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**Occupational therapy students'
experiences of professional reasoning
during practice-based learning: A
dialogical analysis**

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Abstract

Background

Practice-based learning equates to a third of occupational therapy students' education and provides an opportunity for development of professional reasoning. Although professional reasoning is a key competency underpinning entry to the occupational therapy profession, little is known about students' reasoning during their practice-based learning.

Methodology

A dialogical approach, based on the philosophy of Mikhail Bakhtin, has been used to explore occupational therapy students' experiences of reasoning during their practice-based learning. A dialogical approach recognises living as both an individual and a social phenomenon. Bakhtin suggests speech is composed of different genres which have distinctive temporal and spatial features, these can indicate how we position ourselves in relation to others. Twelve occupational therapy students were interviewed after they had completed their final practice placement.

Findings

Fifty-seven key moments were analysed, and two major genres (Bildungsroman and romance) and three minor genres (travel, adventure, and carnival) were identified. The Bildungsroman illustrated experiences of professional socialisation into reasoning. The other genres related to expression of professional identity. The romantic genre was used to convey the person-centred and occupation-centred values that informed the students' reasoning. The travel genre indicated an inability to reason, for example in a fast-paced setting. The adventure genre was used when the practice educator was experienced as testing reasoning, and the carnival genre when reasoning in an unpredictable situation.

Discussion

This study demonstrates the value of a dialogical methodology in exploring a complex, individual, and social phenomenon. Reasoning was experienced both as a means of enacting, affirming, and negotiating a professional identity, and of being socialised into the reasoning of an occupational therapist. Some students resisted socialisation into reasoning that was

incongruent with their values and developing professional identity. The findings also illustrated the emotionality of learning to reason, and the need for emotional intelligence.

Recommendations

It is recommended that students and educators are prepared for the emotionality of learning to reason. Preceptorship programmes need to support newly qualified occupational therapists in the development of their professional identity.

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I would like to dedicate this thesis to the memory of my father, and to my mother who patiently listened to some of the ups and downs associated with completing a PhD, and from whom, I think, I inherited the resilience that enabled me to complete the journey.

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Glossary of Terms

Addressivity - as speech is addressed to someone (immediate or distant), the response we anticipate influences our speech.

Adventure genre – there is transformation and change in the individual often because of a series of trials.

Adventure time – time is intense and in short segments and chance plays an important role introduced by words such as suddenly.

Bildungsroman – this is a genre in which the world is experienced as a school we pass through with the idealism of youth becoming resigned to mature pragmatism, a process which requires adaptation and acceptance of the laws of the world (Bakhtin, 1986).

Biographical genre – a genre in which there is no development the individual is fully formed, the focus on the typical features of life (differs from genres where there is a deviation from the normal course of life).

Carnival – in this genre restrictions are suspended.

Chronotope – the distinctive spatial and temporal relation of the different genres.

Dialogic/al and dialogism – an all-encompassing term to describe Bakhtinian philosophy (Holquist, 2002). This should not be confused with dialogue (an interaction between two individuals).

Double-voiced discourse – discourse that indirectly hits out at another.

Epic genre – a focus on the past, which is distant, finalised, absolute, and complete. Change is not possible. The future is a continuation of the present or a catastrophe, the destiny of the hero is predetermined (Bakhtin, 1981).

Genre – a way of perceiving and understanding the world that influences our speech.

Idyll – a small and stable world in which everything is familiar. It is self-sufficient. Human life is linked to nature (Bakhtin, 1981).

I-for-myself - how we experience our lived life.

I-for-other - how our self appears to others.

Key moment – key extract from the participants data.

Loopholes – an indication of double-voiced discourse, the speaker provides themselves with a loophole.

Monologic – an approach seeking unity and finalisation, closing down rather than opening up. A single authoritative voice.

Multivoiced – containing multiple perspectives.

Other-for-me - how others appear to us.

Outsideness – a position outside another's experience which allows a different perspective rather than reproducing the individual's experience.

Polyphony – multivoicedness, the existence of different and possibly contradictory voices.

Professional genre – illustrated by use of professional language and professional knowledge.

Prosaics - Bakhtin's theory of the novel with its multivoicedness and different genres.

Romantic genre - In this genre the individual does not change instead their identity is established and affirmed, chance plays an important role and can be characterised by tests of fidelity and romantic quests.

Sound bites – quotes from participants data that illustrate a genre.

Superaddressee – related to addressivity but goes beyond the immediate addressee and anticipates the response of a more distant addressee e.g., the people, God, science, human conscience (Bakhtin 1986, p. 126).

Travel genre – the genre emphasises difference and contrasts. The individual is static and does not change.

Unfinalisability - there is no last word, dialogue remains free and open.

Word with a sideways glance - speech that anticipates the response of another which is indicated by the speaker's introduction of loopholes, reservations, and self-depreciation.

Utterance – a unit of speech communication, a bounded narrative, a story of an experience.

Chapter 1

Introduction

1.1 Background

Professional reasoning is central to the practice of occupational therapy, and it has been identified by the World Federation of Occupational Therapists (WFOT) as a key competency that underpins entry to the profession (WFOT, 2016a). Occupational therapy students, practitioners and academics have all recognised professional reasoning as a threshold concept that students must master to make the transition from a student to a qualified occupational therapist (Nicola-Richmond et al, 2016). Sound professional reasoning skills are important in enabling students to address service users' needs by making autonomous, informed decisions which they can justify and defend (Loftus, 2012; Royal College of Occupational Therapists (RCOT, 2021); Health & Care Professions Council (HCPC, 2023).

Practice-based learning is a significant part of pre-registration occupational therapy students' education, equating to a third of their course (RCOT, 2017). All students need to successfully complete 1000 hours of practice placement (WFOT, 2016b) to qualify and be eligible for registration with the Health and Care Professions Council (RCOT, 2019). The practice-based learning component of the students' education provides an opportunity for them to develop and put into practice their professional reasoning skills and for their practice educator to assess how successful they are in this.

This introductory chapter provides some background to my study. I will introduce myself as a researcher and discuss the approach to the inclusion of my voice in this thesis. I will define professional reasoning, provide a brief historical overview of reasoning, and a synopsis of the educational theory relevant to learning to reason. I will conclude this chapter with an overview of the structure and content of this thesis.

1.2. The Researcher

I started in my current role a full-time senior lecturer in occupational therapy in 2004, prior to this I worked in the National Health Service (NHS) for nineteen years, for ten of these years in a clinical lecturer role with my time split between the university and the NHS. Whilst working in the NHS I was a practice educator supporting students on their practice placements and this was

always a part of my role I found very interesting and satisfying. I have experienced receiving occupational therapy briefly myself after hip surgery and more extensively for my father who lived with Alzheimer's. As a practice educator and clinical lecturer, I was interested in how students experienced learning on placement, and I explored this using an interpretative phenomenological approach for my MSc dissertation in 2004. My interest in practice-based learning was engendered by listening to attendees at sessions preparing practice educators to take students on placement, discuss their experience of having their learning facilitated by their practice educators when they were a student.

In my current role I support my personal tutees on their practice placements with a midway call or visit and continue to be involved in teaching the facilitating learning, professional reasoning and reflection components of the session preparing practice educators to take students on placement. My interest in learning distilled into an interest in reasoning, as both my educational and personal experience led me to conclude this was of fundamental importance to the practice of occupational therapy. On a personal level I had been very impressed, and occasionally somewhat disappointed, in the reasoning of the multiple occupational therapists who were involved in my father's care. At a professional level I witnessed students both struggling and succeeding in reasoning during placements, and some excellent and occasionally less excellent input from practice educators aimed at facilitating reasoning. I formed a view that well developed professional reasoning was one of the key factors that made the difference between an average and an excellent occupational therapist. I have been teaching for many years now and have found listening to students and trying to understand how they experience the learning process a powerful tool for development of my teaching practice. This belief in the importance of understanding the student perspective has informed my approach to this study.

1.2.1 The researcher's voice

My study is located within the interpretative, post structural paradigm; within this paradigm it is considered appropriate to include the researcher voice within the text (Golden-Biddle and Locke, 2007; Holliday, 2007; Denzin & Lincoln, 2012; Oliver, 2014). This contrasts with the positivist and post-positivist paradigms, which view data as able to speak for itself, "writing as the straightforward reporting of scientific phenomena" and the researcher as needing to use the passive voice to separate themselves from the text (Golden-Biddle & Locke, 2007, p. 11). Tracy (2020) suggests the use of "I" should be encouraged as this contributes to self-reflexivity by making the researchers influence and presence in the study more transparent. It can aid

clarity and readability (Shelton, 2015; Roush, 2019), make clear the researcher's role in the study, and strengthen credibility (Hyland, 2001). I share Holliday's (2007) view, that use of the researcher's voice is an interactive process that enables the researcher to make sense of both the data and her presence in the study; this approach acknowledges that the researcher is a major part of the study and that they need to reflexively interweave their own voice with their view of others. My approach to reflexivity in this thesis is informed by the theoretical paradigms informing this study and will be introduced following discussion of these in chapter three (methodology). Having already reflexively explored the influence of my professional and personal views on selection of a research question (Section 1.2) and therefore the direction of the literature review. I then explore reflexivity in subsequent chapters, in relation to the methodology (Section 3.8), the methods used (section 4.6), the findings (Section 8.5), discussion (Section 9.8) and reflect on the process in my conclusion (Section 10.5).

1.3 Defining professional reasoning

The complex and multi-faceted nature of professional reasoning means there are multiple interpretations of reasoning as a construct. This makes it particularly important for researchers to recognise this, and to provide clarity about their own definition (Gruppen, 2017). In this section I will discuss and justify the definition I am adopting and provide definitions for some of the terms used to describe reasoning in occupational therapy.

Historically the term clinical reasoning has been used to describe reasoning in occupational therapy. However, for some time there has been concern amongst occupational therapists that the term 'clinical' has medical connotations and therefore does not resonate with the many therapists who practice in non-medical settings (Kielhofner 2008; Schell and Schell, 2018a, Unsworth and Baker, 2016). In recent years, the term professional reasoning has increasingly been used in preference to the term clinical reasoning because of its inclusivity of the many non-clinical settings that occupational therapists' practice in (Unsworth and Baker, 2016). Appropriateness for a wide range of contexts is the only distinction made between the two terms and they have otherwise been used synonymously in the literature. Professional reasoning is the term I will adopt in my own study. However, when directly quoting authors, I have retained whichever term they selected.

Defining professional reasoning is complex and there is a long history of attempts to do so. In respect of my own study, I have selected the following definition by Higgs (2006) cited in Higgs and Jenson (2019, p. 4)

Clinical reasoning (for practice decision making) is a context-dependent way of thinking and decision making in professional practice to guide practice actions. It involves the construction of narratives to make sense of the multiple factors and interests pertaining to the current reasoning task. It occurs within a set of problem spaces informed by the practitioner's unique frame of reference, workplace context and practice models, as well as by the patient's or client's contexts. It utilises core dimensions of practice knowledge, reasoning and draws on these capacities in others. Decision making in clinical reasoning occurs at micro, macro and meta levels and may be individually or collaboratively conducted. It involves metaskills of critical conversations, knowledge generation, practice model authenticity and reflexivity.

This definition emphasises the influence of context, the different levels of reasoning and the fact that reasoning occurs both individually and collaboratively. It goes beyond limiting reasoning to a cognitive process and considers the social and contextual nature of reasoning. This aligns with this study being theoretically informed by social constructivism (see 3.5.5.2 Social constructivism) and my own understanding of reasoning as a complex and multi-faceted phenomenon.

Other terms have been used alongside or instead of professional and/or clinical reasoning, for example, critical reasoning, clinical judgement, clinical decision making and problem solving. Terms such as critical thinking and clinical decision making have been used interchangeably with clinical reasoning by some authors (Furze et al, 2015). Professional reasoning has been seen by many authors as involving several different processes. Fleming (1991) describes reasoning as an umbrella term encompassing many aspects of thinking, as do Harries and Duncan (2009) who explain that clinical reasoning is a term that encompasses the following thinking processes:

- Reasoning – reaching a conclusion inductively or deductively.
- Judgement- to weigh options and consider their relative importance.
- Problem solving – generation of alternatives to select from these.
- Decision making – selecting from the alternatives.

Paterson and Summerfield-Mann (2006) differentiate between problem solving and decision making which they describe as linear processes resulting in action, and reasoning which they describe as a more circular process that may not always result in an action. Harries and Duncan (2009) believe that researchers principally interested in the outcome of reasoning use the terms decision making and judgement, whereas those who are more interested in the process adopt the word reasoning. Although it is impossible to entirely separate the process and the outcome of reasoning, I am more interested in the process (how students experience reasoning) than the

outcome (whether they made the 'best' decision) and I will therefore be using the term reasoning.

1.3.1 Types of reasoning

Within the occupational therapy literature, different terms are used to describe the various modes or types of reasoning. Unsworth (2021) has defined some of terms used to describe the reasoning used by occupational therapists (see Table 1.1).

Table 1.1 – Types/modes of reasoning (based on Unsworth, 2021)

Narrative	Use of storytelling and creativity. Emphasis is on the meaning of the illness and the illness experience to the individual.
Scientific	Hypothesis generation and testing using a biomedical approach– hypothetical deductive reasoning. Identification of diagnosis or occupational problems, informs procedural reasoning.
Diagnostic	Used to identify occupational performance issues or impairments, establish goals, plan interventions, and define outcomes.
Procedural	Reasoning that is related to the procedural aspects of therapy, selecting assessments and interventions, evaluating performance. Includes systematic collection of data, hypothesis generation and testing.
Interactive	How the therapists interact with the service user to engage them in therapy, select communication approach and understand problems from their perspective.
Conditional	Takes account of the clients past, present, and possible future. Helps establish what is meaningful to the service user in their social cultural context.
Ethical	Analysis of a moral dilemma and generating solutions.
Pragmatic	Concerned with the practice context, organisational, political, and economic factors. Therapist's own skills and knowledge.

Unsworth (2021) also states that the individual's worldview (e.g., their values, beliefs, ethics) influence all the other types/modes of reasoning.

1.4 Historical overview of research into reasoning

Early literature on reasoning can be found in medical education, sociology, cognitive psychology, and clinical psychology journals. Initially research into professional reasoning was scientifically orientated and included: cognitive science with a focus on cognition and memory; the decision-making school with a focus on biases in processing information, and the concept learning school with an interest in how information is chunked (Ryan, 1999). Reasoning (in health and social care) first began to be examined in relation to how doctors arrived at a diagnosis. In the 1970's two key studies were carried out with medical students one at McMasters University in Canada (Neufeld et al 1981 cited in Norman, 2005) and the other at Michigan State university (Elstein et al 1978 cited in Norman, 2005) in America. Both studies deduced that at the start of the encounter several hypotheses were generated and then data was collected to support or refute these: a process termed hypothetical deductive reasoning (Norman, 2005).

In the 1970's to 1980's theories of reflection and adult learning acknowledged the importance of personal experience for reasoning and the value of qualitative research became evident (Ryan, 1999). The beginnings of professional reasoning in occupational therapy are attributed to Joan Rogers, an American occupational therapist, who spoke about reasoning as having the following dimensions: scientific, ethical and artistry (Rogers, 1983). Recognising that the literature on reasoning was dominated by medicine, the American Occupational Therapy Association (AOTA) and American Occupational Therapy Foundation (AOTF) sponsored Cheryl Mattingly (a social anthropologist) and Maureen Fleming (an occupational therapist) to carry out an ethnographic study, on occupational therapists in a large teaching hospital to explore "the reasoning strategies therapists used in their practice" (Fleming 1991a, p. 1007). Mattingly and Fleming identified at least four types of reasoning: procedural, interactive, conditional, and narrative (see Table 1.1 for definitions) and found that the therapists switched rapidly between these. They described reasoning in occupational therapy as a two-body practice which considered both the physical body and the individual narrative (Mattingly and Fleming, 1994). The narrative reasoning the therapists used involved a focus on an imagined future for the individual, this contrasted with the more diagnostic past focused nature of reasoning of some other professions. This study brought professional reasoning to the attention of the occupational therapy profession (Unsworth, 2021). Other forms of reasoning are also referred to, for example ethical (Rogers, 1983) and pragmatic (Schell and Cervero, 1993). However, the

modes of reasoning identified by Mattingly and Fleming have remained fundamental to our understanding of reasoning in occupational therapy.

Reasoning has also been explored in the nursing profession. Benner (2001) collected narratives of experiential learning from nurses and drew on the skill acquisition model of Dreyfus and Dreyfus (1986) to discuss the levels of proficiency nurses go through in development of their clinical judgement (novice, advanced beginner, competent, proficient, and expert). These ideas about how reasoning develops have been drawn on by other professions including occupational therapy (Summerfield-Mann, 2010). Ryan (2003) explored placement narratives of occupational therapy graduates and concluded that practice educators need more knowledge of the development of professional reasoning and that there was a need for more research on the placement environment. The need for more research into students' experiences during their practice education remains relevant, as will become evident in the literature review chapter. It appears, that although practice education is a significant proportion of the students' course, academic research has largely focussed on their university-based studies.

Harries and Duncan (2009) have drawn on theories from cognitive psychology, such as dual processing theory to explain decision making in occupational therapy. They describe dual processing theory as involving the use of two different systems when reasoning. System 1 (S1) – a fast intuitive automatic form in which we are aware of the outcome (judgement) but not of the process of arriving at this and system 2 (S2) - a conscious deliberate and logical process, occurring at a slower pace. They state that the S1 intuitive form has in the past been given equal weight to the more evidence based S2 form and argue that research indicates that reliance on clinical experience (S1) without the mediating influence of S2 (objective evidence) leads to errors in judgement (Harries and Duncan, 2009). Peters et al (2017) do not entirely agree, and state that researchers are moving away from S2 bias avoidance models of reasoning, are becoming more interested in S1 reasoning, and are exploring context, experience, and memory. They suggest that assessments based on S1 can be as accurate or more accurate than those based on S2.

Much reliance is still placed on Mattingly and Fleming's (1994) influential study carried out in the context of the North American health care system, and Harries and Duncan (2009) stated that participants in existing occupational therapy clinical reasoning studies have been predominantly North American. Interestingly McCannon et al (2004) found differences in reasoning between United Kingdom (UK) and United States (US) students, with the US students using significantly less interactive reasoning and more procedural reasoning than the UK based

students. This suggests the need to exercise caution when applying the results of studies carried out elsewhere in the world to a UK context.

Recently interest has begun to develop in embodied reasoning and the idea that the body and mind are inseparable (Arntzen, 2017; Kinsella, 2018). Embodied reasoning is in its early stages of development and has a focus on “recognising bodily responses and bodily perceptions as sources of knowledge” (Kinsella, 2018, p. 119).

Having provided a historical overview of some of the key features of research into reasoning I will now outline some of the educational theory that has informed our understanding of how individuals learn to reason.

1.5 Learning to reason and educational theory

In this section I provide a brief introduction to some of the educational theory related to learning to reason during practice-based learning. The intention is to define and provide a brief synopsis of these theories as a reference point for future discussion.

Several educational theories have been drawn on to support the discussion of professional reasoning. These include, communities of practice Wenger (1999), situated learning (Lave and Wenger 1991), scaffolding (Vygotsky, 1978), transformative learning theory (Mezirow, 1997), threshold concepts (Land et al, 2016), and reflection (Schön, 1987; Schön 1991). These theories broadly correspond to those referred to by Patton and Christensen (2019) in their chapter on pedagogical approaches influencing the teaching and learning of professional reasoning. In Chapter nine (Discussion) these theories will be revisited when I discuss the study findings.

1.5.1 Communities of practice and situated learning

Practice placements provide authentic contexts for learning to reason. Schell (2018) suggests that context is important when learning to reason and cites the work of Jean Lave and Etienne Wenger on situated learning and communities of practice (Lave and Wenger, 1991; Wenger, 1999). A community of practice is “an ongoing learning partnership, which over time has resulted in a shared practice and a regime of competence” (Wenger-Trayner and Wenger-Trayner, 2020, p. 31). Students experience participation in different communities of practice on each of their placements. Communities of practice is a social learning theory that explores learning and identity construction through participation in a community (Wenger, 1999). A

student is on what Wenger (1999) termed an outbound trajectory from university progressing towards an inbound trajectory into practice as an occupational therapist. Legitimate peripheral participation has been used to describe the process by which a learner gains the skills and knowledge that allow them to move toward fuller participation in the community (Lave and Wenger, 1991).

1.5.2 Scaffolding

The concept of scaffolding is associated with constructionist learning (Shaw, 2015). It is based on the work of Vygotsky (1978) and involves giving support to learners, when needed, and at the level needed, to pass through the zone of proximal development and reach a level of understanding that is just above their current level. The practice educator scaffolds learning to bridge the gap between the student's current level of performance and the required level of performance, gradually reducing support as autonomy increases (Shaw, 2015). It has been suggested that educators can scaffold a student's reasoning by asking strategic questions, prompting, role modelling, and facilitating systematic reflection (Patton and Christensen, 2018; Schell, 2018; Kantar, 2020).

1.5.3 Transformative learning theory and threshold concepts

Patton and Christensen (2018) suggest that transformative learning theory (Mezirow, 1997) is relevant to learning to reason, particularly when critically reflecting on reasoning. Transformational learning understands learning as a change in an individual's frame of reference and not just as the acquisition of knowledge (Mezirow, 1997). A frame of reference is based on the assumptions through which we interpret experience and meaning (Mezirow, 1997). Transformational learning involves critical reflection on differences between our frame of reference (our assumptions, and how we interpret meaning) and that of others (Land et al, 2016). It is thought that transformational learning can occur when a threshold concept is traversed and there is integration of "disparate elements into a coherent relationship" (Land et al, 2016 p. xii). A threshold concept is a concept that is not easy to assimilate into our existing frame of reference (Land et al, 2016). As previously discussed, (in Section 1.1), professional reasoning is a threshold that students must master on the journey to becoming an occupational therapist (Nicola-Richmond et al, 2016). Traversing a threshold concept involves an emotional as well as an intellectual transformation (Rattray, 2016). There is period of liminality, or liquid learning, where the learner is in the process of losing an existing frame of reference and

adopting a new one and learning can be experienced as troublesome (Felton, 2016; Savin-Baden, 2008).

1.5.4 Reflection

Reflective thinking is considered important for the development of professional reasoning (Mattingly and Fleming, 1994; Christenson and Jenson, 2019). Schön (1987; 1991) explored how becoming a reflective learner might help both the person and the profession. He compares professional practice to high hard ground overlooking a swamp. On the high ground solutions well-formed problems require technical rationality which involves the application of theory and technique. However, he also discusses the swamp where problems are indeterminate and messy. These problems require professional artistry which enables reflection-in-action which is the ability to reason in the moment using tacit knowledge (Schön, 1987; Schön, 1991). The ability to reflect-in action enables the individual to reframe a problem, improvise and manage difficult situations involving uncertainty and uniqueness. To develop professional artistry, Schön advocates learning by doing, with access to educators who engage in reflective dialogue with the student (Schön, 1987).

Reflection-on-action is a metacognitive process in which we think about our thinking. As previously discussed, this is an important aspect of transformational learning, as it provides an opportunity to question assumptions informing reasoning and reinterpret a situation.

1.6 Overview of structure of this thesis

A glossary has been provided at the beginning of this thesis to assist the reader in navigating some of the unfamiliar terminology associated with the *dialogical* methodology. Words included in this glossary are italicised in the text.

This thesis is comprised of ten chapters.

Chapter two is a literature review. This was first completed in 2016 and then revised in 2022. An overview of research published between January 2006 and April 2022 is presented and critically discussed.

Chapter three outlines the study's *dialogical* methodology and provides some background on Mikhail Bakhtin. In this chapter I also locate dialogism theoretically by exploring ontology, epistemology, poststructuralism, and social constructivism. I discuss the role the interpretation

of language plays in qualitative research, I explore dialogism as a qualitative research methodology, and introduce quality criteria and reflexivity.

In Chapter four I discuss the methods employed in this study. This includes, the ethical approval process and ethical issues, the sampling method and process, the use of interviews as a data collection method and the *dialogical* approach to analysis of the data.

Chapter five is the first of four findings chapters and introduces the findings and introduces the *professional genre*. In Chapter six I discuss one of the major *genres*: the *Bildungsroman*. In Chapter seven I discuss another major *genre*: *romance*. In Chapter eight the minor *genres*: *travel*, *adventure* and *carnival* are explored.

Chapter nine presents a discussion of the study findings and explores these in relation to the literature. I discuss quality and examine my study's strengths and limitations.

In the concluding chapter, (Chapter ten) I outline the key findings and the contribution to new knowledge made by this study. I discuss the implications of these findings for education, practice, policy, and research. The strengths and limitations are summarised, dissemination of the findings and my reflections on the process are discussed, and I have drawn my final conclusions.

1.7 Chapter summary

In this introductory chapter I have discussed the background to the study, introduced myself as a researcher, and outlined the research question. I have also defined professional reasoning, provided a brief historical overview of the research on reasoning, and introduced some key educational theories which inform our understanding of the process of learning to reasoning. In the next chapter I will discuss the literature I reviewed and identify how my study can add to what is currently known.

Chapter 2

Literature review

2.1 Introduction

In this chapter I introduce my approach to the literature review, I will outline the databases and search terms employed and critically discuss my findings.

Aveyard (2019) suggests a systematic approach to a literature review is important and this includes.

- A review/research question.
- A clear explanation of the review methods including the search strategy and method of appraising literature.
- Presentation, discussion and critical appraisal of results, discussion,
- Recommendations.

These elements have informed my own review. The review question is discussed in Section 2.2 (review question). The search strategy is addressed in Section 2.3, Appendix 1 (search terms and databases) and Appendix 2 (PRISMA Diagram). The methods of critically appraising the studies are explored in Section 2.4 (critical appraisal). The findings of the review are presented in Appendix 3 (Table of research studies included in the literature review), this includes a critical appraisal of included studies. The findings are critically discussed in Section 2.5 (Review findings) and recommendations are included in Section 2.6 (Chapter summary).

2.2 Review question

The question informing this review was - what is known about occupational therapy students' experiences of professional reasoning during their practice-based learning? The aim of the review was to establish if there was a gap in the literature, to inform the research question and choice of methodology.

2.2.1 The search strategy

The initial search aimed to identify research studies pertaining to the reasoning of occupational therapy students during their practice-based learning. Only eight studies could be located, and seven of these involved some form of educational intervention e.g., a module with service user contact aiming to enhance reasoning. This suggested a gap in the literature regarding occupational therapy students' experiences of reasoning in the absence of an education intervention. Given the limited literature on students' experiences of reasoning the review was extended to include research relating to the real-world experiences of reasoning in relation to occupational therapists. It was hypothesised that there may be some commonalities between the real-world experiences of the reasoning of occupational therapy students and that of qualified occupational therapists.

An alternative approach would have been to explore educational approaches within the university context aiming to develop students' reasoning. However, this literature was excluded as it was contextually different to the real-world focus of my study. There is a substantial body of literature encompassing educational approaches, Henderson et al (2017) identify twenty-seven different instructional methods used to develop professional reasoning in occupational therapy education including, simulation, problem-based learning, case-based learning, self-directed learning, and reflection. Reviewing this literature would have weighted most of the literature review towards discussion of literature that was located outside the context of real-world practice. I have therefore addressed some of the educational theory that is relevant to reasoning during practice-based learning in the introduction (see Section 1.5, Learning to reason and educational theory), rather than attempting to comprehensively review research relating to this in the literature review.

It would have been possible to explore the literature on the experiences of reasoning for students in multiple health and social care professions. However, reasoning can be conceptualised differently across the professions (Young et al 2018) and each profession has its own theoretical constructs that inform reasoning. For example, medical students and physiotherapists' reasoning often focuses on hypothesis generation and diagnosis. My study aimed to explore occupational therapy students' reasoning and a consideration of the reasoning of qualified occupational therapists allowed a focus on how reasoning is experienced in the occupational therapy profession. This focus allowed the current state of research into reasoning in occupational therapy to be established, gaps identified and key findings to be utilised to inform the research question and methodological choices in this study. A more diverse consideration of reasoning within multiple professions, whilst interesting, would have been less

conceptually coherent with the aim of this study which was to explore reasoning in a single profession.

A timeframe of ten years was used for the initial search. This was selected to ensure the studies identified related to contemporary occupational therapy practice. This search period was extended to fifteen years when another search was performed prior to submission of the thesis to identify further studies that had been published following the initial search. Extending beyond this fifteen-year timeframe would have led to the inclusion of literature that may not reflect current practice in the profession and earlier research into reasoning has been discussed in section 1.4.

As discussed in Section 1.3 a decision was made not to include literature that focussed on decision making, as this is conceptually different to reasoning. Decision making focuses on the outcome, whilst reasoning focuses on the process (Harries and Duncan, 2009). This conceptual distinction is congruent with some other researcher's approaches to reviewing the literature on reasoning e.g., Unsworth and Baker (2016). It was also coherent with the aim of the study, which was to explore students' experiences of reasoning which focuses on the process of reasoning.

2.3 Search terms and databases

Search terms included combinations of the following terms "clinical reason*" or "professional reason*" "clinical judgement" "clinical decision making" "clinical thinking" "placement" "fieldwork" "occupational therapy" "student" "allied health profession*" The reference lists of relevant articles were also searched.

Several databases were used: Academic search complete, AMED, CINAHL, Medline, Soc Index, ERIC, Education Research complete, PsycINFO, OTDbase, OT seeker, Cochrane Library. Limiters included – English language, empirical research, published between January 2006 and June 2022. This search was initially completed in August 2017 and repeated in June 2022. Full details of both the searches are provided in Appendix 1 (Search terms and databases) and Appendix 2 (PRISMA diagram).

2.3.1 Inclusion and exclusion criteria

The full inclusion criteria applied to selection of articles for inclusion in the literature review are outlined below. Literature needed to meet all four criteria to be included in the study.

- Empirical research and reviews of the literature.
- Published in English from 1st January 2006 – 30th June 2022.
- An experience of reasoning in a practice context.
- Participants in the study were occupational therapists or occupational therapy students.

Exclusion criteria include.

- Studies where it is not possible to separate the data of occupational therapists from other participants.
- Studies that focus on the outcome (decision made) rather than the reasoning process itself.

2.4 Critical appraisal

Critical appraisal of the literature allows for identification of strengths and limitations of existing research, a judgment to be made about its quality and contribution to answering the research question (Aveyard, 2019). The studies meeting the inclusion criteria were varied in methodology and included qualitative studies, quantitative studies, mixed method studies, a systematic review, and scoping reviews. This meant multiple appraisal tools were required to guide critical appraisal. Quality appraisal of the literature has been informed by the following tools.

- The McMasters guidelines for qualitative research (Letts et al, 2007) and Tracy's eight big tent criteria (Tracy, 2010; 2020) (elaborated on in Section 3.6.3, Quality criteria) were used to guide appraisal of qualitative studies and the qualitative component of mixed methods studies.
- The McMasters guidelines for quantitative research (Law et al, 1998) were used to inform the review of quantitative studies and the quantitative component of mixed methods studies.
- The PRISMA extension for scoping review checklist (Tricco et al, 2018) was used to inform the review of scoping reviews.
- The PRISMA 2020 guidance for reporting systematic reviews (Page et al, 2021) was used to inform the review of the systematic review.

An overview of all the studies included in this review can be found in Appendix 3 (Table of research studies include in the literature review). No studies were excluded on the grounds of being poor quality. However, the quality of the studies is addressed in the table in Appendix 3 and the discussion which follows.

2.5 Review findings

My literature review identified a scoping review and a systematic review of all the occupational therapy reasoning literature (these reviews included literature relating to both occupational therapy students and qualified occupational therapists) (see Section 2.5.1). The remaining studies have been grouped by the study participants, occupational therapists (Section 2.5.2), and occupational therapy students (Section 2.5.3).

2.5.1 Reviews of the literature

Two reviews that included all the professional reasoning literature, relating to both occupational therapists and students were located.

- 1) A systematic review of the professional reasoning literature in occupational therapy Unsworth and Baker (2016).
- 2) A scoping review of the historical development and nature and volume of the professional reasoning literature in occupational therapy (Márquez-Álvarez et al, 2019).

Unsworth and Baker (2016) completed a systematic review of the literature (1982-2014) with the aim of answering two questions, 1) the volume and nature of occupational therapy professional reasoning literature and 2) what is known about the development of reasoning in students through the development of professional reasoning from novice to expert. In relation to the volume and nature of the literature 140 articles were categorised into, what is professional reasoning, ethics and moral reasoning, methods of studying reasoning, reasoning in specific practice areas, novice expert differences, and reasoning of assistants. This literature was not critically appraised and 32% of the articles did not include any data analysis. Given a systematic review requires a clear question and critical appraisal of the selected studies (Salmond and Cooper, 2017) this is perhaps more accurately described as a literature or scoping review. Systematic reviews commonly have a PICO (population, intervention, comparator, outcome) or PEO (population, exposure, outcome) question (Salmond and Cooper, 2017). A

clear question is important in focussing the review and developing inclusion and exclusion criteria (Bettany-Saltikov and McSherry, 2016). The mention of students in the second question infers this is the population however the studies largely focus on novice and expert qualified occupational therapists (the authors' intention being to extrapolate these findings to students). The authors adopt a robust search strategy and quality appraise these articles (n = 14) identifying only eight of these as strong. They implement several measures to enhance the quality of their review including independent data extraction and review of data analysis by the second author. They concluded there was little consistency as to how expertise was defined and that not all occupational therapists become experts. The authors make several suggestions for further research including, curricular models that support student reasoning, methods to research and assess reasoning, exploration of embodied knowledge, intuition, and worldview.

Márquez-Álvarez et al's (2019) scoping review mapped the historical development and the nature and volume of professional reasoning in occupational therapy from 1982-2017 they included books and articles in any language. They found occupational therapy professional reasoning research to be focussed on students, theoretical aspects, and specific practice areas. Their analysis suggests this research has evolved through three phases, 1) exploratory (1982-1993), 2) transition (1994-2003), and 3) consolidation (from 2005 onwards). In the exploratory phase non-empirical studies were prevalent, in the transition phase there were an increased number of empirical studies and diversification in research methods, and in the consolidation, stage studies with a quantitative approach and literature reviews increased. This is a robust review which followed the PRISMA guidelines and performs well when assessed in relation to PRISMA extension for scoping review checklist (Tricco et al, 2018). Márquez-Álvarez et al (2019) found that professional reasoning research is largely qualitative and suggest this is related to the opportunity this approach provides for observing reasoning in practice and obtaining in-depth responses from participants. Their suggestions for further research included a review of the literature that quality assesses publications and more research in non-English speaking countries to better represent ethical and cultural characteristics of reasoning.

Both reviews examined literature from 1982 onwards, the large volume of literature identified was categorised e.g., by topic or methodology. The only study findings to be synthesised and discussed were from the studies (n = 14) related to novice expert differences (Unsworth and Baker, 2016). This means these reviews provide an overview of the scope and nature of the literature rather than a synthesis of what is known about reasoning in occupational therapy.

2.5.2 Occupational therapists' experiences of reasoning

Given the limited literature pertaining to students' experiences of reasoning, studies relating to qualified occupational therapists' experiences of reasoning have also been explored. Two scoping reviews were located and seventeen individual articles. The two scoping reviews will be discussed first and then the individual articles will be reviewed afterwards.

2.5.2.1 Reviews of occupational therapist reasoning

Two scoping reviews excluded literature pertaining to occupational therapy students and so will be discussed in this section. One review focussed on community occupational therapists' reasoning (Carrier et al, 2010) and the other on qualitative and conceptual literature relating to occupational therapists reasoning (Araujo et al, 2022).

The scoping review by Carrier et al (2010) explored textbooks and articles published between 2000 and 2009 about community occupational therapists' professional reasoning. They identified 15 textbook and 25 articles only 6 of the articles had a focus on community occupational therapists' reasoning the other articles were selected on the basis they could assist in understanding more about community occupational therapists' reasoning. The authors used Arksey and O'Malley's (2005) framework. Some relevant detail is provide about identifying and selecting studies however the charting step was not explained. Arksey and O'Malley (2005) suggest that charting key information about primary research assists with synthesis of the data. This step typically includes information about participants, methodology and results (Arksey and O'Malley, 2005) and may have been omitted due to the inclusion of textbooks. The lack of information about the charting step reduces confidence in the robustness of the process. Carrier et al (2010) suggest community occupational therapists reasoning is multidimensional, influenced internally by the therapist's personal context and expertise and externally by the practice context and the service user. They suggest a need for further research into the influence of the personal context and external institutional factors.

The scoping review by Araujo et al (2022) include qualitative and conceptual articles published between 2010 and 2019. The authors identified twenty-six articles of which eighteen were qualitative studies and eight conceptual articles. A scoping review is useful for mapping research activity, summarising research findings, and identifying gaps in research literature (Arksley and Malley, 2005). The inclusion of conceptual literature and integration of this with empirical research literature in the discussion means this review is perhaps best viewed as mapping the current state of scholarship rather than providing a review of empirical research. The review had

a clear question, explanation was provided regarding identification and selection of studies, synthesis, and results, in keeping with guidelines for a scoping review (Tricco et al, 2018). An explanation of how the data extraction tool (which included study objective, participants, methodology and methods) was adapted for conceptual studies would have been helpful. The authors categorised the findings into, factors influencing reasoning, reasoning processes, frameworks to guide reasoning, and emergent and innovative perspectives. Their discussion is well informed, and strengths and limitations are identified. Recommendations for future research include, embodiment, intuition, underground practice, reflection and reasoning, context and institutional environment, frameworks, how ideological perspectives shape reasoning, person-centred and occupation-centred reasoning, social justice, and bias.

All the reviews (Araujo et al, 2022; Márquez-Álvarez et al, 2019; Unsworth and Baker, 2016; Carrier et al, 2010) included conceptual as well as research literature. Whilst this is helpful in providing an overview of how reasoning is conceptualised and the current state of scholarship, it does not provide a clear overview of the current state of occupational therapy research into professional reasoning. The conflation of research and conceptual literature means the reader is reliant on the authors' interpretation of research gaps, a focus on primary research would assist in more clearly identifying gaps in the research literature.

Research related to occupational therapists' experiences of real-world reasoning will be discussed in the next section. All the studies identified were qualitative except for Kuipers and Grice (2009). The studies will be discussed in relation to the internal process of reasoning and the external factors influencing reasoning. These are themes in the literature that have been identified by some of the previous reviews (Carrier et al, 2010; Araujo et al, 2022). The studies use a variety of methodologies the most frequently stated qualitative approaches were ethnography and grounded theory, each of these approaches was adopted by four studies.

2.5.2.2 The process of reasoning

The process of reasoning has been explored both inductively and deductively. Studies exploring professional reasoning deductively analysed the data for the different modes of reasoning these include Unsworth (2011), Haines and Wright (2021), and Berndt et al (2022). Haines and Wright (2021) explored one occupational therapist's narrative reasoning and how this allowed intervention for service users with a learning disability to be individualised to the setting. An interesting account is provided; however, the discussion exclusively relies on the work of Cheryl Mattingly. Given the critical ethnographic approach a broader discussion with more focus on

power, politics, and assumptions (Holloway and Galvin, 2017) might have been expected. The other two studies both focus on driver assessment and intervention. Berndt et al (2022) interviewed twelve occupational therapists about their reasoning in relation to driver rehabilitation. They identified the use of ethical, procedural, interactive, conditional, narrative, scientific, and pragmatic reasoning. The interviews lasted on average fifty minutes which may have limited the depth of response given the large amount (n = 18) of interview questions.

Unsworth (2011) aimed to capture the kinds of clinical reasoning used by an expert occupational therapist in an on-road driver assessment. Data were collected using a head mounted video camera and debrief session whilst watching the video. The use of a head mounted camera was an innovative technique allowing the researcher to see the situation from the therapist's perspective. The analysis established that the therapist used many different forms of reasoning (procedural, narrative, interactive, conditional, pragmatic reasoning, and generalisation) and captured the therapists' worldview. Unsworth (2011) suggested that the opportunity to review the transcripts of expert clinicians has the potential to enhance the reasoning of novices. Although Unsworth (2011) and Berndt et al (2022) use some overlapping categories there are also differences which makes it difficult to compare the results of the studies.

The remaining studies adopted an inductive approach to data analysis. Two studies focussed on novice-expert reasoning (Kuipers and Grice, 2009; Du Broc and Pickens, 2015). Du Broc and Pickens' (2015) grounded theory study explored occupational therapists (n = 8) reasoning in home modifications as they developed from novice to expert. They concluded that with expertise came a shift from systematic reasoning steps to more habitual comprehensive, client-centred, and contextually informed reasoning. This study used snowball sampling. As theoretical sampling is typical used to achieve saturation in grounded theory (Holloway and Galvin, 2017), the lack of reference to theoretical sampling undermines their claim to have achieved saturation. Kuipers and Grice (2009) aimed to explore and measure change in novice and expert Australian occupational therapists reasoning following training in the use of a protocol. They used repertory grid interviews pre and post a three-day workshop where the protocol was presented. They found statistically different change in novices reasoning but not in that of experts. Novice's reasoning evolved to reflect experts reasoning more closely, in that it was more structured and theoretical. This suggests that protocols may be most effective for novices. This was a methodologically coherent study; however, it would have been strengthened by more transparency regarding who completed the data collection and whether this was the first author who ran the workshop.

Two studies explored occupational therapists reasoning in relation to evidence-based practice. Crowe (2014) explored the professional reasoning process of occupational therapists (n = 7) using multi-sensory environments with clients with dementia. They concluded the participants were not using evidence to inform their reasoning and instead relied on personal assumptions and clinical experience. The author has a valid point re the need to use research evidence to inform reasoning, but there are multiple stances on evidence-based practice and some of these would consider clinical expertise as a contributor to evidence-based practice (Thomas and Young, 2019). The discussion would have been enhanced by considering some of the complexities and debates associated with evidence-based practice. Vachon et al (2010) also explored occupational therapists (n = 8) clinical decision-making process in relation to evidence-based practice. Five decision-making modes were identified, 1) defensive, 2) repressed, 3) cautious, 4) autonomous intuitive 5) autonomous thoughtful. These modes were influenced by the therapist's emotional state. Through a process of self-understanding (deliberateness) participants moved to more shared decision making (client-centredness) and to bringing about change at the system level. Time in the field contributes to a study's rigour (Tracy, 2020), and data collection over 15 months allowed the researcher to analyse data and go back to participants multiple times increasing the rigour of this study. The contrasting findings of Crowe (2014) and Vachon et al's (2010) studies relate to the context of each study. Crowe (2014) set out to explore the reasoning behind practice they believed was not evidence based. Whilst the occupational therapists in Vachon et al's (2010) study had participated in an evidence-based practice course and attended reflective sessions to support their evidence-based practice.

Two studies explored occupational therapists reasoning in relation to specific aspects of their practice. Lam Wai Shun et al (2021) used constructivist grounded theory to explore occupational therapists (n = 10) reasoning when assessing stroke and traumatic brain injury (TBI) patients' rehabilitation potential. The use of multiple data collection strategies (think aloud protocols, a head mounted video camera, and semi-structured interviews) is a strength of the study. It allowed for collection of data before, during and after the assessment providing a detailed explanation of the therapists reasoning at different stages of the process. Their constant comparative analysis identified that top down (activity performance) and bottom-up scripts (anticipated impact of impairment) were used to build a picture of rehabilitation potential. The data analysis process was clearly explained, robust, and congruent with the stated methodology. This adds to the coherence of the study (Tracy, 2020). There was some evidence of theoretical sampling and saturation which are in keeping with a grounded theory approach (Holloway and Galvin, 2017).

The other study by Hess and Ranmugondo (2014) explored the reasoning occupational therapists (n = 5) used to determine the nature of spiritual occupations in relation to mental health pathology. They found that participants shifted rapidly between scientific/diagnostic and humanistic person-centred modes of reasoning and emphasised the importance of client-centeredness. They suggested clinical reasoning was complex, non-linear, and multi-layered. Transparency about conduct of the research and reflexivity regarding the researcher's role and impact, are important contributors to a studies quality (Tracy, 2020). This study's quality was enhanced by a transparent recruitment process and provision of interview questions. Another strength was the authors reflexive reconsideration of the binary divide they had initially imposed on spiritual occupations as being, either health seeking, or manifestations of illness. They ultimately concluded they could be both simultaneously. Both studies indicated that therapists integrated bottom-up (impairment focussed) reasoning and top down (occupation-focussed) reasoning.

