while complementing available resources. This approach

enables appropriate intervention to be offered to a larger group of patients, while reserving intensive psychological support for those who need it most.

In collaboration with, and with the support of, the Consultant Psychologist who leads our Pain management workstream, (and who supervised this aspect of my clinical work), a group intervention was developed to improve psychological well-being and social functioning even without altering pain levels. The programme consisted of five sessions focused on teaching patients to respond to persistent pain and distress in ways that reduce the impact on quality of life. The primary aim was to shift the focus away from symptom elimination towards enhancing patients' ability to cope with their symptoms and to increase the frequency of value-driven behaviours that are "intrinsically rewarding". (Bennett & Oliver, 2019).

The content was based on the ACT principles, including an emphasis on common humanity, metaphorical use of language, experiential methods, and on changing responses to symptoms rather than the symptoms themselves (McCracken and Wowles, 2014).

Assessment

Participants were recruited and referred to the group intervention from the MDT pain management clinic. The group was offered the group after, or as an alternative to, a one-off group "Information session," already available in the service for this patient group.

Patients were allocated to the group if they met at least one of the following criteria:

- Distress related to dental and/or orofacial condition.
- Significant impact on engagement in valued activity
- Non-compliance with treatment regime or recommendations due to psychological difficulties
- High acute service use or perceived service overuse due to psychological difficulties.

A pre-group assessment was completed to help ensure that everyone attending the group was suitable and had appropriate expectations about what it would cover.

In preparation, I reviewed the medical notes to summarise any previous treatments and clinical diagnoses related to the presenting pain problem, as well as relevant medical history and any previous support from our clinical psychologist as part of MDT clinic, aiming to primarily identify the impact of the condition on daily functioning, the current mental health, and patients' goals summarized in Table 2.

Table 2: Group profile from assessment summary

Patient	Demographics & social	Pain diagnosis	Impact on daily life	Mental health & previous therapy
1	38 Female White British Married 3 children not working	Persistent idiopathic facial pain; TMD	Poor concentration and "not present" when in pain; worries pain will worsen and that she will not cope	Marked social anxiety leading to avoidance of planned activities; brief CBT (2 sessions) for panic; declined group therapy due to social anxiety
2	51 Female Indian Married 2 children part-time work	Burning mouth syndrome; TMD	Pain and anxiety affect return to work; severe symptoms impact talking and eating; sometimes withdraws and cancels plans/socialising	Feels constantly "stressed"; low mood, sadness, tearfulness, loss of confidence; nervous about going out; often in "fight or flight"; caring role contributes; finds it hard to talk about feelings but beginning to do so
3	51 Male White English Single social worker stopped work due to pain	Trigeminal neuropathic pain	Not working because of pain; does not feel able to cope with work when pain flares	Feels "stuck in a rut" and "fed up"; episodes of low mood and tearfulness; previous group therapy for panic attacks
4	44 Male White English Married no children	Trigeminal neuropathic pain	Persistent front-tooth pain; unable to wear denture; very self-conscious about appearance; cuts conversations short; concentration poor during flares	Mental health status not described in notes

Subsequently, I contacted each patient to introduce myself and explain the group format and the aim of the intervention.

Assessment Measures:

All participants completed several standardised measures at the start of the first session. These assessed current pain intensity (using a 0 to 4 numeric rating scale), acceptance of pain (Chronic Pain Acceptance Questionnaire), the impact of oral health on daily life (Oral Health Impact Profile; OHIP-14), and general psychological well-being, including symptoms

of depression and anxiety (PHQ-9 and GAD-7). These measures, summarized in Table 3, were repeated at different stages of the intervention to monitor change overtime.

Table 3: Summary of standard measures included in pre and post intervention:

Your Symptoms: pain rating scale	Assesses pain over the past two weeks, rating how bad symptoms are: 5-points scale 0 =no symptoms, 4 =symptoms as bad as you can imagine)
CPAQ- 2 (Chronic Pain Acceptance Questionnaire) (Fish et al. 2010)	Self-reported scale measuring pain acceptance Two subscales: <ul style="list-style-type: none"> • Activity engagement scale (AE): the extent of participation in activities explicitly with continuing pain • Pain willingness s (PW): the capacity to experience pain fully and without attempts to avoid or control it. 7- points scale: 0 =never true, 6=always true Higher scores indicate greater pain willingness and activity engagement.
PHQ-9 (Patient Health questionnaire) (Kroenke et al., 2001)	9-item self-report measure for depression (0-3 scale) - Total range 0-27 <u>Symptom severity index:</u> 0-4 no depression; 5-9 mild depression ;10-14 moderate depression;15-19 moderate-severe depression; 20-27 severe depression Score ≥ 10 indicate clinically significant symptoms.
GAD-7 (Generalised Anxiety Disorder) (Spitzer et al., 2006)	7 item self-report measure of anxiety assessing anxiety symptoms. <u>Symptom severity index:</u> 0-4 no anxiety; 5-10 mild; 11-15 moderate; 15-21 severe anxiety Scores ≥ 8 indicate clinically significant symptoms.
OHIP 14 (Oral Health Impact Profile-14) (Slade 1997)	14 item self-report questionnaire measuring functional limitation, discomfort and disability attributed to oral condition. Higher scores indicate more oral and dental health impacts.
Patient Global Impression of change Scale (PGIC) (Scott & McCracken,2015)	Measure of perceived change across six domains: overall improvement, physical activities, work-related activities, mood, and pain. 7-points scale from “very much worse” to “very much improved”.

Formulation

Formulation is central stage in any psychological intervention (Johnstone & Dallos, 2013), where information gathered during the assessment phase is conceptualised.

A model is then generated based on the factors contributing towards the occurrence and maintenance of the behaviour selected for change (Porcheret et al., 2014). During the assessment process, I was guided by the ACT case formulation framework, which considers how an individual's problems relate to the processes that contribute to psychological flexibility (Hayes, 2004). Structuring the case formulation therefore involved identifying factors that both promote and detract from psychological flexibility (Bach & Moran, 2008).

The assessment outlined the following problematic issues:

- Activity avoidance: Pain-related behaviour was prevalent for all patients assessed, leading to reduced engagement in activities and, consequently, a reduced quality of life.
- Lack of control: Two patients reported a sense of helplessness, believing they had little control over when pain would affect them, which led to withdrawing from social plans.
- Anxiety and reassurance-seeking: Patients were concerned about the progression of their condition and, as a result, frequently requested further investigations and potentially unnecessary treatment.

Design of the intervention

The intervention combined a range of methods aimed at promoting behaviour change directed by personal goals and values, and at developing and practicing skills in the following areas:

- Accepting pain as part of their experience.
- Observing thoughts without becoming overwhelmed by them.
- Making choices aligned with what is most important to them.
- Engaging regularly in valued activities.

Each session was designed to follow a similar structure, including an arrival practice, discussion of the preceding week's practice, followed by one of two experiential exercises to develop skills in openness, present-moment awareness and value-based action. Sessions

ended with a summary and a plan for practice and committed action during the week ahead.

The final session was scheduled four weeks after session four to allow participants time to implement and consolidate the skills learned. Methods emphasised experiential learning and were focused less on didactic information. Table 4 summarises the content of each session in the group intervention programme.

Table 4: Summary of Structure and Content of ACT Group Programme Sessions

Session	Brief description of content
Session 1	<ul style="list-style-type: none"> • Welcoming the group and shaping the expectation including confidentiality and respect for others. • Completion of consent forms and baseline questionnaires. • Orientation to ACT using Triflex model as a framework. • Values- Ice breaker exercise: introducing your most important personal value. • Metaphor: “Passengers on the bus”. • Experiential exercise: “Dropping anchor”. • Home practice: identify and set a values-based goal for the week ahead.
Session 2	<ul style="list-style-type: none"> • Arrival practice: Three steps breathing space. • Review of home practice and values-based goals. • Psychoeducation on present- moment awareness and mindfulness in daily life. • Experiential exercise: 5,4, 3,2,1 grounding practice. • Further work on values using the Bullseye and Choice Point tools. • Introduction to SMART goals and setting specific goals for the coming week.
Session 3	<ul style="list-style-type: none"> • Arrival practice: Noticing Thoughts, Returning to Breath • Review of goal practice and progress towards SMART goals • Psychoeducation about how we relate to our thoughts, and ways of responding differently to them. • Cognitive defusion practice: “I am having the thought” exercise. • Experiential exercise: “Meeting with physical discomfort”. • Home practice: continue using defusion and mindfulness skills between sessions.
Session 4	<ul style="list-style-type: none"> • Arrival practice: mindfulness exercise: Arriving with Awareness. • Experiential exercise” Observing self”. • Metaphor: “Sky and the weather” if time • Psychoeducation: Self as context and its role in living with persistent pain. • Discussion about committing and re-committing to value-based goals; identification of goals for the coming weeks. • Completion of week 4 questionnaires. • Discussion about ending the group and planning for follow-up.
Session 5 Follow-up booster session	<ul style="list-style-type: none"> • Arrival practice: loving kindness meditation. • Review of home practice and goals over the past month. • Skill refresher: brief recap of course content and opportunity for the group to decide which skills to revisit. • Completion of an individualised “keeping-going plan” and discussion about using skills in everyday life. • Final questionnaires and group evaluation.

Implementation:

A total of six participants were referred to and initially selected for the intervention. All attended the first session, however, only four continued for the remaining sessions. One participant opted to wait for a later time or online due to travel distance and another was unwell.

Session one

The primary aim for the first session was to build a therapeutic relationship with patients and between group members, and to clarify that the treatment focused on increasing value-based behaviour rather than on symptom reduction or control.

A substantial part of this session was spent explaining ACT as a different way to cope with pain. The session also included initial values work: participants were encouraged to reflect on their values and identify value-based goals they would like to work toward during the intervention.

