Hayley Anderson

Professional Doctorate in Health Psychology

University of Staffordshire

2026

Contents

Acknowledgements

I would like to sincerely thank those who have played a role in supporting, encouraging and inspiring me throughout my journey in Health Psychology.

Firstly, thank you to my supervisor, Dr Rachel Povey. Your continued guidance, encouragement and belief in my abilities has been invaluable. You've helped me to navigate obstacles and supported me through trickier times, always motivating me to keep going. It has been a true pleasure to be supervised by you. I also want to thank Dr Emily Buckley for your support ahead of my viva voce. I greatly appreciate your guidance during these final stages.

I would like to extend my thanks to Dr Amy Burton and Professor Richard Cooke for your advice and support during the research competencies. Absorbing your wisdom and expertise turned what initially seemed like a daunting task into something I loved accomplishing. Thank you for all your help.

A special thank you to my workplace supervisors. To Dr Louise Joy-Johnson, thank you for supporting me throughout the first year of the doctorate and for taking a chance by hiring me as a Trainee Health Psychologist. You challenged me to push myself outside of my comfort zone, helping me to grow while always showing empathy and care. To Dr Emily Finney, thank you for taking on the role of my workplace supervisor, for making me feel valued, and for supporting me to finish my studies alongside work. Your continued encouragement in developing and enhancing my clinical skills truly means a lot.

I would also like to sincerely thank my clinical team colleagues. I feel extremely lucky to be surrounded by such a wonderful team. Your willingness to share your knowledge and wisdom has helped shape me as a clinician, and has greatly increased my confidence. I am continually impressed and inspired by each of you.

To my fellow trainees, thank you for your ongoing support and encouragement. I can't wait to see where your health psychology journeys take you and the positive impact you will make in your careers.

A special thank you to the families and children I've worked with, particularly those I've worked closely with during interventions and the research project. Thank you for giving up your time and sharing your experiences with me. You are all remarkable!

I also want to thank the individuals, who have shaped my less than conventional educational and professional career path. I am so grateful to have had your support and for the opportunities to learn from you all. You have shaped me into the Trainee Health Psychologist I am today. The journey has been long and challenging, but I would not be in this position without the parts each of you have played.

To my best friends, thank you for your continued support, not only during the doctorate, but throughout my life. I truly cherish our decades of friendship and I'm so grateful to continually learn and grow with you all.

To my partner Benjamin, thank you for supporting me and your constant reassurance and belief in me. You've had to put up with me complaining that "I'm stressed" for a while now, I promise I'll try to stop saying that. I'm so grateful for all your love and support. Thank you also to my "English family" for welcoming me into the family during my time down south.

Most importantly, thank you to my mum and dad. I don't think we would've believed ourselves if we said 15 years ago that my path would lead here. Your unconditional love and unwavering support means the world to me. Thank you for allowing me to pursue my dreams and for always being my biggest cheerleaders.

Abstract

Hayley Anderson, Professional Doctorate in Health Psychology, 2026

This portfolio details my work and professional development throughout the Professional Doctorate in Health Psychology at the University of Staffordshire. During this time, I worked as a Trainee Health Psychologist, providing autism diagnostic assessments within a charity organisation. The portfolio provides a comprehensive account of the skills, knowledge and competencies I have developed through both placement-based and independent work. It is divided into six chapters, each representing a core competency of Health Psychology.

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

Across these chapters, I present research manuscripts, case studies, evaluations, and a consultancy contract alongside reflective commentaries that demonstrate my learning throughout the Professional Doctorate. Overall, this portfolio provides insight into my academic, professional and personal journey, highlighting my growth in confidence and competence during my progression towards becoming a qualified Health Psychologist.

Introduction

Within this portfolio, I present the work I completed whilst enrolled on the Professional Doctorate in Health Psychology at the University of Staffordshire between September 2022 and January 2026. Throughout the doctorate, I have been employed as a Trainee Health Psychologist within a charity that provides autism assessments and support services for children and their families. Given that my role within the organisation primarily focusses on the autism diagnostic pathway, I proactively sought out additional opportunities to meet the requirements of the doctoral competencies, both within and outside my placement. These included independently organising and delivering psychological interventions, conducting a participatory research project and facilitating teaching sessions within the organisation, alongside completing a consultancy project, a systematic review and further teaching sessions outwith my placement. Each competency is described in further detail in their corresponding chapters.

Chapter 1: Professional Skills in Health Psychology

Chapter one outlines my professional development as a Trainee Health Psychologist throughout the Professional Doctorate. Through a reflexive report, I present the competencies I have achieved and the professional skills I have developed, supported by excerpts from reflective diaries. These experiences discuss both my placement role and additional work completed externally during my doctoral studies.

Chapter 2: Systematic Reviewing

Within chapter two I present a systematic review examining the effectiveness of parent-based training interventions in improving symptomology in children and adolescents with Avoidant/Restrictive Food Intake Disorder (ARFID). I also include a reflective commentary detailing the rationale for the review, alongside critically reflecting upon the processes involved in designing and conducting the review.

Chapter 3: Research: From Design to Dissemination

Chapter three presents my qualitative research manuscript exploring autistic young people's experiences of healthy eating using photo-elicitation, following a participatory action research approach. This is accompanied by a reflective commentary, which discusses my motivation for the project and the value of participatory research, alongside the design and development of the study, critically reflecting upon my decision-making throughout the research process.

Chapter 4: Health Psychology Interventions

Chapter four presents two case studies; one face-to-face intervention and one non-face-to-face intervention delivered remotely. The face-to-face intervention was conducted with a young autistic male with chronic food restriction and avoidance, with the primary goal being to build his tolerance around novel foods and achieve a "less limited diet". The non-face-to-face intervention was conducted with a young autistic female targeting emotion regulation to support her independence. Both interventions involved processes of assessment, formulation, design, planning, facilitation and evaluation.

Chapter 5: Teaching and Training in Health Psychology

Chapter five presents a case study detailing the planning, design and delivery of five teaching sessions under the theme *Health and Eating Behaviours within Autism.* Topics included healthy eating, eating behaviours within autistic children and Avoidant/Restrictive Food Intake Disorder (ARFID). The sessions were delivered to diverse audiences, including health professionals and students. This chapter also includes an evaluation and reflective commentary of the teaching sessions, considering different learner groups, session sizes, and the various forms of assessment collected.

Chapter 6: Consultancy in Health Psychology

Chapter six presents a case study of a consultancy opportunity delivered to an Autism Short Breaks Service within a Scottish Children's Charity. The project involved creating and delivering a training session for support workers on strategies and interventions targeting eating difficulties within autistic children and young people, alongside information handouts for support workers and parents/caregivers. A consulting agreement, outlining the services provided and the terms of the arrangement, is also included.

Table of Completion

Module	Date of Completion
Professional Skills in Health Psychology	January 2026
Systematic Reviewing	January 2026
Research: From Design to Dissemination	January 2025
Health Psychology Interventions	June 2025
Teaching and Training in Health Psychology	January 2026
Consultancy in Health Psychology	June 2024

Chapter 1

Professional Skills in Health Psychology

Professional Skills Reflexive Report

Background

This reflexive report outlines my professional development as a Trainee Health Psychologist during the Professional Doctorate. It summarises the competencies I have completed and skills I have gained between September 2022 and January 2026, reflecting upon the experiences that have shaped me towards becoming a competent Health Psychologist. Throughout my training, I have engaged in regular reflective practice, writing weekly diaries to evaluate my learning and professional development. Using Gibbs' (1988) cycle of reflective practice as a framework, I have reflected upon various situations, identifying what happened, what went well, and what could be improved upon for future practice. The first half of this report focusses on completion of the five core competencies, whilst the second half details the professional skills a Health Psychologist must demonstrate, outlined by the British Psychological Society (BPS, 2017) and Health and Care Professions Council (HCPC, 2023).

Placement

My doctoral placement was a two-year bursary set up by the University of Staffordshire at a charity that provides autism assessments and support services for children and their families. I started my role in September 2022, working as a Trainee Health Psychologist within the clinical team, becoming the first and only Trainee Health Psychologist to work within the organisation. The clinical team form a core part of the Autism Service, which offers a two-day child-centred autism diagnostic assessment. Day 1 consists of an ADI-R (Autism Diagnostic Interview Revised) with parents/carers to gather information about the child's developmental history, behaviours, communication and interests. Day 2 involves a range of structured and play-based assessments, including the Autism Diagnostic Observation Schedule (ADOS-2). The psychology team also conduct additional assessments to rule out differential diagnoses, including: cognitive assessments - Wechsler Nonverbal Scale of Ability (WNV), Wechsler Intelligence Scale for Children (WISC); cognitive questionnaires - Adaptive Behaviour Assessment System (ABAS); Attention Deficit Hyperactivity Disorder (ADHD) screening tools - Conners-4; self-report questionnaires - The Camouflaging Autistic Traits Questionnaire (CAT-Q), Anxiety Scale for Children – ASD (ASC-ASD), Revised Child and Anxiety Depression Scale (RCADS); alongside parent interviews - The Coventry Grid Interview (CGI) exploring autism and attachment difficulties.

My primary role involves working within the autism diagnostic pathway; therefore, I proactively sought opportunities to meet the requirements of the doctoral competencies. This included independently organising and delivering psychological interventions and teaching sessions within the organisation, as well as completing consultancy and further teaching sessions outside of my placement. During the final phase of my two-year bursary, I transitioned from clinical work to full-time research to complete my empirical study. During this time, I was encouraged by senior leadership to apply for a Registered Psychologist position as a Trainee. Following a successful interview, I returned to the clinical team. In this role, I have taken on increased clinical responsibility, including case-leading autism assessments, considering complex differential diagnoses and acting as the leading ‘Psychologist’ as a Trainee Health Psychologist in the Multi-Disciplinary Team (MDT) on assessment days under clinical supervision. Throughout my doctorate, I have worked with hundreds of children and families, which has been influential in shaping my professional identity and increasing my clinical expertise and confidence.

Core Competencies

Consultancy

The consultancy competence was the first competency I completed as part of the Professional Doctorate. Prior to this, I had no experience of consultancy work. Therefore, I viewed this competency with some initial apprehension. Thankfully, the teaching sessions at the University of Staffordshire helped me build a better understanding of how to successfully undertake a consultancy project. I recognised that to secure a consultancy opportunity, I needed to draw upon my existing professional network and present a service which could be beneficial to others. Unlike many consultancy projects where a client initiates contact, I approached the client, organised the meeting and marketed my skill set. I recognised that training could be a beneficial deliverable and agreed to deliver a tailored training session with additional handouts. This helped me recognise the transferable nature of my skills and the importance of being able to confidently articulate these to clients. Throughout this competency, I learned the importance of balancing my own wants and needs with those of the client. This required listening skills, negotiation and clear communication and expectations. The feedback I received from the client was highly encouraging and affirming, as the client encouraged me to offer the training more widely to healthcare professionals and families. There was additional impact from the consultancy, with the client reporting “the team adopt[ed] what was learned in the session and us[e] it in their daily practice". This significantly boosted my confidence in my developing consultancy skills.

While no formal consultancy opportunities have arisen since completing this competency, I continue to use the skills developed, offering my skill set and advice to different departments at my workplace. Completing this competency provided me with an understanding of the various consultancy stages, from initial contact and contracting, through to delivery and evaluation. Although I was initially apprehensive about finding a suitable client, I used my professional network and skills to produce a successful consultancy project. I am eager to seek more consultancy opportunities in the future.

Psychological Interventions

Although health psychology interventions form a core competency for Trainee Health Psychologists, my placement did not routinely offer these. I therefore had no prior experience of psychological interventions, no structured formats to follow and no opportunities to shadow an intervention before conducting my own. Combined with organisational constraints, I did not receive as much clinical supervision as I had hoped for and felt initial apprehension about my ability to successfully deliver psychological interventions. However, I did have experience working one-to-one with autistic children and delivering neurodivergent adaptations, alongside contributing to assessment and formulations during autism diagnostic assessments; I therefore approached this competency with a sense of optimism.

I delivered four person-centred interventions to autistic young people, focussing upon their chosen goals surrounding restricted diet, self-esteem, emotion regulation and executive functioning. To develop my intervention skills and design and deliver both in-person and remote interventions, I sought out clinical supervision where feasible, attended webinars and prioritised reading the literature extensively to prepare as much as possible (Spain et al., 2023). I utilised elements of various psychological approaches and adapted these techniques based upon the needs of the young person (Cooper et al., 2018). I then carefully planned each intervention, researching relevant outcome measures, assessing and formulating, before creating visual resources, activities and workbooks, whilst structuring the sessions and following best practice guidelines (National Autistic Society & Mind, 2021; NICE, 2021). In hindsight, juggling four interventions for the first time, each requiring a different approach, treatment goal and demanding individualised research, alongside my usual clinical workload and case-lead duties was incredibly demanding, and became a valuable learning experience regarding work capacity.

Overall, delivering psychological interventions has been a highlight of my professional development and a moment within my doctoral journey I feel very proud of. What initially started out as a nerve-racking task turned into something better than I could have ever hoped for. Each stage of the intervention process enhanced my knowledge and expertise, and I feel grateful to have had the opportunity to work with such dedicated young people. Building a strong therapeutic rapport and collaborating with young people provided me with invaluable skills in engagement, adaptability and clinical practice. Although I do not routinely deliver interventions, the knowledge and skills I gained during this competency continue to influence my clinical work. I look forward to actively developing and improving my therapeutic skills, seeking future opportunities to observe and practice psychological interventions.

Teaching and Training

Prior to the doctorate, I had no formal teaching training, however I had delivered presentations and talks throughout my life. Therefore, compared to some of the other competencies, I felt fairly confident in my ability to deliver health education training to various audiences, including healthcare professionals (Michie et al., 2004). However, despite my initial confidence, the process of preparing and delivering sessions required meticulous organisation: assessing learners' needs, tailoring learning outcomes, incorporating relevant literature, designing interactive activities and discussions, ensuring assessment of the learning outcomes, alongside requesting performance feedback (Hallas, 2004). These individual stages helped me to appreciate the complexity of teaching, and the benefits of following evidence-based teaching processes.

The quote *"when we teach, we learn"*, resonates with my teaching experience. The knowledge and skills I learned whilst designing and delivering five teaching sessions to various audiences for this competency continues to influence how I teach others; whether through formal teaching sessions, or informally when advising colleagues or students. Throughout the doctorate, my teaching skills have improved significantly, and my confidence in understanding a topic and effectively disseminating knowledge to others has strengthened. Furthermore, I have learned to become more relaxed when teaching others, as I now recognise that I can be an expert in a topic without ‘knowing everything’, as Carl Rogers (1983, p.106) emphasises the essential quality of the teacher is “realness or genuineness”.

Since completing this competency, I have been asked to re-deliver a previous teaching session to new staff members. Delivering this training session for the second time was much less nerve-racking, reflecting my improved confidence and comfort in facilitating training, tasks and discussions. In addition, I have successfully delivered further health psychology training to colleagues, including a session on ‘Neurodiversity & Sleep’, to both in-person and online attendees.

Empirical Research

I started this competency lacking confidence in my research abilities; my only research experience consisted of quantitative studies for my undergraduate and master’s degrees. However, wanting to push myself, I opted to design a qualitative study exploring healthy eating in autistic young people using photo-elicitation and Participatory Action Research (PAR) principles. I was fortunate to gain a place on the PAR programme at the University of Staffordshire and over the next seven months, I attended monthly training sessions, learning from research experts about creative and accessible research methods, gaining inspiration for my project. The programme also provided funding for my research project, covering the costs of digital cameras and participant incentives, which greatly increased engagement. Yet, recruitment proved to be the biggest challenge, spanning nearly three months; autistic young people are a hard-to-reach group, and despite emailing hundreds of families, it took a long time to gain interested participants. This was an important learning curve in that research often takes longer than initially expected, and to allocate additional time for this.

This was also my first time conducting qualitative research interviews, which felt daunting. Although I had experience interviewing young people and parents during clinical assessments, this context felt different. However, the PAR course reshaped my understanding of what research interviews could be, demonstrating that they do not have to be rigidly structured or formal to be successful. Guided by PAR values of flexibility and inclusion, my interviewing technique took on a more conversational tone as I followed up on participants’ responses, affirming and encouraging their statements. After each interview, I reflected upon myself as an interviewer and identified various areas for development. For example, in hindsight, during some interviews I missed opportunities to probe further and ask more follow-up questions. Engaging in reflective practice enabled me to continually improve my interviewing technique.

The addition of the PAR workshop also encouraged young people's engagement in the research project. Reflecting upon the workshop, despite feeling outside my comfort zone, I realised how much I had grown as a facilitator. Despite my initial apprehension, I created an engaging and inclusive environment, incorporating interactive activities in which young people felt comfortable sharing their views. The positive feedback from young people, parents and my academic supervisor confirmed the workshop's success. I now feel confident hosting future participatory events and would actively seek to incorporate these in research projects.

This large piece of work was both challenging and rewarding. Working autonomously with supervisory guidance, I gained valuable skills in interviewing, transcription, reflexive thematic analysis and research writing. I also gained a deeper appreciation for participatory action research; although this research approach requires time and effort, the benefits are vast, and PAR values will continue to influence my future research in meaningful ways. I have incredible admiration for all the young people who participated in the project, and I hope they are proud of the work they contributed. I have since been encouraged to send the paper for publication, something I am actively working towards.

Systematic Review

Prior to the Professional Doctorate, my only experience of reviewing consisted of a miniature systematic review for my master's degree; therefore the idea of producing a full systematic review felt like an enormous task. However, during my doctoral studies, I gained experience acting as a peer reviewer for a systematic review, screening hundreds of titles and abstracts, before reviewing full texts. This was a great opportunity to learn about the reviewing process, and instilled confidence in me that I could successfully complete my own systematic review.

For my review, following a CPD event that focused on supporting family members of individuals with eating disorders, I felt inspired to explore parent-based training interventions for children with Avoidant Restrictive Food Intake Disorder (ARFID). As I began drafting my PROSPERO registration form, I quickly realised this would take longer than I had initially expected, due to the level of detail needed before beginning the review. During the quality appraisal process, I also found a new respect for the various research methodologies used across studies. I recognised how these methodological choices could cause levels of bias, which prompted me to use my critical thinking skills when interpreting the results of each paper. The write-up, quality appraisal and data synthesis were also much newer experiences for me, and I noticed that I found these stages much more challenging; therefore I was grateful to receive support from my supervisory team.

Designing and conducting the review strengthened my understanding and knowledge of the complexity of systematic reviewing. This competency, whilst thought-provoking at times, helped me to appreciate the importance of research design during the early stages and will undoubtedly influence how I approach future research.

Professional Competence

To recognise my developing professional skills and support continuous improvement, I have engaged in regular reflective practice by writing weekly reflective diaries. This practice of reflection improves self-awareness, enhances skills and plays a crucial part in professional development and capability (Schön, 1987). I have used this exercise almost as an 'outlet', writing my strengths, weaknesses and challenges, alongside lessons I have learnt throughout the doctorate, consistently ensuring I maintain good practice. Writing the reflective diaries has been almost therapeutic at times, as it has allowed me to process my thoughts and feelings. It has also been helpful to read these back and notice my professional development over time. I have used Gibbs' Reflective Cycle (1988) as a framework; although at times I diverted from this model, as I did not consistently reflect upon what I would do differently in future situations. Many of my reflective diaries centre around retrospection and self-evaluation of autism assessment cases, reflecting upon complex formulations whilst analysing diagnostic rationales. However, I also ensured I reflect on both positive and challenging scenarios, as well as learning opportunities.

Supervision has been another essential space to support my reflective practice, which I utilised as a safe environment to explore complex cases and formulations, and the progress of my doctorate competencies. Over the course of the doctorate, I have recognised my increase in confidence, noticing a shift in tone within my reflective practice, as I have become more competent in clinical practice working within a multi-disciplinary team, as well as during direct work with children and families.

Professional Skills

Team Working and Leadership

Health psychologists often work within multi-disciplinary teams (MDT), adding a unique perspective to clinical services (Forshaw, 2022). Within my placement, I have worked with a range of clinicians from various disciplines delivering autism assessments, including Clinical and Counselling Psychologists, Assistant Psychologists, Speech and Language Therapists, Paediatricians, Occupational Therapists, and Nurses. Teamwork is crucial to inform the autism diagnostic process, with disciplines frequently working simultaneously. MDT work has been an important part of my learning and success, and I thoroughly enjoy working with fellow disciplines, and believe positive interpersonal relationships enhance professional work (Driskell et al., 2018).

From September to December 2023, and since rejoining the clinical team in January 2025, I have case-led autism assessments. This includes accepting accountability and autonomy for diagnostic outcomes; leading the assessments, reading through all clinical documentation, making clinical judgements regarding what assessments are needed, formulating with the team, writing up reports and providing feedback of the diagnostic outcomes to families. Case-leading assessments is an incredibly rewarding part of my job, as parents describe their child's autism diagnosis as a "life-altering event" (Boshoff et al., 2018 p.153).

Since March 2025, I have been the leading 'Psychologist' within the MDT on designated assessment days as a Trainee Health Psychologist, providing psychology oversight for children coming into the service, under clinical supervision. This role includes leading the psychology component of up to five children's autism assessments per assessment day alongside case leading duties, working with highly complex information. This was an initially daunting task, however through my experience working within the autism service and the skills gained during my doctoral training, I am able to confidently and effectively lead the psychological aspects of the assessment, fulfilling this role under clinical supervision. At times, differential diagnosis cases have been complex and challenging, and this has developed my professional skills immeasurably. These experiences have enhanced my confidence in leadership, teamwork, formulation and clinical decision-making as I consistently ensure my work is completed to a high professional standard.

Towards the end of 2023, I also began mentoring two qualified clinical psychologists as an induction to their new positions within the team. At the time, I was the most experienced psychology team member, after my clinical supervisor, due to staff leaving the service. Due to the skills and experience gained during my time on placement, the new psychologists observed my work during service procedures; this included observing my case-leading duties, shadowing diagnostic assessment sessions (such as ADI-R and ADOS), reading through my reports, observing diagnostic feedback sessions with families, and asking general advice regarding autism assessments. My clinical supervisor commended my professional and leadership skills, whilst managing my own caseload ensuring a high-quality of work was maintained. This reinforced my capability to perform well within my role and to guide others to do so, boosting my confidence in both my autism knowledge and professional practice.

In addition, I have gained supervisory skills by supporting and organising opportunities for a master's placement student, following supervision guidance (BPS, 2024). This has provided me with leadership skills, highlighted the importance of clear and consistent communication and improved my ability to provide constructive feedback. My workplace are keen for me to gain further experience as a supervisor, supervising Assistant Psychologists once I gain accreditation.

Giving Health Psychology Advice and Guidance to Others

Throughout my training, I have increasingly provided health psychology advice to others. My confidence to do so has improved, as I have become more self-assured in the advice I provide and aware of my competence, recognising my expertise and when to signpost elsewhere when beyond my remit (Hallas, 2004). I have provided advice and training to various departments in my workplace, including my colleagues in the clinical team, family support team, marketing, and research departments providing information related to my expertise in autism and eating-related behaviours, but also regarding topics such as sleep, physical health and wellbeing. For example, I provided advice to the marketing department regarding ARFID to help them create an infographic for Eating Disorder Awareness Week. Additionally, I have contributed to an "ask the team" initiative, directed at providing clinical expertise to family members of autistic children via social media.

I have also provided clinical advice to the family support team surrounding healthy eating behaviours, including resources and feeding interventions that could be applied in practice. I have similarly been asked by colleagues to speak to families coming in for an autism assessment who have concerns surrounding their child's eating challenges. For instance, I had a discussion with a family who reported worries about their son's overeating. I gained background information from the family, assessed the needs of their concerns, queried their previous strategies, before introducing evidence-based techniques that they could implement at home. I am pleased to have received positive feedback on the advice I have provided.

I also regularly contribute to service development at my workplace, imparting knowledge for the family workshops, as well as developing clinical resources to disseminate to families addressing concerns surrounding healthy eating, such as food and portion size awareness and improving restricted diets. Providing advice and guidance to others has been a thoroughly enjoyable experience and aided me in recognising the valuable contribution Health Psychologists can have.

Communication Skills Across Different Contexts

Communication skills are an integral component of working as a competent psychologist (Suter et al., 2009). Working primarily with autistic individuals, I recognise the importance of clear, inclusive communication, using both verbal and non-verbal means. When conducting assessments with children or parents, I aim not to rush conversations. I actively listen and prioritise building rapport, as parents often tell me they have waited years to talk about their child's neurodivergent behaviours. Ultimately, I want the service user or carer to feel supported as they discuss challenging subject matters. In these moments, I recognise the importance of kindness, and my responsibility to respond with care and empathy to aid future positive interactions with healthcare practitioners (Boshoff et al., 2018).

During my doctoral training, my communication skills have improved significantly. This is particularly evident when challenging assessment cases arise, as I use both verbal and non-verbal communication methods to diffuse situations. For example, I efficiently managed conflict between separated parents who had differing opinions on their child's neurodivergent behaviours. I also carefully navigate and consider my communication when discussing disagreements during formulations with the MDT. One case I led required me to navigate various differential diagnoses, whilst justifying my clinical decisions on the assessment day to the team. Whilst others contrasted my views, this required me to present and communicate my professional judgements and knowledge during the formulation, providing evidence to support my observations. I was commended by team members for the "fantastic work" and continually striving to make the best decision for the child and family.

Regarding one complex case, a colleague asked me to meet a young person and conduct an anxiety questionnaire (RCADS) to explore potential underlying anxiety and OCD-like behaviours to support the autism assessment. I was cautious approaching the session, thinking carefully about how I introduced myself, how I reassured the young person and how I approached sensitive questions. I ensured I was aware of my communication and how my body language and tone of voice could impact the interaction. I recognised quickly that presenting as deliberately calm and patient helped them to discuss their mental health challenges and disclose more than I initially expected. Following the assessment, I reflected upon my write up of the session and how to carefully input this into the assessment report. I chose to include qualitative information as I believed this provided more insight into their compulsive behaviours beyond the standardised questionnaire statements. Although I recognised my competence limits and could not help further, I empathised with both the young person and family and signposted them to further support services.

During my placement, I have also become more aware of my written communication skills improving, due to regularly writing assessment reports and tailoring these for parents, GPs and schoolteachers. Having to consider the perspectives of different readers has highlighted the importance of thinking carefully about my word choices and how I clearly convey complex and sensitive information, avoiding medical jargon and emphasising neuro-affirmative language (Jegatheesan et al., 2010; Bottema-Beutel et al., 2021).

During the PAR programme, I received compliments from lecturers and professors about my communication skills, which gave me a huge boost of confidence. I have further developed my communication skills during many presentations. At the end of the PAR programme, I discussed my empirical research during a Q&A session with fellow academics and community researchers. I have also delivered research updates to the CEO and senior leadership team at my placement. Gaining clinical experience has helped me to feel more comfortable speaking in front of various audiences and adapting my language and communication style. I also presented my empirical research at the Health Psychology conference at the University of Staffordshire in 2024 and was delighted to win 'best oral presentation', as well as 'best poster presentation' the following year. These experiences have encouraged me to challenge my inner critic, as I feel proud to share and contribute to the health psychology community.

Engaging in Continuing Professional Development (CPD)

During my doctoral training, I have engaged in a wide range of CPD activities to expand my professional knowledge and competence. Early in my training, I completed external ADI-R and ADOS-2 accredited training courses to conduct standardised autism assessments, alongside shadowing various assessments, before 'learning by doing' whilst on the job (Kolb, 1984). I have also attended internal training days at my placement, including sessions on cognitive assessments, which are essential for the psychology team's roles. My clinical supervisor also introduced me to the Autism Practitioner's Network, and I have attended several webinars on various topics, such as 'Autistic Individuals' Physical Health and Barriers to Accessing Healthcare'. Through work, I have also attended an Autism and ADHD conference, as well as a 'Sleep in Neurodivergent Individuals' webinar.

I additionally completed self-directed learning, completing training activities related to neurodivergence, including attending a workshop on 'Adapting Therapeutic Interventions for Neurodivergent People'. This provided a great opportunity to learn about current practice and network with others working within neurodivergence. I further expanded my knowledge through CPD on eating disorders, attending webinars on 'Avoidant Restrictive Food Intake Disorder (ARFID)' and 'Developing the Skills of Families and Carers Supporting Those with Eating Disorders'. Additionally, I was signposted by my academic supervisor to attend a conference focussing on children's eating behaviours, and the development of interventions aimed at reducing childhood obesity.

Throughout my doctorate, I have tried to grasp every opportunity to engage in CPD to broaden my knowledge and update my skill set. CPD activities highlight my enthusiasm for health psychology and motivate me to continually learn and keep up to date with current research and clinical practice (Berdondini & Elton, 2020). In line with the BPS (2017) and HCPC (2023) guidelines, I recognise the need for further development and will actively seek out CPD opportunities to continually engage in lifelong learning throughout my professional career.

Service User and Carer Involvement

Prior to the doctorate, service user and carer involvement was a fundamental part of my work as a Support Worker, supporting children with disabilities and autism. This experience ignited a strong commitment to inclusivity and meaningful involvement. During assessments with children and families, I continue to prioritise an inclusive and personalised approach, actively involving children and families where possible, whilst embracing flexibility and collaboration (Donaldson et al., 2017).

Involving autistic young people in my empirical research was a core value of my PAR project. I strongly believe that autism research should improve the lives of autistic people, however, research often lacks involvement of autistic individuals (Pellicano et al., 2014). At the beginning of the project, I included an initial meeting to introduce young people and their parents to the study. This provided an opportunity to ask questions and allow young people to decide whether they were interested in taking part. I believe this was an important step in the process, to allow the participants to meet me and understand what would happen at each stage. Additionally, the workshop enabled young people to be actively involved in the research process, following PAR principles (Poulsen et al., 2022). Throughout the project, I actively listened and learned from the young people, ensuring that they knew they were the experts in the project.

Equality, Diversity and Inclusion

Inclusivity is a key part of my job role and reflects my personal values alongside my workplace's ethos. Inclusivity aligns with person-centred practice, which keeps in mind a holistic understanding of individuals' unique and complex experiences and identities (Saleebey, 2015). In my day-to-day work, this includes making reasonable adaptations and adjustments during autism assessments: asking about communication preferences, using clear language, slowing down and allowing additional processing time, using resources and visual supports, alongside following a concrete and structured approach. Adapting the physical environment can also prove beneficial, as autistic individuals can find sensory information overwhelming. It is therefore important to minimise visual, auditory and olfactory stimuli, such as dimming room lighting, avoiding strong smells and being aware of loud or distracting noises (National Autistic Society & Mind, 2021).

During my empirical research, I also prioritised autistic young people's engagement by adapting communication methods based upon their individual needs. A key strength of the research project was using photo-elicitation to not only facilitate conversations but to also allow participants to take the lead. In addition, I offered participants the option to participate online or in-person, providing flexibility and accommodating for individual preferences. I was also mindful that focus groups may be challenging for some, therefore opted for individual interviews, and developed an accessible interview guide to share in advance to reduce anxieties and provide participants time to process and prepare.

Development and Maintenance of Legal, Ethical and Professional Standards

It is crucial to practise within one's competence and protect service users (Byrne, 2020, HCPC, 2023). Throughout my placement, I followed these standards diligently and regularly undertook training in safeguarding and GDPR, with the confidentiality and safety of individuals forming a crucial part of my work. On several occasions during my clinical work, children or parents disclosed information which required me to raise a safeguarding concern with our safeguarding team. This included concerns such as emotional abuse and domestic violence. Individuals were informed of what information would be shared and agreed for me to contact the safeguarding team. I then completed the necessary documentation, in line with service protocols and BPS guidelines (2017).

During my clinical work, it is additionally essential I document clinical notes accurately, following service procedures, doing so in a timely and confidential manner (HCPC, 2023). In line with HCPC (2023) standards, I regularly assess risk prior to and during assessments. For my one face-to-face intervention that was held in the kitchens, I liaised with other departments to ensure that both clinical and operational risk assessments were in place before beginning.

For my empirical study, I followed ethical standards adhering to the BPS code of Human Research Ethics considering risk and gaining valid consent (Oates et al., 2021). I studied the literature regarding research procedures and ethical practice when working with autistic individuals and applied this to my research design (Courcy & Koniou, 2024; Harrington et al., 2014). This informed the development of accessible and transparent assent and consent forms, information sheets, PowerPoint presentations, handouts, interview guide and debriefing forms. All documents were created using concrete language, visuals, easy-to-read font and removed language that could be deemed confusing (Nicolaidis et al., 2019). As the research participants were under 18 years old, this required further ethical and risk considerations. Throughout the research, I prioritised confidentiality and gaining informed assent, ensuring that young people clearly understood what they were agreeing to, their right to withdraw at any time, alongside regularly checking in with their understanding, and working closely with their parents (Oates et al., 2021).

Organisational and Systemic Issues

My time on placement has not been without organisational challenges. At my placement, there was an initial lack of understanding of the role of a Trainee Health Psychologist, and the competencies I am required to complete. This resulted in training sessions being cancelled last minute, lack of support conducting interventions, and the research department at my workplace dispersing, resulting in a limited understanding of why I still needed to complete an empirical study. Instead, my workplace prioritised my role conducting autism assessments and did not allocate time to complete my Professional Doctorate competencies. This led me to reflect upon my contract and raise these issues during supervision, which felt disheartening and caused some tension between myself and my placement.

The clinical team also faced many organisational changes during my time on placement, including a high staff turnover alongside new management, processes and practices. My workplace contact also returned to the NHS, and I no longer had their guidance and protection of my training role at my placement. This resulted in increased workload, an understaffed team and challenges maintaining a high-quality of work, leading to staff working overtime and having to prioritise quantity over quality. At times, I needed to juggle my time and delegate work to others, whilst also asserting boundaries regarding increasing workloads whilst trying to implement professional boundaries, prioritising my health and wellbeing (HCPC, 2023).

Despite the changes and demands, I have navigated through these challenges respectfully and utilised supervision with my academic and clinical supervisor to overcome these hurdles, taking their advice on board (Smollan & Pio, 2018). On a positive note, this has been good practice to recognise my capabilities, prioritise my clinical duties and assert myself by ‘speaking up’ when workload is creeping up. Previously, I would have said ‘Yes’ to everything and lead myself to burnout, whereas now I am progressing within my professional competence I am reinforcing necessary boundaries. My clinical supervisor praised me during these challenging times for my “positive and adaptable approach to work, proactive and solution-focussed, modelling professionalism and being supportive to colleagues and management in the midst of some uncomfortable team dynamics at times”. I have also been commended by my academic supervisor for showing a “great amount of resilience”. Overcoming these challenges has helped me to develop in independence and professionalism.

Personal Development as a Health Psychologist

Reflecting upon my journey, I started out with the primary goal of becoming a competent Health Psychologist whilst adjusting to a new placement, new course and a new country. Throughout the doctorate, I have continually learned and grown. My experiences have allowed me to become confident and competent conducting autism assessments, case-leading, deliberating differential diagnoses and providing professional judgements, communicating these clearly as part of a multi-disciplinary team. I believe I am a valuable team member and encompass knowledge and expertise that effectively contributes to diagnostic assessments. I have grown in self-assurance and capability, providing health psychology and autism-related advice to colleagues, children and families. I have absorbed wisdom and knowledge from colleagues and supervisors, as well as children and families.

As I have progressed within my placement, I have been allocated the same level of work as the qualified Psychologists, which I believe reflects trust in my abilities and work ethic. Following qualification, I have the opportunity to continue as a qualified Health Psychologist within the Autism Service, and I look forward to developing and enhancing my knowledge and skill set.

Conclusion

Completing my doctorate journey has been an emotional whirlwind, full of highs and lows. It has provided me with an abundance of skills and learning opportunities, which have shaped me into a competent clinician. The experiences I have gained during this time, both within my placement and externally, have been fundamental to my professional development. I look forward to my next steps as a qualified Health Psychologist and what the future may bring.

References

Berdondini, L., & Elton, T. (2020). Continuing Professional Development (CPD): Professional and ethical considerations. In *The Handbook of Professional, Ethical and Research Practice for Psychologists, Counsellors, Psychotherapists and Psychiatrists* (3rd ed., pp. 261–272). Routledge. https://doi.org/10.4324/9780429428838-21

Boshoff, K., Gibbs, D., Phillips, R. L., Wiles, L., & Porter, L. (2019). A meta-synthesis of how parents of children with autism describe their experience of advocating for their children during the process of diagnosis. *Health & Social Care in the Community*, *27*(4), 143–157. https://doi.org/10.1111/hsc.12691

Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding Ableist Language: Suggestions for Autism Researchers. *Autism in Adulthood*, *3*(1), 18–29. https://doi.org/10.1089/aut.2020.0014

British Psychological Society. (2017). *BPS Practice Guidelines.* https://doi.org/10.53841/bpsrep.2017.inf115

British Psychological Society. (2024). *Supervision Guidance for Psychologists.* https://doi.org/10.53841/bpsrep.2024.rep178.1

Byrne, A. (2020). Ethical and professional issues in community psychology. In *The Handbook of Professional, Ethical and Research Practice for Psychologists, Counsellors, Psychotherapists and Psychiatrists* (3rd ed., pp. 307–319). Routledge. https://doi.org/10.4324/9780429428838-24

Rogers, C. R. (1983). *Freedom to learn for the 80's*. C.E. Merrill Pub. Co.

Cooper, K., Loades, M. E., & Russell, A. J. (2018). Adapting Psychological Therapies for Autism - Therapist Experience, Skills and Confidence. *Research in autism spectrum disorders*, *45*, 43–50. https://doi.org/10.1016/j.rasd.2017.11.002

Courcy, I., & Koniou, I. (2024). A scoping review of the use of photo-elicitation and photovoice with autistic and neurodiverse people. Moving towards more inclusive research? *Disability & Society*, *39*(5), 1317–1338. https://doi.org/10.1080/09687599.2022.2137391

Donaldson, A. L., Krejcha, K., & McMillin, A. (2017). A Strengths-Based Approach to Autism: Neurodiversity and Partnering With the Autism Community. *Perspectives of the ASHA Special Interest Groups*, *2*(1), 56–68. https://doi.org/10.1044/persp2.SIG1.56

Driskell, J. E., Salas, E., & Driskell, T. (2018). Foundations of Teamwork and Collaboration. *The American Psychologist*, *73*(4), 334–348. https://doi.org/10.1037/amp0000241

Forshaw, M. (2022). *Health Psychology in Clinical Practice*. Routledge. https://doi.org/10.4324/9781003120469

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

Hallas, C. N. (2004). Health Psychology Within Health Service Settings. In S. Michie & C. Abraham (Eds.), *Health Psychology in Practice* (pp. 351–371). Blackwell Publishing Ltd. https://doi.org/10.1002/9780470694008.ch18

Harrington, C., Foster, M., Rodger, S., & Ashburner, J. (2014). Engaging young people with Autism Spectrum Disorder in research interviews. *British Journal of Learning Disabilities*, *42*(2), 153–161. https://doi.org/10.1111/bld.12037

Health & Care Professions Council (HCPC). (2023). *Standards of Proficiency: Practitioner Psychologists* https://www.hcpc-uk.org/globalassets/resources/standards/standards-of-proficiency---practitioner-psychologists.pdf

Jegatheesan, B., Fowler, S., & Miller, P. J. (2010). From symptom recognition to services: how South Asian Muslim immigrant families navigate autism. *Disability & Society*, *25*(7), 797–811. https://doi.org/10.1080/09687599.2010.520894

Kolb, D.A. (1984). *Experiential learning: experience as the source of learning and development.* Englewood Cliffs, Prentice-Hall.

Michie, S., Abraham, C., & Johnston, M. (2004). Health Psychology Training: The UK Model. In S. Michie & C. Abraham (Eds.), *Health Psychology in Practice* (pp. 5–45). Blackwell Publishing Ltd. https://doi.org/10.1002/9780470694008.ch2

National Autistic Society and Mind. (2021). *Good practice guide. For professionals delivering talking therapies for autistic adults and children*. https://s2.chorusmk.thirdlight.com/file/24/asDKIN9as.klK7easFDsalAzTC/NAS-Good-Practice-Guide-A4.pdf

National Institute for Health and Care Excellence (NICE). (2021). Autism spectrum disorder in under 19s: Support and management. https://www.nice.org.uk/guidance/cg170/chapter/Recommendations

Nicolaidis, C., Raymaker, D., Kapp, S. K., Baggs, A., Ashkenazy, E., McDonald, K., Weiner, M., Maslak, J., Hunter, M., & Joyce, A. (2019). The AASPIRE practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants. *Autism*, *23*(8), 2007–2019. https://doi.org/10.1177/1362361319830523

Oates, J., Carpenter, D., Fisher, M., Goodson, S., Hannah, B., Kwiatkowski, R., Prutton, K., Reeves, D., & Wainwright, T. (2021). *BPS Code of Human Research Ethics*. British Psychological Society. https://doi.org/10.53841/bpsrep.2021.inf180

Pellicano, E., Dinsmore, A., & Charman, T. (2014). What should autism research focus upon? Community views and priorities from the United Kingdom. *Autism: the international journal of research and practice*, *18*(7), 756–770. https://doi.org/10.1177/1362361314529627

Poulsen, R., Brownlow, C., Lawson, W., & Pellicano, E. (2022). Meaningful research for autistic people? Ask autistics! *Autism: the international journal of research and practice*, *26*(1), 3–5. https://doi.org/10.1177/13623613211064421

Saleebey, D. (2015). Biopsychosocial Understanding. In *Human Behavior and Social Environments* (pp. 92–131). Columbia University Press. https://doi.org/10.7312/sale11280-004

Schön, D. A. (1987). *Educating the reflective practitioner : toward a new design for teaching and learning in the professions.* Jossey-Bass.

Smollan, R., & Pio, E. (2018). Organisational change, identity and coping with stress. *New Zealand Journal of Employment Relations*, *43*(1), 56–82.

Spain, D., Milner, V., Mason, D., Iannelli, H., Attoe, C., Ampegama, R., Kenny, L., Saunders, A., Happé, F., & Marshall-Tate, K. (2023). Improving Cognitive Behaviour Therapy for Autistic Individuals: A Delphi Survey with Practitioners. *Journal of rational-*

emotive and cognitive-behavior therapy: RET, *41*(1), 45–63. https://doi.org/10.1007/s10942-022-00452-4

Suter, E., Arndt, J., Arthur, N., Parboosingh, J., Taylor, E., & Deutschlander, S. (2009). Role understanding and effective communication as core competencies for collaborative practice. *Journal of Interprofessional Care*, *23*(1), 41–51. https://doi.org/10.1080/13561820802338579

Chapter 2

Systematic Reviewing

For Submission to: International Journal of Eating Disorders

How Effective are Parent-Based Interventions for Children and Adolescents with Avoidant/Restrictive Food Intake Disorder (ARFID)? A Systematic Review

Hayley Anderson [a*], Rachel Povey [a], Kim Buckless [a], Richard Cooke [a].

[a] *University of Staffordshire, UK*

* Corresponding author: Hayley Anderson, University of Staffordshire, Health Science and Wellbeing, Leek Road, Stoke on Trent, ST4 2DE, UK.

Keywords

Avoidant/Restrictive Food Intake Disorder, ARFID, parent, training, children, adolescents.

ABSTRACT

Objective: Avoidant/Restrictive Food Intake Disorder (ARFID) is characterised by an individual's restricted food intake in terms of volume, variety or both. This systematic review evaluates the effectiveness and acceptability of parent-based interventions for children and adolescents with ARFID in improving symptomology.

Method: Five databases—EBSCO, PsycARTICLES, PsycINFO, PubMed, Scopus—were searched using key terms. Studies between January 2013 to January 2025 were included if they described training or resources for parents to improve their child's symptomology of ARFID. Overall, eight studies were included and narratively synthesised.

Results: Improvements in ARFID symptomology were reported in all studies. Parent-training interventions demonstrated increased acceptance of new and nonpreferred foods, increased number of foods added to a child's diet, decreases in challenging mealtime behaviours and reductions in ARFID symptomology. Parent-based interventions frequently incorporated behavioural strategies including exposure techniques, differential and contingent reinforcement, and parental strategies including psychoeducation and differential attention. Parents rated interventions as highly acceptable and feasible.

Discussion: This systematic review provides evidence that parent-training interventions can improve ARFID symptomology in children and adolescents. However, the existing evidence base remains limited due to various methodological issues including interventions using small samples, uncontrolled or single-case experimental designs, and failing to collect follow-up data. Future studies should prioritise larger, more diverse samples, incorporate randomised controlled trials and ARFID-validated outcome measures to establish effectiveness of parent-training interventions for ARFID.

Key Points

- Parent-training interventions consistently demonstrate positive outcomes, suggesting a promising treatment option to improve ARFID symptomology in children and adolescents.
- Parents regard parent-training interventions for ARFID as highly acceptable and feasible.
- The evidence base remains limited and of low quality. Further high-quality research is needed to determine the effectiveness and generalisability of parent-training interventions for ARFID.

Background

Avoidant/Restrictive Food Intake Disorder (ARFID) was introduced into the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in 2013 (American Psychiatric Association, 2013) and added to the International Classification of Diseases, eleventh edition (ICD-11) in 2019 (World Health Organisation, 2019). ARFID is characterised by an individual's restricted food intake in terms of volume, variety or both. The DSM-5 identifies three main presentations of ARFID: (1) aversion to sensory characteristics of foods (2) fear of aversive consequences of eating e.g. choking, vomiting and (3) an apparent lack of interest in food, not related to weight or body image concerns. ARFID can present as food refusal and disgust to food aversions, overeating 'safe' foods or undereating, fear of eating or the eating environment (Fisher et al., 2014). It can lead to weight loss, difficulty gaining weight, nutritional deficiencies, dependence on nutritional supplements or enteral feeding and psychosocial problems (Coglan & Otasowie, 2019). ARFID's prevalence is increasing, with estimated rates between 1.5 and 32% in clinical populations, and 0.3 and 15.5% in non-clinical populations (Bourne et al., 2020; Dinkler & Bryant-Waugh, 2021). While ARFID can affect individuals at any point during their lifespan, research suggests for many individuals, onset starts at an early age (Cañas et al., 2021).

ARFID not only affects the individual but adversely affects their parents and caregivers (Chatoor & Begtrup, 2018); research indicates that parents and caregivers experience heightened parental stress (Fishbein et al., 2016; Greer et al., 2008), low self-esteem, social isolation (Blissett et al., 2007), and anxiety and depression (Coulthard & Harris, 2003). This can contribute to tension during parent-child interactions at mealtimes, with parents' efforts to increase their child's food intake inadvertently worsening the child's eating difficulties (Fishbein et al., 2016). Additionally, parents' behaviours such as increasing attention to refusal behaviours or reducing food demands in response to food refusal can contribute to the maintenance of food neophobia and food refusal (Carruth et al., 2004; Mitchell et al., 2013).