The final two studies approached the process of reasoning from the perspective of cultural-historical activity theory (Toth-Cohen, 2008) and the use of intuition (Chaffey et al, 2010). Toth-Cohen's (2008) focussed ethnographic study explored the context of clinical reasoning for occupational therapists (n = 4) in a home-based programme for service users with dementia. They identified sources of conflict and congruence when the therapists' intervention was analysed as an activity system. Sources of conflict with caregivers included, the best environmental strategies, and expectations of the occupational therapists and the caregivers' roles. Sources of congruence were between the service's intervention protocols and the approaches developed to modify living arrangements. The authors identified an approach to reasoning in which caregivers/the service user and the occupational therapist co-construct intervention. Meaningful coherence includes the use of methods that fit well with the stated theory (Tracy, 2020). In this study there was good evidence of congruence between cultural-historical activity theory, data analysis and discussion of findings. Elaboration on how reasoning was co-constructed was perhaps constrained by polarisation into conflict and congruence, although this is in keeping with the methodology and provides an interesting perspective.

The final study by Chaffey et al (2010) explored mental health occupational therapists (n= 9) use of intuition. Their grounded theory study found that professional experience (tacit knowledge) and emotions contribute to intuition, that intuition increased with experience, and some therapists oscillated between intuition and analysis. Grounded theory involves in initial purposive sampling and then as emergent categories begin to emerge from analysis of the data a theoretical sample to enhance understanding (Conlon et al, 2020). The authors state theoretical sampling was completed, but given all participants were opportunistically sampled

at a conference more transparency would have been helpful as to how this was operationalised with the available timeframe.

In summary, studies have identified the multiple modes of reasoning used by occupational therapists (Berndt et al, 2022; Unsworth, 2011). Novice expert differences have been explored with expert reasoning found to be more client-centred and contextually informed (Du Broc and Pickens 2015), more structured and theoretical (Kuipers and Grice 2009) and more intuitive (Chaffey, 2010). Evidence-based reasoning has been explored and found to evolve from defensiveness to a point where therapists can make autonomous evidence-based decisions (Vachon et al, 2010). It has also been suggested that decisions may rely on assumptions and experience (Crowe, 2014). Occupational therapists have been found to integrate top down (occupation-focussed) reasoning and bottom-up (impairment focussed) reasoning (Lam Wai Shun et al, 2021; Hess and Ranmugondo, 2014). Toth-Cohen (2008) has also identified a role for the service use in the co-construction of reasoning. Together these studies demonstrate the complex, dynamic and multi-layered nature of the professional reasoning process.

2.5.2.3 Factors Influencing the reasoning process

Several studies have explored the factors influencing occupational therapists' professional reasoning.

Carrier et al (2020) explored how the institutional context affected the reasoning of Canadian community occupational therapists using institutional ethnography. They collected administrative documents and completed semi-structured interviews with ten occupational therapists and twelve key informants. They concluded that institutional procedures such as the organisations basket of services, the occupational therapists mandate and waiting times restricted reasoning. Meaningful coherence is an indicator of a study's quality (Tracy, 2020) and this was a robust and coherent study which was methodologically informed throughout.

Shafaroodi et al's (2017) grounded theory study found, that in Iran, occupational therapists' reasoning was constrained by dominance of medical perspective and a lack of insurance. Shafaroodi et al (2014) also found that that reasoning was influenced by 1) sociocultural factors (the client's beliefs, the therapists' values and beliefs, and social attitudes to disability. 2) Individual attributes (client's attributes, therapist's attributes). 3) Environmental conditions (managers lack understanding of occupational therapy, lack of supportive teamwork, limited facilities, and resources). Similarly, Lam Wai Shun et al (2021) found that Canadian occupational

therapists reasoning (when assessing stroke and traumatic brain injury (TBI) patients' rehabilitation potential) was influenced by, patient, clinician, and organisational factors.

Kristensen et al's (2012) phenomenological action research study aimed to gain a deeper understanding of the aspects affecting Danish occupational therapists (n = 25) reasoning when implementing evidence-based practice in stroke rehabilitation. They found that occupational therapists' values and the beliefs of local occupational therapy culture were embedded in reasoning. Tracy (2020) defines rich rigour as ensuring research is carried out appropriately, and the extensive data collection, time in field, and robust data analysis process, all contributed to this studies rigour.

Skubik-Pelaski et al (2015) explored North American occupational therapists (n = 3) decisions about which in-patient stroke rehab environment to work in (this arose out of larger study that identified the environment selected influenced intervention). Reasoning in relation to rehabilitation environment was found to be influenced by habits and routines. The choice of environment influenced intervention and therapists were less likely to provide an occupation-based intervention in the gym. The gym was seen as safe place with support from others and occupation-based intervention as requiring more reasoning and preparation. A clear explanation of data collection and analysis methods are indicators of the quality of a study (Mays and Pope, 2020). This study lacks a full description of the interviews/focus group and data analysis process, reducing confidence in the findings. However, some interesting points are made regarding the impact of the environment on how occupation-based the intervention was. Reasoning can be a shared social process and Hess and Ranmugondo (2014) also found in their study that the participants regarded other people as a valuable resource to inform their reasoning.

Robinson (2012) carried out a phenomenological study which explored how critical thinking and clinical reasoning developed in newly qualified occupational therapy practitioners to meet the expectations of employers in Scotland. All participants (six newly qualified practitioners, seven supervisors and seven managers) identified the "shock of practice" as a barrier to reasoning. The newly qualified practitioners did not feel well prepared for the pragmatic reasoning the workplace context demanded. They found their supervisor to be a key source of support and knowledge, with support from their peers and preceptorship supplementing this.

In summary, the findings of these studies suggest that multiple contextual factors impact on reasoning. The institutional context was found to restrict reasoning (Carrier et al, 2019; Shafaroodi et al, 2017; Shafaroodi et al, 2014). Also, although other occupational therapists can be a source of support for reasoning (Hess and Ranmugondo, 2014), the local occupational

therapy culture can restrict reasoning (Skubik-Pelaski et al, 2015; Kristensen et al, 2012). Robinson's (2012) findings suggests that pragmatic context dependent constraints can be a barrier to the reasoning of new graduates.

2.5.2.4 Summary

The quality of the studies exploring occupational therapists' professional reasoning varied. There were some methodologically robust and coherent studies e.g., Toth-Cohen (2008), Kristensen et al (2012), Carrier et al (2020) and Lam Wai Shun et al (2021). Other studies could have provided greater transparency regarding data collection and analysis (Skubik-Pelaski et al, 2015) or more evidence of coherence between the methodology and findings (Haines and Wright, 2021). For those studies using grounded theory although it was stated theoretical sampling had taken place this process was not always clearly discussed (e.g., Chaffey et al, 2010; Du Broc and Pickens 2015). Those studies reviewing reasoning deductively (looking for evidence of different modes of reasoning in the data) used overlapping but different modes to code data. Ideally studies using this approach would use the same clearly defined modes as this would facilitate comparison of results between studies.

In summary the findings of the studies that explored the professional reasoning of occupational therapists suggested this was a complex, dynamic, and multi-layered process, influenced by multiple contextual factors which contributed to its complexity.

Having discussed research relating to occupational therapists reasoning the remainder of this review will explore the reasoning of occupational therapy students.

2.5.3 Occupational therapy students reasoning and their practice-based learning

As discussed in Section 2.2 (review question) only one study (Summerfield-Mann, 2010) could be located that explored reasoning on a practice placement. Therefore, studies with a university intervention have been included if they collect data on students' experiences of real-world reasoning with service users. Eight studies were identified, three of which were quantitative (Coker, 2010; Newton-Scanlan and Hancock, 2010; Wild et al, 2013), three were mixed-methods studies (Summerfield-Mann, 2010; Knecht-Sabres, 2013; Bolton and Dean, 2018) and two qualitative (Falk-Kessler and Ciaravino, 2006; Bazyk et al, 2010).

Seven of the studies examine the outcomes of an intervention designed to enhance professional reasoning. Some universities have established camps or clinics on campus (Coker, 2010), others have designed courses involving students providing intervention to service users (Falk-Kessler and Ciaravino, 2006; Bazyk et al, 2010; Knecht-Sabres, 2013; Bolton and Dean, 2018), and two studies examined blogging as a means of developing reasoning during practice learning (Wild et al, 2013; Newton-Scanlan and Hancock, 2010). The study by Summerfield-Mann (2010) involved secondary data collection from a case study assessment which included a reflection on the student's reasoning on a placement (structured using different modes of reasoning).

Five studies were completed with students in North America (Falk-Kessler and Ciaravino, 2006; Bazyk et al, 2010; Coker, 2010; Knecht-Sabres; 2013; Bolton and Dean, 2018). The other studies were carried out with students in Ireland (Wild et al, 2013) England (Summerfield-Mann, 2010) and Australia (Newton-Scanlan and Hancock, 2010).

The studies have been grouped by their methodology (quantitative, qualitative, mixed methods) for discussion, as this facilitates comparison of similarities and differences.

2.5.3.1 Quantitative studies

Coker's (2010) quasi-experimental pre-test post-test study used the Self-Assessment of Clinical Reasoning and Reflection (SACRR) (Royeen et al, 2001, cited in Seif et al, 2014) to evaluate occupational therapy students' (n = 25) perception of their clinical reasoning and critical thinking skills pre and post participation in a one-week day camp for children with cerebral palsy. The (SACRR) (Royeen et al, 2001, cited in Seif et al, 2014) has established reliability and validity and uses a five-point Likert scale, on which the participant is required to indicate their level of agreement with twenty-six statements (Seif et al, 2014). The students delivered a programme of constraint induced movement therapy for the children. The post-test score demonstrated a statistically significant ($p = 0.001$) improvement on 84.6% of the items on the SACRR (Royeen et al, 2001, cited in Seif et al, 2014). Robson and McCartan (2016) states that the pre-test post-test single group design has several threats to validity (e.g., maturation, any change being a consequence of events other than the intervention), and recommends this design is strengthened with a control group. As this study did not include a control group it is not possible to determine whether the intervention was responsible for improvement in the students' reasoning.

Newton-Scanlan and Hancock (2010) developed a format to structure online discussions during placement to facilitate students' reasoning. RASCH analysis was used to convert the SACRR

(Royeen et al, 2001, cited in Seif et al, 2014) ordinal data into interval data and students completed this before and after placement. The authors reported a significant increase in scores ($P=0.001$) and acknowledged the limitation of not having a control group. Students were also required to structure discussion postings around narrative, interactive, procedural, conditional, and pragmatic reasoning. The postings were analysed for the percentage of several cognitive elements (understanding, analysis, evaluation, metacognition, and decision making) after first and second placements, and the results were compared to a previous cohort who had not been provided with the structure. This aspect of the study added a non-equivalent group to the pre-test post-test only design, this is stronger than the single group design (Robson & McCartan, 2016). The analysis of postings demonstrated a significant reduction in the more basic understanding cognitive element and a significant increase in evaluation. The higher cognitive functions (metacognition and decision making) did not increase significantly, and in fact declined after the second placement. The authors postulated that this may be due to the nature of the instructions provided. The review of postings alongside the students' self-assessment helps triangulate the results and overcomes some of the problems associated with self-rating the SACRR (Royeen et al, 2001, cited in Seif et al, 2014). The authors suggest that in-depth interviews with students may be a more profitable way of accessing the development of clinical reasoning.

The other quantitative study by Wild et al (2013) also explored blogging during a practice placement but this was an optional activity for the students. An online survey was used to find out about the occupational therapy students' experience of blogging with a response rate of 40% (27 students). Only 27% of the students agreed that the blog developed clinical reasoning (23% neutral, 50% disagreed or strongly disagreed). The non-compulsory nature of the blog and the fact that it was not summatively assessed may have limited students' engagement with the activity. A strength of this study was the authors willingness to report their negative results, this avoids a bias towards reporting only positive results (Dawson and Dawson, 2018) and allows the reader to understand what does not work as well as what does work.

2.5.3.2 Mixed methods studies

Although there were three mixed-methods studies (Summerfield-Mann, 2010; Knecht-Sabres, 2013; Bolton and Dean, 2018), only the qualitative component of Summerfield-Mann's (2010) study was relevant to my research question (the quantitative component involved the development of an instrument to assess reasoning). Therefore, the qualitative component of Summerfield-Mann's (2010) study will be discussed with the qualitative studies.

Bolton and Dean (2018) completed a mixed methods study with occupational therapy students (n = 36) using a retrospective pre-test post-test data design and collected data using the SACRR (Royeen et al, 2001, cited in Seif et al, 2014) and a reflective journal assignment. The students were participating in a university course that had direct service user contact weekly over twelve weeks. Results from the SACCR (Royeen et al, 2001 cited in Seif et al 2014) indicated a significant self-assessed growth in clinical reasoning and reflection (P= 0.018). As previously stated, a pre-test post-test design without a control group means it is not possible to determine if any change is a consequence of the intervention (Robson and McCartan, 2016). To analyse the journals the researchers identified holistic themes rather than completing line by line coding. The themes identified prompted them to use self-determination theory as a framework to complete deductive coding for competence, relatedness, and autonomy. They then concluded that students' reasoning developed from competence, to relatedness, to autonomy. The prompts for the reflective journals were different at each data collection point, for example at week eight the students are asked to describe challenges, and a week sixteen this is replaced with a prompt about expansion of clinical skills, and an additional prompt is added regarding the service user. This may go some way to explaining the researcher's conclusion that clinical reasoning develops from competence in performance, to relatedness to others, and finally to autonomy in decision making.

Knecht-Sabres (2013) developed an optional experiential learning opportunity for occupational therapy students (n = 36) which involved the researcher supervising the students' assessment and intervention for an older person. This mixed methods study involved students completing a pre and post-test questionnaire (developed by the researcher), keeping a journal (which was assessed), and giving feedback on the experience. The aim was to explore development of OT related skills and clinical reasoning. Scores on the questionnaire increased significantly (P = 0.5 for 4 items and P = .001 for 6 items). As this was a single group pre-test post-test design it is not possible to be confident the change was a result of the intervention (Robson and McCartan, 2016). Also, the questionnaire did not have established reliability and validity. The analysis of the qualitative data suggested the experience provided an opportunity to develop person-centred care, gains skills and confidence and improve professional reasoning. With input from an instructor the students moved from procedural to conditional and narrative reasoning. Explanation of the data analysis process adds the rigour of a study (Tracy, 2020). However, the author provides very limited information about the process of data analysis, and this therefore reduces confidence in the findings.

2.5.3.3 Qualitative studies

Two qualitative studies were identified (Falk-Kessler and Ciaravino, 2006; Bazyk et al, 2010;) and the qualitative component of Summerfield-Mann's (2010) mixed method study will also be discussed here (as the quantitative component did not meet the inclusion criteria for this review). The first two studies both collect data after a course that involved students implementing interventions with service users.

Falk-Kessler and Ciaravino (2006) explored how a course on chronic illness involving voluntary work helped occupational therapy students' (n = 26) broaden their interactive reasoning skills. The researchers did not provide an explanation for their focus on a single mode of reasoning. They stated they used a phenomenological design, but did not elaborate on this when discussing sampling, data collection, and data analysis. Also, the data analysis process was described as "immersion in the data to separate out themes" Falk-Kessler and Ciaravino (2006, p.79) and this was not elaborated on. These limitations make it difficult to be sure that a rigorous approach was taken and that there was coherence between the stated theory and methods used (Tracy, 2020). The researchers found that self-awareness developed, students recognised the importance of narratives, learnt to ask service users questions for clarification, and gained greater insight into conditions. They suggested students need more cues than therapists to understand an interaction and that narrative reasoning is supported by reflection on interactions.

Bazyk et al (2010) explored the perceptions of occupational therapy students (n = 18) delivering eight weekly sessions at a faith-based after school club for young people established by the lead author. The researchers selected six of the students' reflective journals for analysis, based on the level of detail and depth of description of the experience and seven students were selected randomly to participate in two focus groups. Transparency regarding the conduct of a study contributes to its quality (Tracy, 2020). In this study there was a lack of transparency regarding whether any students contributed to both the focus groups and the journals, and the questions used for the focus group are not provided. The steps in the data analysis process are not explained and it is not clear how the four students and one occupational therapist analysing the data reached consensus. The authors stated that data analysis followed Giorgi's descriptive phenomenological method which is in keeping with their stated phenomenological approach. This adds to the coherence of the study (Tracy, 2020). Bracketing of previous assumptions is a feature of Giorgi's method (Finlay, 2011) but this is not addressed. The authors claimed that the experience facilitated the development of professional reasoning which they stated progressed from procedural to interactive and then conditional. However, it is possible that the selection of

journals based on detail and depth may have favoured students making positive progress with their reasoning.

Summerfield-Mann's (2010) study examined the reasoning used by occupational therapy students in a placement related assessment and their reflections on this experience. The aim was to explore the acquisition of reasoning in the students' PBL curriculum. The author analysed of a case study assessment (which discussed a client the student had worked with on placement). The students were asked to structure the reflection using different modes of reasoning (narrative, interactive, pragmatic, procedural and conditional). Qualitative content analysis was to explore student (n = 52) reflections on learning, to establish how practice placements supported the development of professional reasoning. This study was more transparent in relation to the process of data analysis than the other two qualitative studies. This transparency increases the robustness of the study and confidence in the findings (Tracy, 2020). The secondary nature of data collection meant this was not contemporaneous with the publication of the PhD thesis. Data were collected from reflections written between 1998-2003 and this needs to be considered when applying these findings to current practice. Themes emerging from the qualitative analysis were 1) different ways of working; different ways of learning, 2) team working and collaboration, 3) becoming an OT, 4) the real world, 5) being client-centred. Summerfield-Mann (2010) concluded that the clinical learning environment and the student's ability to self-direct were important in the development of professional reasoning and that reasoning is individual, complex, and socially situated.

2.5.3.4 Summary

This literature is broadly divided into quantitative research approaches aiming to measure a change in professional reasoning following an intervention and qualitative research methodologies aiming to explore experiences and perceptions of reasoning.

The studies collecting quantitative data are comprised of two groups: those involving contact with service users whilst at university and those involving some form of online activity whilst on placement. Some of the studies used a pre-test post-test single group design (Coker, 2010; Knecht-Sabres, 2013; Bolton and Dean, 2018) or pre-test post-test non-equivalent group design (Newton-Scanlan and Hancock, 2010). Whilst quasi-experimental designs like these can be useful, when a randomised controlled trial is not possible, it can be difficult to determine whether any changes are attributable to the intervention, particularly with the pre-test post-test single group design (Robson and McCartan, 2016). Randomisation and a control group, and

if this is not feasible, inclusion of a non-equivalent group, would strengthen future studies. The use of non- standardised tools to measure changes in reasoning in some of these studies (Knecht-Sabres, 2013; Wild et al, 2013) is a limitation. Unsworth and Baker (2016) also found limited use of standardised tools and felt there was considerable scope for use of these measures. All the studies except Wild (2013) found an increase in the students' self-perception of their reasoning. The authors of one of the quantitative studies (Newton-Scanlan and Hancock, 2010) recommended qualitative research (rather than quantitative) and in-depth interviews with students as a profitable way of accessing the development of their clinical reasoning.

Five studies collected qualitative data, however three of these (Falk-Kessler and Ciaravino, 2006; Bazyk et al, 2010; Knecht-Sabres, 2013) lacked transparency reducing confidence in their findings. The deductive nature of the data analysis process in some studies shaped their results (Falk-Kessler and Ciaravino, 2006; Bolton and Dean, 2018). The four studies collecting qualitative data in relation to an intervention suggested this was successful in the development of reasoning. Knecht-Sabres (2013) suggested students developed their reasoning to be more person-centred and (Bolton and Dean, 2018) that reasoning developed from competence, to relatedness, to autonomy. Some studies drew conclusions based around different modes of reasoning. Falk-Kessler and Ciaravino (2006) suggested with experience less cues were required for interactive reasoning, and reflection on interaction supported narrative reasoning. Bazyk et al (2010) suggested reasoning progressed from procedural to interactive and then conditional. Finally, Knecht-Sabres (2013) suggested students initially focussed on procedural reasoning but with input from an instructor developed their conditional and narrative reasoning. Summerfield-Mann (2010) discussed the complex, individual and socially situated nature of reasoning. This was not explicitly addressed by the other authors; it may have been that these features of reasoning were more evident when a written reflection relates to full-time practice-based learning in the real world of practice. It may also be that this author (who was not aiming to demonstrate the usefulness of a specific intervention) adopted a more open approach to data analysis. Some of the findings from Summerfield-Mann's (2010) study were comparable to those of occupational therapists, for example the contextual and socially situated nature of reasoning. It may be that the limited exposure to the realities of practice afforded by the intervention-based studies limited their transferability to practice-based learning. However, it is difficult to draw firm conclusions from such a limited number of studies.

Despite some limitations, the data from the qualitative and quantitative studies, demonstrates that these university-based interventions may be helpful in facilitating students' reasoning. The findings of studies involving online interventions such as blogging whilst on placement are more variable.

2.6 Key findings from the literature

Although there have been some recent reviews of the occupational therapy professional reasoning literature (Unsworth and Baker, 2016; Márquez-Álvarez et al, 2019; Araujo et al, 2022) only articles (n = 14) on novice-expert differences have been critically appraised. Also, the conflation of empirical research and conceptual articles has made it difficult to assess the current state of research in the profession. My own review focussed on occupational therapists' and occupational therapy students' real-world experiences of reasoning. The studies exploring occupational therapists reasoning suggest that it is a complex, multi-layered and dynamic process that is influenced by multiple social and contextual factors. Summerfield-Mann's (2010) study of occupational therapy students produced similar findings.

Márquez-Álvarez et al (2019) and Unsworth and Baker (2016) have identified that the reasoning of occupational therapy students is an area where there has been a lot of research. However, my own review found no published studies relating to students' experiences of reasoning during practice-based learning and just one unpublished PhD thesis. Given that practice-based learning makes up one-third of the curriculum, and that this is where students gain real-world experience of reasoning, this is a surprising omission. Academics appear to have focussed on educational interventions aimed at enhancing reasoning as part of students' university-based education. Understanding more about the actual lived experience of developing professional reasoning skills within the context of the students' practice-based learning would enable us to understand this phenomenon from the students' perspective and give students a voice which is largely absent in the current literature.

Methodologically, occupational therapists' experiences of reasoning have overwhelmingly been explored qualitatively with just one quantitative study (Kuipers and Grice, 2009). It has been suggested that qualitative methods including in-depth interviews with students are a suitable means of accessing the development of clinical reasoning (Newton-Scanlan and Hancock, 2010). However, occupational therapy students' real-world experiences of reasoning have mainly been explored with quantitative and mixed-methods studies. This is related to the authors' attempts to demonstrate the efficacy of educational interventions. Just two qualitative studies (Bazyk et al, 2010; Falk-Kessler and Ciaravino, 2006) have been completed. Neither used individual interviews, both were intervention-focussed and lacked methodological transparency.

Three recent reviews of the literature (Unsworth and Baker, 2016; Márquez-Álvarez et al, 2019; Araujo et al, 2022) make multiple recommendations for future research. This suggests professional reasoning is an area with a lot of scope for further study. Most of the participants in the studies reviewed were North American. As discussed in the previous chapter differences

in reasoning have been identified between UK and US students (McCannon et al, 2004). It is therefore important that more research is undertaken with UK participants, so we have a better understanding of the real-world experience of reasoning in a UK context.

2.7 The research question and rationale for the study

My research question is 'How do occupational therapy students' experience professional reasoning during their practice-based learning'.

This literature review has demonstrated that little is currently understood about occupational therapy students' experiences of developing professional reasoning skills during their practice-based learning. My study will add to the limited qualitative research on occupational therapy students' real-world reasoning and contribute to research on reasoning in a UK context. It will advance our understanding of how occupational therapy students experience professional reasoning during their practice-based learning from the student's perspective. It will also contribute to the theoretical understanding of professional reasoning within the occupational therapy profession. The results of this study could inform the ways in which universities prepare and support students and practice educators for the practice-based learning experience.

This literature review has identified professional reasoning is both externally (socially and contextually) influenced and an individual internal process. Therefore, methods used to explore reasoning as whole need to be able to capture both the contextually influenced nature of reasoning and access the internal processes that shape reasoning. Although it has been recognised that reasoning is individual and variable, the studies with multiple participants and inductive data analysis all used variations of thematic analysis and merged the participants data to produce common themes. This approach risks obscuring the individual nature of reasoning and there is a need to consider alternative approaches to data analysis which preserve individuality. It has been suggested that more research is required on the individual's worldview (Berndt, 2022; Unsworth and Baker, 2016), and how ideological perspectives shape reasoning (Araujo et al, 2022). Worldview and ideological perspectives are likely to be varied and individual and therefore require an approach that can capture this.

To understand more about students' reasoning, I plan to use a *dialogical* approach; a methodological approach which I believe can illuminate our understanding of the individual, complex, social, and contextual nature of professional reasoning. This approach is informed by the work of Mikhail Bakhtin, a Russian philosopher and literary critic, and is elaborated on and justified in Chapter three (methodology).

Chapter 3

Methodology

3.1 Introduction

My thesis is methodologically underpinned by the philosophical work of Mikhail Mikailovich Bakhtin (1895 -1975). I will therefore begin this chapter by providing some background information about Bakhtin. This will be followed with a discussion of some key aspects of his philosophy and how it is positioned ontologically and epistemologically. I will justify the use of a qualitative approach and discuss the other methodologies I explored, before explaining the reasoning informing the selection of Bakhtin's dialogism. I shall outline some of the ways in which researchers have recently used Bakhtin's dialogism as a research methodology and justify the selection of Sullivan's (2012) methodological approach. I will then conclude the chapter by explaining my approach to reflexivity, the quality criteria informing the design of my study and provide a discussion of my reflexive thoughts on my research practice in relation to the methodology.

3.2 Mikhail Bakhtin (1895-1975)

Mikhail Mikailovich Bakhtin has been described as a Russian philosopher, social thinker, and literary critic (Holquist, 1986). He was born near Moscow in 1895. He studied the classics at Odessa, and then St. Petersburg Universities and following the 1918 revolution became part of an intellectual discussion group known as the Bakhtin circle (Holquist, 2002). He was exiled to Kazakhstan in 1929 probably because of his religious and political views (Sullivan, 2012). He spent 30 years in exile with his wife, initially working as a bookkeeper and then teaching in local schools. During this time his leg was amputated due to osteomyelitis and his mother and sisters died of starvation in the siege of Leningrad (Bakhtin et al, 2019). He began a major and controversial work on Rabelais (a 16th Century writer) which he unsuccessfully submitted for a doctorate and was awarded a lower degree (Morson and Emerson, 1990). Bakhtin wrote between 1919 and 1941 (Erdinast-Vulcan, 2013). He was an active member of Russian cultural circles, a prolific reader of literature and philosophy, and was influenced by Kant and Neo-Kantism (Bakhtin et al, 2019). It was not until the 1950's, when allowed to return to the Moscow region, that he was rediscovered (Gardiner and Bell, 1998). Some graduate students from Moscow convinced him to revise his Dostoevsky book, this 2nd edition was published in 1963

and it was then followed by the publication of other works (Morson and Emerson, 1990). He died from emphysema in 1975 (Sullivan, 2012). In the 1980's his work began to be translated and published outside Russia and he began to become more known in the Western world (Erdinast-Vulcan, 2013). Some of his earliest writing was not discovered, translated, and published until after his death the 1990's (Holquist, 1993). This means that some of what has been published are notes and essays that Bakhtin would have perhaps polished and edited, had he been able to, prior to publication. It also contributes to his philosophy having been much less established in the research community than for example phenomenology with which it has been compared by some authors (Erdinast-Vulcan, 2013; Sullivan, 2012; Bernard-Donals, 1994).

Having provided some background information about Bakhtin in the next section I will explore some of the key concepts underpinning his work.

3.3 Bakhtinian philosophy - key concepts

Dialogism is often used as an all-encompassing term to describe Bakhtinian philosophy (Holquist, 2002). Dialogism is the term I will be using in this thesis when referring to Bakhtinian philosophy. Emerson (1997) and Morson and Emerson (1990) describe Bakhtin's work as centred around three major inter-related concepts; *dialogue*, *prosaics*, and *unfinalisability*. I will discuss each of these concepts in turn.

3.3.1 Dialogue

Traditional views of dialogue see it as in interaction between two individuals (Holquist, 2002; Linell, 2009). This is very different to Bakhtinian *dialogism* which perceives living as a shared experience, involving our own unique unrepeatable existence in a specific context, but importantly also including what has gone before. This means we do not invent words for the first time when we speak them, or select them from a dictionary, instead Bakhtin suggests they are taken from:

Other people's mouths, in other people's contexts, serving other people's intentions: it is from there that one must take the word, and make it one's own. And not all words for just anyone submit equally easily to this appropriation.... many words stubbornly resist, others remain alien, sound foreign in the mouth of the one who appropriated them (Bakhtin, 1981, p. 294).

Dialogue takes place between what is in ourselves and the world outside ourselves, this is a creative, dynamic and ever evolving process (Holquist, 2002). A *dialogic* view of the self encompasses *I-for-myself*, *I-for-other* and *other-for-me* (Bakhtin, 1986; Morson and Emerson, 1990). *I-for-myself* refers to how we experience our lived life (Bakhtin, 1990), *I-for-other* how our self appears to others and *other-for me* how others appear to us (Bakhtin, 1986; Morson and Emerson, 1990). This is reflected in our speech which is “full of transmissions and interpretations of other people’s words” (Bakhtin, 1981, p.338). Bakhtin (1986) uses the term *addressivity* to explain that speech is addressed to someone, and this means a response is anticipated, the anticipated response influences our speech, as we take account of the others’ views and knowledge. In addition to an immediate addressee, he suggests our utterances may also be addressed to a more distant *superaddressee* e.g., the people, God, science, human conscience (Bakhtin, 1986). This anticipation of another’s response can result in what Bakhtin (1984) terms *double-voiced discourse*. For example, discourse that indirectly hits out at others or a “*word with a sideways glance*” where there is self-depreciation, reservations, loopholes, and concessions to the anticipated views of others (Bakhtin, 1984, p. 196). Understanding living as a shared experience has promise for developing an understanding of reasoning as a social and contextual process, something researchers in physiotherapy and medicine are beginning to identify and explore (Ajjawi and Higgs, 2008; Peters et al, 2017). This is also a view of speech that sees it as constructed (see Section 3.5.6, Interpretation of language and qualitative research), a view I have adopted in relation to this study. It has been suggested that a weakness of Bakhtinian philosophy is that it very much foregrounds the self and other relationship and does not consider the roots of power (Sullivan, 2012), for example at more systemic level. As the focus of my own study is at the level of the individual’s experience this is perhaps an acceptable weakness.

Bakhtin (1986) argues that a creative and powerful understanding arises from a position of *outsideness* and does not just come from immersing oneself in another’s experience and seeing the world through the eyes of another. This position of *outsideness* and difference allows us to ask new questions, from a different perspective, resulting in a more in depth understanding and producing something new rather than just duplicating the individual’s experience (Bakhtin, 1986). This has implications for the position of the researcher (see Section 3.5.3, Epistemology) and acknowledges the value of interpretation (see Section 3.5.4, Qualitative and quantitative approaches).

3.3.2 Prosaics

Prosaics refers to Bakhtin's theory of the novel with its different *genres* and *multivoicedness* (Emerson, 1997). Bakhtin (1986) defines *genres* (speech and literary) as an accumulation over time of the ways in which we perceive and understand the world, and he suggests we compose our speech generically. Although we are unaware that we are using *genres*, if we had to originate these as we speak, this would make communication extremely challenging (Bakhtin 1986). A *genre* is "a loose set of stylistic conventions" (Sullivan, 2012 p. 45) and conveys a perception of reality (Medvedev, 1978). For example, depending on our perception, reality could be experienced as a romantic quest, an epic struggle, or a transformative adventure. *Genres* are "styles of thinking communicating and acting that are shared and understood by relevant social communities" (Marková and Novaes, 2019, p. 122). An example of this is provided by Spencer and Oppermaan (2020), who contend that the Brexit leave campaign gained popular support (and was successful) due to its consistent use of the *romantic genre*. They suggest that the romantic narrative of the hero fighting for their ideals and resisting the existing order, meant that the public identified and emotionally engaged with the campaign.

Bakhtin suggests that

There are no "neutral" words and forms – words and forms that can belong to no one; language has been completely taken over, shot through with intentions and accents.... language is not an abstract system of normative forms but rather a concrete heteroglot conception of the world. All words have a "taste" of a profession, a genre.... Each word tastes of the context and contexts in which it has lived its socially charged life; all words and forms are populated by intentions (Bakhtin, 1981, p. 293).

Context and our worldview will permeate our speech, and we appropriate the words of others when constructing speech. This way of thinking recognises competing voices and values different worldviews. It resists systematising and instead recognises "flexible, particularized, non-repeating relations among differentiated parts" (Emerson, 1997, p. 36). Bakhtin (1993) values individuality and uniqueness over repeatable unity. This gives each voice equal-weight and although a strength of this approach is its inclusivity, it fails to privilege truth over lies or reach a moral conclusion where there is conflict (Emerson, 1997). An individual's worldview influences all types of professional reasoning (Unsworth, 2021) and *dialogism* offers the opportunity to access this by exploring and interpreting the *genres* used by participants to narrate their experiences of reasoning.

Bakhtin (1981) uses the term *chronotope* to describe the distinctive temporal and spatial relations of the different *genres*. *Chronotope* is a means of understanding context and experience (Morson and Emerson, 1990). Bakhtin (1981, p. 90) for example, describes “adventure-time” which is “intensified but undifferentiated” where there is an interruption to the usual course of events and the individual may face tests of character or obstacles to overcome.

3.3.3 Unfinalisability

As previously discussed, Bakhtin was anti-theoretical, against systemising, the application of universal laws, and reduction to commonalities (Morson and Emerson, 1990). Linked to this is his aversion to finalisation, there is no last word, dialogue remains free and open (Bakhtin 1984). Bakhtin links *unfinalisability* to *polyphony*, meaning it allows for multiple different even contradictory voices to coexist (Bakhtin, 1984). This is an approach that could therefore be helpful in exploring the uniquely individual nature of reasoning. Whereas a *dialogic* approach does not seek to homogenise, a *monologic* approach seeks unity and is finalised without the opportunity for a response, closing down rather than opening up (Bakhtin, 1984). Smith (2010) suggests that in *dialogism* the individual is not self-sufficient, they are connected to others, whereas in *monologism* the individual is seen as self-sufficient, independent from, and unaffected by, others. In *dialogism*, although not self-sufficient, the individual remains separate from others, whereas in *monologism* there is an attempt to unify and merge with the other and use of a single authoritative voice rather than multiple equal voices (Bakhtin, 1984; Smith, 2010). This equality of voices could perhaps be seen as an idealised view, ignoring the power relationships which can prevent equality (Sullivan, 2012). Also, the *unfinalisability* and open-ended nature of dialogue can make evaluation problematic, as it is always in the process of becoming rather than complete.

Having provided some background material on Mikhail Bakhtin and his philosophy I will now provide an overview of some of the ways in which this has been appropriated in the Western world.

3.4 Appropriation of Bakhtinian philosophy in the West

Initially, Bakhtinian philosophy was introduced to the West by literary theorists (Nielsen, 2002). But as well as literary studies Bakhtinian philosophy has informed several different disciplines including sociology (Nielsen, 2002; Kaczmaraczyk, 2018), cultural theory (Hirschkop and Shepherd, 2001), art theory (Haynes, 2002), language and communication studies (Linell, 2009) psychology (Hermans and Dimaggio, 2004) and education (Friere, 2000; Matusov et al, 2009). Many of these approaches only appropriate a small section of Bakhtinian philosophy. For example, there is an approach used in psychology called *dialogical* self-theory. This approach sees the self as part of society and is primarily focussed on Bakhtin's conceptualisation of the different I-positions, within the self and in relation to others (Hermans and Gieser, 2011). A *dialogical* pedagogy which has been linked to Bakhtin by some authors (Matusov et al, 2019) was introduced into education by Friere (2000). Interpretations of this approach are varied (Sarid, 2012) but often focus on the dialogue between student and teacher (Skidmore and Murakami, 2016). Thereby adopting a definition of dialogue as being between two individuals rather the Bakhtinian interpretation of *dialogism*. Wengerif (2008, p. 359) suggests this is a conflation of *dialogic* with dialectic, and these are contradictory conceptualisations as, "dialogic presupposes that meaning arises only in the context of difference, whereas dialectic presupposes that differences are contradictions leading to a movement of overcoming." In my study I will be drawing on Bakhtin's interpretation of dialogism (see 3.3.1, Introduction).

I have introduced Bakhtin and his philosophy and begun to discuss what this has to offer as a research methodology (this is elaborated on in Section 3.6.2, Dialogism as a research methodology). I will now discuss the theoretical paradigms informing my study.

3.5 Theoretical Paradigms

3.5.1 Introduction

I will begin this section by situating my study and myself ontologically and epistemologically. Ormston et al (2014) have described ontology as "the nature of reality and what there is to know about the world" (p. 4) and epistemology as "ways of knowing and learning about the world" (p. 6). Within the qualitative paradigm researchers adopt different ontological and epistemological positions regarding the nature of knowledge. This influences the aim of the study, the type of knowledge produced by the study, the role of the researcher, how the world is viewed and therefore what can be known (Willig, 2013). Understanding and acknowledging the research

paradigm underpinning a study allows for “coherence, credibility and depth.” (Finlay, 2006, p. 17). It is also important in determining the relevant quality criteria to apply to a study (see Section 3.6.3, Quality criteria). It is therefore important that I endeavour to be explicit about the ontological and epistemological assumptions underpinning Bakhtinian philosophy, as my study is informed by this.

There is controversy and sometimes contradiction in how researchers view and discuss research paradigms (Lincoln et al, 2011), and aligning Bakhtinian philosophy with existing paradigms is challenging given the anti-theoretical and anti-systemising nature of his philosophy. Bakhtin was more inclined to distance, than align himself with established theory and he has been described as anti-theoretical (Holquist, 1990; Frank 2012). Bakhtin (1990, p. 87) argued that philosophy and theory could be “impoverishing” when its attempts to achieve unity erased individuality. This informed his own philosophy of *dialogism* which allows for multiple voices and resists finalisation.

Bakhtinian philosophy has been described ontologically as a theory of being, and epistemologically as a theory of knowing (Holquist, 2002; Linell 2009; Sullivan, 2012). Holloway and Galvin (2017) suggest that our ontological position about the nature of reality informs our epistemological assumptions about what can be known. I will therefore begin by situating Bakhtinian philosophy ontologically.

3.5.2 Ontology

Ormston et al (2014, p. 7) suggest that there are broadly two ontological positions: realism and idealism. In realism “an external reality exists independent of our beliefs or understanding” and in idealism the opposite is true and “no external reality exists independent of our beliefs and understanding”. Bakhtin was anti-realism, which with its emphasis on causal explanations, he believed realism transformed voices into just a sign or symptom of something, and meant voices were faint echo’s that we could no longer respond to and engage in dialogue with (Bakhtin, 1986; Bakhtin 1990).

Relativism is a perspective related to idealism (Ormston, 2014). Although Bakhtin wrote many years before we recognised and embraced relativism in the West some of his ideas are compatible with relativism (Gardiner and Bell, 1998). However, Bakhtin was opposed to extreme relativism, which he saw as making dialogue unnecessary (Bakhtin, 1984). It has been suggested that Bakhtin “allows truth to be provisional and alterable in the light of an ever-expanding horizon of understanding” (Owen, 2011, p. 153) rather than asserting there is no truth

(relativism) or an absolute truth (realism). I would argue that my thesis (informed by Bakhtin's philosophy) is closer to the idealism/relativism end of the realism-idealism continuum but falls short of extreme relativism. I will explore what this means epistemologically for what can be known in the next section.

3.5.3 Epistemology

Our ontological view of the nature of reality has implications for what we believe can be known. One epistemological issue is what is held to be the best means of acquiring knowledge. Pope and Mays (2020) suggest this can be deductively, inductively, or abductively. They define deductive research as a top-down approach in which the study starts with a theory which the researcher sets out to either prove or disprove. Inductive interpretation is defined as developing theory or patterns arising solely from observations of the phenomena. An alternative is abduction, this approach like induction begins with empirical data but uses (rather than rejects) theory to identify patterns and develop understanding (Alvesson and Sköldbberg, 2018). This abductive approach is the one I have adopted, using the theory of *dialogism* to identify patterns in the data (this is elaborated on in Section 4.4, Data analysis).

Ormston et al (2014) suggest that there are different epistemological interpretations of the nature of knowledge and the connection between the researched and the researcher. Some researchers adopt a foundational view of knowledge which assumes an objective, value-free researcher who does not influence the researched. An alternative approach, and one I have adopted, is that the relationship between the researcher and researched is interactive and objectivity is not possible. Bakhtin (1990; 1986) suggests that we occupy a position outside the other (another person) and therefore should not seek to merge with them. This merging is consistent with a foundational view of knowledge in which the researcher seeks to mirror the participants reality. Bakhtin (1990; 1986) views merging into one as monologism (speaking with a single authoritative voice). He advocates a *dialogical* approach and suggests our own viewpoint, informed by our worldview, brings an active creative understanding which is enriching (Bakhtin, 1986). This is congruent with a view of qualitative research that sees the researcher's goal as bringing their own interpretation to the participant's narrative rather than passively repeating what they say (Josselson, 2011a).

3.5.4 Qualitative and quantitative approaches

Different ontological and epistemological positions underpin qualitative and quantitative approaches. Broadly, quantitative approaches are informed by positivism and realism, whereas qualitative approaches are informed by interpretivism and relativism (Pope and Mays, 2020). Ormston et al (2014) state that positivism aims at value free objective research aimed at capturing an accurate reality. Whereas interpretivism has a focus on subjective meaning and interpretation of the world (Pope and Mays, 2020). Research within the quantitative and qualitative paradigms offers different contributions to the study of professional reasoning in occupational therapy. For example, researchers who are primarily interested in examining decision making and cognitive processes (e.g., studies informed by dual-process theory) will often use quantitative methods to measure these (Unsworth, 2018; Arocha and Patel, 2019). Researchers interested in the experience and context of reasoning will often adopt qualitative approaches. Other researchers have combined these approaches in mixed methods studies (Arocha and Patel, 2019). Unsworth (2018, p. 481) argues that qualitative methods are important in investigating how occupational therapists “think in action” and this supports their use in my own study which explores students’ real-world experiences of reasoning.

Qualitative research is interpretative in nature and has a focus on the social construction of reality (Howitt, 2019). Holloway and Galvin (2017) suggest that qualitative research facilitates the exploration of experience from the perspective of participants. This allows qualitative researchers to explore how reasoning is experienced and is commensurate with the aim of my study which seeks to understand how occupational therapy students experience reasoning during their practice-based learning. Finlay (2006) suggests that in qualitative research: the researcher is central to knowledge construction; their relationship with participants is important; research is exploratory, inductive, and interpretative; findings are rich, complex, and messy. Given little is known about how reasoning is experienced by students an exploratory approach is useful in learning more about their experiences of professional reasoning during their practice-based learning.

3.5.5 Theoretical paradigms informing qualitative research

There are several theoretical paradigms underpinning qualitative research and I will discuss two that relate to my study, poststructuralism, and social constructivism.

3.5.5.1 Post-structuralism

Some authors conflate the terms post-modernism and post-structuralism, but Zeegars and Baron (2015) argue that post-structuralism is the most appropriate term for a theoretical perspective based on post modernism, and that post-modernism is a much wider term encompassing for example writing, design, and art. Post-structuralism is ontologically situated towards the relativist end of the realism-relativism continuum, and recognises; language as important in constructing experience, multiple co-constructed interpretations, and subjective findings (Finlay, 2006; Denzin and Lincoln, 2011). A post-structuralist approach views humans as constructing reality through language rather than reporting an objective reality (Zeegars and Baron, 2015). This means as we narrate our experiences, we position ourselves in relation to them and construct our version of reality (Willig, 2012).