The concept of metaphor was introduced using the “Passengers on the bus” metaphor, which illustrates alternative ways of responding to pain and other unpleasant experiences. This resonated with participants who reflected on and acknowledged “their passengers” that can interfere with their journey. I was pleased to notice a positive atmosphere: group members got engaged well and showed respect for each other.

The session concluded with a mindfulness exercise, “Dropping anchor” and with setting a schedule of home practice. Participation in experiential exercises was optional, but all patients chose to take part.

Session two

The session began with an arrival practice: “A three-step breathing space” which linked to providing some psychoeducation about present moment awareness. The focus was on helping patients observe their thoughts without over-identifying them and on increasing awareness of triggers and consequences of behaviour.

To deepen the values work, I introduced the Bullseye and Choice Point exercises. Using the Bullseye, patients rated how closely their current behaviour matched their values in key life areas, and several were struck by how far their marks fell from the centre, especially for social contact and leisure. We then used the Choice Point to map common “away moves” (e.g. cancelling plans, staying at home) and to generate small “towards moves” more in line with

their values. This helped normalise their struggles and highlighted that, even in the presence of pain, they still had choices about how to respond.

Session Three focused on cognitive defusion and aimed to help patients see the context of their thoughts in different ways. The aim was for patients to understand and create distance from unhelpful thoughts and emotions. Exercises to promote defusion were practised, illustrating methods that helped participants change their response to particularly distressing thoughts.

The primary purpose for this session was to allow patients to explore different ways of integrating and accepting difficult internal experiences, including pain and related emotions. Mindfulness techniques were introduced to support this process. Patients described mixed experiences: some noticed how quickly their minds were pulled into worries about the future or frustration about their symptoms, while others were surprised to find brief moments of calm even with ongoing discomfort in the jaw or face.

Session four

The focus was on consolidating skills and clarifying goals. For this session I deliberately chose a longer arrival and mindfulness practice, to compensate for the lack of other mindfulness exercise, unfortunately, some patients were unable to fully engage.

Patients were encouraged to review all the skills and tools that had been introduced and to evaluate them based on their experiences between sessions. Revisiting each skill and tool also allowed a brief evaluation of patients' understanding of ACT concepts.

Toward the end of the session, each patient was encouraged to identify one SMART goal to commit to until the follow-up session. This was introduced as an experiential exercise in which patients imagined carrying out their chosen goal and identified potential barriers and actions needed to address them.

Participants noted down and shared a SMART goal. This process was effective and seemed to generate elements of social support within the group. By reviewing goals, I learned that the participants supported each other and maintained accountability through the chat group they had created. For example, one person committed to finding and reviewing a book about mindfulness at home, and others reminded her while she was on holiday.

Additional content included further discussion of their individual core values that participants had shared, and exploration of how these values might guide their behaviour in terms of goal attainment.

Session five

The final session centred on reviewing progress and planning for future challenges.

Patients shared their progress on previously set goals and reflected on their experiences over the past four weeks.

The discussion then explored how patients could move further toward achieving their goals and maintain their progress. One patient, for example, noted increased empowerment in managing uncertainty and a reduced need for control; she reported going abroad on holiday with her children on her own for the first time. Another patient described mastering the ability to defuse from unhelpful thoughts after receiving worrying news about his father. Relapse prevention planning was introduced to support patients in maintaining changes beyond the group. Together we identified likely triggers or high-risk situations (for example, flare-ups of pain, stress or setbacks in other areas of life), early warning signs that they were beginning to struggle, and practical coping strategies they could use at these points. Each patient created a brief written “keeping-going plan” outlining their personal warning signs, valued directions, preferred mindfulness or defusing exercises, and sources of support.

Evaluation:

Within a therapy context, evaluation has been described as the systematic collection and reporting of treatment outcomes to assess what, if any, changes occurred (Kennerley et al., 2016). In line with IMPACT recommendation (Dworkin et al., 2008) I selected measures that covered four core domains: pain intensity, physical functioning, emotional functioning and participants rating of overall improvement.

A detailed summary of all clinical outcomes and feedback results are illustrated in Tables 5 - 7 and described below.

Table 5: Summary of treatment measures

	Symptoms			OHIP-14			PHQ-9			GAD-7			CPAQ 2		
	S1	S4	S5	S1	S4	S5	S1	S4	S5	S1	S4	S5	S1	S4	S5
P1	2	2	2	7/28	3/22	3/20	6	3	3	3	3	1	2/3 5	4/3 7	3/4 7
P2	2	2	2	4/23	6/30	5/25	6	7	10	11	9	6	2/5 7	4/5 9	4/6 10
P3	2	2	2	8/33	7/35	6/36	6	5	7	15	15	11	2/2 4	1/2 3	1/1 2
P4	2	2	2	7/39	8/38	10/3	16	12	15	10	9	12	3/4 7	3/5 8	3/5 8

Table 6: PGIC (Patient Global Impression of Change)

Participant	Overall	Physical	Social	Work	Mood	Pain	Medication
P1	Much improved	Much improved	Minimally improved	Much improved	Much improved	No change	Stayed the same
P2	Very much improved	Much improved	Much improved	Very much improved	Minimally improved	Much improved	Decrease
P3	Minimally improved	Minimally improved	No change	Minimally improved	Minimally improved	Minimally worse	Decrease
P4	Minimally improved	Minimally improved	No change	Minimally improved	Minimally improved	Minimally improved	No change

Table 7 TEI (Therapeutic Experience)

Participant	Coping skills	Managing your condition	Relationship with therapist	Can use what you learned	Handle your condition better	Condition has improved
P1	A lot of new skills	Learned a lot	Exceptionally good	Can use / apply very much	Very able	Very much
P2	A lot of new skills	Learned a lot	Very good	Can use / apply very much	Somewhat more able	Very much
P3	A lot of new skills	Learned a lot	Very good	Can use / apply very much	Somewhat more able	Moderately
P4	A lot of new skills	Learned a lot	Very good	Can use / apply very much	Somewhat more able	Moderately

Clinical outcomes

Participants completed standard measures at baseline (week 1), post-intervention (week 4) and at follow-up (week 8).

1) Pain rating scale:

A numerical scale assessed pain/symptoms over the past two weeks. All but one patient reported no change, consistently rating their pain as 2 across different measurement stages.

2) Oral Health Impact Profile-14 (OHIP-14):

This questionnaire measured the impact of oral health on patients' quality of life across seven domains. The average score was 33.2, with patients reporting 4 to 7 impacts. This is

considerably higher than the UK average of 19.7 and 1-3 impacts (Adult Health Survey, 2021). The most frequently reported impacts included painful aching (100 %), difficulty relaxing (100%) self-consciousness and embarrassment (50%) and finding it uncomfortable to eat any food (50%), all highlighting the impact on well-being and quality of life. Scores varied due to an acute episode of pain for one patient but were relatively constant for the rest of the group.

3) Emotional functioning

Mood and anxiety were assessed using the PHQ-9 and GAD-7, both validated tools for chronic health conditions (Kroenke et al., 2001). Scores indicated moderate depression for two patients and moderate anxiety in three. Although scores decreased for two participants, symptoms remained clinically significant.

Formal psychological measures complement the clinical judgements and must be interpreted in context. For instance, one patient's mood and anxiety were impacted by his father's declining health as his father was his primary support -hence higher scores at the follow up appointment.

4) ACT Measure Chronic Pain Acceptance Questionnaire (CPAQ-2)

The CPAQ-2, is a validated and widely used scale (Reneman et al., 2010) for measuring chronic pain acceptance. It consists of two subscales: Activity Engagement (pursuing meaningful activities despite pain) and Pain Willingness (Accepting pain without attempting to control or avoid it). In this intervention three participants showed marked improvement in pain acceptance, while one showed no change.

In the final session, patients also completed Patient Global impression of change scale (rates changes resulting from treatment) and the Treatment Evaluation Inventory – (assessed skills during the intervention).

5) Patient Global Impression of Change Scale (PGIC)

Most participants experienced positive changes across key domains, including reduced medication use, despite persistent pain level; 1 out of 4 rated their condition as “very much improved” while two patients reported minimal improvement.

6) Treatment Evaluation Inventory

Most patients reported gaining lot of new skills and learning more about their condition and rated their relationship with the therapist as very good. They reported being able to apply the skills learned and able to handle the conditions better.

Qualitative feedback was gathered in the final session via anonymous group evaluation. Participants were asked how helpful they found the course, if they would recommend to someone with similar concerns to them, what they found helpful and what could be improved. Patients gave positive feedback on the content and delivery, but shared wishes for better facilities (such as less noisy and hot venue), which was shared with the clinical team.

These results were not dramatic, as change takes time, yet some positive changes were made. I was heartened that one participant reflected about the change in her next Oral Medicine appointment and the clinician emailed me to acknowledge that.

Conclusion:

Overall, the intervention ran as planned and addressed the goals of the intervention, with positive outcomes as reflected in clinical outcomes and patients' feedback. The group dynamic was positive, patients engaged well, and there was a positive atmosphere, something which patients identified within their feedback.

This intervention provided a valuable opportunity for me to practice and develop new clinical skills, particularly in delivering a group-based intervention. I became more aware of the ACT model benefits, and I try to apply the skills shared in the intervention also on my day-to-day work.

I really enjoyed the novelty of the intervention and delivery of the group therapy, and I found it both stretching and rewarding. I feel very motivated to continue to develop my skills in delivering group interventions, therefore I volunteered to deliver to this group regularly.

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4.4 Group intervention reflective commentary

Critical reflection is integral to health psychology doctoral training (Forshaw and Sheffield., 2012), and trainees are encouraged to reflect upon their work to support meaning, understanding, and professional development from their experiences (Michie & Abraham, 2004). Therefore, the purpose of this reflective report is to introspectively focus on aspects of the process of designing, facilitating and evaluating of the group intervention delivered for patients with orofacial pain.

In this report, I note my reflections on the process of designing and delivering a group intervention. I have included a particular focus on key stages of preparing the intervention, highlighting the difficulties that created opportunities and areas that I would improve in future group work. I will also consider what I have learned from the process and how I might benefit from using this information in the future.