Parent-based training, also known as parent-implemented intervention, involves training parents about evidence-based strategies to support their child. Using a variety of techniques, parents learn how to deliver tailored interventions at home (Wong et al., 2015). This is implemented by transferring knowledge from practitioners to parents, with the aim to empower parents to deliver or apply the intervention directly (Bearss, 2019). This approach enables parents to build skills to help them to cope with their child's eating difficulties and has been shown to improve parent-child interactions, enhancing wellbeing for both child and parent, and reducing parental stress (Goodier et al., 2013).

Despite increasing research and clinical awareness of ARFID, there are currently no evidence-based treatment guidelines within the UK to guide care for individuals with ARFID (NICE, 2017), with much of the existing evidence-base restricted to case studies (Willmott et al., 2023). Furthermore, although parent-based interventions have shown promising results in other eating disorders, their application to ARFID remains underexplored (Frogley & Taylor, 2020). This suggests a crucial need for research to support the development of clinical guidelines for healthcare practitioners working with families and children with ARFID. To the authors' knowledge, there are no published reviews investigating the effectiveness of parent-based interventions for children and adolescents with ARFID. This systematic review aims to critically evaluate the effectiveness of parent-based interventions for children and adolescents with Avoidant/Restrictive Food Intake Disorder (ARFID) in improving ARFID symptomology. Secondary aims were to identify what intervention methods or components are associated with successful interventions.

Methods

Registration

The review protocol was pre-registered with the International Prospective Register of Systematic Reviews (PROSPERO), registration number: CRD42025642507.

Eligibility Criteria

Eligibility criteria are presented within Table 1.

[Insert Table 1 about here]

Search Strategy

A comprehensive search was conducted using five electronic databases (PubMed, PsycARTICLES, Scopus, EBSCO and PsycINFO). The search strategy was developed using MeSh terms and refined following consultation with the second and last author. 2013 was set as the start date for the review, as this is when ARFID was first introduced as a formal diagnostic category in the DSM-5. The search was conducted up to 30th January 2025. The full search strategy is available in Supplemental File 1. Authors of articles that were not accessible online were emailed to obtain the full text. Additional relevant studies were identified through backwards and forwards citation searching.

Screening of citations

After removing duplicate papers, the first author screened the titles and abstracts of each citation against the eligibility criteria. Ten percent of the titles and abstracts were then independently screened by the third author. Inter-rater reliability (Cohen's kappa: McHugh, 2012) showed almost perfect agreement (κ = 0.82, 92% agreement). Any differences were resolved through discussion. The first author then undertook full-text screening, with any study deemed ineligible being excluded and the reason noted e.g. the article stated that the clinician worked directly with the child. The third author also conducted blind reviews on ten percent of the full-text reads, noting their reason for inclusion or exclusion. Perfect agreement was reached on all reviewed papers (κ = 1, 100% agreement).

Data Extraction

Information extracted included study characteristics (authors, year of publication, country), study design, sample characteristics (number of parents, disseminator, audience, child's gender/age/ethnicity, ARFID subtype, comorbidities), intervention features (aim, strategies, duration, delivery method), study measures (e.g. number of bites accepted, number of new foods eaten, clinician- and parent-reported measures) and outcomes/follow-up. Data on acceptability/feasibility and attendance/attrition rates were also extracted.

Risk of Bias

Risk of bias was assessed using the Effective Public Health Practice Project (EPHPP) Quality Assessment Tool (Thomas & Ciliska, v. 2010), a tool that enables appraisal of the validity of the study findings and facilitates comparison of methodological quality across studies. The EPHPP assesses various components: selection bias, study design, confounders, blinding, data collection, withdrawals and drop-outs. Each component is rated as strong, moderate or weak before an overall global rating is calculated. The first author provided risk of bias judgements for all studies, and the second author independently assessed ten percent. Inter-rater reliability demonstrated perfect agreement (κ = 1, 100% agreement).

Synthesis of Results

Studies were synthesised to identify key features of the interventions alongside evaluating their effectiveness in improving ARFID symptomology in children and adolescents. Due to the heterogeneity between studies within intervention methods and outcomes, it was decided that meta-analysis, was not appropriate for this review. Therefore, a narrative synthesis is presented analysing the findings (Popay et al., 2006).

Results

Study Selection

The PRISMA flowchart (Figure 1) provides an overview of the study selection process and reasons for article exclusion. Database searches identified 636 results with an additional two papers identified through citation and reference list searches. After removing duplicates, 358 papers remained. Of these, 316 were excluded based on title and abstract screening, leaving 42 full-text articles for review. A further 34 articles were excluded for the following reasons: duplicate studies (*k* = 2), non-English full-texts (*k* = 2), study protocols (*k* = 2), clinician working directly with the child (*k* = 15), no parent-training component (*k* = 3), outcomes not reported for the ARFID subgroup (*k* = 2), ARFID not specified (*k* = 3), qualitative outcomes reported (*k* = 2), no intervention conducted (*k* = 1), reliance on supplementary feeding (*k* = 1) and no pre-post measure of symptomology/eating behaviours reported (*k* = 1). See Supplemental File 2 for references and rationale of excluded articles. A total of eight studies met all inclusion criteria.

[Insert Figure 1 about here]

Study Characteristics

Eight studies were included in the review. Most were conducted in the United States of America (*k* = 6), with one study each from France and Indonesia. Studies typically included small sample sizes, ranging from 1 to 30 participants, with a total of 111 participants across all studies (this includes 3 single-participant studies and two studies including a control group). Six of the interventions delivered to mostly mothers. Children ranged in age from 1 to 14 years and were mostly male (approximately 76%). Ethnicity was reported in six studies, with approximately 95% of children identified as White. Seven studies included children exhibiting the sensory sensitivity ARFID subtype. Comorbid conditions were reported in four studies, most commonly anxiety disorders (*k* = 3), and neurodevelopmental conditions such as autism and ADHD (*k* = 4). Most interventions were therapist-led (*k* = 5), with one study delivered by a multi-disciplinary team (Carletti et al., 2024). Three interventions were delivered remotely via videocall, whilst four were delivered in-person in clinical settings. One study allowed participants to choose between taking part in-person or online (Shimshoni et al., 2020). Intervention duration ranged from two to 18 sessions, with some interventions lasting six months (Dahlsgaard & Bodie, 2019; Murphy & Zlomke, 2016). Study and sample characteristics are displayed in Table 2.

[Insert Table 2 about here]

Parent-training Techniques

Intervention techniques and strategies were taught to parents then delivered by parents. In some studies, this was under the therapist's direct guidance with the child present (Bloomfield et al., 2019; Bloomfield et al., 2021; Murphy & Zlomke, 2016). In others, the child was not present, and parents were taught by the therapist and then asked to apply the techniques outside of sessions (Breiner et al., 2024; Carletti et al., 2024; Dahlsgaard & Bodie, 2019; Prasetyo et al., 2021; Shimshoni et al., 2020). Intervention descriptions and outcomes are displayed in Table 3.

[Insert Table 3 about here]

Interventions usually incorporated multiple evidence-based techniques. Table 4 provides a description of the strategies used across studies and the number of studies implementing each method. Behavioural techniques commonly used were exposure to non-preferred foods (*k* = 7), psychoeducation (*k* = 6) and operant conditioning methods (*k* = 6), which included differential reinforcement of alternative behaviours (DRA) (*k* = 4), and contingency reinforcement (*k* = 4).

Four studies (Breiner et al., 2024; Carletti et al., 2024; Dahlsgaard & Bodie, 2019; Shimshoni et al., 2020) used structured training manuals that combined psychoeducation with a variety of parent-based training methods (e.g. modelling, role-play). Other studies incorporated didactic instruction (*k* = 3), differential attention techniques (*k* = 5) and in-vivo performance feedback (*k* = 3). Two studies prioritised group support and sharing (Carletti et al., 2024; Dahlsgaard & Bodie, 2019). Only one study examined family accommodation behaviours and attitudes (Shimshoni et al., 2020).

[Insert Table 4 about here]

Outcomes

Only two studies included a control group (Breiner et al., 2024; Prasetyo et al., 2021). All studies reported that interventions were associated with improvements in children's ARFID symptomology, although there was heterogeneity in how outcomes were measured: the most common outcome measures were parent- and clinician-report questionnaires assessing food acceptance and mealtime behaviours (*k* = 7). Two studies used clinician-reported measures (Carletti et al., 2024; Shimshoni et al., 2020), whilst six used parent-reported measures, five of which included validated scales (Bloomfield et al., 2019; Breiner et al., 2024; Dahlsgaard & Bodie, 2019; Murphy & Zlomke, 2016; Shimshoni et al., 2020) and the other, an author-created measure (Prasetyo et al., 2021). Three studies (Bloomfield et al. 2019; Bloomfield et al., 2021; Murphy & Zlomke, 2016) measured bite acceptance, demonstrating increased consumption of non-preferred foods, ranging from five to 30 foods over 11 to 18 sessions. Three studies reported the number of new foods consumed pre-post intervention using food diaries (Breiner et al., 2024; Murphy & Zlomke, 2016; Shimshoni et al., 2020), with results ranging from 0 to 28 novel foods added to a child's diet. Three studies included follow-up assessments, ranging from 1- to 6-months (Bloomfield et al., 2019; Breiner et al., 2024; Dahlsgaard & Bodie, 2019) all indicating consistent and long-lasting improvements for children's ARFID symptomology.

Effect sizes were reported in three studies (Breiner et al., 2024; Dahlsgaard & Bodie., 2019; Shimshoni et al., 2020). Effect sizes were calculated using Cohen's *d* (Breiner et al., 2024; Dahlsgaard & Bodie., 2019) and Hedge's *g* (Shimshoni, 2020), and ranged from 0.47-2.52, indicating medium to large effect sizes (Cohen, 1992; Hedges, 1981), suggesting significant improvement in children's ARFID symptomology following intervention. Both Dahlsgaard and Bodie (2019) and Shimshoni and colleagues (2020) presented within-group changes, with moderate to large effect sizes, whilst Breiner and colleagues (2024) reported between-group changes with similar effects. Effect sizes were not reported across other studies (Bloomfield et al., 2019; Bloomfield et al., 2021; Carletti et al., 2024; Murphy & Zlomke, 2016; Prasetyo et al., 2021). However, based on author-reported outcomes, parent-training interventions were associated with increased consumption of non-preferred foods (Bloomfield et al., 2019; Bloomfield et al., 2021; Murphy & Zlomke, 2016), increases in novel foods added to the child's diet (Breiner et al., 2024; Shimshoni et al., 2020), decreases in ARFID symptomology (Carletti et al., 2024; Murphy & Zlomke, 2016; Prasetyo et al., 2021), decreases in challenging mealtime behaviours (Bloomfield et al., 2019; Dahlsgaard & Bodie, 2019; Murphy & Zlomke, 2016), as well as reports that several children no longer met criteria for an ARFID diagnosis following intervention (Murphy & Zlomke, 2016; Shimshoni et al., 2020).

Acceptability

The acceptability and/or feasibility of the parent-based intervention was formally assessed in five studies using parent-reported outcome measures (Bloomfield et al., 2019; Carletti et al., 2024; Dahlsgaard & Bodie, 2019; Murphy & Zlomke, 2016; Shimshoni et al., 2020). An additional two studies provided informal qualitative feedback (Bloomfield et al., 2021; Murphy & Zlomke, 2016). See Table 5 for details of acceptability and/or feasibility and attendance/attrition rates. Formal assessment of acceptability varied, with studies employing a range of validated tools to measure acceptability ($k = 1$), perceived effectiveness ($k = 3$) and parental/caregiver satisfaction ($k = 4$). One study also evaluated the acceptability of the technology used to deliver the intervention remotely (Bloomfield et al., 2019). Overall, parents rated the interventions as highly acceptable and reported good satisfaction, noting improvements in their child's eating behaviours and alignment with family goals. However, adherence to exposure practices between sessions was mixed. Two studies reported parents did not complete between-session exposures as intended (Bloomfield et al., 2019; Breiner et al., 2024), whereas three studies described frequent implementation of exposure practices, with some parents exceeding the frequency expectations (Dahlsgaard & Bodie, 2019; Bloomfield et al., 2021; Murphy & Zlomke, 2016).

One study (Breiner et al., 2024) reported parent feedback indicating the intervention was not suitable for their family, as the child's motivation to try new foods reduced due to the use of large rewards during the beginning of treatment. A single study (Dahlsgaard & Bodie, 2019) provided feedback regarding specific intervention components, reporting that group support, alongside techniques such as exposure and contingency reinforcement were perceived as the most beneficial aspects. One study (Shimshoni et al., 2020) also assessed acceptability from the child's perspective, with children rating the intervention highly satisfactory. Regarding attendance and attrition, four of the five multi-participant studies reported attendance rates, which were consistently high. Additionally, across these studies, pre-post data were available for 108 of the 118 parents initially recruited, indicating an average attrition rate of 8.5% (ranging from 0% to 16%). The findings indicate low attrition and strong engagement across parent-training interventions.

[Insert Table 5 about here]

Risk of Bias

Table 6 outlines risk of bias judgements using the EPHPP tool. Selection bias across studies ranged from moderate to weak. Similarly, study design ranged from moderate to weak, with only one study (Breiner et al., 2024) using a randomised controlled trial design, achieving a strong rating. Confounders were generally not considered, resulting in weak ratings for the majority of studies, although some authors did acknowledge that they had not assessed for these (Carletti et al., 2024). Data collection methods tended to be rated strong, with five studies using validated outcome-measures. Blinding of assessors and/or participants was not applied in the included studies, and consequently all papers were initially rated as weak for this criterion, which lowered their global ratings. For this review, blinding was generally considered as impractical or unethical, and the weak ratings lowered potential higher-quality studies. This has been addressed in similar reviews (Chawner et al., 2019; Marshall et al., 2015), therefore an adjustment was made to classify blinding as non-applicable, and global quality ratings were recalculated. No studies received an overall strong global rating. Six studies received an overall weak global rating (Bloomfield et al., 2019; Bloomfield et al., 2021; Breiner et al., 2024; Carletti et al., 2024; Murphy & Zlomke, 2016; Prasetyo et al., 2021). Two studies (Dahlsgaard & Bodie, 2019; Shimshoni et al., 2020) received an overall moderate global rating.

[Insert Table 6 about here]

Discussion

The primary aim of this systematic review was to evaluate the effectiveness of parent-based interventions for children and adolescents with ARFID, with effectiveness defined as an improvement in ARFID symptomology. The secondary aims were to identify what intervention methods or components are associated with successful interventions. The review highlighted a small yet rising number of studies involving parent-led interventions for ARFID. To our knowledge, this is the first review to focus on this topic, providing a synthesis of the available interventions to guide clinical practice in the absence of formal guidelines.

The review provides promising evidence that parent-training interventions can improve ARFID symptomology in children and adolescents, demonstrating increased acceptance of new and nonpreferred foods, increases in the number of foods added to a child's diet, decreases in challenging mealtime behaviours and reductions in ARFID symptoms. These successful outcomes were consistent across heterogeneous study designs (single-case designs, cohort studies, quasi-experimental design and one randomised controlled trial) and across varied delivery methods (in-person, online, individual and group-based), suggesting good adaptability and potential scalability of parent-based training for ARFID.

Across all eight studies, interventions most frequently incorporated behavioural strategies such as food exposure, differential and contingent reinforcement, and parent-training strategies. Previous feeding interventions have similarly found that operant conditioning techniques such as differential and contingent reinforcement produce the greatest results (Kodak & Piazza, 2008; Sharp et al., 2010; Marshall et al., 2015). Differential reinforcement strategies have additionally been reported as the preferred and most acceptable technique by parents (Vazquez et al., 2019). These 'reward' strategies can enhance motivation for children, as parents easily integrate these techniques into mealtimes (Cooke et al., 2011). Behavioural exposure is also a well-established strategy for improving children's eating behaviours (Chawner et al., 2019; Akyurek & Koca Senturk, 2025). Previous research demonstrates that children require repeated exposures, often around 15 presentations of a novel food, before that food can be trusted and tasted, and a further 10-15 tastes before the food becomes enjoyable (Wardle et al., 2005). Parents therefore play a crucial role, by repeatedly offering rejected foods and modelling consumption, they help transform unfamiliar foods into familiar ones (Mitchell et al., 2013). However, many parents stop offering these foods after only a few attempts if the child demonstrates refusal (Aldridge et al., 2009). Coercive feeding practices can additionally inadvertently exacerbate food neophobia and avoidance (Savage et al., 2007; Powell et al., 2011). Parent-training interventions can support and equip parents to adopt more adaptive strategies and better understand the developmental and behavioural processes underlying ARFID (LaMarre et al., 2023; Langley et al, 2018).

Working directly with parents is also supported by the broader feeding disorder literature, which highlights that caregivers' behaviours, attitudes and accommodations can maintain or reduce symptoms (Wagner et al., 2020). Parental accommodation such as preparing and serving only preferred foods, and limiting exposure to feared foods, can reinforce food avoidance and maintain disordered eating patterns (Wagner et al., 2020). Alongside this, many parents of children with ARFID experience guilt, stigma and self-blame that their child eats a restricted number of foods and presents avoidance of nonpreferred foods (Wufong et al., 2019). Parent-based interventions can help to alleviate feelings of shame whilst encouraging empathetic and supportive responses to support their child with feeding difficulties (Stillar et al., 2016).

Clinical Implications

The findings in the review suggest that parents can be successfully trained to use evidence-based behavioural strategies at home, which may reduce barriers accessing specialist services and reduce lengthy waitlist times (Fisher et al., 2014). Remote delivery also enables wider dissemination to parents, which could be beneficial given the limited number of clinicians specialising in ARFID-specific treatments (Bryant-Waugh et al., 2021). Group-based delivery may also be worthwhile for both parents and clinicians; parents value group dynamics that can facilitate peer support, sharing of experiences and problem-solving, as group delivery has been previously demonstrated to reduce self-blame (Mitchell et al., 2013) and promote acceptance and understanding (Frogley & Taylor, 2020). Group delivery also allows clinicians to reach multiple families simultaneously, offering a cost-effective approach.

The parents within the included studies also reported high acceptability and feasibility of the interventions. These insights are useful to design and facilitate future parent-based interventions, as engagement with an intervention is crucial for effective outcomes, and must align with family values. However, adherence of intervention techniques outside of sessions was mixed across studies, highlighting that families may require additional strategies and support between sessions. Bloomfield and colleagues (2019) suggest incorporating reminders, such as check-ins via text message or email, to improve adherence and maintain participant motivation.

Strengths and Limitations

This review presents a novel and comprehensive evaluation of the growing literature concerning parent-based interventions for children and adolescents with Avoidant/Restrictive Food Intake Disorder (ARFID). Key strengths of the review include a transparent and systematic search strategy across multiple databases, with a broad inclusion criterion to maximise identification of relevant studies. However, the limitations of the review are notable. The available evidence is primarily reliant on single-case and controlled designs, with reporting of effect sizes inconsistent across studies. Additionally, sample sizes were small and lacking demographic diversity (participants were mainly mothers and their children predominantly White). Studies also used multiple parent-training techniques within interventions, therefore the effectiveness of individual methods remain ambiguous.

The limitations of studies included within the review are also considerable. Several studies lacked follow-up data, making long term effectiveness of interventions unclear. Additionally, outcome measures were heterogeneous, and not all were validated for ARFID, making generalisability of intervention effectiveness challenging. Overall, quality of the research was generally weak, and studies demonstrated poor reporting of confounders; despite some studies acknowledging these, they did not control for them.

Recommendations for Future Research

Future studies should prioritise larger, more diverse samples and incorporate randomised controlled trials. Standardised outcome measures, specifically ARFID-validated tools would be valuable to successfully compare interventions and allow for more conclusive results (Cooke, 2020). Long-term follow-ups beyond six months would also be beneficial to determine whether parent-training interventions can produce long-lasting results. Additionally, future studies should consider how factors such as neurodiversity, comorbidities, age and socioeconomic status influence the effectiveness of interventions to improve ARFID symptomology.

Additional investigation is also needed to clarify which components of parent-based interventions are essential for success, and which are optional. By exploring individual intervention components such as food exposure, differential or contingent reinforcement, psychoeducation, differential attention and reduced family accommodation, researchers can better determine the effectiveness and impact of each component.

Conclusion

Overall, this review provides preliminary but promising evidence that parent-training interventions can improve ARFID symptomology in children and adolescents. Parent-training appears feasible and acceptable to families and is associated with increased acceptance of new and nonpreferred foods, increases in number of foods added to a child's diet, decreases in challenging mealtime behaviours and reductions in ARFID symptomology. However, the evidence base remains limited and generally consists of low-quality studies using small samples, uncontrolled or single-case experimental designs. High-quality research using larger, more diverse samples, standardised ARFID-validated outcome measures and long-term follow-ups is crucial to establish effectiveness of parent-training interventions for children and adolescents with ARFID.

References

Akyurek, G., & Koca Senturk, R. B. (2025). Current therapeutic and educational interventions for feeding problems in early childhood: A systematic review. *Appetite*, *216*, Article 108271. https://doi.org/10.1016/j.appet.2025.108271

Albano, A. M., & Silverman, W. K. (2020). *The Anxiety Disorders Interview Schedule for DSM-5 (child and parent versions)*. New York, NY: Oxford University Press.

Aldridge, V., Dovey, T. M., & Halford, J. C. G. (2009). The role of familiarity in dietary development. *Developmental Review*, *29*(1), 32–44. https://doi.org/10.1016/j.dr.2008.11.001

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition. Arlington, VA: American Psychiatric Association.

Bearss, K. (2019). History and theoretical foundations of parent training. In C. R. Johnson, E. M. Butter, & L. Scahill (Eds.), *Parent training for autism spectrum disorder: Improving the quality of life for children and their families* (pp. 11–37). American Psychological Association. https://doi.org/10.1037/0000111-002

Berlin, K. S., Davies, W. H., Silverman, A. H., Woods, D. W., Fischer, E. A., & Rudolph, C. D. (2010). Assessing Children's Mealtime Problems with the Mealtime Behavior Questionnaire. *Children's Health Care*, *39*(2), 142–156. https://doi.org/10.1080/02739611003679956

Blissett, J., Meyer, C., & Haycraft, E. (2007). Maternal mental health and child feeding problems in a non-clinical group. *Eating Behaviors: An International Journal*, *8*(3), 311–318. https://doi.org/10.1016/j.eatbeh.2006.11.007

Bloomfield, B. S., Fischer, A. J., Clark, R. R., & Dove, M. (2019). Treatment of Food Selectivity in a Child with Avoidant/Restrictive Food Intake Disorder Through Parent Teleconsultation. *Behavior Analysis in Practice*, *12*(1), 33–43. https://doi.org/10.1007/s40617-018-0251-y

Bloomfield, B. S., Fischer, A. J., Dove, M., Clark, R. R., & Fife, M. (2021). Parent Teleconsultation to Increase Bites Consumed: A Demonstration Across Foods for a

Child With ARFID and ASD. *Behavior Analysis in Practice*, *14*(4), 913–926. https://doi.org/10.1007/s40617-021-00586-4

Bourne, L., Bryant-Waugh, R., Cook, J., & Mandy, W. (2020). Avoidant/restrictive food intake disorder: A systematic scoping review of the current literature. *Psychiatry Research*, *288*, Article 112961. https://doi.org/10.1016/j.psychres.2020.112961

Breiner, C. E., Miller, M. L., & Hormes, J. M. (2024). ARFID Parent Training Protocol ("ARFID-PTP"): Results of a Randomized Pilot Trial Evaluating a Brief, Parent-Training Program for Avoidant/Restrictive Food Intake Disorder. *The International Journal of Eating Disorders*, *57*(11), 2306–2317. https://doi.org/10.1002/eat.24269

Bryant-Waugh, R., Loomes, R., Munuve, A., & Rhind, C. (2021). Towards an evidence-based out-patient care pathway for children and young people with avoidant restrictive food intake disorder. *Journal of Behavioral and Cognitive Therapy*, *31*(1), 15–26. https://doi.org/10.1016/j.jbct.2020.11.001

Bryant-Waugh, R., Stern, C. M., Dreier, M. J., Micali, N., Cooke, L., Kuhnle, M. C., Murry, H. B., Wang, S. V., Breithaupt, L., Becker, K. R., Misra, M., Lawson, E. A., Eddy, K. T., & Thomas, J. J. (2022). Preliminary validation of the pica, ARFID and ruminations disorder interview ARFID questionnaire (PARDI-AR-Q). *Journal of Eating Disorders, 10(1).* https://doi.org/10.1186/s40337-022-00706-7

Cañas, L., Palma, C., Molano, A. M., Domene, L., Carulla-Roig, M., Cecilia-Costa, R., Dolz, M., & Serrano-Troncoso, E. (2021). Avoidant/restrictive food intake disorder: Psychopathological similarities and differences in comparison to anorexia nervosa and the general population. *European Eating Disorders Review*, *29*(2), 245–256. https://doi.org/10.1002/erv.2815

Carletti, L., Porte, C., Helbert, S., Hooreman, M., Charpentier, F., Delorme, R., & Ayrolles, A. (2024). *Training group for parents of patients with pediatric avoidant/restricted food intake disorder sensory-based avoidance: feasibility and acceptability.* Research Square. https://doi.org/10.21203/rs.3.rs-4719121/v1

Carruth, B. R., Ziegler, P. J., Gordon, A., & Barr, S. I. (2004). Prevalence of picky eaters among infants and toddlers and their caregivers' decisions about offering a new food. *Journal of the American Dietetic Association*, *104*(1), 57–64. https://doi.org/10.1016/j.jada.2003.10.024

Chatoor, I., & Begtrup, R. (2018). Chapter 6 - Evolution From Feeding Disorders to Avoidant/Restrictive Food Intake Disorder. In *Complex Disorders in Pediatric Psychiatry* (pp. 63–76). Elsevier Inc. https://doi.org/10.1016/B978-0-323-51147-6.00006-5

Chawner, L. R., Blundell-Birtill, P., & Hetherington, M. M. (2019). Interventions for Increasing Acceptance of New Foods Among Children and Adults with Developmental Disorders: A Systematic Review. *Journal of Autism and Developmental Disorders*, *49*(9), 3504–3525. https://doi.org/10.1007/s10803-019-04075-0

Chin, W. W., Johnson, N., & Schwarz, A. (2008). A Fast Form Approach to Measuring Technology Acceptance and Other Constructs. *MIS Quarterly*, *32*(4), 687–703. https://doi.org/10.2307/25148867

Coglan, L., & Otasowie, J. (2019). Avoidant/restrictive food intake disorder: what do we know so far? *BJPsych Advances*, *25*(2), 90–98. https://doi.org/10.1192/bja.2018.48

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

Cooke, L. (2020). Baseline and outcome measures. In R. Bryant-Waugh & C. Higgins (Eds.), *Avoidant restrictive food intake disorder in childhood and adolescence: A clinical guide* (pp. 68–86). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429274862-6

Cooke, L. J., Chambers, L. C., Añez, E. V., & Wardle, J. (2011). Facilitating or undermining? The effect of reward on food acceptance. A narrative review. *Appetite*, *57*(2), 493–497. https://doi.org/10.1016/j.appet.2011.06.016

Coulthard, H., & Harris, G. (2003). Early food refusal: The role of maternal mood. *Journal of Reproductive and Infant Psychology*, *21*(4), 335–345. https://doi.org/10.1080/02646830310001622097

Crist, W., & Napier-Phillips, A. (2001). Mealtime Behaviors of Young Children: A Comparison of Normative and Clinical Data. *Journal of Developmental & Behavioral Pediatrics*, *22*(5), 279–286. https://doi.org/10.1097/00004703-200110000-00001

Dahlsgaard, K. K., & Bodie, J. (2019). The (Extremely) Picky Eaters Clinic: A Pilot Trial of a Seven-Session Group Behavioral Intervention for Parents of Children With Avoidant/Restrictive Food Intake Disorder. *Cognitive and Behavioral Practice*, *26*(3), 492–505. https://doi.org/10.1016/j.cbpra.2018.11.001

Davison, G. C. (1968). Systematic desensitization as a counterconditioning process. *Journal of Abnormal Psychology, 73*(2), 91–99. https://doi.org/10.1037/h0025501

Devilly, G. J., & Borkovec, T. D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of behavior therapy and experimental psychiatry*, *31*(2), 73–86. https://doi.org/10.1016/s0005-7916(00)00012-4

Dinkler, L., & Bryant-Waugh, R. (2021). Assessment of avoidant restrictive food intake disorder, pica and rumination disorder: interview and questionnaire measures. *Current opinion in psychiatry*, *34*(6), 532–542. https://doi.org/10.1097/YCO.0000000000000736

Elliott, S. N., & Treuting, M. V. B. (1991). The behavior intervention rating scale: Development and validation of a pretreatment acceptability and effectiveness measure. *Journal of School Psychology*, *29*(1), 43–51. https://doi.org/10.1016/0022-4405(91)90014-I

Fishbein, M., Benton, K., & Struthers, W. (2016). Mealtime Disruption and Caregiver Stress in Referrals to an Outpatient Feeding Clinic. *JPEN. Journal of parenteral and enteral nutrition*, *40*(5), 636–645. https://doi.org/10.1177/0148607114543832

Fisher, M. M., Rosen, D. S., Ornstein, R. M., Mammel, K. A., Katzman, D. K., Rome, E. S., Callahan, S. T., Malizio, J., Kearney, S., & Walsh, B. T. (2014). Characteristics of Avoidant/Restrictive Food Intake Disorder in Children and Adolescents: A "New Disorder" in DSM-5. *Journal of Adolescent Health*, *55*(1), 49–52. https://doi.org/10.1016/j.jadohealth.2013.11.013

Frogley, C., & Taylor, K. (2020). Group interventions. In *Avoidant Restrictive Food Intake Disorder in Childhood and Adolescence* (1st ed., pp. 196–211). Routledge. https://doi.org/10.4324/9780429274862-16

Goodier, G., McCormack, J., Egan, S., Watson, H., Hoiles, K., Todd, G., & Treasure, J. (2014). *Parent Skills Training Treatment for Parents of Children and Adolescents with Eating Disorders: A Qualitative Study*. https://doi.org/10.1002/eat.22224

Greer, A. J., Gulotta, C. S., Masler, E. A., & Laud, R. B. (2008). Caregiver Stress and Outcomes of Children with Pediatric Feeding Disorders Treated in an Intensive Interdisciplinary Program. *Journal of Pediatric Psychology*, *33*(6), 612–620. https://doi.org/10.1093/jpepsy/jsm116

Guy W. (1976). ECDEU Assessment Manual for Psychopharmacology. *US Department of Health, and Welfare*, 534–537.

Hedges, L. V. (1981). Distribution Theory for Glass's Estimator of Effect Size and Related Estimators. *Journal of Educational Statistics*, *6*(2), 107–128. https://doi.org/10.2307/1164588

Hendy, H. M., & Raudenbush, B. (2000). Effectiveness of teacher modeling to encourage food acceptance in preschool children. *Appetite*, *34*(1), 61–76. https://doi.org/10.1006/appe.1999.0286

Hendy, H. M., Seiverling, L., Lukens, C. T., & Williams, K. E. (2013). Brief Assessment of Mealtime Behavior in Children: Psychometrics and Association with Child Characteristics and Parent Responses. *Children's Health Care*, *42*(1), 1–14. https://doi.org/10.1080/02739615.2013.753799

Kapp, C., Perlini, T., Baggio, S., Stephan, P., Urrego, A. R., Rengade, C.-E., Macias, M., Hainard, N., & Halfon, O. (2014). Psychometric properties of the Consumer Satisfaction Questionnaire (CSQ-8) and the Helping Alliance Questionnaire (HAQ). *Santé publique (Vandoeuvre-lès-Nancy, France)*, *26*(3), 337–344.

Kinder, D., & Carnine, D. (1991). Direct Instruction: What It Is and What It Is Becoming. *Journal of Behavioral Education*, *1*(2), 193–213. https://doi.org/10.1007/BF00957004

Kodak, T., & Piazza, C. C. (2008). Assessment and Behavioral Treatment of Feeding and Sleeping Disorders in Children with Autism Spectrum Disorders. *Child and Adolescent Psychiatric Clinics of North America*, *17*(4), 887–905. https://doi.org/10.1016/j.chc.2008.06.005

LaMarre, A., McGuigan, K. A., & Lewthwaite, M. (2023). Listening, learning, caring: exploring assemblages of, ethics of and pathways to care for avoidant restrictive food intake disorder (ARFID). *Medical Humanities*, *49*(4), 631–640. https://doi.org/10.1136/medhum-2022-012553

Langley, J. (2018). *Caring for a Loved One with an Eating Disorder: The New Maudsley Skills-Based Training Manual* (G. Todd & J. Treasure, Eds.; 1st ed., Vol. 1). Routledge. https://doi.org/10.4324/9781351232593

Larsen, D. L., Attkisson, C. C., Hargreaves, W. A., & Nguyen, T. D. (1979). Assessment of client/patient satisfaction: development of a general scale. *Evaluation and program planning*, *2*(3), 197–207. https://doi.org/10.1016/0149-7189(79)90094-6

Lebowitz, E. R. (2013). Parent-based treatment for childhood and adolescent OCD. *Journal of Obsessive-Compulsive and Related Disorders*, *2*(4), 425–431. https://doi.org/10.1016/j.jocrd.2013.08.004

Lebowitz, E. R., Scharfstein, L., & Jones, J. (2015). Child-Report of Family Accommodation in Pediatric Anxiety Disorders: Comparison and Integration with Mother-Report. *Child Psychiatry and Human Development*, *46*(4), 501–511. https://doi.org/10.1007/s10578-014-0491-1

Marshall, J., Ware, R., Ziviani, J., Hill, R. J., & Dodrill, P. (2015). Efficacy of interventions to improve feeding difficulties in children with autism spectrum disorders: a systematic review and meta-analysis. *Child: Care, Health & Development*, *41*(2), 278–302. https://doi.org/10.1111/cch.12157

McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia Medica*, *22*(3), 276–282. https://doi.org/10.11613/BM.2012.031

Michie, S., Richardson, M., Johnston, M., Abraham, C., Francis, J., Hardeman, W., Eccles, M. P., Cane, J., & Wood, C. E. (2013). The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: building an international consensus for the reporting of behavior change interventions. *Annals of behavioral medicine: a publication of the Society of Behavioral Medicine*, *46*(1), 81–95. https://doi.org/10.1007/s12160-013-9486-6

Mitchell, G. L., Farrow, C., Haycraft, E., & Meyer, C. (2013). Parental influences on children's eating behaviour and characteristics of successful parent-focussed interventions. *Appetite*, *60*(1), 85–94. https://doi.org/10.1016/j.appet.2012.09.014

Murphy, J., & Zlomke, K. R. (2016). A Behavioral Parent-Training Intervention for a Child With Avoidant/Restrictive Food Intake Disorder. *Clinical Practice in Pediatric Psychology*, *4*(1), 23–34. https://doi.org/10.1037/cpp0000128

National Institute for Health and Care Excellence (2017) Eating disorders: recognition and treatment. Available at: https://www.nice.org.uk/guidance/ng69/resources/eating-disorders-recognition-and-treatment-pdf-1837582159813

Piazza, C. C., Moes, D. R., & Fisher, W. W. (1996). Differential reinforcement of alternative behavior and demand fading in the treatment of escape-maintained destructive behavior. *Journal of Applied Behavior Analysis*, 29(4), 569–572.

Popay, J., Roberts, H. M., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., & Britten, N. (2006). *Guidance on the conduct of narrative synthesis in sytematic reviews*. Institute for Health Research.

Powell, F. C., Farrow, C. V., & Meyer, C. (2011). Food avoidance in children. The influence of maternal feeding practices and behaviours. *Appetite*, *57*(3), 683–692. https://doi.org/10.1016/j.appet.2011.08.011

Prasetyo, Y. B., Dewi, Y. S., Arifin, H., & Kamel, A. D. (2021). The Effect of Learning Module Program on Mothers' Ability to Adapt to New Foods, Feeding Styles, and Self-efficacy to Their Children with Avoidant Restrictive Food Intake Disorder. *Open Access Macedonian Journal of Medical Sciences*, *9*(E), 485–491. https://doi.org/10.3889/oamjms.2021.6204

Roberts, M. W., Hatzenbuehler, L. C., & Bean, A. W. (1981). The effects of differential attention and time out on child noncompliance. *Behavior Therapy*, *12*(1), 93–99. https://doi.org/10.1016/S0005-7894(81)80109-8

Savage, J. S., Fisher, J. O., & Birch, L. L. (2007). Parental Influence on Eating Behavior: Conception to Adolescence. *Journal of Law, Medicine & Ethics*, 35(1), 22–34.

Sharp, W. G., Jaquess, D. L., Morton, J. F., & Herzinger, C. V. (2010). Pediatric Feeding Disorders: A Quantitative Synthesis of Treatment Outcomes. *Clinical Child and Family Psychology Review*, *13*(4), 348–365. https://doi.org/10.1007/s10567-010-0079-7

Shimshoni, Y., Silverman, W. K., & Lebowitz, E. R. (2020). SPACE-ARFID: A pilot trial of a novel parent-based treatment for avoidant/restrictive food intake disorder. *The International Journal of Eating Disorders*, *53*(10), 1623–1635. https://doi.org/10.1002/eat.23341

Stillar, A., Strahan, E., Nash, P., Files, N., Scarborough, J., Mayman, S., Henderson, K., Gusella, J., Connors, L., Orr, E. S., Marchand, P., Dolhanty, J., & Lafrance Robinson, A. (2016). The influence of carer fear and self-blame when supporting a loved one with an eating disorder. *Eating Disorders*, *24*(2), 173–185. https://doi.org/10.1080/10640266.2015.1133210

Thomas, B. H., Ciliska, D., Dobbins, M., & Micucci, S. (2004). A Process for Systematically Reviewing the Literature: Providing the Research Evidence for Public Health Nursing Interventions. *Worldviews on Evidence-Based Nursing*, *1*(3), 176–184. https://doi.org/10.1111/j.1524-475X.2004.04006.x

Vazquez, M., Fryling, M. J., & Hernández, A. (2019). Assessment of Parental Acceptability and Preference for Behavioral Interventions for Feeding Problems. *Behavior Modification*, *43*(2), 273–287. https://doi.org/10.1177/0145445517751435

Wagner, A. F., Zickgraf, H. F., & Lane-Loney, S. (2020). Caregiver accommodation in adolescents with avoidant/restrictive food intake disorder and anorexia nervosa: Relationships with distress, eating disorder psychopathology, and symptom change. *European Eating Disorders Review*, *28*(6), 657–670. https://doi.org/10.1002/erv.2786

Wardle, J., Carnell, S., & Cooke, L. (2005). Parental control over feeding and children's fruit and vegetable intake: How are they related? *Journal of the American Dietetic Association*, *105*(2), 227–232. https://doi.org/10.1016/j.jada.2004.11.006

Wardle, J., Guthrie, C. A., Sanderson, S., & Rapoport, L. (2001). Development of the Children's Eating Behaviour Questionnaire. *Journal of Child Psychology and Psychiatry*, *42*(7), 963–970. https://doi.org/10.1111/1469-7610.00792

Wilder, D. A., & Atwell, J. (2006). Evaluation of a guided compliance procedure to reduce noncompliance among preschool children. *Behavioral Interventions*, *21*(4), 265–272. https://doi.org/10.1002/bin.222

Willmott, E., Dickinson, R., Hall, C., Sadikovic, K., Wadhera, E., Micali, N., Trompeter, N., & Jewell, T. (2024). A scoping review of psychological interventions and outcomes for avoidant and restrictive food intake disorder (ARFID). *The International Journal of Eating Disorders*, *57*(1), 27–61. https://doi.org/10.1002/eat.24073

Wong, C., Odom, S. L., Hume, K. A., Cox, A. W., Fettig, A., Kucharczyk, S., Brock, M. E., Plavnick, J. B., Fleury, V. P., & Schultz, T. R. (2015). Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder: A Comprehensive Review. *Journal of autism and developmental disorders*, *45*(7), 1951–1966. https://doi.org/10.1007/s10803-014-2351-z

World Health Organization. (2019). *International statistical classification of diseases and related health problems* (11th ed.).

Wufong, E., Rhodes, P., & Conti, J. (2019). "We don't really know what else we can do": Parent experiences when adolescent distress persists after the Maudsley and family-based therapies for anorexia nervosa. *Journal of Eating Disorders*, *7*(1), Article 5. https://doi.org/10.1186/s40337-019-0235-5

Zickgraf, H. F., & Ellis, J. M. (2018). Initial validation of the Nine Item Avoidant/Restrictive Food Intake disorder screen (NIAS): A measure of three restrictive eating patterns. *Appetite*, *123*, 32–42. https://doi.org/10.1016/j.appet.2017.11.111

Table 1

Eligibility criteria

	Inclusion	Exclusion
Publication Type	Peer-review publications and PhD theses	Systematic, scoping reviews or literature reviews
Language	English language.	Non-English language.
Study Objectives	Studies that include interventions where parents/caregivers have been trained using psychological and/or behavioural treatment techniques and/or have been provided with educational resources to teach or support the management of their child's ARFID. Studies of interventions which include psychological components to improve parent/caregiver learning of ARFID and coping.	Studies that do not describe a psychological intervention. Interventions involving additional medical, dietetic or pharmacological components. Studies that include the therapist completing the intervention directly with the child/young person. Studies which report the intervention as family-based (working with parents and child together).
Study Design	Prospective/longitudinal designs: randomised controlled trials; quasi-experiments; cohort studies; longitudinal studies; pre-post experimental studies; case studies.	Cross-sectional designs Qualitative designs
Sample	Parents/caregivers of a child or adolescent with a clinical diagnosis of ARFID in accordance with (a) DSM-V or ICD-11 (b) suspected diagnosis (meeting diagnosis criteria) following psychiatric/psychological assessment, and/or (c) use of psychometric measure. Parents/caregivers who have received an intervention including parent-learning/parent management training or resources.	Parents/caregivers of a child or adolescent who has a co-morbid eating disorder e.g. anorexia nervosa, bulimia nervosa, eating disorder not otherwise specified. Parents/caregivers of a child who is currently tube-fed, reliant on supplementary feeding or receiving pharmacological medication as treatment for ARFID.

Table 2

Study and sample characteristics

Authors, year published	Country	Study Design	Number of Parents	Delivered By	Delivered To	Child/ren’s Age	Child Gender	Child Ethnicity	ARFID Subtype	Comorbidity
Bloomfield et al. (2019)	USA	Case Study	1	Psychology Doctorate Student	Mother	8	M	White	Sensory Sensitivity	NR
Bloomfield et al. (2021)	USA	Case Study	1	Speech and Language Masters Student	Mother	5	F	White	Sensory Sensitivity	Autism (parent and child)
Breiner *et al*., (2024)	USA	RCT	27 (15 experimental, 12 control in 4-week waitlist)	Clinicians	Mothers (83%), Two parents (17%)	5 to 12	M 80%, F 20%	White (86.7%)	SS 8, LOI 1, FE 1, SS & LOI 13, SS & FE 3. LOI & FE 2, SS LOI & FE 2.[1]	NR
Carletti *et al*. (2024)	France	Cohort	16	MDT including Psychologists, Nurse Practitioners, Dieticians, SALTs, Psychiatrists	Mothers (83%), Two parents (17%)	5 to 14	M 40%, F 60%	NR	Sensory Sensitivity	Autism (22%), Anxiety Disorder (17%)

---

[1] Numbers describe the full sample before participant drop-out (+3).

Dahlsgaard & Bodie (2019)	USA	Cohort	21	NR	Two parents (71%), One parent (29%)	4 to 11	M 90%, F 10%	White (90%)	Sensory Sensitivity	Anxiety Disorder (38%), OCD/Tic Disorder (14%), ADHD (14%).
Murphy & Zlomke (2016)	USA	Case Study	1	Clinician	Mother	6	F	White	Fear of Aversive Consequences	NR
Prasetyo *et al.* (2021)	Indonesia	Quasi-Experiment	30 (15 experimental, 15 control)	NR	Mothers	Under 5 (Mean 2.48)	M 17, F 13	NR	Sensory Sensitivity	NR
Shimshoni *et al.* (2020)	USA	Cohort	14	Psychologist	Parents	6 to 14	M 86.7%, F 13.3%	White (92.9%)	SS 93.33%, LOI 6.67%, FE 26.67%[2]	Anxiety/OCD (33.3%), ADHD (26.67%), ODD (26,67%), Dysthymia (6.67%)

ADHD – Attention Deficit Hyperactivity Disorder, F - Female, FE – Fear of Aversive Consequences, FU – Follow up, LOI – Lack of Interest, M - Male, MDT – Multi-Disciplinary Team, NR – Not reported, OCD – Obsessive Compulsive Disorder, ODD – Oppositional Defiance Disorder, SALT – Speech and Language Therapist, SS – Sensory Sensitivity

---

[2] Percentage reflects overlap of ARFID subtypes.

Table 3

Description of interventions and outcomes

Study	Intervention Aim	Key Features of Intervention	Delivery (setting, duration, format)	Measures Used	Outcomes/Follow-up
Bloomfield *et al*. (2019)	Increase food consumption and variety	Contingency reinforcement, guided compliance, didactic instruction, modelling, in-vivo therapist feedback, behaviour-specific praise.	12 weekly online sessions, *Individual*	Bite acceptance, Parent-report (MBQ & BAMBIC)	Increased consumption of non-preferred fruits/vegetables (10 bites across 3 target foods). Maintained at 1- and 4-month FU. Orange, 4 bites 1-month FU, 6 bites 4-month FU. Broccoli 2 bites maintained 1- & 4-month FU. Carrot 100% consumption during each level, 5 bites 1-month FU, 10 bites 4-month FU. Parent added new target foods, e.g. hamburger. Mealtime behaviours (e.g. crying, gagging) significantly decreased, with behaviours no longer observed during sessions. Parent reported a decrease of problem behaviours at mealtimes. MBQ scores pre-post intervention 71 > 46 (improvement in mealtime behaviours). BAMBIC pre-post intervention score 28 (no measured change).