Bakhtin's earlier work, written in the 1920's, predated post-structuralism and post-modernism but has some remarkable parallels. For example, his ideas about *polyphony* that values multiple views, and *unfinalisability* that allows for no last word. Whilst his ideas have much in common with relativism and post-structuralism, there are also significant differences. For example, Bakhtin's acknowledgement of limits (Emerson, 1997), and his belief in individual agency (Gardiner, 2002; Creswell, 2011), make it impossible to align him with extreme post-structuralism. His view of human beings goes beyond seeing them as controlled by power or language and he has a more social perspective than most post-structuralists (Gardiner and Bell, 1998).

3.5.5.2 Social constructivism

Social- constructivism considers reality to be socially constructed (Gergen, 2009). Researchers using this approach are concerned with "how people construct versions of reality through the use of language" (Willig, 2013, p. 17). Ontologically, Bakhtin's philosophy about the nature of reality suggests it is social in nature (Bakhtin, 1981; 1986). We are not self-sufficient (Bakhtin,

1990), this means we gain a sense of who we are through our relations with others (Sullivan, 2012). In relation to language this means we do not invent words as we speak, instead that the words we use are not only populated with our own intentions, but have already been used by others, and are influenced by their intentions and the contexts they have already been used in (Bakhtin, 1981; Bakhtin, 1986). This social perspective is evident in Bakhtin's (1986) consideration of context, and the idea of *addressivity* – our speech being addressed to someone. This idea of a social and relational self, contrasts with an individualistic self-contained approach, and acknowledges our social nature as human beings (Bertau, 2014). Bakhtin recognises difference and regards us as active developing beings (Gardiner 2002; Bandlamundi, 2016). This belief in individual agency removes him from extreme social constructionism that would see the self as entirely socially constructed (Creswell, 2011). This makes Bakhtinian philosophy a useful paradigm through which to explore the development of reasoning as both a uniquely individual and socially influenced process.

I would therefore argue that although it is challenging to align Bakhtin's dialogism with a specific research paradigm there is some affinity with elements of post-structuralism and social constructivism but also some significant differences from these in their extreme conceptualisations.

Given that qualitative data is language-based (e.g., interviews), interpretation of qualitative data is influenced by the researcher's interpretation of language. In the next section I will explore three different viewpoints on language that may be adopted by qualitative researchers.

3.5.6 Interpretation of language and qualitative research

Willig (2012) suggests that given its influence on the interpretation of data it is important for the researcher to be explicit about their view of language. She identifies three different theoretical viewpoints.

1. Realist - language is a vehicle for the participants to transmit information and the researcher is interested in the content and what this tells them about the phenomenon.
2. Phenomenological – language is a means of understanding more about the texture and quality of the experience.
3. Social constructivist – this view of language sees it as performative and the researcher is interested in the form of the data and how meaning is constructed through language.

My research is most closely aligned to the social constructivist view of language, this view means the researcher is concerned with how language is used to construct experience (Willig, 2013). Holquist (2002, p. 15) suggests Bakhtin “seeks to explain human behaviour through the use humans make of language”. Loftus and Higgs (2019, p. 135) have identified the promise of using “language as a theoretical lens” to study reasoning. I reasoned that paying attention to language offered promise as means of understanding more about professional reasoning, and this influenced my choice of a methodology informed by Bakhtinian philosophy.

Having discussed the selection of a qualitative approach and the theoretical paradigms informing my study I will now discuss the study methodology.

3.6 Methodology

3.6.1 Introduction

My literature review suggested reasoning was complex, multi-layered, individual, social, and contextual. Also, it has been suggested that paying attention to language could be a useful means of understanding more about reasoning (Loftus and Higgs, 2019). I was therefore seeking a methodological approach that would allow me to:

- Access the multi-layered and complex nature of reasoning.
- Preserve individual differences.
- Capture the social and contextual nature of reasoning.
- Pay attention to language.

I explored several different qualitative methodologies. I focussed on phenomenological and narrative methods as I felt these had potential to enable an in-depth exploration of the students’ experiences of reasoning on practice placement.

A phenomenological methodology would have offered the opportunity for a detailed exploration of students’ lived experiences of professional reasoning. Phenomenologists explore the meaning of lived experience and its embodiment, which enables them to describe the essence of a phenomenon (Finlay, 2011). As previously discussed, (Section 3.5.6 Interpretation of language and qualitative research) this involves a focus on the texture and quality of the experience (Willig, 2012). This is an approach that views participants as being able to represent their pre-existing experience through language (Willig, 2013). As discussed in Section 3.5.5.2 my study is influenced by social constructivism which views language as performative rather than

representative (Willig 2012). A performative conceptualisation of language views meaning and experience as being constructed through language, because as we speak, we position ourselves in relation to the subject (Willig, 2013). In addition, (in common with many qualitative approaches) phenomenological approaches typically employ thematic analysis (Finlay, 2011). St. Pierre and Jackson (2014) argue that the process of coding data in thematic analysis decontextualises the data, and that there is a need to consider alternative approaches. I believed that, whilst data reduction is an inevitable part of qualitative research, the process of reducing data to codes and themes would limit my ability to preserve context and individual difference when analysing and discussing the students' reasoning. Consequently, I sought a methodological approach that did not require the development of codes and themes.

Given my interest in the use of language to construct reality, I briefly explored discourse analysis as a possible methodology. Discourse analysis offers the opportunity to analyse how discourses enable and constrain what is said and how power operates (Ballinger and Cheek, 2006; Willig, 2013). As identified by Sullivan (2012) discourse analysis offers the opportunity to explore how external factors influence experience, but it is less effective at understanding participants' perceptions of their own experience. My study explores the students' perceptions of their experiences, and I rejected this approach as it would not allow me to do this in sufficient depth.

I also explored several different narrative methodologies. Narrative research operates on the premise that we understand our life in a storied form, it engages with stories elicited from participants which reflect both their internal and external world (Josselson, 2011b). Narrative methodologies enable the researcher to explore "different and sometimes contradictory layers of meaning, to bring them into useful dialogue with each other, and to understand more about individual and social change" (Squire et al, 2013, p. 1). Narrative methodology therefore offered the opportunity to explore the complex multi-layered nature of reasoning and accommodate difference. Narrative research also, depending on the approach selected, offer the opportunity to consider context (Squire et al, 2013). Narrative approaches are diverse but typically convey context and the participants' story e.g., by a vignette outlining this. The use of vignettes in this study might involve providing a synopsis of the participants experience on each of their placements, this would have been difficult to achieve without making the individual identifiable to staff and other students in the cohort. Narrative methods also commonly involve thematic analysis (Riessman, 2008) and as previously discussed I was seeking alternative approaches to this.

It was through the exploration of narrative approaches that I became aware of Bakhtin. Riessman (2008) and Frank (2010; 2012) both discuss *dialogic* approaches to narrative research

based on Bakhtinian philosophy. In the next section I will explore the use of dialogism as a research methodology.

3.6.2 Dialogism as a research methodology

Although Bakhtin was writing at a similar time to many of the German phenomenologists and explored some similar issues e.g., the question of the subject, his works have not gained the same credence with researchers. Several factors account for this. His earlier works which were written in the 1920's have the most philosophical stance; but these were not published in the West until the 1990's. Although Bakhtin writes convincingly, and at times eloquently, as Gardiner and Bell (1998) identify, much of his writing is dense and was not intended for publication. Consequently, Bakhtinian philosophy is only just beginning to be drawn on to underpin research methodology.

Aspects of Bakhtin's work have influenced some other qualitative methodologies, for example, discourse analysis and narrative research (Sullivan, 2012). However recently researchers have begun to draw solely on the work of Bakhtin to inform their research. Although this is a relatively new approach to research in the social sciences, it has now informed several studies, e.g., Riessman (2008), Frank (2010; 2012), Madhill and Sullivan (2010), Sullivan (2012), Gomersall and Madhill, (2014), Cunningham (2016), and Thompson et al (2019). The key authors exploring Bakhtin's dialogism as a research methodology are Reissman (2008), Frank (2010; 2012), and Sullivan (2012).

Some of Bakhtin's ideas are complex, and some of the original emphasis can be lost when these are re-interpreted and de-contextualised from his work as a whole. Riessman (2008), Frank (2010; 2012), and Sullivan (2012) all suggest ways in which Bakhtin's theoretical ideas might be applied to qualitative research. To evaluate these authors' approaches I read some of Bakhtin's original texts: 'The Dialogic Imagination' (Bakhtin, 1981), 'Problems of Dostoevsky's Poetics' (Bakhtin, 1984), 'Speech Genres and Other Late Essays' (Bakhtin, 1986), 'Art and Answerability' (Bakhtin, 1990), and 'Towards a Philosophy of the Act' (Bakhtin, 1993). I have also drawn on others' analyses of his work, including: Holquist (2002), Morson and Emerson (1990), Bernard-Donals (1994), Gardiner and Bell (1998), Emerson (1997), Sullivan (2012), Erdinast-Vulcan (2013), and Bandlamudi (2016).

This led me to the conclusion that the approach developed by Sullivan (2012) was the one which drew most extensively on Bakhtin (rather than other's interpretations of this work). His approach was also the most comprehensive in encompassing the breadth of Bakhtinian

philosophy. For example, from my reading of Bakhtin *genre* was a key concept discussed in several of his texts, and this was foregrounded by Sullivan (2012) in data analysis but given less emphasis in the approaches of Reissman (2008) and Frank (2010; 2012).

Sullivan (2012) states that his *dialogical* approach is suitable for research questions associated with the relationship between contexts, peoples' experiences, and the ways in which their world of meaning is felt and thought through. It therefore offers the potential to explore how occupational therapy students experience reasoning in the practice learning context. As previously discussed, this approach is epistemologically informed by the belief that knowledge arises out of a dialogue with the ideas of others, acknowledges that participants are trying to make sense of the experience to themselves as well as others, and that there are different lived truths (Sullivan, 2012). Frank (2012) believes one of the strengths of *dialogical* research is that it does not finalise participants and acknowledges that future change is possible. This fits with my understanding of not seeking a single truth and the ongoing construction of knowledge.

It has been suggested that a limitation of a *dialogical* methodology is, that when analysing for *chronotope* and *genre*:

That it is sometimes difficult to establish whether someone can simply speak a genre and organise a time and space (e.g., come along to an institution and make everyone an epic hero in a moment) or if the organisation of particular places is already constituted by various historical and social forces over which the individual has no control. (Sullivan, 2012, p. 166).

This is a relevant point, although my interpretation of the findings of this study suggested it is sometimes possible to differentiate between organisational/social control and individual agency. This is something that will be explored in more depth in Chapter nine (Discussion) and Chapter ten (Conclusion). Other methodological limitations (identified earlier in this chapter) include a lack of attention to the roots of power (Sullivan, 2012), and that its' inclusivity gives all voices equal weight and does not reach a moral conclusion if there is conflict (Emerson, 1997). Had my research aimed to explore power relationships or reach conclusions where there were likely to be conflicting views, these may have been significant limitations. However, this is not the purpose of my study.

Sullivan (2012) states that although methodologies such as phenomenology and grounded theory have tended to dominate health research, a *dialogical* approach with its emphasis on transformational experiences and the perception of social world has a lot to offer researchers

interested in exploring how individuals manage changes in identity. Given that professional reasoning is a key part of students' developing professional identity this approach should be helpful in exploring that process.

Having discussed the theoretical basis of my study I will now introduce the quality criteria that have informed its design.

3.6.3 Quality criteria

The ontological and epistemological framework informing the study influences what would be considered excellent (Willig, 2013). This has led to debate as to whether universal quality criteria are feasible in qualitative research (Mays and Pope, 2020). For example, criteria from a more realist and post-positivist orientation e.g., saturation, elimination of bias, and triangulation, would not be suitable for my study given their orientation to a finalisation, a single reality, and a detached and objective researcher.

Tracy (2010; 2020) has developed 'eight big tent' quality criteria for qualitative research (see Table 3.1. Tracy's (2010; 2020) 'eight big tent criteria). These criteria each have a variety of quality practices from which those that are most appropriate can be selected. This allows these criteria to be applied to a wide range of qualitative research paradigms. Sullivan (2012) has also mentioned quality criteria which are important when using a *dialogic* approach. Sullivan's (2012) and Tracy's (2010; 2020) criteria are outlined below.

Sullivan's (2012) evaluation criteria for a *dialogical* approach.

- *Polyphony* - the interpretation places different voices in contact with each other. This involves *synchrisis* and *anacrisis*. *Anacrisis* refers to enabling others to express their point of view and *synchrisis* to putting different viewpoints together in a persuasive and coherent manner.
- The analysis should draw attention to *chronotope* (time-space elaboration), *genre* and emotional connection

Table 3.1 Tracy's (2010; 2020) 'eight big tent criteria'

Big Tent criteria (Tracy, 2010; 2020)	
Tracy suggests <u>some</u> (not all) of the practices relating to the criteria will be relevant.	
Criteria	Practices
Worthy topic	The research is relevant, timely, significant and/or interesting.
Rich rigour	The study has sufficient, theoretical constructs, sample, data collection and analysis.
Sincerity	Evidence of self-reflexivity and transparency.
Credibility	Thick description, member reflections, triangulation <u>or</u> crystallisation, multivocality.
Resonance	The research influences and affects the reader through aesthetic and evocative, naturalistic generalisations and/or transferable findings.
Significant contribution	Makes a significant contribution conceptually/theoretically, methodologically, practically and or heuristically.
Ethical	Procedural ethics, situational, and/or relational ethics are considered.
Meaningful coherence	The study achieves what it sets out to, methods fit with the study goals. Literature, the research question, findings, and interpretations are connected

Being mindful of quality criteria can “help researchers thoughtfully consider how to practice and conduct their study in ways that will persuade desired audiences to appreciate, respect, and pay attention to their research” (Tracy, 2020, p. 269). This is my aim, and I will revisit these quality criteria in relation to my study in Chapter nine (Discussion).

3.7 Reflexivity in this thesis

Reflexivity has been defined as “thoughtful, self-aware analysis of the intersubjective dynamics between the researcher and researched” (Finlay and Gough, 2003, pp. ix). It acts as a means of exploring positionality (Dean, 2017) and requires an awareness of oneself, monitoring of practice, and determining action when there may be conflicting guidelines for this (May and Perry, 2017). I have adopted an epistemological position that recognises that knowledge is what Ormston (2014) describes as value-mediated, with an interactive relationship between the researcher and the researched, and the researcher mediating the study findings (see Section 3.5.3 Epistemology). I have also ascribed to a theoretical paradigm that understands reality as social constructed (see Section 3.5.5.2, Social constructivism). I have selected an approach that

views reflexivity as being composed of two related parts: endogenous and referential reflexivity (May and Perry, 2017). I believe that this approach to reflexivity is congruent with my espoused epistemological and theoretical position. May and Perry (2017) state that endogenous reflexivity relates to who we are and the influence of the social and cultural environment within which we operate and referential reflexivity to what this means for our relations with others. Endogenous reflexivity therefore contributes to a consideration of the social and contextual influences on my practice as a researcher, and referential reflexivity to exploring what this means for the value-mediated nature of the relationship between myself and my participants.

The process of reflexivity involved writing reflexively in a journal at regular intervals throughout the research process, completing a structured reflection after each interview (see Section 4.4.2, Interviews, and Appendix 7, Example of post interview reflection). I also made use of research supervision to explore my research practice. In Chapter one I introduced myself in and spoke about the need for the researcher's voice to be reflexively interwoven with others (Holliday, 2007). As a means of interweaving my voice, my reflexive thoughts are threaded throughout this thesis. I have used May and Perry's (2017) conceptualisation of endogenous and referential reflexivity to guide my reflexive thoughts in a reflexivity section at the end of each of the chapters. I have reflexively considered the quality of my study in my discussion (Chapter nine) and summarised my reflection on the process in my conclusion (Chapter ten).

3.8 Reflexivity - methodology

I have at times wondered why I selected a *dialogical* methodology when there were so many other more established methodologies available. Earlier in this chapter I have explored why the methodology was right for the research question, here I will attempt to explore why it was right for me.

It took me a long time to select a methodology. I was very influenced in my choice by wanting to preserve difference and believing that approaches using thematic analysis would not do this. This considerably restricted the methodologies available to me, I had not realised quite how dominant thematic analysis was in qualitative research. I have become aware that valuing difference is important to me. When I teach, I try to use methods that are responsive to a variety of different needs. As a clinician person-centredness and individualising my approach was important to me. Growing up I had a diverse group of friends and grew to appreciate what their different perspectives added to my experience of the world. As a child (although I rarely felt different) my limp, and on occasion being referred to as a 'spastic' made me aware that I was

(and was perceived by others as) different. Perhaps this goes some way to explaining my attraction to an approach that values heterogeneity and difference.

The approach I have selected has (for me) been theoretically and intellectually challenging. I think perhaps I needed this challenge to stay engaged throughout the six years of completing this thesis. I am also aware I get satisfaction from learning something new and trying to master it.

3.9 Chapter Summary

In this chapter I have introduced Mikhail Bakhtin and his philosophy, explored the theoretical paradigms informing my study, discussed the *dialogical* methodology, introduced reflexivity, and explored my reflexive thoughts on the study methodology. In the next chapter I will discuss the methods used in my study.

Chapter 4

Methods

4.1 Introduction

In the previous chapter I discussed the theoretical paradigm and methodology informing my study in this chapter I discuss the study methods. Clearly delineating the study methods is an important aspect of a studies quality, this makes it transparent how the research was conducted. It also allows the reader to reach a judgment as to whether the methods used are coherent with the stated theoretical paradigm (Tracy, 2020).

This chapter begins with a discussion of ethics, then sampling, data collection, and data analysis. Finally, I conclude with my reflexive thoughts on these methods.

4.2 Ethics

The discussion that follows will address the ethical approval process, confidentiality, the invitation to participate in my study and the process of gaining consent. I will also explore my relationship with the students.

4.2.1 Ethical approval

This study received ethical approval from London South Bank University School of Health and Social Care School Ethics Panel, reference number HSCSEP17/15 (see Appendix 4: Ethical approval letter), in November 2017. Permission was given by the then head of department to invite students to participate in the study.

Changes made at the request of the ethics committee included: amending the invitation to participate to include a specific date for how long data would be retained and making some minor adjustments to its wording. The consent form was amended to delete statements not required. It had been my intention to offer to visit students towards the end of their final placement and complete the interview on the placement site (if they preferred this option to an interview at the university). The ethics committee stated this would require approval from placement providers and I followed their suggestion to host all interviews at the university. I

also complied with their request to not be involved with academic delivery for the students who were eligible to participate in my study. I had originally thought I might require a gatekeeper, but the ethics committee stated this was unnecessary and that I could approach the students directly.

4.2.2 Confidentiality and anonymity

Confidentiality involves protecting the identity of research participants by anonymising data relating to them (Wiles, 2013). This needed consideration as it will be apparent to the reader (given my relationship with the students) which university they attended. In groups where individuals know each other there is more risk of breaching confidentiality and a common means of addressing this is not to collect identifying demographic information (Damianakis and Woodford, 2012). Also, the use of large extracts of text which is vital in this methodology provides more potentially identifying contextual information than the shorter quotes typical of most types of thematic analysis. It is recognised in qualitative research that pseudonyms may be insufficient (O’Leary, 2014) and Squire (2013) suggests that although you may lose some of the richness of the data, to preserve confidentiality, it may be necessary to change or leave out data. To preserve the confidentiality of the students participating in this study, and the educators and service users they referred to, when personal pronouns such as he, she, were used these have been replaced with they, or the service user/student/educator. In addition, the participants have been referred to by a gender-neutral pseudonym. This is particularly important given the small number of men in the profession, heightening the risk of any male educators and students being identified. Any identifying information specific to the setting, personal details (e.g., previous jobs, personal relationships) and the service user’s diagnosis has been removed. Where this has taken place a statement to this effect is made in parentheses. Demographic data has not been collected; given that the quotes provide information about the context of the placement the combination of this information and the demographic details of individuals would have risked identification of the participants.

Vainio (2012, p.686 suggests that in addition to its ethical justification “anonymity is useful for conducting qualitative research of a high standard.” She argues that anonymity assists the reader in theoretical generalisation, extending the application of the findings beyond the specifics of an individual case. This is associated with the aim of qualitative research which is to extend the findings to a larger experience of the phenomenon rather than a larger population of individuals (Levitt, 2021). Inclusion of participant characteristics can have unintended

consequences, and Vainio (2012) suggests that the researcher need to be aware of how readers may use characteristics such as age and gender. It is possible that stereotypes based on participant characteristics may influence the readers interpretation of the data in ways the researcher does not intend.

The decision about how much detail to present about the participants and the setting is an element of situational ethics (Goodwin et al, 2020), and this will be elaborated on when I review the application of quality criteria in Section 9.10.8 (Ethical research practice).

4.2.3 Invitation to participate and consent

Informed consent involves letting participants know what is involved in a study so they can make an informed decision about whether to participate (Wiles, 2012). An important part of gaining informed consent is provision of an invitation to participate which provides potential participants with information about the research. The invitation to participate for my study (Appendix 5: Participant information sheet) included the opening prompt to be used at the start of the interview and made the students aware that interviews could last 1-2 hours. The invitation to participate was made available for students on the universities virtual learning platform and sent to students who expressed an interest in participating in the study. Students were provided with an opportunity to ask questions when the study was first launched to the cohort at the end of a lecture and individually before signing the consent form (Appendix 6: Consent form).

4.2.4 My relationship with the students

The participants were all final year occupational therapy students at London South Bank University. As I am an occupational therapy lecturer at this university all the students were acquainted with me to some extent. Power relationships such as these can result in an imbalance which disadvantages the participant Moriña (2020). To mitigate against the potentially conflicting roles of researcher and lecturer I was not involved in any teaching or assessment of the students during in their final year of study. However, my role and relationship with the students was integral to the data I collected; and I will discuss this further in Sections 4.4 (Data collection) and 4.6 (Reflexivity).

4.3 Sampling

It is important to be clear about how the research has been conducted as this adds to the transparency of the study and contributes to its' quality (Tracy, 2020). In this section I will discuss the purposive sampling method, the process of recruiting participants, and the sample size. I aim to be explicit about the process and the reasoning that informed the decisions I made.

4.3.1 Purposive sampling

Purposive sampling is generally used in qualitative research (Braun and Clarke, 2013; Holloway and Galvin, 2017; Hinton & Ryan, 2020). This process is informed by the research question, ethical and practical considerations (Holloway and Galvin, 2017). Purposive sampling involves selection of individuals who can provide rich data based on their experience (Hinton & Ryan, 2020). There are multiple approaches to purposive sampling and the approach I selected was criterion-based sampling. Criterion based sampling involves the selection of individuals to meet the research aims based on specific criteria (Holloway and Galvin, 2017). The students eligible to participate in my study complete four full time placements; the first is five weeks long, the second seven, and the final two ten weeks. These take place in a variety of NHS, social care and third sector organisations and the student is supervised by a registered occupational therapist (referred to as a practice educator) from the placement setting. The students who were able to provide the most complete data were those that had completed all their practice placements. Consequently, only students who met the criteria of having completed all four placements were eligible to participate.

Some methodologies require selection of a sample based on homogeneity (similarity) or heterogeneity (diversity). For example, interpretative phenomenological analysis, it is important that the sample is homogenous (Howitt, 2019). In others, for example grounded theory variation and heterogeneity is preferred (Holloway and Galvin, 2017). A dialogical methodology can accommodate either a homogeneous or heterogeneous sample, so this was not a consideration that influenced the approach to sampling.

Another approach to purposive sampling that could have been used was snowball sampling which includes use of recruited participants' networks to recruit other participants (Braun and Clarke, 2013). I did not adopt this approach as it would have compromised the anonymity of participants by making it evident to other students in the cohort that they were participating in my study. However, one student did volunteer that that they were encouraging other students

to participate, and another that if I required more participants (I did not) they knew others who may be interested in participating. It therefore seems that an element of snowball sampling also occurred, initiated by the participants.

4.3.2 Recruitment process

The sample was drawn from the final year cohorts of all the occupational therapy courses. Students were invited to participate in their final year of study before their final placement. I briefly spoke to each cohort at the end of a lecture, information about the study was provided on their virtual learning platform, and the students were then reminded about my study at the end of their placement. Students wishing to participate or find out more about the study emailed me.

I have indicated below in Table 4.1 when students from each of the courses were recruited and interviewed.

Table 4.1 Timing of recruitment and interviews

Course	Length of course	Initial information provided	Reminder	Interviews
BSc (part time)	4 years	February 2018	April 2018	May 2018
BSc students (full time)	3 years	February 2018	May 2018	May 2018
PGDip/MSc	2 years	May 2018	August 2018	August 2018

4.3.3 Sample size

In many qualitative studies saturation (ceasing data collection when no new themes emerge from the data) is used as a guide to sample size (Holloway and Galvin, 2017). Whilst this might be a helpful quality criterion for some studies, as it is theoretically influenced by realism is not appropriate for all qualitative research (Braun and Clarke, 2013). Saturation conflicts with the philosophy underpinning a *dialogical* approach. An important principal of a *dialogical* approach

is *unfinalisability* (Frank, 2012), concluding you have said all there is to be said is considered finalisation. Therefore, it would be inappropriate to use saturation as a guide to sample size.

I wanted to sample students after they had completed all their placements and before they had begun the transition into a qualified practitioner role, as this would allow for the discussion of their placements from a student perspective. This meant a small window of opportunity to recruit students after their final placement and before completion of their course. Consequently, a decision had to be made about sample size in advance rather than concurrently with data analysis.

Within *dialogical* analysis sampling is not emphasised and frequencies are not counted (Frank, 2010) this means there is little in the way of guidance in relation to sample size. Sullivan (2012) described the data collected from two interviews with eleven participants as a large amount of data for two researchers to manage in his study which used a *dialogical* approach and narrative interviews. I planned to use a similar type of interview in my study, so needed to consider that these are often longer than semi-structured interviews (Josselson, 2013), and can therefore generate more data. With the support of my dissertation supervisors, I decided on a sample of twelve to fifteen. This decision was informed by the anticipated length of the interviews, I was aiming to achieve a balance between gathering sufficient data and ensuring that the breadth of the data did not compromise the depth of the analysis. All occupational therapy students in the final year cohorts, were invited to participate. Twelve students consented to participate six participants were from the BSc (Hons) courses (three from the part time, and three from full time course) and six were from the PGDip/MSc course. Also, few more PGDip/MSc students indicated they may be interested in participating, if I needed more participants.

I ceased data collection after twelve participants; this decision was informed by the amount and richness of the data I had obtained at this point. The interviews had taken on average ninety minutes, and in the time between the BSc (Hons) and PGDip student interviews I had been able to begin transcribing and reflecting on some of the data, and believed I had some rich data. Holloway and Galvin (2017) suggest that qualitative researchers often do not leave sufficient time for data analysis, as they underestimate the complexity of their data and the time required to analyse this. Achieving rich rigour requires the researcher to be thorough, and to expend time and effort (Tracy, 2020). I was concerned that collecting more data would have a detrimental effect on my ability to achieve an in-depth analysis. I considered respecting the time the participants had given me, and the experiences they had shared with me, to be an important part of relational ethics. I therefore needed to ensure my analysis of their data was rigorous and not rushed or superficial.

4.4 Data collection

4.4.1 Selection of a data collection method

Researchers using a *dialogical* approach have adopted an open attitude to data collection as a *dialogical* approach is seen as appropriate for use with a wide range of data collection methods including interviews, focus groups, observations (Sullivan, 2012), written accounts, and pre-existing texts (Frank, 2010). I made the decision to interview participants, as illustrated above other methods can be used, and some of these were considered. It would, for example, have been possible to ask the students to provide a written account. However, I was concerned this may have discouraged students from participating and be overly burdensome at a time when they were completing final assessments. I also considered observation; this would have been useful if I were less familiar with the nature of practice-based learning as it would have provided context for the interviews. However, it would require extensive periods of observation to capture significant events pertaining to reasoning as these occur sporadically and unpredictably. In addition, my presence may have made the participant anxious and impacted on their reasoning. I do not think that suitable pre-existing texts relating to occupational therapy students reasoning on placements exist. I also wanted to collect my own data as, the data would be current, and I would be more intimately acquainted with it, aiding data analysis. I therefore decided to use interviews as my data collection method.

4.4.2 Interviews

As I was interested in exploring the individuality of the students' experiences, I chose individual interviews over focus groups. I selected an unstructured or what is sometimes described as a less structured interview (as no interview is completely without structure). I thought a semi-structured interview may guide the participants into adopting a framework I had developed when considering reasoning. Mishler (1986) suggests traditional research interviews are constructed as a stimulus (researcher's question), response (participant's answer). He argues that this can mean the researcher's questions structure the participants responses and suppress the participants' natural instinct to provide a storied response. Given my aim was to preserve any individual differences I was concerned that a semi-structured interview may homogenise and structure the participants' responses into a similar pattern, rather than preserve the heterogeneity of their experiences. Reissman (2008, p. 24) suggests that giving up control and "following participants down *their* trails" can shift the power relationship in an interview and make participants more equal. Given my relationship with the participants I wanted them to

have more control over the interview process, rather than this being overly directed by me. This less structured approach gave the participant more influence over what was discussed and the ordering of the discussion than a standard semi-structured interview would have. It allowed them to narrate their experiences in a way that made sense to them, rather than imposing my framework of meaning. In the participant information sheet (Appendix 5) I made it clear that I was not expecting the participants to use professional language in the interview. I wanted, as far as possible, for them to narrate the experiences naturally and not to feel they had to engage in a professional discussion with me.

Interviews allow access to emotions, experiences, and thoughts about the experience (Bold, 2012). They provide an opportunity for the researcher to access the participants' inner world as it is experienced within their social reality (Josselson, 2013). They had the potential to capture the students' perspective and their experiences of reasoning during their practice learning. Interviews can begin with a statement that orientates the participant to the purpose of the study and invites a response (Josselson, 2013). This is the approach I used, beginning each interview with the following statement "Can you tell me about professional reasoning during your placements, all the events and experiences that were important for you?" This included a prompt to recount important events and experiences, as this encourages the production of a narrative account (Wengraf, 2001). Reasoning can be seen as a cognitive process, and therefore is potentially somewhat challenging to verbalise. The opportunity to discuss events and experiences provided something concrete and real life to attach reasoning to. I also believed this would help to capture the social and contextual nature of reasoning. Bakhtin (1993) distinguishes a lived truth of a performed act (*pravda*) from abstract truth (*istina*). A *dialogical* approach focuses on the lived truth (*pravda*) (Sullivan, 2012), and the event and experience focus of the statement was designed to prompt the participants to discuss their lived truths. I wanted to avoid an abstract and hypothetical discussion that would tell me little about the actual use and development of reasoning within the context of their practice-based learning. Also, given a large part of my analyses would focus on *genre* I reasoned that the participants' 'stories' about different placement experience would provide me with the opportunity to gather material that lent itself to this type of analysis.

My role as a researcher was to actively listen, promote elaboration, and obtain detailed stories (Josselson, 2013). I used the participant's words to develop narrative pointed follow up questions about the topics they had raised. Narrative pointed questions are questions designed to elicit more narrative (King and Horrocks, 2010). This technique was important given my familiarity with both topic and the participants. It helped to ensure their voice rather than mine was prominent. I used elaboration, completion, and clarification probes (King and Horrocks,

2010). An elaboration probe aimed to gain more data on a topic of relevance to my research question, a clarification probe to obtain more explanation when I was uncertain about the participants meaning, and a completion probe assisted in finding out the ending of a story that appeared to me to be incomplete. Mishler (1986) states that participants often naturally tell stories, and the interviewer can get in the way of these by interjecting with questions. I was mindful of this and tried to stay out of my participants way by allowing pauses to develop, and the participant to relate the experience in their own way. I explore my experience of this in a more detail in the reflexivity section (Section 4.6) at the end of this chapter.

Interviews could have been carried out after each placement, but this would have meant an extended data collection period (four years in the case of the part time course) which would have been difficult to manage within the constraints of the time available to complete a PhD. I elected to conduct a single interview with each participant rather than multiple interviews. Practically multiple interviews would have been difficult to carry out given the short time frame between the end of the final placement and the final day of the course. Engaging in a second interview after most had started their first job would have meant the participants were in a newly qualified practitioner rather than a student role and would therefore be positioned differently. This may have introduced new material unrelated to my research question which focusses on students. This might be an interesting (but different) study to complete but, without reducing the participant numbers significantly, it would have generated too much data to do justice to. Also, multiple interviews would have been more demanding for participants. Aware I was not going to have a second opportunity I was careful to explore the events recounted by the participants in as much depth and detail as possible. In some respects, multiple interviews could be construed as an attempt at finalisation or saturation, rather than an acceptance that this was an account provided at a given point in time that may well be expressed differently in the retelling.

Although the interviews had to be completed within a relatively short time frame at the end of the course, I spaced them out as much as possible to maximise any opportunities for reflexivity. I was often able to modify my technique within the interview, but reflexivity provided the opportunity to take a step back. I used a template to guide me the structure of this was informed by points raised by Josselson (2013) (see Appendix 7 for an example). This was helpful in making me aware of my role in co-construction, and in modifying my interview technique. It allowed me to reflect on the interview and identify any issues I had not become aware of, and responded to, in the interview, and modify my technique prior to the next interview. For example, after the first interview, I realised I had unintentionally reworded the initial prompt when I restated it later in the interview, perhaps because I thought it would sound foolish repeating the same

statement. I thought the participant might have picked up on the slightly different emphasis and that this had been introduced by me rather than them. I decided if I needed to restate the prompt I would stay with the original wording, and this worked well in future interviews.

4.5 Data analysis

I will begin this section by explaining the process of preparing data for analysis, I will then discuss the theoretical basis of data analysis and finally the steps of the analytical process.

4.5.1 Data Preparation

To prepare the audio recordings of the interviews for analysis I transcribed all of these. Transcribing your own data can allow the researcher to immerse themselves in the data and begin to become aware of issues that may be important (Holloway and Galvin, 2017). Although this was time consuming, I found it a useful means of becoming familiar with the data in preparation for data analysis. When transcribing I noted any pauses of two seconds or longer in brackets, and any material that was not direct speech, such as laughter. Any responses I made were included within the participant speech if they were aimed at demonstrating engagement with what the participant was saying (e.g., mmm, yeah). Interjections or follow up questions begin on a new line. Where the participant adds emphasis the word/s has/have been underlined. As previously stated, (Section 4.2.2), the students participating in this study have been referred to by a gender-neutral pseudonym, and practice educators and service users have been referred to as they, or the service user/educator. Where identifying information has been removed a statement to this effect has been made in parentheses.

4.5.2 Theoretical basis for data analysis

Before outlining the data analysis process, I will elaborate on the theoretical basis for data analysis by discussing selection of *key moments* and identification of *genres*.

4.5.2.1 Introduction

A *dialogical* approach to data analysis differs from thematic analysis. Typically, thematic analysis involves a bottom-up approach in which the entire data set is coded, and these codes are then assembled into hierarchical categories to generate common themes (Pope et al, 2020). A *dialogical* approach keeps the stories within each transcript whole rather than dissecting them line by line (Sullivan, 2012; Frank, 2012). Data reduction is achieved by selection of *key moments* for analysis, this is elaborated on in Section 4.5.2.2 (Key moments) below.

4.5.2.2 Key moments

In thematic analysis reduction of the data is achieved by complete or selective coding of the entire data set, whereas in a *dialogical* approach to data analysis key extracts from the data are selected for in-depth analysis. Madill and Sullivan (2010, p. 2196) refer to these as *key moments* and state that a *key moment* is a “complete story of an experience”. The length of a *key moment* can be anything from a line or two to several pages of text (Sullivan, 2012). The use of *key moments* as a unit of analysis preserves the individual’s unique standpoint and allows a single line of speech to be considered in relationship to the whole story of the experience. Polkinghorne (1988, p. 196) suggests an advantage of this type of method is that it allows for analysis of the complexity of social interaction, rather than basing inferences on “decontextualized bits and pieces”. This allows more attention to be paid to context, and emotional intonation which may be more difficult to preserve if coding line by line.

4.5.2.3 Genre

This term was introduced in Section 3.3.2 (Prosaics) and is revisited here as data analysis involves identification of *genres*. The participants would not have conceived of themselves as using different *genres*. However, *genres* convey the different ways in which individuals experience the world (Sullivan, 2012) and the speaker’s perception of reality (Madhill and Sullivan, 2010). This

makes them useful in understanding how the participants position themselves and construct meaning when narrating their experiences. When using a *dialogical* approach, the researcher does not focus on seeing the world from the participants perspective. Bakhtin (1986) speaks about a position of *outsideness* that brings a different perspective and something new. Bakhtin explores several *genres* in his texts, for example, *romance*, *adventure*, *biography*, *idyll*, and *carnival*, in most depth, and in less detail *travel*, *Bildungsroman*, and *epic*. Researchers also include other *genres* if needed e.g., professional (Madill and Sullivan, 2010; Sullivan, 2012) which Bakhtin refers to very briefly, and *genres* he does not discuss, for example, psychodrama (Sullivan, 2012), black comedy (Cunningham, 2016).

4.5.3 Analytical process

Data analysis was guided by the approach developed by Sullivan (2012). As discussed in Section 3.6.2 (Dialogism as a research methodology) my selection of this approach was informed by having read Bakhtin myself and how well this approach resonated with the understanding I was developing of Bakhtin's ideas. Sullivan (2012) suggests a means of analysing data using this approach but does not provide a circumscribed method as this would limit flexibility. He suggests it is important to supplement this approach with additional reading both from Bakhtin and others, for example in relation to *genres* (Sullivan, 2012).

The steps Sullivan (2012) suggests are:

- 1) Familiarisation with the entire data set.
- 2) Identifying *key moments*
- 3) Summarising the data.
- 4) Writing about the *genres*.

Below I will expand on the application of these steps in my own study. Although these are presented as a series of steps this was an iterative process (see discussion that follows).

1) Familiarisation with the entire data set.

Familiarisation with the data began with transcription. Transcribing all the interviews myself enabled me to listen to them closely and repeatedly. Once they were all transcribed, I read through each transcript repeatedly making notes on the transcripts about my initial ideas about *genre* and highlighting potential *key moments*.

2) Identifying key moments

Sullivan (2012) suggests that it is possible to develop criteria to aid the selection of *key moments* from the data.

My selection of *key moments* for further analysis was informed by the following inclusion criteria.

- Relevance to my research question i.e., an event or experience related to professional reasoning.
- The focus on embodied lived truth which represents the speakers own experience and values (*istina*) rather than abstract or theoretical truths (*pravada*) as Bakhtinian dialogism is concerned with lived rather than abstract truth (Madhill and Sullivan, 2010).
- Emotional intonation – the utterance has emotional investment from the participant (Madhill and Sullivan, 2010)
- Responsivity – the utterance demands a response from the listener (Sullivan, 2012).

I initially selected 285 extracts (11 - 40 per participant) for further analysis to determine which were *key moments*. I was deliberately over inclusive at this stage, mainly focussing on the first criteria - relevance to the research question. This was in part a desire to be thorough but also a consequence of a lack of confidence with the methodology at this stage of the process.

More rigorous application of all four of the criteria assisted in refining my selection to those extracts which most effectively meet the inclusion criteria. This was a gradual and iterative process that involved returning to the transcripts several times, until I ultimately selected fifty-seven *key moments* for inclusion in the finding's chapters.

As part of the process of identifying *key moments* I had begun to note my initial thoughts on *genre* and discursive features of the text (e.g., *double-voiced discourse*) on the transcripts. Sullivan (2012) identifies some basic features of a few of the different *genres*, but not in sufficient depth or breadth to begin analysis. He recommends further reading, and I began with Bakhtin's books and extended out to other authors who wrote about these *genres*. I made notes about the different *genres* and referred to these as I read the transcripts. This was very much an iterative process, as I moved between reading the transcripts, identification of *key moments*, and reading and writing about the *genres*. It involved analysing each transcript multiple times. I developed a flow chart based on my reading of Bakhtin to help me discriminate between some of the relevant *genres* (Appendix 8: Genre decision making aid). This genre decision making aid was developed by identifying commonalities and difference between the different genres. For example, in some of the genres it was evident that there was a change in the individual whereas

in others the individual's identity was affirmed or enacted but did not change. Therefore, deciding whether there was a change in the individual assisted in identification of the genre. The two key genres where there was a change in the individual's identity were the *Bildungsroman* and the *adventure genre*. A key difference between these genres was the deviation from the normal course of events that was evident in the *adventure genre* but not the *Bildungsroman*. I was therefore able to use this to discriminate between these two genres. For those genres where the individual did not change (*travel, romance, biography/autobiography*) the *travel genre* was the only genre in which the individual experienced the world as exotic and strange. The remaining two genres *romance*, and *biography/autobiography* could be differentiated by the presence of *adventure-time* in the *romantic genre*. In *adventure-time* chance plays an important role and things happen suddenly (Bakhtin, 1981).

3) Summarising the data

To summarise and organise the *key moments*, I had to decide what shape my findings chapter would take. One possibility is to group the *key moments* according to the *genres* you have identified (Sullivan, 2012). This was the approach I ultimately adopted (the process of reaching this decision is explored in the reflexivity Section (4.6) at the end of this chapter).

As suggested by (Sullivan, 2012) I produced a table summarising an overview of my analysis and a table of *sound bites* for each *genre*. The overview of the analysis includes all the *key moments* and indicates their emotional register, time space elaboration and context. The table of *sound bites* includes quotes from participants transcripts which are illustrative of the *genre*. These are explained and discussed in my first findings chapter (Chapter 5).

4) Writing about the genres

The next step involves combining theory with the data drawing on background reading on *genres* and is an important part of data analysis (Sullivan, 2012) rather than an event occurring after completion of this. It involved paying attention to the "self-other axis" (Sullivan, 2012, p. 168), this is how the participant authors (positions) themselves in relation to others. This involves considering the "emotional and moral connection to what is said" (Sullivan, 2012, p. 168).

4.6. Timeline for the study

As discussed in Section 4.3.2 Recruitment process, data were collected in May and August 2018. The process of transcribing and then analysing the data began immediately after data were collected and analysis continued until June 2021. As previously discussed, when using a dialogical methodology, writing about the data is considered a part of the data analysis process (Section 4.5.3, Analytical process) so at this stage, I had a rough draft of my findings chapter. The analysis of the data was impacted by the COVID 19 pandemic and an outage of some of the university's IT systems lasting several months following a cyber-attack. These events led to a substantial increase in my workload between March 2020 and April 2021 and during this time very little work on my PhD was possible. This break in the data analysis process meant I needed to take time to refamiliarize myself with the data and the dialogical approach to analysis. Whilst this prolonged the process, re-engagement with the dialogical approach provided an opportunity to reflect. I became aware I had largely focussed on reading of Bakhtin and exploration of genre. After refamiliarizing myself with work of Sullivan (2012) I was able to progress the data analysis by summarising the key moments according to emotional register, time space elaboration and context.

4.7 Reflexivity – Methods

Interviews

Bakhtin (1986, p.94) states “an utterance is constructed while taking into account possible responsive reactions, for whose sake, in essence, it is actually created. As we know the role of others for whom the utterance is constructed is extremely great”. The participants were constructing their utterances (narratives) for me and ultimately for you the reader. Their relationship with me as a lecturer and their knowledge that they were participating in a research project will have made them mindful of how what they were saying would be received. I noticed as the interview progressed some participants became increasingly relaxed and immersed in what they were narrating. I was aware of encouraging this, as I felt the data was rich, but then wondered if they would regret their openness and feel exposed reading their words in my thesis. This cemented my conviction that preserving confidentiality was particularly important.