Choosing the intervention

I see my dual role as a Trainee Health Psychologist and Clinical Nurse Specialist as both a limitation and an opportunity. As a trainee psychologist, I want to take opportunities to develop new skills and competencies that would benefit me in getting a job outside my current role when I graduate, yet as a nurse employee, I must provide support within the services I am currently working for.

When choosing the intervention, my initial plan was to develop a brief online intervention to support paediatric patients, a group population very close to my heart. The proposal was initially received as a good opportunity to expand our service remit, yet it had to be postponed due to the current limitations of the services offered to the Paediatric Dental Department.

To meet both needs, completing my competency and supporting our service during staff shortages, I volunteered for a day of my clinical work for the pain stream of our service. This was a great opportunity to improve my skills and to have some training in Acceptance and

Commitment Therapy. Therefore, I decided to work towards proposing a group intervention that would benefit the service by reducing the waiting list and complementing the current psychological support.

Setting up the intervention

Before starting this project, I questioned whether I would want to challenge myself by introducing three new elements simultaneously: group intervention—an unfamiliar form of delivery—a new mode of therapy, and a new patient population. Yet, as I am getting close to the end of the training, I want to focus on acquiring as many skills as I can.

When deciding whom to target (patients with chronic pain have multiple comorbidities), I was mindful that I had no prior experience in designing a group intervention. Whitaker (1999) suggests that relatively inexperienced group therapist should start with an "easy group" consisting of members who are well motivated, comfortable sharing experiences and unlikely to be disruptive and difficult to manage.

Under the supervision of our lead consultant in pain management, I proposed a group intervention that would support patients learning skills to cope with long-term conditions but would not focus on a particular condition. I was very apprehensive about the unpredictability caused by the various conditions and patient treatment expectations. On reflection after delivering the group, I learned about the common ground of pain suffering despite different symptoms, and it reassured me.

I had not prepared a patient manual, but after each session, patients received handouts that included different exercises or mindfulness scripts linked to what was delivered on that day. I gave them separately to make them relevant to the content delivered at each session and to introduce the skills and concepts gradually. Upon reflection, having everything set up as a manual will support patients' better access to the material. One patient kept losing the forms and asking for copies.

The group intervention made me reflect on the differences in the way patients are assessed and formulated. Although I have previous experience conducting health assessments and designing interventions, the limitation of group formulation is that you must include and

cover multiple clinical presentations. This was shared in my supervision and caused some apprehension; yet, when working with patients, I learned about the common ground of pain suffering despite different symptoms, and it reassured me.

Delivery of the intervention

I felt very conscious and anxious prior to the first session. Reflecting on this, I realised that my apprehension resulted from my limited experience in conducting group intervention and that I had to rely on the information from the referral and clinical notes. This new perspective was placing me out of my comfort zone, especially as it was the first time that I had used ACT as a framework and worked with "chronic pain", an area that I was relatively unfamiliar with.

My apprehension was also influenced by my experience observing a group in a Pain Management program. Participants had difficulty interacting and complained about a staff member not being kind and supportive. However, I quickly found that the patients in my group responded differently, showing respect and compassion for each other's experiences.

At first, I found encouraging patients to share information challenging. I had a few moments in the first session when patients did not want to participate, which made me very nervous, worrying whether I could maintain the group engagement. Reflecting on action (Schon, 2017), I realised that I needed to allow some time for participants to build up a rapport and feel less vulnerable. As a result, I started to share personal examples and then asked participants to respond, which helped build trust and made patients feel less exposed.

In the future, I plan to be more mindful of building rapport at the start of the session and of the group's need for time to build relationships.

In line with the ACT spirit of being focused on experience, I wanted the session to be delivered so that it would be highly experiential, and discussion based. I chose to rely less on PowerPoint presentations. This enabled a connection with the participants and encouraged the group to explore the ideas both with the facilitator and as a group with other participants, but it made me feel less in control. In future, I plan to use this in teaching as well, to build confidence.

At the last session, in addition to the post-intervention measure, I requested the completion of an evaluation form and anonymous feedback, which required a significant amount of time. Two patients were reluctant to complete the forms and asked me if they could take them home. On reflection, I could have prepared the electronic version so patients could take their time with that, but I was worried about attrition and low response rates.

Evaluation of the intervention

As part of evaluating the intervention and questionnaires with measures, I disseminated anonymous questionnaires and encouraged participants to be as open as possible about what can be improved in the future. Most of the feedback was positive, and the main negative comments were about the setting and venue.

As participants reflected, the room allocated was noisy, and this interfered with patient interaction and my delivery. Following the meditation in the first session, several people in the group commented on how the sounds of the external environment (people talking in the corridor or having dental treatment) were very prominent and distracting. Patients could hear dental treatment, and although none of the participants had dental anxiety, this was received as slightly disturbing. Although I used this opportunity to highlight that distractions are a central part of mindful practice (Kabat-Zinn, 2013) and that it can be seen as an opportunity to increase their ability to further their mindful practice, I sensed an uneasiness within the group.

This impacted my delivery of mindfulness exercises. I was constantly aware of the background noise, and I felt I needed to speak louder. Although the group did not critique this, I internally felt very conflicted. I was concerned that my intention to compensate for the noise by raising my voice would impact on participants' engagement, and this was visible to me.

Conclusion

Overall, I found the experience of designing, delivering and evaluating this group intervention challenging but rewarding, especially as I chose to push myself out of my comfort zone and use new methods of intervention. With some changes, the group

intervention is successfully continuing to run, now with two clinicians supporting delivery, which creates an opportunity to collaborate with other colleagues and create better support. The service is currently planning to deliver this intervention regularly, alternating between face-to-face and online formats.

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Chapter 5: Teaching and Training in Health Psychology

5.1 Teaching and Training Case Study

Background:

This report outlines the planning, design, delivery, and assessment of five teaching sessions prepared and delivered as part of my teaching competency. Working at Guy's Hospital, a teaching hospital attached to King's College London, and my current role, which involves providing both teaching and mentoring for dental nurses, facilitated finding all teaching opportunities within my workplace.

The audience comprised healthcare professionals at different stages of training and practice, including:

- Student dental nurses
- Dental core trainees (DCTs)
- Specialty registrars in Special Care Dentistry (SCD StRs)
- Qualified dental nurses
- Dental hygienists and orthodontic therapists.

The overarching theme of the sessions was 'Applications of Health Psychology in Dentistry', with a particular focus on interventions to support patients with dental anxiety and behaviour change strategies to promote oral health and reduce disease burden.

In designing and preparing these teaching sessions, I employed a student-centred approach, focusing on what the learners need to do to 'create the knowledge' and encourage 'deep learning' (Race, 2020), rather than passively receiving information. A student-centred approach implies that teaching is not just about delivering concepts to be understood, it requires clarity about what it means for students to understand the 'content' in the way required by the intended learning outcomes (Biggs and Tang, 2011).

A brief overview of each session, and the order in which they were delivered, is provided below:

Table 1: Summary of the sessions

Session No.	Title of session	Format	Audience	No. of Learners	Duration
1	Prevention and management of dental anxiety- the role of dental nurses in supporting anxious patients during treatment.	CPD session (synchronous, online)	Dental Care Professionals (Dental Nurses)	50	1 hour
2	Anxiety and fear in dental setting: Behavioural management for dental patients and dental-related anxieties	Workshop	Dental Core Trainees (DCTs) year 1 rotation	15	2 Hours
3	Dental anxiety: Behaviour intervention to support anxious patients.	Lecture	Student Dental Nurse	10	3 Hours
4	Better oral health outcomes through behaviour change	Seminar (delivered online)	Postgraduate students – Specialty Registrars in Special Care Dentistry (SCD StR	20	1 Hour
5	Health behaviour change in dental practice	CPD session	Dental Care Professionals (Dental hygienists and Orthodontic therapists)	8	1 Hour

For this reason, my planning was guided by the following principles: acknowledging and building upon the existing knowledge and experience that students bring to the topic, and incorporating activities and materials aligned with their interests. To support students in constructing their own learning, I applied the principles of Constructive alignment (Biggs, 2003), ensuring that learning outcomes, learning, teaching activities and assessments were aligned. This approach made clear to learners what was expected, how it could be achieved, and how their achievement could be demonstrated (Morss & Murray, 2005).

To guide the development of these sessions, it was necessary to refer to and understand the processes that underlie learning. Several models and theories of learning in higher education provide insight into the different ways students engage with knowledge. After reviewing such theories, I found Race's 'Ripples on the pond' model of learning (2020) particularly valuable baseline for informing the learning process. Race's model, grounded in

experiential learning, emphasises the importance of learner motivation, the centrality of learning by doing, and the role of assessment and feedback as a central feature of the learning process. In this model, successful learning is seen as comprising four interrelated elements: needing/wanting (motivation), doing (practice; trial and error), feedback (seeing the results), and digesting (making sense of it, gaining ownership). These processes interact dynamically, 'like intersecting systems of ripples on the pond'. Accordingly, in designing my lesson plans, I aimed not only to facilitate the immediate acquisition of knowledge and skills, but also to foster a broader impact on learners' behaviour, confidence, and engagement with dental practice.

The education of dental professionals is embedded in the practice of two large service activities, education and the care of patients (Fry & Marshall, 2008). Within the healthcare system, much of the training occurs in the workplace setting, where greater emphasis is placed on the application of knowledge and skills. Effective teaching is therefore crucial, as it ultimately contributes to improved patient care (Parker & Freeth, 2009). The primary goals of most clinicians or students participating in a learning activity are to acquire the knowledge and develop the skills that they perceive as necessary to provide the best possible care for patients (Dent et al., 2017).

As all sessions were delivered to healthcare professionals, my intention was to design teaching that would stimulate motivation to learn by focusing on outcomes relevant to participants' clinical practice. Following Race's (2020) principle of 'allowing for doing', I incorporated opportunities to develop both skills and knowledge that could be directly applied to improving patient care (Disch, 2012).