Bloomfield *et al*. (2021)	Increase food consumption and variety	Hierarchy of feeding demands, DRA, didactic instruction, modelling, differential attention, in-vivo therapist feedback.	11 x 50-min online sessions over 3 months, *Individual*	Bite acceptance	Increased consumption of nonpreferred foods (dried pineapple, dried apricot, dried apple, banana chips, turkey and cheese sandwich). Ended the intervention with the child consuming 3–10 bites of each target food. No FU.
Breiner *et al*., (2024)	Improve ARFID symptomology using parent-training and parent-led food exposures	Psychoeducation of food exposures, differential attention, DRA, role-play, feedback.	Two 2-hr online sessions & 30-min booster at 4-week FU, *Individual*	New foods eaten, Parent-report (PARDI-AR-Q)	Increase of new foods added to diet. Added on average 1.4 new foods at 4-weeks (*n* = 19), additional 2.9 foods 3-month FU (*n* = 13), and 3.8 foods 6-month FU (*n* = 11), ranging from 0-28. Added on average 8.1 foods overall. Children in the experimental group had a decrease in ARFID symptoms compared to those on the waitlist (control group). 6-month FU demonstrated participants had significantly reduced ARFID symptoms > PARDI-AR-Q severity scores: baseline *M* 3.10 (*SD* 1.24), 4-week FU *M* 2.82 (*SD* 1.38), 3-month FU *M* 2.96 (*SD* 1.39), 6-month FU *M* 2.50 (*SD* 1.14). Mean *t*-tests comparing change in PARDI--AR-Q scores in the first 4 weeks of treatment (experimental group, *n* = 15) to the 4-week waitlist period (control group, *n* = 15) showed significant differences in change in symptom severity (*p* = 0.04, Cohen's *d* = 0.72), lack of interest (PARDI-LOI; *p* = 0.02, Cohen's *d* = 0.77), and fear of aversive consequences (PARDI- F; *p* = 0.008, Cohen's *d* = 0.98). Individuals in the control group experienced

					an increase in scores during the waitlist while individuals in the experimental group experienced a decrease in scores in the first 4 weeks of treatment.
Carletti *et al*. (2024)	Increase food intake, empower families and reduce coercive parenting	Psychoeducation about ARFID and dietary knowledge. Group sharing and support. Contingency reinforcement, exposure/systematic desensitisation.	2-day in-person hospital programme (12 hours) delivered 3 weeks apart. *Group*	Clinician-report (CGI-S)	At first admission, CGI-S baseline scores showed markedly severe illness within children, with a mean CGI-S score of 5.56 (*SD* 0.91). Two-month FU, the CGI-S score significantly improved, with a mean reduction of 4.39 (*SD* 1.24). ANOVA comparing mean CGI-S scores at admission, before admission and two months after admission, showed a significant effect (*F* value = 6.682, *p* < 0.003).
Dahlsgaard & Bodie (2019)	Train parents to become behavioural interventionists and promote food acceptance	Psychoeducation about ARFID, mealtime hygiene and appetite optimisation. Daily food exposure, DRA, contingency reinforcement. Group sharing and support encouraged. Didactic instruction, role-play.	Seven 90-min in-person clinic sessions over 6 months, *Group*	Parent-report (BPFAS, CEBQ)	BPFAS scores indicated significant reductions across all subscales (child frequency, parent frequency child problems, parent problems) from pre- to post-treatment (*p* values < .01) with large within-effect sizes (Cohen's *d* range = 1.00-1.28) as well as pre-treatment to 3-month FU (*p* values < .01) with similarly large within-group effect sizes (Cohen's *d* range = 0.98-1.23). CEBQ scores indicated significant increases in Enjoyment of Food, and significant decreases in Satiety Responsiveness, Slowness in Eating, and Food Fussiness from pre- to post-treatment (all *p* values <.05) with large within-group effect sizes (Cohen's *d* range = 0.58-1.26), pretreatment to 3-

					month FU (p values <.05), moderate to large within-group effect sizes (Cohen's d range = 0.47-1.36).
Murphy & Zlomke (2016)	Improve mealtime behaviours and acceptance of novel foods	Psychoeducation of fear/avoidance and gradual exposure, role-play, in-vivo therapist feedback, modelling, differential attention, DRA, contingency reinforcement, gradual exposure to novel foods (and limiting access to preferred foods).	18 in-person clinic sessions over 6 months, *Individual*	Bite acceptance, new foods eaten, Parent-report (BPFAS)	Child mastered food challenges each week, taking at least one bite/sip of 30 novel foods. By the end of treatment, the child was accepting twice as many types of food per week (20–30) than at pretreatment and expanded their diet to include multiple items from all food groups. The child no longer met criteria for ARFID. BPFAS scores decreased from clinically elevated (89) to within normal limits (71).
Prasetyo *et al*. (2021)	Improve mothers' feeding style, self-efficacy and child's adaptation to new foods	Psychoeducation about fathers' involvement, adaptation to new foods, motivation and enhancing mothers' self-efficacy.	Four weekly 50-min in-person sessions vs control home visits, *Group*	Parent-report (author-created questionnaire)	Experimental group improved food adaptation ($t = -2.973$, $p < 0.003$), feeding style ($t = -4.646$, $p < 0.001$) and self-efficacy ($t = -3.3652$, $p = 0.001$) in comparison to control group.
Shimshoni *et al*. (2020)	Improve child's food flexibility by modifying parental	Psychoeducation on ARFID, monitoring and reducing family accommodating behaviours/attitudes,	12 weekly 60-min sessions, online or in-person,	New foods eaten, Clinician-report (ADIS-	Thirteen children (92.86%) added new foods/drinks to their diet (ranging from 1 to 14 new additions). Five (35.71%) were willing to try most presented foods. Eleven (78.57%) increased brand and flavour flexibility. Six (42.86%) increased flexibility of

	responses to ARFID symptoms.	behaviour-specific responses. Systematic desensitisation in a “game-like” manner e.g. food chaining, increasing child’s food knowledge, involvement in food prep/food-related games.	*Individual*	C/P), Parent-report (NIAS, FASA)	settings they’d eat in. At posttreatment, eight participants (57.14%) no longer met criteria for ARFID. ARFID-related interference ratings based upon the ADIS-S were significantly reduced ($t = 7.77$, $p < .001$, Hedge’s $g = 2.52$). ARFID symptom severity based upon NIAS scores significantly reduced ($t = 5.50$, $p < .001$, Hedge's $g = 1.49$ for total NIAS score; $t = 3.72$, $p = .003$, Hedge's $g = 1.23$ for picky eating, $t = 3.56$, $p = .003$, Hedge's $g = .57$ for appetite, and $t = 3.42$, $p = .005$, Hedge's $g = .78$ for fear). Family accommodating behaviours significantly reduced post-treatment based on FASA total scores ($t = 4.10$, $p = .001$ Hedge's $g = 1.17$).

ADIS-C/P – Anxiety Disorders Interview Schedule for DSM-5 – Child and Parent Versions (Albano & Silverman, 2020), BAMBIC - Brief Assessment of Mealtime Behaviour in Children (Hendy et al. 2013), BPFAS - Behavioural Paediatrics Feeding Assessment Scale (Crist & Napier-Phillips, 2001), CEBQ - Child Eating Behaviours Questionnaire (Wardle et al., 2001), CGI-S - Clinical Global Improvement: Severity Scale (Guy, 1976), FASA - The Family Accommodation Scale Anxiety—parent version (Lebowitz, Scharfstein, & Jones, 2015; Lebowitz, 2013), MBQ – Mealtime Behaviour Questionnaire (Berlin et al. 2010), NIAS - The Nine Item Avoidant/Restrictive Food Intake Disorder Screen (Zickgraf & Ellis, 2018), PARDI-AR-Q - The PARDI ARFID Questionnaire (Bryant-Waugh et al. 2022)

Table 4

A description of the intervention techniques and the studies using this method

Method/Intervention Technique	Description in relevance to parent-training/feeding behaviours	Number of study using method
Based upon operant conditioning		
Differential reinforcement of an alternative behaviour (DRA)	Positive reinforcement of a 'target' behaviour e.g. reinforced with preferred foods, games, screentime or verbal praise (Piazza et al., 1996).	2, 3, 5, 6.
Contingency reinforcement	The child accesses a preferred activity or food only when the target behaviour is achieved (Murphy & Zlomke, 2016).	1, 4, 5, 6.
Based upon exposure therapy		
Hierarchy of feeding demands	Systematic levels of feeding demands (e.g. touch the food, kiss the food, lick the food) to increase exposure leading to higher levels such as chewing and swallowing unpreferred foods (Bloomfield et al., 2021).	2.
Systematic desensitisation (e.g. gradual/daily exposure to novel foods).	A process designed to reduce avoidant behaviours of nonpreferred foods by gradually increasing exposure e.g. taste, touch, smell, sight (Davison, 1968). Examples can include direct exposure, food chaining, food-related games and activities etc.	1, 3, 4, 5, 6, 8.
Behavioural Skills training		
Modelling/demonstration	Providing a demonstration of the behaviour to the parent OR child watches parent perform the target behaviour e.g. one bite of a non-preferred food.	1, 2, 6.
Role-play/rehearsal	Behavioural practice and rehearsal of the strategies taught by the therapist (Michie et al., 2013).	3, 5, 6.
In-vivo therapist feedback	The therapist monitors and provides informative or constructive feedback to the parent on their performance of the behaviour (Michie et al., 2013).	1, 2, 6

Parent-specific training techniques		
Psychoeducation	Providing education and information to parents regarding ARFID and eating behaviours.	3, 4, 5, 6, 7, 8.
Didactic instruction	A teacher-centred approach focussed on providing step-by-step information for a parent to implement (Kinder & Carnine, 1991).	1, 2, 5.
Differential attention/ behaviour-specific praise	Giving attention to positive behaviours and withholding attention from undesirable behaviours e.g. spitting out food (Roberts et al., 1981).	1, 2, 3, 6, 8.
Guided compliance	The parent encourages the child to try the nonpreferred food by moving their hand to the utensil, or guiding the food towards the child's mouth (Wilder & Atwell, 2006)	1.
Group sharing & support	The group learn from one another, support other parents and share strategies and problem-solving ideas for various situations (Frogley & Taylor, 2020).	4, 5.
Family accommodating behaviours/attitudes	Family members reduce behaviours, habits and attitudes that sustain ARFID behaviours e.g. buying only preferred foods, bringing specific foods to events, only visiting restaurants that serve preferred foods, increasing attention to avoidant behaviour (Wagner et al., 2020).	8.

Table 5

Individual studies and acceptability/feasibility and attendance/attrition rates

Study	Acceptability & Feasibility (Achieving Implementation between Sessions)	Attendance/Attrition
Bloomfield *et al.,* 2019.	The parent rated the intervention highly acceptable across all scales (overall acceptability, perceived effectiveness and time to effect), BIRS scores *M* = 6.0, 5.86, and 6.0, respectively. Informally, parent reported significantly easier family meals following the intervention. Based on the FF-TAM, the parent acceptability of technology was rated high with a total sum score of 35 (*M* = 2.92, range = 2.0–3.0). However, exposure adherence between sessions was limited; the author reported the parent did not consistently implement practice sessions outside of sessions as intended.	N/A
Bloomfield *et al.,* 2021	Informally, the parent stated they were happy with their child's progress. Between sessions, the parent conducted four weekly sessions (as intended) independently at home.	N/A
Breiner *et al.,* 2024	Families rated "agree" or "highly agree" in response to questions assessing satisfaction with treatment, preparation to begin treatment, and worthwhileness of the intervention. Average CEQ-C score was 7.75 (*n* = 27; *SD* = 0.87). Of the 19 families to complete the 4-week FU questionnaires, eight (42.1%) requested an optional booster session. 9 families (33.3%) completed the Qualitative Exit Survey at 6-month FU. Most families (*n* = 6; 66.6%) reported they found the intervention helpful in increasing their quality of life, particularly through small	50% of eligible individuals enrolled in the trial. 3 participants dropped out during the intervention. Low number of participants completed the FU. Of the 27 participants completing the intervention, 19 (70.3%) completed 4-week

	and consistent changes. One family (11.1%) noted that the treatment approach itself did not feel like a good fit, and they felt their child had low motivation to receive rewards after receiving a large reward during the first month of treatment, making other rewards less meaningful. Exposure adherence between sessions was lower than expected. On average, families completed 4.42 exposures per week (*SD* = 1.87, *n* = 19) at 4-week FU, 2.31 (*SD* = 1.80, *n* = 13) at 3-month FU, 2.81 at 6-month FU (recommended was >5 per week). Adherence did not meet a priori thresholds of ≥75% of daily food exposures.	FU, 13 (48.1%) completed 3-month FU, and 11 (40.7%) completed 6-month FU measures. FU retention did not meet a priori thresholds of ≥75% retention.
Carletti *et al.,* 2024	Parents rated the treatment as highly satisfactory, with significant increases from pre-post treatment HAQ-11S (*t* test = -4.28, *p* < .001) and CSQ-8 scores (*t* test = -4.65, *p* < .001). Qualitative evaluation identified seven main satisfaction themes: improved symptom understanding, improvement in letting go, increased parental competence, enhanced communication with child, reduced feelings of guilt, renewal and maintenance of motivation, and decreased isolation.	Of the 26 eligible families, 18 (69%) participated in the training group. Of the 18 participating families, all except 2 (11%) completed sessions.
Dahlsgaard & Bodie, 2019	15 families (71%) completed a treatment satisfaction questionnaire post-treatment. Regarding how helpful the parents found aspects of the intervention, 96% of parent responses fell within the 'Very Helpful' or 'Extremely Helpful' categories. Parents frequently reported group support and parent training in exposures and contingency management procedures as the most beneficial aspects. Outside of sessions all parents conducted food exposures at least 5 days of the week (with the majority adhering to 7 days a week). Author reports the brief length of active treatment (six sessions spaced over 3 months), and evening timing made it feasible for working parents to attend.	Twenty-five families were initially evaluated and referred to the treatment groups. Twenty-one families completed the intervention. Two families dropped out of treatment after Session 4, both citing difficulties adhering to the protocol of nightly food challenges. One family dropped out after Session 5, due to complications unrelated to participation. An additional family did not complete posttreatment/FU measures.

		Attendance to sessions was high, with 95% of families having at least one parent attend all six sessions. Many had two parents attend sessions (71%). Although the seventh reunion session was optional, 81% of families chose to attend. The four families that could not to attend (19%) completed the FU questionnaires.
Murphy & Zlomke, 2016	Informally, the parent reported confidence continuing to implement intervention strategies at home. Author reported that the parent continued practicing sessions between sessions.	N/A
Prasetyo *et al.,* 2021	NR	NR
Shimshoni *et al.,* 2020	CSQ-8: Both parents and children rated the treatment as highly satisfactory (*M* = 29.86, *M* = 24.14). Most parents (64.29%) provided a score of at least 31 and 6 parents (42.86%) provided the maximum score of 32.	Of 17 eligible families, 15 (88.24%) chose to participate in the intervention. Of these, 14 (93.33%) completed all 12 weekly treatment sessions. The single family who dropped out completed six treatment sessions before discontinuing due to “scheduling conflicts.”

BIRS: Behaviour Intervention Rating Scale (Elliot & Treuting, 1991), CEQ-C: Credibility and Expectancy Questionnaire (Devilly and Borkovec, 2000), CSQ-8: Consumer Satisfaction Questionnaire (Larsen et al., 1979), FF-TAM: Technology Acceptability Model-Fast Form (Chin et al., 2007), FU – Follow-up, HAQ-11S: Helping Alliance Questionnaire-11 (Kapp et al., 2014), N/A – Not applicable to case studies, NR – Not reported

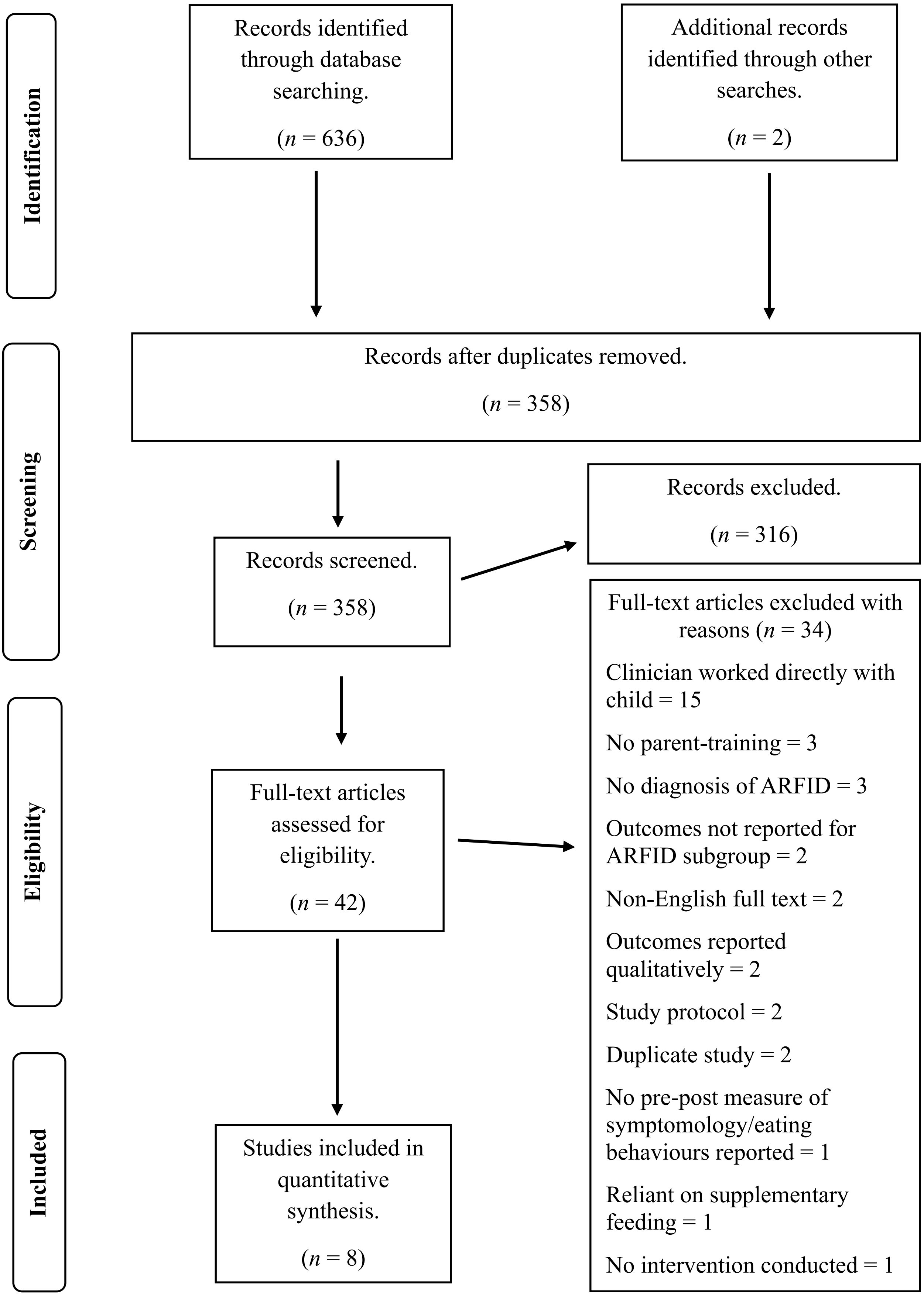
Table 6

Risk of bias within individual studies

Study	**Selection Bias**	**Study Design**	**Confounders**	**Blinding**	**Data Collection Method**	**Withdrawals and Dropouts**	**Overall Rating**
Bloomfield *et al*., 2019	Weak	Weak	Weak	N/A	Strong	Moderate	**Weak**
Bloomfield *et al*., 2021	Moderate	Weak	Weak	N/A	Moderate	Moderate	**Weak**
Breiner *et al*., 2024	Weak	Strong	Strong	N/A	Strong	Weak	**Weak**
Carletti *et al*., 2024	Moderate	Moderate	Weak	N/A	Weak	Strong	**Weak**
Dahlsgaard & Bodie, 2019	Moderate	Moderate	Weak	N/A	Strong	Strong	**Moderate**
Murphy & Zlomke, 2016	Weak	Weak	Weak	N/A	Strong	Moderate	**Weak**
Prasetyo *et al*., 2021	Weak	Moderate	Moderate	N/A	Weak	Weak	**Weak**
Shimshoni *et al*., 2020	Moderate	Moderate	Weak	N/A	Strong	Strong	**Moderate**

Figure 1

PRISMA flowchart of the screening process



Systematic Review Reflective Commentary

Initial Idea and Rationale for the Review

My initial interest in parent-training interventions arose from a CPD event I attended that focused on supporting family members of individuals with eating disorders. During the training, I was introduced to the Maudsley Method and the different ways a caregiver might support a young person with an eating disorder (Treasure et al., 2016). What resonated with me most, was the careful approach parents had to take; every comment, action and attitude had the potential to impact an individual's eating disorder, positively or negatively. I became increasingly aware of the impact an eating disorder has on not only the individual, but the entire family. Around this time, I also became aware of the current research surrounding Avoidant/Restrictive Food Intake Disorder (ARFID). ARFID is still a relatively new diagnosis (APA, 2013) and as such, there is limited research and clinical guidelines to support clinicians, individuals and families (Bryant-Waugh et al., 2021).

Whilst delivering and designing an intervention for the doctorate with an autistic young person, who I believed met criteria for ARFID, I witnessed first-hand the stress and strain feeding difficulties place upon the parent. Despite parents' determination to support their child and encourage them to try new foods, they often feel shame and guilt that their child eats a restricted diet and avoids nonpreferred foods (Blissett et al., 2007). This led me to explore the literature on parent-based training for ARFID, and whilst the interventions were few and far between, I discovered that the studies I found could be both feasible and cost-effective for families and services (Dahlsgaard & Bodie, 2019; Shimshoni et al., 2020). When I broadened my search looking into parent-based interventions for other eating disorders, the evidence base was much more established and consistently demonstrated improvements in patient symptomology (Hannah et al., 2022). I also believed this approach could be less distressing for children; I considered the benefits of parents conducting feeding interventions at home in the child's natural environment (Carpenter & Garfinkel, 2021), alongside removing the need for clinical settings and unknown clinicians working directly with children, which in itself can be a source of distress (Radez et al., 2021). The idea for my systematic review became clear; I wanted to explore the literature and determine whether parent-based interventions could successfully provide parents with effective strategies and improve children's ARFID symptomology.

Developing the PROSPERO and Ethics Form

I began drafting up my PROSPERO registration form and ethics application. Although the PROSPERO protocol needed to be finalised first, I decided to draft the ethics form alongside this, to help me understand my overall rationale for the review. I initially anticipated this would be a relatively quick task, however this process took much longer than I expected. Writing the PROSPERO form required numerous back-and-forth discussions with my supervisory research team, with much of this involving refinement of the search strategy, to ensure I would discover all the relevant studies from the databases. For example, one of the early changes involved removing the term ‘experiment’ from the search term strategy as this term was too vague, whilst terms such as ‘treatment’ or ‘training’ were more likely to bring up the journals I needed ahead of the screening process. Another key point that required additional attention was how to explicitly state within the exclusion criteria that the clinician should not directly work with the child. Interventions involving direct clinician-child interactions alongside parent-training would be classified as family-based interventions; I specifically wanted to explore interventions where the clinician worked solely with the parent. I believed the parent-only approach could offer a cost-effective treatment option and had the potential to improve mealtime parent-child interactions, without the involvement of a third-party clinician. For this review, the child could be present, but the main intervention had to be delivered to the parent. I therefore had to think carefully about how to word this, cautiously choosing specific search terms that ensured I would not be disregarding any relevant studies.

Another area I carefully deliberated upon was whether to include case studies or not. My supervisory research team queried whether this would be worthwhile, as case studies provide low-level evidence in systematic reviews (Burns et al., 2011). However, I was conscious in my initial screening of the literature that much of the existing parent-based interventions for ARFID consisted of case studies. The risk of excluding them could mean that I did not have enough studies for a meaningful review. Therefore, upon further consultation with the research team I decided it was important to include these. Finally, I was ready to submit the PROSPERO form, and after a few minor adjustments, it was accepted.

I had not anticipated how detailed the PROSPERO protocol would be, nor how many questions the research team would ask me about aspects of the review I hadn’t previously considered. During this early stage, having expert guidance, along with time and space to reflect on the necessary information to include in the protocol, was invaluable. In comparison, finalising the ethics form was a much quicker and smoother process. I had already created a rationale for the PROSPERO form, so all I needed to do was strengthen it with a brief literature review. Thankfully, the ethics submission was straightforward, and I quickly received confirmation that it had been accepted.

Conducting Searches and Screening Papers

Conducting the initial searches and screening was the next step, which I surprisingly looked forward to. I had experience helping a member of my research team by screening papers for their systematic review the previous year. I therefore had a vague idea of what the process looked like. Additionally, they had expertise in the systematic review management platform Rayyan (Ouzzani et al., 2016), so having their guidance and support on how the system worked made the whole process less daunting. Once I'd completed a preliminary search, I felt ready to input everything into the databases and upload the results to Rayyan. As ARFID first became a formal diagnosis in the DSM-5 in 2013, I anticipated there wouldn't be thousands of papers to trawl through, which I deemed a benefit of choosing a newer research area. After removing duplicates, I had 358 papers remaining for the initial screening of titles and abstracts. I downloaded everything to Rayyan and added the app to my phone, so I had an alternative way to screen papers. As I'd previously completed the screening of papers for my research team member's review, I was able to 'hit the ground running'. I believed I had a strong idea of what I needed to achieve and look for, and with my PROSPERO protocol at the forefront of my mind, I worked systematically through all 358 titles and abstracts. I genuinely enjoyed the initial screening process, finding it almost therapeutic, evaluating each title and abstract. It was systematic and orderly, which really suits the way I like to work. Once finished, I asked my research team member to screen ten percent of the papers, before meeting to compare and talk through our decisions. There was a total of three 'maybes' and three 'conflicts' to discuss. For each study, we talked through our reasoning and reached an agreement. This discussion was valuable for my learning, as we talked through the importance of including studies that were somewhat ambiguous, as the full-text screening would determine eligibility of the paper.

The process of full-text screening required more time and concentration. I had 42 full texts to read, however thankfully with a thorough screening of titles and abstracts, this task didn't feel too overwhelming. I sent ten percent of papers (using a random number generator) to my research team member to review the full texts. I also wanted to double-check a couple of papers with my research team, as I felt some studies sat in the 'grey' area of my research question. For example, two studies reported outcomes qualitatively rather than quantitatively, so I reached out for a second opinion. They advised me that this wasn’t explicitly a post-outcome score as it required the reader to add up the results, therefore didn’t fit the inclusion criteria. I was grateful to have the research team to discuss review decisions, as talking through my reasoning helped me to understand the choices made within the review.

Quality Appraisal

Quality assessment is important as it provides insight into how reliable and reputable the study findings are (Tacconelli, 2010). After some back-and-forth discussions with my supervisory research team, I was advised to change my initial quality assessment tool and use the Effective Public Health Practice Project (EPHPP) tool (Thomas et al., 2004), which was deemed a better fit. At first glance, the EPHPP appeared straightforward. However, once I started reviewing the quality of each study, certain criterion was trickier for me to ‘get my head around’. I carefully read through each paper, assessing the risk of bias within individual interventions. Some aspects were relatively easy to rate, such as selection bias, study design, and data collection methods. Whereas I found assessment of the confounders within studies much more challenging. Each study approached confounders differently, with the majority of papers not mentioning any confounders, whilst others openly acknowledged that they did not control for these (Carletti et al., 2024). Additionally, no intervention included blinding for assessors or participants (which is understandable given the nature of the interventions). However, this meant that no study could receive an overall ‘strong’ global rating and would only be considered ‘moderate’ at best, which I felt limited the potential higher-quality studies. Therefore, following consultation with my supervisory research team and based upon approaches used in similar reviews, we agreed that assigning a non-applicable rating for blinding of studies was more appropriate (Marshall et al., 2015; Chawner et al., 2019). During quality appraisal of studies, I utilised supervision to clarify my decision-making, which was helpful to ensure I was making the correct judgements.

To ensure consistency and reliability, I asked my supervisor to quality-check ten percent of the papers. We then discussed each paper individually, assessing each risk of bias criterion. Thankfully, 100% agreement was reached within each criterion, and no further discussion or changes were needed. This provided me with confidence that my approach to quality appraisal was appropriate, as I was initially apprehensive and second-guessing my decisions. I found the quality appraisal process an interesting and valuable way to dissect and analyse the individual studies. This allowed me to reflect upon key features of interventions, including aspects that may not have been fully considered by the researchers when designing the study. The insight I gained from the quality appraisal process will influence and inform how I approach and design research studies in the future.

Data Extraction

When I first started reading through the studies, I wasn't entirely sure where to begin. I started off by creating my PRISMA flowchart. Fortunately, this was a simple task as I had clearly documented reasons for why each full-text article was included or excluded during the screening process (I did this for all titles and abstracts too!). I'd also already drafted an initial data extraction table and summarised the results, which felt like a good starting point. However, I realised that I needed to revisit each paper individually and immerse myself in a more in-depth analysis, to recognise and understand the details and effectiveness of each intervention. This process reminded me of the reflexive thematic analysis stage for my empirical study, which felt overwhelming at first, as the amount of information to comprehend felt like a mountain I had to overcome. However, with time (similarly to my qualitative research) the process became easier. I went back through each individual paper and repeated the data extraction and quality review process for a second time to ensure I had collected all the necessary data. I then mapped out various data extraction tables including (1) study characteristics (2) intervention details and outcomes and (3) acceptability/feasibility and attendance/attrition outcomes. I also opted to create a fourth table with descriptions of intervention techniques. This idea stemmed from a similar table included in a review conducted by Chawner and colleagues (2019), with the intention to support readers' understanding of the various techniques used in feeding interventions.

Going back through each paper allowed me to double-check the quality appraisal and read studies side-by-side, which helped to highlight similarities, differences and the varying approaches of interventions more clearly. During this process, I realised that two of the studies I had included in the study seemed almost identical; they shared the same first author, participant characteristics, and ethical approval reference number, with only minor differences in the number of intervention sessions and additional questionnaires. I brought this to the supervisory research team, who advised that I include only one of the studies which best aligned with the outcomes in relation to the review research question. This experience emphasised to me the importance of being meticulous during data analysis and provided me with valuable learning about how to navigate situations in research when faced with duplicate publications.

Synthesis

During the data extraction phase, I began writing up my notes, developing patterns, and mapping out an overall idea for the structure of the review, adding different headings and topics to guide some of my ideas. I then started reading more about data synthesis, and how to identify patterns, consider effectiveness of interventions and bring everything together (Tacconelli, 2010). Synthesising the studies felt like a huge task, and I tried to prepare as much as possible by reading through the relevant literature, including methodological papers on systematic reviewing (Khan et al., 2003; Reeves et al., 2002), as well as various reviews on feeding and parent-training interventions (Marshall et al., 2015; Willmott et al., 2023). This gave me some initial direction, and once I started analysing the included studies, I found myself working inductively and grouping intervention components together based upon their similarities, whilst still trying to make sense of it all. However, despite my preparation, clustering the information still felt like an incredibly daunting and complex process, as each study used different approaches and techniques, and I felt overwhelmed at times with the sheer amount of information to comprehend. It was therefore beneficial for me to take a step back and 'break things down' when examining the various delivery methods, components and outcomes.

During this stage I really enjoyed reading and learning about the interventions which were delivered to parents in a group setting, rather than individually. Within one study (Dalsgaard & Brodie, 2019), parents provided feedback expressing that group support was one of the most valuable aspects of the intervention. This peer support has also been backed by broader evidence that support and community can enhance acceptability and effectiveness of an intervention (Frogley & Taylor, 2020). Furthermore, sharing experiences and problem-solving situations with others can have a positive influence on behaviour (Mitchell et al., 2013). Although only a small number of studies were delivered to groups, I appreciated the potential this delivery method may have in future parent-training research studies. One of the more challenging parts of the synthesis was interpreting the statistical reporting across studies. The papers varied significantly in their reporting of outcome measures and effect sizes (with the majority of studies not reporting effect sizes). This required me to carefully consider the data, as I contemplated and compared the additional reported outcome measures, such as bite acceptance and novel foods accepted to gauge intervention effectiveness. This required a lot of additional time, reflection, comparison and critical thinking to understand the results and success of each intervention. At this stage, I learned the value of pacing myself and allowing space for ideas to develop, rather than expecting them to emerge immediately. This reflective and iterative approach helped me to feel more confident in the synthesis of the studies.

Writing up for Journal Submission

Whilst writing up the review for publication, I contemplated which journal the review would best fit academically. I decided that the *International Journal of Eating Disorders* felt most appropriate, as the research question closely aligns with existing intervention studies exploring ARFID, which have already been published within this journal. Although eating disorders are often associated with clinical psychology, I reflected upon the underlying processes of ARFID more deeply and its links to health psychology. Given its impact on physical health, nutritional health, alongside psychosocial wellbeing (Howard et al., 2023) I gravitated towards this topic for the systematic review and wanted to approach this from a health psychology perspective. This was also shaped by my placement experience and clinical work with autistic young people, where ARFID is a common (and often undiagnosed) challenge for individuals and their families; as autism research consistently highlights the high co-occurrence of autism and severe food selectivity and restriction, with many individuals meeting criteria for an ARFID diagnosis (Sader et al., 2025). When conducting the review, I hoped it would provide practical and valuable advice for healthcare professionals working with children and young people with ARFID. Although the findings from the parent-based interventions appear promising, more research is needed to establish whether parent-training for ARFID can be an effective treatment option.

Overall Reflections

The process of conducting the review was genuinely enjoyable at times and played to some of my strengths (I found the screening of titles and abstracts surprisingly fun!). However, the write-up, quality appraisal and data synthesis were much newer experiences for me, and I found these stages significantly more challenging. I frequently questioned whether I was making the right judgements and I spent a lot of time revisiting papers, double-checking my decisions and using supervision sessions to talk through my uncertainties. Overall, designing and conducting the review has strengthened my understanding and knowledge of the complexity of systematic reviewing. Furthermore, it has helped me to develop a wide range of research skills and grow in confidence when making research decisions.

References

American Psychiatric Association. (2013*). Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.* American Psychiatric Association.

Blissett, J., Meyer, C., & Haycraft, E. (2007). Maternal mental health and child feeding problems in a non-clinical group. *Eating Behaviors: An International Journal*, *8*(3), 311–318. https://doi.org/10.1016/j.eatbeh.2006.11.007

Bryant-Waugh, R., Loomes, R., Munuve, A., & Rhind, C. (2021). Towards an evidence-based out-patient care pathway for children and young people with avoidant restrictive food intake disorder. *Journal of Behavioral and Cognitive Therapy*, *31*(1), 15–26. https://doi.org/10.1016/j.jbct.2020.11.001

Burns, P. B., Rohrich, R. J., & Chung, K. C. (2011). The levels of evidence and their role in evidence-based medicine. *Plastic and reconstructive surgery*, *128*(1), 305–310. https://doi.org/10.1097/PRS.0b013e318219c171

Carletti, L., Porte, C., Helbert, S., Hooreman, M., Charpentier, F., Delorme, R., & Ayrolles, A. (2024). *Training group for parents of patients with pediatric avoidant/restricted food intake disorder sensory-based avoidance: feasibility and acceptability.* Research Square. https://doi.org/10.21203/rs.3.rs-4719121/v1

Carpenter, K. M., & Garfinkel, M. (2021). Home and Parent Training Strategies for Pediatric Feeding Disorders: The Caregivers' Perspective. *The Open Journal of Occupational Therapy*, *9*(1), 1–21. https://doi.org/10.15453/2168-6408.1725

Chawner, L. R., Blundell-Birtill, P., & Hetherington, M. M. (2019). Interventions for Increasing Acceptance of New Foods Among Children and Adults with Developmental Disorders: A Systematic Review. *Journal of Autism and Developmental Disorders*, *49*(9), 3504–3525. https://doi.org/10.1007/s10803-019-04075-0

Dahlsgaard, K. K., & Bodie, J. (2019). The (Extremely) Picky Eaters Clinic: A Pilot Trial of a Seven-Session Group Behavioral Intervention for Parents of Children With Avoidant/Restrictive Food Intake Disorder. *Cognitive and Behavioral Practice*, *26*(3), 492–505. https://doi.org/10.1016/j.cbpra.2018.11.001

Frogley, C., & Taylor, K. (2020). Group interventions. In *Avoidant Restrictive Food Intake Disorder in Childhood and Adolescence* (1st ed., pp. 196–211). Routledge. https://doi.org/10.4324/9780429274862-16

Hannah, L., Cross, M., Baily, H., Grimwade, K., Clarke, T., & Allan, S. M. (2022). A systematic review of the impact of carer interventions on outcomes for patients with eating disorders. *Eating and Weight Disorders*, *27*(6), 1953–1962. https://doi.org/10.1007/s40519-021-01338-7

Khan, K. S., Kunz, R., Kleijnen, J., & Antes, G. (2003). Five steps to conducting a systematic review. *Journal of the Royal Society of Medicine*, *96*(3), 118–121. https://doi.org/10.1258/jrsm.96.3.118

Marshall, J., Ware, R., Ziviani, J., Hill, R. J., & Dodrill, P. (2015). Efficacy of interventions to improve feeding difficulties in children with autism spectrum disorders: a systematic review and meta-analysis. *Child: Care, Health & Development*, *41*(2), 278–302. https://doi.org/10.1111/cch.12157

Mitchell, G. L., Farrow, C., Haycraft, E., & Meyer, C. (2013). Parental influences on children's eating behaviour and characteristics of successful parent-focussed interventions. *Appetite*, *60*(1), 85–94. https://doi.org/10.1016/j.appet.2012.09.014

Ouzzani, M., Hammady, H., Fedorowicz, Z., & Elmagarmid, A. (2016). Rayyan—a web and mobile app for systematic reviews. *Systematic Reviews*, *5*(1), Article 210. https://doi.org/10.1186/s13643-016-0384-4

Radez, J., Reardon, T., Creswell, C., Lawrence, P. J., Evdoka-Burton, G., & Waite, P. (2021). Why do children and adolescents (not) seek and access professional help for their mental health problems? A systematic review of quantitative and qualitative studies. *European Child & Adolescent Psychiatry*, *30*(2), 183–211. https://doi.org/10.1007/s00787-019-01469-4

Reeves, S., Koppel, I., Barr, H., Freeth, D., & Hammick, M. (2002). Twelve tips for undertaking a systematic review. *Medical Teacher*, *24*(4), 358–363. https://doi.org/10.1080/01421590220145707

Sader, M., Weston, A., Buchan, K., Kerr-Gaffney, J., Gillespie-Smith, K., Sharpe, H., & Duffy, F. (2025). The Co-Occurrence of Autism and Avoidant/Restrictive Food Intake Disorder (ARFID): A Prevalence-Based Meta-Analysis. *The International Journal of Eating Disorders*, *58*(3), 473–488. https://doi.org/10.1002/eat.24369

Shimshoni, Y., Silverman, W. K., & Lebowitz, E. R. (2020). SPACE-ARFID: A pilot trial of a novel parent-based treatment for avoidant/restrictive food intake disorder. *The International Journal of Eating Disorders*, *53*(10), 1623–1635. https://doi.org/10.1002/eat.23341

Tacconelli, E. (2010). Systematic reviews: CRD's guidance for undertaking reviews in health care. *The Lancet Infectious Diseases*, *10*(4). https://doi.org/10.1016/S1473-3099(10)70065-7

Thomas, B. H., Ciliska, D., Dobbins, M., & Micucci, S. (2004). A Process for Systematically Reviewing the Literature: Providing the Research Evidence for Public Health Nursing Interventions. *Worldviews on Evidence-Based Nursing*, *1*(3), 176–184. https://doi.org/10.1111/j.1524-475X.2004.04006.x

Treasure, J., Smith, G., & Crane, A. (2016). *Skills based learning for caring for a loved one with an eating disorder: The New Maudsley Method.* (2nd Edition) Routledge.

Willmott, E., Dickinson, R., Hall, C., Sadikovic, K., Wadhera, E., Micali, N., Trompeter, N., & Jewell, T. (2024). A scoping review of psychological interventions and outcomes for avoidant and restrictive food intake disorder (ARFID). *The International Journal of Eating Disorders*, *57*(1), 27–61. https://doi.org/10.1002/eat.24073

Chapter 3

Research: From Design to Dissemination

Qualitative Research Manuscript

Autistic Young People and Healthy Eating: A Photo-Elicitation Study

ABSTRACT

Autistic individuals are commonly reported within the literature to experience eating difficulties, such as restricted diets and ritualised eating behaviours. However, qualitative studies exploring the eating experiences of autistic adolescents remain absent. It is therefore unclear how to effectively support autistic young people in making healthy eating choices and develop essential skills that will benefit them in adulthood. This study explored autistic young people's experiences of healthy eating using photo-elicitation. Seven participants, aged 11 to 17, took part in semi-structured interviews. Interviews were audio-recorded, transcribed and analysed using reflexive thematic analysis. Three of these participants additionally attended a participatory workshop to discuss the research findings. Four core themes were developed: *a) Sensory experiences influence eating behaviours; b) Family members play a crucial role within healthy eating; c) Routine, predictability and "knowing what to expect";* and d*) Eating… "you know it's a spectrum".* The findings illustrate that eating profiles of autistic young people are varied and individual. Whilst some may stick to specific food routines or eat a smaller range of preferred foods due to sensory preferences, others display a willingness to try new foods and bold flavours. Some autistic young people view their food routines and eating preferences not as obstacles, but as adaptive and functional strategies to navigate eating-related challenges. Additionally, family members are fundamental in providing opportunities for healthy eating and expanding food variety. Family-centred interventions are strongly recommended to promote healthy eating, with tailored support for autistic young people that acknowledges and respects individual eating behaviours being essential.

Key Words

Autism, Healthy Eating, Young People, Adolescents, Photo-elicitation, Qualitative

1. Introduction

Many autistic individuals are reported to have eating difficulties across their lifespan, typically restricted diets and ritualised eating behaviours (Bandini et al., 2017; Vissoker et al., 2015). This is often associated with common autistic characteristics such as sensory sensitivity and cognitive rigidity (Nimbley et al., 2022; Page et al., 2022; Chistol et al., 2018). Autistic individuals' eating patterns are frequently classified as 'abnormal' within the literature (Råstam, 2008; Li et al., 2020; Margari et al., 2020; Demartini et al., 2021). Feeding difficulties such as selective eating, food neophobia (fear of trying new foods), disruptive mealtime behaviours and persistence for specific food routines and rituals are reportedly common within autistic children (Baraskewich et al., 2021). Research suggests feeding difficulties are five times more frequent within autistic children compared to their neurotypical peers (Sharp et al., 2013). Autistic children's eating difficulties are not typically self-reported, this information is primarily collected from parents, teachers and health professionals (Martins et al., 2008; Nadon et al., 2011; Ismail et al., 2020; Connor et al., 2023). Further research provided by parent-report surveys indicate that eating difficulties often persist into adolescence with autistic adolescents being more likely to display reluctance trying new foods and presenting heightened food-related sensitivities (Kuschner et al., 2015; Bandini et al., 2017).

However, qualitative studies exploring autistic adolescents' subjective experiences of eating appear limited. Adolescence is an important time for young people as they increase independent food choices and begin preparing their own meals (Reicks et al., 2015; Green et al., 2021). Correspondingly, food choices during adolescence strongly influence eating patterns that continue into adulthood (Christoph et al., 2019, Dorn et al., 2019). Eating difficulties present physical, mental and social consequences (Doreswamy et al., 2020), and autistic individuals are perceived to be at a higher risk of being overweight or obese (Croen et al., 2015) or underweight (Westwood & Tchanturia 2017). It is therefore essential to gain first-hand understanding of autistic adolescents' eating preferences and perspectives of healthy eating, as typical approaches to healthy eating may not be accessible or effective for autistic young people. It is currently unclear how to successfully support autistic young people to make healthy eating choices and learn essential skills that will transfer into later life (Esposito et al., 2023). This information will be crucial when creating future interventions to alleviate eating difficulties.

Often research lacks involvement of autistic people (Pellicano et al., 2014) and limited research has been devoted to the voices of autistic adolescents (Harrington et al., 2014; Warner et al., 2019).The present study aimed to partner with autistic young people as co-creators of knowledge using photo-elicitation to gain understanding of their definitions of healthy eating and explore how these are translated into their everyday choices. Please note that identify-first language will be used throughout this study (e.g. autistic young people). Whilst this may not be the best fit for every individual, this is the preferred and least offensive language for the autistic community (Botha et al., 2023; Bottema-Beutel et al., 2021). Photo-elicitation is a participatory research method which encourages engagement through photography (Howe et al., 2023). Autistic individuals can face communication challenges, including interoceptive difficulties (recognising and managing their own emotions and social interactions) and alexithymia (difficulty expressing their emotions to others). This can make it additionally challenging to communicate respective information, rendering qualitative methods that rely primarily on verbal communication potentially inaccessible. Photo-elicitation can help support social, communication and self-awareness skills, as photographs act as a concrete and visual aid for autistic individuals who may struggle to discuss abstract concepts (Courcy & Koniou, 2024). Photo-elicitation has previously been used in research studies with autistic young people to explore health behaviours such as physical activity (Lamb et al., 2016; Obrusnikova & Cavalier, 2011), however has not yet been used to explore healthy eating. This research study explores *"what are autistic young people's experiences and perspectives of healthy eating?".*

2. Methods

2.1. Recruitment

Families that had previously visited a national UK charity based in Staffordshire for an autism assessment and had consented to be contacted for research purposes were emailed an invitation for their child to take part in the study. Young people were eligible to take part if they were aged between 11 and 17, had a diagnosis of autism and did not have experience of an eating disorder or medical condition significantly impacting their food choices. Participants were offered a £15 shopping voucher for their participation. Each parent was required to give consent for their child to take part, with each young person providing assent. Ethical approval was obtained from the University of Staffordshire's Ethics Committee.

In this study, autistic young people aged 11 to 17 were invited to take photographs of things relating to their thoughts and perceptions of healthy eating, before discussing their photographs in an interview. Participants were additionally invited to attend an optional participatory workshop to discuss the research findings.

Seven young people assented to take part and completed an interview. Participant demographics are presented within Table 1. An additional three young people assented to take part, however, withdrew from the research project before their interview. Participants were based in different regions of England, United Kingdom. Three young people were provided with a digital camera, whilst four young people opted to use their own camera phone. Five participants completed their interviews online via video-call, and two participants completed their interviews face-to-face. Interviews ranged from 60 minutes to 85 minutes. A parent was present at six of the interviews to support the young person. Three participants (Stella, Ruby and Liam) attended the final workshop to cross-check the analysis, discuss dissemination and provide feedback. Due to the large amount of information received during interviews, a relatively small sample was suitable for this study. The seven interviews provided enough data and sufficient information power to develop the research findings (Malteud et al., 2015).

Table 1

Participant Demographics

Pseudonym	Age	Gender	Ethnicity	Education Provider	Accompanied by Parent During Interview
Andrew	12	Male	White	Mainstream	Yes
Butterfly	13	Female	White	Specialist provision	Yes
Toriko Derous	15	Male	White	Specialist provision	Yes
Blossom	11	Female	White	Mainstream	Yes
Stella	17	Female	White	Specialist provision	Yes
Ruby	12	Female	White	Mainstream	No
Liam	13	Male	White	Preferred not to say	Yes

2.2. Procedure

Families were emailed a letter of invitation to take part in a research study, with separate information sheets for young person and parent. If interested in taking part, parents were asked to complete a consent sheet, and young people were asked to complete an assent sheet alongside an eligibility questionnaire online via Qualtrics. Eligibility was screened by the lead researcher. Families were then sent a brief demographics questionnaire asking for the child's date of birth, sex, education provider (mainstream or specialist provision) and ethnicity. Interested participants were also asked their preferred method of contact (in-person or online video call) and whether they would like to use their own camera phone or preferred to be provided with a digital camera to take photographs. Photographs taken by young people were used to guide discussion around the topic of healthy eating, following photo-elicitation principles (Richard & Lahman, 2015; Courcy & Koniou, 2024). All documents were created using concrete language, easy-to-read font and removed language that could be deemed as confusing (Nicolaidis et al., 2019). Further adaptations were made following suggestions from an expert in autism research.