Given my relationship with participants there was a risk they would try to prioritise producing a professionally correct account in terms of language and what they selected to share with me. I was concerned if they were too focussed on this, I would obtain a less diverse and rich account

of their experiences. Therefore, I made the students aware in the invitation to participate that professional language was not necessary, and I avoided using professional terminology in my prompts unless it was a term the participant had used themselves. On one occasion I felt an attempt to use professionally correct terminology was beginning to interfere with the flow of the participants account, and I reminded them this was not necessary. It was a delicate balance, as an important part of reasoning is gaining confidence in using the language of the profession, and I did not want to get in the way of the demonstration of this. Overall, I followed the participants lead; but made sure I was alert to other means of expressing themselves and the use of different *genres*, to avoid falling into an entirely professional dialogue with them. For example, I followed up on any emotive content and the use of metaphors. I also found it important to use pauses. It is tempting to fill silence and interject, but I found when I paused participants often elaborated without the need for me to prompt. When narrating, *chronotope* can be reordered to achieve a specific effect (Holquist, 2002). In one of my interviews, I realised my prompt was effectively working as an attempt to impose a chronological structure on an event that was not being narrated chronologically by the participant. I was able to modify future prompts to avoid making the same mistake. This is elaborated on in my post interview reflection (see Appendix 7: Example of post interview reflection).

Data analysis

As anticipated, this was a time-consuming process, even the first step of familiarisation with the entire data set took time and thought, as a note in my reflexive diary indicates

“I must have spent twelve full days on this now and I am still only a little over halfway through my second reading” (Researchers reflection 1.7.2019).

I found it challenging to reduce that data to *key moments*. I was aware that I was including data that was not going to fully meet all the inclusion criteria (as discussed in step 2 of data analysis), but I was, I think cautious about missing something. Reflecting on this at the time I wrote

“Although I am keen to move away from thematic analysis, I am finding it hard to some extent let go of the idea of including everything. I am finding it a real struggle to reduce the data - I somehow feel I am devaluing participants by leaving out data, I am concerned that some might feel their contribution was less valuable if there are not many key moments attributed to them”. (Researchers reflection, April 2021).

I also questioned whether the focus on emotion as an inclusion criterion meant I was leaving out data for participants who expressed themselves less emotively. I went back to the original transcripts of two of the participants who I had fewer *key moments* for and reread them. I found that at times they spoke in a more abstract way about reasoning, and this was detached from a specific experience. This meant that not only was this material not particularly emotive, but it was also not connected to an experience of reasoning during their practice-based learning. This meant the data I was leaving out was not related to my research question, and I therefore made no changes to the *key moments* I had analysed for these participants. I recognised that this dilemma of what to leave out is also a feature of other approaches, as there must be a means of reducing the data.

There was one *key moment* that I could not get out of my head, and I wondered why I had not included it in the final cut. I went back to the transcript, and it met all the criteria. I had made a note next to it about having a lot of *key moments* from this participant, but on rereading it, as it met all the criteria, I included it. I think I was influenced by feedback questioning there being a lot of *key moments* from some participants and fewer from others. I concluded that as I was not thematically analysing the data, I did not need to ensure all participants were represented across themes. The whole point was to preserve individuality and that will mean identifying more *key moments* in some transcripts than others. I therefore added this as a *key moment* for this participant and included it in my analysis.

The data analysis occurred over an extended period (more than two years) as I moved between reading about *genres*, reading the transcripts and writing about my interpretation of the data. Qualitative data analysis always is (and should be) time consuming but this approach added another layer due to the need to become familiar with a theory that was new to me to inform the analysis. This required extensive reading, and even locating relevant texts was challenging. This has made me question the practicality of this approach for a first-time user, but also made me realise the added value of a theoretically informed analysis. It occurred to me that my previous analyses had largely been informed by what I already knew. The *dialogical* approach extended what I already knew and made me attentive to aspects of the data that I would not have addressed previously, such as emotion and the way in which the participant positions themselves in relation to others. When I first started constructing the summary table of *key moments* it felt a little odd to be looking for emotion in the data. It was only when I began to share some of the emotions the participants experienced with other cohorts of students that I realised that these emotions resonated with them, and how important being attentive to emotion was to my analysis. I returned to the data and took a stronger focus on emotion in my analysis and looked for and named the emotions I saw in the data. This led to the development

of Appendix 9, Emotions identified in relation to the different genres. This process aided my understanding of the how the emotions experienced by the participants related to the different genres.

4.8 Chapter Summary

In this chapter I have explored the ethical issues associated with my study, discussed sampling, data collection and data analysis and concluded with my reflexive thoughts on this process. In the next chapter I will begin the discussion of my findings.

Chapter 5

Findings – Introduction and the professional genre

5.1 Introduction to the study findings

The findings have been organised by *genre*. My interpretation of the data identified two major *genres* (*Bildungsroman*, and the *romantic genre*) these were evident in all the participants transcripts and three minor *genres* (*travel genre*, *adventure genre* and *carnival*) that were less prevalent. The *professional genre* was evident throughout, but this was referred to fleetingly and was mixed with other *genres*. I have included the *professional genre* as it adds to the *multivocality* of the findings by illustrating the different positions the participant may adopt in relation to an experience. Sullivan (2012, p. 93) refers to this as “dialoguing with another genre” and suggests that “it is important to look for quite different or even opposing genres...in terms of how they add to an emerging interpretation of the experience.” As previously stated, (in Section 4.5.2.3, Genre), the participants would not have considered themselves to be ‘using *genres*’ this my interpretation of the findings using a *dialogical* approach.

The findings are presented in four chapters. In this introductory chapter I introduce the findings chapters and explain how these are structured. I also provide an overview of all the *key moments* selected for analysis and introduce the *professional genre*. Although the *professional genre* was not a major *genre*, including it in this first finding chapter provides the reader with an understanding of this *genre* prior to it being referred to in the other chapters. In Chapter six I discuss the first of the major *genres* the *Bildungsroman*, and in Chapter seven the second major *genre* *romance*. Finally in Chapter eight I discuss the minor *genres*, *travel*, *adventure*, and *carnival*, and my reflexive thoughts on the findings.

One solution to managing the data would have been to focus on the major *genres* (*Bildungsroman* and *romance*) which were identified by nearly all the participants. Sullivan (2012) suggests this can be an appropriate means of data reduction. However, the minor *genres* (*travel*, *adventure*, and *carnival*), although evident for less participants, added additional perspectives and increased the *multivocality* of the findings. The minor *genres* dealt with experiences that were challenging and emotive. Although these experiences were less commonplace, they provided a richer and more complete picture of the complexity of reasoning. For these reasons I have included both the major and minor *genres*.

Two terms have been used repeatedly in my discussion of the findings: occupation-centred and person-centred. I have therefore defined them in this introduction and explained why I selected them over other terms used in the literature. For clarity I have used these terms consistently when referring to reasoning unless directly quoting an author. The term occupation-centred has been selected based on Fisher (2013), who distinguishes between occupation-centred, occupation-based, and occupation-focused. She uses occupation-based, and occupation-focussed to describe methods that are based or focused on an occupation-centred perspective. Fisher (2013) suggests that is an occupation-centred perspective that can inform our professional reasoning. I have therefore used this term in relation to the participants reasoning. In the literature both the terms client-centred and person-centred are used but in the UK the term person-centred is increasingly being used. For example, in the Royal College of Occupational Therapists Professional Standards for Conduct and Ethics (RCOT, 2021). This is therefore the term I have elected to use.

Having introduced the findings. I will now provide an overview of the analysis.

5.2 Overview of key moments selected for analysis

Table 5.1 provides an overview of the *key moments* selected for analysis and inclusion in this chapter. The findings can be read without reference to this table. However, Sullivan (2012) suggests that summarising the analysis in a table is useful in providing the reader with an overview of the entire data set. As the findings chapters are organised by *genre*, this table may provide a useful synopsis for the reader interested in the *key moments* and *genres* for each of the participants. For each *key moment* the *genre/s* are identified (each *genre* is highlighted in a different colour), the emotional register, time-space elaboration, and context.

Table 5.1 Overview of key moments selected for analysis

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Alex	Bildungsroman	Frustration Resignation	Fast paced, new Models out the window Home as quickly as possible Limitations of service limit reasoning	Unable to use a model when reasoning (acute physical setting)
	Bildungsroman	Inadequacy Discomfort	Knowledge little, low As time went on knowledge increased	Student does not have knowledge to answer educator's question about equipment
	Professional Romantic	Empathy Pride Passion Satisfaction Disappointment Determination	Thinking quickly on the spot Chronological time interrupted by misfortunes Future orientated - got to have a product	Working with service user to develop cooking skills
Charlie	Professional Romantic	Beneficence Empathy Challenged	In the grand scheme of things Future orientation – not jeopardising other sessions	Balancing being person-centred with ensuring efficacy of intervention
	Bildungsroman Professional	Illumination	Future orientation Moment of realisation (light bulb) Risk biggest thing	Service user with amputation and steps reasoning around acceptable risk
	Professional Bildungsroman	Challenged Beneficence/responsibility Satisfaction/achievement Reassured Confidence	Student is manipulating and in control of time Get them to stop for a moment Do in the moment Good gains	Development of reasoning from after session to in session

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Chris	Professional Irony Romantic	Beneficence Confidence Empathy Determination	Doing less but staying out of hospital Pressures of service Luxury of being a student – gives them time their educator does not have Taking time – slowing patient	Service user has carers but wants to be independent in self-care
	Bildungsroman Professional	Confidence	Reasoning fluid and automatic in the moment Previously “black and white” structured Forward thinking – reading referral already thinking	Development of reasoning to become instinctive
	Romantic, Double-voiced discourse Irony Professional	Empathy Frustration – with educator Beneficence	Future orientation – the type of therapist I want to be Family forward thinking re spouse’s future surgery Educator here and now - just here for my patient Student future orientated- preventative	Educator does not explain reason to service user.
	Romantic Professional	Empathy Beneficence Satisfaction	Things done in people’s beds in that space Full shower takes longer Lifted mood Luxury of more time as a student Seeing affect and changing course of action. Weird journey	Organises shower and coffee for service user in response to their low mood
Eli	Romantic Professional	Empathy Challenged	Bouncing off one another The moment starts talking about dog Reasoning conflicting (pragmatic and person-centred occupation-centred)	Referral for cooking (service user not interested in this)
	Romantic Professional genre,	Empathy Passion Confidence Satisfaction/achievement	Face immediately lit up Ran over to cupboard All of a sudden back on track A little bit of a moment where OT is quite special An a-hah moment all reasoning came together Without educator pressure off time to reason Educator butting in – just needed more time	Student does not understand educator’s reasoning for non-occupation-based intervention so introduces occupation focussed intervention

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Eli	Carnival Romantic Loophole Professional Bildungsroman	Impulsivity Empathy Irreverence Passion Illumination	Reasoning not so in the moment Very much after Chopping and changing Service user reasoning alongside them How little time their educator needs to reason compared to them All coming from reasoning	Spontaneous decision to let service user chop vegetables becomes risky
	Bildungsroman	Discomfort Determination and resilience	On the spot Pushes you to think Introduces reasoning Things come together	Educators questioning to develop student's reasoning
	Bildungsroman Professional	Openness Determination	Stream of conscious thoughts Reasoning takes time when you are new to it Funnelling down Extract relevant stuff	Internalising reasoning
	Adventure novel Parody Professional	Overwhelmed Independence Openness Determination resilience Pride in achievement	Lack of space and time Bootcamp in SOAP notes Get into educator's mind set Now not using educator's approach Analysis bringing it together Plan what's the next step	SOAP notes bootcamp – documenting reasoning in acute setting.
	Bildungsroman Professional	Traumatised Determination Illumination	Not close enough Person always in my mind	Risk assessment- service use could have fallen.
	Bildungsroman	Safety Confidence Reassured	Breathing space to reason. Safe to explore.	Educator gives student space to reason

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Eli	Bildungsroman Travel	Anxiety (being watched) Relief (not being watched) Frustration (PT/OT butting in)	Hierarchy of cognition The pressures off Eventually get there Took me a little bit of time Butting in	Time to reason - hierarchy of cognition
	Bildungsroman Professional	Relief (time and space) Amazement/ wonder (can reason in moment) Confidence	Building rapport Barriers came down Space and time Pressure In moment Very much after On autopilot Dipping toe in Reasoning comes on top (big thing) Not quite there	Reasoning in the moment querying service user's cognition, had space and time to reason
Frankie	Romantic Professional	Empathy Positivity Beneficence Satisfaction/achievement Determination	Taking time to develop rapport Not dwelling on negatives Dwell more on positives Glass isn't half empty Boundaries in place Change after time	Reasoning how to develop rapport and discover patient's interests
	Bildungsroman Professional	Challenged Amazement and wonder Pride	Nine-track mind Learning reasoning all the time Loads of different modes of reasoning	Nine-track reasoning – the complexity of reasoning
	Adventure	Sad Disappointment Determination Challenged Isolation Positivity Openness	Newness of setting Isolation Buckled down Speed – needs to be faster Forward movement	SOAP notes bootcamp needed to copy educator
	Professional. Bildungsroman	Amazement Confidence Reassured	In a nutshell Back of my head Get to intervention	Use of PEOP, reasoning becomes instinctive

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Jordan	Bildungsroman Professional	Freedom Unsure Rueful	Educator gave freedom Too much of a step for service user Educator stepped in	Student given freedom to suggest intervention to service user
	Travel Professional	Stifled Disorientated Challenged	Less time for narrative in acute Time for narrative in community Back to baseline	Lack of opportunity to develop relationship with patient stifles reasoning
	Travel Professional	Challenged Overwhelmed Anxiety	Fast pace Needed more time to process things Difficult to know next step immediately Pace = higher anxiety Shut down (at time) Knew answer (afterwards) Time to step back gives broader perspective	Anxiety in acute setting inhibits reasoning
	Bildungsroman Professional	Freedom Confidence	Open licence Get on and do Thrown in deep end Build x6	Autonomy aids reasoning
	Bildungsroman	Challenged Determination/resilience Resistant (initially) Supported	Squeeze thinking into the model In-depth Shape and structure thinking	Use of a model to structure thinking
Jules	Bildungsroman	Satisfaction/achievement Doubt	Separate in my mind (using SOAP) Bank information Knowledge to filter information Alarm bells	SOAP notes help structure reasoning
	Carnival Bildungsroman Superaddressee	Independence Loss of control Unrestricted	Could not finish Completely out of my control Less formal, less structured Trying not to restrict Distance between then and now Took sheet off me	Completing an OCAIRS assessment with service user

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Jules	Travel Irony Double-voiced discourse Professional	Frustration (with educator) Disorientation Empathy for service users	Going along with it Like 'one flew over the cuckoo's nest' Knew then, know now, not right approach	Student disagrees with educators reasoning for music group
	Bildungsroman Word with a sideways glance Professional	Supported Reassured	Box of tricks Work within parameters Within structure of service Little guide Knew which direction Limited resources	Use of treatment protocols to structure reasoning
	Bildungsroman Professional	Reassured	Availability of time and space Go away and process	Having time to process information helped reasoning
	Carnival Double-voiced discourse Irony	Isolation Confidence Freedom Bravery Independence	No processes whatsoever Chaos – madness how it was run Break out a little bit Expanded knowledge	Reasoning in an unstructured setting
	Romance Professional Word with a sideways glance	Passion Empathy	Suddenly understands therapeutic use of self Set up boundaries Don't have to be same all the time Been through a lot	Discussing reasoning use of therapeutic use of self with chaotic service users
	Romance Professional Irony	Reassured Passion	Understanding of occupation solidifies the mind How to pick apart Always had a starting point	Occupation starting point for reasoning
	Romance Professional Sideways glance	Empathy Uncertainty Passion	Allowing control Sticking with it	Reasoning how much control to relinquish to service users
Logan	Bildungsroman Word with sideways glance	Confidence	Put too much in the plan – overwhelming for child Not in the same order as planned	Discussing a treatment session with a child

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Logan	Bildungsroman Professional	Reassured/thankful Confident	Chronological More time = confidence	Having time to reason
	Bildungsroman Professional.	Support	Chronological Note writing allowed time for reflection	SOAP notes
Morgan	Travel	Overwhelmed Pressured	They were so fast Provide intervention there and then Miss out things	Difficulty in following experienced therapists reasoning
	Bildungsroman	Overwhelmed	A ton of questions In time might be able to answer them straight away	Reasoning for equipment provision. Understanding of complexity -aware of the questions that need answering
	Bildungsroman	Illumination	Giving privacy – looked away Big learning curve	Educator picks up on risk the student fails to identify
	Bildungsroman Professional	Illumination	Incremental growth throughout placement Move from passive acceptance of patient's wishes to actively selecting appropriate type of assessment	Reasoning around type of wash dress assessment to select
Rowan	Travel	Overwhelmed Disorientation Challenged Dependent Unsupported	Fast – no time to think What's next Gap between theory and practice	Acute setting needed fast paced reasoning
	Romantic Professional Sideways glance/loophole Irony	Beneficence Empathy	Roll it out Educator – narrow thinking Student broader Student more empathy, more aware	Student's person-centred values clash with educator/context

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Rowan	Romantic Professional	Empathy Uncertainty Frustration with system	More than one option Systems in place, ways of doing things Student fresher eyes	Finds educators reasoning for profiling bed difficult to understand
	Bildungsroman	Supported (by educator)	Took a while to get used to setting Educator slightly directing Student going off a bit Educator bringing back Intense, doing a lot of things	Educator scaffolds the students reasoning
	Romantic Professional	Empathy	Got to know them a bit longer We learnt very quickly Tried to build Spent a lot of time building rapport	Reasoning regarding developing rapport when completing assessments that made the service user feel tested
Sam	Professional Romantic	Empathy Beneficence Challenged Uncertainty Sadness	Rapid deterioration, passed away Home as quickly as possible Delaying discharge Juggling Busy ward Sneak in opportunities Off topic, coming back	Person-centred and knowledge-based reasoning conflict in acute setting
	Professional Romantic Bildungsroman. Word with a sideways glance/loophole Irony	Beneficence Confidence Frustration	Not enough clinical reasoning (educator) Seeing how far my reasoning had come No one is immortal (educator) Always things you don't know	Discussed a situation when their reasoning about the most appropriate assessment to carry out with a service user differed from their educators
	Bildungsroman Professional	Confusion Overwhelmed Determination/resilience Illumination	Swamp – difficult to navigate a way out Stepping back Resolve with time Swimming in swamp an important part of process Becomes automatic strange swamp was there Alien – where are they getting that from	Complexity of reasoning Repetition helpful

Participant	Genres and discourse	Emotional register (of learning/truth)	Time-space elaboration	Context
Sam	Travel Bildungsroman Romantic Professional.	Challenged Disorientation Passion Confidence Resignation Beneficence	Distance “gulf”, “split” “divorced” Reductionist With people	Experience of an acute hospital context and how they had to reason what sort of therapist they wanted to be
Val	Bildungsroman.	Fear Illumination Confidence	Educator able to look a bigger picture Student focussed on “one time”	Risk (road safety) and reasoning
	Travel Professional Romantic Bildungsroman	Embarrassment Anxious Overwhelmed Pressured Empathy Supported	Tripped up Assessment not linear Moved closer Too much for my brain Where are we going	Completing a first initial assessment in the service user’s home
	Romantic Professional	Passion Satisfaction Empathy	Back to see them a lot of times Service user did not leave house Went shopping by themselves	Service user barely left home, student helps them participate in more occupations

Having introduced the study findings and provided an overview of the *key moments* included in the analysis. I will now discuss the approach I have adopted to discussion of the study findings.

5.3 The approach to discussion of the findings

In this section I will explain how I have approached discussion of the *genres* and the use of quotations in the findings' chapters.

5.3.1 Discussion of each Genre

When discussing a *genre* for the first time, I will briefly introduce it and then provide a table of short quotes from participants to illustrate the *genre*. These short quotes are referred to as *sound bites* by Sullivan (2012). This allows more examples of the *genre* to be shown than it is feasible to include in the text. I will then discuss the *key moments* relating to this *genre*. A *key moment* is an extract of the data selected for further analysis (see 4.5.2.2, Key Moments, for further information). When discussing *key moments*, I have grouped these under subheadings with the aim of assisting the reader in navigating the chapter. Reflexivity in relation to the findings is presented as a discussion on the process as a whole and so is addressed in the final findings chapter. Given *key moments* often used multiple genres the different genres were considered concurrently. Consequently, it would not be possible to separate out my reflexive thoughts in relation to each genre and disperse these between the four findings chapters.

5.3.2 Use of Quotations

The quotations included in this chapter are longer than would be usual when using thematic analysis and are more typical of the length of quote you might find in a study using narrative or discourse analysis. I have quoted as much of the *key moment* as was feasible to assist the reader in understanding my interpretation and analysis. Omitted text is indicated by ellipsis (...). Longer quotes give space to participants voices and allow the reader to interact and respond to both my interpretation and directly with the data (Sullivan, 2012).

This chapter concludes with an introduction the *professional genre*.

5.4 The professional genre

This *genre* was referred to fleetingly by participants, often indicated by a few words or a single sentence. It is discussed how it appeared in the *key moments* – in relation to other *genres*. It is introduced here so the reader is aware of what is meant by the *professional genre* when it is referred to in subsequent chapters.

The *professional genre* was often identifiable when participants adopted the professional language of an occupational therapist. Bakhtin (1986) states that our speech is influenced by the response we anticipate from others, given our awareness of their views and knowledge. The participants were aware I am an occupational therapist and a lecturer and so would have anticipated we shared a professional language and that will have influenced their use of this *genre*. As well as use of professional language, the participants used this *genre* when they drew on professional knowledge and skills to explain and justify their reasoning. This *genre* was also evident in discussion that demonstrated their understanding of the local practice context and the impact of this on their reasoning. For example, Morgan learnt that you would not aim to rehabilitate someone beyond their baseline, Val and Alex felt reasoning was easier once they knew the systems and what the service remit was.

Table 5.2 below includes some *sound bites* from participants to illustrate this *genre* this gives a ‘flavour’ of the *genre* and enables more examples of the *genre* to be illustrated than it will be possible to include in the discussion of the selected *key moments*.

Table 5.2 Sound bites from the professional genre

<p>Alex <i>“different MOHO components, em process skills, sequencing all that and that sort of thing”</i> <i>“because of the time constraints you can’t do that”</i> <i>“I was asking ... what is the evidence for this”</i></p>
<p>Charlie <i>“I got really involved in the literature that was out there”</i> <i>“adapting the session in the moment but based on their level of cognitive fatigue”</i> <i>“quite difficult to work on interventions...quite limited by their environment”</i></p>
<p>Chris <i>“big learning curve why...certain people were let of the ward and certain people weren’t”</i> <i>“what’s the evidence about frailty and falls and risk involved”</i> <i>“as a student I had the luxury of working with them a bit more”</i></p>
<p>Eli <i>“ had a stroke...presented as quite flat”</i> <i>“managing expectations and not promising anything you might not be able to deliver”</i> <i>“once I’d read those guidelines... it kind of cemented”</i></p>

<p>Frankie</p> <p><i>“reasoning behind hoist was for safety purposes for whoever was transferring them”</i></p> <p><i>“certain trigger things that indicated to me, that they, erm may not be taking their medication”</i></p> <p><i>“had to read up about... the best way of working with people with psychotic episodes”</i></p>
<p>Jordan</p> <p><i>“making it safe according to the regulations”</i></p> <p><i>“black bedding going on...so had to move clients on”</i></p> <p><i>“their medical history, their diagnosis, their current baseline, ... what their current physical abilities were and then getting them back to baseline”</i></p>
<p>Jules</p> <p><i>“how nerves are innovated and how that affects function”</i></p> <p><i>“being really struck by the environment of the ward as being so restrictive”</i></p> <p><i>“so you implement the lower level short term goals”</i></p>
<p>Logan</p> <p><i>“risk assessment and thinking about the patient”</i></p> <p><i>“didn’t seem to be another service...to refer them onto...people can sort of fall through the gaps”</i></p> <p><i>“I noticed that there might be a perceptual error”</i></p>
<p>Morgan</p> <p><i>“you’ve got to be responsible for the budget”</i></p> <p><i>“I gave them written risks that came with the equipment”</i></p> <p><i>“we had a standard assessment that you followed protocol each time”</i></p>
<p>Rowan</p> <p><i>“I needed to know about their processing skills”</i></p> <p><i>“doing the MOHOST I found really helpful in breaking it all down”</i></p> <p><i>“I used a bit of like quality improvement methodology”</i></p>
<p>Sam</p> <p><i>“it’s in our ethics, ethics or code of conduct”</i></p> <p><i>“I was working through the cognitive hierarchy”</i></p> <p><i>“and the NICE guidelines say”</i></p>
<p>Val</p> <p><i>“I kind of felt comfortable knowing really what we could offer as a service”</i></p> <p><i>“in the physical community setting...time was quite constricted”</i></p> <p><i>“we were looking at taking a more rehabilitative approach in terms of making a cup to tea”</i></p>

5.5 Chapter summary

In this chapter I have introduced the study findings and provided an overview of the *key moments* selected for analysis. I have also explained my approach to the discussion of *genres* and use of quotations in the chapters which follow. The *professional genre* has been introduced and *sound bites* illustrating its use provided. In the next chapter I will discuss my findings in relation to the *Bildungsroman*, which was one of the two major *genres* identified from my analysis of the data.

Chapter 6

The Bildungsroman

6.1. Introduction

The *Bildungsroman* is also referred to as the novel of education or human emergence and focusses on an individual in the process of becoming (Bakhtin, 1986). The world is experienced as a school we pass through with the idealism of youth becoming resigned to mature pragmatism. This process requires adaptation and acceptance of the laws of the world (Bakhtin, 1986).

Given the educational nature of practice placements and the fact that the students were addressing their accounts to me (a university lecturer) it is perhaps to be expected that this *genre* was evident in all the participants accounts. This *genre* was used by participants to explain the maturation and development of their reasoning. Table 6.1 below provides some *sound bites* from this *genre*.

Table 6.1 Sound bites from the Bildungsroman

<p>Alex <i>"MOHOST...really good for structuring my thinking"</i> <i>"I suppose it's those realities of practice"</i> <i>"having an educator I could talk to about clinical reasoning that helped me a lot"</i></p>
<p>Charlie <i>"as a student I would go in with this grand plan"</i> <i>"I learnt ...you do need to do therapy with them, but it needs to be of a certain quality... being able to judge when, perhaps enough is enough and you kind of sort of step in"</i> <i>"sometimes educators expect us to be explicit in our reasoning... but they're not necessarily that transparent in explaining"</i></p>
<p>Chris <i>"it was a good learning experience...after that... I was...more aware of checking patients' notes"</i> <i>"its all about the service user....sometimes... it's not possible...because...pressures on the service"</i> <i>"on my first placement I'd have looked at it in isolation whereas by placement four I was thinking if they are having difficulty with that, then they may also be having difficulty with this"</i></p>
<p>Eli <i>"can read some evidence and it tells you this... but if the person and the service...doesn't fit"</i> <i>"a person might not be able to do exactly everything they want to do"</i> <i>"the emphasis is very much on you as a student connecting the stuff you are learning in Uni to the stuff you are learning on placement"</i></p>

<p>Frances</p> <p><i>"it's like riding a bike you do it naturally not knowing you are doing it"</i></p> <p><i>'all the critique and everything I got from the second one, that, I worked on it, so I, for the third one, um I could try and improve'</i></p> <p><i>'it feels like I've grown this course, erm from the first year to now'</i></p>
<p>Jordan</p> <p><i>"clinical reasoning had to underpin why they were going against the consultant...that was very helpful to see"</i></p> <p><i>"their <u>choices</u> and their independence is the most important, and then when you're faced with the reality, that, that doesn't work"</i></p> <p><i>"put that flesh on the bones of what you've learnt"</i></p>
<p>Jules</p> <p><i>"you have to be part of the system"</i></p> <p><i>"using sort of evidence-based practice to, to sort of think"</i></p> <p><i>"needed the time to really <u>process</u> that information before I could make some <u>proper clinical</u> recommendations"</i></p>
<p>Logan</p> <p><i>"good to be able to speak to your educator because, the, you know if you're on the right track"</i></p> <p><i>'something that I learnt...I would have liked to do rehabilitation...but for them that was not really appropriate'</i></p> <p><i>"asked a lot more questions of me...it definitely helped me to articulate things"</i></p>
<p>Morgan</p> <p><i>"liked to ask loads and loads of questions to the point where I was like it really overwhelming"</i></p> <p><i>"taking longer to do my clinical reasoning than in my first few placements...because I don't know if I had enough ideas or enough knowledge"</i></p> <p><i>"this is the best out of bad solutions.. one that will keep them the safest"</i></p>
<p>Rowan</p> <p><i>"trying to work out even if that's what they want, is that going to be the best thing for them"</i></p> <p><i>"doing the MOHOST I found really helpful in... breaking it all down and seeing those strengths"</i></p> <p><i>"my reflection on it was further down the line it will all go back to how it was before"</i></p>
<p>Sam</p> <p><i>"get overwhelmed so...it was really uncomfortable...but...come away feeling like I had learnt a lot"</i></p> <p><i>"it was a really nice development...because in the beginning it felt like ah I am not quite sure"</i></p> <p><i>"doesn't feel right to discharge someone...but we're limited by...the structures of society"</i></p>
<p>Val</p> <p><i>"positive risk taking is something I can really learn from my placements"</i></p> <p><i>"a little more space... you had more time...talk together and go through the clinical reasoning"</i></p> <p><i>"but it really did get easier"</i></p>

6.2 Introduction to key moments

This section begins with some *key moments* in which the participants discussed how they experienced professional reasoning as complex and overwhelming. This is followed by *key moments* relating to the participants' discussion of managing this complexity. This section is structured using the subheadings below.

- A nine-track mind -the complexity of reasoning
- Time and space to reason
- Scaffolding reasoning
 - Treatment protocols
 - Documentation guidelines
 - Occupational therapy conceptual practice models
 - The practice educator as a role model for reasoning
 - The practice educator's questions

6.3 A nine-track mind - the complexity of reasoning

Frankie, Morgan, Eli, and Sam discussed their experiences of the real-world complexity of reasoning.

Frankie spoke about the complexity of reasoning and cited Mattingly and Fleming's (1994) seminal study that suggested there are three tracks (procedural, interactive, and conditional) to occupational therapists' reasoning.

Frankie: I don't even think it's a three-track mind, I think it's like a nine-track mind [both laugh] I think three is, really like you're using different modes all the time, and that's what I, I think. Coming out of my last placement, I've kind of, you're learning, the different modes of reasoning all the time. So, it's not just, I'm going to use procedural for this, I'm going to use interactive, you're learn, you're using everything all at the same time [Clare: mmm] and then you are also reflecting in action so does this fit for that person? No, that doesn't fit for that person, so I'm going to try to employ that. But you're doing it without thinking about it. So, I think with the placement, the placement given me, you, the skill, to start to introduce you to it, okay that's, that, I'm not too sure what that is. But as you go through, I'm realising that I'm developing more on this. So, I think for me it's like now it not just a one-track thing you're always clinical reasoning, you're always using clinical reasoning for everything you do. (Frankie, p. 13-14)

Frankie: You have to learn to develop the skills. I don't think I could have done all of that in the first, well for me personally [Clare: mmm] in my first placement. But as

we've gone through placements, I've been able to develop more on that [Clare: mmm]. Because I didn't get it in the first placement, the first placement, OT. But it didn't actually drop [Clare: mmm], OT like it drops, but it doesn't drop. So, I didn't actually get that, get it, but then, so, but looking back and understanding the way I am now to where I was in the first placement, I'm like oh my gosh I actually understand now there's so much different modes there's so much different things going on. (Frankie, p. 15).

Frankie emphasised their experience of the complexity of reasoning tripling the three-track reasoning discussed by Mattingly and Fleming (1994) to nine tracks. They also discussed the challenge of considering multiple factors at the same time, rather than one factor at a time, and the need to reason in the moment to modify what you are doing. The *Bildungsroman* was indicated by their discussion of their development. There was a sense of amazement and wonder at the complexity of reasoning and pride that they had been able to progress so far in grasping this. The *professional genre* was used when Frankie discussed where they were now using terms such as “procedural” and “interactive”. When they discussed their first placement the language was more informal “it didn't drop” perhaps mirroring their limited grasp of professional reasoning at that point in time.

In the *key moment* below Morgan spoke about their reasoning around what type of washing and dressing assessment to carry out and the realisation that this was more complex than it initially seemed.

Morgan: Yeah, yeah, um I'd got it wrong a few times at the start, um [2 sec pause] yeah.

Clare tell me about that, because that's interesting when you get it wrong sometimes [Morgan: yeah] that's part of the learning.

Morgan: yeah, I um, I can, I can remember just thinking “oh they like a shower so they would have a shower” and then they'd (practice educator) be like “well no, their sitting tolerance is not good, they need to kind of erm be able to sit up for a while to do that, or their dynamic balance was not good” and also, they had to decide whether it was a one person assist or two people assist. (Morgan, p. 19).

Morgan elaborated on this a little later in the interview.

Morgan: I tended to just go along with the patient's views at the start but then I realised after looking at a few washes and dresses and how a stroke would affect someone, erm that it wasn't always possible. Some people just had to have a strip wash in bed, where the OT had them sat out on the bed, and then if there was any

issues, we could just kind of put their legs on and get them lying again. Erm and also, sometimes people would say that they would like a shower, but their baseline wasn't a shower and they kind of had the expectations that they were going to get rehabbed to the point where they were better than their baseline, um and that into consideration. Um which is nice to have that hope, but erm that, that was the reason that, one of the reasons is assessing their baseline. I was told we wouldn't rehab someone more than their baseline it would be great if that happened but that wouldn't be the aim while a person was in hospital. (Morgan, p. 20-21).

Initially, Morgan tried to work in a person-centred way by attempting to fulfil the service user's wishes. As they spent more time observing services users and listening to their educator's explanation of their reasoning, there is a sense of illumination, as they became aware of how complex reasoning was, and that there were multiple factors to consider. This development from naivety to maturity is characteristic of the *Bildungsroman* (Bakhtin, 1986). As Morgan's knowledge grew there was a shift to the *professional genre*, for example, when discussing "strip wash in bed" and "baseline". Morgan's reasoning developed from doing what the service user wanted, to considering the impact of the stroke on their ability and the pragmatic issues influencing service delivery.

Eli explained what was involved in the reasoning process and that novices need time for this.

Eli: It's like you come from college where everything is kind of told to you and you have to learn it, rote learn it. But the whole learning in occupational therapy with everything, including clinical reasoning, is like internalising it, it becomes a part of who you are and how you think [Clare: mmm]. You, you, that's why, I don't know, you can't just, you don't have to just, like anyone could just, just list off narrative reasoning [Clare: mmm], procedural reasoning, scientific, diagnostic, you know that, but you have to internalise it, [Clare: mmm] I think.

Clare: Mmm, you might not always use those words you know.

Eli: yeah, yeah, you know it's, it's kind of like, how you think, it's like a stream of kind of conscious thoughts [Clare: mmm]. I think that you just, when I reflect back, I always have it in my mind, kind of what I saw, so like a mental picture of what I observed along with just key things that the person said [Clare: mmm]. So, and then you kind of piece it all together to kind of come up, you have to extract the relevant stuff, [Clare: mmm] the stuff, and then, come, it like funnelling it down [uses hands to draw a funnel] this is what I need to do [Clare: mmm] so it's all this [gestures] yep, right yep, yep, yep this is, what, it [sighs] these are like the key points, this is why and this is what I need to do [laughs].

Clare: Makes it sound easy?

Eli: Yeah, [both laugh] so, but that process is hard [Clare: yeah] and takes a lot of time when you're very new to the profession [Clare: yeah, yeah] [laughs]. (Eli, p. 17-18).

There was a sense of determination when Eli spoke about how hard and time consuming it was to filter out the relevant information. The suggestion of complexity here, although initiated by me, was based on what Eli had already said about their experiences of reasoning on their placements. In the *Bildungsroman* the individual's development is linked to acquisition of roles (Michelson, 2012). To become a part of the occupational therapy profession Eli had to internalise reasoning, it had to become part of their identity.

Morgan explained that awareness of complexity meant there was more to think about and more questions to answer.

Morgan: I think developing your clinical reasoning comes as you get more into doing clinical reasoning you have more questions that you need answering. I don't know if it like in time those questions will be answered and I'll just think of them straight away but at the moment, yeah if I put in any equipment for someone, I feel like I'm just going to have a ton of things I need to ask on how it's going to be suitable for someone and what risks it's going to impose. (Morgan, p. 7).

The development associated with the *Bildungsroman* opened Morgan's eyes to the multiple factors that needed to be considered when reasoning. Although they currently experienced reasoning as a slow and somewhat overwhelming process, they looked forward to a future in which reasoning might become more instinctive.

Sam also discussed the complexity of reasoning.

Sam: In the later placements, it was just confusing, and I was doing treatment planning, trying to kind of plan the session, and think okay, well maybe if we do this, and do that, but is that actually testing this? And, um, yeah, there was some times where I was like in a swamp, [laughs] and it was, [2 sec pause] it was, yeah, it was, it was hard to um navigate in a way. But then actually, I think maybe actually, just about stepping back makes a difference, and I don't want to say not thinking about things too much. But, um, it felt like that seemed to resolve a bit with time actually. (...) There's something about having that, the process, so going in and being in the swamp and then just swimming around and being like I don't know how to make

sense of it, but then actually something seems to emerge. But the swamp is such an important part of, of the process. And then it can seem strange that there even was a swamp, because it just seemed more automatic, or it seems like ah, it seems much more obvious, and I suppose that the swamp also relates to the alien where it's like "but where are they getting that from? I don't, yeah, there's a step that I am kind of not quite seeing or missing [2 sec pause]. And then it just made me think, just now, on how some of the reading I was doing, it was saying, this is, I would agree with this from my experience, of how having the same example or similar case studies makes a difference for clinical reasoning, but educators might vary it to give you variety. But then it's hard to put together the kind of steps or the structure or make sense of what's going on [Clare: mmm] [3 sec pause] yeah. (Sam, p. 9).

Brandist (2017) suggests the *Bildungsroman* involves a process of socialisation where the views of others, which may at first seem alien, are adopted. In this *key moment* Sam used the term 'alien' to describe their confusion when trying to follow their educator's reasoning. It is as if there are steps in the educator's reasoning that were not visible to Sam. Perhaps because the educator could reason more fluidly and instinctively. The overwhelmingness of reasoning is indicated by references to "swimming" in a "swamp". Sam's resilience allowed them to tolerate being lost in the swamp and over time their understanding grew, and reasoning became more instinctive, so much so, it then felt "obvious" and "automatic", as if the swamp did not exist.

For some participants reasoning was experienced as a more complex process than they initially anticipated and could be overwhelming. The experience of managing complex reasoning processes supported the development of their reasoning, and some participants described reasoning as becoming more instinctive over time.

6.4 Time and space to reason

Logan, Jules, Charlie, Eli, and Jordan, spoke about the time and space needed for reasoning.

Logan discussed how helpful it was to have time to reason.

Logan: in terms of the development of my clinical reasoning, um I think it was really helpful for me on that placement to have had the time before each session to be able to, you know, I literally typed up a session plan. And, um, so, you know I was able to think about what resources I might need. I thought about the time and structure of the session and [2 sec pause] yeah that very much helped me. Because I like to feel confident in what I'm doing [Clare: mmm] and luckily on that placement I had the time to be able to do that, which obviously not all placements have that [Clare: yeah]. But while I was at that stage of the first time of sort of doing it on my own, it really

helped me to have that time, and then a lot the time I'd just go up to my educator and say does that look okay? And everything to have that opportunity as well to get feedback from them was very helpful for me. (Logan, p. 17).

The *professional genre* was evident in references to “session plan” “resources” and “time and structure of the session”. Having time to reason was mentioned three times in this short extract. This was experienced as reassuring. The development associated with the *Bildungsroman* was suggested by the fact that the time allowed Logan the opportunity to learn how to plan session independently and become confident in their reasoning.

Jules also described how reassuring it could be for a student when the placement context allows them time to reason.

Jules: So you're going through that whole process of getting the information and obviously you have the referring information as well and you are thinking, you know, what, what's been identified on the referral, what is the parent identifying, what might be the child's priority if you can get that from them, and then use that information in the short term to get more information, by choosing a game, or picking an assessment, or whatever it is, picking an activity, and then you go away and you sort of process all of that. I really liked being able to have that time as well. (Jules, p. 15-16).

Jules itemised the multiple different sources of information they needed to process (the referral, information from the parent, information from the child, their own observation, and the assessment results). For both Jules and Logan, the way the service was structured enabled time and space to reason, this enabled them to process multiple sources of information. This was suggestive of the *Bildungsroman* with the time and space facilitating the development of reasoning.

Charlie spoke about the development from needing time to reason after the session, to being able to reason in the moment during the session.

Charlie: I found I was, with that I was reflecting after the sessions and thinking okay, maybe I shouldn't have done this and maybe I shouldn't have done that, and maybe I need to adjust the session in this way [Clare: mmm]. Erm and I found it came more implicitly as the placement went on. So, I was able to do that in the context of a particular session with them. So rather than adapting my response to kind of eliminate something I'd sort of acknowledge their frustration and give them a

strategy to work around it. So, if they were finding difficult to put their socks on erm, they were becoming verbally frustrated I would just get them to stop, catch their breath for a moment and then go back to doing it...

Clare: And did it work that strategy?

Charlie: It worked really well for them and I kind of felt like I was doing it without even realising that I was doing it [Clare: mmm] which I suppose from my perspective it felt quite reassuring, that actually, instead, whilst I initially felt really kind of challenged as to how am I going to manage their frustrations but still achieve the things that we want to achieve. [Clare: mmm] Um, that it was more, being able to do both in the moment sort of implicitly without realising it and I don't know if it was my confidence and experience working within a particular setting [Clare mmm] erm, and that kind of thing really and for the, they made some really good gains that I think if I had just given in to the frustration all the time and had of graded things down they wouldn't have made the gains that they had made. (Charlie, p.14).

Use of terms such as “adapting my response” and “give them a strategy” suggest the *professional genre*. Charlie described the movement from being very conscious of their reasoning and this taking time (unable to do it in session needed to do afterwards) to being able to reason “implicitly” in the moment “without realising it”. This *key moment* was underpinned by Charlie’s sense of responsibility to achieve the best outcome for the service user. There was a development in Charlie’s ability from feeling challenged, to gaining the confidence and experience that allowed them to facilitate the session effectively. Achieving this progression in their reasoning also meant the patient made gains in their rehabilitation.

Eli discussed their experience of reasoning in the moment when working with a service user.

Eli: Erm so we're, we're just really querying cognition [Clare: mmm]. Erm, but then the real change came from moving from assessment to intervention [Clare: okay] and kind of building that rapport, because the barriers came down and I built a rapport with them. I could start asking these questions that for me were really helping [Clare: mmm] the reasoning. Because I had space and time while we were just walking along to really think about okay where am I going with this person, and what, what do I want to do? I think having that space is really important [Clare: mmm]. In the assessment I felt a little bit under pressure [Clare: mmm], so I think you can't always think clearly, and always reason and I get in a little bit of a tizzy when I feel under pressure. But then having the space to come out of it, and to really digest what you've seen [Clare: mmm]. So, for me it's very much like, I'm not at that stage where I can reason in the moment, I don't think, it's very much after, I think, what have I seen there? Then I sort of think for myself, this is the reasoning I'm coming up with, and then it is nice to go and, so kind of almost through reflection, I guess. That's been a really key tool, because I've noticed, since I've been reflecting well or better my reasoning has come on [Clare: okay]. So, I think reflection is a really key tool. So, with

this person that's when I almost started reflection-in-action a bit more, and then the clinical reasoning in the moment kind of happened [Clare: mmm]. Because I had the space to kind of think, you know, bring it all together, watch them walking, watch their kind of anxiety drop [Clare: mmm] and I noticed, I started noticing things like they were joking with me and showing higher thinking like planning "oh we've got another (OT's name) the OT is coming back [laughs] with you next week on the 5th" and I think wow they've just remembered that, they haven't read it, they obviously can plan [Clare: mmm] and think ahead, and joke with me and understand, and kind of subtext and the irony and [Clare: mmm.] So then, I just, it sort of started, I started thinking more like, wow they're, it's changing, like my reasoning and I'm think, now like it's, it's, its changing. Because I have the space, built the rapport and um, yeah. I am just trying to think like to the point of why, why it changed. 'Cause I know that's what you are interested in [laughs]. Um, [2 sec pause] yeah, like, [2 sec pause] with competence as well and sort of knowing [2 sec pause] having confidence in yourself [Clare: mmm] confidence and competence where, you've, kind, you know the basis of your area [Clare: mmm]. So I kind of, by this point it was week 6 or something [Clare: okay] and so I'd kind of got a while to get used to stroke and sort of seen a few people before and know what I'm really looking out for, and the more that, that becomes on autopilot, and like the reflection becomes a bit more on autopilot you start dipping your toe in reflection-in-action that when the reasoning comes on top. (Eli, p. 5-6)

I think reasoning is quite like an advanced higher function of OT, like it's quite a big thing like, you can read and kind of think of, yeah I kind of get that but to actually do it in the moment, or even after, it takes a lot of thinking [2 sec pause] I can definitely feel myself building on the skills, but I'm not, not quite there yet [Laughs]. (Eli, p. 6).