Assessment of training needs

Within the teaching literature, there has been a noticeable shift toward methods and theories that emphasise students' active involvement in their learning (Wilson & Peterson, 2006). This is central to the constructivist approach, which suggests that learners construct knowledge based on their previous experiences and current understanding (Biggs & Tang, 2011). In developing each session plan, I conducted a training needs assessment by meeting with the course directors or the module leaders and by meeting or observing the learners

themselves. For each group, I requested information on the number of learners, the delivery format (online or face-to-face), and the preferred learning style as suggested by the module leader.

For groups following a formal curriculum (sessions two and four), I obtained module handbooks to understand the overall programme aims and that my sessions complemented the rest of the module.

As all sessions were required to meet the General Dental Council (GDC) standards for continuing professional development (CPD), I ensured that each topic was not only relevant to Health Psychology but also aligned with GDC requirements (GDC, 'CPD for dental professionals' website).

The fourth session was developed in collaboration with my supervisor, who hosted the session. A meeting with her and the consultant overseeing the training helped me to identify where the lecture fitted within the wider module and what prior learning the students had received (Special Care Dentistry curriculum). To ensure constructive alignment (Biggs & Tang, 2011), I asked for information on students' summative assessments. These included personal development portfolios (PDP) and work-based assessment (WBAs), which I considered when designing the content.

Where possible, I also tried to learn directly from the learners by speaking with them before teaching. Following Winefield's (2004) recommendation, gathering information directly from participants, provided me with further insight into their work programmes and helped me identify content that was both relevant and engaging, reflecting their 'interests and wants' (Race, 2020). To better understand the group dynamic and learners' previous experience, I attended similar sessions delivered by colleagues. For example, in preparation for the first session, I joined a CPD session on a different topic for dental nurses (on a different topic) delivered in the same format- online and to a large group. For the session with DCTs, I volunteered to support my supervisor in teaching a session on a different topic, which gave me the opportunity to introduce myself to the group and speak with students to find out about their current roles. From a discussion with the student lead, I learned that the group received monthly teaching on different aspects of dentistry as well as practical supervision. As she was aware of my role and expertise in working with dental anxiety patients, she confirmed that this topic had not been covered, which further justified the relevance of my planned session.

Having detailed information about the format of the session, the educational level of students, and the existing knowledge of the learners (Winefield, 2004), as well as understanding their 'wants' from the teaching session (Race, 2020), provided a point of reference, and, at times, prompted me to rethink aspects of initial planning to ensure the content and delivery were appropriate. For example, I questioned whether I should use Mentimeter after learning that some dental nurses would access the session online using their mobile phones, which could affect their ability to interact at the same time.

I was also mindful of the importance of equal opportunities and ensured that no learners were disadvantaged. Therefore, I checked with the module leaders if any students required adjustments. To enhance inclusivity in Session One, I proposed an optional setting where a group of five learners could attend the session together with a facilitator. This was particularly aimed at nurses reporting less confidence in accessing online teaching, making learning materials more accessible and inclusive (Casey & Jones, 2011).

Identifying training programme structure and content

Learning outcomes are defined as clear statements of what the learner is expected to know, understand, and be able to demonstrate at the end of a period of learning (Kennedy, 2006). They provide indicators of the intended level and content of the session, while also helping students identify their own targets and work systematically towards demonstrating the achievement of these targets (Race, 2020; Donnelly & Fitzmaurice, 2005).

When writing learning outcomes, I identified the key concepts and skills that students should develop through the learning experience and defined what was expected that students would achieve in clear and simple terms, aiming for realistic, observable, and measurable outcomes (Kennedy, 2006). All learning outcomes were written to demonstrate compliance with Standards for Dental Professionals approved by the General Dental Council. For the StR group, I also mapped learning outcomes on behavioural sciences, specifically principles of behavioural psychology and sociology.

When preparing Learning Outcomes, I considered the appropriate level of cognitive complexity, based on the depth of understanding and requirements of the lecture (UK

Quality Code for Higher Education); I used action verbs to describe observable behaviours learners would be able to demonstrate to evidence achievement. Alongside using Bloom's taxonomy, I used the Framework for Higher Education Qualifications (FHEQ) to ensure the content was pitched at the correct level for learners and course requirements. Outcomes included both lower and higher levels of Bloom's taxonomy, from understanding information and building skills to analysing and critically evaluating how the content could be applied (Kennedy, 2006). These criteria formed the basis for the design of the session structure, content, methods/approaches utilised.

Identifying structure and content

The essence of effective and inspiring teaching includes a clear structure that is easy to follow, the enthusiasm and ability of the speaker to arouse curiosity and hold attention from start to finish, and the concern of the speaker in helping the audience to understand and become involved in different ways (Fry et al., 2008).

The content and structure of my sessions were driven by the information collected during the needs assessment. To engage the audience in a 'deep approach' to learning (Marton & Säljö, 1976), where the learner engaged meaningfully with the task and demonstrated a high level of cognitive involvement, I aimed to build on their previous experience and knowledge, using their expertise and experience as a teaching resource. I also sought to generate enthusiasm for the topic by delivering information and providing evidence of how this can be used in their future practice. In my teaching plan, I structured the sessions around activities (doing/feedback) and addressed 'wants and needs' by assessing learning needs. To ensure well-structured teaching and facilitate a logical order, I developed detailed plans tailored to each session to establish the timings, content, and material required, yet still allowed for some flexibility.

Resources and materials

When planning and preparing each session, I referred to up-to-date and accurate sources of dental and psychology information by researching each topic thoroughly. I used a variety of sources to develop the content of the sessions, including journals, books, YouTube videos,

and my own professional experience. I ensured that each session followed a logical flow and used signposting to support the audience following the topic.

The design of each session was tailored to the specific group format. In each case, I sought to implement some form of interaction with learners, adapting this to the group size, professional level, and delivery format.

As online learning has become increasingly common in higher education (McLachlan & Tippet, 2023), I was eager to gain experience in this mode of delivery for the first time. When planning the online teaching, I recognised that the way in which content is expressed differs from face-to-face teaching and requires a different set of communication skills (Major, 2015). In preparation, I tried to anticipate how I would structure discussions (whether through chat or live conversation), and how I would acknowledge student contributions. I aimed to make use of the advantages of synchronous virtual classrooms, such as providing immediate feedback and encouraging students to type questions and comments (Martin & Parker, 2014). At the same time, I was aware of the disadvantages of teaching large groups online, particularly the risk that learners might adopt a passive role. To prevent the risk of decreasing attention level, I implemented interactive activities interspersed throughout the lecture, posed direct questions, and used session headings to clearly signpost new learning outcomes.

For small-group teaching, I designed activities and tasks that enabled learners to put into practice what they had just learned. This created opportunities for peer interaction, providing a safe environment for learners to express ideas, opinions, and perspectives, thereby supporting active and collaborative learning.

Delivery Preparation

For each session, I checked the layout of the room to see whether I could arrange the chairs in a circle, as recommended by Race (2003). I also checked in advance what technical resources would be available and who I could contact for technical support if needed. To prepare, I rehearsed the presentation and viewed it from the learners' perspective to ensure appropriate contrast, visibility, and font size, confirming that the slides could be read clearly from the back of the room (Race, 2003).

Implementing Teaching and Learning strategies

For all my teaching, I used PowerPoint presentations; however, I tried to avoid 'having the slides giving the talk' by selecting a simple design template, minimising text, and incorporating relevant visual aids. I also linked some slides to websites to make the sessions more engaging and to avoid the monotony of only me presenting (Race, 2003).

In addition to the use of various techniques and a well-structured knowledge base, I hoped that my own enthusiasm for the subject shared in discussing practical benefits of psychology knowledge would cultivate motivation among learners. Discussion during learning activities is recognised to be one of the most effective ways to engage students, enhancing learning and improving communication skills (Brookfield & Preskill, 1999).

I integrated several opportunities for learners to apply their knowledge as they were studying, using group discussions, small group tasks, and case study work. Learning activities, as Fry et al. (2008) highlight, are considered structured exercises that support students to learn together in a guided, collaborative way. For example, one small-group task asked learners to construct a hierarchy of anxiety-arousing situations for a patient with a fear of sharp instruments and present it to the wider group. This aimed to deepen learning by encouraging learners to verbalise their understanding, as Race (2020) emphasises that explaining new knowledge to others helps consolidate and internalise learning.

Assessment of learning outcomes and evaluation

Assessment of learning has multiple purposes, including promoting student learning by providing feedback to help improve performance, evaluating knowledge and skills, and certifying performance by awarding a grade (Quality Assurance Agency for Higher Education, 2022). Assessment usually takes the form of summative assessment (formal, usually at the end of the teaching) or formative assessment (informal, embedded within teaching process) (Espasa et al. 2018).

The learning outcomes in my sessions were assessed informally during interactive activities using incidental feedback. This type of feedback is provided to learners in an unplanned or

spontaneous manner during the learning process, and it's key characteristics are immediate and contextual relevance, offering timely feedback (Winefield, 2004). Formative feedback adds value by giving students information to improve learning, allowing them to check for misunderstanding and correct them in the moment (McLachlan & Tippet, 2023). It also supports student engagement and fosters a sense of connection.

During the online session, I used the discussion and chat functions to gather responses from the audience, and breakout rooms for group discussion. I specifically chose the chat function as it allowed learners to connect and contribute in a way that gave a voice to those who may have difficulty speaking up, need more time to formulate a response, or find verbal participation difficult. Contributions to the chat box provided some insight into learners' understanding (Gribble & Wardrop, 2021).

For small group tasks, I observed learner behaviour and engagement, while also interacting with the groups by offering praise, support, or further explanations when required. I particularly noticed the value of providing feedback during post-task discussions, as this not only reassured learners but also encouraged further questions, showing that they were engaging with and reflecting on the learning content. The activities used in session two were selected to assess how learners would be able to use the skills in their practice, which was one of the learning outcomes. Therefore, the successful completion of these activities and the enthusiasm from the participants provided an indication that this learning outcome had been met. Students' responses further demonstrated that they had acquired the intended knowledge.