Young people were invited to individually attend two sessions alongside their parent. The first meeting was to meet the lead researcher and learn about the project. The second meeting was to discuss the photographs they had taken. A participatory workshop was advertised to participants as an optional third meeting.

The first meeting included a PowerPoint presentation discussing the purpose of the research and provided project guidelines. Participants were given simple instructions to take as many photographs as they wanted of anything they related to the topic of '*healthy eating'* in their daily lives over two weeks. It was suggested this may include objects, people or places however participants were assured there would be no 'right' or 'wrong' photographs. Ethical issues surrounding taking photograph of others were discussed as participants were asked not to take photographs of anyone without first gaining their consent (Lapenta, 2011). Participants were asked to choose between five to eight photographs to send to the lead researcher by email prior to the second meeting. The number of selected photographs for interviews follows previous photo-elicitation studies (Danker et al., 2017; Green et al., 2021). Examples of photographs were not provided to ensure participants were led by their own experiences. Following Green and colleagues' (2021) photo-elicitation study, an additional 'Things to Remember' handout was provided to the young person and parent reiterating the project guidelines. This handout emphasised that the participant was the expert in this project and we were interested in hearing their thoughts and experiences of healthy eating (see supplement 1). Once participants had emailed their chosen photographs to the lead researcher, an accessible interview guide was emailed to families (see supplement 2). Questions included within the interview guide were developed following an extensive review of the literature and were adapted in relevance for the autistic population (Green et al., 2021). Providing the interview guide in advance allowed participants to review the interview questions, to provide transparency and reduce anxiety (Nicolaidis et al., 2020).

The second meeting involved participants discussing their photographs in an interview with the lead researcher. A semi-structured flexible interview technique was followed, with questions dependent on the participant's responses to elicit greater depth. Example questions included *"Can you tell me more about this photograph?", "How do you make healthy food choices?" and "Do you think autism affects your eating or food choices? If so, in what ways?"*. Each of the participant's photographs were discussed in turn. All interviews were conducted by the lead researcher (face-to-face at the charity's Staffordshire-based centre or online via video-call) and were audio-recorded using Microsoft Teams. Interviews were transcribed verbatim, with identifying information removed. Participants were given pseudonyms to protect their anonymity (participants were given the opportunity to choose their own pseudonym). All participants were provided a certificate following completion of the interview alongside a debrief form and a £15 gift voucher. Initial meetings and interviews were conducted between May 2024 and July 2024.

2.3. Data analysis

An experiential critical-realist approach to reflexive thematic analysis (TA) was implemented, following a six-phase framework (Braun & Clarke, 2021). Reflexive TA offered flexibility to explore and interpret the individual's experience whilst identifying patterns of shared meaning across the dataset. This provided an opportunity for analyses that went beyond the 'surface', allowing for personal insight into young people's lived experiences of healthy eating.

The lead researcher initially read through each transcript twice, familiarising themselves with the dataset to gain a sense of each young person's experience, alongside keeping a written reflection outlining thoughts about the individual's 'story'. The data were then coded following an inductive approach, marking similar ideas from each narrative. This was completed once electronically using NVivo software and once manually by-hand, with the transcripts being re-read in a different order. The lead researcher then generated themes by manually grouping codes together, re-reading written reflections and using mind-mapping techniques to aid construction of developing themes. The lead researcher presented preliminary themes to the research team. Themes were then reviewed in relevance to the research question and across the whole dataset before being finalised and presented to participants attending the workshop for review.

2.4. Participatory Workshop

Participants were offered to meet for a final participatory workshop to discuss the research findings. This was incorporated to enable and empower participants to be actively involved in the research, whilst doing so in a fun and collaborative way. Inviting participants to reflect on the resulting analyses is a strategy recommended by Braun and Clarke (2022) to ensure quality within qualitative research. In this study, the researcher sought 'participant validation' as an appropriate technique to check whether data analyses were recognisable to participant's accounts of their own experiences (Ryan & Bernard, 2003).

The workshop incorporated accessible and creative participatory techniques to encourage engagement (Gratton & Beddows, 2018). The workshop began with an ice-breaker exercise, before the lead researcher outlined the schedule and aims for the workshop *1) Share your thoughts and opinions of the research themes* and *2) Discuss how the findings can be distributed*. Preliminary developed themes were presented to participants by the lead researcher. Participants were asked to consider each theme and subtheme and use an interactive two-sided paddle and hold up whether they agreed or disagreed, presenting their views discreetly.

Young people were then invited to work together in small groups and divide anonymised quotes to the preliminary themes, before discussing the relevance of the researcher's interpretations in relation to their individual experiences. Young people then ranked themes prioritising their importance in relation to the research question. Young people were additionally asked whether they wanted to change or modify any of the preliminary themes. At this stage participants believed two preliminary subthemes ('tolerating textures' and 'separating foods') would be better suited if combined into one collective subtheme (see 3.1.1.). Young people explained separating foods was a strategy they employed to tolerate difficult food textures, therefore ‘separating foods’ should be subsumed by ‘tolerating textures’. Otherwise, participants agreed with each theme and subtheme, expressing that the theme names the lead researcher proposed were appropriate and they did not want to change these. Workshop attendees expressed that all of the preliminary themes presented to them during the workshop should be retained and incorporated into the research results. They believed each theme provided valuable insight into their experiences and answered the research question. All quotes presented within this paper were chosen by young workshop attendees to represent each individual theme or subtheme. Finally, participants took part in a focus group discussion about how the findings could be creatively disseminated, before providing feedback about the whole research process.

2.5. Researcher Reflexivity

Throughout the data analyses, the lead researcher kept a reflective journal for ongoing reflection during each stage of the research process. The lead researcher is a non-autistic female doctoral student with experience working with autistic young people. It is acknowledged that previous knowledge and experience of autism and eating behaviours will have actively shaped data collection and interpretation of the interviews. However, regular supervision and ongoing reflection ensured themes were grounded within the dataset.

3. Results

Photographs generally consisted of meals, fruit and vegetables, food items, family members, or food activities such as fruit picking and cooking. During the interviews, participants provided insight into the topic of healthy eating and how autism impacts their food and eating behaviours. Four overall themes and ten subthemes were developed. The four core themes are: 1) *Sensory experiences influence healthy eating behaviours*; 2) *Family members play a crucial role within healthy eating* 3) *Routine, predictability and “knowing what to expect”* and 4) *Eating… “you know it’s a spectrum”*. Themes and subthemes are presented within Table 2.

3.1. Sensory experiences influence healthy eating behaviours

All participants experienced heightened sensory processing which influenced their healthy eating behaviours and dietary preferences. This affected how young people felt and acted towards healthy food and eating, presenting as over- or under-sensitive to different sights, sounds, smells, tastes and textures.

Table 2

Research themes and subthemes

Themes	Subthemes
1. Sensory experiences influence healthy eating behaviours	1.1 Tolerating textures 1.2 Handling 'cleanliness' 1.3 Navigating eating environments 1.4. Noticing hunger and fullness
2. Family members play a crucial role within healthy eating	2.1 Encouraging and guiding healthy eating 2.2 Awareness of healthy eating education 2.3 Availability of healthy food 2.4 Learning through food activities
3. Routine, predictability and "knowing what to expect"	
4. Eating… "you know it's a spectrum"	4.1 Taste preferences 4.2 Choice matters

3.1.1. Tolerating textures

Difficulties tolerating food textures was commonly reported, as all participants had aversions to some healthy foods due to texture. Most notably fruit, vegetables and meat. Texture was reported as the most important determinant of whether a participant would eat a food or not. Although many participants ate a variety of healthy foods, they were aware that they would not eat something if they didn't like the texture.

> *The texture, of, like normal melon and the flavour it's just ew... If I don't like something, it's mainly because of the texture, not the taste. (Liam, 13)*

> *If something has like a horrible texture then I can't really have it… Obviously, like, you know, eating healthy is important. For me, it's mostly… about how it tastes and how like the texture is. (Stella, 17)*

One young person (Andrew, 11) explained that having autism *"affects like textures"* and preferred having simple healthy meals with limited textures, stating his favourite food as noodles served on their own with soy sauce. Other participants disliked multiple textures within one food item or meal. Ruby (12) related this to confectionary: *"like certain chocolates and stuff, like the texture. That freaks me out a bit, like a Double Decker I really hate, because it's like a weird mixture of different things"*. In Ruby's example, the combination of different textures within the chocolate bar - crunchy cereal filling, soft chewy nougat, smooth milk chocolate – generated feelings of disgust as she struggles tolerating contrasting textures simultaneously.

Whilst all participants reported similar experiences of selective eating due to texture, some stated they overcame difficult textures by keeping food items separate, which allowed them to enjoy healthy balanced meals whilst accommodating for their sensory needs. For example, in response to his photograph of a bowl of chocolate hoops and spoon, Andrew (11) described he eats his cereal dry each morning with a glass of milk on the side, due to the texture of the cereal changing when milk is added. For another participant, separating food items is a daily occurrence. In response to her photograph of a Sunday roast dinner, Ruby (12) explained this wasn't her plate of food, *"It was probably my mum's ... [mine is] just laid out a bit differently"*. If the food is mixed on the plate, Ruby separates each food component out, preferring to control the layout and view the quantities of each food item, before she can enjoy her meal. By separating foods, Ruby can eat a wider range of foods without discomfort.

> *I wouldn't want [the food] all touching because I like my foods apart. So, like, if I have a roast dinner because obviously if you, if you like, are dishing it up quick, everything like goes everywhere. So, I separate it all and then I eat it. (Ruby, 12)*

3.1.2. Handling 'cleanliness'

Controlling the cleanliness of food and utensils was also reported as a sensory issue that impacted some participants when eating meals at home, school or dining out. Butterfly (13) described the appearance and condition of dishes and utensils as barriers to healthy eating.

Butterfly explained that she refuses to touch anything she perceives as unclean, with even the smallest marks causing her anxiety or aversion. Avoiding any signs of contamination and maintaining a high level of cleanliness is essential for Butterfly to feel comfortable eating.

> *At school… I have to wash every single thing I get out… If I see a dirty plate or anything, I will not touch it… If we go to a like a restaurant or something and there's a dirty fork, I either nick mum's or ask for a new one… That's why I use wooden cutlery at school. Cause even if there are watermarks, I will not eat [with] it. (Butterfly, 13)*

Another participant shared a different perspective of cleanliness as a barrier to healthy eating. For Toriko Derous (15) the sensory experience of eating food with his hands can be uncomfortable due to heightened sensitivity of feeling food textures on his hands. This discomfort forces him to stop eating and clean or wipe his hands immediately. He explained that whilst he enjoys eating messy healthy foods such as eggs or sandwiches, he cannot tolerate the sensation of food messiness on his hands, and this affects the enjoyment of his meal.

> *(Toriko Derous, 15) I hate having my hands dirty…*
>
> *(Interviewer) And so how do you overcome that?*
>
> *(Toriko Derous, 15) Wash my hands… yeah either a cloth or wash my hands. I get up mid-meal and wash my hands.*

3.1.3. Navigating eating environments

For autistic young people, choosing whether to dine at home or out in restaurants is further influenced by various sensory factors, which consequently impacts their eating experiences. Dining at home was the preferred option for most participants, as the environment can be controlled to accommodate sensory needs. At home, participants were more likely to feel relaxed and be open to trying new textures, flavours or healthier food options. Whilst eating out in restaurants provided the opportunity to try new and adventurous foods, it was frequently described to be more challenging due to participants' hypersensitivity to restaurant stimuli, such as crowds, loud noises and unpredictable surroundings. Instead, participants opted to dine in restaurants during off-peak hours to have a more positive and healthy experience eating out. Stella (17) explained how she manages to cope in noisy restaurants by reducing background noise wearing her headphones:

> *If it's, like, too crowded or too noisy... Sometimes I can deal with it, but it depends on the day... And also, I have my, like headphones and stuff, so that can help. If like I'm*

> *eating in a restaurant, and it starts to get too loud. I just put both my headphones in for a bit and like, I'll be fine pretty much. Usually. (Stella, 17)*

The sensory challenges of dining out in the UK, such as the overwhelming busyness of restaurants, led many participants to avoid such settings, limiting their opportunities to explore new healthy food options. However, this was not the case for two participants when dining out in European countries. Stella (17) expressed enjoyment eating out whilst on holiday abroad, as it provided the opportunity to try new foreign cuisines, expanding her diet in a positive way. Similarly, Butterly (13) preferred dining in Bulgarian restaurants as they were less crowded and quieter stating she enjoyed them "*because there's not a lot of people in them ones. And also 'cause they don't understand, like, my conversations"*. Butterfly felt less social pressure abroad, as the language barrier reduced scrutiny of her communication style, allowing her to focus upon trying new international foods and enjoying her meal.

3.1.4. Noticing hunger and fullness

Many autistic individuals can experience interoception difficulties. This can impact their ability to recognise internal bodily signals indicating when they are full or hungry, which can lead to health risks due to regularly over- or undereating. For one participant, this was a substantial barrier to healthy eating. Toriko Derous (15) explained alongside the support of his parent that he struggles to know when to stop eating, typically relying on his parent to intervene. Toriko Derous explained that he often continues to eat beyond his fullness levels, eating large amounts until he feels unwell. This occurs with both healthy and unhealthy foods, indicating that the issue is not about the food type itself but rather a difficulty with self-regulation.

> *It is fruit as well. Like, when I have cherries and stuff... [my parents have to say] "stop it"... I also like hummus. And, like, pitta bread... Yeah, that's definitely something you have to tell me to stop eating. I could just sit and eat a pot of hummus. (Toriko Derous, 15)*

This insight was based upon the experiences of Toriko Derous, who raised the topic with the support of his parent. Additionally, two other parents of participants noted that they believed their child struggled to recognise their fullness levels, which impacted their ability to maintain healthy eating behaviours. Similarly, Toriko Derous explained that he struggles to prioritise signs of hunger, particularly when he is engaged in activities he enjoys. In these moments, his focus is absorbed on the task at hand rather than acknowledging his body's internal signals of hunger. This can lead to missed meals or delayed eating, consequently affecting his ability to maintain a regular healthy eating routine.

> *If I'm hungry, like if I know I'm hungry, but I'm focused on something, I don't really care about eating. I don't really feel, like I know I'm hungry, but so if I was focused on something, like looking for a Lego piece or something, then I'd know I'm hungry, but I wouldn't like, really register properly that I was hungry until I had found that thing which I was looking for. (Toriko Derous, 15)*

3.2. Family members play a crucial role within healthy eating

During interviews, it was evident that close family members significantly influence young people's everyday healthy eating. This was demonstrated as family members continually shape the young person's perspective and experience of healthy eating through support, education and activities.

3.2.1. Encouraging and guiding healthy eating

For many participants, their relationship with healthy food was influenced by their parents' attitudes to food. Parents modelling healthy eating had a significant influence on their child, encouraging the young person to adopt similar behaviours, making healthy eating a natural part of their routine. This was recognised by one young person, Stella (17). As her parents provided daily meals for her and modelled healthy eating, she consequently enjoyed nutritious food as part of her everyday eating.

> *The stuff mum and dad make, it's just healthy food. So, it's just what I like… I think I'm really lucky that they're, like such great cooks because otherwise I probably would be like if you saw people [say] like 'ew healthy food tastes gross' or whatever, you know what I mean, but it's like no, it's healthy and it tastes lovely. (Stella, 17)*

Family members also encourage young people to try new foods. Whilst trying new foods can be challenging for some autistic young people, Andrew (11) shared that his older sisters support him by introducing new healthy foods and encouraging him to taste them without pressure or consequences.

> *(Interviewer) Do you think that your mum helps you to eat healthier?*
>
> *(Andrew, 11) Yeah, but my sisters help a bit more … They just say try this or try that and then when I do, I might like it sometimes, I might not, and they just say it's fine… [Now] I eat more veggies.*

As a result of non-judgemental and ‘safe’ encouragement from his older sisters, without fearing any consequences, Andrew now eats a wider variety of healthy foods. Whilst encouraging food variety was the focus for some families, this was not relevant for all participants. Parental support was provided at varying degrees and for different reasons. For one participant (Blossom, 11) who described herself as having a restricted and repetitive diet, her parents focussed less on expanding food variety within her diet, and more on ensuring her preferred foods are always available to her. Blossom receives healthy eating support from her parents by ensuring she is eating enough to sustain a basic level of nutrition. In response to a photograph of her mother, who Blossom perceives as healthy, Blossom explained her mother tells her what she should eat.

> *(Interviewer) Is there anything that helps you to eat healthier?*
>
> *(Blossom, 11) Her! [points to mother]*
>
> *(Interviewer) How does your mum help you eat healthy?*
>
> *(Blossom, 11) She tells me what to eat.*

Whilst Blossom appeared to struggle eating a variety of different food groups, her mother supported her to eat healthily by providing foods she enjoys and attempting to incorporate small amounts of vegetables into her meals and providing encouragement to try new foods.

3.2.2. Awareness of healthy eating education

Participants were aware of the various aspects of healthy eating including balanced diets, portion sizes and the importance of fruit and vegetables. Most young people believed that eating non-processed foods and homemade foods prepared by parents were “*definitely healthier” and “100% tastier”* (Toriko Derous, 15). Eating a variety of foods as part of a balanced diet was viewed as the key to healthy eating. Participants shared that every food can be healthy when eaten in moderation and disputed the notion that certain foods can be ‘unhealthy’, explaining that no food is *“bad”* unless it is eaten in excessive quantities. One participant (Butterfly, 13) provided a strong positioning on the topic, explaining that having *“one too many”* of one specific food, even a fruit or vegetable, can tip an individual over into an unhealthy amount.

> *Healthy is just not like salads and that because everything's technically healthy… spaghetti’s healthy and other foods are healthy ... but if you have one too many of it, it's not healthy… You want to have a balanced diet and also if you have too much*

> *vegetables, it's not healthy apparently… Because someone at school's child just kept wanting bananas and that. And apparently it was unhealthy because he had loads and loads and loads cause that's all they wanted. (Butterfly, 13)*

> *My teacher always says that certain foods are bad, but nothing's bad as long as you don't have too much or too little of it. She always says "yup chocolate's bad, crisps are bad, fizzy drinks are bad, oils and stuff are bad" but then, you have to have a bit of everything otherwise you'd get bored. (Ruby, 12)*

Labelling any food as *"bad"*, particularly when communicated by an influential person such as a teacher can be confusing for a young person and have severe implications, inducing feelings of shame when a young person eats these foods. Particularly for autistic individuals, who often take language literally, these statements could be detrimental and lead an autistic young person to cut out the food entirely, generating food restriction and disordered eating.

Interestingly, two participants took photographs of the 'Eat Well' plate to discuss during interviews. This plate is split into sections and displays the recommended amount for vegetables, carbohydrates and protein to guide food portioning. The plates serve as a great educational tool; although not always used as intended, they were a reminder of healthy foods and the importance of a balanced diet. Young people observed that the 'food sections' were helpful to recognise what is 'healthy' in relation to their own eating. Blossom (11) articulated that the plate containing the five food groups was *"things you need to eat every day"* explaining "*you need a balanced diet, cause, if you have too much of one food then you might get poorly cause you don't have everything you need"*.

3.2.3. Availability of healthy food

Having healthy food readily available and provided by parents was a regular occurrence for participants. When nutritious foods were easily accessible, individuals were more likely to make healthier choices. For some parents, this included directly preparing and providing home-cooked and healthier versions of their child's preferred foods. For Stella (17), this involved her parents incorporating vegetables into the meal itself, as an effective and efficient way to gain additional nutrients. In response to a photograph of her family's evening meal, which her mother had prepared, Stella explained:

> *We always put like grated carrots and like courgettes in [burgers] … I feel like a burger and like, chips is like, well and like BBQ sauce, isn't something you typically see as like, very healthy, it's all like a healthier version of that. (Stella, 17)*

For another young person (Ruby, 12) her parents always ensured there were various fresh fruits available in the kitchen fruit bowl to prompt healthy eating. If she was feeling hungry, the fruit was visible and ready to eat and encouraged her to opt for a healthy snack over a less healthy option.

> *We have a big fruit bowl at home, and it's always got stuff in. So, whenever you want a snack, if I'm like mum "I'm hungry", but like we're not having tea yet, she's like "have some fruit" and I'm like "ok", so then we've always got fruit in. (Ruby, 12)*

Another approach parents implemented to provide young people choice during mealtimes was to place the food dishes out in the centre of the dining table, allowing them to 'help themselves'. This encouraged autonomy when choosing a variety of different foods (e.g. protein, carbohydrates and vegetables) and to decide upon their preferred portion size. They also provides the option to go back for 'seconds' if they are still hungry. One young person (Toriko Derous, 15) photographed his evening meal four times; each meal included a side salad as a key component on his plate. This initiated a conversation that his parent encourages healthy eating by having a salad bar within the kitchen. This allows Toriko Derous and his siblings to independently choose their preferred salad items. He explained *"I just [choose] stuff I like… I really like olives… [and] I love lettuce"* as this 'nudges' him to easily add nutritious fruits and vegetables to his meals.

3.2.4. Learning through food activities

Many participants enjoyed the process of preparing meals, especially cooking. Cooking was viewed as an engaging and educational opportunity for young people to build a healthy relationship with food. One participant (Ruby, 12) described cooking for her family every week, using technology to help her. Ruby recorded her father's instructions and listens to them as a step-by-step guide to cook the family meal. Another participant, (Butterfly,13) acknowledged her love for cooking during her interview. Three of her chosen photographs were of her cooking at school, which initiated a conversation around her enjoyment of mixing tastes and textures to create big flavours. Butterfly stated *"I like making paella… and I make curries. [I cook] all the time"*. Butterfly also frequently cooks with her grandparents, as they support her to incorporate healthy foods and try new recipes. Butterfly however explained that she likes to control the cooking and enjoys following the recipe precisely. If others take over this leads to her feeling annoyed: *"If someone messes up the recipe, I'm not happy and I will tell them"*.

Additionally, four participants took photographs of local produce and homegrown fruits and vegetables, which initiated a conversation around natural unprocessed foods. One participant (Stella, 17) described fruit picking at a local farm as an interactive way to learn and taste new foods. Other participants also expressed enjoyment learning about fresh locally grown produce and discovering where their food comes from. A few participants grew their own fruit at home with the support of their parents, and believed it tasted even better because of the effort they had invested.

> *It tastes better because it's homegrown… it feels like there's love in it… Last summer, we grew this massive tomato plant, and it was huge, and we had loads of different types of tomatoes… They were the best tomatoes I've ever had. (Ruby, 12)*

Supermarket shopping served as an additional food exposure activity, where young people could join their parents to discover the different healthy food options on offer. One participant (Stella, 17) shared how her parents were preparing her for independence by encouraging her to shop for ingredients on her own in the supermarket. This experience was viewed as a valuable opportunity to develop practical life skills that will benefit her in the future. Stella believed this to be an excellent way to understand meal planning, shopping, buying and cooking, valuing the entire process as preparation for when she eventually moves out of the family home.

> *Recently I've been, we've been doing a thing where like [my parents] sort of give me like a little mini shopping list of some of the stuff we need to buy on it. I just walk around the store and get them, which has been quite fun and like good practice for when I'm older…, you know, going out, shopping and buying ingredients and actually, like, making stuff, I feel like I'm quite like, prepared in terms of aspects of, like, I feel like when I eventually move out one day, I'm not going to be even like, "what am I doing? Help!" (Stella, 17)*

3.3. Routine, predictability and "knowing what to expect"

For some participants predictability around food routines is vital to healthy eating practices within their daily lives, as they find comfort having the 'same food' meals. This may include having the same breakfast every day or going through phases of eating preferred foods. A common feature within autism is that individuals can find change difficult. Therefore, sticking to a predictable and healthy eating routine can reduce distress and lessen endless choices, which can be overwhelming. One participant (Liam, 13) noted that until recently he had eaten the same brand of cereal every day for breakfast. Similarly, Andrew (11) reported having the same breakfast cereal, from a specific bowl, every day before school as part of his routine.

> *(Interviewer) How often do you have chocolate hoops?*
>
> *(Andrew, 11) Every five days… School days, yeah.*

For some autistic individuals, routine and food familiarity can contribute to healthier eating habits by promoting regular, balanced meals whilst minimising the stress that comes with new food experiences. Ruby (12) explained that she prefers to stick to a predictable routine and enjoys the simplicity of having the same foods every day, *"knowing what to expect"*. Ruby continued that she would rather eat food prepared at home, as eating out creates unpredictability that she may be served an unfamiliar food within her meal. If Ruby does go out for a meal, she sticks to a healthy meal she knows she will enjoy.

> *I tend to have something that's like quite simple and I stick to a routine. So I have the same thing every day… Because it's easier because I know what I'm, I know what I'm expecting. There's no surprises of what it'll be and what I'll have… It's kind of like with trying new foods, I don't really like that that much. Yeah, so if I find a food that I like, like pasta from this one place when we go out to eat. I always have the same thing because I know that it's something I like… I just stick to one thing because I know that I like that forever. (Ruby, 12)*

For one young person, their food choices were more restrictive and repetitive as they opted for specific brands of foods. Blossom (11) stated she would only eat specific foods such as Heinz spaghetti hoops and Aldi pizza subs as she explained that other brands were the *"wrong flavour"*. Eating the same food repetitively offered a safe and predictable option for texture, taste, smell and look of a food item.

Predictable food routines not only offer a sense of stability but also support healthy eating practices by ensuring meals are scheduled and regular. This reduces the risk of overeating or undereating, as well as providing structure to consume a well-balanced diet. Liam (13) related this to his family's weekly meal planning routine. Liam stated that his mum *"does her weekly plan at the start of the week"* creating a meal timetable, which he enjoys as he knows exactly what to expect for each meal. Structured eating routines not only support healthy eating habits but can also contribute to emotional wellbeing by reducing stress associated with food unpredictability. During the interview, Liam mentioned feeling distressed about an upcoming holiday, as the uncertainty of travelling and the unpredictability of not knowing where, when or what he would be eating was causing him concern:

> *It’s a pain when we’re travelling, innit? ... We've got to have lunch on the ferry… Tea before we get to the hotel. Breakfast in the hotel and then on the way down at like a service station. So, it's like not going to be the best, is it?... Not knowing what you're having, yeah. (Liam, 13)*

3. 4. Eating… “you know, it’s a spectrum”

Many participants wanted to address the misconception that having autism inevitably leads to a restricted ‘unhealthy’ diet, as they highlighted their diverse food preferences and openness to trying new foods.

3.4.1. Taste preferences

There is a common stereotype that autistic individuals eat a ‘bland, beige diet’. This is often associated with hypersensitivity of sensory aspects of foods. In reality, sensory differences within autism lie within a spectrum, with individuals typically falling into the hypersensitive or hyposensitive categories. Participant (Stella, 17) explained the sensory differences associated with autism and healthy eating with a comparison between herself and her brother, who is also on the autistic spectrum. While Stella often seeks out more intense flavours because of hyposensitivity to sensory input, her brother can have a completely different response to foods and avoid certain flavours due to heightened sensory sensitivities.

> *(Stella, 17) (laughs) Beige food. Which I mean It’s not like its entirely untrue, like, no autistic people like that kind of thing. My brother loves it. But, like, I think it's just like if what my mum says for, like… either you prefer much, like, more milder flavours or you prefer much more intense flavours. And me and my brother, like, we’re the exact opposites of our spectrum… you know, it's a spectrum. The autistic spectrum!*

On the other end of the spectrum, some autistic individuals are hyposensitive to foods, requiring bold flavours to enjoy their eating experience. Many participants displayed sensory-seeking behaviours when eating, reporting their love of strong and spicy flavours.

> *(Interviewer) What would you say your favourite foods are?*
> *(Stella, 17) Spicy stuff... Curry is, like probably like the number one…*
>
> *I like spicy stuff now. I love spicy. If my dad has chillies on his plate, I'll eat them. (Butterfly, 13).*
>
> *(Interviewer) So what do you like about Nando's?*
> *(Blossom, 11) Cause they have spicy sauce… Hot is my normal… My nose starts to run. I just like the taste. And it feels spicy…*

One participant (Liam, 13) believed it was important for people to recognise that autistic people don’t just eat bland food, *“I'm the opposite… I don't like bland foods!”*. For many of the participants within this study, sensory-seeking eating behaviours appeared to play a role in healthy eating, as they appeared motivated to explore and try a wider variety of foods that offered bold and distinct tastes. However, as Stella (17) previously mentioned, for some the opposite is true, highlighting the fact that autistic young people have varied tastes.

3.4.2. Choice matters

Encouraging young people to try novel foods whilst respecting their choices is suggested by participants as the most helpful way to encourage healthy eating. This approach includes offering the young person a variety of food options whilst understanding that each person’s level of comfort trying new foods is different. Some participants like Butterfly (13) enjoy experimenting and tasting a wide variety of foods, such as sushi, caviar, squid and offal, indicating that some young people are naturally open to trying new foods. However, Butterfly admits she can “*still [be] picky”*, highlighting that whilst trying new foods can be exciting for some, they won’t necessarily enjoy the novel food. Similarly, Liam (13) demonstrates an instinctual eagerness to try new foods, stating *“I just do it. I just do it automatically. I want to try new stuff. I don't have to make myself try any stuff”*. His experience demonstrates that for some young people, their desire to try new foods is a natural and effortless process. For other participants, trying new foods is a much more challenging experience. Family members providing a young person the option to try a new food was seen to be helpful, however one participant explained they don’t always feel ‘ready’ to try new foods, this depends on how they are feeling at the time.

> *[My family will] encourage me to try [new foods] but then if I'm like no I really don't want to eat that they’re like yup that's fine you don't have to… Because some days I'll be like, oh, yeah, I'll try that… but then some days I just don't want to try that because sometimes I like the comfort of just having stuff that I like instead of trying something new. (Ruby, 12)*

When family members do offer new foods, participants emphasise the importance of providing a non-judgemental and supportive approach, adopting a ‘no consequences’ attitude creating a safe environment. Similarly, Stella (17) recommends that those involved with autistic young people need to be patient when asking them to try new foods: “*Don't put like too much pressure* *on them because, like, they'll like what they'll like and if they want, if they want and do end up wanting to try new things, they'll do it at their own pace".*

3.5. Workshop Feedback

Participants were able to provide anonymous feedback during the participatory workshop about what they enjoyed during the research process. One young person would have preferred the *"[interview] conversation [to be] not as long/not as challenging".* As interviews averaged over one hour long, it was understandable that this length of time may have been difficult for some to answer numerous open-ended questions about healthy eating. One participant said they enjoyed the entire process, with another enjoying *"learning about the various experiences of other autistic people".* For one young person, this helped them to feel less alone saying *"I have learnt that it's not only me that has all the problems and lots of people are the same as me".* Participants expressed that they enjoyed the photo-elicitation element of the research project *"I enjoyed taking photos for the project because I find taking photos fun that's why I chose this"* and enjoyed *"having a little meeting to talk about the photos".* For another participant, they believed "*sharing my experiences and knowing they'll be used to help people"* was the greatest benefit of taking part.

4. Discussion

The objective of this study was to use photo-elicitation to facilitate conversation and provide novel insight into autistic young people's experiences of healthy eating. To the author's knowledge, this is the first photo-elicitation study to explore healthy eating with autistic adolescents.

The experience of participants in this study indicate that autistic young people's sensory experiences influence their healthy eating behaviours. Participants noted that sensory aspects related to texture, cleanliness, environmental stimuli and interoception affected their healthy eating behaviours in some way. Participants' experiences of selective eating due to food textures highlight the important role sensory factors present for autistic adolescents when engaging in healthy eating. Strategies to overcome food textures, such as separating out foods, demonstrate how individuals manage healthy eating by adapting food presentations to accommodate sensory preferences. These adaptations support healthy eating as individuals can eat a broader variety of foods and meet their dietary needs. A strong finding from this study was that the majority of young people in this study reported food texture to be the deciding factor whether they would eat a food or not, regardless of the taste. These findings resonate with existing research, including parent-report studies identifying food texture as the primary cause of food refusal amongst autistic young people (Hubbard et al., 2014; Mayes & Zickgraf, 2019; Nadon et al., 2011).

Further findings from participants highlight that the assumption that autistic individuals dislike strong flavours, preferring ‘beige, bland’ food and display reluctance to try new foods is not applicable for many autistic young people, contradicting previous research (Kuschner et al., 2015). Whilst autistic individuals present more food-related sensory sensitivities in comparison to their non-autistic peers, taste preferences likely lie on a spectrum. Many participants within this study presented sensory-seeking eating behaviours, preferring strong and spicy flavours. This finding corresponds to previous research within autistic adults (Stephenson et al., 2024) and similarly suggests that autistic young people have diverse sensory preferences and may seek out intense flavours presenting hyposensitivity, while others may avoid them due to hypersensitivity.

One participant (Toriko Derous, 15) raised the issue of interoceptive difficulties having a significant impact upon his healthy eating behaviours, as he struggled to recognise hunger and fullness cues. Whilst Toriko Derous was the only participant to bring up interoception challenges, two additional parents discussed during the interview and workshop stages that they believed their child struggles to recognise their fullness levels. A limitation of this subtheme is that the topic of interoception was not directly asked and explored by the interviewer during all interviews and instead was brought up during conversation by Toriko Derous. Research examining the association between autism and interoceptive difficulties and how these directly impact eating behaviours appear scarce (Trevisan et al., 2020). Furthermore, interoceptive challenges may not be easily recognisable for autistic individuals (Fiene & Brownlow, 2015). Future research exploring interoceptive processes within autistic individual’s eating practices could provide invaluable insight and reduce disordered eating. Meanwhile, clinical guidance to support young people and families to navigate interoception challenges could help to alleviate over- or under-eating.

Additionally, some participants within this study highlighted the importance of predictable food routines, which provided comfort and stability in their everyday lives. For some autistic young people, familiarity with meals, such as having the same breakfast every day or repeatedly eating preferred foods, helps minimise anxiety and avoid the overwhelming task of making food choices or trying novel foods. This preference for routine is often linked to the difficulty many autistic individuals have with adapting to change (Martins et al., 2008). Additionally, predictable food routines are associated with healthier eating habits through regular, balanced meals (Sharp et al., 2020; Selman & Dilworth-Bart, 2024). Structured mealtimes may additionally benefit autistic young people who struggle with interoception difficulties and may reduce the risk of over- or undereating due to unnoticed signs of satiety or hunger (Kinnaird et al., 2021). Establishing a routine with consistent mealtimes could help autistic young people to eat balanced meals on a regular basis.

The study findings highlight that family members play a crucial role in promoting healthy eating habits among autistic young people through encouragement, education and providing healthy food options. Families within this study were supportive and accommodated their child's diets, whether that included encouraging young people to try new foods or making sure they were eating a suitable amount of food. Both were understood to be 'healthy eating' presented in alternate ways. The findings in this study indicated that autistic young people are influenced by their parents' approach to healthy eating and that close family members can have a positive influence on participants' eating behaviours. These findings equally correspond to research undertaken with non-autistic youths (Mahmood et al., 2021). This is somewhat expected as participants' parents typically decide upon which foods are available within the household, model healthy eating habits and establish ground rules for meal quality and quantity for their children. Additionally, the way in which a parent communicates with their child impacts their eating (Norton et al., 2023). Therefore, when family members introduce new foods, participants stressed the importance of providing non-judgemental and supportive encouragement, allowing the young people to try new food without fear of judgement or shame. This approach additionally fosters autonomy and enables the young person to make their own food choices, a technique commonly used within feeding interventions with autistic young people (Cosbey & Muldoon, 2017).

Furthermore, some participants' parents implemented 'nudging' techniques at home. This is a behaviour change strategy used within interventions to promote healthy eating behaviours (Broers et al., 2017; Bucher et al., 2016). This was applied by displaying available healthy foods within the young people's environment, simultaneously encouraging autonomy (Lycett et al., 2017). By subtly altering the home environment and positioning healthy food (such as a fruit bowl or salad bar) within direct view of the young person, this positively prompts the young person to opt for healthy food choices. Additionally, offering self-serving meals at the dinner table allows young people to decide how much food they want, and can be beneficial when introducing portion control as they transition into adulthood and begin making more independent food choices. These subtle yet important changes gently encourage young people to select healthier food options independently under parent's guidance. Through nudging techniques, parents are setting up participants to develop lifelong healthy eating habits (Balatekin et al., 2020). Future eating interventions involving autistic young people should aim to incorporate and target family-level behaviours.

Participants additionally expressed their enjoyment of preparing and cooking meals, frequently preparing their own breakfast or lunch, or cooking for their family. This involvement in food preparation and cooking enhanced their relationship with food in a positive way, boosting self-efficacy and advancing their culinary skills. Engaging in hands-on food activities such as cooking and fruit picking generates a positive association with food for young people and enhances nutritional knowledge and the importance of healthy eating (DeCosta et al., 2017; Hartmann et al., 2013; Jarpe-Ratner et al., 2016; Lavelle et al., 2016; Woodruff & Kirby, 2013). Cooking teaches practical life skills and encourages sensory exploration of new foods, as it allows the autistic young person to become more comfortable with different textures and smells. One participant (Stella, 17) was additionally encouraged by her parents to enhance her daily living skills and independently shop for food ingredients, boosting her executive functioning skills. Often, autistic individuals can face difficulties with executive functioning skills and may require additional support around meal planning, grocery shopping and cooking meals (Kinnaird et al., 2019). Enhancing executive functioning skills from an early age could be invaluable long term as adolescents begin to choose and prepare their own food.

Whilst all participants in this study described experiencing autism-related eating behaviours (sensory sensitivities, specific food-based routines or aversions to new foods) and acknowledged that their eating patterns were different, for most participants they did not perceive these to be problematic. This concurs with previous research with autistic adults that although autism affects eating behaviours, some autistic individuals do not want to be unnecessarily pathologised (Kinnaird et al., 2019). It may be instead important to recognise that many autistic individuals adapt and develop coping strategies to manage their eating difficulties, and these can be positive and functional. By reconsidering what constitutes healthy eating for an autistic young person and building understanding of atypical eating patterns, we can more efficiently care for autistic young people who require support to overcome food-related challenges.

5. Strengths and Limitations

A key strength of the project was using photo-elicitation as a novel approach to facilitate conversations. It is important that research methodology is adapted to the needs and abilities of autistic individuals so that they can participate actively and meaningfully (Harrington et al., 2014). As autistic individuals have visual strengths and have a greater ability to process what is seen in comparison to what is heard (Lamb et al., 2016; Carnahan, 2006), this concrete method benefited participants who may have difficulties communicating their perspectives, to share experiences visually rather than relying solely on memory. The interactive nature of photo-elicitation allowed participants to capture their authentic voice and experiences. Photo-taking additionally allowed the young people to take the lead as a participant and reduced their reliance upon parents and was reported as enjoyable by many participants.

Often research lacks involvement of autistic people, particularly autistic young people (Lam et al., 2020). This research project prioritised young people's engagement by adapting communication to the individual's needs. One of these methods was offering the option to take part online via video-call or in-person. Additionally, the interview process was designed to be flexible to reduce any communication anxieties and provide richer insight into their individual stories. The cross-checking workshop was another participatory method to ensure that the research findings were representative of the lived experiences of those who participated in the study. The study had a positive impact upon some participants as one young person stated they enjoyed everything about the research process and learnt *"how to be a researcher"*. Future research that values the inclusion of the autistic young community and adapts to neurodiverse needs is fundamental.

A potential limitation of the study is that a parent was present at six out of seven interviews. For some participants, communicating their experiences and perspectives during interviews was challenging. In particular, some younger participants relied on their parents to scaffold the conversation surrounding autism and healthy eating. Danker and colleagues (2017) similarly recognised that whilst photo-elicitation can aid conversation, some autistic young people can present difficulties explaining why they have taken specific photos, or how it relates to the research topic. Having a parent present allowed the young person to feel more comfortable answering questions and recognises that eating behaviours in this age group are co-dependent and entwined with family attitudes and behaviours. Whilst parental support appeared necessary in a small number of interviews, it is important to note that this study focussed upon young people's views. Moreover, the themes that arose during interviews with parents present were not dissimilar from the young person who completed their interview independently.

Although it was not the focus of this present study, parents wanted their experiences to be heard and provided noteworthy comments during interviews. To name some examples, parents stated that having to cook separate meals at night proved difficult, health professionals often dismissed their child's eating challenges, and one parent shared that a schoolteacher previously forced food upon their autistic child, which had led them to struggle with certain foods ever since. This research presents views of autistic young people, but the presence of parents highlighted that they wanted to share their views too and should be an avenue for future research.

Another potential limitation is that the families who chose to participate in the research may have had greater interest in the topic of healthy eating compared to those who chose not to take part. Furthermore, the recruitment strategy specifically targeted parents. This may have led to more supportive parents who recognised healthy eating behaviours within their child to take part. It is acknowledged that healthy eating is not always straightforward, and encouraging young people to eat healthy food, can cause conflict between children and parents (Shaw et al., 2021). Despite this, participants and their parents noted that they became more aware of healthy and unhealthy eating habits through their involvement in the study. The research question generated conversations between parents and young people about healthy eating, as several realised they were unconsciously eating healthy food regularly.

Additionally, more representation across different cultures is needed within future research exploring autistic young people and healthy eating. The present study was conducted in England, United Kingdom with all participants of white ethnicity. There is undoubtedly a cultural and social influence within the topic of 'healthy eating', particularly within the use of language and the word 'healthy' (Cavanaugh et al., 2014). The Western ethos surrounding healthy food generally focusses upon balanced food groups, portion size, and optimising an individual's health (Braun et al., 2020), whereas the Eastern ethos of healthy food focusses upon a more holistic approach influenced by traditional practices, viewing food as medicine for the body and mind (Heinrich et al., 2021). It is important to note that the findings from this study correspond with Westernised views of healthy eating.

6. Conclusion

Within this study, photo-elicitation facilitated participant interviews and provided novel insight into autistic young people's experiences of healthy eating. The findings illustrate that eating profiles of autistic young people are varied and individual. While some may stick to specific food routines or eat a smaller range of preferred foods, many also display a willingness to explore new foods and flavours. Importantly, autistic young people often develop their own coping strategies to navigate any eating challenges. They view their food routines and specific food preferences not as barriers to healthy eating, but as adaptive responses to sensory and social challenges, ensuring that they still meet their nutritional needs. Social contacts, particularly family members, are influential in how well young people manage their diets. They play a crucial role in providing opportunities for healthy eating and expanding food variety. Effective support from family members requires a delicate approach, creating a safe and non-judgemental space where young people feel supported to try new foods at their own pace. Additionally, families are instrumental when developing life skills such as cooking and grocery shopping, which encourages life-long healthy eating practices. To encourage healthy eating, it is essential to involve family members, therefore family-centred interventions are strongly recommended to generate healthy eating outcomes for autistic young people. Furthermore, including autistic young within research to understand their eating experiences offers invaluable insights into their perspectives and needs. These findings equip families, educators and health professionals with education and awareness of autism-related eating behaviours. This knowledge enables them to provide tailored and effective support and address individual eating challenges with empathy and understanding.

Funding

This research study was supported by a University of Staffordshire Connected Communities Participatory Action Research Grant.

Ethical Statement

Ethical approval for the research study was obtained from the University of Staffordshire's Health, Education, Policing and Sciences Ethics Committee (Ref SU_23_125). All participants and parents provided full and informed assent and consent to take part.

Declaration of Competing Interest

The authors declare no declarations of interest.

Data Availability

Due to social communication challenges the research population face, participants were assured their full transcripts would remain confidential and would not be publicly shared.

Acknowledgements

The authors would like to sincerely thank all the young people who contributed to the research.

Additional Notes

An adapted interactive flipbook including the key research findings will be disseminated to participants and families and publicised by the national UK charity based in Staffordshire.

Supplementary data

Supplementary data to this article can be found at the end of this paper.

References

Balantekin, K. N., Anzman-Frasca, S., Francis, L. A., Ventura, A. K., Fisher, J. O., & Johnson, S. L. (2020). Positive parenting approaches and their association with child eating and weight: A narrative review from infancy to adolescence. *Pediatric Obesity*, *15*(10), https://doi.org/10.1111/ijpo.12722

Bandini, L. G., Curtin, C., Phillips, S., Anderson, S. E., Maslin, M., & Must, A. (2017). Changes in Food Selectivity in Children with Autism Spectrum Disorder. *Journal of autism and developmental disorders*, *47*(2), 439–446. https://doi.org/10.1007/s10803-016-2963-6

Baraskewich, J., von Ranson, K. M., McCrimmon, A., & McMorris, C. A. (2021). Feeding and eating problems in children and adolescents with autism: A scoping review. Autism, 25(6), 1505-1519. https://doi.org/10.1177/1362361321995631

Botha, M., Hanlon, J., & Williams, G. L. (2023). Does Language Matter? Identity-First Versus Person-First Language Use in Autism Research: A Response to Vivanti. *Journal of Autism and Developmental Disorders*, *53*(2), 870–878. https://doi.org/10.1007/s10803-020-04858-w

Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding Ableist Language: Suggestions for Autism Researchers. *Autism in Adulthood*, *3*(1), 18–29. https://doi.org/10.1089/aut.2020.0014

Braun, V. & Clarke, V. (2021). *Thematic analysis : a practical guide*. SAGE.