At the beginning of this *key moment* the *professional genre* was suggested when Eli queried the service user's cognition. This *genre* was threaded through the *key moment*, for example in the reference to the importance of reflection and reflection-in-action. Eli was just beginning to be able to reason in the moment, describing themselves as a novice, "tip your toe in reflection in action". They identified how important building rapport with the service user was to their reasoning and having the time and space to reason. There was a sense of amazement about the development in their reasoning this brought. Michelson (2012) associates the *Bildungsroman* with maturity because of self-knowledge, and this was evident when Eli spoke about their development; through experience they learnt they needed to use reflection, and that they needed time.

For these participants the development in their reasoning associated with the *Bildungsroman* needed time. Some practice-based learning contexts allowed the participant time to reason outside of the session with the service user. For Eli building rapport allowed them to set the pace during a session and reason at a speed that worked for them. The participants described an initial difficulty reasoning in the moment. With time, and a growth

in knowledge and confidence, reasoning became more instinctive, and reasoning in the moment was possible. Autonomy and space away from their educators were also important for the development their reasoning.

Michelson (2012) suggests that in the *Bildungsroman* a lack of experience leads to mistakes and that acquiring and using experience results in positive outcomes. With autonomy came the need to reason in the moment without the support of the practice educator. Schon (1987; 1991) would refer to this as reflection-in-action, the ability to ‘think on your feet’ and generate and implement immediate solutions to problems. When the need to reason in the moment arose out of an error the participant had made, sometimes they were able to reason quickly and arrive at a solution, as we see in this *key moment* from Logan.

Logan: Um, hmmm, it [2 sec pause] yeah it didn’t go to plan [laughs].

Clare: It doesn’t always [both laugh].

Logan: No, it was it was okay, um I think in all of those sessions I, we managed to do everything I’d planned it just wasn’t in the same order [Clare: mmm]. Um, so that was particularly something, in the first session, that I definitely learnt, and I changed it for the next time. But in the first session with him I had everything out in the room on display [Clare: okay] that we were going to do in the session [Logan laughs] so obviously then he just got distracted by everything [Clare laughs] and, yeah, so I kind of I just went with it, in that, I think, I think there was a ball or something that he just immediately went to and I hadn’t planned on doing that first, but I just said okay we’ll do this for five minutes and then we’ll move onto another. It was just a different order, and the way I sort of dealt with that in the session, was when we finished something I put it back in the cupboard and then it wasn’t out anymore [both laugh].

Clare: A bit of thinking on your feet?

Logan: Yeah, um, and then, so for the next session I didn’t have everything on display [both laugh] and I also got one of those, like a board up that they use, like it was used in other sessions as well. With pictures of what we wanted to do and say now we are using this and have a start and finish and it was quite a clear visual thing. (Logan, p. 14).

My “it doesn’t always comment” at the start of this *key moment* was intended to reassure Logan that (in my view) mistakes are a normal part of the learning process. Their “no it was okay” response, is what Bakhtin (1984, p. 196) refers to as “a word with a sideways glance”. Perhaps fearful of being judged, Logan provided unasked for reassurance about their professional competence. The separate protagonists (present remembering self and past remembered self) associated with the *Bildungsroman* (Michelson, 2012) were evident.

Looking back, they saw their reasoning around setting up the session as inexperienced; laying out all the activities they planned to do “obviously” meant the child would be distracted. At the time they were able to reason in the moment and regain control of the session by putting away objects after use to avoid further distraction. Development in their reasoning was evident in their confident approach to the next session with the child, where having learnt from their mistake they carefully implemented a range of strategies to keep the child on task. The *professional genre* became more evident at the end of the *key moment* as Logan discussed their solution which involved a board with visual cues for the child.

For Jordan the experience was different when their educator gave them the freedom and space to implement their own reasoning.

Jordan: I'd seen some community services that were available that might help them to engage socially. Help them to engage er socially, [Clare: mmm] and help them to be able to kind of, yeah work through the anxiety, engage in occupation, and I think that was, was quite different from what my educator was doing, and so I think I suggested with this work, and that was where it was, I felt quite, I'm not sure if this is the right thing to suggest [Clare: okay] and I I'm not sure if this is right, because I also had no theory, I didn't have theory to say this is what, this is. This and this reason, [Clare: mmm] I think this might be a good intervention for them, or I think this might be a good, this will help them to work towards their goals [Clare: mmm]. So yeah, I think there were two clients where they gave me, yeah one, one they gave me the freedom to say what do you think [Clare: mmm] and the other one it was more their client. But I just saw something that I thought might be a good intervention and then [Clare: mmm] and then feeling like can I say this and how will that, how will that be perceived.

Clare: Mmm, and how was it perceived?

Jordan: So, I think, so it, it was, like my educator they weren't totally er sure that it was the right thing [Clare: mmm]. But they did give me the freedom to say, suggest it to them in the session [Clare: mmm] see how they, see how they respond to it. I, um, so I, so I did that. It didn't go, it [Jordan laughs], it didn't go very well [both laugh]. Because I, um, I was, I hadn't anticipated how they would, how they would, receive the information and they got very anxious about going to this group, and I hadn't explained that I would, the whole process of how it would happen, and that I would go with them that we could do it in small stages [Clare: mmm]. So, I think it was, I could see now from the educator's perspective, it was very much, it was, it was too much of a step for them at this stage [Clare: mmm]....They did say that the way that I delivered, kind of, delivered the, the information to them wasn't as helpful as it could have been in terms of explaining the process [Clare: mmm] and maybe heightened their anxiety instead of, instead of yeah helping it. (Jordan, p3).

Mistakes in the *Bildungsroman* are usually related to inexperience and success is related to amassing more experience (Michelson, 2012). On one of their earlier placements, Jordan's inexperience meant they overwhelmed the service user, ironically increasing the very anxiety they were attempting to decrease. Jordan recognised that their reasoning at the time was uninformed by theory. Reflecting on this event Jordan positioned themselves alongside their educator, demonstrating their growth in understanding. Again, the split protagonist (present self and past self) associated with the *Bildungsroman* is evident. The more 'sure-footed' (Michelson, 2012, p. 207) present self contrasts with the inexperienced past self that made the mistake. Although at the time Jordan was unable to reason in the moment and correct the error, their educator's careful handling of the situation allowed them to learn from their mistake. The *professional genre* was used by Jordan to justify their reasoning and explain what they learnt.

On a later placement Jordan discussed the importance of autonomy for building confidence in their reasoning.

Jordan: the service I was with was very relaxed and I was given a lot of autonomy I think that definitely helped me to just go yeah I had to, yeah I was kind of thrown in the deep end and you know just had to get on with it and it actually helped me to build my confidence [Clare: mmm] to just, I kept doing things and thought and said if I'm doing anything wrong tell me but this is what I'm going to, this is what I'm doing with, this is what I'm doing and this is why I'm doing it but if it wrong tell me [Clare: mmm] because of, yeah.

Clare: How do you think that, yeah, it's interesting, how do you think that autonomy helped then?

Jordan: Yeah, I think so. I think it felt, I think I felt that it gave me the freedom to operate as, kind of putting the theory I'd learnt into practice and just being given open licence to get on get on and do it helped. Just really helped me to build my confidence but also to go out and do things as I thought they should be done. And as I say, I think it was giving me, I felt if I'd been doing anything wrong, or anything I shouldn't have been doing, [Clare: mmm] or was practicing unsafe, they would have said. And I think I spoke to my educator, and I said, "I feel I've just got on with things and you've let me". They said "yeah I know what you're doing, and you've told me what you are doing, and if there was anything unsafe, I would have stopped you. But I've, I've just seen what you're doing, what I think, so I've just let you progress with that". And so, I think having the freedom to explore different options and some of them were right, some of them weren't right, some of them may not work out. But just being given that freedom to explore different options and gather a lot of information from different from different er perspectives [Clare: mmm] really helped to build my confidence and to build. Um, and as I say I think because I had, I had to explain why, what I was doing and why I was doing it, that also made me go through

my different kinds of reasoning. So, you had to get, I had to explain to my educator what I had done and why I'd done it [Clare: mmm] so that also helped to kind of build, yeah build that up [Clare: mmm] as well. (Jordan, p. 28-29).

Jordan used the word “build” six times emphasising the impact of the experience of autonomy on the growth of confidence in their reasoning. Autonomy allowed Jordan space away from their educator and freedom to reason for themselves. The development in their reasoning associated with the *Bildungsroman* needed this space. For Jordan the space away from their educator removed the pressure of being observed indicated by terms such as “relaxed”, “open licence” and “freedom”. There was also an acceptance of not always getting it ‘right’ first time and this being part of the learning process. The need to articulate their reasoning to their educator helped to build reasoning. The concern for safe practice is suggestive of the *professional genre*. The freedom came with safeguard of the educator and Jordan discussing Jordan’s reasoning.

Eli discussed the growth in confidence in reasoning in the moment that arose out of space to be autonomous. The educator’s approach indicated an acceptance that not getting everything right is part of the learning process, this was reassuring for Eli.

Eli: I didn't always in the moment I remember being quite hesitant in my first kind of three placements I wouldn't ever really, I'd think I could do this, but I'd never do it [Clare: mmm] because I wouldn't have the confidence. It wasn't until placement four when my educator kind of, it was community and my educator kind of gave me a bit of breathing space [Clare: mmm] and I felt quite safe. I think that was quite a key thing, I felt, that last educator, I felt really kind of safe to explore things and read things and try things out, the, you know, if I went back to them and I hadn't quite done it right it didn't feel like they'd be scary or like have a go at me [Clare: mmm]. You know it was quite nice to almost experiment with your reasoning [Clare: mmm] and then have feedback [Clare: mmm] about how you know, how they would have done it perhaps, or if you tweak this bit, or no that was really good. (Eli, p. 25).

This *key moment* from Eli illustrated the important role of the educator in facilitating learning. Eli was liberated and enabled to reason in the moment. There was a reassuring feeling of having been held but not constrained by the educator, being “safe” and having “breathing space” and with this came confidence in reasoning. Here the educator’s acceptance of error facilitated the learning and development associated with the *Bildungsroman*.

For these participants development in their reasoning was experienced when their educators provided them with opportunities for autonomy. This autonomy allowed the participants space to develop their own reasoning. The practice educator's tolerance of imperfection and acceptance of error as a part of the learning process, together with feeling safe to discuss reasoning, supported the development of the participants reasoning.

6.5 Scaffolding Reasoning

As previously discussed, (see Section 1.5.2, Scaffolding), the concept of scaffolding is attributed to Vygotsky (1978) and involves providing support for learners, when needed, and at the level needed. Support can be provided in several ways, including provision of materials, frameworks, and discussion (Pritchard, 2014). Some of the participants in my study spoke about resources that supported their reasoning. These included, treatment protocols, documentation guidelines and occupational therapy conceptual practice models. In addition, their educators explaining their reasoning and using questioning to elicit the participants' reasoning was experienced as helpful in scaffolding reasoning. Each of these scaffolds will be discussed below.

6.5.1 Treatment protocols

In the *key moment* below Jules discussed how the service was structured and how treatment protocols shaped their reasoning.

Jules: "So, the box of tricks, there's lots of box of tricks basically [laughs] and they have pathways that they run the service on. So, there would be a sensory pathway, and a bilateral co-ordination pathway and a dyslexia and dyspraxia pathway, um, and so within that, you'd sort of work within those parameters. So, we had a nice little guide basically, so you knew which direction you were going in, and then obviously you'd use your own reasoning to be person-centred. I kind of feel like, that is how I've used it really in terms of, you know, you have to work within the structure of the service that you work in, you know, and there's a limited amount of resources. So, you know, in terms of for example in an assessment, deciding what kind of standardised assessment to use, what kind of questionnaire or you know to use [Clare: mmm]. Yes, you do use clinical reasoning, but the choices are four (laughs) [Clare: mmm], so it's quite a limited choice really" (Jules p14).

In the *Bildungsroman*, to develop the individual needs to “recognize and submit to the existing laws of life” (Bakhtin, 1986, p.23). In this context Jules needed to know the contents of “box of tricks” to scaffold their reasoning. In this *genre*, the world is a school and often “turned out to be more impoverished and drier than it seemed at the beginning” (Bakhtin, 1986, p. 23). The expression “box of tricks” and laughing reference to just three pathways to choose from suggests limits to the reasoning required to choose one of the pathways. The reference to “obviously” using their own reasoning to be person-centred could be a *word with a sideways glance*. Perhaps Jules wanted the listener to be clear they were not solely dependent on the “box of tricks” to support their reasoning and that they were acting professionally and individualising therapy. The *professional genre* is threaded through this *key moment* and can be seen in Jules references to the different pathways, being person-centred and the selection of standardised assessments.

6.5.2 Documentation guidelines

Jules and Logan discussed the importance of the subjective-objective-analysis-plan (SOAP) structure for scaffolding their reasoning. This is a standardised method of documentation used by occupational therapists, often referred to as SOAP notes. Documentation is structured using the headings subjective, objective, assessment, and plan (Gateley and Borcharding, 2016) and some participants found this structure helpful for scaffolding their reasoning.

In the *key moment* below, Jules discussed the relationship between SOAP notes and their reasoning and how their educator shared their own notes and reasoning.

Jules: The first sort of idea I got around clinical reasoning is the ‘A’ section of the SOAP notes, you know. So, I first started doing that on my first placement. So, I guess, there, actually I would have been sort of trying to use my clinical reasoning independently, you know, by myself. Independently, because my educator would ask me to write my own SOAP notes, and then they would write their SOAP notes, and then we would compare them and see if we were sort of coming up with the same ideas, which generally we did. Um, I think maybe there would be times when they said, “mmm, did you think about this, you might have missed this thing out” or reminded me and I’d be “yeah okay I forget about that” and then get to the sort of plan [Clare: mmm] part of it from there. So yeah that’s. that’s something isn’t it? (Jules, p. 4).

They returned to this topic later in the interview.

Jules: Again, using that, I think, really that SOAP note format really helps me to form my clinical reasoning [Clare: mmm]. It's such a simple thing, isn't it? But when you separate, in my mind now, when I'm assessing somebody, that's how I bank the information, you know, and again that didn't start happening until I was on my third placement. Because I didn't do any assessments on my second placement and on my first placement, I just didn't have that, I didn't have the, you know, the, the basic sort of knowledge to filter the information in that way but by the third placement I was able to sort of you know, say if a parent had said, I know why the alarm bells were, you know. But you just get that, oh no, how did that happen? [Clare: mmm] Questioning myself, myself now. It really did happen in that placement though. (Jules, p. 15).

Jules found SOAP notes a useful way of filtering information and scaffolding their reasoning. In the *Bildungsroman* we see the individual's development over time (Bakhtin, 1986). In the first *key moment* Jules discussed their first placement, and in the second *key moment* their third placement. Development can be seen in moving from writing up afterwards with guidance from the educator to being able to store information in this way during the assessment. Jules made the point that filtering information in this way required a level of knowledge that was not present in the first placement. The reference to "alarm bells" suggests that increased experience and knowledge had enabled reasoning to become more intuitive. Perhaps this was why they doubted and questioned themselves, maybe the tacit, intuitive nature of their reasoning was not as tangible and therefore harder to explain.

Logan also found SOAP notes helpful and used them to reflect and think about their reasoning.

Logan: Um, I found the note writing really helpful [Clare: mmm] in sort of, yeah in working through my clinical reasoning. We wrote SOAP notes so then using the analysis part to, well just using the analysis part to analyse what had happened in the session. I, um, I had feedback that my notes had progressed through the placement. I kind of felt that too, that it really helped me to reflect on the session and um consider what needed to be done next and working out what the implications of everything that had happened in that session were [Clare: mmm]. So, yeah, I didn't necessarily do that many written reflections on those on patients, but I think the notes really helped me to work through my clinical reasoning. Um, yeah, reflect back on the session and plan for the next. (Logan, p. 28).

Logan used the *professional genre* when discussing completion of the SOAP note documentation. Use of the SOAP note structure supported Logan to explain their reasoning, particularly when they completed the analysis section. This process also provided the time

and space to reflect and think about reasoning. The development associated with the *Bildungsroman* needed this time and space.

6.5.3 Occupational therapy conceptual practice models

Frankie, Jordan, and Alex all discussed using occupational therapy models of practice to scaffold their reasoning. For Frankie the PEOP (person-environment-occupation-performance) model Christiansen et al (2015) assisted in scaffolding their reasoning. This model involves thinking about “how the characteristics of the person and environment interact to influence the performance of everyday occupations” (Christiansen et al 2015, p. 129).

Frankie: A model that I've used in my head from the first, no the second placement but I think it just rings true for any setting that I go into is the POP, PEOP model (...) Like if I look at the person, if I look at the environment, if I look at the occupation and the performance that basically everything [Clare: mmm] in a nutshell, isn't it? Whether it be mental health, whether it be functional, so with that, I've always got that (...) I've also got that model in (...) and I've got the model, (...) as I've got that model in the back of my head, okay what's the person, what's the environment like, what's the patient that we're looking at, what's their occupational performance. (...) I'm think, of the person, so I need to know a bit more about them (...) If I'm looking at the environment, how do I check the environment (...) The occupation how's that impacting on their performance (...) It's like riding a bike, you do it, naturally but not knowing that you're actually doing it. Well, I do it and I actually know, oh my God that's actually a model that I'm using erm I'm actually using this mode of clinical reasoning, I'm just doing it to er [Clare: mmm] to get the erm to help with the planning and to get the intervention. (Frankie, p. 21-22).

Frankie drew on the *professional genre* to explain how an occupational therapy model informed their reasoning. They described the use of the model as having become “natural” “like riding a bike”. Reasoning like an occupational therapist was becoming instinctive for them. In the *Bildungsroman* development involves an acceptance of the laws of the world (Bakhtin, 1986) and a model could be perceived as laws, or a guide for practice. Frankie when referring to the model said “I've got that” or “I've always got that” several times indicating how reassuring this was, and its vital role in informing their reasoning. The use of the nutshell metaphor suggests that the model assisted in simplifying and scaffolding the information that informed their reasoning. There was also a sense of confidence and amazement that they could now reason using a model.

Jordan spoke about how using an occupational therapy model of practice helped to guide their reasoning.

Jordan: I think it was really helpful, it's the first time I've been in a setting where they've really used a specific model at all [Clare: mmm] and definitely used it so in-depth, through everything, and I think initially it was hard particularly with my client who was non-verbal and who, was, had (states diagnosis) to try and work out their motivation or their routine [Clare : mmm] and to try to think of them in those aspects it didn't relate at all to what they were doing. I found it was very, I felt like I had to try and squeeze my thinking into those into those aspects. But actually, as you, as I, thought more in that way, it actually became easier and you started to think what is this telling me about their motivation, what's that telling me about their routine, what's it saying about their occupational. So, it gave you very structured categories to think in [Clare: mmm] and then actually did help to then focus your thinking. So initially it felt a bit resistant, but afterwards as you thought, you trained yourself to think more in those categories it did actually help you to put together a picture from those, from those aspect [Clare: mmm] and so I think that definitely helped to shape to get much more of a structure to my thinking I think [Clare: mmm] so I think that was helpful. (Jordan, p. 30-31).

In Jordan's practice setting the Model of Human Occupation (MOHO) (Kielhofner, 2008) was used to structure assessment. The *professional genre* can be seen in their use of concepts associated with this model e.g., routine and motivation. Initially the model was seen as challenging to use and Jordan was resistant to having to "squeeze" their thinking into the model. However, as they became more familiar with the model, they found it supported them in structuring their reasoning. In the *Bildungsroman* the world is a school, with regulations requiring the individual to adapt and submit (Bakhtin, 1986). Jordan initially found this process "hard" and described themselves as "resistant" the use of the word "trained" indicated resilience and a determination to persevere with a model that they initially found challenging.

Whilst Jordan had to overcome an initial resistance to using a model to structure reasoning Alex, on their first placement, had theory they wanted to use but found themselves unable to in the fast-paced acute physical setting.

Alex: It was my first, first placement [Clare: mmm]. So, obviously very new to all, and er, er observing and, and stuff, and I think things we'd been obviously been taught at university about models and stuff like that seemed to go out of the window really. Because it was very much, very, very fast paced about a lot of, and, and, er, in, and actually a lot of the critical reasoning surrounding about discharge planning [Clare: okay]. So it was, obviously it, there was, there were OT elements, in the sense it was

very much equipment provision. But it was very much sort of compensatory. So, we'd sort of get people to, you know essentially trying to get them home as quickly as possible, um safely and so they could do those sort of basic thing. But, but, I think, I remember at the time, being, er, quite frustrated just because obviously I had been taught about, say for example the like Canadian model. We had, like, you know, selfcare, productivity and leisure [Clare: mmm] and actually very much with a focus on selfcare. But I suppose, as I've, as I've got on, I've understood that a bit more, because actually that's what the different services are for, for those different things. The clinical reasoning was often about looking at their selfcare particularly mobilising, bed transfers, toilet transfers [Clare: mmm] and whether they needed any equipment for that when they are going home. I, how far off are they from their baseline, from before they came, they came in. Um, and, yeah, so it was very, yeah very pragmatic really [Clare: mmm] In that sense it was very sort of practical, you know within the limitations of the service, that's what we were there to do. (Alex, p.1-2).

In the *Bildungsroman* mature pragmatism replaces the idealism of youth (Bakhtin, 1986). Alex was initially frustrated at not being able to fully implement a model of practice “models and stuff like that seemed to go out of the window” and contrasted what they saw in practice with what they had been taught at university. The process of emergence requires acceptance of the laws of the world (Bakhtin, 1986). Alex then came to accept that individuals may not have all their needs met by one service. The focus on basic things, and use of the terms “practical”, “pragmatic” and “limited” suggest Alex was resigned to accepting a view of the world as diminished. This is something Bakhtin (1986) suggests can arise because of the maturation process associated with the *Bildungsroman*. Alex used the word obviously four times, perhaps as a means of illustrating their current position of competence.

As some participants gained knowledge and experience their reasoning required less explicit scaffolding. Chris described a move away from using structure to support reasoning in their final placement.

Chris: Erm, I think as you, yeah, it's more as I've gone through the course, by place, I think by let's say placement two. I'd really have to think about, like write down, so cognitively what are the issues or what are you thinking about physically. Really having to black and white write down. Whereas, so yeah, the fourth placement I think, I still find it helpful to do like a case study every week for like my supervision. Where I'd thought about the like, those components and then what the problems are and what the intervention was. I still found it really useful, but it came a little bit more naturally to me. Like in the moment of [Clare: mmm] reading the referral I'm already thinking okay I need to look at their environment, erm I need to have a look at, like

functionally assess how are they doing it, to be able to figure out what it is that is making it difficult. Erm and I think it's that automatically that you're thinking in that way a little bit more implicitly, I suppose. Whereas, before it was very much like black and white. I wrote it down, structured process, whereas yeah by the end it been a bit more like fluid and automatic [Clare: mmm] erm, yeah. (Chris, p. 10).

The *professional genre* was evident in the use of professional terminology e.g., “cognitively”, “physically”, “functionally assess”. Michelson (2012, p. 204) states that “change in the Bildungsroman is seen as the result of individual effort, both the world and the self are malleable, and the world is structured both to teach and to reward”. We see the effort Chris put into developing their reasoning, they supported this by writing case studies about the service users they were working with. This effort was rewarded when they began to be able to reason in the moment while working with the service user, and no longer need to go away and organise the information afterwards to reason. Chris gained confidence and their reasoning became less explicit and more instinctive.

All these participants experienced scaffolds as useful in assisting them to focus their reasoning. They also helped the participants process what could be experienced as an overwhelming amount of information. Interestingly, for Jordan this process initially felt constraining before becoming enabling and both Jules and Chris spoke about being less consciously reliant on scaffolds on later placements and reasoning more instinctively.

6.5.4 The practice educator as a role model for reasoning

The educator’s explanation of their reasoning could expose the participant to a different way of thinking and increase their awareness of the factors the educator was considering. This type of learning experience could scaffold the development of the participant’s reasoning as they began to appreciate the multiple factors they needed to consider when reasoning. In the *key moments* below Charlie, Val, Eli, and Morgan discussed their experiences of listening to, and learning from, their educator’s explanation of their reasoning.

Charlie discussed the complexity and context dependent nature of risk-assessment and how they experienced learning from their educators reasoning.

Charlie: I sort of felt like the whole placement was a bit of a light bulb moment [Clare: okay]. But, I guess, I suppose the biggest thing for me was around, er, managing risk. So, I suppose a lot of my previous experience to date had been working, er, with

patients, in more elderly settings. And so, (pause) what I tended to find was that working with someone in an elderly setting they might say, if you can't get up the stairs for whatsoever reason, then, it's, it's almost acceptable to say to an elderly person to have a downstairs setup [Clare: mmm]. But to say to a thirty-year old who's lost a leg, actually you're going to sleep downstairs for the rest of your life because getting up the stairs is too risky, wasn't quite so acceptable. (Charlie p. 7).

Charlie provided an example to illustrate this.

Charlie: They'd have to sort of position their body to sort of hitch their prosthesis over the step and things like that. Looking at it, it didn't look (pause), a hundred percent safe, but (pause) it wasn't frowned upon for them to do that and the advice wasn't given to them to not do that. So, I think for me it, was, having that discussion with my educator [Clare: mmm]. Okay, so we're saying that it, it's not the safest thing for them to do, in that it would be safer for them to say, for somebody to help you over the step. But, for them, them being young they want their independence to be able to do that [Clare: mmm]. So, (pause) discussion with my educator around actually, these are the different ways that they could do it but the way in which they were doing it, which was what my educator had recommended, was actually the safest in all of those options [Clare: mmm]. Erm, (pause) and I think for me, it was just a moment around thinking, that makes absolute perfect sense. (Charlie, p. 7).

The light bulb moment suggested a transformation in Charlie's reasoning as they grappled with the complexity of assessing risk and the impact of context on this. Charlie's initial interpretation of observing a patient exit their front door was that this was unsafe. However, after their educator articulated their reasoning, this was illuminating for Charlie. They re-interpreted the situation and saw the risk as acceptable rather than unacceptable. Charlie learnt to adapt to the context and was supported by their educator to develop the future orientated conditional and narrative aspects of reasoning. They learnt to tolerate risk and began to understand the complex balance between risk and independence.

Val discussed their experience of an assessment of a service user's road safety and contrasted their reasoning their educator's.

Val: I think because, I think because I am a student, I was, it hard not to be a little bit over, like a little bit risk adverse at points [Clare: mmm]. I think positive risk taking is something I can really learn from my placements [Clare: mmm]. But I think, I think there was one point where they hadn't looked, well they hadn't looked properly one of the ways. But actually, it was fine, and I was a bit worried about that. The, sort of, OT was saying "well you know, but it was fine and all the other times they did look and if we look at the big picture" and, and I think I was a bit like "oh God they didn't look one particular time" and quite nervous about that [3 sec pause] but then it's also

thinking then what your recommendations would be and [3 sec pause] yeah. (Val, p. 5).

Val's fear, as a student, about being responsible for something going wrong was evident. Again, there was support from the educator with the future-orientated aspects of reasoning, and in understanding the impact on the service user's life story. Val learnt from their educator that risk cannot always be totally eliminated, this reinterpretation and reconstruction of the plot is typical of the *Bildungsroman* (Bakhtin 1986). Val's view of the situation was transformed, and they gained confidence in positive risk taking.

Other participants learnt from their educator to be aware of risks they had not previously considered.

Eli: yeah, erm an example of that, so (3 sec pause) I, in placement two I wasn't very good at risk assessment [Clare: okay] (slight laugh) so like (slight laugh) I remember, you know, my educator saying to me after a session, like you know, you weren't standing close enough to this person, they could have fallen. It was quite like, serious and they were like these are the reasons like, talking about body structures and then, you know, the environment and all their reasons and how they came to that risk assessment of that they need to be quite close to that person. Erm and I remember always thinking then, having that person in my mind, and whenever I was now walking with another person to the toilet or wherever, then always thinking have I got a chair nearby, do I need another person, before I kind of go in? Or when, during, you know, if I'm doing a sit to stand with them, do you know what I mean? [Clare: mmm]. So then kind of, yeah just applying that reasoning from one person to another is really helpful [Clare: yeah] So you know, I kind of learnt the art of risk assessment there, where, and then, because it was almost traumatic, like when they were, you really, I was really worried, you know, that it wasn't that safe that was like oh God, (dramatically) I could've really taken that really wrong and I could've been like I'm really rubbish [Clare: mmm] and der, der, der, der and I didn't, I kind of thought right I'm not going to, I'm to take that bad situation and now I know whenever I go and see a person. I am going to check all the things that my educator said [Clare: mmm] so yeah. (Eli, p. 21).

Eli described risk assessment as an art and emphasised the skill required. The capacity for self-realisation and reflection is associated with the *Bildungsroman* (Swales, 1978) and in this key moment Eli experienced that self-realisation as "traumatic". Michaelson (2012, p. 206) states that "mistakes in the *Bildungsroman* tend to be a function of insufficient experience of the world, and happy endings are the result of accumulation of memories of relevant experience". Eli (who was on one of their earlier placements) lacked experience in risk

assessment, and their educator's perspective transformed their reasoning. They were determined to keep the memory of this mistake in their mind in order avoid making the same error again. The *professional genre* is evident when Eli reiterates their educator's reasoning, but as Eli discusses the worry of doing something unsafe the emotion becomes more evident, and the *professional genre* recedes.

Morgan discussed an experience where they learnt that the idealism of preserving the service user's dignity was outweighed by a need to ensure their safety.

Morgan: it was good to just see how they used any opportunity to erm assess, and risk assess because they, they did present a few risks. Getting on to the toilet which we kind of anticipated, but also, they weren't really aware of what their catheter was for, and it was one that went inside, and they were trying to pull it, because they wanted to wee as well as open their bowels. They were, erm, thinking if I pull this out, I can go toilet, and to be honest I didn't spot it, because I was like give them some privacy. I looked away [laughs] and then the band seven knew better, to actually watch them go, and that it's not about privacy so much [Clare: mmm] it's more about making sure they are safe. Erm, so that was a big learning curve, kind of not to look away, because it's that social situation you wouldn't, usually watch someone goes to the toilet. That was a good, good thing to learn erm yeah. (Morgan, p. 18-19).

Michelson (2012) states that "the Bildungsroman is able to simultaneously depict the unfolding of individual development and the enfolding of the individual into social institutions and roles" Michelson (p. 203). At this stage Morgan's reasoning was still guided by social norms rather than professional norms, they were learning that becoming a professional required transformation in thinking and behaviour.

The participants' educators explained their reasoning around the more future orientated aspects of conditional reasoning that were challenging for the participants. This enabled the participants to appreciate the complex balance between risk and independence, and the negative consequences that may be associated with an attempt to eliminate all risk. Their educators also identified risks that participants missed and increased their awareness of possible risks.

Professional reasoning requires an understanding of the context in which occupational therapy is provided. Unfamiliarity with the context can be challenging for students who are

on a placement for a relatively short period (six to ten weeks), and they can be required to reason without fully understanding how therapy is normally delivered in the setting. Rowan explained how their educator's explanation of their reasoning helped to provide contextual information and scaffold their reasoning.

Rowan: Because I think it was my fourth placement, they were kind of expecting me to do the work and they (educator) would you know say "well what do you think?" [Clare: right] [laughs] and I would have to explain, um, my kind of reasoning around it. They were quite good at just slightly directing me. So, if I was going off a bit they'd say "just bring it back to the goals" you know. "Just make sure what you're doing relates to their goals" and then also, because it took me a while to get used to, because it, quite a, people were in hospital for three to four months. So, quite a long period of time, and quite, a very intense, like doing lots and lots of different things with them. It wasn't just this like one bath board thing, it's like we were doing upper limb and cognitive stuff, and it was like wheelchairs and like everything. Um, so they were quite good at kind of just bringing me back to "well at his stage normally, like typically we'd be thinking about this part of their rehab so you need to be thinking about your referrals now" or "you need to think about um ordering a wheelchair, like around now if this is for discharge. Or "you need to do like a home visit so you can do a graded" so they were kind of pointing out things like procedurally, that I should be, be aiming for, which was really useful. I think that's because there's so much information to take in again, that working out what to do first or how to go about things was, quite, yeah quite difficult. (Rowan, p. 18).

Rowan discussed the complexity of the setting and the number of options they needed to reason through. The *professional genre* was evident in the discussion of the service user's length of stay, and (supported by the educator) the different stages of the occupational therapy process (referrals, goals, interventions). In the *Bildungsroman* the world is experienced as a school through which the individual passes in process of becoming (Bakhtin, 1986). The practice educator played the role of a teacher in this school and was important in supporting the development of Rowan's reasoning. They scaffolded Rowan's reasoning by providing relevant contextual information, this orientated Rowan to unfamiliar steps and processes.

As well as explaining their own reasoning practice educators also used questioning to elicit and scaffold the participants' reasoning.

6.5.5 The practice educator's questions

Educators sometimes questioned students to enable them to articulate and develop their reasoning, Eli and Alex discussed their experiences of their educators' use of questioning.

Eli: They'd go "why do you think it's important that I got this chair for this child who", it was (describes setting) [Clare: mmm] like, and I'd go like you know "yeah well so they could sit up". I'd just be quite basic, [both laugh]. Like, I didn't really know, and then they'd do that question where they're like "well why is it a chair?" Well, I don't know exactly, cause this was like, I can't really remember, but this was like one of those corner seats that kind of sit on the floor. "So why, why on the floor, like what did you notice when Mum was putting the child on the floor?" I was like "oh, they, they were playing" and they were like "right okay so what do you think perhaps?" I don't know exactly how they said it, but it got to the point that like play is an important occupation for the child [Clare: mmm]. So, it was almost, kind of like, when, when they were asking me questions, to like, I never like it, it's always uncomfortable because it puts you on the spot [Clare: mmm] and you think oo, er, I don't know. But in a way it's kind of useful if you come out with it yourself and even if you don't and they tell you, you feel a bit crap but you kind of remember [Clare: mmm] You know what I mean? (Eli, p16).

Eli: I suppose that was their kind of way of introducing the idea of you thinking about reasoning [Clare: mmm] wasn't it? Because they're, they're asking you to think why. Again, it comes back to why, why are you doing this where is your, not evidence in the sense of evidence-based practice, but where's your evidence coming from, like why are you doing it? Is it because of what the person said? Is it what you've observed? Is it what your manager in the service is telling you that needs to get done? And all those things come together for you to formulate goals and modify your interventions as needed [2 sec pause] or like discharge that person or put forward why that person might need more therapy, or this chair or that bit of equipment [Clare: mmm] you know and its quite helpful. (Eli, p. 16).

In the *Bildungsroman* the hero is in the process of becoming and is required to "submit to the existing laws of life" (Bakhtin 1986, p. 23). Eli needed to tolerate the discomfort of their educator's questioning to develop the skills they needed for admittance to their chosen profession. Eli used the *professional genre* to justify their educator's approach and discuss the importance of being able to evidence your reasoning.

Alex also speaks about their experience of an educator's questioning.

Alex: one thing I remember was actually about how little I felt I knew at one point. So, I might, one of the supervisions I had, I, I mean I was very lucky I had a couple of very nice practice educators. Um and once I'd been there for a couple of weeks, they gave me example one of the patients they had on, in on the ward and said you know

what sort of equipment do you think you'd be providing for this person? [Clare: mmm] And I just, I remember at the time, I just felt absolutely useless, cause I just didn't know. I thought, I had, you know, I possibly had some ideas. But I because, erm, my knowledge of equipment was very little, very low, I didn't know what was available I didn't know what to [Clare: mmm] what to recommend. Um, and I, I always remember that, because it made me feel, really like, I, you know, I hadn't felt like that for a long t, when I've really felt just didn't know enough about something. Um, so I remember having, what helped me was actually having a little sort of tour with the technician. They gave me a little tour of their like storeroom [Clare: oh okay] and I think that, and that really showed me like how much you know, knowledge of, in this particular case equipment, really helped with the clinical reasoning. Because you can't clinically reason about something if you don't know, what equipment there is. (Alex, p. 2).

Alex's discomfort and inadequacy associated with their inability to respond to the educator's questions was evident. Typical of the *Bildungsroman* growth was related to the individual's effort (Michelson, 2012) and Alex's visit to the equipment store allowed them to acquire the knowledge the needed. When Eli was questioned, they were able to draw on what they had observed to answer questions. Alex required specialised knowledge to answer the questions, and understandably at this stage this was absent.

6.6 Chapter Summary

Bakhtin (1986) describes the *Bildungsroman* as focussing on an individual in the process of becoming. For the participants an element of becoming was learning to reason like an occupational therapist. This involved understanding the complex nature of reasoning and developing the ability to manage a large amount of information. An understanding of the complexity of reasoning sometimes developed from an initial unawareness that complexity existed and seeing simple problems with straightforward solutions. This was reflective of the youthful idealism of the *Bildungsroman*. An awareness of complexity could result in feeling somewhat overwhelmed by the amount of information needing to be considered when reasoning. Some participants used theory to assist them in focussing and filtering this information. They were also aided by listening to their educator articulate their reasoning. This type of learning experience assisted the participants, who could be present orientated in their reasoning, to consider the future orientated aspects of reasoning, for example, predicting the outcomes of their decisions for the individual.

Another important factor for growth in reasoning was space and time. Autonomy provided space away from the educator and time to reason at their own pace. This type of experience provided the opportunity to reason in the moment and without the 'safety net' of the educator's presence and the participants described how they became more reliant on their own reasoning. As the participants progressed with their reasoning it became more fluid and instinctive. The development associated with this *genre* could involve a transformation in reasoning and brought with it a confidence in the participant's ability to reason.

Chapter 7 – Findings

The Romantic Genre

7.1 Introduction

In this *genre* the individual does not change, instead their identity is established and affirmed as Bakhtin (1981, p. 107) states “the hammer of events shatters nothing and forges nothing it merely tries the durability of an already finished product”. The *romantic genre* is characterised by what Bakhtin (1981) describes as *adventure-time* in which chance plays an important role. *Adventure-time* is in short segments, characteristically introduced by words such as “suddenly” and “at just that moment” (Bakhtin, 1981, p. 92). Bakhtin (1986) describes the *romantic genre* as involving a test of fidelity and purity. For the participants in this study this involved a test of their fidelity to values underpinning the occupational therapy profession particularly person-centredness and occupation-centred practice. Table 7.1 below provides an overview of some *sound bites* from the *romantic genre*.

Table 7.1 Sound bites from the romantic genre

Alex “I was thinking about clinical reasoning from the person’s point of view” “most importantly for me that’s what they wanted” “the therapeutic value of activity”
Charlie “trying to be client-centred, doing the things they wanted to do” “there was a narrative with them about what was important to them” “how you can bring client-centredness into that and it can really inform your reasoning”
Chris “my hands are my livelihood...it was a huge part of their identity” “you can really build up good relationships...with patients” “so really, really focussing on their goals”
Eli “you just have an instinct, like empathy” “when I’ve built rapport that’s when it all comes to me” “really listening to them and their opinions and really valuing an occupational focus on them”
Frankie ‘I could have made a real, difference in supporting them to get back into, create, creative activities’ ‘I love the Lampart table because it gives you like a good snapshot of just so much things going on just to do one little activity.’ “there was a lot of exploring... in terms of what do you want”

<p>Jordan <i>"finding out what they really want"</i> <i>"trying to work towards the clients goals...and keep them engaged in occupation"</i> <i>"for me it was seeing by the end of it they were really, really happy"</i></p>
<p>Jules <i>"I wanted to find out...what motivates them"</i> <i>"that was one of the most positive things I've done...even through it was my worst placement"</i> <i>"I was behaving in quite a different way to my educator...that was quite scary because you are supposed to emulate your educator"</i></p>
<p>Logan <i>"so thinking about patient-centred care"</i> <i>"I was asking why we weren't getting them more what they were looking for"</i></p>
<p>Morgan <i>"I always believe that working with the family... it's nice to feel valued"</i> <i>"that was really <u>sad</u> because the reasoning was there to get them what they wanted"</i></p>
<p>Rowan <i>"I remember thinking about the narrative reasoning and what their experience of the situation is"</i> <i>"you have to maintain a good relationship"</i> <i>"thinking more about the empathy around the person"</i></p>
<p>Sam <i>"wasn't living in a very good environment...so unjust this inequality"</i> <i>"clinical reasoning can be very individual... relating to values"</i> <i>"trying to think of things that were meaningful for them"</i></p>
<p>Val <i>"Thinking about what the person wants"</i> <i>"it is important that the goal is person-centred really for it to be successful"</i> <i>"tried to tailor my groups to what people wanted"</i></p>

7.2 Introduction to key moments

This section begins with some *key moments* in which participants discuss the person-centred and occupation-centred values which informed their reasoning. Then *key moments* relating to times when these values meant their reasoning was different to their educators are explored. Finally, the romantic quests the participants embarked on (informed by their person-centred and occupation-centred values) are discussed.

7.3 Person-centred and occupation-centred reasoning

For Rowan, Frankie, and Jules their person-centred values informed their reasoning around how to engage with the service user and establish rapport.

In the *key moment* below Rowan discussed their reasoning around their approach to developing rapport with a service user they had been working with.

Rowan: From our um assessments we identified that they had problems with their sort of spatial awareness, they had neglect and that they, um some of their executive functioning was quite poor. But their insight into all of that was very, very poor, and [laughs] they were also quite negative, well not negative, what's the word? In denial of any kind of cognitive issues. Um, they also, and we also learnt very quickly from doing the assessments that they hated being tested, and I probed that a bit more with them when I got to know them a bit longer. But they'd actually left school at fifteen they didn't have any qualifications, and yeah, I think they were quite kind of resistant to any sort of judgements. So that really kind of made me think about how I was with them, in terms of not being someone who was like judging them. I tried to build, spent quite a lot of time, like the first couple of weeks like, really building a rapport with them. Trying to like make them, sort of not see me as someone who is not here to just test them, but as someone who's here to help them do what they want to do (Rowan, p. 18-19).

In this *key moment* Rowan began by using the *professional genre* when discussing their reasoning and listing the service user's impairments. A transition to the *romantic genre* came as Rowan started to speak about the service user's narrative. This informed their person-centred reasoning and empathetic approach to building a relationship. Their person-centred values were evident in their desire to "help them do what they want to do".

The next *key moment* from Frankie was quite lengthy, so I have only provided the final part of it here. To provide some context, Frankie began by discussing their efforts to develop a therapeutic relationship with the service user and identify their interests. In the *key moment* below, they spoke about the reasoning underpinning their efforts to develop rapport with the service user. Frankie explained that this was a slow process that required persistence and could not be rushed.