Additionally, the effectiveness of the session was evidenced in the student's evaluation forms, where learners were asked to describe what they learned during the session that they anticipate using in their work.

Conclusion:

Planning, designing, and delivering these sessions was an informative and rewarding experience that facilitated learning across a range of audiences with different levels of experience. The challenges encountered and the achievements made contributed to my professional development and significantly improved my confidence in teaching.

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5.2 Teaching and Training Reflective Commentary

Background

The following report critically evaluates a series of teaching session planned, designed, and delivered as part of my doctorate training in Health Psychology. The five sessions within the programme were centred on 'Applications of psychology in dentistry', predominantly focusing on two themes, dental anxiety and behaviour change to enhance oral health. Sessions (S) were delivered to five different groups, students (S2, S4) and healthcare professionals (S1, S3, S5) working and training at Guy's Hospital and King's College. The evaluation will reflect on several feedback forms, identify the successful and less successful aspects, and provide suggestions for improvement.

The Purpose of Evaluation

Evaluation of teaching is viewed as a necessary and integral part of the educational process (Hounsell, 2008). Its inclusion as part of a systematic approach to course planning (D'Andrea, 2003) allows for improving the teaching programme by ensuring quality teaching and learning (Biggs, 2001) and identifying areas where teaching can be improved (Wilkes & Bligh, 1999).

An evaluation may cover different aspects: the quality of the educational provision, the providers' performance, and the experience of students/learners (Morrison, 2003). Furthermore, evaluating teaching sessions assesses the aptitudes of the educators (Morrison, 2003), and helps them to enhance their effectiveness in teaching others, which is referred to as 'transformative reflection' (Biggs & Tang, 2011).

This process supports the evaluation of what actions should be taken to improve practice by building on strengths and achievements and identifying areas that need improvement (Hounsell, 2008).

Consequently, I considered all these aspects from the planning stage and incorporated various methods and sources of feedback (Hounsell, 2008): self-evaluation and reflection, peer evaluation, and learner feedback.

Forms of feedback

As a novice teacher, I prioritised the identification of strengths on which I could build further and the weaknesses I needed to address. Research evidence shows that a variety of sources should be used when collecting feedback to obtain a broad view of strengths and areas of improvement, enabling the feedback strategy to be robust (Hounsell, 2008). To evaluate my teaching most effectively, I incorporated different sources of feedback methods to gather both subjective and objective views, which supported the identification factors that could impact teaching (Biggs & Tang, 2011).

Learner Feedback

Student evaluation of teachers is largely adopted in higher education institutions to gather valuable information about both the teacher and school performance (Hounsell, 2008). These evaluations could focus on various aspects, including basic features of teaching such as clarity, relevance, quality of teaching materials, availability to students, classroom logistics, and more (Antoci et al., 2021). To evaluate my teaching, I used standardised questionnaires with open questions and some Likert-type scales provided and administered by the session organisers. The forms were anonymous, as I wanted to gather honest student opinions and constructive criticism (Fry et al., 2009).

The questionnaires asked questions about content and delivery, what learning students anticipate using in their work, and rating sessions in terms of expectations, being informative, clarity of resources and approachability from the tutor. I always valued suggestions for improvement; however, I considered limitations presented by questionnaires as a tool of collecting feedback such as lack of objectivity (Zerihun et al., 2011) and the risk of 'questionnaire fatigue' caused by the fact that students are being frequently asked for opinions (Hounsell, 2009). I also noted in my self-reflection my tendency to minimise or dismiss positive appraisal; in the past this made me avoid potential teaching opportunities. Moreover, I still find it difficult to decide when the best time is to administer the evaluation form at the end of the session or at later time, giving students

time to reflect. In my experience giving the evaluation form at the end of the session provided a better response rate, but learners offered more in-depth feedback if they completed later; in S2 all participants completed the evaluation form, while for S4, where the evaluation form was sent online, only 30% of forms were returned.

Peer Feedback

Direct observation from colleagues is a recommended mechanism of evaluation used to monitor and enhance teaching quality (Bingham & Ottewill, 2001). Race (2019) highlights the importance of getting feedback from different sources and the benefits of comparing feedback from colleagues and other staff with self-reflection to have a balanced view. I organised a peer observation for two of my sessions; this was provided by a colleague from the nursing academy who participated as a learner at the first session and my work supervisor, who co-facilitated the teaching of my third session. They both formally provided feedback by completing a learner evaluation form and informally with immediate verbal feedback after the session. When reflecting on their comments, I attempted to be open to constructive feedback and to take on board the recommendations (Gosling, 2005).

Self-reflection

Self-reflection is a key feature that can contribute to teacher development (Evans, 2001), so I made a conscious effort to objectively reflect on and monitor my progress. For each session, I tried to reflect immediately after each experience, reviewing what I did in the situation, how I responded, and what I might do differently next time. Reflecting upon my current practice enabled me to develop an awareness of my needs as a teacher, and my teaching style, and to enhance my understanding of my practice (Fry & Ketteridge, 2009).

I was conscious that learner and peer feedback was more positive than my own performance evaluation. This may be because I tend to minimise what was positive and focus on what was not so successful, but I was able to learn from mistakes/negative experiences and implement the learning in the next situation.

Aspects of incidental feedback (Hounsell, 2008) were also noted; this involves observations made during the lesson, where the educator observes the audience's reaction to the teaching, such as students' level of attention and responsiveness (Bligh, 1998). During the

teaching, I observed how engaged the students were, to what extent they reacted to what was said, and what responses I was getting from them.

While I felt several aspects of my teaching were successful, there are also factors I wish to improve in future teaching opportunities, as described below.

Successful aspects of my teaching experience:

Successful learning requires delivering appropriate content in a well-structured knowledge base, (Biggs& Tang, 2011), with learning taking place through the active behaviour of the learners (Biggs, 2001) where they feel the need to engage appropriately and meaningfully (Race, 2019). My goals were to deliver clear and relevant content, create active participation, and engage the group in interactive activities.

The sessions appeared to be well received; when reviewing learners' feedback, they rated the sessions predominantly positively. Attendee feedback form indicated they enjoyed the lectures: 28 of 50 learners in S1 completed the evaluation form and rated it as very informative / or informative. All students in S3 rated the speaker content and delivery as excellent (14) and good (1). This, combined with some positive comments such as 'content was very interesting and easy to understand' (S2), increased my confidence in my ability to teach others.

Both attendees and peer reviewers encouragingly commented on the material used in the session. They acknowledged the teaching expanded their knowledge on the subject area; key concepts were relevant to their experience and practice and appropriate to the level required for completion of specialty training. This was particularly highlighted in S1 and S3, where dental nurses and dental nursing students shared that they would aim to implement in clinical practice the techniques taught in the session. A reviewer from S2 commented:

"Very well delivered; thank you for all the tips and tricks."

The peer observer suggested the discussion was well-facilitated, with favourable comments regarding clarity and attentiveness, which is pleasing as I am often very self-conscious that English is my second language and may impact on the clarity and fluency of the message shared with the audience.

The peer observer praised the material as being presented in a very accessible way, providing real-life examples, and acknowledged the applicability of theory to practice that was illustrated with examples of some special care patients. Also, one reviewer of S1 described the presentation as *“having a clear structure that included relevant and applicable content”*.

However, I find it difficult not to dismiss the positive comments; in my reflection, I highlighted the limits of students’ evaluation (Race 2019) and questioned if they were just ‘tick boxes’ to complete another task or if the questions asked were designed well to capture the important aspects the student needed to share (Zerihun et al., 2011).

Nursing and dentistry are practice-based disciplines, where students often engage in clinical reasoning founded on theoretical knowledge and experience of clinical practice (Parker & Freeth, 2008). As all my teaching sessions were for practitioners and students in dentistry, I chose to include practical tasks where possible to present the relevance of the theory (Griffiths, 2003). Reviewing the feedback was a rewarding experience for S2 and S5; students participating in the teaching session reported that they enjoyed the variety of interactive tasks, and how these helped the sessions to be engaging and enjoyable. This was reassuring, as my aim was to ensure that learners had opportunities to ‘learn by doing’ (Race, 2019) and help them to be able to apply aspects of the learning in activities in everyday practice.

One session in which I noted particularly high levels of engagement was S3, when completing the task of creating a graded exposure hierarchy. In my reflection, I noted after the session that I was surprised by how engaged the nurses were; the enthusiasm was shared in the feedback. Due to the success of this activity and their feedback, I plan to use similar activities in future teaching.

I felt I benefited from using various forms of teaching. For example, the video clip explaining the vasovagal response provided a concise explanation of the concept, saving time but also tapping into different learning styles; In S2 and S5, I used group discussion to promote interactivity and break up the session. The benefits of discussion were positively reviewed by learner feedback, and I appraised that as a successful aspect of teaching in my self-evaluation.

I particularly enjoyed the discussion about using numbing cream before administering dental injections and I felt it was relevant to the students. Participants shared their practices and their beliefs regarding the benefits of using the numbing cream. Some described it as time-consuming and not reducing pain; some shared the use of it for every patient. It was an opportunity for me to share my clinical view based on my experience from working with needle phobia, where pain is a significant factor in their fear. Many learners commented on the feedback from this session and highlighted how they valued that I discussed this topic.

Less Successful Aspects of the programme

A common improvement needed was centred around the timing of the sessions and the high volume of content I prepared for the sessions. Although I did not run late, I felt that both online sessions were rushed toward the end and that I could manage the time and content more effectively. Towards the end of the session, I had to increase the pace of my delivery, which may have come across as rushed. This was commented on by the peer review S1 in her suggestions of improvement: *“had a lot of information to share, although she did cover all of this it felt at the end some were not covered in depth.”*

In my reflection, I realized that was caused by less accurate lesson plan timing; although in the preparation and rehearsal, I was planning to use a total time of 40 minutes to present the content, I was less accurate in predicting the time needed to engage with the audience via the chat function. On reflection, I did not take into consideration that the group size would affect the time I needed to spend on answering questions, and I also was less inclined to stop responding to the chat, as I wanted to show I valued their contribution.