Braun, V., Carruthers, S., Lupton, D., & Feldman, Z. (2020). Working at self and wellness: A critical analysis of vegan vlogs. In *Digital Food Cultures* (1st ed., pp. 82–96). Routledge. https://doi.org/10.4324/9780429402135-8

Broers, V. J. V., De Breucker, C., Van Den Broucke, S., & Luminet, O. (2017). A systematic review and meta-analysis of the effectiveness of nudging to increase fruit and vegetable choice. *European Journal of Public Health*, *27*(5), 912–920. https://doi.org/10.1093/eurpub/ckx085

Bucher, T., Collins, C., Rollo, M. E., McCaffrey, T. A., De Vlieger, N., Van der Bend, D., Truby, H., & Perez-Cueto, F. J. A. (2016). Nudging consumers towards healthier choices: a systematic review of positional influences on food choice. *British Journal of Nutrition*, *115*(12), 2252–2263. https://doi.org/10.1017/S0007114516001653

Carnahan, C. R. (2006). Photovoice: Engaging Children with Autism and their Teachers. *Teaching Exceptional Children*, *39*(2), 44–50. https://doi.org/10.1177/004005990603900208

Cavanaugh, J. R., Riley, K. C., Jaffe, A., Jourdan, C., Karrebæk, M., & Paugh, A. (2014). What Words Bring to the Table: The Linguistic Anthropological Toolkit as Applied to the Study of Food. *Journal of Linguistic Anthropology*, *24*(1), 84–97. https://doi.org/10.1111/jola.12038

Chistol, L. T., Bandini, L. G., Must, A., Phillips, S., Cermak, S. A., & Curtin, C. (2018). Sensory Sensitivity and Food Selectivity in Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, *48*(2), 583–591. https://doi.org/10.1007/s10803-017-3340-9

Christoph, M. J., Larson, N. I., Winkler, M. R., Wall, M. M., & Neumark-Sztainer, D. (2019). Longitudinal trajectories and prevalence of meeting dietary guidelines during the transition from adolescence to young adulthood. *The American Journal of Clinical Nutrition*, *109*(3), 656–664. https://doi.org/10.1093/ajcn/nqy333

Connor, Z. L., Hennessy-Priest, K., Kneafsey, R., & Lycett, D. (2023). Let down by Low Expectations: A Qualitative Interview/participatory Photography Study of Feeding Problems in Autistic Children. *Journal of Occupational Therapy, Schools & Early Intervention*, *16*(3), 262–280. https://doi.org/10.1080/19411243.2022.2054485

Cosbey, J., & Muldoon, D. (2017). EAT-UP™ Family-Centered Feeding Intervention to Promote Food Acceptance and Decrease Challenging Behaviors: A Single-Case Experimental Design Replicated Across Three Families of Children with Autism Spectrum Disorder. *Journal of autism and developmental disorders*, *47*(3), 564–578. https://doi.org/10.1007/s10803-016-2977-0

Courcy, I., & Koniou, I. (2024). A scoping review of the use of photo-elicitation and photovoice with autistic and neurodiverse people. Moving towards more inclusive research? *Disability & Society*, *39*(5), 1317–1338. https://doi.org/10.1080/09687599.2022.2137391

Croen, L. A., Zerbo, O., Qian, Y., Massolo, M. L., Rich, S., Sidney, S., & Kripke, C. (2015). The health status of adults on the autism spectrum. *Autism*, *19*(7), 814–823. https://doi.org/10.1177/1362361315577517

Danker, J., Strnadová, I., & Cumming, T. M. (2017). Engaging Students With Autism Spectrum Disorder in Research Through Participant-Driven Photo-Elicitation Research Technique. *Australasian Journal of Special and Inclusive Education*, *41*(1), 35–50. https://doi.org/10.1017/jse.2016.7

DeCosta, P., Møller, P., Frøst, M. B., & Olsen, A. (2017). Changing children's eating behaviour - A review of experimental research. *Appetite*, *113*, 327–357. https://doi.org/10.1016/j.appet.2017.03.004

Demartini, B., Nisticò, V., Bertino, V., Tedesco, R., Faggioli, R., Priori, A., & Gambini, O. (2021). Eating disturbances in adults with autism spectrum disorder without intellectual disabilities. *Autism Research*, *14*(7), 1434–1443. https://doi.org/10.1002/aur.2500

Doreswamy, S., Bashir, A., Guarecuco, J. E., Lahori, S., Baig, A., Narra, L. R., Patel, P., & Heindl, S. E. (2020). Effects of Diet, Nutrition, and Exercise in Children With Autism and Autism Spectrum Disorder: A Literature Review. *Cureus*, *12*(12), e12222. https://doi.org/10.7759/cureus.12222

Dorn, L. D., Hostinar, C. E., Susman, E. J., & Pervanidou, P. (2019). Conceptualizing Puberty as a Window of Opportunity for Impacting Health and Well-Being Across the Life Span. *Journal of Research on Adolescence*, *29*(1), 155–176. https://doi.org/10.1111/jora.12431

Esposito, M., Mirizzi, P., Fadda, R., Pirollo, C., Ricciardi, O., Mazza, M., & Valenti, M. (2023). Food Selectivity in Children with Autism: Guidelines for Assessment and Clinical Interventions. *International Journal of Environmental Research and Public Health*, *20*(6), 5092-. https://doi.org/10.3390/ijerph20065092

Fiene, L., & Brownlow, C. (2015). Investigating interoception and body awareness in adults with and without autism spectrum disorder. *Autism Research*, *8*(6), 709–716. https://doi.org/10.1002/aur.1486

Gratton, N., & Beddows, R. (2018). *Get Talking: Managing to Achieve More through Creative Consultation*. Emerald Group Publishing Limited.

Green, E. M., Spivak, C., & Dollahite, J. S. (2021). Early adolescent food routines: A photo-elicitation study. *Appetite*, *158*, 105012–105012. https://doi.org/10.1016/j.appet.2020.105012

Harrington, C., Foster, M., Rodger, S., & Ashburner, J. (2014). Engaging young people with Autism Spectrum Disorder in research interviews. *British Journal of Learning Disabilities*, *42*(2), 153–161. https://doi.org/10.1111/bld.12037

Hartmann, C., Dohle, S., & Siegrist, M. (2013). Importance of cooking skills for balanced food choices. *Appetite*, *65*, 125–131. https://doi.org/10.1016/j.appet.2013.01.016

Heinrich, M., Yao, R., & Xiao, P. (2021). 'Food and medicine continuum' - Why we should promote cross-cultural communication between the global East and West. *Chinese herbal medicines*, *14*(1), 3–4. https://doi.org/10.1016/j.chmed.2021.12.002

Howe, S. J., Hull, L., Sedgewick, F., Hannon, B., & McMorris, C. A. (2023). Understanding camouflaging and identity in autistic children and adolescents using photo-elicitation. *Research in Autism Spectrum Disorders*, *108*, 102232.

Hubbard, K. L., Anderson, S. E., Curtin, C., Must, A., & Bandini, L. G. (2014). A Comparison of Food Refusal Related to Characteristics of Food in Children with Autism Spectrum Disorder and Typically Developing Children. *Journal of the Academy of Nutrition and Dietetics*, *114*(12), 1981–1987. https://doi.org/10.1016/j.jand.2014.04.017

Ismail, N. A. S., Ramli, N. S., Hamzaid, N. H., & Hassan, N. I. (2020). Exploring eating and nutritional challenges for children with autism spectrum disorder: Parents' and special educators' perceptions. *Nutrients*, *12*(9), 1–17. https://doi.org/10.3390/nu12092530

Jarpe-Ratner, E., Folkens, S., Sharma, S., Daro, D., & Edens, N. K. (2016). An Experiential Cooking and Nutrition Education Program Increases Cooking Self-Efficacy and Vegetable Consumption in Children in Grades 3–8. *Journal of Nutrition Education and Behavior*, *48*(10), 697-705.e1. https://doi.org/10.1016/j.jneb.2016.07.021

Kahathuduwa, C. N., Dhanasekara, C. S., Wakefield, S., Moustaid-Moussa, N., & Mastergeorge, A. (2022). Autism spectrum disorder is associated with an increased risk of development of underweight in children and adolescents: A systematic review and meta-analysis. *Research in Autism Spectrum Disorders*, *94*, 101969-. https://doi.org/10.1016/j.rasd.2022.101969

Kinnaird, E., McLachnan, I., Smith, K., & Tchanturia, K. (2021). Assessing sensory sensitivities co-occurring in autism and eating disorders. In *Supporting Autistic People with Eating Disorders.* Jessica Kingsley.

Kinnaird, E., Norton, C., Pimblett, C., Stewart, C., Tchanturia, K., & Tregellas, J. R. (2019). Eating as an autistic adult: An exploratory qualitative study. *PloS One*, *14*(8), e0221937–e0221937. https://doi.org/10.1371/journal.pone.0221937

Kuschner, E. S., Eisenberg, I. W., Orionzi, B., Simmons, W. K., Kenworthy, L., Martin, A., & Wallace, G. L. (2015). A preliminary study of self-reported food selectivity in adolescents and young adults with autism spectrum disorder. *Research in Autism Spectrum Disorders*, *15–16*, 53–59. https://doi.org/10.1016/j.rasd.2015.04.005

Lam, G. Y. H., Holden, E., Fitzpatrick, M., Raffaele Mendez, L., & Berkman, K. (2020). “Different but connected”: Participatory action research using Photovoice to explore well-being in autistic young adults. *Autism*, *24*(5), 1246–1259. https://doi.org/10.1177/1362361319898961

Lamb, P., Firbank, D., & Aldous, D. (2016). Capturing the world of physical education through the eyes of children with autism spectrum disorders. *Sport, Education and Society*, *21*(5), 698–722. https://doi.org/10.1080/13573322.2014.941794

Lapenta, F., Pauwels, L., Margolis, E. M., Margolis, E., & Pauwels, L. (2011). Some Theoretical and Methodological Views on Photo-Elicitation. In *The SAGE Handbook of Visual Research Methods* (pp. 201–213). SAGE Publications. https://doi.org/10.4135/9781446268278.n11

Lavelle, F., Spence, M., Hollywood, L., McGowan, L., Surgenor, D., McCloat, A., Mooney, E., Caraher, M., Raats, M., & Dean, M. (2016). Learning cooking skills at different ages: A cross-sectional study. *The International Journal of Behavioral Nutrition and Physical Activity*, *13*(1), 119–119. https://doi.org/10.1186/s12966-016-0446-y

Li, C., Liu, Y., Fang, H., Chen, Y., Weng, J., Zhai, M., Xiao, T., & Ke, X. (2020). Study on Aberrant Eating Behaviors, Food Intolerance, and Stereotyped Behaviors in Autism

Spectrum Disorder. *Frontiers in Psychiatry*, *11*, 493695–493695. https://doi.org/10.3389/fpsyt.2020.493695

Lycett, K., Miller, A., Knox, A., Dunn, S., Kerr, J. A., Sung, V., & Wake, M. (2017). 'Nudge' interventions for improving children's dietary behaviors in the home: A systematic review. *Obesity Medicine*, *7*, 21–33. https://doi.org/10.1016/j.obmed.2017.06.001

Mahmood, L., Flores-Barrantes, P., Moreno, L. A., Manios, Y., & Gonzalez-Gil, E. M. (2021). The influence of parental dietary behaviors and practices on children's eating habits. *Nutrients*, *13*(4), 1138-. https://doi.org/10.3390/nu13041138

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample Size in Qualitative Interview Studies: Guided by Information Power. *Qualitative health research*, *26*(13), 1753–1760. https://doi.org/10.1177/1049732315617444

Margari, L., Marzulli, L., Gabellone, A., & de Giambattista, C. (2020). Eating and mealtime behaviors in patients with autism spectrum disorder: Current perspectives. *Neuropsychiatric Disease and Treatment*, *16*, 2083–2102. https://doi.org/10.2147/NDT.S224779

Martins, Y., Young, R. L., & Robson, D. C. (2008). Feeding and eating behaviors in children with autism and typically developing children. *Journal of autism and developmental disorders*, *38*(10), 1878–1887. https://doi.org/10.1007/s10803-008-0583-5

Mayes, S. D., & Zickgraf, H. (2019). Atypical eating behaviors in children and adolescents with autism, ADHD, other disorders, and typical development. *Research in Autism Spectrum Disorders*, *64*, 76–83. https://doi.org/10.1016/j.rasd.2019.04.002

Nadon, G., Feldman, D. E., Dunn, W., & Gisel, E. (2011). Mealtime problems in children with autism spectrum disorder and their typically developing siblings: a comparison study. *Autism : the international journal of research and practice*, *15*(1), 98–113. https://doi.org/10.1177/1362361309348943

Nicolaidis, C., Raymaker, D. M., McDonald, K. E., Lund, E. M., Leotti, S., Kapp, S. K., Katz, M., Beers, L. M., Kripke, C., Maslak, J., Hunter, M., & Zhen, K. Y. (2020). Creating Accessible Survey Instruments for Use with Autistic Adults and People with Intellectual Disability: Lessons Learned and Recommendations. *Autism in Adulthood*, *2*(1), 61–76. https://doi.org/10.1089/aut.2019.0074

Nicolaidis, C., Raymaker, D., Kapp, S. K., Baggs, A., Ashkenazy, E., McDonald, K., Weiner, M., Maslak, J., Hunter, M., & Joyce, A. (2019). The AASPIRE practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants. *Autism*, *23*(8), 2007–2019. https://doi.org/10.1177/1362361319830523

Nimbley, E., Golds, L., Sharpe, H., Gillespie-Smith, K., & Duffy, F. (2022). Sensory processing and eating behaviours in autism: A systematic review. *European Eating Disorders Review*, 30(5), 538–559. https://doi.org/10.1002/erv.2920

Norton, L., Parkinson, J., Harris, N., Darcy, M., & Hart, L. (2023). Parental food communication and child eating behaviours: A systematic literature review. *Health Promotion Journal of Australia*, *34*(2), 366–378. https://doi.org/10.1002/hpja.604

Obrusnikova, I., & Cavalier, A. R. (2011). Perceived Barriers and Facilitators of Participation in After-School Physical Activity by Children with Autism Spectrum Disorders. *Journal of Developmental and Physical Disabilities*, *23*(3), 195–211. https://doi.org/10.1007/s10882-010-9215-z

Page, S.D., Souders, M.C., Kral, T.V.E. *et al.* Correlates of Feeding Difficulties Among Children with Autism Spectrum Disorder: A Systematic Review. *Journal of Autism Developmental Disorder* **52**, 255–274 (2022). https://doi.org/10.1007/s10803-021-04947-4

Råstam M. (2008). Eating disturbances in autism spectrum disorders with focus on adolescent and adult years. *Clinical Neuropsychiatry: Journal of Treatment Evaluation*, 5(1), 31–42

Reicks, M., Banna, J., Cluskey, M., Gunther, C., Hongu, N., Richards, R., Topham, G., & Wong, S. S. (2015). Influence of parenting practices on eating behaviors of early adolescents during independent eating occasions: Implications for obesity prevention. *Nutrients*, *7*(10), 8783–8801. https://doi.org/10.3390/nu7105431

Richard, V. M., & Lahman, M. K. E. (2015). Photo-elicitation: reflexivity on method, analysis, and graphic portraits. *International Journal of Research & Method in Education*, *38*(1), 3–22. https://doi.org/10.1080/1743727X.2013.843073

Ryan, G. W., & Bernard, H. R. (2003). Techniques to Identify Themes. *Field Methods*, *15*(1), 85–109. https://doi.org/10.1177/1525822x02239569

Sammels, O., Karjalainen, L., Dahlgren, J., & Wentz, E. (2022). Autism Spectrum Disorder and Obesity in Children: A Systematic Review and Meta-Analysis. *Obesity Facts*, *15*(3), 305–320. https://doi.org/10.1159/000523943

Selman, S. B., & Dilworth-Bart, J. E. (2024). Routines and child development: A systematic review. *Journal of Family Theory & Review*, *16*(2), 272–328. https://doi.org/10.1111/jftr.12549

Sharp, W. G., Berry, R. C., McCracken, C., Nuhu, N. N., Marvel, E., Saulnier, C. A., Klin, A., Jones, W., & Jaquess, D. L. (2013). Feeding Problems and Nutrient Intake in Children with Autism Spectrum Disorders: A Meta-analysis and Comprehensive Review of the Literature. *Journal of Autism and Developmental Disorders*, *43*(9), 2159–2173. https://doi.org/10.1007/s10803-013-1771-5

Sharp, W. G., Burrell, T. L., Berry, R. C., Stubbs, K. H., McCracken, C. E., Gillespie, S. E., & Scahill, L. (2019). The Autism Managing Eating Aversions and Limited Variety Plan vs Parent Education: A Randomized Clinical Trial. *The Journal of pediatrics*, *211*, 185–192.e1. https://doi.org/10.1016/j.jpeds.2019.03.046

Shaw, S., Correia Simao, S., Jenner, S., Lawrence, W. T., Woods-Townsend, K., Vogel, C. A., Farrell, D., Inskip, H., Baird, J., Morrison, L., Barker, M., & Strömmer, S. T. (2021). Parental perspectives on negotiations over diet and physical activity: how do we involve parents in adolescent health interventions? *Public Health Nutrition*, *24*(9), 2727–2736. https://doi.org/10.1017/S1368980021000458

Stephenson, H., Thom-Jones, S., Lowe, J., & Milne, L. (2024). “I Know It’s Very Spectrum-y”: Autistic Women Reflect on Sensory Aspects of Food and Eating. *Autism in Adulthood*. https://doi.org/10.1089/aut.2023.0114

Trevisan, D. A., Parker, T., & McPartland, J. C. (2021). First-Hand Accounts of Interoceptive Difficulties in Autistic Adults. *Journal of Autism and Developmental Disorders*, *51*(10), 3483–3491. https://doi.org/10.1007/s10803-020-04811-x

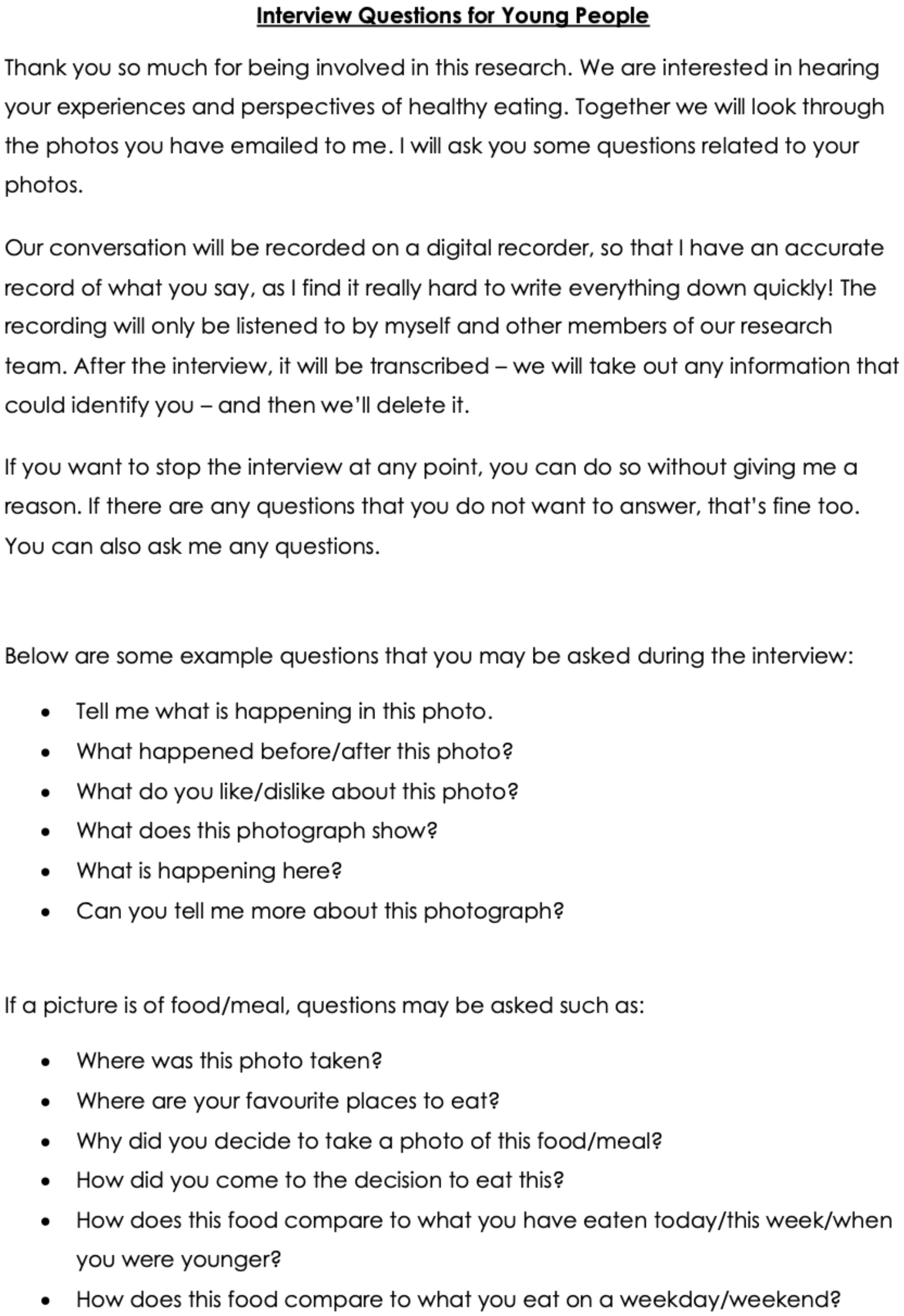
Vissoker R. E., Latzer Y., Gal E. (2015). Eating and feeding problems and gastrointestinal dysfunction in autism spectrum disorders. *Research in Autism Spectrum Disorders*, 12, 10–21.

Warner, G., Cooper, H., & Cusack, J. (2019). *A review of the autism research funding landscape in the United Kingdom*. Autistica.

Westwood, H., & Tchanturia, K. (2017). Autism Spectrum Disorder in Anorexia Nervosa: An Updated Literature Review. *Current Psychiatry Reports*, *19*(7), 41--41. https://doi.org/10.1007/s11920-017-0791-9

Woodruff, S. J., & Kirby, A. R. (2013). The Associations Among Family Meal Frequency, Food Preparation Frequency, Self-efficacy for Cooking, and Food Preparation Techniques in Children and Adolescents. *Journal of Nutrition Education and Behavior*, *45*(4), 296–303. https://doi.org/10.1016/j.jneb.2012.11.006

Supplement 1. Interview Guide for Young People



Interview Questions for Young People

Thank you so much for being involved in this research. We are interested in hearing your experiences and perspectives of healthy eating. Together we will look through the photos you have emailed to me. I will ask you some questions related to your photos.

Our conversation will be recorded on a digital recorder, so that I have an accurate record of what you say, as I find it really hard to write everything down quickly! The recording will only be listened to by myself and other members of our research team. After the interview, it will be transcribed – we will take out any information that could identify you – and then we'll delete it.

If you want to stop the interview at any point, you can do so without giving me a reason. If there are any questions that you do not want to answer, that's fine too. You can also ask me any questions.

Below are some example questions that you may be asked during the interview:

- Tell me what is happening in this photo.
- What happened before/after this photo?
- What do you like/dislike about this photo?
- What does this photograph show?
- What is happening here?
- Can you tell me more about this photograph?

If a picture is of food/meal, questions may be asked such as:

- Where was this photo taken?
- Where are your favourite places to eat?
- Why did you decide to take a photo of this food/meal?
- How did you come to the decision to eat this?
- How does this food compare to what you have eaten today/this week/when you were younger?
- How does this food compare to what you eat on a weekday/weekend?

If a picture looks like an activity (such as cooking/baking), questions may be asked such as:

- What was going on when you took this photo?
- What other things do you cook/prepare?
- Who else is involved in preparing meals at home?

Some example questions related to healthy eating may be:

- What does healthy eating mean to you?
- How do you make healthy food choices?
- What do you think the benefits of healthy eating are?
- Is there anything that helps you to eat healthier?
- What do you think is difficult about eating healthily?
- Is it important to you to make healthy food choices? Why/not?

In relation to autism and healthy eating, questions may be asked such as:

- Do you think that autism affects your eating or food choices? In what ways?
- Do you think autism helps/hinders your ability to eat healthy food?
- What would you like health professionals to know about autism and eating?

Supplement 2. Photo Guidelines Handout

[redacted]

Photo Research Project - Things to Remember

Take pictures of anything in your daily life that you relate to **Healthy Eating**. This can be people, places, or things that you think are important when it comes to what you eat!

Please remember not to take pictures of anyone you do not have consent from.

If you need more time to take pictures you and/or your parent can contact me.

Please choose between 5 and 8 pictures and email these to me before our second meeting.

We will talk about these pictures you have taken.

We hope you have fun taking photos! Please remember there are no 'right' or 'wrong' pictures to take. You are the expert in this project – we want to know your thoughts and experiences of healthy eating!

You can email me with any questions that you have during the research project:

[redacted]

Qualitative Research Reflective Commentary

My Interest in the Project

My current work placement involves working closely with autistic children and young people during autism assessments. As a primary objective within my doctoral research project, I wanted to intentionally involve autistic young people. A lot of autism research doesn't involve the views of autistic people themselves, and typically focusses on their perceived deficiencies (Botha, 2021). My goal was to include autistic young people using adapted communication methods to discuss their experiences and how issues directly affect them. Ultimately, autism research should improve the lives of autistic people and I believed this approach would facilitate and inform future research and interventions.

The idea of investigating healthy eating and autistic young people emerged from my own interest and the extensive literature review I conducted for various doctoral competencies (consultancy, interventions and teaching/training). I studied numerous journals discussing autism and food selectivity, rigid food routines and interoceptive difficulties and witnessed these difficulties first-hand, as prior to my doctorate I worked with autistic children as a respite care worker. As part of my job, I had to prepare meals and navigate young people's eating difficulties sensitively and had engaged in numerous conversations with autistic young people experiencing eating difficulties.

My exploration of the topic led me to consider a broader perspective beyond the restrictive and negative descriptions often associated with autism and eating. I pondered whether anyone had ever explored the concept of healthy food from the perspective of an autistic young person and delved into the reasons driving their food choices. I additionally wanted to investigate whether young people believed autism influenced their relationship with healthy food. These reflections ultimately inspired and formed the basis of my research project.

Including Autistic Young People in Research

Research suggests that 9 out of 10 autistic people want to participate in research, however on average only 9% of funding is allocated to studies recruiting autistic adolescents (Warner et al., 2019). For my research project, I wanted to involve autistic young people as much as possible, without overwhelming them. Participatory involvement can also help to improve research quality, contextualise findings within real-world settings and facilitate practical implementation (Fletcher-Watson et al., 2019). In November 2023, I submitted a bid to join the University of Staffordshire's Participatory Action Research programme and was successfully accepted. Over the next seven months, I attended monthly training sessions learning from research experts about creative and accessible research methods, gaining inspiration for my project. The programme also provided funding for my project, covering the costs of digital cameras and participant incentives, both of which greatly increased engagement. Throughout the course, I developed an appreciation for Participatory Action Research and the positive impact of including community members in the research process.

Designing the Study

I customised the study to actively engage autistic young people, drawing from principles within autism research. To inform my research design, I conducted an extensive review of the literature, exploring work from leading autism research organisations (Autistica, AASPIRE), qualitative studies recruiting autistic adolescents, photo-elicitation studies, autism Participatory Action Research and qualitative healthy eating research (Zamzow, 2021; Pickard et al., 2022, Poulsen et al., 2022; Fletcher-Watson et al., 2019, Chown et al., 2017; Gowen et al., 2019). I designed documentation using accessible and concrete language, easy-to-read font and visuals, aligning with the guidelines from autism research toolkits (Bottema-Beutel et al., 2021; Nicolaidis et al., 2019). I created information sheets with comprehensive yet clear explanations of what the study would involve, why it was taking place, and what the participant would be asked to do. This was to minimise any prospects of distress or anxiety caused by unexpected activities during the research project (Fletcher-Watson et al., 2019). I also sought feedback from an independent autism research expert on the research materials. I incorporated their recommendations regarding study transparency by incorporating additional information within the debrief form and altering the term 'co-researcher' to 'participant' to improve understanding for young people. Additionally, following their concerns about autistic adolescents unknowingly having eating difficulties I conducted a risk assessment to anticipate and overcome any potential hurdles.

I was additionally mindful that focus groups could be particularly challenging for many autistic young people due to difficulties communicating in group settings or with unfamiliar individuals (DSM-5, 2013). I instead opted for individual interviews (alongside photo-elicitation) and developed an accessible interview guide to share with participants in advance. This provided a brief overview of the interview structure and outlined potential questions they may be asked. As autistic individuals can have difficulties answering open-ended questions, it felt necessary to provide them time to process and prepare. I additionally offered the flexibility of online or face-to-face interviews to make it easier for families from a wider geographical area to participate (notably, most participants opted to take part online). Ethical considerations were considered throughout the research process to minimise participant distress and ensured the study was both respectful and inclusive of the needs of participants.

Gaining Ethical Approval

Working together with my supervisor, we finalised and submitted the ethics proposal. Following feedback from the ethics committee, we revised the proposal accordingly. Within our response, I outlined the adjustments and provided justifications for the decisions made within the research project. For example, in response to the reviewer's comment, I had to defend the use of incentives for participants, as the reviewer noted this could be viewed as coercive. This prompted me to revisit the literature and identify relevant journals supporting the use of incentives, specifically gift vouchers, for participants within this age bracket. I explained that this approach was both appropriate and ethical to reimburse participants for their time and effort invested in research (Field & Behrman, 2004; Rice & Broome, 2004; Afkinich & Blachman-Demner, 2019). For this research project, participants were expected to dedicate up to five hours for meetings and workshops, in addition to spending one to two weeks taking photographs. Considering this timescale, and after discussions with my supervisor and advice from a developmental psychology researcher, the incentive value was reduced. Responding to the ethics committee's comments was a valuable learning experience as it allowed me to critically evaluate my study and articulate justifications for my decisions.

Recruitment

Recruitment was challenging and more time-consuming than I anticipated, spanning nearly three months. Participants were recruited through my workplace database as I contacted families who had previously accessed the autism assessment service. I contacted families via email and dedicated significant time responding courteously to those who declined participation. Three families withdrew from the study, and seven interested families did not complete the necessary consent and assent forms, which at the time, felt discouraging. Overall, a sample of seven young people took part in the research project.

An initial meeting was conducted to introduce myself to the young person and their parent, obtain additional assent and establish rapport. This also provided an opportunity to reiterate the purpose of the research, explain what their involvement would entail and address any questions they had. Although this was a brief meeting, this initial interaction proved invaluable in building familiarity between the participant and me. By the time of the interview, participants appeared more at ease and willing to engage, as I was no longer perceived as a stranger. I believe this contributed to a more productive and meaningful conversation during interviews and reinforces the importance of rapport building with young people during research.

Collecting Data

This was my first time conducting qualitative interviews within research, and I must admit I was nervous. Despite my experience interviewing young people and parents during clinical assessments, this felt different, and I felt pressure to conduct the interviews in what I imagined to be a 'professional' manner. Nevertheless, the principles I had learnt during the Participatory Action Research (PAR) course reshaped my perspective of what research interviews could be as I recognised that they don't have to be rigidly structured and formal to be successful. The core values of PAR – flexibility and inclusion – guided my interviewing technique as I aspired to create a conversational atmosphere and follow up on participants' responses. Affirming and encouraging their statements, I wanted them to feel comfortable and confident, knowing they were saying the 'right' things. I actively listened and learnt from participants and ensured that they knew they were the experts in the research project. I believe this approach helped participants to feel more at ease as I allowed them to speak without interruption, although it did extend the duration of the interviews. I felt it was important not to rush the process, as it allowed me to collect meaningful and detailed information relevant to the research question.

Each participant had their own unique communication style, which required me to be flexible in my own communication and adapt my approach. I tailored my language to be concrete and easy to understand, using a mix of open and closed questions to suit their needs. However, some participants faced challenges answering questions during interviews. At times, some participants looked towards their parent, relying on them to answer, which impacted the flow of conversation. Additionally, during some online Teams interviews, distractions at home made it difficult for younger participants to stay engaged, leading to one-word answers or frequent "I don't know" responses to questions. One participant expressed confusion by some of the questions, as they explained that their family doesn't discuss healthy eating at home. This highlighted the importance of being flexible and adapting during interviews, particularly when participants did not understand the questions or were losing interest.

After reviewing each interview recording, I reflected upon myself as an interviewer and identified areas for improvement. I kept a reflective diary to document key learning points and skills to improve upon. I realised upon reflection that I could occasionally draw upon my background knowledge of autism and eating during interviews, using terms such as “safe food” that the young people had not mentioned. I would avoid this in future and remain neutral, following the participant’s use of language. Additionally, I missed opportunities to ask follow-up questions or probe further. For example, when one participant mentioned a specific food routine, I didn’t explore it in greater depth, and doing so would have provided further understanding into their experiences. Reflecting upon the interviewing experience provided me with valuable learning and reiterated the importance of being present in the moment.

Data Analysis

The research project marked my first time transcribing interviews, which I found to be extremely time-consuming. Despite using Teams software, I had to heavily edit the transcripts for accuracy. One challenge was transcribing a fast-talking participant verbatim, which required careful attention. To ensure precision, I reviewed all transcripts twice against the original recordings. For data analysis, I employed Braun and Clarke’s (2021) reflexive thematic analysis, following its six distinct recursive phases, which required ongoing exploration and interpretation. Reading Braun and Clarke’s guidelines steered me to fully immerse myself in the dataset. I spent considerable time familiarising myself with each transcript, writing reflections throughout the analysis, whilst revisiting them frequently during theme development. Interestingly, I found that reviewing both electronic and hard copies of the transcripts led me to different insights and interpretations. When coding, I initially used NVivo to speed up the process. However, I was conscious that I may have been ‘over-coding’ and decided to manually code during the second read-through. I opted to manually write out all codes before grouping these based upon patterns and commonalities.

Taking breaks from the data also proved essential, as it allowed me to go back with ‘fresh eyes’. During these breaks, I reflected on the broader research question and ensured reflexivity was integrated throughout my analysis. Braun and Clarke (2021) emphasise the importance of reflexivity in high-quality analysis, describing it to be a process where researchers bring their own situated knowledge and perspectives to the dataset. Using this lens of reflexivity also allowed me to view the dataset from a critical realist perspective, allowing me to interpret participants' lived experiences whilst acknowledging them as contextually located. I understood that the qualitative interviews offered access to participants' perceptions of reality rather than objective reality itself. Understanding this concept, I began identifying preliminary themes and subthemes, selecting quotes and data to address the research question. I collaborated with the research team at this stage to refine my interpretations. During a meeting with my supervisor and research module lead, I presented thematic maps which facilitated reflexive discussions and feedback. This enhanced my understanding and interpretation of the dataset, ensuring quality within the research findings.

Participatory Workshop

The participatory workshop provided an opportunity for participants to come together for a third meeting, creating a space to collaborate on the analysis and dissemination of the findings. This approach, grounded in Participatory Action Research principles, aimed to empower participants to be actively involved in the research process, whilst doings so in a 'fun' and interactive way. This also ensured my interpretation of the interviews aligned with their lived experiences.

Facilitating the workshop felt outside of my comfort zone. I prefer organised events, however the workshop required a more improvised approach which I found daunting. To help ease my nerves, I created a visual PowerPoint to structure the afternoon and prepared interactive activities alongside creative materials to encourage engagement. Despite my pre-planning, the workshop presented unexpected challenges. Of the four young people and parents who were expected to attend, one didn't show up and another arrived late due to a timing mix-up. These setbacks heightened my initial nerves, as we began the activities later than intended. Luckily participants were busying themselves with an icebreaker task that I had set up upon arrival and it didn't impact them.

During the workshop, I separated young people and parents to gather their views independently. Whilst I was initially apprehensive about this decision, young people appeared comfortable. Throughout the various activities, the young people interacted well and expressed their opinions regarding the research findings presented to them in a productive and respectful manner. Whilst previous autism research with young people steers away from the use of focus groups, the participatory workshop highlights how utilising creative activity-based discussions could promote engagement in ways that traditional focus groups might not be able to. One young person shared that she felt increasingly comfortable as the workshop progressed, noting that it is unusual for her to feel at ease at a social event. Her parent expressed pride seeing his daughter confidently sharing her thoughts with the group. Parents additionally valued the participatory workshop, enjoying the chance to speak with other parents and expressed that the research had increased their awareness of healthy eating for both themselves and their children.

Reflecting upon the workshop, I realised how much I had grown as a facilitator. Despite my initial apprehension, I was able to create an engaging and inclusive environment where young people felt comfortable sharing their views. The positive feedback from both young people and parents affirmed the workshop's success and showcases the value of participatory events within research. Moving forward, I feel more confident hosting participatory events and would actively seek to incorporate these in future research projects.

Dissemination

Disseminating the findings of research is a pivotal aspect, with opportunities to present taking various forms. I originally presented preliminary data at the Health Psychology conference at the University of Staffordshire, fulfilling part of my competence requirements. The presentation was during the early stages of my analysis and provided not only a platform to share my work but also a chance for reflection and deeper understanding of why I started this research. I was overjoyed to win the audience vote for Best Oral Presentation, a moment that boosted my confidence significantly. I've since delivered additional presentations at my placement to the directors and CEO, for which I received extremely positive feedback. These have left me feeling immensely proud of the progress I've made. Over time, as I've become more immersed in my research project, I've developed more confidence when discussing the study. This has led me feeling at ease presenting and enjoying any opportunity to share my research findings with others. I hope my passion and enthusiasm for the project comes across.

As part of the Participatory Action Research course, I also discussed my research project in a Q&A session, alongside writing up a case study to conclude the programme. The course has been invaluable in shaping me as an early-career researcher. The knowledge and insights I've gained have not only strengthened this research project but will continue to influence my future research in meaningful ways.

Looking ahead, my next steps are to publish my findings in *Appetite*, a journal that closely aligns with my research project and the themes of psychology and food. *Appetite* is a highly regarded publication and has previously featured photo-elicitation studies, making it an excellent fit for my research. Publication within this journal will allow me to reach a broad and diverse academic audience.

Equally important is ensuring the research findings can be accessed by non-academic circles. Based upon feedback from participants during the workshop, I plan to create an accessible interactive flipbook that can be widely distributed to families, teachers, health professionals and community members. This format was chosen by participants as the most accessible and visually engaging option and ensures that the findings can lead to practical and meaningful changes to support autistic young people.

Overall Reflections

This is my first experience conducting qualitative research, and it has been both challenging and rewarding. A key strength of this research project was its focus upon accessibility for participants and value of authentic inclusion of autistic young people within research. Engaging with autistic young people and listening to their experiences as a researcher has strengthened my understanding and empathy, and has allowed me to become more adaptable within my communication. I plan to continually learn and improve as a researcher, applying the lessons I have gained throughout my research journey within my future work.

References

Afkinich, J. L., & Blachman-Demner, D. R. (2020). Providing Incentives to Youth Participants in Research: A Literature Review. *Journal of empirical research on human research ethics: JERHRE*, *15*(3), 202–215. https://doi.org/10.1177/1556264619892707

Alleva, L. (2006). Taking time to savour the rewards of slow science. *Nature (London)*, *443*(7109), 271–271. https://doi.org/10.1038/443271e

Botha, M. (2021). Academic, Activist, or Advocate? Angry, Entangled, and Emerging: A Critical Reflection on Autism Knowledge Production. *Frontiers in Psychology*, *12*, 727542–727542. https://doi.org/10.3389/fpsyg.2021.727542

Bottema-Beutel, K., Kapp, S. K., Lester, J. N., Sasson, N. J., & Hand, B. N. (2021). Avoiding Ableist Language: Suggestions for Autism Researchers. *Autism in Adulthood*, *3*(1), 18–29. https://doi.org/10.1089/aut.2020.0014

Braun, V., & Clarke, V. (2021). *Thematic analysis: a practical guide*. SAGE.

Chown, N., Robinson, J., Beardon, L., Downing, J., Hughes, L., Leatherland, J., Fox, K., Hickman, L., & MacGregor, D. (2017). Improving research about us, with us: A draft framework for inclusive autism research. *Disability & Society, 32*(5), 720- 734. https://doi.org/10.1080/09687599.2017.1320273

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

Field, M. J., & Behrman, R. E. (2004). Payments Related to Children's Participation in Clinical Research. In *Ethical Conduct of Clinical Research Involving Children* (pp. 211–228). National Academies Press.

Fletcher-Watson, S., Adams, J., Brook, K., Charman, T., Crane, L., Cusack, J., Leekam, S., Milton, D., Parr, J. R., & Pellicano, E. (2019). Making the future together: Shaping autism research through meaningful participation. *Autism: the international journal of research and practice*, *23*(4), 943–953. https://doi.org/10.1177/1362361318786721

Gowen, E., Taylor, R., Bleazard, T., Greenstein, A., Baimbridge, P., & Poole, D. (2019). Guidelines for conducting research studies with the autism community. *Autism policy & practice*, *2*(1 A new beginning), 29–45.

Nicolaidis, C., Raymaker, D., Kapp, S. K., Baggs, A., Ashkenazy, E., McDonald, K., Weiner, M., Maslak, J., Hunter, M., & Joyce, A. (2019). The AASPIRE practice-based guidelines for the inclusion of autistic adults in research as co-researchers and study participants. *Autism*, *23*(8), 2007–2019. https://doi.org/10.1177/1362361319830523

Pickard, H., Pellicano, E., den Houting, J., & Crane, L. (2022). Participatory autism research: Early career and established researchers' views and experiences. *Autism: The International Journal of Research and Practice*, *26*(1), 75–87. https://doi.org/10.1177/13623613211019594

Poulsen, R., Brownlow, C., Lawson, W., & Pellicano, E. (2022). Meaningful research for autistic people? Ask autistics! *Autism: the international journal of research and practice*, *26*(1), 3–5. https://doi.org/10.1177/13623613211064421

Rice, M., & Broome, M. E. (2004). Incentives for children in research. *Journal of nursing scholarship: an official publication of Sigma Theta Tau International Honor Society of Nursing*, *36*(2), 167–172. https://doi.org/10.1111/j.1547-5069.2004.04030.x

Warner, G., Cooper, H., & Cusack, J. (2019). *A review of the autism research funding landscape in the United Kingdom*. Autistica.

Zamzow, R. (2021). Six steps to engaging in participatory autism research. *Spectrum*. https://doi.org/10.53053/PIMJ5590

Chapter 4

Health Psychology Interventions

Face-to-face Intervention Case Study

Overview

This case study describes a face-to-face intervention conducted with an 11-year-old British male. To protect anonymity, the young person will be referred to as 'Oliver'. Oliver had recently been diagnosed with Autism and presented chronic food restriction and avoidance. Oliver's mother and clinicians expressed suspicion that Oliver may have Avoidant Restrictive Food Intake Disorder (ARFID), however this had not been formally diagnosed. A CBT-AR adapted intervention involving assessment, formulation, design, planning, facilitation and evaluation took place over four months consisting of ten sessions with Oliver's primary goal being "to have a less limited diet".

Background

Many autistic children present eating-related challenges (Smile et al., 2021); whether this be a restricted or repetitive diet, aversions to smells or textures or an unwillingness to eat in front of others (Nimbley et al., 2023). Often autistic children with restricted eating prefer to eat the same foods and brands, typically preferring foods of a similar texture, with whole categories of foods frequently avoided (Zimmer et al. 2012). Many autistic children also present food neophobia and avoid trying new foods (Rodrigues et al., 2023). This can make mealtimes extremely challenging as parents worry about the lack of nutrition in their child's diet (Xie et al., 2024).

Avoidant Restrictive Food Intake Disorder (ARFID) is an eating disorder characterised by a pattern of eating that is limited in variety and/or volume. Although research exploring ARFID and autism is limited, the available statistics suggest that ARFID is likely to be more prevalent within autistic individuals (Sader et al., 2025).

Intervention Opportunity

This intervention opportunity arose when the consultant psychologist within the team emailed me following an autism diagnostic feedback session with a parent. She noted that Oliver's mother was concerned about Oliver's restricted diet and believed that I might be able to help. I reached out to Oliver's mother, who was delighted at the prospect of a face-to-face intervention. I created information sheets and parent consent forms which Oliver's parents signed and consented to a case study and reflexive report being written up as part of my Professional Doctorate.

Assessment

Assessment aims to understand the nature and degree of the problems associated with a specific behaviour, through a variety of methods such as observer-report scales and clinical interviews (De Los Reyes et al., 2015). In this instance, multi-informant assessment was beneficial to evaluate the presence and severity of Oliver's eating difficulties and discover his maintaining mechanisms to inform treatment goals. As young people with suspected ARFID may not always feel there is a problem with their eating, gathering information from observers can be crucial (Thomas & Eddy, 2019). I examined Oliver's clinician referral notes that had been provided for his autism assessment. They reported that Oliver had been eating the same eight foods every day for at least six years, with meat and vegetables excluded from his diet. They stated that Oliver presented considerable anxiety surrounding novel and strong-smelling foods and was unable to sit with his family at dinner or eat out in restaurants.

I conducted a clinical telephone interview with Oliver's mother to assess the severity of Oliver's feeding difficulties. Oliver's mother was asked eating-related questions based upon clinical guidance from a specialist dietitian. Oliver's mother reported that Oliver's diet primarily consisted of carbohydrates and previous attempts to introduce Oliver to new foods resulted in "disaster" as Oliver expressed fears that new foods "might kill him". She added that over time, foods Oliver had previously accepted had fallen off his 'safe' list, leading to his diet becoming increasingly restricted. His mother felt that Oliver's eating difficulties disrupted daily life, as she frequently visited multiple grocery stores to find his preferred foods.

Oliver's mother was eager to support Oliver to expand his food variety. Therefore, the family were offered a preliminary eight intervention sessions. Typically, CBT-AR recommends 20 sessions over a six-to-twelve-month period (Thomas & Eddy, 2019). However, the number of sessions offered to the family was determined in consultation with my clinical supervisor and factored in my ongoing work within the autism diagnostic service. Additionally, following extensive research into relevant psychometric outcome measures, Oliver's mother was asked to complete the Brief Autism Mealtime Behaviour Inventory (BAMBI) (Lukens & Linscheid, 2008). BAMBI is an 18-item Likert scale questionnaire specifically designed for caregivers to evaluate autistic children's mealtime behaviours. This was included to evaluate pre- and post-intervention outcomes and aid formulation.

Assessment Session

Assessment should also gather the young person's beliefs about their difficulties, to inform a collaborative psychological formulation and guide intervention (Redhead et al., 2015). I organised the first session with Oliver to continue the assessment, taking a collaborative approach to learn what he hoped to achieve during the intervention. Acknowledging that this could be daunting for Oliver, I prioritised building a strong therapeutic rapport, showing kindness and compassion whilst listening to his experiences of food and eating (Lugo et al., 2017). To support this, I designed a visual and personalised workbook to explore his perceptions of his eating behaviours. This involved completing a sensory profile, where Oliver reflected on whether he enjoyed or avoided certain foods based on their sensory aspects to gain insight into his aversions and reluctance towards foods (PEACE Pathway, 2020).

During the assessment, I also incorporated motivational interviewing techniques to help Oliver identify positive changes he could make, recognising that eating had been a longstanding challenge for him. Motivational interviewing helps individuals recognise their ability to change more effectively, by encouraging them to explore their own reasons for change, which boosts their self-efficacy (Miller & Rollnick, 2012). We discussed Oliver's desire, ability, reasons and need to change before setting goals for the overall intervention; Oliver wanted *"to have a less limited diet"* and if he knew he couldn't fail, he would *"eat lots of new food"*. The benefit of achieving this goal is that he *"would be healthier"*. I incorporated the readiness ruler to evoke 'change talk' looking at the importance of change and his confidence to do so, alongside the decision balance to look at the pros and cons of changing his diet. Overall, Oliver agreed that he wanted to eat a wider variety of foods and try new foods with less distress.

Self-monitoring Record

As an at-home task, I asked Oliver to complete a self-monitoring record. This was to gain insight into the frequency, quantity and variety of food he consumed each day (see Table 1). Through analysis of Oliver's self-monitoring record, his accepted foods tended to consist of beige carbohydrates, bite and dissolve foods, processed and branded foods. These foods presented taste, texture, and visual sensitivities and consistencies, and were generally easy to process. This was useful information to guide formulation and provided further understanding to Oliver's sensory sensitivities.