Frankie: More of a way befriending, but not befriending doing it a more professional way, to find out a bit more about what is going on. (...) My clinical reasoning, in that sense, was to be, to build a friendly rapport and be er, be more positive. (...) You've just come out of a negative place you've been, when I say negative place, you just

come out of hospital. I don't want to dwell on the negatives that happened in your life. I wanted to dwell, I wanted to dwell more on the positive things that happened [Clare: mmm]. So, I tried to, that's my mode of reasoning to use more positive thinking, the glass isn't half empty it's half full and just to find out a bit more about this person that we can actually do and be more interactive. So, when we would talk I wouldn't erm I wouldn't be like far away I'd be like kind of in the safe, not safe, that's erm (laughs) er professional, like having our boundaries erm in place. And it was, good, I was able to see the change after time when they actually enjoyed going to the groups.(...)They started to build a rapport and I think it's really important to build a rapport when you're working with clients, because I think that's core of my clinical reasoning I've taken away from my first placement to now. It's important to initially build a rapport with the clients that you are working with whether it be functional whether it be mental health. Because ideally, you're, you're there to support and help that person to so it's good to have a good rapport. That's what I, from my experience, from each placement it's actually helped me engage with the client more and actually get more information and able to provide a better service by doing that. (Frankie, p. 18-19).

Frankie's reasoning in relation to this service user was informed by their person-centred and occupation-centred values. As with Rowan, an understanding of the service user's narrative and empathy supported reasoning. The negativity of the hospital admission informed Frankie's reasoning around focussing on positives. The *professional genre* was evident when Frankie justified the time invested in developing rapport as resulting in the provision of a better service. There was a sense of striving towards providing what was best for the service user and satisfaction when their reasoning around person-centred approach and development of rapport achieved this. Frankie repeatedly shifted between the *romantic* and *professional genres* e.g., befriending with being professional, being not too far away from the patient with having boundaries in place. Frankie was balancing the use of therapeutic use of self to engage the service user, with maintaining professional boundaries. Frankie did not always arrive at the professional terminology they were looking for initially, e.g., replacing the word safe with professional boundaries. They are perhaps still in the process of acquiring professional language to explain their reasoning. This could also be interpreted as *a word with a sideways glance* (Bakhtin, 1984) where the speaker's words anticipate the others' words about them. Perhaps a feeling they needed to use the correct language when speaking to me and/or an effort to position themselves as the professional they are about to become.

In the *key moment* below Jules discussed their reasoning around developing rapport with service users.

Jules: You know I really thought a lot about the therapeutic use of self a lot. Because, you know, again, the clients were very chaotic, and they will react to you in very different ways. So, you need to use that to inform the kind of, you know, the kind of therapist you present to that person. Um, and I never used to believe in that, or believe in it, that that was a thing. I thought you have to be the same with everyone, surely, you know, you have to be professional, and set up boundaries, and of course you have to do all those things. But that doesn't mean you have to be the same with everyone, it doesn't mean you have to be the same all the time, it doesn't mean you have to be robotic either, there's plenty of, you know, robotic, you know, kind of professionals out there and I think the beauty of OT is that you can employ that therapeutic use of self, to, to make people feel comfortable with you, you know, and that's hugely important in that setting because they're people who are very fragile and sensitive and have been through a lot of stuff and have no trust in any professionals whatsoever. Because they've been really let down by services, like all the time since they were children [Clare: mmm] and so you really have to be, what they need you to be, in that, within the boundaries of occupational therapy. (Jules, p. 25).

Jules described their passion for therapeutic use of self “I never used to believe in that”. They embraced the “beauty” of occupational therapy and wanted to be what the service users needed them to be. Their empathy for the service users’ narratives (having previously been let down by services and lacking trust) informed their reasoning around the importance of the therapeutic use of self. They mixed this romantic value-based discussion with the *professional genre* and caveats, or what Bakhtin (1984) would describe as a *word with a sideways glance*, where the speaker’s words anticipate the others’ words about him. The reference to “you have to be professional and set up boundaries” and the final statement “within the boundaries of occupational therapy” suggested the *professional genre* and a desire to be perceived by others as professional. They also differentiated themselves from “robotic” professionals who do not individualise their approach.

Later in the interview Jules returned to this topic

Jules: So, you have to use your clinical reasoning to say what it is that you can and can't do, [Clare: mmm] and how you decide to deal with someone's impairments, you know [Clare: mmm]. Or their personalities, as well, because there is so much to do with, behaviour, and the way that someone deals with the situation that affects how you engage with them. You know, er (sighs) and sometimes that felt like, I was sort of, you know, pandering to them a little bit, or, you know, maybe allowing them more

control than I would have previously [Clare: mmm]. You know, letting them choose what kind of activities they wanted to do for example, or um, you know, I don't think, I don't think it's in so much of an impactful way, you know. It's just giving them, you know it's good to give, the client needs to have a bit of control [Clare: mmm]. They need to have all the control really because it's their lives and their treatment, they're never going to, it's never going to be successful if they are not engaged with it, and if they are not part of it. So, it's that kind of occupation side of it and being person-centred again, is all about, you know, finding out about what their priorities are and sticking with it. Which is hard because their priorities change all the time. You know, so that was, that was really challenging. (Jules, p. 35).

Jules had to reason how to engage with a service user based on their personality and behaviour. Again, the empathy for the service user and passion for a person-centred approach was evident. They faced the difficult issue of how much control to relinquish to the service user. In this extract there was another example of the mixing of the *professional genre* and the *word with a sideways glance*. A sideways glance “manifests itself above all in two traits...a certain halting quality to the speech and it's interruption by reservations” (Bakhtin, 1984, p. 205). Jules expressed some uncertainty about giving the service user too much control and pandering to them. After saying they let the service user select the activities there were several hesitations “or um”, “you know”, “I don't think” before they stated that allowing the service user this choice was not impactful. Developing a therapeutic relationship required Jules to make complex and finely balanced judgements.

Charlie discussed the need to integrate person-centred and professional knowledge-based reasoning. This *key moment* also demonstrated the complexity of being person centred.

Charlie: So, (pause) I suppose I would try to kind of be client-centred to a certain extent, but not at the expense of jeopardising their overall recovery and a lot of it would kind of be a balance around, I suppose, if I'd fitted my session in before the Physio was due to see them and I knew that the Physio would be doing quite an extensive walking on their leg (pause) although the patient's focus was wanting to be up on their leg I would know that that's going to probably fatigue them quite a lot for their Physio session. So, erm, we would have a little discussion around the focus of the session and how they, they would, like, to be up on their leg, but perhaps in the grand scheme of things it's better to maybe do a little bit and save a lot of that for later on with the Physio. Erm, and I found that quite (pause) challenging in some ways because it kind of felt like taking away from what they actually want to do. But it's, I found that having the knowledge of (pause) body systems and things and how they work was (pause) something that they hadn't even considered. So having that discussion with them [Clare: okay], it was a sort of me explaining my reasoning to them, [Clare: mmm] sort of facilitated a positive session. And so, we could adjust it

slightly, so they still felt it was working towards what they wanted to work towards, but without jeopardising their other sessions. (Charlie, p. 6).

The *professional genre* was evident in Charlie's discussion of the pragmatic contextual factors, and the use of their professional knowledge of body systems to justify their reasoning and communicate this to the service user. Charlie needed to reason through how to enact their romantic value of person-centred practice within the confines of the setting and with the service user's best interests in mind.

The next *key moment*, from Sam, illustrated the conflict between their person-centred values and their professional role in the practice setting. They alternated between the *professional* and *romantic genres* and the context prevented them from fully enacting their romantic values.

Sam: There was um one patient who, um, had (states diagnosis) and they deteriorated really rapidly, um and yeah [voice breaks], passed away within a couple of weeks and [2 sec pause] yeah I think that really affected, ... my, yeah, clinical reasoning and understanding of, right let's get them home as quick as possible. Or even, which, this person I think had difficulty processing things again, and it seemed to be that there were factors that were delaying their discharge um from [sighs], from them. So maybe, yeah, there was some equipment that could be useful, but they weren't quite sure of the aesthetics of it. Which naturally, people, people have a right to. But then there is something about, if you can't go home without the equipment then you can't go home, and I, I just think there was some other unexpressed needs there for them [Clare: mmm]. So [voice breaks], we worked with this, this, this client and tried to build a rapport. So, I suppose my clinical reasoning in that was very much working with other members of the MDT, and the social worker, and actually, I suppose, just, we can only work with where the person is, as well what their journey is. (Sam, p. 2-3).

Sam: Um I don't know why this particular person just had an [2 sec pause] yeah [voice breaks] I suppose a big impact on me [7 sec pause] yeah, I suppose this feels like this off topic from clinical reasoning. It was, I suppose, just juggling the, the role of an OT within that setting. So, um, some people were [voice breaks] maybe they are not able to mobilise anymore, but actually they just want to have some human contact and just kind of have a chat. And yeah, I suppose that can be quite difficult when there are other people to prioritise that um are actually going to be discharged soon. There are so many things to kind of do [Clare: mmm] and it's a busy ward [5 sec pause].

Clare: So, competing demands [Sam: uh huh] quite difficult to juggle?

Sam: Uh huh, yeah [4 sec pause]. But we had an, I felt like we developed quite a good relationship and managed to, you know [laughs,] sneak in opportunities.

Clare: Sneak in opportunities? [both laugh]

Sam: Just go by and have a little chat, and yeah [Clare: mmm]. Um, and so, yeah, coming back to the question about clinical reasoning. I suppose, um yeah, very much about the disease progression and that I guess impacts, you know the conversations I would have with people. So [Clare: mmm], if I had the same understanding of um the deterioration, then maybe I would have spoken a bit differently about things. Or maybe there would have been a different focus on psychological support, or um, I don't know. Or maybe things wouldn't have been different. Maybe actually staying in hospital was the right place for them. That's why in some ways they were stalling going home [Clare: mmm]. Um, but then, you know we're not, in that context you're not, there to just have people that are stalling going home. And so, it, I suppose it's, um it's tricky and I guess this is one of the things, when I was reflecting on clinical reasoning of how, when I'd done some reading it talked about values and how um that can really come into it and whether we are conscious of it or not. And I can really see, that yeah, that really informs, I think, my clinical reasoning. In wanting to, yeah do the best for people. And trying to [2 sec pause] yeah, I suppose, um [6 sec pause] yeah, I don't know how I can describe it, it's something about [3 sec pause] I guess you know it's in our ethics, ethics or code of conduct. Yeah, being person-centred and wanting the best for people and it feels that, that you know really guides what I think, think is, is right, or what feels good to do. (Sam p. 3-4).

Sam suggested that their professional, procedural knowledge-based reasoning in relation to the patient's diagnosis had become stronger in their final two placements. They identified the opportunity offered by practice-based learning to apply academic knowledge. They were wrestling with their experience of enacting person-centred values versus their knowledge of the scope of occupational therapy practice in this setting. There were no easy answers and no neat alignment between the two, as they attempted to juggle the empathetic person-centred value-based feelings about the individual's needs with the professional practicalities of the acute context. Sam's comment about going "off topic" when discussing their person-centred reasoning perhaps indicated the predominance of the medical model in this setting and the limited space for reasoning informed by the service user's narrative. When they were "coming back" to discussing reasoning this involved the use of the *professional genre* and reasoning around disease progression and person-centred reasoning being underpinned by the code of ethics. There was a lot a *double-voiced discourse* in this extract, with Sam first expressing the services user's needs, and then anticipating why these cannot be met and providing the reasoning about the remit of this service. There was also a very clear sense of Sam's commitment to their person-centred values, striving towards what is best for the service user, and sadness at not being able to arrive at an ideal solution before the service user passes away.

In the next *key moment* Jules spoke about how important a focus on occupation was in guiding their reasoning in a setting that was very unstructured.

Jules: So, the staff, the manager who really wanted me to come they really wanted an OT student, um, because they had a lot of complex cases that they needed to move on. But they kept calling me occupational health (both laugh). So, no one there knew about OT except me. But what I learnt, so much during that, my understanding of occupation, and what that means for us as professionals, and how we use that. I really, that solidified in my mind so strongly. We're actually so lucky to have it aren't we? Because the support workers would go in and they'd have a one to one with a client and they'd be I don't know where to start because this person is an alcoholic, has a mental health diagnosis, was abused when they were a child (...). How do you even pick that apart? But for me I could see that person, regardless of any of those things I'd be like so what can you do and what can't you do? What do you want to do that you can't do? It's as simple as that isn't it? (Clicks fingers) You know, what, how does it impact your ability to engage in occupation? That is the question that I'm asking myself and you can ask that, that applies in any situation regardless of diagnosis or, or anything and I always had a starting point. I was so comforted to know that I had that, you know (tentative laugh). Even if it's the most basic thing of identifying, okay this person really wants to cook a home, really wants to cook food from their homeland. There was a service user I was working with, and they just wanted to cook a meal (...) and go and buy the ingredients. (...) We went and you know, shopped for the ingredients and we made this meal, you know this really simple meal, and it just gave them so much satisfaction and they were so motivated to do the task and you know, they hadn't cooked a meal in twelve years, (...) the sense of accomplishment that gave them, that was so good, for their well-being [Clare: mmm] and that was just a simple, I think I came to that conclusion within about 5 minutes of talking to them. You know, just saying "what is it that you're finding hard at the moment?" and they said, "I just want to cook" and that was it. Hey presto, two weeks later we've done this. (Jules, p. 26-27).

The *professional genre* was threaded through the first part of this *key moment* for example when Jules referred to - "us as professionals" "complex cases" and "engage in occupation". When the focus shifted to the service user the *romantic genre* became predominant. In the *romantic genre* the hero is solitary, they embody and actualise an idea (Bakhtin, 1990). Jules was isolated – no one understood their profession, not even the person that wanted them to work in this setting. They were "comforted" by their understanding of occupation, and passionate about using this to inform their reasoning when they worked with the service user. The suddenness and just at that moment nature of the *adventure time* that is characteristic of the *romantic genre* (Bakhtin, 1981) was evident. For example, only five minutes after meeting the service user Jules was able to reason through what to work on with them. Also, the expression "hey presto" implies speed and ease almost as if a magic trick had been performed and the intervention was suddenly complete. This provided a

dramatic contrast with the twelve years that had passed since the service user had cooked a meal.

7.4 Reasoning differently from your educator

The participants' commitment to person-centredness and occupation-focused practice sometimes meant they thought and acted differently from their educators.

In the next *key moment* Rowan spoke about the difference between their approach and their educator's approach to reasoning about what to work on with service users.

Rowan: They were very, just roll it out, do the same thing with everybody. It felt very kind almost robotic [laughs] [Clare: mmm] and I was a bit concerned by the lack of sort of person-centred, you could say like conditional reasoning. Um trying to, working with the actual person. They just seemed to be trying to get through as many patients as they possibly could. (Rowan, p6.)

Rowan: This patient had lots of other things going on, they had a bit of a mental health issue, um you know and they, they were, their life at home didn't sound great, and you know, and all these other things going on with their life that I picked up on, but my educator just didn't. They're like, you know, they need a wash and dress assessment, they need to do, they need to go home. I was a bit like, I don't know it just didn't feel, it felt too kind of matter of fact. I was well what about these other issues with them? Do we need the social worker or is there anything else we can do other than just send them home with a bath board? But yeah, my educator, I mean they're probably right in a way, that wasn't our role for that service, but it just felt like they were much more narrow thinking whereas my perspective on things was a lot broader [Clare: mmm]. Um, and also, have, being a student, I guess, like feeling that more kind of empathy or kind of like more aware that people are in a strange environment. Just like, I was, um, and like being bit more like, feeling that you wanted to do something for that person a bit more special [Clare: mmm]. But um I think as an educator it was more, just another patient, just another, I've heard it all before sort of thing [tentative laugh] maybe. So yeah, I think that was where we clashed a bit [tentative laugh]. (Rowan, p. 8).

In the *romantic genre* tests of integrity and selfhood occur (Bakhtin, 1981), and here Rowan's person-centred values were being tested. Like Jules, they differentiated their own approach from the "robotic" approach of others. They used the *professional genre* to support their discussion of their values, with references to being "person-centred" and using "conditional reasoning". Whilst Rowan's reasoning was based on empathy for the service user and their romantic person-centred values, their perception was that their educator had a pragmatic focus on addressing basic needs and achieving a quick discharge. Rowan contrasted their

educator's narrow focus on basic needs with their broad one on the patient's well-being. In this fast-paced acute setting there was limited time and space to enact person-centred values.

Eli discussed a conflict between the client's wishes and the remit of the service.

Eli: Mmm [sigh], so then I had this whole dilemma that's when the reasoning really came in because you know, their, personal, perspectives so that kind of the side of reasoning was that they didn't want to do the cooking [Clare: mmm] and from an occupational therapy point of view we're all about motivation aren't we? All about the person, occupation-centred practice and then I had this real conflict with like. And then I spoke to the OT about, and they were "yeah but we still want to maybe get to that point because maybe then their care package can come down". And from, you know, a very much, like a funding and a money, all that [Clare :mmm] kind of point of view it would be a lot better if the patient could just put their ready meals in the microwave themselves and not have the care come in(...)It just didn't matter to them (service user). When I was talking to them, they just always quickly dismissed it, said "I'm not interested" [Clare: mmm]. But the moment you start talking about their dog and going on a walk. It very much, that's their little, like, [Clare: mmm] I suppose when I think about models, you have the er it's the Canadian isn't it? Where you've got the spirituality in the middle someone's essence and what, really drives them and it's really hard, I find with reasoning, they're always bouncing off one another or like conflicting so [sighs] (...) I don't really know how I would have gone about trying to persuade this person to do a microwave meal when they just weren't motivated. It's really difficult but then you have people going like "oh why can't, why can't, why can't they just do that on their own" from a service and a money point of view you know "why haven't they achieved this goal they, they are capable of doing it themselves". Yeah, I find that a lot [Clare: mmm] those two modes, those two modes really conflict. (Eli, p. 7).

Being person-centred, having empathy for the service user's perspective and then trying to reconcile this with service demands was challenging for Eli. The person-centred reasoning was very much from Eli, and the pragmatic, service-based considerations from their practice educator. There was a clash between real world service needs and Eli's romantic person-centred ideals. Fidelity is an important characteristic of the hero in the *romantic genre* (Bakhtin, 1981). In this key moment Eli was battling to stay true to their person-centred values and their belief in meaningful occupation. They used the *professional genre* and cited an occupational therapy model to reinforce that what matters to the person should be central. In this *key moment* there was no integration between Eli's professional knowledge-based reasoning around the pragmatic service needs and their person-centred values as they stated these were "bouncing off one another" and in "conflict".

Usually practice educators are role models for students however, sometimes, students actively chose a different professional persona to their educator's.

Chris: [Laughs] I think me, and my educator had different teaching learning styles. Erm yeah.

Clare: Do you think that impacted on your reasoning?

Chris: In a way. I think it probably [2 sec pause], made me think that [2 sec pause] I don't need, like I er, like I am my own thinker. Like I don't need to [Clare: mmm] erm [2 sec pause] er go by what they say as, gold like. I don't need to, if they say it, it's not necessarily the right way to do it. It made, I guess it probably made me think, actually I can, I do have my own mind to have my own thoughts and reasoning. Because their approach was [laughs] if I sort of said why are you doing that? It's like well, like "this is the way I do it and this is how OTs do it" rather than actually being able to explain to me, [2 sec pause] like, I guess, their own reasoning. (Chris, p. 14).

Chris provided an example of a situation where their reasoning conflicted with their educators'. Chris's focus on patient-centred reasoning and their empathy for the patient and their family meant their reasoning was different to their educator's.

Chris: So, we went to see a patient in their home they, they had erm [diagnosis] and was at risk of falls (...) They had, like, a couple of steps down into the kitchen and my educator was measuring for rails and erm the family sort of said, "well the client's spouse is going to have an operation erm in the next few weeks. So, if there's anything you're gonna to put in now it would be good to kind of consider both of them. Because, like, if they're going to be needing things, it would be good to get things that they both can use, rather than like one". One thing for them and one thing for the other (laughs). And my educator's response was, erm, "they are not my patient their spouse is my patient. So, I'm, this intervention is for them". I think it's, I thought, ugh like, from like the patient's perspective, the patient and the family, that's like a very valid point that they've made erm like they wanted support for both, anticipating that the patient's spouse would need it and that whole prevention of erm or needing further health care. (Chris p15).

Chris: Yeah, so I guess at the time, yeah even now, I didn't really think it was a reasoning thing. But it is because my educator was trying to do something, trying to, like erm [2 sec pause] provide an intervention [Clare: mmm] but they weren't explaining that to the family [Clare: mmm] and reasoning it to them in a way that they understood and in a way that they then would be happy for. Because I think in the end, they just refused it [Clare: okay] because (laughs) because, because my educator didn't explain the reasoning [Clare: mmm]. I think they just said like this is what the patient needs. Rather than at the moment they are not very stable because of their [diagnosis] they are not really taking their stick with them. They are, you know actually explaining the reason as to why they wanted to do it. It was more like this is what I need to do, and, you know, this is what I need to do, that was it [laughs]. Erm so, then the family then weren't on board [Clare: mmm]. So, well like, in that case leave it, and we will wait until they have their operation and then we'll see, then what we need [Clare: mmm]. So, the service user didn't get what they needed and

would have been at a higher risk of falling [Clare: mmm] just, I guess, the reasoning wasn't explained to the family [Clare: mmm] it's quite a good point actually [laughs]. (Chris p. 16).

In this *key moment* Chris described both the family's and their practice educator's perspectives. Chris's person-centred values suggest the *romantic genre*, and they empathise with the family. They used the *professional genre* to justify their support for family's view – prevention of the need for future health care. Chris realised their values were different to their educator's. The romantic hero's fidelity is tested (Bakhtin, 1986) and Chris was frustrated by their educator's approach, remained true to their person-centred values and commitment to achieving the best for the service user, by explaining their reasoning about supporting an informed choice.

Rowan discussed a time when they found their educator's reasoning difficult to understand. Rowan had completed a washing and dressing assessment with a patient who was being discharged home with a profiling bed (hospital type bed).

Rowan: 'when I watched them being dressed and washed by the nurse, they were able to roll and hold onto the side themselves, so they weren't like completely helpless they had like a bit of strength. Um so I was a bit confused as to whether I needed to recommend a one-handed package of care or two-handed [Clare: mmm] but apparently my educator said in the end like no if they've got a hospital bed it has to be two handed, double care. Again, it's that, that's the way it was, so I ended up doing that again, but I was, I guess I could have talked to more people, found out a bit more because they were actually quite mobile in bed they just weren't able to get out because of their respiratory um illness rather than their physical strength. (...)I felt like there was more than one option or more than one answer to the problem. But there was kind of systems in place or ways of doing things, or possibly just my educator's way of doing things. But it felt like, if you've met that criteria then it means this [Clare: yeah]. Rather than being a bit more creative, or being a bit more, kind of, thinking about the actual individual problem. Which I guess again as a student, not having had so much experience, with a little bit fresher eyes, I was maybe looking at thing a bit differently erm yeah and also kind of aware that having two people come in and look after you is a bit more of a big deal than one person coming in to look after you, (Rowan p9).

Rowan began discussing the results of their assessment using the *professional genre* with terminology such as “one-handed” and “two-handed care” and “mobile in bed”. At this point Rowan was discussing the service user in a professional and dispassionate manner. They

were frustrated that they needed to recommend two carers, when they had assessed the patient can manage with one. Rowan's justification was empathetic and romantic, enacting their person-centred values, and focused on the impact on the patient of having two rather than one carer come into their home. Rather than pragmatic and professional. i.e., the increased cost of two carers over one. The expression "fresher eyes" indicates they were not fully socialised into the setting allowing a different perspective.

Sam discussed a situation when their reasoning about the most appropriate assessment to carry out with a service user differed from their educators. Sam used the *professional genre* and their knowledge-based reasoning to explain why they did not think a specific assessment would be suitable.

Sam: I was saying I don't think it be, will pick up on the subtleties just because of how they've been presenting." So, my educator said, "my clinical reasoning", they used those words, so I thought ah. 'My educator said "well my clinical reasoning is that I don't um want, it's not good to do an assessment that I haven't done before, and for the first time with someone. So that's why we'll use the [name of assessment]" (...). I just thought [sighs] I guess there were two points. So, one of the, there are assessments that assess just [area they wished to assess], um and yeah. So that was something that kind of stood out, and then the clinical reasoning is because you're not, you don't know you haven't practiced or haven't done another assessment and you know afterwards I thought about it makes sense if you're not familiar with an assessment. But I was thinking, is that clinical reasoning, or is that, or does that form part of it? (Sam, p. 6).

Sam questioned their educator's reasoning, challenging the usual expectation of the student being less knowledgeable than their educator. They went on to explain what they would have done had they been in the educator's position, and here person-centred reasoning worked in tandem with their professional knowledge-based reasoning.

Sam: So, I think for me I was thinking even before that, if I was in that role then I would, at the weekend, I would have a look at some assessments and I would maybe practice and go through them and then I would deliver whichever one I thought was good. Because at the end of the day my clinical reasoning was [2 sec pause] this is about the client and actually what's best for them. (Sam, p.6).

Bakhtin (1990, p. 179) describes the romantic hero as "full of initiative with respect to values" which they enact. Sam's person-centred values were evident in their commitment to delivering what was "good" and "best" for the service user even if that meant working at the

weekend. They went on to explain how they felt about their educator's reasoning, and here their speech became more hesitant.

Sam: It feels, I don't want to say lazy, it feels judgmental, but it, or sloppy. But it, I, yeah, I suppose I just felt, hmm, for me I don't know if that would be enough of clinical reasoning to say oh it's because I haven't done another, I haven't done another assessment before. (Sam, p.6).

Bakhtin (1984, p. 198) describes *a word with a sideways glance* as "speech that repudiates itself in advance, speech with a thousand reservations, concessions, loopholes and the like". Lazy and sloppy were strong words, and Sam left a *loophole* for themselves by saying they do not want to say these words and that this could sound judgmental.

For Sam the outcome of experiencing this difference in reasoning was enhanced confidence in their own reasoning.

Sam: So, I think that just showed um, like gave me some confidence in my own clinical reasoning, um, and yeah. I think it's something about um you know picking up on the subtleties and [sighs] I guess being able to put it together and, know what it is. So, for example um I might kind of pick up on "oh there's something not quite right but I don't know what it is" but being able to formulate and give it that structure (...) it was kind of hard to put it into words. So, um I think yeah there was something about that example, of just seeing how far I suppose that my clinical reasoning had come, and actually just made me think you know about um you know no one's immortal [laughs]. Everyone no matter what level you're at there's always areas for development and there's always things that you don't know and that's one of the amazing things about being in this field. (Sam, p. 6-7).

Sam described the development of their reasoning, moving from seeing the signs without really understanding what the significance of these were, to be able to structure and integrate what they had seen with existing knowledge and justify their reasoning. When they discussed the development of their reasoning this suggested another *genre*, the *Bildungsroman*. Bakhtin (1986) describes the hero in this *genre* as is the process of becoming rather than ready-made. This contrasted with Sam's discussion of their person-centred reasoning when they were enacting their existing values and there was no development or inner change. The statement that "no one is immortal" perhaps, slightly ironically, questioned the 'god like' status of the practice educator and was perhaps indicative of the development of their own professional persona.

7.5 The romantic quest

Use of the *romantic genre* could be seen when the participants' reasoning led to them undertaking a quest underpinned by their person-centred and/or occupation-centred reasoning. The *professional genre* often became evident as they justified their commitment to this quest and navigated a path through the pragmatic real-world issues of the practice setting.

In the *key moment* below, we hear about Chris's reasoning when they discussed their quest to lift the service user's mood.

Chris: It sounds really bizarre, but its' like we'd been doing a lot of like er grooming and erm personal care in the bed and I was like "have you had a shower since you've come?" They were like "no". and so, I was like "so do you want to have a shower?" and it hadn't really, I think because a lot of the time things are done in people's beds and in that space, for me, I was like, I hadn't even really thought about [Clare: mmm] do you want a full shower? It obviously, time reasons wise, it takes a little bit longer. But for them, they like, absolutely like, loved it, and just felt, for their mood particularly, so I was on the Monday, they said, they were a bit more like sombre. So, I guess to get them a bit more, I was like "do you want to have a shower? You can have, just sit under the water, don't expect you to do anything" erm and afterwards I think that just like lifted their mood. So, it was like they felt normal again, obviously, like, when you've been in bed there's nothing like a good shower (laughs) [Clare: mmm]. Erm but again I think probably because I was a student I had the luxury of a bit more time, so the 45 minutes per patient for therapy, for me didn't really count. (...) whereas maybe my educator well they didn't have that luxury because they had so many patients they need to see (...), Mondays we sort of decided, well I kind of decided, that we wouldn't do like the just standard personal care. So, we just started, like coffee, "so how about on Monday we go to the kitchen, and you can make yourself a coffee?" Just to, kind of like, they'd get off the ward. So, it was like it was quite like a bit of a weird journey to get there so they'd pass quite a few people and they'd be able to make like a coffee and have a reward at the end of it. Which was really nice they could then sit and just enjoy their coffee (laughs). So that was quite nice. Erm so that was like Monday's like seeing their affect and deciding, like changing (clicks fingers) the course of action, what we were doing, just to make it a bit more meaningful and motivating for them to kind of lift their mood [Clare: mmm], it was really nice (...). It's good yeah like relationship wise to build, that up, erm but I think probably for them, like reasoning, it was like listening, like their interact, interactive and narrative reasoning of like their job, their like life that they wanted to get back to. They're like I don't mind if I'm in a wheelchair as long as I get my hands back and I can still do what I love to do. Erm so really, really focusing on like their goals but also knowing, that, the more you do something, like the task specific prac, er practice the er easier and more familiar it will become and like setting those like neuropathways and like plasticity and things. (...), although you're doing it because its motivating for them you also know that the more that they do it the better it's going to be [Clare: yeah] so it's like a joint thing of like (2 sec pause) it's like medically

like you know it's going to improve their function but motivationally you know that's what they want to do [Clare: mmm] so it kind of like worked really well which was good. (Chris, p. 20).

Chris transitioned between the *romantic* and *professional* genres. The *adventure-time* of the *romantic genre* “comes into its own in just those places where the normal, pragmatic and pre-meditated course of events is interrupted—and provides an opportunity for sheer chance” (Bakhtin, 1981, p. 92). Chris described their “bizarre” realisation that the patient might have enjoyed a shower. Perhaps this felt bizarre, as they had been immersed in the *professional genre* and the pragmatic routine of the hospital, indicated by reference to “grooming and personal care in the bed” and “things are done in people’s beds”. Their empathy for the service user meant that they initiated a quest to lift their mood. Chris switched to the *professional genre*, when they mentioned the standard 45 minutes allocated for therapy, their Monday session will significantly exceed this, but the supernumerary status of a student allowed them the luxury of more time. Chris returned to the *romantic genre* to discuss their quest to devise further treats for Mondays; a trip off the ward, and chance to make and enjoy a cup of coffee. They used the *professional genre* and discussed neuroplasticity to justify their reasoning. There was a sense of satisfaction at the success of their interventions. They began with a focus on person-centred reasoning, thinking about what the patient loved to do, maybe this was more prominent in their thinking. Then they brought in the professional knowledge-based reasoning about neuroplasticity and identified the need for these two strands to fuse for successful interventions. Perhaps there was a desire to underpin and justify their romantic ideals with professional evidence. As with some of the other participants empathy and an awareness of the service user’s narrative informed their reasoning.

Val completed a quest to find occupations that were meaningful for a service user.

Val: they went to a monthly medical appointment but apart from that they didn't leave the house and didn't have any TV or read or anything, their (...) care co-ordinator, kind of checking medication management, how they were, and then we left, and I said I'd love to work with them. So, I carried on, I went back to see them, and they said that they wanted to buy a TV, a cooker and a washing machine. So, because I'd been trying to encourage them to come out and do some shopping with me. Um, but they were quite reluctant to do that, and I think it's trying not to impose, you know, what you want and really to respect what they want the goals to be. But also, equally knowing that someone is literally just sat in their own day after day is not good, not good for their mental health. So, I took them shopping.

Clare: out shopping or?

Val: Yeah, I took them out shopping. So that enabled me to kind of see how they were kind of interacting on public transport and in the shop. I did need to give them a little bit of support in the shop. (...) So, I stood by, supported them to sort of place the order um and then get the stuff delivered and then went back to see them. I saw them, I went back to see them quite a lot of times, actually. And then, I was just trying to find, we were going out for walks, and I was just trying to find some like, something that they were interested in. And they were really enjoying their television, actually. Because they, literally before that, had been doing nothing at all. Um, so they started watching soaps and the news, and then they said they like reading but there was no books at all in their flat. So, I talked to them about going to join the library. So, I took them to join the library (...) I offered to go shopping with them, and when I went for the next visit, they'd been themselves [Clare: oh, okay]. So that was quite a big thing, that they'd been, because they'd not been doing anything (...) they'd gone out to buy clothes and they'd got some shoes (...) They seemed quite happy, they seemed happy, and they were really happy with, because they didn't have a washing machine either. They were happy to wash their clothes and their relative was really happy and the care co-ordinator said, I was quite sort of pleased with that outcome. (Val, p. 23-24).

The role of chance, typical of the *romantic genre* (Bakhtin, 1981), was important – Val was with another professional when they happened to visit a service user who Val thought would benefit from occupational therapy. If Val had not been on that visit this service user may not have received this input. The “romantic character is arbitrarily self-active and full of initiative with respect to value” (Bakhtin, 1990, p. 179). Val’s enthusiastic “I’d love to work with them” demonstrated their passion for enacting their values. This was swiftly followed by a return to the *professional genre* with references to respecting the service user’s goals, the link between participation and mental health and the shopping trip being an assessment opportunity. In the last paragraph the word happy was used five times emphasising their satisfaction with the outcome and the happy ending to Val’s quest.

Alex’s quest involved working with the service user to increase their cooking skills and develop a healthier diet.

Alex: They said they can, they can shop independently, so I thought okay great, [Clare: mmm] so I can obviously go and do that. I think because you can get a lot from that you know. I was thinking about; I can see them cross the roads, about safety awareness, I can see if they, how they interact with people, those sorts of different things that make up um a lot of those different MOHO components, em process skills, sequencing all that and that sort of thing and phys, physically how, how they were. Um, unfortunately, as I said, when I got there, they didn't have any money, (...). Um, so I said, “ok then can I ask you to make a cup of tea?” Because they said they could

do that as well. Unfortunately, they didn't have a kettle. Um, so, (both laugh), so I was having to sort of think on the spot, (...). So, I asked them to make their bed (...) and they, that they could do. And they said, they said to me, they were so confused they said because they didn't think they could do it, and it showed me, because they did it really well. They were like, you know they were showing attention to detail, all the sheet round the corners. (...) It just showed me then their low confidence in their ability to do things [Clare: oh okay]. Um and I said, so I said to them about saving some money for the week after, and yeah, we decided, we decided to do that. The week after they had actually saved money for, for the shopping trip [Clare: okay]. Which is fantastic. (Alex, p. 11-12).

Alex went on to discuss the task of cooking pasta.

Alex: It was going really well, and the only, except the only thing I had to step in with was (...) they didn't have a lid for the pan, or a sieve, or a colander. So there is no way they could drain the pasta, so (laughs) I had to use like a side plate and I said to them don't do this [Clare: laughs] normally, but there was no other way to do it and I though I've got, I want to have an end product again. Because I want to, I want them to be able to taste it, and make it, and eat it, you know, um, and they really enjoyed it, which was really good and they, you know they said, they were, were really happy. They could do it, and it was, it was so nice to see them so happy because they'd obviously felt like they had achieved something.(...)I was going to write down the recipe for them, (...), I actually used their name as the recipe, so I said this person's, you know, like pasta sauce then [Clare: mmm], to make it a bit personal for them. Um they were going to put it in their little notebook (...) I planned to do a session with them the week after (.....) Unfortunately, they didn't turn up for that assessment which was a real shame. Either they didn't open the door to me, I don't know if they weren't there. (...) I suppose I was a bit gutted really because I'd, they'd told, they'd told me specifically in their words "I had right fun" the week before so I really thought they'd want to be, they'd carry, carry on. (Alex, p12-13).

This *key moment* began with the *professional genre*, for example the use of an occupational therapy conceptual practice model when planning the session and the reasoning around choice of meal. As Alex began to discuss reasoning in the moment suggestions of the *romantic genre* emerge. In the *romantic genre* the hero can experience a series of trials (Bakhtin,1986). In this *key moment* Alex spoke about a series of challenges they had to face; they could not go shopping as the service user had no money, cannot make a cup of tea as the service user did not have a kettle, and there was no colander or pan lid to drain the pasta. Alex determinedly overcame each of these challenges. Initially it appeared the ending was going to be satisfyingly happy; the pasta dish was named after the service user, they were happy, Alex was happy. But then the service user was not a home when Alex next visited, and they were "gutted". The service user had told them how much fun they had in their last session and then disappointingly did not turn up for this one. Had Alex remained in the

setting they would have faced another challenge, however the placement finished, and Alex stopped working with the service user.

Chris's person-centred values and empathy for the service user led to them embarking on a quest to enable the service user to complete their self-care independently.

Chris: They were saying, well that's one thing, the only thing I do for myself. They had their carers to do their meals and everything else, that was the only thing they do in their day. Why then not, then work with them, to kind of enable them to carry on doing that rather than taking that off them as well? [Clare: yeah] That probably, yeah, the first, I guess in the final placement, it was more like, I felt enable, like able to disagree with my educator or question more about their reasoning. And you can kind of see, you can see their reasoning, because the service is an [removed to preserve confidentiality] team. So, for them they're trying to keep the patients out of hospital and if that means them doing less but staying out of hospital [laughs], that's the purpose of the service [Clare: mmm]. But, I guess, as a student I had the luxury of working with them a bit more intensely than maybe the qualified OT did. So, I could use, like, I could see them more often. Work with them er more than maybe they could, because of their big caseloads [Clare: mmm] and the pressures of the service. So, maybe if I wasn't a student working in that team then it might have been different (...) it was quite nice that I had the opportunity to do that, and I guess it's that whole the pragmatic reasoning of staffing, money, time, that I had the luxury as a student [Clare: mmm] [Chris laughs] [Clare: mmm]. Whereas a qualified OT in that position probably doesn't have. (Chris, p. 5).

There were differences in Chris's approach and that of their educator. Chris was focused on fidelity to their professional values, whereas for their educator pragmatic considerations such as cost, and time predominated. Chris was successful in challenging their educator's approach. Chris used the *professional genre* when they discussed the pragmatic issues influencing their educators reasoning. They referred to the "luxury" of being a student, this meant they had the time to implement these occupation-focused interventions whereas their educator did not.

The quest was not straightforward, and like Alex, Chris experienced a series of trials to overcome; on each of Chris' visits the service user does something risky. First, they attempted to get into the bath in an unsafe manner, then they nearly overbalanced when reaching to hang up their dressing gown, and finally lost their balance when trying to stand on one leg to wash their foot. This testing of fidelity is characteristic of the *romantic genre* (Bakhtin, 1986). Chris was determined, persevered, and suggested pacing and safer techniques.

'Chris: We sort of spoke to them about doing it while the carers were there doing their breakfast and medication so if they did need help or they did get into any difficulty they were there to help them. So, it's still managing risk I suppose but not taking away their occupation.' (Chris, p. 8).

Chris's managed to successfully align their romantic, value-based reasoning around maintaining the service user's occupation, and their professional pragmatic reasoning around risk.

Eli spoke about a time when they did not understand their educator's reasoning for doing exercises rather than an occupation-based activity with a service user.

Eli: The OT, it was very much like doing exercises with their upper limb, and everything in my head was saying this is not OT, it's not like a real object, it's not meaningful. And so, I had this kind of conversation with the OT. I was like "why are you doing that, like just with a spongy ball, that, not really like a familiar object? (...) My educator they told me stuff, but I didn't always like, I could get it out of them exactly why. (...) But then when I picked up with her it was very much like okay so we go from the gym into the home and in the home it was very much like filling the cup up with water, (...) Their (educator), I don't know what kind of reasoning it was but their reasoning was that they needed to build up the kind of movements and the strength before they're going into daily tasks. (...) I was doing more of a rehab assistant role, that would've probably been passed onto a rehab assistant. But it was quite nice because it gave me a chance to really observe them (...) I had quite a few sessions where I could think about what was going on and what I was doing (...) I was always told in the stroke ward that the evidence says that you know if it's a meaningful object it can relate more [Clare: mmm] to the brain and the person you know that somewhere hardwired in their brain they know it's a cup [Clare: mmm] do you know what I mean. So, it's more recognisable. So, we were doing these interventions, (...) putting dried pasta into a cup. And after a while I just noticed like, they, I don't know like, they were just getting a bit bored [Clare: mmm]. They were just, they like, the only way I can describe it was that they lost the spark in their eye. They were like a really motivated, like great client to work with, you know, did stuff while you were away, and they practiced, but something just kind of went like. I just felt their motivation drop a little bit and it was almost like, oh here we go again, kind of thing whenever I came round. I thought to myself we need to like switch this up we need to have a conversation about what's motivating them. (...) So, I started thinking we need to make this a bit more meaningful. I said to them, I was like you know "what about if we, with the spooning of the pasta, why don't we see if you can eat some breakfast? Do you like cereal or anything? See if you can" and their face like immediately lit up and they were like "yeah" and then they run over to the cupboard and showed me the bran flakes and stuff and I was like "oh okay cool so we'll, we'll do that" and then we practiced still hand over hand and kind of like, yeah, I won't go too much into detail about the exact like their arm and stuff [Clare: mmm]. But yeah, like that really

motivated them, and all of a sudden, we were back on track again and they even said to me that is more meaningful to me, that is like a real thing, and I didn't even say that to them [Clare: mmm]. They said that to me. So, it was quite nice that you know the, like, it was almost like a little bit of a moment where it's like OT is quite like special [Clare: mmm]. Do you know what I mean? I felt a little bit like, and this is because our reasoning is quite different [Clare: mmm] to any other professional. It was kind of a bit of like an a-hah moment [Clare: yeah] where all the reasoning came together [Clare: mmm]. (Eli, p. 11-13).

What Eli saw on placement conflicted with their professional values about occupation-centred reasoning. The commitment to these values suggests the *romantic genre* although the *professional genre* initially predominated, as they puzzled over their educator's reasoning and discussed the evidence that informed intervention in a different setting. The *romantic genre* then dominated as Eli discussed the service user who "lost the spark in their eye". On a quest to rekindle motivation Eli suggested an occupation-focused activity. The response was immediate, the patient's face lit up and they ran to the cupboard for cereal. The romance ends happily with the patient saying how meaningful the activity was for them. This was satisfying for Eli, as occupational therapists emphasise the importance of meaningful activities – the service user was talking their language. Eli's passion for their professions core values was rewarded with a special "ah-hah moment" where the reasoning came together, and the power of occupation was confirmed. Use of the term suddenly is characteristic of the *adventure time* of romance (Morson and Emerson 1990), and Eli's references to "immediately" "all of a sudden" and "running to the cupboard" are indicative of this.

7.6 Chapter summary

The *romantic genre* was evident when the participants drew on occupation or person-centred practice to inform their reasoning. This was informed by empathy for the service user and an understanding of their narrative. The *professional genre* was used to justify these values. For example, by drawing on evidence, when considering the pragmatic, context-dependent issues influencing reasoning, and sometimes to discuss professional boundaries. The *adventure-time* associated with the *romantic genre* needs space for the adventure to develop (Bakhtin, 1981). The participants' practice educators provided this space by allowing the participants autonomy to work independently with service users. This enabled the

participants to maintain fidelity to the importance of occupation and use this to underpin their reasoning. Some of participants acknowledged this was only possible due to their supernummary status and the “luxury of being a student”.

The participants sometimes found their reasoning differed from their educators. The educators reasoning was more strongly influenced by pragmatic considerations than the participants. The opportunity to enact the person-centred and occupation-centred values underpinning their reasoning supported the participants in the development of their professional identity.

Chapter 8 – Findings

The Minor Genres

8.1 Introduction

In this chapter I will introduce and discuss three less prevalent *genres*, the *travel genre*, the *adventure genre*, and the *carnival genre*. I will explore the ways in which these *genres* were mixed with the *genres* discussed in the previous chapters (the *professional genre*, the *Bildungsroman*, and the *romantic genre*). This demonstrates how the participants moved between *genres* and adopted multiple positions illustrating the *polyphonic (multivoiced)* nature of some of the *key moments*.