In my third session, I tried to incorporate a large amount of content to introduce the audience to as many concepts as possible. This can have the opposite effect, leading to surface learning due to ‘content overload’ (Fry et al., 2009). When introducing the behaviour change theory to StR students, I found it difficult to decide what to exclude, as I find the whole topic relevant to clinician practice and very interesting. I was offered an hour by the organiser, and it was difficult to condense the topic and include some interactive activities. In the lecture, I chose to briefly mention many techniques and suggest references for further reading. In my reflection, I questioned if this was the best decision, but the peer

review did not give any feedback on this aspect as a limitation *“There was a lot to cover, and when Geanina realized there were many slides to cover about ¾ of the way through, she explained she would briefly explain these – which was certainly sufficient for the learner group”*. However, in the following session on a similar topic (S5), I have chosen to describe less behaviour change intervention and give more details and examples, which worked well.

The online format made engagement challenging; I reflected after the first session on how the use of chat as the only interaction has impacted attendees’ participation and timekeeping. I acknowledged that using the chat to get the answers was more time-consuming. I realised that I underestimated my wish to acknowledge as many individual responses as possible on the chat and that the size of the group impacted the time participants needed to answer my questions. My decision not to use a polling platform to capture the answers was based on the advice from the leader that some nurses will use their phones to access online learning; therefore, this might make it less accessible for some nurses. Even if I prepared the quizzes to be run on Mentimeter, I did not proceed with it.

Moreover, even if it was not commented negatively by the audience, I felt that monitoring the chat while teaching affected my concentration, as I was worried that I would not respond to the participants. I learned from this difficulty, and for the next online session, I used two screens, allowing a better view of the chat. Also, I found it extremely helpful knowing that my supervisor had volunteered to monitor the chat and alert me if I missed any comments.

Another technical difficulty I experienced during the first session was losing contact with the audience caused by a loss of internet connection in the area I was working. I re-joined immediately, but apologizing to the group and explaining what had happened took a few minutes. This impacted on time; I had to advise the learners to watch a video explaining a relaxation technique independently, and I had less time to answer questions. I learned from the comments of participants that the internet connection was affecting receiving the session: *“The internet connection was very bad, it was challenging to hear all of the session”*. Therefore, I asked the admin team to share the presentation when they sent the CPD certificate to the participants.

Suggestions for improvements

Reflection on my teaching and feedback from learners and observers has allowed me to recognize which approaches were more successful and get advice on how to improve my academic practice.

Looking at ways to increase learner engagement in an online setting would be something to explore in the future. I realized that I feel more confident in managing the audience in face-to-face sessions. I felt very confident in including an array of techniques such as group tasks and discussion, but I felt reluctant to integrate interactive online options, as I was extremely worried about my ability to handle the online space. However, I do understand the need to incorporate new and engaging interaction platforms which will support not only being able to synthesise better audience responses, particularly for large groups, but also help to use engaging methods to motivate students to participate.

Therefore, one area which I aim to develop is improving my confidence in using interactive polling and question platforms and in considering a wider range of interactive tools. I reflected that choosing not to use the interactive poll in S1 was generated by some avoidance caused by the unknown. But because it worked well in the next session, I felt more inclined to include it in my work.

From research and self-reflection, I identified a few strategies that I believe will support me in managing time better and preventing myself from including too much content. Firstly, I will ask for a longer time if I need to cover an extensive topic area or choose to focus only on a few aspects and provide references for those interested. Also, I could benefit from using pre-knowledge questionnaires as part of the needs assessment.

Summary:

Teaching is a learning opportunity for the teacher; my experience in designing and delivering various types of teaching sessions to various audiences was a great opportunity to gain new skills as I progressed through each session, each new session allowed me to practice the corrections identified and experience improvement.

My confidence in delivery from my first session to the last one has increased considerably. I progressed from delivering small teaching sessions to my colleagues to teaching large audiences, to having “learners” in the audience who were my “teachers” in the past and coping in various learning environments. It was a positive experience; however, I felt that the characteristics of the learner group potentially increased the likelihood of successful delivery as all participants were working in dentistry, a field I am familiar with. I am planning to take more opportunities for teaching other groups such as patients, service users or other student groups.

I believe that teaching is a continuous learning process, and it is natural to encounter challenges along the way. Striving to improve myself by reflecting regularly on my teaching practice, seeking feedback and implementing new learning contributes towards becoming a more effective and engaging teacher.

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Chapter 6: Consultancy Skills

6.1 Consultancy Skills Case study

Section 1: Introduction

This reflective report describes the process taken during a consultancy opportunity at Guy's Hospital, an NHS setting. It will outline the commissioning and conduct of the consultancy, the skills developed through planning, managing, and monitoring consultancy work, together with the outcomes.

"Consulting" broadly refers to the process of transferring expertise, knowledge, and skills from one party (the Consultant) to another (the Client) to aid or solve problems (Block, 2023). It involves a two-way interaction, often based on a formal relationship (Lippitt & Lippitt, 1986). After a consultancy request, a relationship is established with the Client based on the perceived need or desire that consultancy can fulfil (Newton, 2010). The Consultant engages in a dialogue with the Client and applies their expertise, taking into consideration the Client's specific needs and context. However, despite having influence, the Consultant's temporary position and independent status mean they have no direct power to make or implement changes (Block, 2023).

There are many consultancy models, all of which have helping at their core (Earll & Bath, 2004), and the stages outlined in consultancy hinge around this philosophy. This report will describe the consultancy process using Newton's (2010) core stages and steps of consulting engagement, which are specific to client-centric consulting.

The consultancy outlined here aimed to help dental nurses improve how they provide Oral Health Education to patients at a "Specialist Nurse-led Oral Health Clinic" (SN-OHC). It sought to enable nurses to initiate conversations about changing health behaviours in dental care settings, to assist patients and improve their oral health by enhancing their knowledge, motivation and skills. The consultancy aims were achieved through a one-hour tailored training session, built on evidence-based behaviour change principles and techniques, tailored to meet this clinic's patients' needs.

The stages of the consultancy and the key activities I have undertaken to complete each step are outlined below (Table 1):

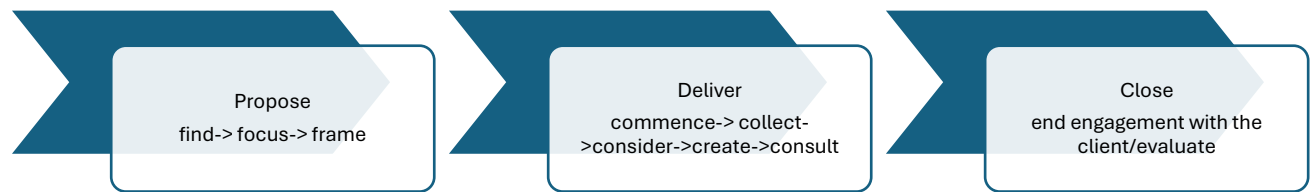


Figure 1. Core stages of Consultancy, Newton (2010)

Table 1: Core stages involved in the consultancy, adapted from Newton (2010)

Core stages of consultancy and steps		Aspects of consultancy and key activities undertaken by the author
Propose	→Find (an opportunity) →Focus (to define the scope of engagement) →Frame	Identified the need for consultancy from an initial dialog with the Contact Client. Identified and consulted with Primary and Contact clients. Undertook scoping and contracting. Agreed objectives and communication plan. Agreed outcome/ deliverable: specified learning objectives, the content and format of the training. Signed the contract.
Deliver	Commence (planning and resourcing engagement) Collect (Collect information) → Consider (consider the most relevant findings and recommendation) →Create → Consult (throughout consultancy)	Set out milestones and project goals. Completed systematic research on evidence-based intervention applied to dentistry. Conducted clinic observation. Reviewed literature on behaviour change intervention specific to orthodontics and periodontics patients. Prepared the training content. Reviewed the content with appropriate clients.
Close	Close	Handed over the deliverable. Evaluated feedback from participants and stakeholders. Reviewed and reflected on the learning from the consultancy.

Background

The British Psychological Society describes Health psychology consultancy as “the use of the health psychology skills and knowledge to provide a service to an external client” (BPS, 2015, p. 37). These multiple skills allow for the facilitation of a range of services, from providing evidence-based reports, best practice guidance, teaching, and informed expertise in behavioural science. With a background in dental nursing and psychology, I have always found fulfilment in helping patients embrace preventive health behaviours. In my role, I often assist patients who have difficulty maintaining regular oral health habits due to various reasons such as sensory issues, fear of brushing, or other underlying health conditions. I felt

confident in my competence to offer my skills and expertise in oral health behaviour change, to upskill dental nurses in their approaches and input with patients. Therefore, I sought out opportunities to undertake a consultancy project in this specialist area, across a range of dental services in which I could offer my clinical experience and knowledge as a consultant.

Section 2: PROPOSE-Identification of the need for the consultancy and negotiation on the project.

Newton (2010) argues that one of the best ways to find a consultancy opportunity is to be aware of potential clients who might need your skills, and to share your availability and capabilities.

During a meeting with senior dental nurses, it was announced that a "Specialist Nurse-led Oral Health clinic" (SN-OHC) was planned. These clinics would prioritise patients under active specialist treatment in orthodontics and periodontology who are identified as having higher risk and a higher need for extra oral health support.

I was interested in exploring the opportunity to apply psychological theory to developing oral health support and enquired about the clinic's development and the person responsible for its design and implementation. I volunteered to help, hoping to secure a consultancy opportunity. Consultancy models propose that the Consultant is usually approached by the Client (Earll & Bath, 2004; Schein, 1987); however, in this instance, I offered my consultancy services. Before initiating this, I was aware I needed to clarify if I could support the project and use the project as an opportunity to meet my consultancy competence for my training. On liaising with the module leader and my supervisors, I learned that although this service was in the same organisation as my placement, it was a different department and entirely unrelated to my current role, therefore classifying me as an external consultant (Block, 2023).