Table 1

Self-monitoring record

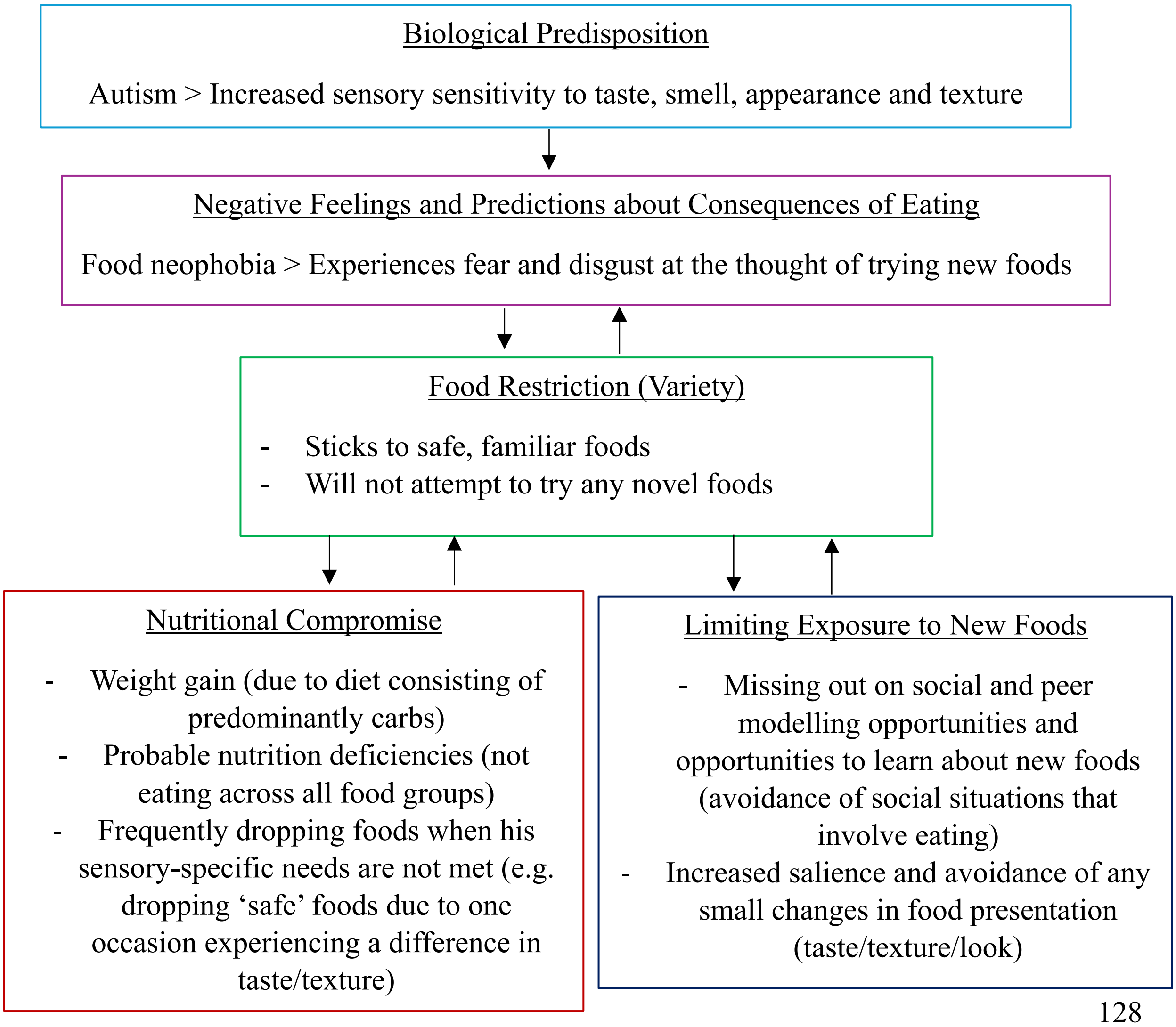
Day 1: Thursday *Completed by Oliver*		**Day 2: Friday** *Completed by Oliver's mother*		**Day 3: Saturday** *Completed by Oliver's mother*	
10:00	1 bowl of Shreddies	10:00	1 bowl of Shreddies	10:00	1 bowl of Shreddies
13:37	1 piece of toast	11.15	1 Kinder egg	11:00	2 pieces of toast
	2 biscuits	13:00	6 fish 'Flipper	11:30	3 biscuits
16:37	6 fish 'Flipper Dippers'		Dippers'	13:30	1 packet of Pom-Bear
20:14	1 apple	15:00	1 Nesquik cake		crisps
	1 pear	16:00	2 pieces of toast		1 apple
		19:30	2 apples	17:00	6 chicken nugget
			1 packet of Pom-Bear		McDonalds meal
		21:00	crisps	21:00	1 apple
			2 pieces of toast		1 pear
			2 biscuits		2 biscuits
Day 4: Sunday *Completed by Oliver's mother*		**Day 5: Monday** *Completed by Oliver's mother*		**Day 6: Tuesday** *Completed by Oliver's mother*	
9:30	1 bowl of Shreddies	9:30	1 bowl of Rice Krispie	9:30	1 bowl of Rice Krispie
12:30	2 pieces of toast		Multigrain		Multigrain
	1 Nesquik cake	12:45	6 Fish Flipper dippers	12:00	2 pieces of toast
15:50	1 apple		1 packet of Pom-Bear	14:30	6 chicken nugget
	1 pear		crisps		McDonalds meal
17:00	6 fish 'Flipper Dippers'	*No*	6 pieces of toast	17:30	2 pieces of toast
19:10	2 packets of Pom-Bear	*times*	6 chocolate biscuits		1 packet of Pom-Bear
	crisps	*given*			crisps
	2 biscuits			20:30	2 pieces of toast
21:00	2 pieces of toast				2 chocolate biscuits

Formulation

Formulation is an ongoing process of collaborative sense-making where clinicians link theory with practice to develop a tailored intervention plan for the individual (Vetere & Dallos, 2003). Following the multi-informant assessment, the formulation focussed upon Oliver's food avoidance and restriction. Following Cognitive Behavioural Therapy for Avoidant Restrictive Food Intake Disorder (CBT-AR) guidelines, a CBT model of formulation was developed (see Figure 1). Based upon Sharp and Postorino's (2018) categorising of ARFID, Oliver presented with a chronic moderate form of undiagnosed ARFID, characterised by sensory sensitivity. After consulting with my clinical supervisor, we decided not to present the CBT model of formulation to Oliver to prevent potential confusion or distress. Instead, I collaboratively established Oliver's formulation through discussion of his eating experiences, using workbook activities to understand what he wanted to gain during the intervention, and introduced a new perspective to his eating challenges. Presented in a non-judgemental manner, the formulation focussed upon psychoeducation and Oliver understanding his individual experiences. Together, we highlighted Oliver's motivation for change, emphasised his strengths, and outlined the steps needed to achieve his goals (Baudinet et al., 2021).

Figure 1

Oliver's CBT model of formulation



The CBT formulation highlighted Oliver's pattern of reoccurring food avoidance and restriction as he often predicts that he is very unlikely to like or be able to tolerate new foods. Chronic food restriction has both physical and psychological effects and limits opportunities for exposure. The ongoing pattern of food avoidance maintained Oliver's negative predictions about eating novel foods and reinforced this restriction. It was therefore essential to directly target food avoidance and restriction and the associated negative feelings towards trying new foods, as well as the anticipated outcomes and consequences of doing so, to break this cycle. It was concluded that an adapted CBT-AR approach would be the most appropriate intervention for Oliver, as the primary goal of CBT-AR is to reduce or eliminate negative feelings, predictions and consequences associated with eating new foods.

Designing, Planning & Facilitation

CBT-AR is the leading treatment for individuals aged 10 and above with ARFID, taking a person-centred and collaborative approach in the form of weekly sessions with at-home tasks (Thomas & Eddy, 2019). Behavioural interventions such as CBT-AR, which include repeated taste exposure, have been demonstrated to improve food variety and reduce food neophobia within autistic children presenting food selectivity (Bourne et al., 2022). For this intervention, I tailored CBT-AR to meet Oliver's needs and considered how autism influences his eating difficulties. I removed sections that could lead to catastrophising, such as the health consequences of ARFID (see Table 3 for the CBT-AR adapted stages delivered to Oliver). I also incorporated intervention techniques such as psychoeducation, somatic management via relaxation training, cognitive restructuring, problem solving, exposure therapy and relapse prevention.

During stage 1 (sessions 1-4), psychoeducation was fundamental to support Oliver's engagement and help him to understand why change was necessary long-term. To support this, I designed personalised workbooks incorporating information from CBT-AR, as we discussed the science behind 'Exposure Work'. I explained that food restriction or avoidance is often associated with anxiety, with individuals with sensory sensitivities describing food neophobia and feelings of disgust when presented with new foods. A normal reaction to anxiety-provoking stimulus is avoidance. Avoidance provides short-term relief by taking away the fear, however this can increase anxiety long-term and reinforces the behaviour. Also at this stage, I incorporated foods within games (e.g. uncooked pasta for noughts and crosses) as part of a desensitisation technique. Using foods during play is an evidenced way to help children gradually tolerate non-preferred foods (Cihon et al., 2023). Two additional sessions were added to allow for the extended time required to prioritise psychoeducation and rapport building before tasting sessions.

Table 3

Four stages of adapted CBT-AR

Stage	Primary Interventions
1. Psychoeducation and early change ***Sessions 1 to 4***	• Psychoeducation of Autism and restricted eating. • Individualised formulation of mechanisms that maintain avoidant/restrictive eating (in Oliver's case > sensory sensitivity). • Start self-/parent-monitoring of daily food intake. • Increase food variety with at-home tasks.
2. Treatment planning ***Sessions 2 to 4***	• Learn about different foods and identify what foods Oliver finds most and least difficult to eat. • Continue increasing food variety at-home. • Review foods currently eating across the 5 food groups and select foods to learn about in Stage 3.
3. Exposure sessions ***Sessions 5 to 9***	• Start to introduce novel foods during 'Tasting Sessions'. • Start overcoming maintaining mechanism - *Sensory Sensitivity:* Systematic desensitisation to novel foods by repeated in-session exploration of sight, touch, smell, taste and texture. • Create specific plans for outside of sessions > practising tastings and introducing ideas to incorporate into food routine.
4. Relapse prevention ***Session 10***	• Develop a plan to support Oliver to maintain changes independently. • Evaluate whether treatment goals have been met, identify treatment strategies to continue at home/create plans to continue learning about novel foods.

Tasting Sessions (Sessions 5-9)

Systematic desensitisation allows the individual to slowly and gradually be introduced to new or non-preferred food textures, tastes and smells to overcome sensitivities (Willmott et al., 2024). To identify and manage any risks during the tasting sessions, I created a risk assessment to allow Oliver to prepare and cook food with me in the kitchen facilities. This would help Oliver taste a broader range of foods, and develop his culinary skills, improving his relationship with food, as cooking is demonstrated to improve adolescents' tolerance of fear foods (DeCosta et al., 2017).

Oliver chose five novel foods each week to try in-session. The five steps 'Food Critic' was implemented as a repeated and graded taste exposure activity; Oliver was asked to explain the 1) look 2) feel 3) smell 4) taste and 5) texture of each food and 'judge' its sensory elements before providing an overall rating. Oliver was reassured there was a 'no-pressure' approach during tasting sessions; the purpose was to learn about new foods, not necessarily like every food on the first taste, as it can take up to 14 tastes to enjoy a food (Thomas & Eddy, 2019). Instead, we were building Oliver's tolerance and skills to facilitate his future novel tastings. Oliver was also encouraged to enhance his food exposure by visiting supermarkets outside of sessions and continue at-home tasting practices. Additionally, small changes within his food routines and meals were discussed and recommended to increase Oliver's eating flexibility.

Ending the Intervention

Towards the end of the tasting sessions, we arranged a final session and discussed how Oliver could continue developing his skills and tasting foods independently. We contrasted Oliver's baseline food restriction and avoidance with his current functioning; Oliver had changed many of his negative feelings and predications about tasting new foods. During the final session, Oliver established strategies to overcome any future difficulties, as he reported he would *"try new foods [he] wouldn't necessarily think of*" and would *"keep using these methods to help [him] eat more food"*. Oliver learned skills throughout the intervention that would support him to continue novel tastings with his family's support. I presented Oliver a certificate to commend all his hard work and posted a goodbye letter summarising the progress he'd made throughout the intervention.

Parental Inclusion

Parents and caregivers play a crucial role in supporting young people with restricted diets (Erriu et al, 2020). These diets often place immense psychological and financial pressure on families, from sourcing the child's safe foods to preparing separate meals (Chapman et al., 2021). Many parents can feel a sense of failure or embarrassment when their child refuses to eat a variety of foods, it was therefore essential for me to respond to Oliver's mother with empathy and compassion. From the beginning, it was agreed that working individually with Oliver would help him to understand the purpose of the intervention and set his own individualised treatment goals. Oliver's mother thereafter attended four tasting sessions and sat out of the final two; this was due to ongoing strain within their relationship regarding Oliver's eating. Nevertheless, Oliver's mother was debriefed after each session and continually supported Oliver outside of sessions, facilitating food tastings at home. When Oliver's mother did attend sessions, she developed her skills, gaining knowledge and techniques to support Oliver to continue increasing his food variety.

Evaluation

Evaluation aims to assess the effectiveness of the intervention and determine whether the intended outcomes were achieved (Smith, 2003). Since the beginning of the intervention, Oliver tasted 30 foods he'd previously never tried before and reintroduced 4 foods that had fallen from his diet, successfully achieving his goal of trying new foods with less distress. Table 4 presents the worksheet Oliver completed throughout the intervention to track his progress. He independently marked the sheet to indicate the number of new and reintroduced foods he had tasted since the start of the intervention.

Table 4

Oliver's worksheet indicating the number of new and reintroduced foods tasted

Foods Reintroduced	'x' indicates the number of tastes since starting (0 – 10+)									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10+**
• Pear	x	x	x	x	x	x	x	x	x	x
• Grapes (green)	x	x	x	x	x	x	x	x	x	x
• Banana	x	x	x	x	x	x	x	x	x	x
• Raisins	x	x	x	x	x					

New Foods Tasted	‘x’ indicates the number of tastes since starting (0 – 10+)									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10+**
• Blueberries	x	x								
• Carrots	x	x	x	x						
• Avocado	x									
• Oranges (and tangerines)	x	x	x	x	x	x	x	x	x	x
• Melon	x	x	x	x	x	x				
• Tomatoes (cherry and plum)	x	x								
• Watermelon	x	x	x	x						
• Peas	x									
• Bell pepper (red and yellow)	x	x	x	x						
• Peach	x	x								
• Lettuce (and rocket)	x	x	x	x	x	x	x	x	x	x
• Cucumber	x	x	x							
• Cabbage	x									
• Kiwi	x	x								
• Radishes	x									
• Plum	x									
• Grapes (black)	x	x	x	x	x	x	x	x	x	x
• Yogurt	x	x	x	x	x	x	x	x		
• Yogurt drink	x	x	x	x	x	x	x	x	x	x
• Pasta	x									
• Baguette	x	x	x	x	x	x	x	x	x	x
• Green Beans	x									
• Raspberries	x									
• Smoothie	x									
• Apple juice	x	x	x	x	x					
• Orange juice	x									
• Fishcake	x									

Oliver's attitude towards food noticeably shifted during the intervention, as he tasted new foods during and outside of sessions. During session 7, after trying each individual food, despite not liking the foods, Oliver commented that he would try foods again even if he did not like them first time. By session 8, Oliver adapted his meals, incorporating a banana alongside his breakfast cereal each morning, and varied his fruit during school lunchtimes, enhancing his food variety. See Table 5 for further qualitative quotes from Oliver and his mother.

Table 5

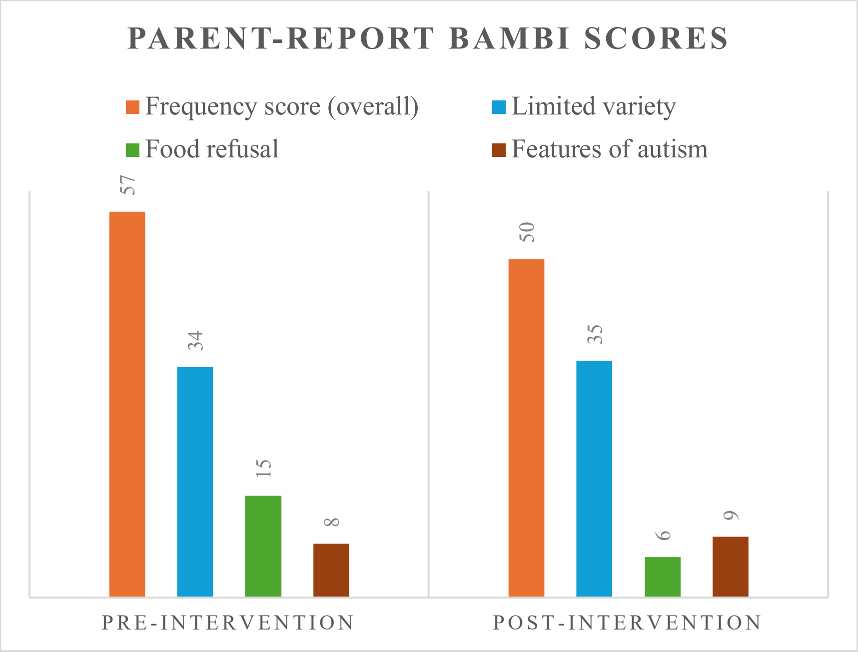
Quotes from Oliver and his mother

After session 1	Oliver's mother *"I just wanted to say thank you for today! Oliver left here in a foul mood, extremely negative thinking he was going to be force fed despite me trying to explain, to coming out so much more positive and reading what he's put in the workbook whilst with you has also given me a bit of hope! Looking forward to next week!"*
After session 2	Oliver's mother *"Just so you know, this week he had 5 segments of an easy peel orange, said he didn't like the feel in his mouth, he tried a raspberry, he hated that, he then tried 3 different yogurts one being a cherry, he didn't care for these either but wants me to get strawberry munch bunch ones if I can, he tried a raw carrot, it was acceptable, he hated the smell of a cooked one and didn't attempt that, but he's trying and wouldn't previously! So I am proud of him!"*
Session 3	Oliver reintroduced grapes back into his diet, stating "*they were nice"* and felt "*happy trying different foods" and "happy that they may become a part of my diet"*.
Session 4	*Oliver "I haven't tried as much as I wanted, but I feel more positive around food"* *"It can't kill me so I may as well try it!"* *"I'm eating pears a lot more now"* *"If something smells good, I want to try it"* *"It's nice to eat new foods without as much fear, I now know I like pears a lot"*
Session 10	*Oliver: "I'm very happy, my diet is a lot different now and I can eat a lot more foods" "[I'm] a lot better with food, a lot more confident"* *"[I] can go near foods now".*

As an additional evaluation tool, Oliver's mother completed the BAMBI questionnaire during the first and final session. The BAMBI questionnaire is defined by 3 sub-factors ('Limited Variety', 'Food Refusal' and 'Features of Autism') with a higher score reflecting more problematic mealtime behaviours. See Figure 2 for pre- and post-intervention scores.

Figure 2

Parent-reported BAMBI scores pre- and post-intervention



The BAMBI scores signify an overall improvement of Oliver's mealtime behaviours post-intervention, particularly within the sub-type 'Food Refusal'. While the 'Limited Variety' and 'Features of Autism' scores remained relatively stable pre- and post-intervention, this is not unexpected. As this measure was based on parent-reporting, it is likely that Oliver's mother continued to perceive his eating as restricted post-intervention. However, it's important to consider the context: for an individual with a diverse diet who eats hundreds of foods, incorporating an additional food item has little effect. In contrast, for individuals like Oliver with a highly restricted diet, even a small increase in the number of foods eaten can represent a substantial percentage increase in variety. The improvement within Oliver's 'Food Refusal' scores is positive and aligns with his intervention goal. Additionally, Oliver's anxiety noticeably decreased during tasting sessions, as he no longer experienced clinically impaired psychosocial effects, such as difficulty tolerating the sight and smell of others' food as he became much more comfortable in food-related social situations.

I conducted a follow-up call with Oliver's mother three weeks after the intervention to check-in on his progress. I thanked her for her continual support, facilitating tastings in and out of sessions. Although Oliver's eating behaviours were still restricted and his diet "virtually the same", his mother reported there were noticeable differences following the intervention. She reported Oliver eats "more banana, more fruit and lettuce and he's also having an [yogurt drink] everyday" and alternating between fruits. When asked if she felt the intervention had been beneficial, she responded, "Oh god definitely! … Before Oliver wouldn't entertain coming into the kitchen and being around food", she added that it has "completely brought [him] out of his shell".

Conclusion

The CBT-AR informed intervention with Oliver consisted of ten sessions over four months, primarily focussing on psychoeducation and exposure therapy. The intervention aimed to help Oliver to feel comfortable tasting new foods whilst gradually incorporating them into his diet and building his tolerance around foods. Designing and delivering the intervention was a learning experience that allowed me to grow personally and professionally. It enhanced my ability to communicate effectively, build therapeutic rapport, and deepened my appreciation for an empathetic and person-centred approach during psychological interventions. Oliver's achievements throughout the intervention highlight the effectiveness of a structured, short-term intervention in addressing a long-standing challenge. Despite his struggles surrounding eating and food, the intervention generated meaningful progress, equipping Oliver with lifelong skills.

References

Baudinet, J., Simic, M., & Eisler, I. (2021). Formulation in eating disorder focused family therapy: why, when and how? *Journal of Eating Disorders*, *9*(1), 97–97. https://doi.org/10.1186/s40337-021-00451-3

Bourne, L., Mandy, W., & Bryant-Waugh, R. (2022). Avoidant/restrictive food intake disorder and severe food selectivity in children and young people with autism: A scoping review. *Developmental Medicine and Child Neurology*, *64*(6), 691–700. https://doi.org/10.1111/dmcn.15139

Chapman, L., Cartwright-Hatton, S., Thomson, A., & Lester, K. J. (2021). Parental eating disorders: A systematic review of parenting attitudes, behaviours, and parent-child interactions. *Clinical Psychology Review*, *88*, 102031–102031. https://doi.org/10.1016/j.cpr.2021.102031

Dallos, R., & Vetere, A. (2003). *Working Systemically with Families: Formulation, Intervention and Evaluation* (1st edition.). Routledge. https://doi.org/10.4324/9780429485244

De Los Reyes, A., Augenstein, T. M., Wang, M., Thomas, S. A., Drabick, D. A. G., Burgers, D. E., & Rabinowitz, J. (2015). The validity of the multi-informant approach to assessing child and adolescent mental health. *Psychological bulletin*, *141*(4), 858–900. https://doi.org/10.1037/a0038498

DeCosta, P., Møller, P., Frøst, M. B., & Olsen, A. (2017). Changing children's eating behaviour - A review of experimental research. *Appetite*, *113*, 327–357. https://doi.org/10.1016/j.appet.2017.03.004

Erriu, M., Cimino, S., & Cerniglia, L. (2020). The role of family relationships in eating disorders in adolescents: A narrative review. *Behavioral Sciences*, *10*(4), 71-. https://doi.org/10.3390/bs10040071

Lugo, A. M., King, M. L., Lamphere, J. C., & McArdle, P. E. (2017). Developing Procedures to Improve Therapist–Child Rapport in Early Intervention. *Behavior Analysis in Practice*, *10*(4), 395–401. https://doi.org/10.1007/s40617-016-0165-5

Lukens, C. T., & Linscheid, T. R. (2008). Development and validation of an inventory to assess mealtime behavior problems in children with autism. *Journal of autism and developmental disorders*, *38*(2), 342–352. https://doi.org/10.1007/s10803-007-0401-5

Miller, W. R., & Rollnick, S. (2012). *Motivational Interviewing: Helping People Change* (3rd ed.). Guilford Publications.

Nimbley, E., Golds, L., Sharpe, H., Gillespie-Smith, K., & Duffy, F. (2022). Sensory processing and eating behaviours in autism: A systematic review. *European Eating Disorders Review*, *30*(5), 538–559. https://doi.org/10.1002/erv.2920

Redhead, S., Johnstone, L., & Nightingale, J. (2015). Clients' experiences of formulation in cognitive behaviour therapy. *Psychology and psychotherapy*, *88*(4), 453–467. https://doi.org/10.1111/papt.12054

Rodrigues, J. V. S., Poli, M. C. F., Petrilli, P. H., Dornelles, R. C. M., Turcio, K. H., & Theodoro, L. H. (2023). Food selectivity and neophobia in children with autism spectrum disorder and neurotypical development: a systematic review. *Nutrition Reviews*, *81*(8), 1034–1050. https://doi.org/10.1093/nutrit/nuac112

Sader, M., Weston, A., Buchan, K., Kerr-Gaffney, J., Gillespie-Smith, K., Sharpe, H., & Duffy, F. (2025). The Co-Occurrence of Autism and Avoidant/Restrictive Food Intake Disorder (ARFID): A Prevalence-Based Meta-Analysis. *The International journal of eating disorders*, 10.1002/eat.24369. https://doi.org/10.1002/eat.24369

Sharp, W.G. & Postorino, V. (2018). Food selectivity in autism spectrum disorder. In L. K Anderson, S. B. Murray, and W. H. Kaye (Eds.), *Clinical handbook of complex and atypical eating disorders* (pp. 126-146). New York: Oxford University Press.

Smile, S., Raffaele, C., & Perlin, R. (2021). Re-imagining the physicians' role in the assessment of feeding challenges in children with autism spectrum disorder. *Paediatrics & Child Health*, *26*(2), e73–e77. https://doi.org/10.1093/pch/pxaa008

Smith, T.W. (2003). Health Psychology. In Handbook of Psychology, I.B. Weiner (Ed.). https://doi.org/10.1002/0471264385.wei0210

Thomas, J. J., & Eddy, K. T. (2019). *Cognitive-behavioral therapy for avoidant/restrictive food intake disorder: children, adolescents, and adults: paperback*. Cambridge University Press.

Willmott, E., Dickinson, R., Hall, C., Sadikovic, K., Wadhera, E., Micali, N., Trompeter, N., & Jewell, T. (2024). A scoping review of psychological interventions and outcomes for avoidant and restrictive food intake disorder (ARFID). *The International Journal of Eating Disorders*, *57*(1), 27–61. https://doi.org/10.1002/eat.24073

Xie, Q., Yong, C., Xiang, C., Xi, Y., Huo, J., Liang, J., Zou, H., Pan, Y., Wu, M., & Lin, Q. (2024). The Impact of Caregiver Pressure to Eat on Food Neophobia in Children with Autism Spectrum Disorder: A Cross-Sectional Study. *Children (Basel)*, *11*(5), 528-. https://doi.org/10.3390/children11050528

Zimmer, M. H., Hart, L. C., Manning-Courtney, P., Murray, D. S., Bing, N. M., & Summer, S. (2012). Food variety as a predictor of nutritional status among children with autism. *Journal of autism and developmental disorders*, *42*(4), 549–556. https://doi.org/10.1007/s10803-011-1268-z

Non Face-to-face Intervention Case Study

Introduction

The Health and Care Professions Council (2009) and the British Psychological Society (2010) state that trainee psychologists should "be able to use professional and research skills in work with clients based on a scientist-practitioner and reflective-practitioner model that incorporates a cycle of assessment, formulation, intervention and evaluation" (BPS, 2011, pp.6). This intervention case study follows these guidelines and describes a remote intervention conducted with a 12-year-old autistic female. To protect the young person and her family's anonymity, she has been given the pseudonym 'Anna' and will be referred to this name throughout.

Background

Autistic individuals often face challenges during therapeutic intervention, as many struggle communicating their difficulties and recognising and expressing their emotions (Doherty et al., 2022). Cognitive-behavioural therapy (CBT) is frequently used within autism, as research suggests CBT increases the effectiveness of therapy for those on the spectrum (Cooper et al., 2018; Spain et al., 2023; Wood et al., 2020). CBT strategies include cognitive restructuring, coping skills and problem-solving (Mahoney & Arnkoff, 1978) and involve teaching and guiding an individual towards adaptive ways to think and behave, with collaborative effort from the client and therapist (Scarpa & Lorenzi, 2013). Overholser (2011, pp.63) describes this practice as guided discovery, as the therapist "assumes the role of a guide, not an expert", with individuals learning that they can tolerate negative emotions and have strategies in place to help them (Weisz & Kazdin, 2010).

Intervention Opportunity

My current placement (an Autism Assessment Service) does not routinely offer interventions therefore there were no service protocols to follow, and I had autonomy during the assessment, formulation, design and deliverance of the intervention. This case study describes 12-year-old Anna, who had been recently diagnosed with Autism Spectrum Disorder (ASD).

Anna was identified as a young person who might benefit from therapeutic intervention due to low self-esteem observed during her autism assessment. Anna was home-schooled and was aware of her difficulties, which impacted her ability to attend high school. This was a formative time for Anna, as she reported that she wanted to return to high school but couldn't cope with the school environment.

It was unfeasible for intervention sessions to be delivered face-to-face due to location constraints, therefore Anna was offered five one-hour sessions (including assessment and formulation) remotely through video-call. I contacted Anna's mother to offer the intervention and consent was gathered from both Anna and her mother for participation in the intervention and for the information to be used within my Professional Doctorate case study.

Assessment

The assessment phase gathers information and identifies the nature and degree of the problem to fully understand the client's needs (Johnstone & Dallos, 2006). Accurate assessment is essential to create a collaborative formulation and produce an effective intervention (Redhead et al., 2015). Mazefsky and White (2013, pp.46) believe "the ideal approach to assessment is multi-method, utilising a combination of continuous screening measures, structured and unstructured observation, and interview and multi-informant", with all sources providing meaningful information to the assessment. Following this practice, multiple informants were utilised during Anna's assessment with interacting perspectives; this included a clinical interview with Anna's mother, an assessment session with Anna and case notes from the multi-disciplinary team involved in Anna's autism assessment, alongside reports from schoolteachers and counsellors.

I conducted a clinical interview with Anna's mother to examine how Anna's autism affects her daily functioning. This provided insight into Anna's self-esteem and communication difficulties. I asked about previous professional involvement, which Anna's mother stated had been ”terrible"; Anna had seen several psychotherapists, however dreaded therapy and had taken a particular dislike to CBT, stating it was too difficult and "adult-like" for Anna to comprehend. I understood that this intervention presented itself as an opportunity to positively alter Anna's view of psychotherapy.

An assessment session was held with Anna to inform formulation and treatment goals; this was framed as a 'Get to Know You' session, utilising a visual workbook to work through together as a collaborative activity, helping establish therapeutic rapport (Halford & Brown, 2009). The workbook facilitated conversation to understand Anna's perspective and strengths and removed language and question demands to informally elicit a conversation surrounding Anna's goals;

for example, writing down ‘things I’d like to change’. Anna stated her overall intervention goal was to “be able to comfort [herself]” and the greatest achievement to reaching this goal was “to be more independent”. During the assessment session it became clear that Anna wanted support to build her independence, specifically regulating her emotions as she currently maintained dependence on her mother to do this.

Psychometric Outcome Measure

It is important to consider which outcome measure is suitable, as means of assessment and evaluation of the intervention (Al Sayah et al., 2021). Prior to Anna’s intervention, I attended a full-day workshop learning how to adapt interventions for neurodivergent individuals. During the workshop, an expert clinician warned attendees about the use of outcome measures. They advised that self-report questionnaires can be difficult for autistic individuals to complete due to abstract questions and likert scales often causing confusion for those on the spectrum. The clinician advised attendees to choose one short questionnaire when delivering interventions and to evaluate the self-report measures qualitatively wherever possible.

Following this advice, I purposely researched evidence-based questionnaires and examined each individual item; many were long, included unclear language and were worded negatively, which I believed would cause Anna distress. To maintain the working relationship between Anna and myself and to avoid Anna feeling that she was being formally assessed, I opted for one short understandable outcome measure.

The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) psychometric assessment was chosen to support a strengths-based intervention (Tennant et al., 2007; Lee et al., 2023). The WEMWBS assesses five domains of mental wellbeing – positive affect, vitality, psychological functioning, emotion regulation and social support - with a higher score indicating more positive wellbeing (Stewart-Brown et al., 2011). The WEMWBS was chosen for its validity in clinical settings for children aged 11 and above (Anthony et al., 2021) and its excellent internal reliability with autistic individuals (Appelqvist-Schmidlechner & Tuulio-Henriksson, 2020). This was completed with Anna during the first (assessment) and fifth (final) session as a pre- and post-intervention measure. I assisted Anna in the completion of the questionnaire, explaining abstract statements such as, ‘I have been thinking clearly’. The questionnaire facilitated an open conversation surrounding her wellbeing, self-esteem and emotion regulation.

Formulation

Formulation is the process of making sense and summarising the information gathered during the assessment, prioritising core problems and understanding the ‘whole picture’ (BPS, 2011). Formulation is a key element of CBT, as it allows the individual to make informed choices about their target goals, and is a ‘road map’ for intervention, relating theory and translating it into practice (Beck, 2011). Formulation is not always linear, but instead an ongoing and flexible process (MacNeil et al., 2012). This was evident during the initial stages of Anna’s formulation, as it was necessary to change the focus of the intervention from improving self-esteem to improving emotion regulation.

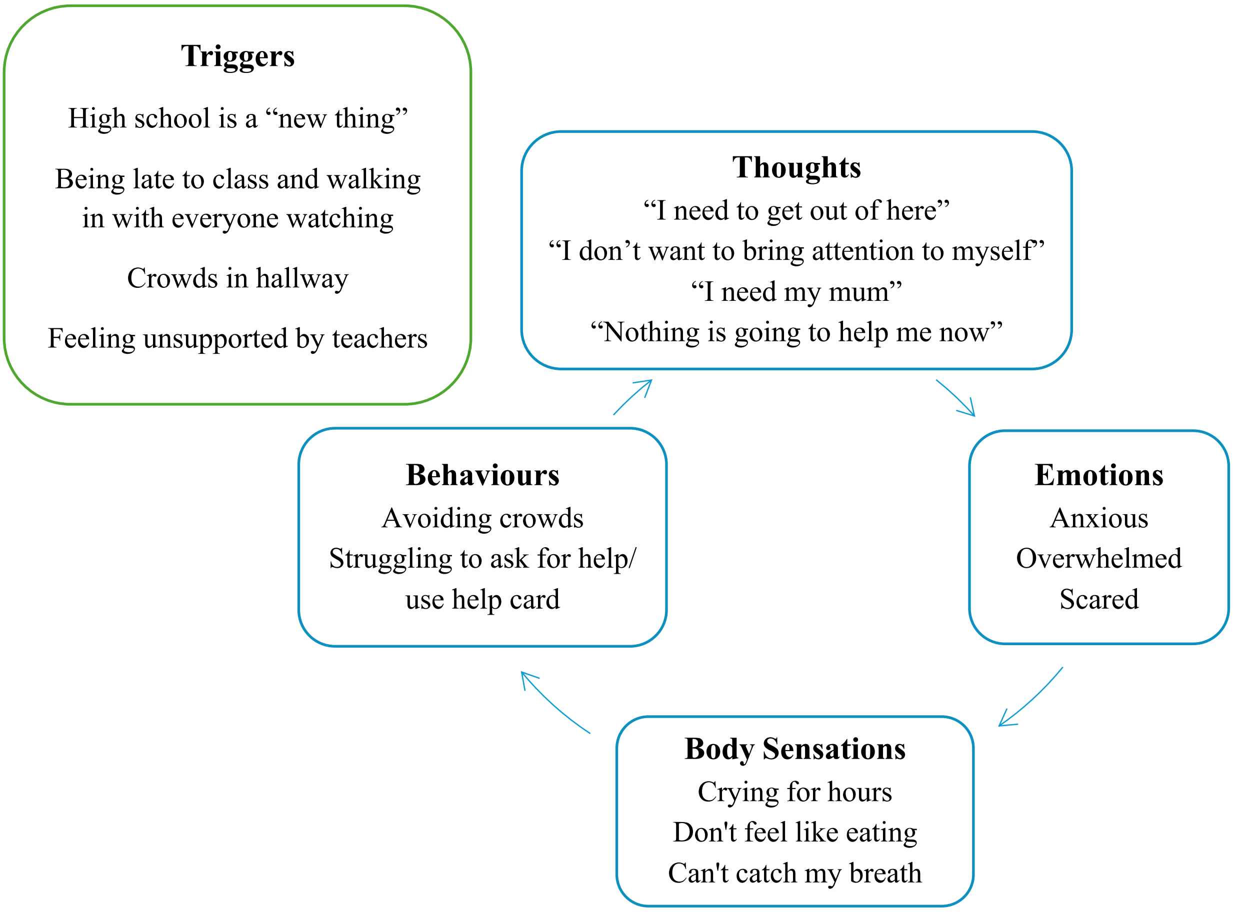
During the assessment phase, Anna’s difficulties surrounding self-esteem arose from multiple informants (family members and health professionals) and a formulation was created based upon this information. However, during the assessment session Anna gave insight into her self-esteem improving over the past two years and no longer felt this was a fundamental problem. I adapted the intervention, realising it is much more important to prioritise the ‘client’ (Anna) and the core issue they choose. After listening to Anna’s goals for the intervention - *“being able to [emotionally] comfort myself”* and *do so “independent[ly]”* - the formulation shifted and became not Anna fitting into the formulation model and selling this idea but learning from Anna’s expertise of herself and her experiences (Johnstone, 2002). The intervention transformed into a collaborative formulation between Anna and myself to primarily focus on improving Anna’s emotion regulation independently.

Mapping Out Formulation

Mapping out the formulation can help the client recognise that their problems are understandable, reduce self-blame and make sense of how their difficulties relate to one another, empowering the individual to identify areas for change (Johnstone & Dallos, 2006). As thoughts and emotions can be explained more easily when related to real-life examples, Anna linked her difficulties regulating her emotions to a concrete experience starting high school (Scarpa & Lorenzi, 2013). We mapped this out together to process the formulation (Figure 1). Anna provided a clear narrative of her triggers during the incident and how they influenced her thoughts, behaviours, emotions and body sensations.

Figure 1

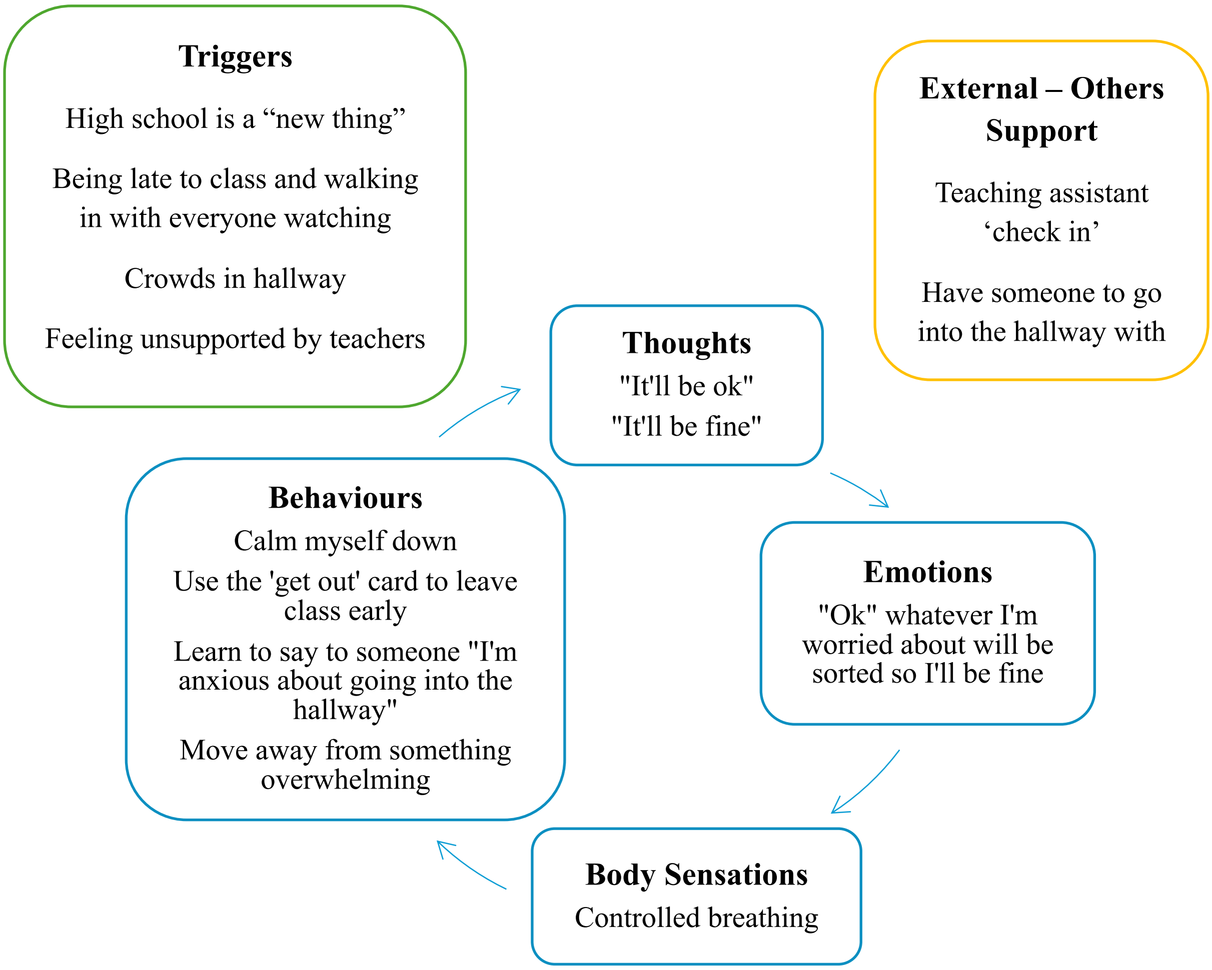
Anna's description of her experience at high school mapped upon Padesky's 5 aspects model (2020) to inform the formulation



We then extended the formulation by looking at an alternate perspective, focussing on what Anna would have liked to have happened during her experience described above. I explained we couldn't change triggers, but we had the ability to change our thoughts, emotions, body sensations and behaviours. We talked through the memory and shifted Anna's interpretation of the event following the ABC model to shift her beliefs. We mapped this onto a separate 5 aspects model as Anna could easily engage with this (Figure 2). This acted as a progression of the formulation, as we collaboratively identified barriers to Anna regulating her emotions and considered how her difficulties could be approached and evaluated differently. Anna reported calming herself down, controlled breathing and being able to communicate that she is overwhelmed would have helped the situation. This helped to guide the following sessions as Anna recognised what she needed help most with (Harper & Moss, 2003).

Figure 2

Extension of the formulation as Anna described 'what she would like to happen', mapped upon Padesky's 5 aspects model (2020)



For my own professional practice, and to make sense of the information gathered from various informants, I mapped out an additional case formulation using the 5 P's and biopsychosocial model as a framework. This helped to ensure I was meeting Anna's needs within the intervention (Kuyken et al., 2009; Bolton, 2014). This formulation was for my own benefit and was not shared with Anna, as I believe this would've been overwhelming.

Designing

CBT can help to explain why we have emotions, how to identify and measure our emotions, and how to explore new strategies communicating and managing these emotions (Attwood &

Scarpa, 2013). Based on the renewed formulation, a tailored CBT-informed intervention was developed following evidence-based approaches targeting emotion regulation improvement (Conner et al., 2019; Mazefsky et al., 2021; Zaharia et al., 2021). The objective of the intervention was developing Anna's ability to manage her distress, instead of engaging in avoidance and safety behaviours. The intervention aimed to enhance her self-efficacy, adjust beliefs about how she can handle situations, and work together to develop a skill set to regulate her emotions so that when Anna is confronted with difficult experiences that can't be changed, she uses kindness and self-care strategies to make her emotions easier to manage, as well as mindfulness to accept the situation and know it will pass (Zaharia et al., 2021).

Planning

Emotions become problematic when we lose control over them (Gross, 1998). This happens when emotions come on too quickly, strongly, or when they last a long time (making it difficult to calm down once upset) (Mazefsky et al., 2012, Thompson, 1991). Emotion regulation is the process we use to modify this emotional response. Emotion regulation difficulties are common in autism, as autistic people often have difficulties recognising their own emotions (alexithymia) and communicating these to others (Cai et al., 2018; Mazefsky et al., 2013). Often autistic people do not recognise the increase in emotional intensity until it is difficult to respond and reduce these feelings (Mazefsky & White, 2014).

For this intervention, I planned to introduce CBT-based cognitive-restructuring alongside emotion-regulation strategies. This included psychoeducation around emotions and the introduction of affective education (to recognise and label feelings) to improve Anna's vocabulary to describe her emotions. A technique utilised within the intervention was to quantify Anna's emotion expression, so that if the word is indescribable, Anna could express her level of emotion using a numerical rating, and this would indicate the intensity of her emotional experience (Attwood, 2004; Dunn Baron & Curtis, 2012). This was included within sessions alongside an introduction to relaxation training and mindfulness. These skills were designed to be taught during the intervention, with additional homework to implement these strategies in daily practice (Table 1). During the planning stage, behaviour change techniques (BCTs) from the Behaviour Change Taxonomy (Abraham & Michie, 2008) were also incorporated throughout the intervention. This was to improve effectiveness and to support behaviour change long-term.

Table 1

Session plan overview

Session	Plan	Corresponding BCTs	Areas covered
Session 1 *Assessment*	1. 'Get to Know you' workbook 2. Psychometric assessment (WEMWBS)	N/A	• Explain my role and the intervention. • Create transparency surrounding what the intervention will involve during sessions and homework. • Remove language demands by following a workbook to elicit conversation. • Explore Anna's understanding of her difficulties. • Discuss things Anna would like to change and treatment goals. • Build therapeutic rapport. • Highlight strengths.
Session 2 *Formulation*	1. '5 Aspects' (Padesky, 2020) model to collaboratively create CBT formulation 2. Extension of 5 Aspects model to introduce ABC model	1.2 Problem solving 4.2 Information about antecedents 13.2 Framing/reframing 8.2 Behaviour substitution 1.1 Goal setting (behaviour)	• Introduce basic CBT model and provide psychoeducation of CBT. • Help make sense of Anna's difficulties, modelling compassion and understanding. • Map out CBT formulation together following Anna's chosen example.

		1.3 Goal settings (outcome)	• Extend formulation - identify, evaluate and challenge current coping strategies by evaluating the situation differently. • Prompt a different perspective asking, “what would you like to happen in these moments?” introducing the ABC model. • Set Anna’s treatment goals collaboratively following formulation.
Session 3 *Intervention*	1. Affective education 2. Incredible 5-Point Scale (Dunn Baron & Curtis, 2012). 3. Behavioural practice - Relaxation training 4. Behavioural practice - Mindfulness	4.4 Action planning 11.3 Conserving mental resources 11.2 Reducing negative emotions 15.1 Verbal persuasion about capability 12.6 Body changes 9.1 Credible source 8.2 Behaviour substitution	• Provide psychoeducation of the benefits of emotions and normalise ‘bad’ or uncomfortable emotions. • Discuss emotional awareness and introduce Incredible 5-point Scale. • Collaboratively create and label the scale, using Anna’s own words. • Discuss recognising what calmness feels like. • Provide psychoeducation of behavioural practices. • Introduce relaxation training: breathing technique using visual aid. • Introduce mindfulness: describing a physical object using the senses.