8.2 The travel genre

8.2.1 Introduction

In the *travel genre* there is an emphasis on differences and contrasts with life moving between different conditions such as success and failure (Bakhtin, 1986). The individual is static and unchanging and an understanding of the whole of the phenomena is lacking instead the world is seen as fragmented (Bakhtin, 1986). It is akin to arriving in a new country where you do not understand the language and customs. Some *sound bites* from the *travel genre* are provided in Table 8.1.

Table 8.1 Sound bites from the travel genre

<p>Eli "If I'm panicked, I can't always attend to all the information around me"</p>
<p>Jordan "I find it very difficult to work within that, those, where you don't really have time to give the client the time to talk" "because of the fast pace its very, I found it very difficult to, I'd take a bit more time to process things" "there were points where I shut down, because of the anxiety of the pace kind of made my clinical reasoning shut down"</p>
<p>Jules "it was like something out of one flew over the cuckoo's nest"</p>

<p>Morgan <i>“they were so fast, and you can’t think of all the options that they might have considered”</i></p>
<p>Rowan <i>“quite overwhelming and it was so fast that there wasn’t time to think, and I was, would have just said what’s next sort of thing”</i></p>
<p>Sam <i>‘that’s probably when it felt the most alien um yeah you know because it just felt very new’ “shock or something in the beginning ...the biggest ...gulf... there was that split between what we had been learning at university.....and then going into the first placement” “in physical health it just felt quite foreign”</i></p>
<p>Val <i>“I just completely and utterly went blank” “I almost felt like that; it was almost like too much for my brain”</i></p>

8.2.2 Introduction to key moments

The *travel genre* was most often experienced in acute settings where the practice the participant saw felt alien and/or situations where they felt immobilised and unable to participate in reasoning. This contrasts with the *genres* already discussed where the participant initiated action. Participants also used this *genre* to disassociate themselves from their educator’s reasoning, when speaking about their difficulty following fast-paced reasoning and when anxiety inhibited their reasoning. This *genre* was often mixed with other *genres* particularly *romance* and *Bildungsroman*.

8.2.3 Reasoning in acute physical settings

In this *key moment* Sam discussed their experience of an acute hospital context and how they had to reason what sort of therapist they wanted to be.

Sam: In the third placement as well, there were some difficult things that came up emotionally. What sort of things? I suppose it was, yeah it was challenging in a lot of ways, and it was um [2 sec pause] yeah, so, but the emotional nature of, of the work. But also finding how I want to work in that setting, and um in some ways, ooh trying to find a balance between what I thought was expected of me and what I wanted to do. So, actually, I’d really like to sit and do ecotherapy with people rather than get them practicing getting up and out of bed, you know. So, I found that a struggle, but I came through that, and I really learnt so much. I think, yeah same as first placement, I think it got me at that edge. I think that’s probably when it felt the most alien, um, yeah, you know. Because it just felt very new, I suppose, and maybe that’s when it was harder to see how it was going to be, or how the, to go from A to B like, or how it went from A to B, or A to C. (Sam, p. 22).

This *key moment* began with some *double-voiced discourse* (Bakhtin, 1986), when Sam anticipated what might have been my follow up question asking for elaboration on the difficult things. Sam alternated between the *Bildungsroman* and the *travel genre*. These *genres* contrast in that there is no emergence or development in the *travel genre* whereas in the *Bildungsroman* there is personal development. Sam used the *travel genre* to describe their feelings when new to the setting and the *Bildungsroman* to describe their feeling at the conclusion of the placement. Bakhtin (1986) describes the *travel genre* as emphasising differences and contrasts, and this was evident in Sam's (possibly slightly ironically) expressed preference to providing patients with ecotherapy (connecting with nature outdoors) over practicing getting in and out of bed. The ordeal type adventures that can feature in the *travel genre* (Bakhtin, 1986) are indicated by Sam's references to "difficult things that came up emotionally" "challenging in lots of ways" and "found that a struggle". Also, a feature of the *travel genre* is how "new" and "alien" the setting felt to them and the disorientation of not being able to get "from A to B". This contrasted with the learning that arose later in the placement, when they attempted to achieve a balance between the occupational therapist they wanted to be and what they felt was expected of them. This suggested the emergence or development associated with the *Bildungsroman*. In the *Bildungsroman* there is a progression from idealism to maturity possibly with some degree of resignation (Bakhtin, 1986). Sam's resignation is evident in the *key moment* below.

Sam: So, we are getting people back to baseline (...) what about enriching people's life or making people's life's better, but baseline like something I just didn't get it [laughs]. I dunno there is something about that, "so it's that we just want them to be able to walk to the toilet?", I, I, I dunno I think that was a real um oh I was going to say shock or something in the beginning and I think the first placement. Um, perhaps felt like the biggest [tuts], I was going to say gulf, but the biggest time when there was that split between what we had been learning at university(...) working with people holistically and looking at all the person, environment, occupation and considering all these factors and then going into the first placement. And it was like, oh it just felt like this isn't, this doesn't look like OT. Actually this, this, it is just getting on and off the toilet, like right, but what about their roles. I remember, there was someone where I, I really feel like there is some social isolation, participation needs there and maybe a bit isolated and they maybe want to talk a little bit, and um it like that, oh I can't do anything (...) There were things that I found out about like Age UK. (...) When I go into my acute um role (...) I want to have just literally just a piece of paper that's got (...) this information of okay, online shopping. If you're having difficulties befriending (...) I'm just going to put a pack together. Because actually those are things that I think are really important and that's, that's how I will want to work. Rather than, I don't really have time, and you know we've covered the basics. So, I guess all these experiences can, yeah come together and inform my future practice. And some of the struggles or not getting it in the first placement and how it feels so divorced from what I thought OT was about, can yeah, um doesn't have to

be seen that way (...) Maybe it seemed more um reductionist because I wasn't aware of all the complexities.

Clare: So, do you look back at it a little differently?

Sam: Yeah, I think so, yeah um, yeah. I did find it really strange, and I remember thinking, if I hadn't had any experience within OT, then (...) if I'd gone on my first placement, I think it would have really made me question if I want to be an OT and thought uh, uh, this isn't for me. (...) To go back to third placement that um you know all though I did find it a bit of a struggle trying to balance how I wanted to work in that context, and with people, rather than maybe what it felt like the demands of the role were. (...) When I was doing a little bit of reading on person-centred or client-centred practice (...) Just saying how patients tend to prioritise kindness, um patience and some more kind of interpersonal qualities um and that for them is important. But then actually within acute settings it might be a rapid discharge that's prioritised more (...) And you know actually both, I think both can find a place, where they, they meet, and yeah that can be okay, and that comes back full circle to values and finding out as part of my clinical reasoning how I want to work as an OT and bringing the humanness and, as well as the efficiency and effectiveness and the knowledge. (Sam, p. 25-26).

This *key moment* began with the *travel genre* and the placement was a world of “differences and contrasts” (Bakhtin, 1986, p. 11). The individual, in the *travel genre*, is governed by “philosophical and utopian interests” (Bakhtin, 1981, p. 104). Sam’s worldview was informed by the holistic (romantic) values of occupational therapy theory they had learnt at university. They were shocked by the contrast between this theory and the practice they saw in an acute placement. The words: “gulf”, “split” and later in the extract “divorced”, emphasise this difference and contrast. Sam’s romantic ideal was that they wanted to enrich people’s lives, but in this setting the emphasis is on getting them back to baseline (the same level of independence in daily activities they had before they were admitted).

In the *Bildungsroman* the world is viewed “as experience, as a school” which requires man to adapt, to leave idealism behind and submit to mature practicality (Bakhtin, 1986, p. 22). A switch to this *genre* was indicated by the change from Sam being passive and at the mercy of the world to them being active. Ultimately, they found a way to enact their values about the holistic nature of OT, by providing their patients with information to address those occupations that were beyond the remit of setting.

Bakhtin (1986, p. 23) states in the *Bildungsroman* the “world turned out to be more impoverished or drier than it had seemed in the beginning”. Sam’s initial description of their understanding of occupational therapy; working holistically and looking at all factors concerning the person, environment, and their occupations, is full and broad. This contrasts

with the more impoverished realities of an acute placement which involved getting service users back to baseline and walking to the toilet. The maturity associated with the *Bildungsroman* was evident when they looked back and reflected that maybe they did not understand the complexity of the setting. They drew on their third placement, also in an acute setting, and elaborated on how they found a way of balancing the demands of the setting with the person-centred and holistic reasoning that they valued. The *professional genre* was evident when they underpinned this with an article they had been reading. Returning to the *Bildungsroman*, they summed up what they had learnt; that they needed to balance person-centred (humanness) and knowledge-based reasoning.

In the *key moment* below Jordan discussed the difference between the reasoning required in an acute setting and the reasoning used in their previous placement (in a community setting). Jordan spoke about how the lack of opportunity to develop a relationship with a service user in an acute setting affected their reasoning.

Jordan: the hospital setting and the procedures you've got to follow within that and so looking a lot more at that, yeah procedural reasoning yeah and what needs to happen because of the setting, because of the setting that you are in (...) Very much focused on their safety and being able to, to, being able to be discharged safely. And er, yeah, your gathering, your narrative that you've got, that was a lot er more er stifled, stifled I guess. There wasn't the, there wasn't the time to get as much narrative from [Clare: mmm] the client or the patient as you would in the other settings (...) and I think that's where I struggled cause I was still in my setting it was a, it was a, it was only a few months after my community setting but it was a lot more I'd been, I'd had the time to get to know the clients and to hear more about, to kind of draw out their history and what was going on for them and what their goals were and here yeah the hospital setting was very different it was much more, in a way clinical [Clare: mmm], their medical history, their diagnosis, their current baseline, yeah, their baseline and then what their current physical abilities were and then getting them back to baseline. (Jordan, p. 5-6).

Bakhtin (1981, p. 103) states

At the centre of the travel novel's world is *the author's own real homeland*, which serves as an organising centre for the points of view, the scales of comparison, the approaches and evaluations determining how alien countries and cultures are seen and understood" (italics in original).

Jordan's statement "I was still in my last setting" (last placement) suggested they were struggling with the mental shift they needed to make from the expectations and skills required in their last placement to those required in this one. They were having difficulty in adjusting to a new "clinical" culture with a focus on getting patients back to "baseline". Service needs dominated, there was no time for them to engage with the service user's narrative, this was experienced as "stifling" their reasoning.

Jordan discussed their difficulties reasoning in the moment in this fast-paced setting.

Clare: and do you think the setting, you said about being anxious and the setting, do you think that affected your reasoning?

Jordan: er yes definitely, I think yeah, and I think it definitely did, and maybe not so much my actual, the reasoning that was going on. But my, then being able to verbalise it and being able to, because of the fast pace its very, I found it very difficult to, I'd take a bit more time to process things. So, I'd find it difficult to see, see, meet the client, meet the patient, do the assessment and straight away know, and straight away know what needed to be done what, what, what further assessments were needed or what discharge planning needs to be done. And I think for me that the pace was, I found difficult, and it did heighten my anxiety a lot (...) that definitely affected my, yeah, my clinical reasoning. (...) Even though there were some (...) some situations where, if you saw x, y, and z then you would do a, b, c. It, um I think I, there were points where I shut down, because of the anxiety of the pace kind of made my clinical reasoning shut down. Even though afterwards I knew what I was seeing and what needed to be done. In the, in the moment, moment I found that difficult [Clare: mmm] difficult to, difficult to process. So, I think the pace, and I think it's probably different for different people, because my educator loved that setting and, and functioned really well in it and other, classmates have said they enjoy the acute setting from, it really brings out, kind of it works really well for them. I think for me the community setting definitely, definitely works better and being able to have the time to step back and to process what you are seeing and to be able to think about the client from different aspects definitely gives you a broader, helps my clinical reasoning and helps me to process and think through things a lot more. (Jordan, p. 9-10).

In the *travel novel* there is a focus on differences and contrasts, for example alternating between success and failure or happiness and unhappiness (Bakhtin, 1986). In this *key moment* Jordan was unable to verbalise their reasoning in the acute setting "my clinical reasoning shut down." This was contrasted with their success in a community setting where "the time to step back and to process (...) helps my clinical reasoning". In the *travel genre* the world is broken down into individual things, in sequence or alternating (Bakhtin, 1986). Jordan stated, "if you see x, y and z you do a, b, and c" indicating there was a sequence of

events: if you saw 'x' you should have been able to reason that you did 'a'. However simple this may sound; they were overwhelmed by the fast pace and unable to enact this sequence. Jordan's description of themselves as "shut down" resonates with what Bakhtin (1986) describes in this *genre* as a hero that is static and unchanging.

Rowan also spoke about how overwhelming and disorientating they found the acute setting.

Rowan: I think the whole placement felt quite overwhelming and it was so fast that there wasn't time to think, and I was, would have just said what's next sort of thing in a way and was quite reliant on people to help me and what they were doing. As I said my actual educator wasn't very good at explaining that either, so it kind of, yeah just left me feeling quite confused a lot of the time actually [Clare: mmm], and a bit kind of unsure about what the purpose of OT was, or why we were there to give out commodes or something which I didn't really feel really fitted with what we'd been learning at university so yeah it was a challenging placement that one [Clare: mmm] [Rowan laughs]. (Rowan, p. 7).

There are suggestions of the *travel genre* with a focus on the strangeness of the setting and how fast this felt. Too fast for Rowan to be able to reason. They experienced this as "overwhelming", "confusing" and "challenging". Bakhtin (1986) suggests in this *genre* the hero is a static. Here we see Rowan passive and reliant on others to reason for them. They contrasted what they experienced on this placement with what they had learnt at university and questioned whether they are studying just to "give out commodes". The combination of the fast-paced setting and an educator who is not able to support the development of Rowan's reasoning left them confused and unsure.

8.2.4 Disassociation from educators reasoning

In the *key moment* below Jules discussed some difficult experiences on an acute mental health placement and situations where there were fundamental differences between the interventions their educator selected and those they would have chosen.

Jules: They (educator) didn't run their groups really very, (laughs) very well. I mean in my opinion, I mean, you know, I'm only a student I'm not qualified but, their, they weren't very engaging. So, for example they, they had a music group, we'd sit down in a circle, and everyone would come and sit down there were lots of instruments for people to choose, some would choose an instrument and just play along, or sing along if they wanted to. But my educator would always sing like religious songs, so

sort of Christian songs and not everybody would, some people did know them, but most of the patients didn't know. You know these are mostly young working-class black guys, you know from (place). Or maybe sing, sometimes they'd sing like a Beatles song um and so you know they (service users) couldn't relate to that. So, they weren't really actively participating at all, they were sort of just sort of going along with it, and it was like something out of 'One Flew Over the Cuckoo's Nest', honestly. Because, and obviously a lot, and so some of the guys were very, you know, strongly medicated. (Jules, p.10).

Jules began with a *loophole* stating they are only a student, ostensibly devaluing their opinion. The description of the music group was suggestive of the *travel genre*, Jules was not the centre of attention, instead it was a diverse world of differences and contrasts that was the focus (Bakhtin, 1986). The emphasis on how strongly medicated the patients were, and comparison of this group to a film, set in a 1960's mental institution with an oppressive regime, was perhaps indicative of how alien and disorientating the experience felt. Jules was prevented from enacting their professional values and there was a mismatch between what Jules expected an occupational therapist to do and what they saw their educator doing.

Jules then anticipated the response of 'another' answering questions that have not be asked.

So, you could say, you know you could see that some of them were getting some enjoyment out of just being in that environment of music playing and being able to play an instrument. Definitely, yes, there are therapeutic benefits to, you know, everybody doing something in rhythm that's also very comforting, isn't it? But, you know, yeah singing these Christian songs that nobody really knew just didn't seem, I knew then, and I know now that that's not (laughs) necessarily the way to go if you want people to actively engage and participate. Um so, so that's something I've learnt not to do. (Jules, p.10).

Bakhtin (1986) refers to this as *double-voiced discourse* in which the speaker anticipates another's response, and this influences their speech. To illustrate this, I have reproduced the quotation below inserting the responses from 'another' that Jules may have been anticipating.

Another: So, what was your educators reasoning for the group?

Jules: *So, you could say, you know you could see that some of them were getting some enjoyment out of just being in that environment of music playing and being able to play an instrument.*

Another: So, there was a therapeutic benefit to the music group?

Jules: Definitely, yes there are therapeutic benefits to, you know, everybody doing something in rhythm that's also very comforting, isn't it? But, you know, yeah singing these Christian songs that nobody really knew just didn't seem, I knew then, and I know now that that's not (laughs) necessarily the way to go if you want people to actively engage and participate. Um so, so that's something I've learnt not to do.

Jules mixed the *professional* and *romantic genres* when discussing their reasoning in relation to the group. The *professional genre* could be seen in the reference to “therapeutic benefits” and “actively engage and participate” providing evidence for their reasoning. The *romantic genre* was indicated by fidelity to their person-centred values and the need for the group to be meaningful to the service users. Their conclusion about the music group emphasised their conviction that it was inappropriate and differentiated their reasoning from their educator's.

8.2.5 Difficulty following fast-paced reasoning

Morgan spoke about it being as if there were parts of the therapist's reasoning which were missing.

Morgan: I went out with band six and seven's and they would do their assessment and then they'd provide their intervention there and then. So, I didn't really have chance to think about what I would do, or what the reason for it was. Um, [sighs] I kind of got what they were doing, erm but they were so fast, and you can't think of all the options that they might have considered or [Clare: mmm] um and sometimes they would go through their reasoning. But I think sometimes they would miss out things that they might think was obvious to discard. But then I wouldn't, I'd think but why wouldn't they consider this, or why wouldn't they consider that.... So being with a band five who was kind of a bit like me, was still figuring it out was quite a good experience [Clare: mmm] and I felt like with the band six and seven's or even an experienced band five, they would have it in their head what they already wanted you to say. Then you're trying to guess what they're trying [Clare: laughs] to think of [Clare: yes] [laughs] rather than thinking through the different options and excluding them yourself you're just trying to guess what they want you to kind of think. (Morgan, p. 2).

In the *travel genre* there is no development of the hero and an emphasis on differences and contrasts (Bakhtin, 1986). Here Morgan highlighted the differences between the more experienced therapists reasoning and their own; the speed at which the therapists reasoned, Morgan's difficulty in knowing what cues to attend to and which can be ignored. For Morgan, being on a more equal footing with an inexperienced band five therapist allowed a shift to the *Bildungsroman* and facilitated the development of their reasoning. This therapist was

not fast, and this was less overwhelming and reduced the pressure, allowing Morgan time and space to reason.

8.2.6 Anxiety inhibits reasoning

Eli and Val both discussed the impact of anxiety on their reasoning.

Eli explained how being observed made them anxious.

Eli: While it's good to throw yourself in the deep end, sometimes when you're being all proper watched all the time, I know for me like I always think about the cog, the hierarchy of cognition, I use it on myself funnily. If I'm panicked, I can't always attend to all the information around me and I can't remember things that I've read in the evidence-based practice, or what I need to be looking for or do you know what I mean? ...I prefer working with service users on my own. I'm very aware the educators need to watch you, but I like working with them on my own because the, the pressures off. They're, like they (service users) don't know all this, all these clinical reasonings and things that are going on inside your mind. And I found quite often you know that I'd eventually get there [Clare: mmm] with what I was doing, and it just took me a little bit of time. Sometimes I found you know on the assessments, if I felt pressured, or the OT or Physio butted in and would say, ask a question, I'd think in my head, you know, I was getting along those lines [Clare: mmm] but it was just taking me more time [Clare: yeah]. So, I think doing some sessions like on your own if you can [Clare: mmm] with the person that was very important for me. (Eli, p. 13).

The discussion of the “hierarchy of cognition” “attend” and “evidence-based practice” suggested use of the *professional genre*. As Eli began to discuss their emotions there was a move away from professional language and use of expressions such as “thrown in deep end”, “proper watched”, “panicked”, “pressured”. They also experienced the frustration of the educator interjecting while they were still processing information. The *travel genre* was indicated by their inability to reason when they were anxious about being watched by their educator. Eli felt the pressure of their educators’ expectations to perform in a certain way and at a certain speed. This was contrasted with the pressure being off when Eli was alone with the service user. When alone the anxiety of being watched was removed and their reasoning had time and space to develop, this indicated a transition to the *Bildungsroman*.

In the next *key moment* Val discussed their initial assessment of a service user in the community and spoke about the impact of anxiety on their reasoning.

Val: [laughs] Um, I think [2 sec pause] it's quite embarrassing actually, I do feel quite embarrassed. But, um, the thing that tripped me up, I think because I found the form very difficult. Because it, what they, they didn't have an initial assessment form. So, it was just a print off of the template from the computer. And [2 sec pause] because my educator was so experienced, they didn't do it in a linear way anyway. So, it's not like I'd been able to see them doing it exactly the same way to think oh I can copy that. And I think I was very distracted by the form, and when I started talking, they, they couldn't hear me as well because they were a little bit hard of hearing, so I was a little bit flustered anyway. So, I moved closer to them. And then my educator said, "can you, have you, you haven't checked that they're, because they might not have worked with occupational therapists before". Um you know "have you explained what we do?" and I don't, I just completely and utterly went blank, and I just, which, I think, because I was, I did feel very nervous, I really did feel nervous. (...) I felt really nervous, and my educator stepped in because they could see that I was really sort of flustered, and they were really, they were really kind actually, they stepped in and started the first couple of questions and then I took over and I was alright, it was alright. I think I still found it difficult I still felt like I was, I was finding it very difficult to concentrate on what they were saying and then think of what I was going to ask next. I almost felt like that; it was almost like too much for my brain. You know, to think "where are we going with this, and have we covered everything?" (Val, p. 8).

In the first part of this *key moment* the differences and contrasts associated with the *travel genre* (Bakhtin, 1986) were evident. In this setting Val lacked a detailed initial assessment form to help them structure the assessment, their experienced educator has used different approaches with different service users. This meant there was no familiar formula to follow, and the process was strange and alien. In the *travel genre* the hero can experience ordeal type adventures. and position and occupation are masks (Bakhtin, 1986). Val's inability to explain what an occupational therapist did to the service user could be interpreted as their professional mask having slipped, exposing an embarrassing momentary incompetence. In this community context they were under pressure to reason in the moment, this was overwhelming "almost too much for my brain" and they were very conscious of having to actively think about the next step. The static hero typical of this *genre* (Bakhtin, 1986) is evident in the temporary paralysis in Val's ability to reason.

Val continued, explaining how following their educator's intervention they were able to successfully complete the assessment.

Val: Then we went through the options and my educator was like, "what do you suggest?" and we went for the bath lift [2 sec pause] (...) and my educator agreed it was an appropriate intervention to put in place. Um but while we were there, we noticed a few trip hazards and my educator noticed as well about the difficulty getting out of the chair. But actually, I explained the options, because by the time that I started doing the initial assessments. We'd kind of seen, we'd been through all the different equipment, been through all the different options so I kind of felt comfortable knowing really what we could offer as a service. (...) But they didn't, they didn't, they refused. Um they didn't want us to do anything to the sofa. I think we might, I think I might have offered them a bed lever they didn't, they didn't want anything. It was just, we just put the bath lift in. But had the opportunity to talk through a few other things (...) because of their mobility issues they weren't able to get out anymore and they'd had a fall um and we talked a bit about that, and they were basically saying they were lonely. (...) So, I spoke to them about, you know, would they be interested in a befriending service, and they were really keen for that. So that was something that I arranged and managed to put in place before I left placement. My educator said you know it was really good, um because it was quite difficult actually to secure that, to secure it, to um to get the befriending service to come in (...) but I managed to get that in place. (Val, p. 8-9).

The support of their educator allowed Val space and time to gather their thoughts and complete the assessment. Val was no longer a nervous and static student, they became active, confident in their knowledge, and were able to suggest suitable interventions. The *professional genre* was more evident and can be seen in Val's discussion of trip hazards and their knowledge of the remit of the service. A transition to the *romantic genre* was suggested with Val's deduction that the patient was lonely. They were committed to the ideal of being person-centred. Although it was not within remit of the service to address loneliness, they overcome this obstacle and put effort into securing a befriending service for the service user. Val reported the service user's enthusiastic acceptance of this which contrasted with their reluctance to accept some of the equipment-based solutions. The romance ends when "the equilibrium that had been destroyed by chance is restored" and the hero emerges with "honour intact" (Bakhtin, 1981, p. 106). This was a happy ending to the initial assessment that initially didn't go well for Val.

Val reflected on what they learnt from this experience.

Val: I did almost feel much more pressure that, it would have been quite difficult to go back and see someone again. So, to try and make sure that you got through everything in a kind of reasonable amount of time. (Val, p.9).

Val: I think [2 sec pause] I think starting to do, when I started to do the assessment alone, at first it felt how am I going to remember to get through all these different things, and to think about everything, and make sure that I don't miss anything? (Val, p. 12).

Val concluded that the community context put them under pressure to reason quickly in the moment, as there was no time to go away and reflect.

The educator's approach both during the visit and afterwards (see below) facilitated the development of Val's reasoning.

Val : Just that first one [laughs] that didn't go very well. But they (educator) were great actually because they, the very next day they said, "right you're just gonna get on with it now". Because I'd gone home, and I'd had a bit of a crisis of confidence because I was thinking "oh God you know what if I can't do it?" and it just feels so overwhelming on the second one. But actually, it was the best thing they could have done for me really, just to get me to do it again. Um but like I said I would just take the assessment, and then just did it much more naturally [Clare: mmm] from that point forward. (Val, p. 10).

The educator got Val to do another assessment the next day, and their approach was transformed, they were able to complete this assessment much more naturally. Typical of the *Bildungsroman* the hero is not ready-made, we see their evolution (Bakhtin, 1986).

8.2.7 Summary of the travel genre

The *travel genre* was used by participants to describe their inability to reason. This could be related to the fast pace of practice in the setting or the speed of their educator's reasoning, a need to disassociate themselves from their educators reasoning, or anxiety. For Val their educator was instrumental in transitioning from the immobility of the *travel genre* to developing initiative and playing the active role that led to the learning and development associated with the *Bildungsroman*. For some participants this transition came when they had time and space to reason. For Sam, Jordan and Jules there seemed to be a disconnect between the romantic values-based practice they had learnt about at university and what

they saw in the practice settings. We see the *travel genre* as they experience the placement setting as alien and are inactive in their reasoning, perhaps as there was no opportunity to enact their values. For all the participants the immobility of the *travel genre* was temporary and there was a shift to the *Bildungsroman* as they learnt how to navigate the messy complex world of practice, and for Sam and Jules something about the sort of occupational therapist they wanted to be.

8.3 The adventure genre

8.3.1 Introduction

The *adventure genre* shares some characteristics with the *romantic genre* for example adventure time. One important distinction between these *genres* is that in the *romantic genre* the individual does not change (Bakhtin, 1981; Bakhtin 1984). Whereas in the *adventure genre* there is transformation and change in the individual (Bakhtin, 1981; Bakhtin 1984). “The series of adventures the hero undergoes does not result in a simple affirmation of his identity, but rather the construction of a new image of the hero” (Bakhtin, 1981, p. 117). Events shape the individual’s identity, whereas in the *romantic genre* they affirm identity. In *the adventure genre* the process of metamorphosis and transformation is experienced as knotty rather than straightforward (Bakhtin, 1981). Table 8.2 below provides some *sound bites* from the *adventure genre*.

Table 8.2 Sound bites from the adventure genre

<p>Eli <i>“It was a bit of a bootcamp in SOAP notes”</i> <i>“I don't like that they were telling me that I was wrong all the time”</i> <i>“totally like listen to what you're saying and how you are thinking about it, because then that helped me to kind of develop my own style”</i></p>
<p>Frankie <i>“Everything I did was always “why did you do it like that? Why's does that? That's not right, that's not this””</i> <i>“I just buckled down and thought okay, just do this”</i> <i>“it wasn't the greatest but what I learnt from that experience”</i></p>

8.3.2 Introduction to key moments

The two *key moment* in this section both relate to feedback the participant was receiving on their reasoning. The *adventure genre* was mixed with the *professional genre* and the *Bildungsroman*.

8.3.3 The emotional impact of feedback on reasoning

When students need to document their reasoning, they are often required to use the SOAP note structure discussed earlier (see 6.5.2, Documentation guidelines). Documenting reasoning is another way educators can access students reasoning and give them feedback on this.

Eli spoke about this process.

Eli: So, on placement two I was actually on erm an acute (type of setting) [Clare: okay] and that was very overwhelming because you didn't have space and time [Clare: mmm] it was like, but what helped me there was SOAP notes, SOAP notes helped [Clare: okay.] It was a bit of a boot camp in SOAP notes. Like my educator, they were quite like, this is exactly how they wanted it, and this is a huge debate, I think. Because some people are very much, like, you know, you have your own style. I don't like that they were telling me that I was wrong all the time. But the way I kind of see it, is that when you're with your educator its quite good to be open. I think okay so this is why they want the SOAP, this is what they want the SOAP notes to look like, and this is like, and you've got to get into their mind set like, why are they thinking like that? [Clare: mmm] I don't know, I find it quite interesting you know. They wanted it exactly this way, but then when I listened to their why, listened to their thought processes it was almost quite interesting. Because now, I still don't write notes how they would have. Perhaps I do it in my own style, you know, going in, going into practice that's one of my last educators, they said you know, well you're developing your own style aren't you? They weren't so like militant on me, and I said, "why are you not really criticising me writing my SOAP notes?" Because I wasn't used to it. In practice placement two it had been very much like you need to show the 'A', you need to show the analysis, erm and in placement four they were like "you're developing your own style you know; you've got the key points in there. I can see where your reasoning's coming from", like. So that was quite, but I don't think we could have had that without having had that openness in placement two [Clare: mmm] listening to my educator's reasoning and like looking at their SOAP notes and almost like adopting them, like just going into it and thinking yeah I am just going to totally like listen to what you're saying and how you are thinking about it, because then that helped me to kind of develop my own style (...) Just kind of having that almost like, I called it a bootcamp for SOAP notes it was quite good because through documentation you have to like write down your reasoning basically don't you? (Eli, p. 18-19).

In common with other participants there were references to the overwhelmingness of the acute setting and the lack of space and time for reasoning. The *adventure genre* was indicated by the metamorphosis Eli experienced, (Bakhtin, 1981) suggests this takes place in a sequence of guilt → retribution → redemption → blessedness. Eli began with the guilt of their documentation being wrong all the time, and then retribution of being put through a SOAP notes boot camp. This was followed by the redemption of being saved by their willingness to put their identity to one side and emulate their educator. Finally, the blessedness of being able to see how this process enhanced their ability to document their reasoning. There was a regaining of identity confirmed by an educator in one of their later placements who suggested that Eli was developing their own style of documentation.

Eli spoke about how totally they subsumed their identity and adopted their educators, but their identity cannot be totally obliterated, and this is seen through their use of parody. Bakhtin (1981, p. 76) describes parody as having two languages or styles, here we see the professional and everyday language used by Eli to describe their experience interspersed with the reference to “SOAP notes boot camp” and their educator having been “militant on them”. The openness required to lose their own identity and become like their educator to succeed is reflective of the requirement for a soldier to conform and follow orders. With parody it is “difficult to establish where reverence ends and ridicule begins” (Bakhtin, 1981, p. 77). The reverent adoption of their educator’s style of SOAP notes was juxtaposed with the image of an unreasonable educator who was putting their student through the harsh discipline of a military training camp for new recruits. Eli demonstrated resilience and suggested this tough experience was good for them – the discipline they were subjected to in the boot camp made them a stronger person. In the *adventure genre* the individual bears some responsibility for changes in their life (Bakhtin, 1981) and the extent to which Eli took on this responsibility was evident in this *key moment*, when they refer to “being open”, “getting into their educator’s mind set”, and “totally listening”.

As discussed in Section 6.5.5 (The practice educator’s questions) one way in which educators tried to assist the development of students’ reasoning was by asking them questions. Frankie discussed the difference between unhelpful and helpful questioning.

Frankie: Everything I did was always “why did you do it like that? Why’s does that? That’s not right, that’s not this” And it was never like “you, you should try and explore this”. Whereas other practice placements if I did something, I, always willing to learn it if they would give me critique, critical feedback I’d be “okay so how can I improve that” they’d go “you can do this, this” they’d say how you can improve that we can work on them together [Clare: mmm]. Always negative, alright you don’t know

anything. It was almost a disappointment, it was almost a disappointment, because I didn't know. It was my first time I'd ever been in a hospital setting, because I didn't know certain things it was almost like a disappointment [Clare: mmm]. Which I kind of got that, and it just made me feel very erm, very isolated, I suppose to a certain degree. So, I just kind of, because I just wanted to pass the placement. I just didn't, I just buckled down and thought okay, just do this (...) just erm try and get through it, and erm yeah. But at that same time even though it was very critical, I learnt in a sense, because they were so hard, I learnt to speed up on my writing. I learnt to try to make my writing a bit more concise, I learnt to erm try to, a different mode of thinking, like why's this, why's that. I started to initiate that in the second one, so when I went to the third one it was like okay, I'm going to do this, I'm going to do this. I'm going to write this way I'm gonna. I was a bit more, I tried to speed up myself, my work as well [Clare: mmm]. Which, which was good, because I got good feedback, and the, one of the things my practice educator would do in the third one is that they'd give you critique, critical feedback, they'd, then they'd also give you positive and they'd always say how you can improve on your practice. Because nobody knows everything and we, the, we're here to learn [Clare: mmm]. So, if I've done something, I want to know how can I improve on that, rather than just being told it's wrong that's not right and being made to feel quite negative to improve on. (...) It wasn't the greatest but (...) rather than dwell on it I looked at what I've taken from [Clare: yeah] the experience (Frankie, p. 22).

Frankie emphasised disappointment and used this word three times. They explained how unfamiliar the context was to them. They seemed to regard their educator as a tester, who was somewhat exasperated with their lack of skill. Frankie contrasted this with other educators who had been more facilitative, provided support, and identified strengths as well as weaknesses. Frankie identifies the isolation typical of the adventure hero (Bakhtin, 1981). This *genre* also emphasises metamorphosis or change which is full of knots rather than straightforward. The individual has agency in this *genre*, and this agency and determination is evident in Frankie's statement "I buckled down". The metamorphosis of the *adventure genre* (Bakhtin, 1981) is suggested by the movement from the guilt of not knowing which was expressed as disappointment. Then the retribution from the educator, when Frankie was told they were not getting it right and they did not know anything. The redemption came with determination and hard work: when Frankie learnt to speed up note writing and to explain the why's of their reasoning. They are then blessed with these skills which they use in the next placement, and they receive positive feedback on these from their educator.

8.3.4 Summary of the adventure genre

Eli and Frankie both discussed topics (educators questioning and use of SOAP notes to structure reasoning) that have arisen already in the *Bildungsroman* section of this thesis (see Chapter six). The difference in *genre* related to how they experienced these events. When the participants used the *adventure genre*, they experienced their educators as testing their reasoning and finding this deficient. This contrasts with the *Bildungsroman* where participants experienced their educators as supportive and facilitative. In the *adventure genre* the participants' perception of a lack of support from their educators rendered learning how to reason challenging and there was a sense of isolation, they must forge their own path.

8.4 Carnival Genre

8.4.1 Introduction

Bakhtin (1984) describes the *carnival genre* as involving a suspension of the hierarchical restrictions governing ordinary everyday life. It involves eccentricity "the violation of the usual and the generally accepted, life drawn out of its usual rut" (Bakhtin, 1984, p. 126). This *genre* is also characterised by; laughter which is ambivalent, parody, and free and familiar contact between people (Bakhtin, 1984). Table 8.3 contains some *sound bites* for this *genre*.

Table 8.3 Sound bites from the carnival genre

<p>Eli "went for it [laughs], in the moment" "a lot of in the moment chopping and changing, and chopping pardon the pun" "they're (patient) trying to problem solve alongside me"</p>
<p>Jules "would not respond to any of my questions and would just start talking about you know UFO's" "They took the sheet off me, and was "oh I'll just write it down for you"" "this really chaotic situation it was completely out of my control"</p>

8.4.2 Introduction to key moments

This *genre* was evident in one *key moment* for Eli and two of Jules's *key moments*. A student on placement operates under restrictions (imposed by the health and social care system) and with the supervision from their educator. This is the antithesis of the lack of hierarchy and restriction free nature of *carnival*, and it is therefore perhaps unsurprising that this *genre* was not more prevalent. The *key moments* relate to the participants' experiences of reasoning without restrictions and reasoning in unpredictable circumstances.

8.4.3 Reasoning without restriction

Jules discussed a placement where they were working very independently in a setting with little structure.

Jules: I was the only OT, and I wasn't even a proper OT yet. um with a bunch of support, well two or three support workers and then lots of locum staff, so, and there were just no processes (clicks fingers) whatsoever, or anything, really. It was just madness how it was run. Just no structure (subdued tone). So that was immediately quite, actually you know I wasn't scared, I wasn't even intimidated by that. I was like great (animatedly) you know; I can do what I want. I can use what kind of assessments I want. I can have that choice. Because I think I had felt a little bit like, I had really expanded my knowledge and really gained confidence in that structure, and I felt ready to break out of that a little bit and sort of find out, find out, you know what kind of OT I wanted to be, actually. (Jules, p. 25).

This placement lacked the hierarchy and structure Jules had experienced on other placements. The lack of structure and departure from the ordinary, in Jules's words "madness how it was run", are characteristic of *carnival*, as is the ambivalence of "ambition with self-abasement" (Bakhtin, 1984, p. 159). In this *key moment* Jules began with self-abasement describing themselves as not even a "proper OT", this was contrasted with the ambition of using this freedom to break out, do what they want and discover their identity as an occupational therapist. The short choppy sentences of the *carnival genre* (Bakhtin, 1981) were evident. There is also *double-voiced discourse* and *a word with sideways glance* where there is "a second and alien discourse functioning within the consciousness and speech of the hero" (Bakhtin, 1984, p. 210). It is as if Jules is responding to another's voice. I have inserted below an example of what they could have been responding to from the other voice.

Jules: there were just no processes (clicks fingers) whatsoever, or anything, really. It was just madness how it was run, just no structure (subdued tone). So that was immediately quite,

Other voice: What, there were no processes, and you were on your own, you must have been scared?

Jules: I wasn't scared.

Other voice: You must have been intimidated by the lack of structure?

Jules: I wasn't even intimidated by that.

Other voice: Really?

Jules: I was like great (animatedly) you know, I can do what I want, I can use what kind of assessments I want, I can have that choice.

Other voice: but how did you know what you were supposed to be doing?

Jules: I had really expanded my knowledge and really gained confidence in that structure, and I felt ready to break out of that a little bit and sort of find out, find out, you know what kind of OT I wanted to be actually.

There was a sense of Jules responding to the idea that they might not have been able to cope in this unstructured and unrestricted setting. *Carnival* has a power that is transformative (Bakhtin, 1984) and for Jules the lack of structure was enabling; allowing independence to develop their professional identity.

8.4.4 Reasoning with unpredictability

Two *key moments* (one from Eli and the other from Jules) illustrate the use of the *carnival genre* when the participant needed to cope with unpredictable circumstances and reason in the moment.

In the next *key moment* from Eli, the experience was narrated using the *romantic genre*, the *professional genre*, the *Bildungsroman* and the *carnival genre*.

Eli discussed a session they facilitated in a patient's home.

Eli: I went in one day being very OT, I said "so what do you want to do today?" And they were like "well I've actually just preparing my lunch" I'm "right okay". They're like "I really wanna butter this bread and put, like cut up some tomatoes and cucumber". I was thinking oh gosh, okay, [laughs] 'because kind of knowing their arm situation I thought, mmm, I'm not so sure if this is going to work but just being like a

student, I thought I'm just going to go with it [laughs]. So probably that was where my reasoning wasn't so like in the, the, a, in the moment [Clare: mmm]. It was very much after, I thought, oh no maybe I shouldn't have, and, reflecting back with my educator maybe that wasn't the best. Well anyway, went for it [laughs], in the moment erm yeah and it, it was, it was quite difficult, you know they didn't, like from a body perspective and their arm it didn't really work and their safety awareness was a little bit out, I found as well. Like when they were cutting the tomato, like they were cutting it like with a knife going towards their hand, and I was thinking, oh my goodness. I had to stop them, and think, you know, okay, there was a lot of in the moment chopping and changing, and chopping pardon the pun [both laugh] and changing. I was almost, it's really bad, but they were almost like my guinea pig. I was really thinking, how can I change this activity for them, I was experimenting all different kind of ways [Clare: mmm]. But I don't think, that was when it was just me and them though, and I don't know if I'd have been confident to do that if someone had been watching me. (Eli p14)

At the beginning of this *key moment*, the *romantic genre* was suggested when Eli was “being very OT” and attempted to implement person-centred and occupation-centred reasoning. The *professional genre* was evident when Eli struggled to balance their romantic values with their professional knowledge of the service user’s condition. The *romantic genre* predominated; Eli referred to the service user’s “arm situation” rather than using more technical professional terminology. Their professional, knowledge-based, reasoning told them chopping vegetables was likely to be challenging but they were not able to fully grasp why and predict the likely outcome. Their romantic person and occupation-centred values meant Eli impulsively decided to go ahead. Not having had the time to process all the relevant information, they had difficulty in reasoning at speed, and this spur of the moment decision led to a transition to *the carnival genre*. Ambivalent laughter is a feature of this *genre* (Bakhtin, 1984) and Eli laughed and seemed uncertain when they discussed their decision to go ahead. “I’m not so sure if this is going to work but just being like a student, I thought I’m just going to go with it [laughs]”. They also gave themselves a *loophole* “being a student”, the implication being at the time did not know any better, but that their reasoning had developed since then. Bakhtin (1984) described *carnival* as multitoned, mixing the serious and the comic, and Eli mixed the serious risk of the patient injuring themselves with the comic chopping pun. Another feature of the *carnival genre* is the reliance on free invention (Bakhtin, 1984), and in this *key moment* Eli referred to the service user as their “guinea pig” and “I was experimenting”.

Eli reflected on this experience a little later in the interview.

Eli: They're (patient) trying to problem solve alongside me [Clare: yeah] but obviously, because they're maybe not as aware of risk assessment and stuff. We're kind of trained to think of those things, they were purely just trying to think like how can I do this? Just trying every way, and then it was me that was coming from the occupational therapy perspective, thinking, okay yeah, I need to step in here, this is like risk, risk, risk [Clare: mmm]. Yeah, so, but my educator thought the chopping board was appropriate, so [Clare: mmm] I kind of felt like I'd got something right [both laugh]. But all of that just kind of came from this noticing that it wasn't really meaningful for them. But then my educator did say you know it's important to perfect maybe the task that you're doing before going onto something else [Clare: mmm] just so your kind of building up and not overloading someone [Clare: mmm.] So, yeah, so, it was interesting, because I was, I think when you're a novice you always you very much go out with the thing of, I want to save the world. I wanna, everything that's meaningful to this person (...). But then as you progress you start to realise actually no, you need to use your reasoning to almost kind of prioritise [Clare: mmm] what you're doing. And yeah, I think that, that transition's quite interesting (...) and as you progress, and you are more in a service, and you talk more to other OT's that are more experienced than you. You start to realise, actually there's all these other things as to why a person might not be able to do exactly everything that want to do [Clare: mmm] and that managing expectations. But to manage an expectation of a person you need to know why, and that I think comes from the reasoning. Do you know what I mean? You have to be quite clear in your clinical reasoning in explaining anything that you do whether it's to a client or to like a doctor [Clare: mmm] but you just adapt how you say it [Clare: mmm. It's all coming from that clinical reasoning isn't it [Clare: yeah] I don't think I really realised that until placement three and four. (Eli, p. 15).

A feature of the *carnival genre* is crowning and de-crowning, which Bakhtin (1984, p. 124) described as a “joyful *relativity* of all structure and order” (original italics) in which authority is handed over. Eli’s momentary loss of control of the situation and the service user taking over their problem-solving role could be interpreted as a de-crowning. Re-crowning was evident when they regained control and were able to arrive at a suitable solution.