The Client

The client is the person or group the consultancy aims to support and who will judge whether the consultancy has been successful or not (Newton, 2010). Their response is affected by multiple factors; they could be significantly impacted by the change or hold different views and interests in a particular engagement (Blocks, 2023). Within any

consultancy process, it is vital to have a clear definition of the client and be able to define each person's role in the consultancy interaction (Appelbaum & Stead, 2005) and understand their wants and needs, to be able to support these and work collaboratively. Table 2 illustrates an overview of the type of clients adapted from Schein's (1997) client definition.

Table 2: Overview of consultancy clients

<i>Client type, (initials) and departmental role</i>	<i>Definition (Schein, 1997)</i>	<i>Role in the consultancy</i>
Contact client: (CJ), Matron (nurse)	"The individual(s) who first contacts the consultant with a request, question or issue."	Informed about the opportunity. Advised me to discuss my potential involvement with primary client and updated me on the current stage of the project. Facilitated access and permission by introducing me to the client.
Primary client: (KP) Consultant / head of Restorative Department	"The individual (s) who "own" the problem or issue being worked on; they are typically also the ones that pay the consulting bills or whose budget covers the project."	Approved the consultancy. Signed the contract. Will be responsible for approving the budget for a paid consultancy.
Intermediate client: (BB) Practice Development Nurse (PDN) Dental Nursing Academy	"The individuals or groups who or which get involved in various interviews, meetings and other activities as the project evolves."	Introduced me to other clients. Supported the integration on training provided with the rest of the existing training programme. Introduced me to the nurses allocated to the clinic- (ultimate client).
Indirect clients: Clinicians referring patients to the OH-CNS clinic	"Members of the organisation who are aware they will be affected by the interventions but who are unknown to the consultant and may feel positive or negative about these effects."	They were affected by the interventions but not directly contacted by the author.
Unwitting clients: Patients	"Members of the organisation or client system above, below and laterally related to the primary clients who will be affected by interventions but who are not aware they will be impacted."	Patients who were affected by intervention but who were not aware they will be impacted.
Ultimate client: CNS's (Clinical Nurse Specialists)	"The community, total organisation, an occupational group or any other group that the consultant cares about and whose welfare must be considered in any intervention that the consultant makes"	Nurses: the intervention was aimed at supporting all CNS's working in the clinic.

The consultant role

My initiative was well-received. KP (the primary client) responded via email and informed me that she would be happy for me to get involved in the development of this clinic. A meeting was arranged with the KP and CJ (primary and contact clients), where I was able to

share what I could offer and hear their view of the clinic's scope (to provide oral health education) and format.

Even though I was conscious of the NHS hierarchical structure in place (i.e. where medical/dental consultants typically have greater authority than nurses), I tried to avoid focusing on our previous relationship determined by our hospital roles; instead I focused on the purpose of the meeting, where I had to offer my Consultancy services as a Trainee Health Psychologist. Despite being very nervous before and during the meeting, I felt confident sharing my expertise and explaining how I could help. I justified my contribution by explaining that there is limited evidence that improvements in knowledge alone lead to improved oral health behaviour and behaviour change techniques are useful tools to aid in intervention development. Furthermore, we discussed that the importance of effectively supporting behaviour change is acknowledged and advised by the General Dental Council and Public Health England.

Earll and Bath (2004) state that the first stage in the consultancy process is to assess the Client's requests and needs. To meet the Client's needs, I explored their view of the clinic and what they hoped to gain from my work. At this stage, my work focused on defining the engagement scope and the required deliverables (Newton, 2010). I proposed offering different levels of support, such as providing a group intervention for the patients or training staff members. It was discussed and agreed that at the current stage of the project, delivering a teaching session on behaviour change would be what they needed.

Planning and negotiating the contract

After collecting the information, the Consultant must prepare a specific proposal covering client needs (Newton, 2010). Having conducted the initial assessment, I determined that the project was within my area of expertise and my level of competence as a Trainee Health Psychologist and, I could integrate the session as part of my teaching programme for another competency. For the next meeting, I prepared a draft of the contract, including potential deliverables and suggestions on the content that I believed should be included and what I believed needed to be agreed upon in the contract. According to Block (2023), a successful relationship with the Client depends on a clear understanding of the project's

scope, what deliverables the Client will receive, how it will be conducted, and how much it will cost. Therefore, at the next meeting, I prioritised discussing "essential and desirable wants" and covering them in the consultancy agreement (Block, 2023).

When negotiating the work, it is essential for an agreement to be made so that it suits both the Client and Consultant (Block, 2023); therefore, as well as discussing the Client's wants, I also stated what I needed. For example, I would be able to follow the requirements from the course by writing and agreeing to a legal contract. In addition, my "desirable want" was the provision of access to this clinic, so I was able to observe the current practice of nurses and retain and integrate the intellectual property for my teaching content. At this meeting, I shared my proposal and requests which were accepted. I was introduced to the academic team (Intermediate Client), who were allocated to support the next step.

It was concluded that the specific deliverables I would be providing would be a one-hour training session that would motivate and enable oral health specialist nurses (CNSs) to facilitate health behaviour change interactions with patients, alongside a toolkit comprising of behaviour change techniques relevant to dentistry and patients' characteristics.

Overall, the Client was happy with my proposal. I had to adjust some of the learning outcomes, to be in line with the General Dental Council (GDC) requirements for Dental nurses' Continuing Professional Development (CPD), and we agreed that I would take my time to prepare the contract to meet the course requirements, while waiting for the allocation of the CNSs to be confirmed.

Section 3: DELIVER- planning and delivery the intervention.

Unfortunately, I underestimated the time needed to write the contract and get it signed by all parties; this was also impacted by factors impacting the Clients, including the introduction of a new electronic patient health record system, which was a current priority across all dental clinics. I had also initially planned to use the agreed teaching session as part of my doctoral training teaching competency; however, the timeframes proposed in the Contract risked delaying the teaching competency submission. Consequently, I delayed delivering the teaching sessions until later than initially anticipated, but still in line with the timelines

agreed in the contract. On reflection, this had a positive impact as I was more flexible with dates and more focused. The planning included:

- Setting milestones and project goals
- Developing a clear picture of stakeholders, I needed to interact with
- Reviewing the resources I already had
- Identifying the gaps in nurses' practice and planning how to address them.

Good planning was essential. I was able to divide the project into manageable sections and stages, which allowed me to plan the steps where I had less control (e.g., observation of the clinic). The focus was to ensure I could offer the appropriate solution for the Ultimate Client's needs by producing information tailored to the audience. Research was undertaken into the topic to prepare the materials, drawing on contemporary theory, research, and evidence-based interventions.

I wanted to spark interest among the CNSs (the ultimate client) in the potential of behaviour change interventions and consolidate this with the resources they could use. To help me design the deliverables, I considered the factors needed to implement change, including consideration of the current knowledge level of the staff members (assessed via observation of current clinics and scoping with the CNSs involved), the complexity of the information in the training (this needed to be tailored to the audience, as CNSs did not have a background psychology), and the inclusion of practical skills that would enable the delivery of the intervention. This is where my former role as dental nurse was invaluable in this consultancy; I could apply my expertise and experience to determine what this professional group would find most useful to employ in their role.

Once I completed the preparation of the material, a meeting was organised with the main Client to review the content and establish dates to deliver the teaching session.

Project delivery: The training and written materials were delivered in July 2023, at the agreed-upon time in the contract. I was pleased that the project was delivered on time, as a successful consultancy should prioritise completing the project within the time and cost limits. The delivery of the teaching was with the CNSs (the ultimate clients), with close

interaction with the contact Client, who was present for some of the session and to explain my role and the importance of the work. I kept the primary Client (as service lead) updated on my progress, to maintain effective working relationships and communication with the key stakeholders involved.

Section 4: Evaluation of consultancy process

Evaluation of a consultancy project can be approached in various ways, including formal evaluation of client satisfaction, influence on decision-making, dissemination scope, client empowerment, and the learning experience, as pointed out by Earll and Bath (2004). This presents an opportunity to contemplate the accomplishments and identify areas for improvement, which can be valuable for future endeavours in terms of skills and recognising unproductive elements at various stages. I concentrated on two primary elements: the client/consultant relationship and the impact of the consultancy (specifically upon the CNSs, who are the ultimate clients for whom this consultancy work was established).

Client/consultant relationship

From the outset, I felt an effective working relationship was established between the clients and myself, as indicated by the collaborative approach adopted with the people involved in the delivery of the project.

However, being my first consultancy, I felt it was important to discuss with the client how my performance was viewed in terms of competency and credibility. To evaluate client satisfaction, I planned a final meeting to close the consultancy and review whether I had completed everything that we agreed, and whether my approach had been flexible and responsive to their needs. Unfortunately, the client was unable to offer a time to discuss the evaluation of the consultancy. Therefore, I adapted my evaluation approach by asking the clients involved to complete a survey, reviewing my communication and responsiveness to the consultancy, my expertise and knowledge, and time management. I also asked if they had any suggestions for improvement and if they would recommend my service. The feedback was mostly positive, emphasising my clear, polite, and punctual communication.

The impact of consultancy

The participants' motivation to discuss behaviour change with the patients was measured before and after the intervention using a validated questionnaire. Furthermore, I asked participants to complete a feedback form to rate the training workshop and, most importantly, to share what they were going to take from the workshop as a way of encouraging the participants to generate their own behavioural intentions in applying the new knowledge and skills in their roles. I discussed this information with BB (the intermediate client) to inform my reflections on the impact of the consultancy.