Session 3 *Homework*	1. Practice breathing and mindfulness practices regularly	1.9 Commitment 12.6 Body changes 8.2 Behavioural practice/rehearsal 8.3 Habit formation	• Employ breathing and mindfulness practices regularly and prior to emotional distress to enhance repetition and practice of skills.
Session 4 *Intervention*	1. Psychoeducation around coping strategies. 2. Create ‘toolbox strategies’ (positive coping strategies) 3. Incredible 5-Point Scale (Dunn Baron & Curtis, 2012). 4. Behavioural practice – “quick calm” relaxation. 5. Behavioural practice – Mindfulness.	13.2 Framing/reframing 12.6 Body changes 11.3 Conserving mental resources 11.2 Reducing negative emotions 8.1 Behavioural practice/rehearsal 8.2 Behaviour substitution 3.3 Social support (emotional)	• Discuss why we use coping strategies and ‘safety-behaviours’. • Return to the Incredible 5-Point Scale, map out emotions Anna had felt that week. • Create a list of ‘toolbox strategies’ when feeling emotions 1-5. • Introduce another breathing practice incorporating numbers. • Practice mindfulness with different object to reinforce behavioural practice.
Session 4 *Homework*	Keep an activity diary and note down emotions using the 1-5 scale. Communicate emotions to family using numbers.	2.3 Self-monitoring of behaviour 1.9 Commitment	• Note down emotions using 1-5 scale to recognise and self-monitor emotions throughout the day to help increase awareness of emotion regulation. • Keep a diary to increase motivation to achieve desired goal.

Session 5 *Intervention*	1. Behavioural practice – "progressive muscle" relaxation. 2. Behavioural practice – Mindfulness. 3. Psychometric assessment (WEMWBS). 4. Reflect upon completion and progress 5. Allocated time to say goodbye	12.6 Body changes 8.1 Behavioural practice/rehearsal 10.4 Social reward 2.7 Feedback on outcome of behaviour 15.1 Verbal persuasion about capability	• Introduce final breathing practice: progressive muscle relaxation. • Practice mindfulness to reinforce behavioural practice. • Reflect upon sessions and completion of the intervention, discussing progress of treatment goals. • Provide affirmations and emphasise that Anna now has the tools to self-manage, and can continue to regulate her emotions independently, with the support of her family. • Say final goodbyes and explain that I will send a letter summarising the intervention sessions and Anna's progress.

Facilitation

CBT is intended to be time-limited and structured, with an array of skills to be taught to help clients achieve goals (Scarpa & Lorenzi, 2013). This intervention comprised of five 60-minute sessions (including assessment and formulation) over the course of five weeks. The intervention was delivered consistently, with each weekly session delivered remotely at the same time as this can be beneficial for autistic individuals, as it ensures predictability (Jenkinson et al., 2020).

Intervention sessions were conducted remotely, which presented advantages and disadvantages (Zhou et al., 2021). An advantage was that Anna could easily share aspects of her daily life, displaying her interests and toys on screen (Kalvin et al., 2021). However, disadvantages included technical issues and difficulties collaborating on handouts and workbooks. To combat this, visuals aids and CBT formulations were shared interactively via ‘screen-sharing’ and workbooks were printed off prior to sessions.

Parental Inclusion

This intervention was primarily delivered to Anna, as it was agreed she would meet with me individually to gain as much benefit as possible from sessions, following the goals of the intervention. Anna’s mother joined the session every week for a few minutes and continued to support Anna outside of sessions. This was used as a protective factor during the intervention, to ensure Anna’s independence and build her self-efficacy. I emailed a summary of the intervention to Anna’s mother at the end of the intervention, to ensure inclusion and to support Anna moving forward with her goals.

Therapeutic Relationship

The importance of a strong therapeutic relationship between therapist and client requires collaboration and reciprocity as a primary driver for change (Budd & Hughes, 2009; Leach, 2005) as research suggests this is the best indicator of success (Goldsmith et al 2015; Norcross & Wampold, 2011; Horvath & Bedi, 2002). Building a positive working relationship was a core objective within the intervention. As Anna had previous negative experiences with therapists, I prioritised building a good rapport and reframing her views of therapeutic work (Waddington, 2002). I maintained this by starting sessions informally ‘catching up’, providing positive affirmations throughout sessions and made genuine efforts to listen and learn about her interests; this consequently reduced Anna's anxiety during sessions and facilitated demand-free communication.

Ending the intervention

Termination of the intervention signifies the client will continue without the input of the therapist, with the aim for them to become self-sufficient (Gutheil, 1993). Ending the therapeutic relationship is a crucial aspect, and if done so successfully, the therapeutic outcome and therapist can be viewed positively by the client (Joyce et al., 2007). The intervention ended after five sessions. As Anna's previous attempts of psychological interventions were unsuccessful and caused her to have a negative view of therapeutic work, the importance of positively reframing therapeutic intervention also relied on ending the relationship successfully (Fragkiadiki & Strauss, 2012). As advised by my clinical supervisor, I informed Anna that I would write her a goodbye letter which would summarise the intervention and illustrate her progress. I ensured the final session had dedicated time to say a meaningful goodbye, and thanked Anna for her engagement throughout.

Evaluation

Evaluation of the intervention includes assessment of the effectiveness of the intervention and determining if outcomes were achieved (Kennerley et al., 2016). The intervention aim was to improve Anna's emotion regulation. Below, is a handful of qualitative quotes and behaviours from Anna and her mother that suggest positive outcomes occurred as a result of the intervention.

Table 2

Quotes and behaviours provided by Anna and her mother, alongside evaluation

Theme	Quotes/Behaviours from Anna	Quotes from Anna’s mother
Overcoming Avoidance	*During session 5, Anna reported that she had been to a garden centre and craft shop the previous weekend (whilst it was busy and noisy).*	
Emotional Resilience	*During session 5, Anna reported: “Every single day of November has been a good day” … “this is the longest time of the year I’ve had good days” “even though some of the day could’ve been bad it was still a good day overall”.*	
Self-monitoring	*Anna incorporated the 5-point scale into her journaling, and reported this was a “good [addition]”, and stated she would continue using the point scale to understand her emotions.*	
Confidence	*Anna reported during session 5: “before now, I’d never been that keen on videocalls, but these have been ok” and said that she would consider meeting up with friends online to chat following the intervention and would use it to call a friend in the future.* This was an additional positive outcome of the intervention, as Anna had prior apprehension about the intervention delivery being online due to previous negative experiences with therapy delivered remotely.	*After Session 1 Anna’s mother emailed saying: “[Anna] really enjoyed talking with you Hayley, this really gave her a boost. She was really happy and is already looking forward to next week.”*

Emotion Regulation Strategies	*During session 5, Anna reported "I tried the breathing… and didn't need to ask mum for help" when in a busy café. "[I'm] proud of myself".* This was huge progress for Anna, as she successfully regulated her emotions independently for the first time since the beginning of the intervention.	
Building Independence	*During session 4 Anna reported that she felt a '1' on the 5-point scale after going to the cinema independently with her brother and sister (without her mother being present).* This was incredible progress to overcome her avoidance and build her sense of independence.	
Overall Intervention	*During session 5 when asked how she has found the sessions, Anna reported she'd found them "helpful", particularly the "breathing", "number scales and techniques" and "quite liked the object – grounding". "Thank you, I think the things you've taught me will come in handy".*	*Anna's mother emailed at the end of the intervention: "Thank you for the letter, [Anna] loved it and she also loved the sessions."*
Next Steps (Self-management)	*During session 5 Anna reported: "the first step was doing breathing" and "not going on autopilot" "I will be more mindful and do the activities" and "I will continue keeping my journal and scoring 1-5".* Anna made plans in the final session to continue using the strategies she had learnt during the intervention.	*Anna's mother provided feedback to my colleague 1 month following completion of the intervention: "[Anna] benefited from the interventions Hayley did and has been using some of the strategies."*

Outcome Measure

The outcome measure (WEMWBS) was conducted with Anna in the first (assessment) and fifth (final) session and used as an additional evaluation tool (Table 3).

Table 3

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) scores

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) scores		**Interpretation**
Pre-Intervention *(first session)*	*52* *(Average)*	Tennent and colleagues (2007) suggest that an initial score within the average range (45-59) could benefit from intervention in terms of emotional resilience and quality of life.
Post-Intervention *(fifth session)*	*55* *(Average)*	An increase of three points from baseline scores is the minimum number to be regarded as an important level of change. This suggests some improvement to Anna's wellbeing following the intervention (Tennent et al., 2007).

Anna's pre- and post-intervention scores were within average range. I believe Anna's scores indicate that she was living within her 'comfort zone' and reflect that she was not attempting to build her distress tolerance levels to reach her goals. Anna's scores post-intervention increased by three points suggesting some improvement by the end of the intervention. Through analysis of Anna's response to specific scale items, Anna improved upon: "I've been feeling relaxed", "I've been dealing with problems well" and "I've been feeling good about myself". These items directly relate to the intervention outcomes, in which we were trying to help Anna feel more relaxed when overwhelmed, handle difficult situations and increase her self-efficacy that she could regulate her emotions independently. This indicates noticeable progress, as small changes in autistic individuals can make a big difference (Ambitious About Autism, 2020).

Self-evaluation

During the intervention, I reflected upon each session about what went well and what could have gone better. This helped my professional skills going into each session. Below I summarise key learning points that I will prioritise for future therapeutic interventions (Table 4).

Table 4

Therapist Learning and Action Points

Learning Points	Action Points
Due to workload, it was not always possible to write up the notes after the session. This led to clinical notes becoming harder to write up when I had more time, relying on memorisation.	Take as many short-hand notes as possible during the session and try to prioritise allocated time to make clinical notes straight after the session.
Keep intervention sessions as regular as possible – this worked well as Anna was home-schooled and prioritised sessions - I believe this greatly improved the effectiveness of the intervention.	Emphasise to the client the importance of regular sessions from the beginning to encourage consistent attendance.
The importance of client self-efficacy during therapeutic intervention was crucial for success. This was key to helping Anna believe that she could regulate her emotions independently. Building Anna's self-efficacy encouraged her to alter her thought pattern and consequently change her behaviours.	Continue modelling positive language towards the client and prioritise building and maintaining trust within the working relationship to increase rapport.
Reiterate the importance of the client using the strategies learnt in sessions throughout the day (not only when distressed) and outside of sessions.	Enforce the "practice, practice, practice" mantra and the importance of at-home tasks between sessions to increase success of achieving goals.

Conclusion

This case study outlines the assessment, formulation, delivery and evaluation of an individual remote intervention targeting emotion regulation. Throughout the intervention, I remained flexible to meet Anna’s needs and her treatment goals. It was challenging to change the direction of the intervention however I believe it was important to focus on Anna’s chosen goals and believe this led to positive change in a short time. I thoroughly enjoyed working with Anna, learning a huge amount throughout the process.

References

Abraham, C., & Michie, S. (2008). A taxonomy of behavior change techniques used in interventions. *Health psychology : official journal of the Division of Health Psychology, American Psychological Association*, *27*(3), 379–387. https://doi.org/10.1037/0278-6133.27.3.379

Al Sayah, F., Jin, X., & Johnson, J. A. (2021). Selection of patient-reported outcome measures (PROMs) for use in health systems. *Journal of Patient-Reported Outcomes*, *5*(Suppl 2), 99–99. https://doi.org/10.1186/s41687-021-00374-2

Ambitious About Autism. (2020, August 12). *Small Changes, Big Difference.* https://www.ambitiousaboutautism.org.uk/what-we-do/awareness/small-changes-big-difference

Anthony, R., Moore, G., Page, N., Hewitt, G., Murphy, S., & Melendez-Torres, G. J. (2022). Measurement invariance of the short Warwick-Edinburgh Mental Wellbeing Scale and latent mean differences (SWEMWBS) in young people by current care status. *Quality of Life Research*, *31*(1), 205–213. https://doi.org/10.1007/s11136-021-02896-0

Appelqvist-Schmidlechner, K., Lämsä, R., & Tuulio-Henriksson, A. (2020). Factors associated with positive mental health in young adults with a neurodevelopmental disorder. *Research in Developmental Disabilities*, *106*, 103780–103780. https://doi.org/10.1016/j.ridd.2020.103780

Attwood, T. (2004). Cognitive Behaviour Therapy for Children and Adults with Asperger's Syndrome. *Behaviour Change*, *21*(3), 147–161. https://doi.org/10.1375/bech.21.3.147.55995

Attwood, T., & Scarpa, A. (2013). Modifications of cognitive-behavioral therapy for children and adolescents with high-functioning ASD and their common difficulties. In A. Scarpa., S. W. White & T. Attwood. (1st ed.) *CBT for Children and Adolescents with High-Functioning Autism Spectrum Disorders* (pp. 27-44). Guilford Publications.

Beck, J. S. (2011). *Cognitive behavior therapy: basics and beyond.* (2nd edition). Guilford Press.

Bolton, J. W. (2014). Case Formulation After Engel—The 4P Model: A Philosophical Case Conference. *Philosophy, Psychiatry & Psychology*, *21*(3), 179–189. https://doi.org/10.1353/ppp.2014.0027

British Psychological Society (BPS) (2010). *Accreditation through partnership handbook: Guidance for clinical psychology programmes.* Leicester: British Psychological Society.

British Psychological Society (BPS) (2011). *Good Practice Guidelines on the use of psychological formulation.* Leicester: British Psychological Society.

Budd, R., & Hughes, I. (2009). The Dodo Bird Verdict—Controversial, inevitable and important: A commentary on 30 years of meta-analyses. *Clinical Psychology & Psychotherapy, 16*(6), 510–522. https://doi.org/10.1002/cpp.648

Cai, R. Y., Richdale, A. L., Uljarević, M., Dissanayake, C., & Samson, A. C. (2018). Emotion regulation in autism spectrum disorder: Where we are and where we need to go. *Autism research : official journal of the International Society for Autism Research*, *11*(7), 962–978. https://doi.org/10.1002/aur.1968

Conner, C. M., White, S. W., Beck, K. B., Golt, J., Smith, I. C., & Mazefsky, C. A. (2019). Improving emotion regulation ability in autism: The Emotional Awareness and Skills Enhancement (EASE) program. *Autism*, *23*(5), 1273–1287. https://doi.org/10.1177/1362361318810709

Cooper, K., Loades, M. E., & Russell, A. J. (2018). Adapting Psychological Therapies for Autism - Therapist Experience, Skills and Confidence. *Research in autism spectrum disorders*, *45*, 43–50. https://doi.org/10.1016/j.rasd.2017.11.002

Doherty, M., Neilson, S., O'Sullivan, J., Carravallah, L., Johnson, M., Cullen, W., & Shaw, S. C. K. (2022). Barriers to healthcare and self-reported adverse outcomes for autistic adults: a cross-sectional study. *BMJ Open*, *12*(2), e056904–e056904. https://doi.org/10.1136/bmjopen-2021-056904

Dunn Buron, K. & Curtis, M. (2012). *The incredible 5-point scale: Assisting students in understanding social interactions and controlling their emotional responses.* AAPC Publishing.

Fragkiadaki, E., & Strauss, S. M. (2012). Termination of psychotherapy: The journey of 10 psychoanalytic and psychodynamic therapists. *Psychology and Psychotherapy: Theory, Research and Practice*, *85*(3), 335–350.

Goldsmith, L. P., Dunn, G., Bentall, R. P., Lewis, S. W., & Wearden, A. J. (2016). Correction: Therapist effects and the impact of early therapeutic alliance on symptomatic outcome in chronic fatigue syndrome. *PloS One*, *11*(5), e0156120–e0156120. https://doi.org/10.1371/journal.pone.0156120

Gross, J. J. (1998). The Emerging Field of Emotion Regulation: An Integrative Review. *Review of General Psychology*, *2*(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271

Gutheil, T. G., & Gabbard, G. O. (1993). The concept of boundaries in clinical practice: Theoretical and risk-management dimensions. *The American Journal of Psychiatry, 150*(2), 188–196. https://doi.org/10.1176/ajp.150.2.188

Halford, J., & Brown, T. (2009). Cognitive-behavioural therapy as an adjunctive treatment in chronic physical illness. *Advances in Psychiatric Treatment : The Royal College of Psychiatrists' Journal of Continuing Professional Development*, *15*(4), 306–317. https://doi.org/10.1192/apt.bp107.003731

Harper, D., & Moss, D. (2003). A different kind of chemistry? Reformulating "formulation." *Clinical Psychology*, *25*, 6–10.

Health and Care Professions Council (HCPC) (2009). *Standards of proficiency: Practitioner psychologists.* Health Professions Council.

Horvath, A. O., & Bedi, R. P. (2002). The alliance. In J. C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 37–69). Oxford University Press.

Jenkinson, R., Milne, E., & Thompson, A. (2020). The relationship between intolerance of uncertainty and anxiety in autism: A systematic literature review and meta-analysis. *Autism : the international journal of research and practice*, *24*(8), 1933–1944. https://doi.org/10.1177/1362361320932437

Johnstone, L. (2002). *Users and abusers of psychiatry: A critical look at psychiatric practice* (2nd ed.). Routledge.

Johnstone, L. & Dallos, R. (2006). Introduction to formulation. In L. Johnstone & R. Dallos (Eds.), *Formulation in psychology and psychotherapy: Making sense of people's problems* (pp.1–16). Routledge.

Joyce, A. S., Piper, W. E., Ogrodniczuk, J. S., & Klein, R. H. (2007). *Termination in psychotherapy: A psychodynamic model of processes and outcomes.* American Psychological Association.

Kalvin, C. B., Jordan, R. P., Rowley, S. N., Weis, A., Wood, K. S., Wood, J. J., Ibrahim, K., & Sukhodolsky, D. G. (2021). Conducting CBT for Anxiety in Children with Autism Spectrum Disorder During COVID-19 Pandemic. *Journal of autism and developmental disorders*, *51*(11), 4239–4247. https://doi.org/10.1007/s10803-020-04845-1

Kennerley, H. (2016). *An introduction to cognitive behaviour therapy: Skills and applications* (3rd edition.). SAGE Publications.

Kuyken, W., Padesky, C.A. & Dudley, R. (2009). *Collaborative case conceptualisation.* Guilford Press.

Leach M. J. (2005). Rapport: a key to treatment success. *Complementary therapies in clinical practice*, *11*(4), 262–265. https://doi.org/10.1016/j.ctcp.2005.05.005

Lee, E. A. L., Scott, M., Black, M. H., D'Arcy, E., Tan, T., Sheehy, L., Bölte, S., & Girdler, S. (2023). "He Sees his Autism as a Strength, Not a Deficit Now": A Repeated Cross-Sectional Study Investigating the Impact of Strengths-Based Programs on Autistic Adolescents. *Journal of Autism and Developmental Disorders*, 1–16. https://doi.org/10.1007/s10803-022-05881-9

Macneil, C. A., Hasty, M. K., Conus, P., & Berk, M. (2012). Is diagnosis enough to guide interventions in mental health? Using case formulation in clinical practice. *BMC Medicine*, *10*(1), 111–111. https://doi.org/10.1186/1741-7015-10-111

Mahoney, M. J., & Arnkoff, D. B. (1978) Cognitive and self-control therapies. In S. L. Garfield & A. E. Berging (Eds.), *Handbook of psychotherapy and behavior change: An empirical analysis* (pp. 689-722). Wiley.

Mazefsky, C.A., & White S. W. (2013) The Role of Assessment in Guiding Treatment Planning for Youth with ASD. In A. Scarpa., S. W. White & T. Attwood. (1st ed.) *CBT* *for Children and Adolescents with High-Functioning Autism Spectrum Disorders* (pp. 45-69). Guilford Publications.

Mazefsky, C. A., & White, S. W. (2014). Emotion regulation: concepts & practice in autism spectrum disorder. *Child and adolescent psychiatric clinics of North America*, *23*(1), 15–24. https://doi.org/10.1016/j.chc.2013.07.002

Mazefsky, C. A., Herrington, J., Siegel, M., Scarpa, A., Maddox, B. B., Scahill, L., & White, S. W. (2013). The Role of Emotion Regulation in Autism Spectrum Disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, *52*(7), 679–688. https://doi.org/10.1016/j.jaac.2013.05.006

Mazefsky, C. A., Pelphrey, K. A., & Dahl, R. E. (2012). The Need for a Broader Approach to Emotion Regulation Research in Autism. *Child Development Perspectives*, *6*(1), 92–97. https://doi.org/10.1111/j.1750-8606.2011.00229.x

Mazefsky, C. A., White, S. W., Beck, K. B., & Conner, C. M. (2021). Emotion Awareness and Skills Enhancement (EASE) Program. In *Encyclopedia of Autism Spectrum Disorders* (pp. 1688–1693). Springer International Publishing. https://doi.org/10.1007/978-3-319-91280-6_102186

Norcross, J. C., & Wampold, B. E. (2011). Evidence-based therapy relationships: research conclusions and clinical practices. *Psychotherapy (Chicago, Ill.)*, *48*(1), 98–102. https://doi.org/10.1037/a0022161

Overholser, J. C. (2011). Collaborative Empiricism, Guided Discovery, and the Socratic Method: Core Processes for Effective Cognitive Therapy. *Clinical Psychology (New York, N.Y.)*, *18*(1), 62–66. https://doi.org/10.1111/j.1468-2850.2011.01235.x

Padesky, C. A. (2020). Collaborative Case Conceptualization: Client Knows Best. *Cognitive and Behavioral Practice*, *27*(4), 392–404. https://doi.org/10.1016/j.cbpra.2020.06.003

Redhead, S., Johnstone, L., & Nightingale, J. (2015). Clients' experiences of formulation in cognitive behaviour therapy. *Psychology and psychotherapy*, *88*(4), 453–467. https://doi.org/10.1111/papt.12054

Scarpa, A., & Lorenzi, J. (2013). Cognitive-Behavioral Therapy with Children and Adolescents: History and Principles. In A. Scarpa., S. W. White & T. Attwood. (1st ed.) *CBT for Children and Adolescents with High-Functioning Autism Spectrum Disorders* (pp. 3-26). Guilford Publications.

Spain, D., Milner, V., Mason, D., Iannelli, H., Attoe, C., Ampegama, R., Kenny, L., Saunders, A., Happé, F., & Marshall-Tate, K. (2023). Improving Cognitive Behaviour Therapy for Autistic Individuals: A Delphi Survey with Practitioners. *Journal of rational-emotive and cognitive-behavior therapy : RET*, *41*(1), 45–63. https://doi.org/10.1007/s10942-022-00452-4

Stewart-Brown, S., Platt, S., Tennant, A., Maheswaran, H., Parkinson, J., Weich, S., Tennant, R., Taggart, F., & Clarke, A. (2011). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a valid and reliable tool for measuring mental well-being in diverse populations and projects. Journal of Epidemiology and Community Health (1979), 65(Suppl 2), A38–A39. https://doi.org/10.1136/jech.2011.143586.86

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J., & Stewart-Brown, S. (2007). *The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation*. https://doi.org/10.1186/1477-7525-5-63

Thompson, R. A. (1991). Emotional regulation and emotional development. *Educational Psychology Review, 3*(4), 269–307. https://doi.org/10.1007/BF01319934

Waddington, L. (2002). The therapy relationship in cognitive therapy: A review. *Behavioural and Cognitive Psychotherapy, 30*(2), 179–192. https://doi.org/10.1017/S1352465802002059

Weisz, J. R., & Kazdin, A. E. (Eds.). (2010). *Evidence-based psychotherapies for children and adolescents* (2nd ed.). The Guilford Press.

Wood, J. J., Kendall, P. C., Wood, K. S., Kerns, C. M., Seltzer, M., Small, B. J., Lewin, A. B., & Storch, E. A. (2020). Cognitive Behavioral Treatments for Anxiety in Children With Autism Spectrum Disorder: A Randomized Clinical Trial. *Archives of General Psychiatry*, *77*(5), 474–483. https://doi.org/10.1001/jamapsychiatry.2019.4160

Zaharia, A., Noir-Kahlo, K., Bressoud, N., Sander, D., Dukes, D., & Samson, A. C. (2021). Proof of Concept: A Brief Psycho-Educational Training Program to Increase the Use of Positive Emotion Regulation Strategies in Individuals With Autism Spectrum

Disorder. *Frontiers in Psychology*, *12*, 705937–705937. https://doi.org/10.3389/fpsyg.2021.705937

Zhou, X., Edirippulige, S., Bai, X., & Bambling, M. (2021). Are online mental health interventions for youth effective? A systematic review. *Journal of Telemedicine and Telecare*, *27*(10), 638–666. https://doi.org/10.1177/1357633X211047285

Chapter 5

Teaching and Training in Health Psychology

Teaching Case Study

Introduction

This case study outlines the planning, design and delivery of five teaching sessions under the theme *Health and Eating Behaviours within Autism,* covering topics such as healthy eating, eating behaviours within autistic children and Avoidant Restrictive Food Intake Disorder (ARFID). These teaching opportunities arose through a combination of consultancy work, internal Continuing Professional Development (CPD) sessions, and ongoing discussions with the University of Staffordshire. The sessions were delivered to diverse audiences, including Support Workers working with autistic young people and children with Intellectual Disabilities; Healthcare Professionals in a Clinical Multi-Disciplinary Team (MDT) comprising Psychologists, Nurse Practitioners and Speech and Language Therapists working within an autism diagnostic service; staff members of a Family Support Team assisting families of children recently diagnosed with autism; and final-year (Level 6) Psychology Undergraduate students enrolled on a Health Psychology module.

The teaching programme comprised of four in-person sessions, and one delivered remotely via Microsoft Teams. Three CPD sessions were conducted at my placement, one lecture was delivered at the University of Staffordshire, and another training session formed part of a consultancy project with a Scottish charity. Session duration varied between one to two hours, and group size ranged from 8 to 22 attendees per session (with the final session designed for a large group of up to 45 students). An overview of the five sessions is presented within Table 1.

Identification and Assessment of Training Needs

Race (2019) identifies seven factors that contribute to successful learning: wanting/needing, doing, making sense, feedback, verbalising and assessing (See Figure 1). Rather than presenting this as a linear process, Race's (2019) model highlights the interconnectedness of learning elements and describes their influence as a 'ripple' effect. To guide the needs assessment, structure and content of my teaching sessions, I drew upon Race's model and began identifying and assessing learners' wants and needs. Understanding the learner's current level of knowledge, experience and learning goals ensured training content would be relevant and beneficial (Race, 2019). This process often involves consulting with the individual who requested the training and identifying gaps in knowledge or skills (Grant, 2002). To assess

Table 1

Overview of Teaching Sessions

Session & Date	Duration	Title	Format	Audience/Learners	Number of attendees	Delivery Method	Location
Session 1 12th April 2023	1.5 hrs	Understanding Autism	Training Session	Support Workers and Consultancy Client	22	Online	Microsoft Teams
Session 2 5th July 2023	1 hr	Eating Behaviours Within Autistic Children	Workshop	Clinical Multi-Disciplinary Team. Including Psychologists, Nurse Practitioners and Speech and Language Therapists	8	In-person	Professional Doctorate Placement
Session 3 12th July 2023	1 hr	ARFID (Avoidant Restrictive Food Intake Disorder) in Relation to Autism	Workshop	Clinical Multi-Disciplinary Team. Including Psychologists, Nurse Practitioners and Speech and Language Therapists	13	In-person	Professional Doctorate Placement
Session 4 12th Sept 2023	1.5 hrs	Eating Behaviours Within Autistic Children	Workshop	Family Support Workers	8	In-person	Professional Doctorate Placement
Session 5 19th April 2024	2 hrs	Healthy Eating	Lecture	Level 6 Psychology Undergraduate Students enrolled on a Health Psychology module	Approx. 15 attended. *(45 students enrolled on module)*	In-person *(Partially recorded for students)*	University of Staffordshire

prior knowledge and ability, I met with key contacts involved in the training organisation, such as the consultancy client, my workplace supervisor, and the university module leader. Prior to these meetings, I prepared a checklist of questions to ensure a thorough needs assessment whilst establishing any additional special educational needs. I also explored how the training could be applied to the learner's roles, their familiarity with the subject, alongside querying any previous training they had received to gain insight into their baseline knowledge. I also asked questions regarding practical considerations such as delivery mode (online versus in-person), session duration and group size to inform the appropriate teaching style and strategies to use.

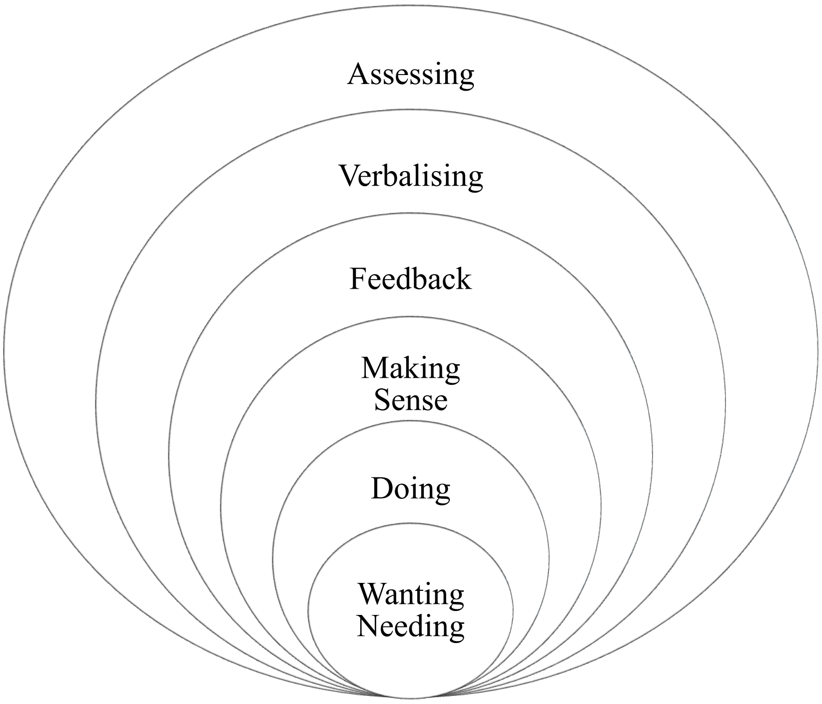


Figure 1

Race (2019) 'Ripples on a pond' model: The seven factors underpinning successful learning.

To secure the opportunity to deliver a lecture to a large group of students, I reached out to a university module leader within my professional network. We arranged a Microsoft Teams meeting to discuss the prospect of contributing to the Health Psychology module. This discussion helped me to understand the lecture brief, its purpose within the broader curriculum, and the associated assessment, which required students to apply psychological theories or research to a case study. It was agreed that a focus on 'healthy eating' would be an appropriate teaching topic, with reference to autistic children as an applied example. The module leader informed me that the audience would consist of up to 45 Level 6 students, who would receive an introduction to health psychology theories earlier in the semester. I requested further details about the group to tailor the session design and delivery accordingly, and asked for example lecture slides to gauge the appropriate teaching level and content. This provided me with reassurance and confidence to ensure that my lecture would effectively support students' learning in health psychology.

For the training delivered to the clinical team and the family support team at my placement, I had more flexibility designing and delivering the content. Following consultation with my workplace supervisor, I arranged CPD sessions focussing upon eating behaviours in autistic children and Avoidant Restrictive Food Intake Disorder (ARFID) in relation to autism, to improve staff's knowledge and inform the autism diagnostic assessments and information provided to families following diagnosis. To assess training needs, I asked team members about their existing knowledge; whilst the clinical and family support team had strong knowledge of autism, they were less familiar with eating-related challenges and ARFID. Given the clinical team included professionals from various disciplines, I recognised early in the planning stage that it was essential to ensure the training was accessible and relevant across roles.

Designing the Sessions

Constructivist learning theory suggests that individuals build knowledge by integrating new experiences with their existing understanding (Kolb, 1984). A constructivist, student-centred approach supports meaningful learning by enabling students to build upon their existing knowledge and develop new insights through active participation (Bada & Olusegun, 2015). Continuing to follow Race's (2019) model of learning, I focused upon designing sessions that included practical activities and encouraged active involvement (doing). I also aimed to incorporate opportunities for learners to reflect, discuss and grasp the content (making sense). Rather than centring the sessions around what I wanted to teach, I reflected on what the learners would want and need to know, considering how the content could support their roles, professional development, or for students, their academic learning and assessment (Biggs & Tang, 2011). This required me to consider the motivations and expectations of each audience.

For healthcare professionals, I recognised their main interest was acquiring practical knowledge and skills they could apply and recommend during their work with autistic children and families. Whereas university students were more focussed upon gaining a conceptual understanding of the teaching to support further independent study, working towards their summative assessment within the Health Psychology module. I therefore integrated relevant research and health psychology models, structuring the session to align closely with their assessment criteria; this included introducing the COM-B model, Behaviour Change Wheel and Behaviour Change Techniques (BCTs) in relation to a healthy eating intervention (Michie et al., 2011; Atkins & Michie, 2015).

Constructively aligning session content with each learner group's goals helped me to recognise the importance of tailoring educational experiences to learners' needs. Aligned with constructivist learning theory, Race (2019) establishes this concept as *learning incomes,* the prior knowledge, skills and attitudes that learners bring with them. While *learning incomes* provide insight into learners' starting points, *learning outcomes* define what they should be able to demonstrate by the end of the session, guiding the teaching content and structure.

Learning Outcomes

Adopting a learner-centred approach, session design began with conceptualising the intended learning outcomes, ensuring a clear alignment between training content and its overarching purpose. Whilst adapting the language of the learning outcomes to suit the specific audience, I considered Bloom's Taxonomy to ensure appropriate levels of learning (Krathwohl, 2002). This also provided a structured approach to designing content and activities that facilitated development of knowledge and skills (Moon, 2002). For example, sessions I designed for healthcare professionals required outcomes at higher levels of the taxonomy, due to the practical applications of knowledge in clinical settings. Whereas outcomes for students were tailored to support academic understanding and skill development in preparation for summative assessment. In line with best practice, I ensured that all learning outcomes identified key learning objectives, were attainable and assessable, and used clear, understandable language (Walker, 1994). I began each session by introducing myself and clearly outlining the learning outcomes, with each session concluding with a recap, highlighting how the learning outcomes had been achieved. This structured and outcome-focussed approach helped to ensure a smooth delivery and coincided with Race's (1999) recommendation to design sessions with a clear beginning, middle and end. See Table 2 for sessions and their corresponding learning outcomes.

Teaching Style

In recent years, the focus of teaching has evolved from being subject-centred to problem-centred and adapted from a teacher-led approach to a student-centred practice (Dunn &

Table 2

Session and Associated Learning Outcomes.

Session	Title	Learning Outcomes
1	Understanding Autism	• Explain the criteria needed to receive an Autism Spectrum Disorder diagnosis • Discuss the differences between autistic individuals • Identify strategies and interventions to support autistic children with eating difficulties
2	Eating Behaviours Within Autistic Children	• Consider the sensory differences within autistic individuals which affect food and eating choices • Have a greater understanding of eating behaviours within autistic children • Identify strategies and interventions to support autistic children with feeding difficulties
3	ARFID (Avoidant Restrictive Food Intake Disorder) in Relation to Autism	• Determine the key factors that would justify diagnosing ARFID (Avoidant Restrictive Feeding Intake Disorder) as opposed to Anorexia Nervosa. • Have a greater understanding of some of the distinctions and similarities between Autism Spectrum Disorder (ASD) and ARFID • Identify interventions specifically targeted to help individuals achieve goals related to their ARFID
4	Eating Behaviours Within Autistic Children	• Consider the sensory differences within autistic individuals which can affect food and eating choices • Have a greater understanding of eating behaviours within autistic children • Recognise similarities between Autism Spectrum Disorder (ASD) and ARFID • Identify strategies and interventions to support autistic children with feeding difficulties
5	Healthy Eating	• Discuss the concept of 'healthy eating' • Consider the application of the Behaviour Change Wheel as an intervention tool • Describe conscious and nonconscious processes that guide food and eating choices • Discuss eating behaviours within autistic children • Identify strategies & interventions that are used to support autistic children with eating difficulties

Honigsfeld, 2009). Teachers now emphasise deeper, more strategic forms of learning, moving away from superficial engagement (Biggs, 2003). To encourage motivation, Bligh (1998) proposes that the lecturer is enthusiastic to teach and nurtures and develops the motivations and interests the learners already have. To all the teaching sessions delivered, I brought along my passion for the subject. All the sessions delivered surrounded my area of interest and expertise - *autism and eating behaviours*. I was able to use my knowledge base and extensive literature review to create session content confidently. I also had various references, information from relevant autism charities and useful resources on hand to support the teaching.

Furthermore, I ensured I related to learners; teaching students is not telling them what they need to learn but emphasising the strengths and knowledge they already hold (Rogers & Horrocks, 2010). Throughout the sessions, I referenced my professional experiences and related back to the learners' own experiences, tailoring the content to each target audience. For example, I directly linked examples to the young people supported within the autism services; I highlighted those whom the Support Workers interact with daily, with direct and anonymised quotations from these children incorporated into the presentation slides as a technique designed to illustrate individual eating preferences. Whereas I used examples from autism assessments (ADOS-2 and ADI-R) to provide the clinical team with context of eating behaviours to deepen their understanding. In the smaller teaching groups (Session 2, 3 and 4), I integrated further lived experiences by distributing handouts detailing an autistic person's personal account of eating, as well as incorporating a poem written by a young person with ARFID within the presentation slides. These materials were incorporated to build a clearer and more empathetic understanding of the challenges that some autistic individuals face when encountering novel foods, which can often elicit heightened feelings of anxiety.

Delivering Training Sessions

When delivering a training session, it's essential to engage and activate the student's motivation to learn, which can be supported by selecting appropriate training materials (Race, 2019). This also reflects an understanding of how to adapt teaching methods for different group sizes and delivery methods. PowerPoint was used for each session, due to it being a helpful resource to deliver key information in a visual format, as slides enable learners to simultaneously view the screen whilst listening to information (Race, 2009; Knight et al., 2018). Ahead of designing the slides, I reviewed teaching literature, which shaped and guided how I created each presentation and ensured slides were accessible, provided ‘chunks’ of information and avoided text overcrowding (D’Angelo, 2018). All PowerPoints were available following the training session. Pre-session slides and a post-session recording were available for the lecture delivered to students.

At the start of sessions, I typically began by asking the audience open questions surrounding their prior knowledge. This was extremely useful when delivering to large groups; during the remote teaching session (Session 1) and the lecture to students (Session 5) I opted to open sessions with Mentimeter, a cloud-based activity which allows the teacher to interact with the audience simultaneously. By using a tool where the teacher sets the question, the audience can input their answers anonymously using their mobile phone or laptop via the internet. Mentimeter has previous success enhancing engagement during remote learning (Vallely & Gibson, 2018); I therefore asked the Support Workers remotely during Session 1 ‘What is Autism?’. The ice-breaker activity set up awareness of learners’ own pre-existing knowledge, providing an opportunity to build their self-efficacy and allowing me to actively engage with them from the onset.

Engaging with learners from the beginning was crucial, as challenges arise during teaching when learners adopt a passive role. To overcome this, it is important to incorporate learning activities that allow students to interact and actively engage with the learning materials (Race, 2019). Research suggests the average attention span drops after 15 to 20 minutes (Bradbury, 2016), therefore intermittently using activities during teaching keeps engagement levels high. This includes visual and audio media aids (such as videos), humour and anecdotes, discussion amongst pairs or groups and intermittently asking questions to and from the audience. Using interactive activities can also peak students’ interest (Kearsley & Schniederman, 1998). I ensured throughout sessions that I interspersed interactive activities and handouts to facilitate learning and achieve the intended learning outcomes. See Table 3 for an overview of the various interactive activities included within sessions.

I deliberately aimed to encourage the concept of ‘‘learning by doing’ to enable learners to actively learn new information and apply this in practice. This approach (also known as experiential learning) has long been proven to achieve productive and long-lasting effects (Race, 2019). During two of the small group sessions (delivered to the clinical team and the family support team) I introduced the ‘Food Critic’ intervention, an evidence-based repeated and graded taste exposure activity designed to encourage individuals to increase their food variety (Thomas & Eddy, 2019). The ‘Food Critic’ task asks individuals to explain the 1) look 2) feel 3) smell 4) taste and 5) texture of a food and ‘judge’ each sensory element, before providing an overall rating, using a visual worksheet as a guide. Bringing along fruit and biscuits to sessions, I asked learners to judge and rate sensory aspects of each food item, before discussing these in small groups. I explained that the purpose of the activity is to encourage individuals to learn about new foods, not necessarily like each food in order to build their tolerance of novel foods. By taking part in the ‘hands-on’ activity, learners understood the significance of the psychological intervention, as research supports the value of team-based training with direct applications to clinical work (Salas & Cannon-Bowers, 2001). This activity, linked with the handouts (which were designed to co-align with the training and would be disseminated by staff for families to try at home) was valuable in giving learners the opportunity to practise the recommendations they provide in clinical reports.

Assessing Learning Outcomes

Evaluating the learner’s knowledge, understanding, abilities and skills in relation to the learning outcomes is a key part of teaching (Quality Assurance Agency, 2018). Various forms of assessment serve distinct purposes such as enhancing student learning through constructive feedback that supports improvement and development during the learning process (formative assessment) as well as evaluating students’ knowledge, comprehension and skills to determine their overall level of learning (summative assessment; Morrison, 2003; Hounsell, 2009). I used formative feedback across all five sessions. This can be achieved via feedback, which is an important factor within many individuals’ learning as it helps the learner develop their ideas and abilities during the learning process.

Following Race’s (2019) ‘ripple’ model of learning, I provided space for regular and meaningful feedback, to reinforce learning and guide students to refine their own understanding. During in-person training sessions, I provided formative feedback by walking around the room to answer questions, provide feedback on their thoughts and encouraged them to communicate their ideas with other learners. During the online training session, I regularly asked learners for their feedback

Table 3

Interactive Activities Used within Sessions

Interactive Activities Incorporated into Sessions	Used within Sessions				
	1	**2**	**3**	**4**	**5**
Active Questions to Learners • E.g. "Why do we eat the foods we do?" • E.g. "Put your hands-up if you've heard of the COM-B model"	x	x	x	x	x
Pair Discussion • E.g. "What are your favourite foods/foods you dislike? How do you feel about trying new or unfamiliar foods?"		x		x	x
Mentimeter • Session 1: "What are some words or phrases you associate with Autism?" • Session 5: "How would you define 'Healthy Eating'? Why is healthy eating important?"	x				x
Case Study and Small Group Discussion • Session 1: Analyse case study 'Olivia' and use the DSM-5 ASD diagnosis criteria to assess and explore differential diagnoses. • Session 3: Analyse case study 'Richard' and assess and explore differential diagnoses and discuss ways to adapt the intervention. • Session 5: Design an intervention to promote healthy eating behaviours for parents of overweight children using the Behaviour Change Wheel.	x		x		x
Media • Video of autistic child experiencing sensory overload in shopping centre. • Video displaying food desensitisation intervention with autistic child. • Video of 'nudging' to highlight behaviour change techniques. • 'Healthy eating' marketing advert used by the Scottish Government.	x	x		x	x
Accounts of Lived Experience • Written account of an autistic individual's perspective of eating • Young person's poem showcasing their lived experience of ARFID	x	x	x	x	x
Intervention: 'Food Critic' Task • Judge and rate sensory elements of individual food items and discuss these in small groups.		x		x	
Handouts • Restricted eating handout and overeating handout co-aligning with training. • PEACE Pathway resources e.g. Sensory Profile.	x	x	x	x	

and thoughts. Formative feedback was particularly useful to check understanding and can prompt reflective practice for learners, as it allows them to digest the information and make sense of it, relating back to Race's (2019) model of learning.

Other methods of formative assessment can be incorporated within sessions, by applying newly acquired learning in tasks where students are asked to work together applying their ideas and knowledge and explain, apply and formulate a problem, such as by analysing a case study (Beaty, 2003). For three teaching sessions (Session 1, 3 & 5) I introduced real-life case studies, which required 'higher order thinking' (Winefield, 2004; Kaufman, 2003). Case studies present learners with a real-life problem in a concrete and detailed manner (Newble & Cannon, 2002; Schmidt, 1989). This allowed the learners to collaboratively and systematically work through steps to define what they needed to know to comprehend the problem and provided an opportunity for the learners to then apply the theoretical concepts learnt to novel and practical scenarios (D'Andrea, 2003). Within Session 5, students were asked to discuss in groups the Behaviour Change Wheel and design an intervention with components for parents to reduce children's portion sizes. During training for the clinical team (Session 3), I asked learners to discuss in small groups how they would adapt an intervention in the case of a young man with suspected Autism and ARFID. It was important when teaching that I encouraged learners to use the knowledge and skills they had learnt during the session and apply them within practice, rather than just memorising them, so that deep learning could take place (Biggs, 2003). Race (2019) further emphasises the importance of students verbalising their learning through discussion and communicating this to others, to promote deeper understanding and contributing to the 'ripple effect' of deep learning.

Conclusion

Race (2019, p. 70) asserts that *"to learn is to be human, rather than being a special kind of activity".* highlighting the inherent and continuous nature of learning. This strengthened my understanding that learning can happen anywhere, anytime, in many different forms, and is most effective when there is a collaborative process *with* people, rather than something imposed *upon* them. Throughout the experience of designing and delivering training sessions, I gained a deeper appreciation for the complexity and value of teaching and learning. Engaging with various groups of learners not only enhanced my confidence but reinforced my commitment to creating personalised and interactive learning environments. I felt a great sense of accomplishment delivering teaching sessions, and I look forward to future opportunities to refine my practice.

References

Atkins, L., & Michie, S. (2015). Designing interventions to change eating behaviours. *Proceedings of the Nutrition Society*, *74*(2), 164–170. https://doi.org/10.1017/S0029665115000075

Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, 5(6).

Beaty, L. (2003). Supporting Learning from Experience. In H. Fry, S. Ketteridge, & S. Marshall (Eds.), *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice* (2nd ed., pp. 134-147). Routledge. https://doi.org/10.4324/9780203416877

Biggs, J. B. (2003). *Teaching for quality learning at university: what the student does* (3rd ed.). Open University Press.

Bligh, D. A. (1998). *What's the use of lectures?* (5th ed.). Intellect.

Bradbury, N. A. (2016). Attention span during lectures: 8 seconds, 10 minutes, or more? *Advances in Physiology Education*, *40*(4), 509–513. https://doi.org/10.1152/advan.00109.2016

D'Andrea, V. M. (2003). Organizing Teaching and Learning: Outcomes-based Planning. In H. Fry, S. Ketteridge, & S. Marshall (Eds.), *A Handbook for Teaching and Learning in Higher Education : Enhancing Academic Practice* (2nd ed., pp. 26-41). Routledge. https://doi.org/10.4324/9780203416877

D'Angelo, L. (2018). PowerPoint Presentations in the classroom: Re-evaluating the genre. *Language Value*, *10*(1), 29–44. https://doi.org/10.6035/LanguageV.2018.10.3

Dunn, R., & Honigsfeld, A. (2009). Research on the Dunn and Dunn Learning-Styles Model: How Do We Know It Works? In *Differentiating Instruction for at-Risk Students*. Rowman & Littlefield Education.