In a later discussion, and in addition to the feedback from the training, many of the nurses reported using some of the behaviour change techniques in their work and developing a new understanding, that giving information alone, will not impact patient behaviour. We also discussed the benefits of observing a few clinics once more, to make comparisons in their approach to communication and interactions with patients and feedback on positive use and integration of some the taught techniques. The contact client (CJ) was also very grateful for my training session, and we discussed the possibility of delivering the session to a larger group of nurses at a point in the future. This is a notable example of how Consultancy work can generate future opportunities, maintaining involvement and possible income.

Section 5 Establish, develop, and maintain working relationships with clients:

The importance of the client-consultant relationship to the effective delivery of a consultancy project is widely recognised (Earll & Bath, 2004; Newton, 2010). Block (2023) argues that a consultant is always operating on two levels when relating to clients: one is the content level, which he describes as the analytic or technical part of the discussion; the other is the relational level, which is about generating a trusting and mutually respectful alliance.

For the content element, I feel that the process of listening and refining the focus of the consultancy which I undertook aligns well with the work of social psychologist Edgar Schein, who advocates for "humble consulting", an approach where the consultant avoids focusing

on the delivery of a defined piece of work, asking instead what the Client is really concerned about, then working together with the Client to address those issues (Schein, 2016).

The relational element of the consultancy was made complex by the number of clients involved in this consultancy; I had to demonstrate my ability to build positive working relationships and communicate effectively with multiple people, or stakeholders, in multiple ways (see Table 3). I felt I did this sincerely, and in doing so, I built a professional and friendly rapport during all my interactions within each Client relationship. Skills that supported my success in maintaining a good relationship were providing support, listening, and defining ideas and needs in terms of behaviour.

Table 3: Summary of relationships with client type

<i>Contact client (CJ)</i>	I had an existing positive working relationship with the contact client (CJ) who was first approached about this consultancy; this did not require much building in comparison to the Primary client (KP)
<i>Primary client (KP)</i>	I built a new alliance with the Primary client (KP), who was a dental consultant and service lead. My interactions with this individual focused more on the development and operationalisation of the Contract, to achieve the agreed deliverables and agree and negotiate all the specifics. This individual is now the Clinical Director for our dental directorate – so I can see these are strengths of hers and I learned a lot in my interactions with her.
<i>Intermediate client (BB) and Ultimate clients (CNSs)</i>	The intermediate and ultimate clients, identified as the lead matron and CNSs to whom I delivered the training, were vital to the consultancy outcome, but were not involved in establishing the contract of agreement on deliverables. I therefore had to make sure I built a good alliance with them, putting myself in a position of humble expertise, to come alongside them and establish their own motivations for their roles.

Reflection and conclusion

A proficient consultant consistently delivers value to clients commensurate with the fees charged (Newton, 2010). While the consultancy was provided without charge, creating a hypothetical budget familiarised me with the economics of consulting and encouraged reflection on how to strategically price services in a way that attracts clients, while still accurately valuing the work provided. I estimated the cost by calculating the charging fees based on the number of chargeable hours (estimated for the hours spent on the preparation and delivery of the training) multiplied by my daily rate, calculated on my current salary (Band 7 Inner London, Agenda for Change). I also estimated a breakdown of other expenses, such as photocopying of the key materials.

I am pleased with the outcome of this consultancy work, and as a result of the process, I feel more confident about offering consultancy as a health psychologist. Completing this project has been a valuable experience and an opportunity to develop consulting skills. As defined by Block (2023), these skills involve the steps and behaviours that create an internal commitment to our suggestions and remove obstacles that prevent the client from acting on our advice.

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6.2 Consultancy Contract and Working Agreement

Consultancy Contract

This Consultancy Agreement ("Agreement") is made and effective on 5th June 2023
BETWEEN: Geanina Bruj Milasan (the "Consultant"), Trainee Health Psychologist
Staffordshire University

AND: [REDACTED] (the "Client") [REDACTED]
[REDACTED]

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.
- C. In providing the services ("the Services") outlined in this Agreement, it is understood that the Consultant is acting as an independent contractor, and not as an employee. This Agreement is exclusively a contract for this service.
- D. The consultancy work will be written up as a case study as part of the Professional Doctorate in Health Psychology. A consent form is provided to the Client with further details as a supplement to this Agreement.

1. SERVICES PROVIDED

1.1 The Client agrees to engage the Consultant to provide the Client with the following 'Services':

- 1.1.1 To review, through observation of current practice, strategies to enhance the benefits of the current treatment regime (measuring plaque scores and providing oral health advice).
- 1.1.2 To identify an overall theoretical model and specific behaviour change techniques that will assist dental nurses in enhancing patients' motivation and confidence in their ability to change oral health behaviour.
- 1.1.3 To deliver a teaching session to dental nurses supporting the "Specialist Nurse led Oral Health clinic" (SN-OHC), covering the theoretical model and

specific behaviour change techniques identified above, and rehearse the implementation of this learning. The training will be a one-hour workshop and will count as a Continuing professional development (CPD) session in accordance with the requirements of the General Dental Council (GDC). The style of the training programme will be a face-to-face teaching session, with content incorporated in PowerPoint slides. The presentation will be interspersed with small group discussion/ activities to facilitate interactivity and to plan implementation in practice.

- 1.2 Once the contract is agreed, the Consultant will liaise with the dental nursing management service to agree an appropriate date for observation of the clinic and delivery of the session.
- 1.3 If the Consultant is unable to provide the Services due to illness or injury, the Consultant will notify the Client as soon as reasonably practical and will serve notice as per clause 9.3.

2. ROLES AND RESPONSABILITIES

- 2.1 The Consultant shall provide the Services detailed in this Agreement.
- 2.2 The Consultant will provide the teaching session in line with the General Dental Council (GDC) requirement for CPD (continuous professional development).
- 2.3 The Consultant will be responsible for:
 - 2.3.1 Observation of one clinical session or a minimum of five consecutive patients attending the clinic, a week prior to the teaching session.
 - 2.3.2 Preparation of the content for the workshop.
 - 2.3.3 Designing materials that will support the training.
 - 2.3.4 Delivery of the training for the nurses on the agreed date and time.
- 2.4 The Consultant will liaise with the Nursing Management Team to organise the teaching facilities necessary for the training (organising the room and technology equipment).
- 2.5 The Consultant will print out the materials necessary for the training.
- 2.6 The Client will provide feedback on the outline of the training session and support implementing the training, by sharing the changes in practice with the clinicians referring patients to SN-OHC.
- 2.7 Anticipated key milestone (the “Milestones”)
 - a) Observation of the clinic by 30th June 2023.

b) Review teaching content and materials with the client by 10th July 2023.

c) Delivery of the teaching session by 30th July 2023.

2.9 The milestones are not binding but shall act as a guide for progress.

3. TERMS OF AGREEMENT

3.1 The term of this Agreement will begin on the date of this Agreement 5th June 2023 and will remain in full force and effect until the completion of the Services, or by 1st August 2023, whichever arrives the soonest, subject to earlier termination as provided in this Agreement. If either Party wishes to terminate this Agreement prior to the Services being delivered, that Party must provide 7 days written notice to the other Party.

3.2 The term of this Agreement may be extended with the written consent of both Parties.

4. FEES AND EXPENSES

4.1 The Consultant will not receive any monetary payment or additional benefits from the Client for the provision of the Services.

4.2 The Consultant will not be reimbursed by the Client for any expenses incurred providing the Services.

5. LIABILITY

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

6. CONFIDENTIALITY

6.1 Confidential information refers to any information or matter which is not in the public domain, and which would reasonably be considered to be proprietary to the Client.

6.2 The Consultant shall not use or disclose any confidential information about the business or affairs of the Client except as authorised by the Client or as required by law. The Client will inform the Consultant when confidential information is being disclosed.

6.3 The terms of confidentiality will apply during the term of this Agreement and will survive indefinitely upon termination of the consultancy.

7. ETHICAL STANDARDS

7.1 The Consultant will conduct the Services in line with the Health and Care Professions Council's 'Standards of conduct, performance, and ethics' (2016) and the

British Psychological Society's 'Code of ethics and conduct' (2009) and General Dental Council Standards (2013).

8. INTELLECTUAL PROPERTY

8.1 All intellectual property and related material that is developed or produced under this Agreement will be the sole property of the Consultant.

8.2 The Client may not use the intellectual property for any purpose other than that is specified within this agreement, except with the written consent of the Consultant.

9. TERMINATION

9.1 Either Party may at any time terminate the Consultancy Agreement with immediate effect if the other Party is in breach of any provision of the Agreement. Such termination will be documented in writing and will take effect from the date of the breach of the Agreement.

9.2 Any property in the possession of the other Party obtained during the provision of Services shall be returned at any time on request and in any event on or before the termination of the Agreement.

9.3 The contract will terminate with immediate effect if the Consultant is unable to complete the Service due to illness, injury, or force majeure. The Consultant will notify the Client in writing if this is the case.

10. VARIATIONS

10.1 Any variation to this Agreement will only be binding and effective if evidenced in writing and signed by both Client and Consultant.

11. DISPUTE RESOLUTION

11.1 In the event that a dispute arises out of or in connection with this Agreement, the Parties will attempt to negotiate and resolve the dispute to the best of their abilities through friendly consultation.

11.2 If the dispute is not resolved within 30 days, then any or all outstanding issues may be submitted for consideration to an independent arbitrator, who will pass judgement and mediate a resolution to the dispute.

12. ENTIRE AGREEMENT

12.1 This Consultancy Agreement constitutes the entire Agreement between both Parties relating to the provision of Services. Both Parties acknowledge that they have not entered into this Agreement based on any warranty, representation, agreement, or condition affecting this Agreement except as expressly provided in this Agreement.

13. GOVERNING LAW

13.1 This Agreement and any dispute or claim arising from the provision of Services shall be governed by and construed in accordance with the law of England and Wales.

14. SEVERABILITY

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

15. SIGNATURES:

Below both Parties duly affix their signatures in acknowledgement and agreement of this contract.

Consultant

5.06.2023
Date

Client

5.06.2023
Date