Grant, J. (2002). Learning needs assessment: Assessing the need. *BMJ*. *324*(7330), 156–159. https://doi.org/10.1136/bmj.324.7330.156

Hounsell, D. (2009). Evaluating courses and teaching. In H. Fry, S. Ketteridge, & S. Marshall (Eds.). *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice* (pp.198-212). Routledge.

Kaufman, D. M. (2003). Applying educational theory in practice. *BMJ. 326*(7382), 213–216.

Kearsley, G., & Shneiderman, B. (1998). Engagement Theory: A Framework for Technology-Based Teaching and Learning. *Educational Technology*, *38*(5), 20–23.

Knight, E., Paroutis, S., & Heracleous, L. (2018). The power of PowerPoint: A visual perspective on meaning making in strategy. *Strategic Management Journal*, *39*(3), 894–921. https://doi.org/10.1002/smj.2727

Kolb, D. A. (1984). *Experiential learning: experience as the source of learning and development.* Prentice-Hall.

Krathwohl, D. R. (2002). A Revision of Bloom's Taxonomy: An Overview. *Theory Into Practice*, *41*(4), 212–218. https://doi.org/10.1207/s15430421tip4104_2

Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science. 6*(1), Article 42. https://doi.org/10.1186/1748-5908-6-42

Moon, J. (2002). *The Module & Programme Development Handbook: A Practical Guide to Linking Levels, Learning Outcomes and Assessment*. Stylus.

Morrison, J. (2003). ABC of learning and teaching in medicine: Evaluation. *BMJ. British Medical Journal (International Ed.)*, *326*(7385), 385–387.

Newble, D., Kapelis, Z., & Cannon, R. (2002). *A Handbook for Medical Teachers* (4th ed.). Kluwer Academic. https://doi.org/10.1007/0-306-47506-5

Race, P. (1999). *2000 tips for lecturers*. Kogan Page.

Race, P. (2009). *In at the Deep End* (2nd ed.). Leeds Met Press.

Race, P. (2019). *The Lecturer's Toolkit: A Practical Guide to Assessment, Learning and Teaching* (5th ed.). Routledge. https://doi.org/10.4324/9780429060205

Rogers, A. and Horrocks, N. (2010). *Teaching adults (*4th ed.). Open University Press.

Salas, E., & Cannon-Bowers, J. A. (2001). The Science of Training: A Decade of Progress. *Annual Review of Psychology*, *52*(1), 471–499. https://doi.org/10.1146/annurev.psych.52.1.471

Schmidt, H. G., Greep, J. M., Lipkin, M., & de Vries, M. W. (1989). The Rationale Behind Problem-based Learning. In *New Directions for Medical Education* (pp. 105–111). Springer. https://doi.org/10.1007/978-1-4612-3472-2_8

The Quality Assurance Agency for Higher Education. (2018). *UK Quality Code for Higher Education.* https://www.qaa.ac.uk/docs/qaa/quality-code/uk-quality-code-for-higher-education-2018.pdf?sfvrsn=4c19f781_31

Thomas, J. J., & Eddy, K. T. (2019). *Cognitive-behavioral therapy for avoidant/restrictive food intake disorder: Children, adolescents, and adults*. Cambridge University Press.

Vallely, K. S. A., & Gibson, P. (2018). Engaging students on their devices with Mentimeter. *Compass (Eltham)*, *11*(2). https://doi.org/10.21100/compass.v11i2.843

Walker, L. (1994). *Guidance for Writing Learning Outcomes*. Oxford Brookes University.

Winefield, H. (2004). Developing and Evaluating Training and Teaching. In S. Michie, & C. Abraham (Eds.), *Health Psychology in Practice* (pp.315-336). Wiley-Blackwell. https://doi.org/10.1002/9780470694008

Teaching Evaluation and Reflective Commentary

Introduction

This report offers an evaluation and reflective commentary of the five teaching sessions delivered to a range of learner groups of various sizes, under the theme *Health and Eating Behaviours within Autism*. Evaluation involves collecting various forms of assessment and critically analysing the information to inform and improve future teaching (Morrison, 2003). During this process, teachers can identify strengths, address areas for improvement and enhance the learning experience (Ramsden, 1992). Following Hounsell's (2009) evaluation cycle, I used multiple sources of feedback to develop and strengthen my teaching delivery and development. Table 1 provides an overview of teaching sessions, alongside the sources of feedback that informed my evaluation.

Table 1

Overview of Sessions

Teaching Session	Audience & Number of Attendees	Location & Delivery Method	Sources of Feedback
1) Understanding Autism	Support Workers and Consultancy Client *(22)*	Microsoft Teams *(Online)*	• Anonymous Online Feedback Form • Verbal feedback from Consultancy Client • Written feedback via email from Consultancy Client
2) Eating Behaviours Within Autistic Children	Clinical Multi-Disciplinary Team including Psychologists, Nurse Practitioners and Speech and Language Therapists *(8)*	Professional Doctorate Placement *(In-person)*	• Anonymous Online Feedback Form • Verbal feedback from Workplace Supervisor
3) ARFID (Avoidant Restrictive Food Intake Disorder) in Relation to Autism	Clinical Multi-Disciplinary Team including Psychologists, Nurse Practitioners and Speech and Language Therapists *(13)*	Professional Doctorate Placement *(In-person)*	• Anonymous Online Feedback Form • Verbal feedback from Workplace Supervisor
4) Eating Behaviours Within Autistic Children	Family Support Workers *(8)*	Professional Doctorate Placement *(In-person)*	• Anonymous Online Feedback Form
5) Healthy Eating	Level 6 Psychology Undergraduate Students enrolled on a Health Psychology module *(Approx. 15 attendees attended, 45 students enrolled on the module)*	University of Staffordshire (*In-person)*	• Anonymous Online Feedback Form • Observer report completed by University Module Leader

Sources of Feedback

Hounsell (2009) highlights the importance of gathering feedback from multiple perspectives, including learners, peers, and through self-reflection. Incidental feedback that emerges during or after teaching sessions can also offer valuable insights (Fry, Ketteridge & Marshall, 2009). In this report, I use various methods of evaluation to assess the quality and impact of teaching: learner feedback, incidental feedback, peer/client evaluation and self-evaluation. The variety of feedback sources allowed me to gain a broader perspective of my teaching ability and supported ongoing reflection and improvement. My evaluation focussed on key aspects such as session content and delivery, and how effectively they contributed to learners' understanding, engagement and skill development. I also considered the quality of the training materials (such as the lecture slides and interactive activities) and how well they contributed to the learning experience.

Learner Feedback and Incidental Feedback

To support a comprehensive evaluation across my teaching sessions, I designed an anonymous evaluation questionnaire to disseminate to learners to encourage honest and unbiased feedback (Morrison, 2003). All feedback was collected digitally through Microsoft Forms. I included a mixture of quantitative questions (e.g. Likert scales rating the overall session and content usefulness) and qualitative open-ended questions (e.g. what did you find most useful?) to gain insight into learners' perspectives. To balance efficiency with practicality, each feedback form contained less than five questions; this was a deliberate choice to prevent what Race (1999) refers to as "death by questionnaire". Following advice from my academic supervisor, I refined the feedback forms after Session 3: I reworded the question "is there anything else you would like to have seen?" to "how could the training be improved?", as the original question was not explicitly eliciting ideas for improvement.

Most learner feedback was received through the anonymous evaluation forms. In addition to evaluation forms, I collected incidental feedback during sessions. This included checking learners' understanding of the training via questions and interactive tasks, paying attention to engagement cues and reading learners' non-verbal communication as indicators of motivation and interest.

Peer and Client Evaluation

Feedback from colleagues and peers is beneficial for teaching development, particularly when it involves direct observation (Winefield, 2004). When a colleague or supervisor is invited to observe a session, they act as a "knowledgeable third party" (Fry, Ketteridge & Marshall, 2009). To support my development, I arranged for my workplace supervisor and university module leader to observe training sessions. Both observers were experienced teachers, and this provided an opportunity to learn from their expertise (Bell & Mladnovic, 2008). My placement supervisor's feedback (following Session 2 and 3) was informal yet constructive, focusing on both strengths and areas for improvement. Session 5 was formally observed by the module leader, who completed a structured observer report. Their feedback focused on teaching aspects including engagement strategies, pacing, clarity of delivery and learner interaction. In addition to peer observation, I received verbal and written feedback from the consultancy client following Session 1. This offered useful insights from the client's perspective regarding the relevance and impact of the training.

Self-Evaluation

Self-evaluation relies on the individual's ability to reflect upon their teaching and perception of their performance and competence (Hounsell, 2009). Self-reflection prior and post-teaching was crucial to my professional development, identifying strengths, challenges and areas to improve upon to adapt upcoming sessions accordingly.

Schön (2016) reports two types of self-reflection: *reflection-in-action* and *reflection-on-action.* Reflection-in-action took place during sessions, where I adapted my teaching based on learners' responses and engagement levels. Reflection-on-action occurred after each session, as I completed a reflective diary to capture my experiences, observations and lessons learned to evaluate what went well and what could be improved upon moving forward. Throughout my self-evaluation it was important to acknowledge when I was being overly critical of my teaching and experiencing imposter syndrome (Wilkinson, 2020). Whilst this can be a barrier, it highlighted to me potential weaknesses and allowed me to address these quickly.

I also used self-generated feedback through teaching preparation by rehearsing sessions in advance with family and friends, a longstanding strategy I've used when public speaking. Winefield (2004) recommends that doing a full-length ‘practice run’ can be beneficial. This helped refine my content, structure and pacing, and anticipate any potential challenges. This ‘previewing’ was also useful to ensure the session was accessible, understandable, and engaging.

Successes

Teaching Style & Enthusiasm

My enthusiasm during teaching was frequently highlighted in both learner and observer feedback. One learner commented that I was “really engaging and the information was presented really clearly and well” (Session 2). I was delighted with this feedback, as an enthusiastic teaching style can enhance student motivation and produce a positive learning environment (Kember & McNaught, 2007; Rogers & Horrocks, 2010). The module leader reiterated this, stating my “enthusiasm and passion is clear”. I was also commended for my confident delivery – an area I have worked on over time - with one learner noting that I “did a great job, she was really confident and delivered the training well” (Session 4).

Knowledge

With some previous experience in public speaking, I felt relatively confident in my teaching style. My strong knowledge base of the topic – *autism and eating behaviours* – reinforced my positivity. Students praised me as “very knowledgeable and interactive” (Session 5) with “good examples to underline context” (Session 5). Additionally, the module leader commended my “explanation of components of models and interventions with real-life, relatable examples”. (Session 5). This was a deliberate strategy I implemented, by sharing experiences from my professional background and linking these directly to the session content. During the initial consultancy meeting ahead of Session 1, it was agreed with the client that it would be useful to refer to the autistic young people I previously worked with as a Support Worker who the learners knew well. During later sessions, I referenced anonymous case examples, which the health professionals were able to relate to, helping them to understand how health psychology theories could be applied in real-world contexts (Miller, 1990; Salas & Cannon-Bowers, 2001). The addition of my experiences working with autistic individuals with eating challenges was frequently commented upon as a positive addition; “really interesting presentation, really liked how you included your experiences [working with autistic young people]” (Session 2); “really relevant examples to an ASD diagnostic setting and everyday examples, interesting and enjoyable!” (Session 2); “the personal experiences of individuals who have feeding challenges were really helpful in acquiring a good perspective and understanding of why it is difficult and how these challenges affect different people” (Session 4). The consultancy client also valued this approach, feeding back that referring to known individuals within the service “added a personal touch” and helped Support Workers connect the content to the young people they work with. Additionally, I incorporated examples of lived experiences, such as poems and articles, to help learners recognise and empathise with the experiences of autistic individuals. I found this approach to be impactful, as it deepened learners’ understanding, highlighting the complex challenges some autistic individuals face surrounding eating. This is a strategy I will continue to use, given its strong emotional and educational effects.

Teaching Strategies > Tasks and Activities

One of the strengths of sessions was including practical activities that healthcare professionals could recommend or apply in practice. This was fed back from learners as the most helpful aspect of training. One learner noted “everything was clear and there was things I hadn’t thought of before, tips and strategies I can use going forward” (Session 1). Whilst another commented the session offered “really helpful advice for parents/carers - practical interventions they can independently carry out” (Session 2). Similarly, learners found that “the different strategies and interventions were really helpful and will be especially useful when speaking with families” (Session 4). Throughout the sessions, I incorporated evidence-based approaches, including behaviour change models, motivational interviewing, and eating-related interventions which learners directly related as applicable to their roles. The practical knowledge transferred to learners was not only beneficial for individuals early in their career, but also for experienced professionals; the consultancy client reflected “as a worker with 10 years’ experience in the role, even I managed to go away with some new knowledge to use in my own practice or pass on to others” (Session 1).

For small group sessions (Sessions 2, 3 and 4) it was important to involve learners in group activities to facilitate deep learning (Race, 2019). I utilised case studies, handouts and group discussions to promote engagement, which has been demonstrated to enhance learning (Schmidt et al., 2015). Learners described the sessions as having “fun activities” (Session 4) and “really enjoyed how [the session] was broken up into different activities, with lots of audience interaction" (Session 2). Another learner highlighted that they "liked the varied activities in the presentation. It helped me learn and kept me interested" (Session 3). When delivering the online session to a large group (Session 1), I was conscious of the additional challenges associated with virtual learning environments, including reduced attention and learners taking a more passive role (Kebritchi, Lipschuetz & Santiague, 2017). At times, I was met with silence when posing questions to the audience, which is a common challenge associated with remote learning (Duran, 2020). To overcome this, I reflected-in-action and provided example answers to questions, followed-up closed questions, or requested attendees use 'thumbs up/down' as a way of responding. Anticipating some of these challenges prior to the training, I utilised technology-enhanced learning to keep participants involved and encourage engagement (Coman et al., 2020). I incorporated online tools such as Mentimeter, case studies and YouTube videos. The consultancy client praised the interactive activities, noting they were greatly effective. I therefore prioritised including these for following sessions.

Challenges and Areas for Improvements

Organisational Hurdles

The training sessions didn't happen without challenges, due to unexpected organisational hurdles. On two occasions, training sessions 2 and 3 were cancelled last minute by the clinical director. When new dates were reorganised, several staff were pulled into other work commitments, leaving only three confirmed attendees on the morning of training. I felt disheartened after months of organisation and preparation and questioned whether it would be worthwhile reorganising the training. Reflecting in-action, I decided to open the training up to the wider team, inviting staff members 'last minute'. Thankfully this proved successful, as eight staff members from various disciplines attended, which worked well for the interactive activities planned. However, another challenge arose as the following training session (Session 3) was organised for one week later. This left me limited time to prepare, and I felt rushed and dissatisfied with the quality of the training. The PowerPoint slides were text-heavy, and I didn't feel as confident ad-libbing the presentation. This was recognised by a learner; "some of the slides were difficult to read - writing was very small" (Session 3). This experience taught me the importance of requesting additional time to prepare for teaching sessions to avoid rushing content. More importantly, I acted upon this feedback and allowed myself additional time to improve the PowerPoint slides of the final two sessions. This was confirmed by a learner who praised the "excellent slides*"* (Session 4) alongside the module leader, who noted my "clear and engaging [presentation]", with "colour, diagrams and pictures" that were "not text heavy" (Session 5).

Attendance and Engagement

Session 5 was delivered as a traditional lecture to students in a large lecture hall. Although a large group of 45 students were enrolled on the module, only around 15 students attended the lecture. Nonetheless, I kept my enthusiasm high as this was an opportunity to adapt autonomously. Despite the lesser numbers, I kept students engaged by asking questions to the whole group, requesting responses via non-verbal cues, such as raised hands to encourage participation. When preparing for the large group teaching session with (up to 45) students, I reflected upon my personal experiences as a student, and the discomfort and uncertainty that can come with speaking in front of a large group. I recognised early on that students may be hesitant to interact, particularly with peers they are unfamiliar with (Race, 2009). Anticipating this, I used Mentimeter early in the lecture to allow participants to participate anonymously, which proved to be an effective icebreaker. This was commended by the module leader; "Hayley used Menti to ask for perceptions of healthy eating, and why it is important… Very small student group, sat at a distance from each other, so Menti was a good technique to engage".

To gain students' interest and motivation to learn, I ensured the session content aligned with their upcoming assessment, a strategy shown to increase engagement (Hoskins & Newstead, 2009). To do so, I'd planned paired activities; however, this was less effective than expected, as many students were reluctant to move seats to engage in discussion. Reflecting-in-action, I walked around the room, checking in with students individually, asking questions informally to gain their perspectives and understanding. This personalised approach helped encourage engagement, as I recognised the importance of remaining flexible, adjusting my strategies based upon students' behaviour. The module leader commended this "supportive, positive acknowledgement of responses" and praised how I "managed discussion tasks with small groups around the room, rather than requiring feedback to the whole group… mov[ing] around the room, speaking to each individual/pair to ensure they understood the task and provide feedback" (Session 5).

Pace

Through self-reflective practice, I recognised that my delivery pace at times was quick, particularly during earlier parts of sessions. As a naturally fast speaker, I tend to speed up when nervous. The consultancy client (Session 1) similarly fed back that I started off quickly, however thankfully slowed down after ten minutes. In hindsight, I rushed the initial slides, as I assumed the audience (Support Workers) would be familiar with the knowledge I was providing, such as definitions of autism. However, upon self-reflection, I recognise the importance of slowing down, as even familiar information can serve as a valuable refresher. For the following sessions, I made a deliberate effort to be mindful of my delivery speed, aiming to maintain a steady, unhurried pace. Whilst I didn't receive comments from health professionals regarding pacing, I received feedback from a student who expressed "at times, the speaker went a little bit too quick (verbally) for me to keep up" (Session 5). To improve for future teaching, I will continue working on pacing by using practical strategies such as pausing more frequently, especially at the end of slides, to allow learners time to reflect and digest the content (Harbell & O'Sullivan, 2022).

Impact and Next Steps

Following sessions, I considered Kirkpatrick's four-level model of evaluation to better understand the impact of the training (See Table 2). Feedback from the consultancy client suggested that Session 1 achieved a 'change in behaviour' (Level 3), 'change in organisational practice' (Level 4a) and 'benefits to patients or clients' (Level 4b). The client explained that staff had started to apply the strategies within the service, "particularly in encouraging young people to try alternate foods" and "since the training we have managed to be more creative encouraging some of our children to eat an alternate food, with the team adopting what was learned in the session and using this".

Table 2

Kirkpatrick's Four Levels of Evaluation (1967). Adapted by Barr et al., (2000).

Level 1	**Learner's reactions**
Level 2a	Modification of attitudes and perceptions
Level 2b	Acquisition of knowledge and skills
Level 3	Change in behaviour
Level 4a	Change in organisational practice
Level 4b	Benefits to patients or clients

Since delivering training sessions, I've been approached with follow-up questions, asked to provide information and signposting to colleagues, and asked to have conversations with families regarding eating challenges. Additionally, the resources I created to co-align with the training have been included in clinical reports and disseminated to families. Information from Session 3 has also influenced clinical formulations and is now used as a differential diagnostic consideration. I've also redelivered the training to new clinical team members. In addition, I was asked to deliver further teaching sessions covering health psychology topics and successfully delivered a presentation on neurodiversity and sleep, demonstrating confidence in my teaching ability, and the value of health psychology within my workplace (Winefield, 2004).

Overall Reflections

The feedback from learners and peers was incredibly positive across sessions. The sessions received an average rating of 4.8 out of 5 stars, with the usefulness of the content rated even higher at 4.97 stars. The module leader's observation reinforced this, as they explained whilst they would typically offer constructive feedback, they had no suggestions for improvements. This validation delighted me and was both affirming and encouraging. Peer observations were particularly valuable, as receiving feedback from experienced teachers helped balance my own self-critical perspective. I would actively seek this out in future teaching opportunities. Additionally, having multiple sources of feedback offered diverse perspectives and understanding of the effectiveness of my teaching. This feedback will continue to influence my future teaching and delivery.

Reflecting upon the experience, I contemplated Seneca’s famous quote, *“while we teach, we learn”* (Koh et al., 2018). Developing and delivering sessions not only strengthened my professional competence but also ignited a genuine passion for teaching. I thoroughly enjoyed the process, finding it incredibly rewarding. Moving forward, I recognise that effective teaching is built upon thorough preparation and requires ongoing practice. I will remain conscious of my pacing and delivery speed, and I am confident with continued awareness and experience, I will continue to improve.

References

Barr, H., Freeth, D., Hammick, M., Koppel, I., & Reeves, S. (2000). *Evaluations of Interprofessional Education: A United Kingdom Review for Health and Social Care.* CAIPE/BERA.

Bell, A., & Mladenovic, R. (2008). The benefits of peer observation of teaching for tutor development. *Higher Education*, *55*(6), 735–752. https://doi.org/10.1007/s10734-007-9093-1

Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students' Perspective. *Sustainability*, *12*(24), Article 10367. https://doi.org/10.3390/su122410367

Duran, L. (2020). Distance Learners' Experiences of Silence Online: A Phenomenological Inquiry. *International Review of Research in Open and Distance Learning*, *21*(1). https://doi.org/10.19173/irrodl.v20i5.4538

Fry, H., Ketteridge, S., & Marshall, S. (2009). *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*. Routledge. https://doi.org/10.4324/9780203891414

Harbell, M. W., & O'Sullivan, P. S. (2022). Reviving the medical lecture: practical tips for delivering effective lectures. *Regional Anesthesia and Pain Medicine*, *47*(5), 331–336. https://doi.org/10.1136/rapm-2021-103401

Hoskins, S., & Newstead, S. E. (2009). Encouraging Student Motivation. In Fry, H., Ketteridge, S., & Marshall S. (Eds.). *A Handbook for Teaching and Learning in Higher Education* (pp. 27 - 39). Routledge.

Hounsell, D. (2009). Evaluating courses and teaching. In H. Fry, S. Ketteridge, & S, Marshall, (Eds.). *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice* (pp. 198-212). Routledge.

Kebritchi, M., Lipschuetz, A., & Santiague, L. (2017). Issues and Challenges for Teaching Successful Online Courses in Higher Education: A Literature Review. *Journal of Educational Technology Systems*, *46*(1), 4–29. https://doi.org/10.1177/0047239516661713

Kember, D., & McNaught, C. (2007). *Enhancing University Teaching: Lessons from Research into Award-Winning Teachers* (1st ed.). Routledge. https://doi.org/10.4324/9780203962947

Kirkpatrick, D.L. (1967). Evaluation of training. In R. Craig, L. & Bittel (Eds.), *Training and Development Handbook.* McGraw Hill.

Koh, A. W. L., Lee, S. C., & Lim, S. W. H. (2018). The learning benefits of teaching: A retrieval practice hypothesis. *Applied Cognitive Psychology*, *32*(3), 401–410. https://doi.org/10.1002/acp.3410

Miller, G. E. (1990). The assessment of clinical skills/competence/performance. *Academic Medicine*, *65*(9), S63-7. https://doi.org/10.1097/00001888-199009000-00045

Morrison, J. (2003). ABC of learning and teaching in medicine: Evaluation. *BMJ. 326*(7385), 385–387.

Race, P. (1999). *2000 Tips for Lecturers* (1st ed.). Routledge.

Race, P. (2009). *In at the Deep End* (2nd ed.). Leeds Met Press.

Race, P. (2019). *The Lecturer's Toolkit: A Practical Guide to Assessment, Learning and Teaching* (5th ed.). Routledge. https://doi.org/10.4324/9780429060205

Ramsden, P. (1992). *Learning to Teach in Higher Education* (1st ed.). Routledge. https://doi.org/10.4324/9780203413937.

Rogers, A. & Horrocks, N. (2010). *Teaching adults (*4th ed.). Open University Press.

Salas, E., & Cannon-Bowers, J. A. (2001). The Science of Training: A Decade of Progress. *Annual Review of Psychology*, *52*(1), 471–499. https://doi.org/10.1146/annurev.psych.52.1.471

Schmidt, H. G., Wagener, S. L., Smeets, G. A. C. M., Keemink, L. M., & van der Molen, H. T. (2015). On the Use and Misuse of Lectures in Higher Education. *Health Professions Education*, *1*(1), 12–18. https://doi.org/10.1016/j.hpe.2015.11.010

Schön, D. A. (2016). *The reflective practitioner: how professionals think in action*. Routledge.

Wilkinson, C. (2020). Imposter syndrome and the accidental academic: an autoethnographic account. *The International Journal for Academic Development*, *25*(4), 363–374. https://doi.org/10.1080/1360144X.2020.1762087

Winefield, H. (2004). Developing and Evaluating Training and Teaching. In S. Michie, & C. Abraham (Eds.). *Health Psychology in Practice* (pp. 315-336). Wiley-Blackwell. https://doi.org/10.1002/9780470694008

Chapter 6

Consultancy in Health Psychology

Consultancy Case Study

This case study will discuss the identification of a consultancy opportunity delivered to an Autism Short Breaks Service within a Scottish Children's Charity. The opportunity involved the creation and delivery of a training session concerning strategies and interventions targeting eating difficulties within autistic children and young people to support workers, alongside an additional two information handouts for support workers and parents/caregivers. The case study outlines the process involved, including identifying the consultancy opportunity, assessment of the client's needs, negotiating and planning, delivery and evaluation of the consultancy project, and developing and maintaining the working relationship between client and consultant.

Introduction

Consultancy is a "formal relationship where one party seeks help from another" (Earll & Bath, 2004, p.230). The 'consultant' offers services to the 'client' by analysing a specific problem, providing insight, and making recommendations based on their knowledge and expertise to expectantly initiate change (Block, 2023). This case study will detail my consultancy experience, covering each of the stages mentioned above.

Identifying the Consultancy Opportunity

The consultant can take a 'proactive approach', contacting the client and marketing their skill set (Earll & Bath, 2004). Boulton (2003) states that to achieve this, the consultant must have a clear understanding of what services they can offer that the client will benefit from. My opportunity to provide consultancy arose when I contacted my former workplace. I had insight into the Autism Short Breaks service, identifying some of the challenges they faced during my time there, and believed the service could benefit from my expertise. The client was enthusiastic about the opportunity for consultancy, acknowledging my familiarity with the young people and their difficulties associated with health and wellbeing. They expressed appreciation for the prospect of training and support, leading to the organisation of a face-to-face meeting.

Assessment of the Client's Needs

Block (2023) recommends the method of "selling our expertise or solution" and encourages consultants to take the lead and share perspective of the problem the client is facing and state plainly what they have to offer. Newton (2019) notes a common mistake new consultants make is to market their skills yet misunderstand their client's needs. Therefore, I actively listened, developing knowledge and insight of the issue before reflecting my understanding back to the client. To aid clarification of what services I could provide, I also presented examples of resources I had created concerning autistic children and eating difficulties that are circulated to families at my current placement. Newton (2019) supports this practice of providing evidence to the client to make yourself a known and credible consultant.

Two core eating-related issues within the service presented themselves during the needs assessment meeting: restricted diets and overeating, with many of the children at the service currently overweight and in need of healthy lifestyle changes. Following the identification of the issue, Block (2023) suggests consultant and client should collaboratively prioritise outcomes that need to be achieved and recognise who will be responsible for making this happen. In this instance, increasing healthy eating behaviours within children and young people was the core priority, therefore both consultant and client needed to consider support worker's needs to implement changes within the service (Grant, 2002). The client recognised the benefit of food routines, strategies and interventions to increase food variety and reduce overeating as ways to implement positive behaviour changes. The client highlighted the benefit of having expertise and knowledge provided by an external source as the current information the client was providing support workers was not being implemented. Schein (1987, p.20) concurs this idea of "using status as an 'outsider' as a special source of authority". This led to the client's request for similar resources that were presented in the meeting, alongside a tailored training session for support workers. This training would provide a general overview of autism alongside evidence-based strategies and interventions to combat restricted diets and overeating. The additional two handout resources summarised the strategies and interventions included within the training and were designed to be distributed following the training, to ensure that support workers had a concrete resource to refer to when needed (Bligh, 1998). We also discussed the importance of working systemically to achieve implementation (Messent & Pendry, 2019; Walker, 2008), therefore handout resources would also be provided to parents/caregivers.

Schein (1999) refers to this consultancy approach as ‘The Purchase-of-Information or Expertise Model: Selling and Telling’, as the client gives away the power by asking the consultant to seek out and provide the relevant information or expertise on behalf of the client. The client stated they were impressed by my knowledge, believed that I recognised what the service would benefit from, and gave me full control of the contents of the deliverables.

Identifying ‘Stakeholders’ and ‘Clients’

Earll and Bath (2004) believe it is essential to identify the clients and stakeholders from the start of the consultancy process. A client can be anyone who is directly or indirectly involved or impacted by the delivery of the consultancy project, whereas the stakeholders can be multiple entities, indicating that the project can have a wider reach than the client the consultant is in contact with (Newton, 2019; Brugha & Varvasovszky, 2000). I created a stakeholder analysis to assess who the various ‘clients’ may be using Schein’s (1997) categorisation (Table 1). I established that the service managers were the contact and primary client, as they authorised the work and provided the specific needs to proceed with the consultancy project. Support workers and parents/caregivers were categorised as the ultimate clients due to their ability to lead change and implement strategies and interventions; children and young people who attend the service were consequently unwitting clients. Mapping out the stakeholders and clients was a useful tool to plan who I would answer to, who I would create the training and resources for, and who would ultimately benefit from the deliverables.

Negotiating and Planning

Block (2023) reports the initial meeting as an opportunity to express and discuss requirements of both parties, talking about what the consultant wants from the client to make the project successful. I expressed my requirements from the consultancy from the beginning to create transparency; this included proposing a realistic time frame to provide resources and a training session that fit within my work demands. Time predictions of projects often include some uncertainty, and this can be a common problem within consultancy as consultants are often overconfident in time predictions

Table 1

Stakeholder analysis

Stakeholder	**Clients**	**Interest (degree of being affected)**	**Power (influence over project)**
Service managers	Contact client and Primary client	**High** – commissioned the work and the outcome would impact the overall service.	**High** – managerial position which dictates the training that support workers receive and oversees their work with children and young people.
Support workers and parents/ caregivers	Ultimate client	**Medium** – may gain knowledge and professional development to put into practice.	Over the immediate project – **Low**. Future implementation gained from knowledge from deliverables – **High** – They are the ‘change-agents’ in the project (Schein, 1987).
Children and young people	Unwitting clients	**Low** – currently unaware of the consultancy project. Following implementation from support workers/parents - **High**	**Low**

which result in financial loss (Halkjelsvik & Jorgensen, 2018). Additional time estimations were included to counteract this issue. I also asked for client involvement, this included organising attendees and distributing handouts. The initial face-to-face meeting set the expectations for the project and 'conceptual agreement' was achieved at an early stage (Weiss, 2009).

Additionally, to ensure a balance of power and reduce ambiguity, a contract was drawn up. Block (2023, p.56) reports that the contract is "simply an explicit agreement of what the consultant and client expect from each other and how they are going to work together". The consultancy was offered as a complimentary service due to the allowance of the case study to be part of my Professional Doctorate portfolio. The contract was reviewed by a Scottish employment lawyer to ensure accurate legal terminology alongside my university supervisor before being emailed to the client; the client signed the agreement with no adaptations needed. Additionally, the PowerPoint presentation slides and PDF handout resources were emailed to the client prior to the training session, to ensure a level of trust and openness.

Delivery

Earll and Bath (2004, p.232) state that the core underpinning values of consultancy should:

- maximise participation and minimise inequality;
- be solution focussed, creating workable solutions to real-life problems;
- be transparent and inclusive;
- embed the work within existing organisational structures, where those whose responsibility it is to implement the findings are empowered by the process and not de-skilled by it.

Following these values, I tailored the content of the deliverables with the audience and charity's ethos in mind. Earll and Bath (2004) state deliverables should encompass 'client empowerment', allowing the client to behave and think in different ways so that the recommendations can be implemented into practice. Therefore, I ensured that the training session closely related to the service and incorporated examples of the children staff work with, acknowledging the food-related difficulties they observe at work. The training was aimed to empower, rather than de-skill, to highlight the capabilities of the support workers, and what their actions can achieve moving forward.

The training session was divided into three sections: Autism from a Diagnostic Viewpoint; Understanding Autism; Autism and Eating Behaviours. I spent time researching relevant teaching literature on how best to deliver the training, prioritising interactive activities periodically to maximise participation and enhance learning (Race, 2020). As the training session was delivered remotely, I utilised Mentimeter, an online interactive tool that allows users to input their thoughts anonymously; Mentimeter has previous success promoting engagement in remote learning (Vallely & Gibson, 2018). At the beginning of the training session, I asked support workers to anonymously answer the question ‘What is Autism?’ and input their answers using their smartphones. This was employed to build self-efficacy and remind them at an early stage, that although I was delivering the training session, they had expertise working day-to-day with autistic young people.

Due to the online delivery of the training session, it was additionally challenging to build rapport with attendees. At times, when I posed a question to the audience, it was met with silence; this is a common hurdle within online training (Duran, 2020). I allowed attendees time to process the questions, however at times received no response and wondered whether the silence indicated disinterest or uncertainty (Xin & Feenberg, 2006). During these moments, I had to quickly adjust and reflect-in-action, using my skills and previous teaching experience to act quickly and provide example answers to questions (Bolton & Delderfield, 2018). If I didn’t receive a response, I adapted again to ask closed questions and requested attendees use non-verbal communication such as thumbs up or down as a response. Another disadvantage to delivering remote training was that I could not see attendees on camera whilst presenting, therefore I could not gauge their reactions to the training. This was due to a technical hiccup in which the presentation slides expanded full-screen and removed all attendees from view. This was particularly relevant at one point as I missed a question from an attendee, as I couldn’t see their ‘hand-up’ on screen. In hindsight, I would intermittingly ask if anyone has questions.

At the end of the training, a support worker asked a difficult question about how to appropriately communicate with an autistic young person about healthy food choices. I contemplated the question before answering with strategies commonly used within health psychology, discussing behaviour change and motivational interviewing techniques in layman terms. Following the training session, I recognised that I had learnt a vast amount during the process of preparing and researching for the training session. Whereas previously I would have been apprehensive of questions I was unprepared for, I had reached a level of expertise where I welcomed them.

Evaluation

The evaluation is the closing aspect of the consultancy process and is vital to ensure the performance of the consultant was adequate, the initial outcomes were reached, and the client was satisfied with the services provided (Earll & Bath, 2004).

Evaluation forms were created for support workers attending the training session (the ultimate client). The forms were anonymous to encourage honesty and incorporated open-text boxes to allow attendees to provide their thoughts in their own words and gather constructive feedback. I received eight responses, with overall feedback professing great satisfaction with the training, with each attendee rating the training five stars. The client also attended the training session and provided verbal feedback at the end. The client stated they were highly impressed by the professionalism of the presentation slides, and appreciated that I had related theory to practice, relating back to individual young people, as this would help support workers understand the information I was providing. I recognise this was a benefit of having ‘insider’ knowledge of the service and would not be possible in other consultancy opportunities. They particularly enjoyed the interactive activities and suggested using more of these in future training sessions. They also provided constructive feedback, asking me to explain the acronym ‘DSM-5’. They stated the training was beneficial to staff and suggested that I market my training session to other services, to increase awareness of autism and eating difficulties, which I deemed a great compliment. I informed the client that I would be in touch for more feedback to evaluate the consultancy process.

I emailed the client questions to assess my overall performance as a consultant; this also acted as closure of the consultancy process. Closure of the consultancy project is vital as it may impact the whole process, and whether the client considers contacting the consultant for future work. Block (2023, pp.6-7) explains “it can provide an important learning experience for the client and the consultant, and keep the door open for future work with the organisation”. The client provided feedback that my communication was “regular” and “there was absolute clarity on the side of both parties… [with] no confusion in what was happening at any point”. The client was satisfied with the deliverables, largely focussing on the training session stating it was “straight forward… but with a depth of information on autism that gave a clear picture of how ASD is diagnosed, the condition itself, and hugely beneficial in giving ideas of how to encourage young people to try other foods." They went on to state "*as a worker with almost 10 years' experience in the role even I managed to go away with some new knowledge to use in my own practice or pass on to others*". The client provided no improvements; however, I would explicitly ask this in future feedback forms.

Schein (1987, p.179) states "the effectiveness of a given intervention is primarily related to the degree to which it facilitates forward movement in the client or client system, as defined by the client". There has been some impact as a result of the consultancy, with the client reporting "since the training we have managed to be more creative encouraging some of our children to eat an alternate food, with the team adopting what was learned in the session and using it in their daily practice". Importantly, the client stated they would recommend me for future consultancy as "training was relevant, understandable and of definite worth to the team".

Developing and Maintaining the Working Relationship

The importance of establishing a working relationship within consultancy is widely documented (Block, 2023). A successful working relationship between consultant and client maximises use of resources, splits responsibility for success and implementation, and creates dedication from both parties (Cope, 2010). As previously noted, I had built a pre-existing working relationship with the client, therefore I was in the beneficial position to maintain this relationship. Because of this, the client did not rush the initial face-to-face meeting. The face-to-face meeting lasted over two hours and gave me time to explain what I could offer the client. I recognise the privilege of having extended time to explain and comprehend the motivation of the consultancy project from both sides, and allow the majority of the consultancy planning to be organised in this meeting. This also allowed in-depth discussion about the project moving forward, and meant that future correspondence was brief, which suited both consultant and client. The client and I were also based in different locations; therefore, it was not possible to have further face-to-face meetings, therefore communication was maintained through emails and Teams meetings. This is something I would continue to do for future consultancy opportunities, to allow enough time for the initial meeting, establish a sound base and organise this face-to-face so that future meetings could be briefer.

Schein (2016, p.28) states that “a relationship is a set of mutual expectations about each other’s future behaviour based on past interactions with one another”. Having a pre-existing working relationship with the client benefitted both myself and the client during the consultancy process, as I had built up a sense of reliability and trust over a significant time period prior to the consultancy project. I recognise in future professional practice I will have to prioritise making a positive first impression and maintaining regular communication with the client.

Reflection

Schein (1987) emphasises the importance of reflection to understand our own emotions and biases, in order to provide effective consultancy, as Earll and Bath (2004, p.250) state “reflection is advisable … to consider what has been learnt from the process, any action that needs to be taken immediately and how things could be done better in the future”.

I was initially apprehensive approaching my previous workplace, as I ‘pitched’ myself and my knowledge to my previous employers. Throughout the consultancy process, I aimed to present myself as professional yet approachable, and thankfully the client was easy to contact throughout. I can appreciate that future consultancy opportunities will not be as easy to achieve sufficient communication and may require more ‘check-ins’ with clients to ensure openness and trust (Schein, 2016). The initial face-to-face meeting was crucial to begin the consultancy process, and I would prioritise meeting a client face-to-face for future projects, as first impressions set the tone for the consultancy (Newton, 2019). The importance of the consultant-client relationship was evident during this consultancy, and I will continue to value the significance of positive working relationships in future. Although the consultancy has finished, the professional relationship between myself and the client remains open, which I believe is an accomplishment. The lessons I have learnt from this consultancy process, is to be confident and transparent, as well as the importance of time-management, consistent and clear communication, and reliability within the consultancy process.

References

Bligh, D. A. (1998). *What's the use of lectures?* (5th ed.). Intellect.

Block. (2023). *Flawless Consulting: A Guide to Getting Your Expertise Used*. Wiley-Blackwell.

Bolton, G., & Delderfield, R. (2018). *Reflective practice: writing and professional development* (5th ed.). SAGE.

Boulton, E. (2003) Turning crisis into opportunity: Consultancy for allied health professionals. *Health Psychology Update,* 12(2), 16-21.

Brugha, R., & Varvasovsky, Z. (2000). Stakeholder analysis: a review. *Health Policy and Planning*, 15(3), 239-246.

Cope, M. (2010). *The seven Cs of consulting*. Prentice Hall.

Duran, L. (2020). Distance Learners' Experiences of Silence Online: A Phenomenological Inquiry. *International Review of Research in Open and Distance Learning*, *21*(1). https://doi.org/10.19173/irrodl.v20i5.4538

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

Grant, J. (2002). Learning needs assessment: assessing the need. *British Medical Journal*, 324(7330), 156–159.

Halkjelsvik, T., & Jørgensen, M. (2018). *Time Predictions Understanding and Avoiding Unrealism in Project Planning and Everyday Life*. Springer Nature.

Messent, P., & Pendry, N. (2019). How can family therapy and systemic practice make a difference in front line social care? *Journal of Family Therapy*, *41*(3), 307–312. https://doi.org/10.1111/1467-6427.12277

Newton, R. (2019). *The management consultant: mastering the art of consultancy* (2nd edition). Pearson Prentice Hall.

Race, P. (2020). *The Lecturer's Toolkit: A Practical Guide to Assessment, Learning and Teaching* (5th edition.). Routledge. https://doi.org/10.4324/9780429060205

Schein, E. H. (1987). *Process Consultation. Vol. 2. Lessons for Managers and Consultants.* Addison-Wesley.

Schein, E. H. (1999). *Process consultation revisited*. Addison-Wesley

Schein, E. H. (2016). *Humble Consulting* (1st edition). Berrett-Koehler Publishers.

Xin, C., & Feenberg, A. (2006). Pedagogy in cyberspace: The dynamics of online discourse. *Journal of Distance Education*, 21(2), 1-25. https://doi.org/10.2304/elea.2007.4.4.415

Weiss, A. (2009). *Getting Started in Consulting* (3rd Edition.). John Wiley & Sons, Incorporated.

Walker, S. (2008). Family therapy and systemic practice. *Handbook for Practice Learning in Social Work and Social Care* (2nd Edi). Jessica Kingsley.

Vallely, K. S. A., & Gibson, P. (2018). Engaging students on their devices with Mentimeter. *Compass (Eltham)*, *11*(2). https://doi.org/10.21100/compass.v11i2.843

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the "Agreement') is made between the following parties:

CONSULTANT	**CLIENT**
Hayley Anderson	xx
Staffordshire University	xx, xx
(the "Consultant")	(the "Client")

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 service.

D. This consultancy work will be written up as a case study as part of the Professional Doctorate in Health Psychology and any confidentiality provision contained within this agreement is subject to this clause.

1. SERVICES PROVIDED

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

1.1.1 To design two electronic three-page PDF handout resources for parents/carers of children and young people with Autism Spectrum Disorder (ASD); one detailing ‘food and portion size awareness’ and one detailing ‘strategies to combat restricted diets’.

1.1.2 To design a one-hour remote training session for Young People’s Workers focussing on autism from a diagnostic viewpoint and associated health and eating behaviours within children.

1.1.3 To design two electronic three-page PDF handout resources for Young People’s Workers to be distributed following the remote training session; one detailing ‘food and portion size awareness’ and one detailing ‘strategies to combat restricted diets’ to support those working with children and young people with ASD.

1.1.4 To deliver the one-hour remote training session on the 12th of April 2023 to approximately 20 Young People’s Workers, also providing the Client an electronic PDF copy of the presentation slides via email on this day.

1.1.5 To provide the Client electronic PDF copies of the four handout resources for parents/carers and Young People’s Workers via email on the 11th of April 2023.

1.2 If the Consultant is unable to provide the services due to illness or injury, she will notify the client as soon as reasonably practical.

1.3 Listed below are the Client’s responsibilities:

1.3.1 It is the responsibility of the Client to recruit the Young People’s Workers to the remote training session on the 12th of April 2023.

1.3.2 The Client must ensure that Young People’s Workers have access to Microsoft Teams to participate in the remote training session.

1.3.3 The Client will be responsible for the production and distribution of two handout resources to Young People’s Workers following the remote training session as designed by the Consultant as listed under clause 1.1.3.

1.3.4 The Client will be responsible for the production and distribution of handouts to parents/carers as designed by the Consultant as listed under clause 1.1.1.

1.3.5 The Client will provide written feedback to the Consultant following the remote training session and receipt of the electronic PDF handout resources.

2. TERM OF AGREEMENT

2.1 The Client shall engage the Consultant and the Consultant shall provide the Services on the terms of this agreement.

2.2 The term of this Agreement (the "Term") will begin on the date the Consulting Agreement is signed by both Parties and will remain in full force and effect until 28th April 2023 ("the Termination Date"), subject to clause 2.3.

2.3 If either Party wishes to terminate this Agreement prior to the Termination Date that Party must provide no less than 7 days prior written notice to the other Party.

2.4 The term of this Agreement may be extended past the Termination Date with the written consent of both Parties.

3. FEES AND EXPENSES

3.1 There will be no fee to the Consultant from the Client for the provision of the Services.

3.2 The Consultant shall bear their own expenses incurred in the course of providing the Services and the Consultant will not be reimbursed by the Client for any expenses incurred providing the Services.

4. CONFIDENTIALITY

4.1 Confidential information (the "Confidential Information") refers to any data or information relating to the Client, whether business or personal, which would reasonably be considered to be private or proprietary to the Client and that is not generally known and where the release of that Confidential Information could reasonably be expected to cause harm to the Client.

4.2 The Consultant agrees that they will not disclose, divulge, reveal, report or use, for any purpose, any Confidential Information which the Consultant has obtained, except as authorised by the Client, any information which is already in, or comes into the public domain otherwise than through the Consultant's unauthorised disclosure, or as required by law. The obligations of confidentiality will apply during the Term and will survive indefinitely upon termination of this Agreement.

5. OTHER ACTIVITES

5.1 Nothing in this agreement shall prevent the Consultant from being engaged, concerned or having any financial interest in any other business, trade, profession or occupation whilst providing the Services.

6. ETHICAL STANDARDS

6.1 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' (2021).

7. INTELLECTUAL PROPERTY

7.1 All intellectual property and related material (the "Intellectual Property") that is developed or produced under this Agreement, will be the sole property of the Consultant.

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

8. LIABILITY

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

9. TERMINATION

9.1 In the event of a breach of the Agreement by either Party then the Agreement shall be terminated immediately.

10. VARIATIONS

10.1 No variation to this agreement shall be effective unless it is in writing and signed by both Parties.

11. ENTIRE AGREEMENT

11.1 This consultancy Agreement constitutes the entire Agreement between both Parties relating to the provision of Services and supersedes and extinguishes all previous and contemporaneous agreements, promises, assurances and understandings between them. 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.

11.2 Both Parties agree that it shall have no claim for innocent or negligent misrepresentation or negligent misstatement based on any statement in this agreement.

11.3 In the event that a dispute arises out of or in connection with this Agreement, the Parties will attempt to resolve the dispute to the best of their abilities through friendly consultation. If the dispute is not resolved within a reasonable period, 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. GOVERNING LAW

12.1 This agreement will be governed by and construed in accordance with the laws of Scotland.

13. SEVERABILITY

13.1 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.

14. SIGNATURES

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

____________________________	____________________________
Consultant	Client
____________________________	____________________________
Date	Date