There was a return to the *professional genre*, evident in the focus on risk assessment and risk (emphasised three times) and more use of professional language. Again, this was interwoven with the *romantic genre*, indicated by Eli’s reference to “I want to save the world”. In the *Bildungsroman* there is a change from “youthful idealism” to “mature sobriety and practicality” (Bakhtin, 1986, p. 22). This was evident when Eli’s reflected on their idealistic idea of saving the world and how this had developed into a more mature understanding of complexity. There was more awareness of the need to manage the service user’s expectations, and a realisation that assuming being person-centred was doing everything the

service user asked for was simplistic. Eli went on to discuss this session with their educator and contrasted the speed at which their educator reasoned with their own reasoning.

Eli: Yeah to, it's going back to that thing where, about time and space, and thinking about it. They literally just summed it up in a couple of minutes like not even a minute like 30 seconds. They like "oh this, this," "if you're doing that, that, that". It was almost like that, how quickly they could do it, just hear it and know. They, very like, they were like band eight, whereas for me that took like the whole session [Clare: mmm] and then like thinking on the bus coming back to placement about it and then still not being sure [both laugh]. (Eli, p15).

Eli emphasised how little time their educator needed to reason. Each clarification made this smaller (a couple of minutes, not even a minute, thirty seconds, instantaneous – just hear and know) and they contrasted this with their own whole session and bus journey back to the office. There was a substantial difference in the time and space Eli and their educator needed to reason.

Jules experienced a challenging initial assessment with a service user on their second placement. In this *key moment* they transitioned between the *carnival genre* and the *Bildungsroman*.

Jules: I think it was maybe the OCAIRS assessment or something like that [Clare: okay] um I can't even remember what. It was impossible to do [clicks fingers] because the client was like floridly psychotic and just not, you know, would not respond to any of my questions and would just start talking about, you know UFO's as soon as I asked them a question about their family, and that was just...

Clare: Must have been a bit tricky?

Jules: Why my educator thought that was a good idea I don't know, in retrospect, God I look back, I would never do that now, you know.

Clare: Mmm, so what happened with that assessment? Did you...

Jules: I didn't finish it. I couldn't, I couldn't do it, you know, I just wasn't, and I didn't really get the support from my educator to complete it either so they just kind of left us to it [laughs].

Clare: What you and the patient?

Jules: Yeah, well we were all, the three of us together, well we were just sitting on a bench or something I think it was, and I was trying to ask the client these questions and you know. I guess in that moment I might have been using some clinical reasoning there, [Clare: mmm] because I remember thinking, really, I had this sheet of paper in front of me with the questions on it and I think I maybe asked them the

first question. You know, as in reading it off the sheet, and I didn't get a very good response. I don't think I got a negative response; I think they just said, "ugh why are you asking me about that, no I don't want to talk about that" and I remember thinking okay I'm not, I'm going to have to do something different here [Clare: mmm]. I can't just sit here and read off this page because they are clearly not comfortable with that. So, you know, you know now, I know what I was doing, and what I could do a lot better now is to sort of react to that [Clare: mmm] patient and ask them the questions in a way that was more comfortable for them or maybe not even ask them questions I might do an activity with them instead probably now [Clare: mmm] and talk to them while we were doing the activity together instead of sitting on a park, on a bench you know?

Clare: What did you do at the time?

Jules: So, at the time, at the time I think I just tried to make my questions less formal, and I think I was more casually asking so what about, you know, you mentioned your relative the other day so what do they do? I sort of tried to make it sound less structured, so it wasn't so antagonising for them. Um and I think I got some information. I remember thinking what the sheet looked like at the end of the session. It was kind of like just bits of words here and there. Actually, no they took the sheet off me, they took the sheet off me, and was "oh I'll just write it down for you" [Clare: laughs] and they started writing things on it and drawing pictures on it and things like that. So, it was kind of this really chaotic situation it was completely out of my control, and I didn't know how to manage it really except for continue being nice, you know not, not being authoritarian and you know, not trying to restrict, so just letting them have their space and you know, again now, I wouldn't, I probably wouldn't let them take complete control of the situation as I did then. I would probably try and put some structure in [Clare: mmm] um but yeah so, so you know, there was the, you know, I know now I was using clinical reasoning then in some primitive form [both laugh]. (Jules p. 5-6).

The *carnival genre* was evident as Jules attempted to reason at the time, and the *Bildungsroman* as they look back on the situation. *Carnival* life is "out of its usual rut" (Bakhtin, 1984, p. 126) and when Jules asked a question about the service user's family; the service user's response was to discuss UFO's. My suggestion that this was a tricky situation for Jules is followed by a mixing of the *carnival genre* and the *Bildungsroman*. The polemic (Bakhtin, 1984, p.138) of the *carnival genre* was evident in Jules's comment about their educator "why my educator thought that was a good idea I don't know." The split protagonist associated with the *Bildungsroman* "the remembered versus the remembering self" (Michaelson, 2012, p. 207) is also evident. As the remembering self, looking back, they feel this was an inappropriate patient to carry out this assessment with and they would be able to handle the situation differently now. When Jules stated "I didn't finish it. I couldn't, I couldn't do it, you know, I just wasn't, and I didn't really get the support from my educator to complete it either so they just kind of left us to it (laughs)" We see the "short", "choppy",

“categorical sentences” (Bakhtin, 1984, p. 138) and the ambivalent laughter (Bakhtin, 1984) that are characteristic of the *carnival genre*. In the *carnival genre* there is crowning and de-crowning. Jules may have lacked experience, but they are still able to adapt their approach and initially regained some ground with a less formal approach. However, this “crowning” was swiftly followed by a “de-crowning” when “symbols of authority are removed” and there was “free and familiar contact” (Bakhtin, 1984, p. 125) when the service user took the assessment form from Jules. Restriction is suspended in the *carnival genre*, and this was evident when Jules described the experience as “chaotic”, “out of control”, and themselves as “trying not to restrict”. The *key moment* concluded with the *Bildungsroman*; Jules explained they had gained competence since then and would manage the situation differently. They could see on reflection that they were using reasoning at the time. The use of the word primitive highlights how far they have come since then, and the maturity associated with the *Bildungsroman*.

8.4.5 Summary of the carnival genre

The *carnival genre* was evident in Jules’ description of the experience of reasoning in a setting where they were free from restrictions. It was also evident for both Eli and Jules in unpredictable situations, where they had to reason alone in the moment. These unpredictable situations were learning opportunities, and this is seen in the use of the *Bildungsroman*. The absence of any input from Jules’s educator (who was present throughout) was notable, the educator was not instrumental in the transition to the *Bildungsroman*. Whereas Eli’s educator played a role in helping them learn from the situation and facilitates the transition to the *Bildungsroman*.

8.5 Reflexivity – findings

Completing the analysis of these findings took a considerable amount of time. My initial thought was not to separate the findings out into individual *genres*. This was because I found the way the participants transitioned between *genres* fascinating. My first draft of this chapter took this approach but the feedback from my supervisors made me rethink this. This was a difficult stage in my PhD journey as the excerpt from my reflective diary indicates.

I think I was a little excited to share my findings with them, and now feel a bit like a mother who has spent nine months producing a baby, only to have people to have nothing nice to say about it. (Researcher's reflective diary, March 2020).

With a bit more distance I was able to adopt a less emotive stance and see how difficult my findings could be for someone unfamiliar with my methodology to engage with. Whilst I had become immersed in dialogism and Bakhtin the reader would not be. I have tried to arrive at an acceptable compromise and focus on individual *genres* but at the same time introduce some of the *genre* transitions I saw in the data as we progress through the chapter and the reader becomes more familiar with the methodology.

I was aware some of these findings immediately resonated with me. Sam's list of services to refer onto was a strategy I used when working in acute settings restricted my scope of practice. Some took more time to percolate, it was a while before I realised the positive risk taking that the participants were learning about had some parallels with my fathers' care. I remembered one occupational therapist's initial solution of 24-hour bed care, due to my father's lack of co-operation when being hoisted. My mother explained the impact of this on their quality of life, as he would not be able to go to the park or the day centre. I was somewhat perturbed that this did not seem to have been a factor in the therapists reasoning. Perhaps this has heightened my awareness of importance of positive risk taking? Some of the findings surprised me. I had not anticipated the level of expertise some of the participants demonstrated in person-centred and narrative reasoning. I had also not appreciated how emotive learning to reason was and that students would sometimes choose to reason differently and could occasionally (in my view) reason more expertly than their educator.

Completing the write up of these findings has sometimes seemed a never-ending task. I would repeatedly return to the data and see something more in it that I wanted to write about. I have, in the end, needed to remind myself that there is always more to be seen and said. This is what Bakhtin refers to as *unfinalisability*, the findings are there to be responded to and not for me to have the last word in their interpretation.

8.6 Chapter Summary

In this chapter I have discussed three less prevalent *genres*. The *travel genre* which was a *genre* the participants used when describing situations where they could not participate in reasoning. This was sometimes experienced as disconnect between what they had learnt at university and what they were experiencing in practice when the participants felt unable to enact their occupation-centred or person-centred values.

In the *adventure genre* reasoning was experienced as an ordeal like adventure. Although the participants developed their reasoning this process was perceived as an uncomfortable testing by their educator. This contrasted with the supportive role of the educator in the *Bildungsroman*. The *key moments* discussed in the *carnival genre* related to events where restriction was suspended and, although the participants were somewhat out of their depth when reasoning, valuable learning occurred.

In Chapters five, six, seven and eight I have represented the findings from my study in relation to the major and minor *genres* identified through my *dialogical* approach to the interpretation of the data. In the next chapter I will discuss these findings.

Chapter 9

Discussion

9.1 Introduction

My study sought to explore how occupational therapy students experienced professional reasoning during their practice-based learning using a *dialogical* approach. My review of the literature (Chapter 2) located no published literature on occupational therapy students' experiences of reasoning during their practice based-learning and just one unpublished PhD thesis (Summerfield-Mann, 2010), which collected and analysed secondary data from an assessment that included a reflection structured around the modes of reasoning. My study is the first to provide students with the opportunity to narrate their experiences of reasoning during their practice-based learning from their own perspective. These findings therefore make a significant contribution to a conceptual understanding of how occupational therapy students experience professional reasoning during their practice-based learning.

My interpretation of the findings led to the identification of two major and three minor *genres* that the participants made use of when narrating their experiences of reasoning during their practice-based learning. The two major *genres* I identified were the *Bildungsroman*, and the *romantic genre*. The *Bildungsroman* was used to explain how the participants learnt to reason in the real world. Use of the *romantic genre* was related to reasoning informed by person-centred and occupation-centred values. There were also three minor *genres*, the *travel genre*, the *adventure genre*, and *carnival*. The *travel genre* was used by participants to describe reasoning that felt alien and/or situations where they were unable to participate in reasoning. The *adventure genre* was used when the participants experienced their educators as testing their reasoning and to describe the transformation that occurred in overcoming this challenge. *Carnival* was used when participants were free from restriction and/or had to manage unexpected situations and momentarily experienced a loss of control of their reasoning. In the identified *key moments*, there were also traces of the *professional genre*, this was evident when professional language, knowledge and skills were used to explain and justify reasoning. It was also used when explaining the impact of the service context on reasoning.

My approach to the discussion of these findings has been influenced by the *dialogical* methodology and involves correlating a given text with other texts to reach a *dialogic* understanding (Bakhtin, 1986), and background reading on a *genre* (Sullivan, 2012). The process of interpretation involves creatively mixing theory with the data (Sullivan, 2012). I have therefore read about *genres* and relevant theory to add depth to my interpretation of what each of the *genres* adds to our understanding of the participants' experiences of reasoning during their practice-based learning. It also involves considering the "emotional and moral connection to what is said" and the "self-other axis" (Sullivan, 2012, p. 168). I have therefore considered how the participant positions themselves in relation to others and explored the emotional connection to their experiences.

In the introduction (Chapter one) and literature review (Chapter two) I set the scene regarding what was known and understood about experiences of professional reasoning in occupational therapy. In this discussion chapter my findings will be explored in relation to this literature. However, given the lack of research relating to occupational therapy students' experiences of reasoning during their practice-based learning, additional literature, and theory, both within and beyond the profession, will be explored. Reasoning can be conceptualised and operationalised differently across health professions, and Young et al (2020) and Young et al (2018) argue that the boundaries imposed by different conceptualisations can mean researchers ignore each other's findings. They suggest that permeable boundaries can allow for identification of commonalities, and complementary conceptualisations of reasoning, thereby improving our understanding of a topic that is complex (Young et al, 2018). I would suggest, that whilst it is important to be aware of differences in how reasoning is conceptualised, knowledge from other professions can extend an understanding of reasoning within occupational therapy. This view is supported by Araujo et al (2022), who state that, drawing on research from other professions can enhance occupational therapists' scholarship in relation to reasoning.

9.2 Structure of this chapter

I will begin by exploring the major *genres* (the *Bildungsroman* and the *romantic genre*), followed by the minor *genres* (*travel genre*, *adventure genre* and *carnival*). Drawing on participants data I will discuss what a *dialogical* approach has added to our understanding of how occupational therapy students experience professional reasoning during their practice-

based learning. I will conclude the chapter with by applying the quality criteria introduced in Section 3.6.3 (Quality criteria) to my study.

Readers familiar with thematic analysis may expect to see a table of themes to aid them in navigating the discussion chapter. In a dialogical approach this is not expected as the approach to data analysis is not thematic. My decision not to include a table is in keeping with other authors who have adopted this approach (Madill and Sullivan, 2010; Gomersall and Madill, 2014; Cunningham, 2016; Thompson et al, 2019). Instead, I have used sub-headings to structure the chapter and signposted the reader throughout the discussion.

9.3 The Bildungsroman – reasoning and professional socialisation

“Learning clinical reasoning, is like internalising it, it becomes a part of who you are and how you think.” (Eli, p. 17).

9.3.1 Introduction

The *Bildungsroman* was a *genre* used by the participants to describe their experiences of being socialised into learning to reason as an occupational therapist. In the *Bildungsroman* the world is experienced as a school we pass through with the idealism of youth becoming resigned to mature pragmatism, a process which requires adaptation and acceptance of the laws of the world (Bakhtin, 1986). Bakhtin refers to the *Bildungsroman* as the novel of education and, given the educational nature of practice-based learning, it is reassuring that this *genre* was so prevalent. It indicates that the participants’ experiences of reasoning during their practice-based learning provided opportunities for learning and development. Recently authors have begun to explore similarities between the *Bildungsroman* and transformational learning (Fuhr et al, 2017). Both see learning as a process which recognises difference, involves critical reflection, reconstruction of assumptions, and re-interpretation of experience (Fuhr et al, 2017). This will be explored in more depth in the discussion which follows.

Michelson (2012, p. 203) states that “the Bildungsroman is able to simultaneously depict the unfolding of individual development and the enfolding of the individual into social institutions and roles”. In their use of this *genre*, we saw the participants learning to reason as they were socialised into the occupational therapy profession. Higgs (2013, p. 86) defines

professional socialisation as “the individual’s journey in becoming a member of a particular profession, a unique social group, and learning to be part of the culture of that group with all its privileges, requirements, and responsibilities”. Higgs (2019) has argued for reasoning to be reinterpreted and conceived of as an encultured practice with professional socialisation as a key process. This relatively recent reinterpretation indicates that our understanding of the relationship between professional socialisation and reasoning may be at an early stage of its development. My findings make an original contribution to understanding how professional socialisation is experienced by occupational therapy students during their practice-based learning.

9.3.1.1 Outline of the structure of this section

I will begin by discussing how socialisation into reasoning as an occupational therapist was experienced as complex, and then explore the time, space, and resources that helped scaffold the participants’ reasoning and facilitated engagement with this complexity.

9.3.2 A nine-track mind the complexity of reasoning

‘I don’t even think it’s a three-track mind, I think it’s like a nine-track mind’ (Frankie, p.13).

Some of the participants’ experienced reasoning as complex and this could leave them feeling overwhelmed (Rowan and Morgan), feeling challenged (Frankie), or lost and confused (Sam). The complexity of reasoning is well recognised in the occupational therapy literature (Mattingly and Fleming, 1994; Hess and Ranmugondo, 2014; Unsworth, 2021) and that of other professions (Gruppen, 2017; Higgs, 2019). As the participants became socialised into the profession (by discussing reasoning and observing the practice of others) their awareness of the multiple factors influencing reasoning and its complexity grew. Mattingly and Fleming (1994) suggest that occupational therapists shift rapidly between different modes of reasoning, the three tracks of procedural, interactive and conditional reasoning, and narrative reasoning. Frankie expanded this three-track reasoning into nine tracks to explain the large number of factors that need to be considered when reasoning, an apt illustration of their experience of reasoning as a complex phenomenon.

Initially there could be an unawareness of the complex and multi-faceted nature of reasoning. For example, when reasoning about whether a service user could have a shower,

Morgan's reasoning was initially that they should agree to the request, and they failed to consider the multiple factors that influenced this decision. In transformative learning theory a frame of reference is comprised of "a habit of mind and resulting points of view" (Mezirow, 2000, p. 17). Support to challenge assumptions and unquestioned values is important (Cranton, 2016). Morgan's educator explaining their reasoning exposed Morgan to a different way of viewing the situation, and supported them in transforming their frame of reference, by socialising them into the more professionally informed view that would be adopted by an occupational therapist.

Nicola-Richmond et al (2016) suggest that professional reasoning is a threshold concept students need to acquire to transform into a practitioner. Threshold concepts are transforming for the individual both intellectually and emotionally (Rattray, 2016). For example, Sam described reasoning as confusing, hard to navigate and compared it to swimming in a swamp. Information processing theory suggests that the overwhelmingness of reasoning for novices is related to; an inability to discriminate between important and unimportant cues, a lack of organised knowledge to integrate new information with, limited pattern recognition, and low automaticity (Carr and Shotwell, 2018). Emotionally it has been suggested that resilience and emotional security in the face of uncertainty helps learners deal with difficult liminal spaces when negotiating threshold concepts (Rattray, 2016). Sam's emotional security was evident in their willingness to spend time in the swamp-like, uncertain liminal state. Once Sam's frame of reference (viewpoint) was transformed, what had seemed alien in the occupational therapist's frame of reference became automatic. This tacit knowledge was described by Eli as internalising reasoning, and by Frankie as reasoning without thinking about it. Mattingly and Fleming (2019, p. 121) describe tacit knowledge as the "automaticity of expertise" that enables expert occupational therapists to act without consciously thinking about their actions. My findings extend this concept to students and suggest that (although not typically regarded as experts), they can begin to draw on tacit knowledge on their later placements.

Some educators can expose a student to as many different experiences as possible, this adds to the complexity of reasoning and Sam suggested this was not always helpful. This exposure to variety can reduce opportunities for repetition, and therefore arguably inhibits the acquisition of patterns. Experts can see patterns in information due to their experience of having been in many similar situations (Carr and Shotwell, 2018). Pattern recognition assists in discriminating between important and unimportant cues, facilitating the filtering of

information, and can therefore reduce feelings of overwhelmingness. Repetition versus variety needs to be finely judged, as variety and complexity has been found important for development of more advanced reasoning (Mattingly and Fleming, 1994; King et al, 2008). This means that the practice educator needs to attempt to offer students a reasoning task that will challenge them without overwhelming them. Vygotsky (1978) suggests there is a zone of proximal development, beyond a student's current independent learning level, that an expert can assist them in reaching. A study by Kantar et al (2020) found that three constructs were used by preceptors when assisting nursing students through the zone of proximal development. These constructs were 1) differentiation – the ability to individualise the learning experience, 2) scaffolding – e.g., prompts, role modelling and guidance and 3) forming a positive partnership with the student that valued their contribution. These constructs will be explored further in relation to my findings in the discussion that follows.

The participants in my study experienced autonomy, time, and space to reason as supporting the development of their reasoning. Also, means of scaffolding their reasoning (occupational therapy models, documentation guidelines, treatment protocols, the practice educators' questions, and role modelling of reasoning) helped manage the complexity of reasoning. I will begin by discussing the participants experiences of time, space, and autonomy to reason (9.3.3) and then discuss means of scaffolding reasoning (9.3.4).

9.3.3 Time, space, and autonomy

"In terms of the development of my clinical reasoning.... it really helped me to have that time" (Logan p. 17). "My educator kind of gave me a bit of breathing space" (Eli, p.25).

To manage the complex nature of reasoning and achieve the development associated with the *Bildungsroman* time, space, and autonomy were experienced by some participants as important. During students' practice-based learning they participate in communities of practice. A student on placement is new to the practice community and in a position of legitimate peripherality which involves power relationships (Lave and Wenger, 1991). For the student it is the practice educator who has the power to decide to what extent they can autonomously participate. Autonomy is not just a personal trait, it is also a social phenomenon, and the support and independence afforded by a supervisor is an important factor (Fredholm et al, 2015). Reaching a judgement about the level of support and independence requires the educator to individualise the learning experience, and to value

what the student can contribute. Kantar et al (2020) found this was important in assisting students to move through the zone of proximal development (Vygotsky, 1978) and achieve a level of performance above their current level. An educator that can balance support and autonomy at a level appropriate for the individual can contribute to the development of the student's professional reasoning. Being trusted with autonomy indicates to a student that their contribution is valued, and the participants in this study gained confidence through this autonomy. In Rodger et al's (2014) study occupational therapy students' perceptions of excellence in practice educators included, a reciprocal relationship with their educator that valued their contribution, being encouraged to be autonomous, and their educator's ability to select an appropriate level of challenge. Naidoo and Wyk (2016) also found autonomy and space to work independently supported occupational therapy students' learning. Educators often achieve a balance between autonomy and support, but at other times students can experience them as providing too much or too little autonomy (Beanlands, 2004).

Autonomy brought with it the need to reflect in action and this sometimes led to errors in reasoning when the participants' lack of experience and knowledge meant they did not select the most suitable course of action initially. Errors are an inevitable part of reasoning (Cronin and Grabe, 2018) and for the participants these errors were valuable learning opportunities. For example, Logan learnt a child would get distracted if they had too much equipment on display, and Jordan that it was important not to overwhelm a service user. Richmond et al's (2020) review of educational interventions to develop reasoning ability in medical students, found a safe place to make mistakes was important in the development of students' reasoning. The development associated with the *Bildungsroman* was possible for the participants in this study because their practice educators accepted that when a student is learning to reason errors will occur. A positive learning environment and partnership of trust with the student is important. This can be challenging for educators as they need to balance, allowing the student autonomy, with their accountability for the student's actions and a duty of care to the service user (Beanlands, 2004).

When practice educators facilitated autonomy, this allowed the participants a space in which to independently practice the reasoning they were being socialised into. The participants were grateful for time and space to reason (Jules and Logan), felt safe (Eli) to reason independently, freer (Jordan), and more confident (Eli and Jordan). The relationship between autonomy and increased confidence is something which has been noted for students on role emerging placements (Mattila et al 2018; Clarke, et al 2019). Autonomy also allows students

to reason at their own pace without intervention from their educator. As novices lack the experience that allows experts to see patterns, access knowledge quickly, and identify relevant cues, they need more time to reason (Beanlands, 2004; Falk-Kessler and Ciaravino, 2006; Carr and Shotwell, 2018). Time to reason was context dependent, for example Jules and Logan had time, on their own, to reason through assessment results before planning the next session with the service user. This is not always the case, and placement settings where this was not possible could be challenging for students (*key moments* relating to this will be discussed in relation to the *travel* and *carnival genres* (see Sections 9.5 and 9.7). Eli found that the additional time needed to reason was not always recognised, and their educator would interject whilst they were still processing information. Information processing theory suggests that experts reason much faster than novices (Carr and Shotwell, 2018). It is therefore perhaps difficult for an expert, whose reasoning has become fluid and automatic, to anticipate how much time a novice might need to process information. However, the ability to work with a novice at their pace is a skill that could contribute to the successful facilitation of their reasoning by allowing them sufficient time to process information.

In this section I have discussed how time, space and autonomy were important in supporting the participants to manage the complexity of reasoning. In the next section I will explore some of the resources that assisted in scaffolding the participants reasoning.

9.3.4 Scaffolding Reasoning

As well as time and space to reason, the participants found several resources helpful in scaffolding, and coping with the complexity of reasoning. Scaffolding is conceptualised as a means of providing support to the learner so they can reach a level just above their current level (Kantar et al, 2020; Vygotsky, 1978). Treatment protocols, documentation guidelines, occupational therapy practice models, the educator's role modelling of reasoning and their use of questioning to elicit reasoning, all acted to scaffold the participants' reasoning. These scaffolds played a dual role; they facilitated engagement with the complexity of reasoning, and they also helped socialise participants into the reasoning of an occupational therapist. This will be elaborated on as each of the different scaffolds are discussed.

I will begin by discussing treatment protocols, documentation guidelines and occupational therapy conceptual practice models. Then move on to discuss the educator's explanation of their reasoning and their use of questioning to elicit the participants' reasoning.

9.3.4.1 Treatment Protocols

Jules identified that they used service protocols to scaffold their reasoning. Whilst they still needed to make a reasoned decision the protocols limited the options e.g., choosing one of the four assessments that may be suitable. There has been some debate about the use of protocols in the literature. Kuipers and Grice (2009) suggested that protocols were useful to inform the reasoning of novice occupational therapists. Robertson (2012) however, acknowledged that protocols served a useful function in organising knowledge, but suggested that they cannot replace the role of experience in developing expertise. Whilst protocols could arguably restrict independent reasoning, evidence-based protocols can scaffold the reasoning of novices, and by managing complexity reduce feelings of being overwhelmed.

9.3.4.2 Documentation Guidelines

The SOAP (Subjective, Objective, Analysis, Plan) (Gately and Borcharding, 2016) note structure acted as a means of scaffolding reasoning for Jules and Logan. One of the difficulties experienced by novices is that they can be slow in learning new information as they lack a well-organised knowledge base to integrate this with (Carr and Shotwell, 2018). The need to break down reasoning using SOAP provided a structure. For Jules the SOAP note structure helped to organise information, it provided a framework for reasoning and a means of “banking” information. For Logan expressing reasoning in a written format helped in reflecting on their reasoning. A profession’s paradigm brings with it specific terminology and understanding the approach to decision making and communication is important (Simpson and Cox, 2019). SOAP notes make a student’s reasoning explicit allowing the practice educator to provide feedback and socialise the student into the language and reasoning of the profession.

9.3.4.3 Occupational therapy conceptual practice models

A setting where they... used a specific model..., it gave you very structured categories to think in and then actually did help to then focus your thinking (Jordan, p. 30). Taught at university about models, and stuff like that seemed to go out of the window really (Alex, p. 1).

Another means of scaffolding reasoning was the use of occupational therapy conceptual practice models, Frankie, Jordan, and Alex discussed reasoning using these. It has been suggested that conceptual practice models are useful in shaping reasoning as although they provide guidance, they are not directive (Cronin and Grabe, 2018). A model provides a structured, theoretical, evidence-based foundation for reasoning, but the individual still needs to use their own clinical judgement (Duncan, 2021). Students are socialised into the use of models at university, but placement provides an opportunity to practice reasoning with a model in the real world. The *Bildungsroman* is associated with the enfolding of individuals into social institutions (Michelson, 2012). Occupational therapy conceptual practice models socialise individuals into the theoretical foundations of the profession (Turpin and Iwama, 2011) and provide a means of engaging with service users as complex occupational beings (Boniface, 2012). For Frankie the use of a model was described as natural and always in their head, the model had become part of their professional identity. Ikiugu and Smallfield (2015) suggest that conceptual practice models are an important contribution to a student's professional identity and embed reasoning in occupational therapy theory. Frankie is perhaps beginning to do what Forsyth (2017, p. 159-160) describes as "think with theory" as experience of using theory in practice both enriches reasoning and adds depth to knowledge of the theory.

Whilst models were seen as helpful, they were also sometimes seen as confining. For example, Jordan described initially being resistant to "squeezing" their thinking into a model, before progressing to finding it useful to reason using a model, which gave "structured categories to think in" and helped form a picture of the service user. This initial resistance suggests what Wenger-Trayner and Wenger-Trayner (2015) describe as engagement, rather than unthinking compliance, when aligning with a community of practice.

Alex found once on placement, in a fast-paced setting, the focus was on discharge planning, and they were frustrated that they were unable to fully use the occupational therapy conceptual practice models they had learnt about at university. Instead, they had to focus their reasoning on a small aspect of the model, they learnt they were not able to address all

the service user's needs, and that other services could meet some of these. The maturation associated with the *Bildungsroman* means a loss of idealism and a diminished perception of the world (Bakhtin, 1986). As Alex becomes more socialised into the community of practice, awareness of the pragmatic contextual factors influencing reasoning develops and the scope of their reasoning is diminished in line with the remit of the service. It has been suggested that an understanding of context is essential for occupational therapists reasoning (Ryan and Hills, 2012). This is particularly challenging for students, who spend a short time in a practice setting, allowing them limited opportunity to become aware of all the contextual factors influencing reasoning.

Frankie, Jules, and Chris all described experiencing reasoning evolving to become more instinctive and with experience being less conscious of using scaffolds to support their reasoning. Over time, although their reasoning was still guided by these scaffolds, they had become part of their tacit knowledge. Tacit knowledge is professional knowledge gained through experience that an occupational therapist can act on without consciously focussing on this (Mattingly and Fleming, 2019). My findings suggest students may also begin to draw on tacit knowledge.

I have discussed the use of protocols, documentation guidelines and occupational therapy conceptual practice models to scaffold reasoning. I will now explore two more scaffolds for reasoning, the practice educator acting as a role model for reasoning, and the practice educator's questioning of the student.

9.3.4.4 The practice educator as a role model for reasoning.

The whole placement was a bit of a light bulb moment.... having that discussion with my educator... was just a moment around thinking, that makes absolute perfect sense (Charlie, p. 7).

An educator articulating their own reasoning can role model expert reasoning and make this more accessible to students. Role modelling has been found to be a useful means of scaffolding student learning through the zone of proximal development (Kantar, 2020). Role modelling reasoning has the potential to expose the student to a different perspective on a situation to the one they currently hold. This facilitates the student's reflection and identification of differences between their reasoning and their educator's reasoning. Richmond et al's (2020) review identified that an expert explaining their reasoning was

experienced by medical students as a positive learning experience, and conversely a lack of explanation was perceived negatively. The instinctive and fluid nature of expert reasoning can be difficult for experts to explain and for novices to follow, Sam described this expert reasoning as “alien”. Both Sam and Morgan identified that there were steps in their educators reasoning that were not visible to them making it difficult to understand how a solution was arrived at. Benner (2001) suggests it is the highly skilled nature of an expert’s performance that makes it so difficult to unpick the individual steps. However, Ajjawi and Higgs (2007; 2008; 2012) argue, for physiotherapists, the ability to break down reasoning is a key element of communicating reasoning. If educators are to communicate their reasoning effectively to students, the ability to identify and communicate the steps is important. Isabel et al (2021) et al suggest several means of sharing reasoning with students including, reflection and discussion, thinking aloud when reasoning, mind maps and decision trees.

Schön (1987; 1991) has suggested that messy complex areas of practice require professional artistry to reflect-in-action and manage challenging situations, and that reflective dialogue with a student facilitates the development of professional artistry. Risk assessment can be complex and requires professional artistry, this may account for it being discussed by several participants. The participants’ inexperience meant they could be more risk averse than their educators. Risk management has also been identified as an issue for early career occupational therapists who needed to learn to accept the service users’ rights to take risk (Murray et al, 2020). A loss of idealism is characteristic of the *Bildungsroman* (Bakhtin, 1986) and the participants needed to move from an idealistic view that all risk could be eliminated to one that balanced risk and other factors e.g., autonomy.

The participants were less likely than their educators to consider contextual factors and use future orientated conditional reasoning to consider the adverse consequences of any attempts to manage risk. The RCOT (2018) recommends that occupational therapists embrace and engage with risk, working with service users to enable choice and participation. This is therefore an aspect of their own reasoning that it is important for educators to share so students can learn how to embrace and engage with risk. Unsworth (2001) found novices were less likely to use conditional reasoning, and Knecht-Sabres (2013) that students needed facilitation from an instructor to progress to conditional reasoning. Moir et al’s (2021, p. 8) review of the literature identified that seeing the “bigger picture” is an aspect of reasoning that is challenging for newly qualified occupational therapists. This means it is important that

educators to share their conditional reasoning and support students to consider the contextual factors influencing reasoning.

Their inexperience also meant the participants sometimes missed risks that were identified by their educators. As Morgan identified, a student may not have transitioned from observing social norms such as respecting privacy and allowing people personal space, to professional norms which prioritise safety. The experience of discussing reasoning around risk with their educators allowed transformative learning to occur. Transformative learning takes place when taken for granted assumptions are challenged and constructive discourse takes place (Mezirow, 2000; Mezirow, 2003). Discussion with their educators allowed Charlie, Eli, Morgan, and Val to engage with a frame of reference different to their own, and to increase their appreciation of the multiple factors influencing reasoning. They were then able to draw on this knowledge to inform their future reasoning. The participants learnt from their educators both to be more aware of risk and to be less risk averse when managing risk.

Brandist (2017) when discussing the *Bildungsroman* speaks about:

A general process of acculturation in which the individual becomes more able to understand the thought and standpoint of others, broadens his or her horizons, internalises what originally appeared alien, cultivates the imagination, engages in intellectual labour, develops and realises his or her own abilities. (Brandist, 2017, p. 868).

This resonates with the experience of the participants in my study who were exposed to reasoning informed by a frame of reference that was different to their own when their educators explained their reasoning. This allowed them to re-examine a situation from a different perspective. By role modelling their reasoning the educator acted as what Savin-Baden (2008) describes as a learning bridge and assists the student in transitioning from a disjunctive space (where knowledge is troublesome) to proactive learning (a change in perspective). Ajjawi and Higgs (2008) found role modelling of reasoning to be central to professional socialisation of physiotherapists. My findings suggest that role modelling of professional reasoning may also be important for the professional socialisation of occupational therapy students.

My findings suggest when expert educators can make their reasoning visible this is valuable in role modelling the complexity of reasoning and socialising students into how occupational

therapists' reason. In particular, the ability to break down their reasoning into steps and share their conditional reasoning can be transformative for students' reasoning.

9.3.4.5 The practice educator's questions

When they were asking me questions...I never like it, it's always uncomfortable ...but in a way it's kind of useful if you come out with it yourself, and even if you don't and they tell you, you feel a bit crap but you kind of remember. (Eli, p16)

The final means of scaffolding reasoning was the practice educators' use of questioning to elicit the participant's reasoning. Ajjawi and Higgs (2008) discuss the importance of articulation of reasoning as a means of becoming aware of subconscious reasoning, allowing self-reflection, and others to provide critique. Alex and Eli both experienced their reasoning being questioned as being uncomfortable and engendering feelings of inadequacy. Questioning of students requires a skilled approach for this uncomfortableness not to inhibit learning and become too emotionally challenging for the student. Part of the skill is pitching questions at the right level, as Richmond et al (2020) identify reasoning tasks beyond a student's confidence are associated with negative outcomes. Alex describes feeling "absolutely useless" and Eli as feeling "a bit crap" when they did not know the answers to their educators' questions. Alex and Eli were able to learn from their educators questioning by tolerating the discomfort associated with not knowing, and because they knew their educators were aiming to support the development of their reasoning. This required a degree of emotional intelligence and resilience, concepts which I will explore when discussing the *adventure genre* (Section 9.6).

9.3.5 Summary of the Bildungsroman

I have explored the participants' use of the *Bildungsroman* to convey their experiences of learning to reason on their practice placements. The prevalence of this *genre* suggests that practice placements provide good opportunities for students to develop their reasoning. Given the lack of published research on occupational therapy students' experiences of reasoning during their practice-based learning my findings contribute to developing an understanding of this experience. In my discussion of this *genre*, I have conceptualised learning to reason as a process of professional socialisation.

Professional socialisation into reasoning involved the participants learning from their practice educator, and other occupational therapists, what was involved in reasoning as an occupational therapist. A focus on the relationship between professional socialisation and reasoning is relatively new (Higgs, 2019) and has been explored in relation to experienced physiotherapists (Ajjawi and Higgs, 2008). My findings make a significant contribution in illustrating how occupational therapy students experience professional socialisation into learning how to reason during their practice-based learning. The socialisation process could be transformative for participants and sometimes involved leaving behind their previous assumptions and adopting a new frame of reference. This required the cognitive self-awareness and self-reflection that Michelson (2012) suggested are characteristic of the *Bildungsroman*.

My findings indicated that the educator played a key part in facilitation of the student's reasoning by acting as a learning bridge. To support movement towards independent reasoning the practice educator needed to balance, variety and repetition of reasoning experiences, and the autonomy and support they provided to the student. The practice educator could be instrumental in allowing time and space for the participant to reason, and providing opportunities for autonomy, which contributed to participants feelings of confidence and reduced the anxiety they felt when being observed. The practice educator can also scaffold reasoning by exposing the student to the theory they use to reason, and by role modelling reasoning. Role modelling conditional reasoning (which is difficult for novices) can be transformational for a student as it can expose them to a completely different and more expert way of viewing a situation.

My interpretation of the findings suggests that learning to reasoning is not just a cognitive process, it is also an affective process. The participants spoke about the emotions they experienced, these included feeling anxious when their reasoning was being observed by their educator. They also experienced the frustration of not being able to reason with the theory they had learnt at university, or alternatively an initial resistance to reasoning with theory. They needed to tolerate experiencing confusion, finding reasoning hard, and feeling uncomfortable when their lack of knowledge was exposed. The emotionality of reasoning was also a feature of the other *genres*, and this is a topic that will be revisited when these are discussed.

9.4 The romantic genre: reasoning and professional identity

I'd done some reading it talked about values and how um that can really come into it and whether we are conscious of it or not. And I can really see...that really informs, I think, my clinical reasoning (Sam, p. 4).

9.4.1 Introduction

In this section I begin by briefly discussing the values associated with romanticism, and occupational therapy's historical relationship with romanticism. The participants' use of the *romantic genre* is considered in relation to their professional identity and the relationship between professional identity and professional socialisation is addressed.

This is followed by a discussion of the person-centred and occupation-centred values that underpinned the participants reasoning, their experiences of reasoning differently to their educator, and the romantic quests they embarked on.

9.4.1.1 Romanticism and occupational therapy

Berlin (1999, p. 147) argued that because of the romantic movement we have "liberalism, toleration, decency, and the appreciation of the imperfections of life." Romanticism undermines the concept of a single objective truth, and values ideals and motive over success (Berlin, 1999). Occupational therapy has a long association with romanticism, by virtue of its roots in The Arts and Crafts Movement (Hocking, 2008a). Romantic ideals informed the practice of occupational therapy from the 1930's onwards with a belief in the transformative potential of engagement in creative activities for health and wellbeing (Turner and Alsop, 2015). These romantic ideals co-existed alongside more scientific rational ideas about use of technical expertise, remediating impairment, and measuring outcomes (Hocking, 2008b). Eventually rationalism came to predominate, until the turn of the century when there was a resurgence of interest in the romance of the transformational power of occupation (Hocking, 2008c).

Turner and Alsop (2015) contend that the tension between rational and romantic ideals continues. They suggest that rational thinking informs the more visible context dependent skills of occupational therapists (skills often shared with other professions) e.g., group work,

wheelchair assessment. Whereas romantic thinking informs the professional reasoning process that allows an individualised person-centred approach to engagement in occupation. The findings from my study support this, with the participants' romantic occupation-centred and person-centred values being central to their reasoning. Turner and Alsop (2015) argue that it is this largely invisible, occupation-centred reasoning, that is the unique core skill of an occupational therapist.

The World Federation of Occupational Therapists (WFOT, 2012, no page number) defines occupational therapy as "a client-centred health profession concerned with promoting health and well-being through occupation" and (RCOT, 2021) states that a focus on occupation and person-centredness underpins occupational therapy interventions. Given this, it is perhaps unsurprising that these values were central to the participants' reasoning. The participants' commitment to implementing these values pervades all the *key moments* relating to the *romantic genre*. I have already discussed how the participants use of the *Bildungsroman* related to the development of professional reasoning as part of their socialisation into the profession. In the *romantic genre* the individual acts out their values, embodies an idea, and affirms their identity (Bakhtin, 1981). In my discussion of the *romantic genre*, I will explore how participants' experiences of reasoning related to the performance of their individual professional identity.

9.4.1.2 Professional identity and professional socialisation

Snell et al's (2020) review of ninety-six articles about professional identity and professional socialisation in allied health students identified that the terms, professional identity, and professional socialisation, are frequently conflated. These terms are interrelated but not identical. Soday (2021, p. 49) defines professional identity as "a conscious embodiment of the way a professional defines who they are and the way they choose to act and represent themselves". Whereas professional socialisation is a process by which professional identity is formed (Snell et al, 2020). A concept analysis of professional identity in the health professions concluded that it comprised "knowledge values and ethics; personal identity; group identity; and the influence of context of care" (Fitzgerald, 2020, p. 1).

Professional identity is conceptually congruent with personal identity formation (Crues et al, 2015). This means identity theory can assist in understanding how professional identity is formed. Identity theories are usually either informed; 1) by sociology and emphasise the

external social nature of identity and affiliation with groups, or 2) by psychology and focus on the internal cognitive and affective nature of identity (Hammack, 2015; Waterman, 2015; Zerbe et al, 2017). However, in practice many theorists recognise the interaction of both the interior psychological and exterior sociological aspects of identity. Hammack (2015, p. 12) acknowledges this, and defines identity as “concerned with sameness and difference at the level of social categorization, group affiliation, and intergroup relations, as well as at the level of individual consciousness or subjectivity”. Professional identity has been conceptualised as a “process through which a learner transforms into a health care professional” which involves both professional socialisation into roles and psychological development at an individual level (Hagen et al, 2019, p. 70). My interpretation of the findings supports this conceptualisation, with both professional socialisation into roles and development of an individual professional identity being evident. A recent scoping review of professional identity in occupational therapy found four themes in the literature “developing a shared ontology, embracing the culture, enacting occupational therapy and believing in occupational therapy” (Walder et al, 2022, p. 175). The authors’ discussion is largely at the level of group (the profession’s) identity rather than at the level of individual identity development and maintenance. This is perhaps a reflection of the identity of the profession being the focus of most of the literature they identified.

When discussing the *Bildungsroman*, I explored participants’ experiences of professional reasoning during their practice-based learning as a process of professional socialisation. In this process individuals negotiate their identity in relation to an institution’s culture, which regulates identity by stipulating preferred behaviours (Alvesson and Willmott, 2002; Zerbe et al, 2017). The culture, values, and beliefs of a professional community become internalised (Sadeghi Awal Shahr et al, 2019). As well as external (social) influences on identity, internally identity is influenced by emotions and cognition (Zerbe et al, 2017). Drolet and Désormeaux (2016) suggest that values are central to occupational therapists’ professional identity and reasoning. The values an individual cognitively and emotionally ascribes to influence their reasoning, and this will be the focus of the discussion in this section.

In Romanticism there is a focus on individual will and creation of our own values, rather than adapting to or modelling our values on those held by others (Berlin, 1999). Romanticism involves a free commitment to ideals and values (Berlin, 1999) and I will discuss how participants experienced reasoning when enacting values informed by their professional identity. Fitzgerald (2020) suggests that professional identity can be experienced at a group

level (the identity of occupational therapy profession) and the level of an individual member of the group (the identity of an occupational therapy student). My focus will be on professional identity at the level of the individual.

This discussion begins with an exploration of how the participants drew on person-centred and occupation-centred values to reason. I will then discuss their experiences of reasoning differently to their educator, and finally the romantic quests they undertook when using person-centred and occupation-centred reasoning to inform their interventions.

9.4.2 Person-Centred and Occupation-Centred Reasoning

It's that kind of occupation side of it and being person-centred again, is all about... finding out about what their priorities are and sticking with it. (Jules, p. 35).

Person-centred and occupation-centred values were central to the participants' reasoning. They drew on narrative reasoning to inform a person-centred approach and experienced the challenges of being person-centred in their reasoning in the real world of practice.

9.4.2.1 Narrative reasoning and person-centredness.

Construction of narratives is a key part of reasoning (Loftus and Higgs, 2019), and Hamilton (2018) suggests that the best practice of person-centred reasoning requires narrative reasoning. This is because narrative reasoning enables therapists to individualise interventions based on their understanding of the story the service user is in, and their values and beliefs (Mattingly and Fleming, 2019). It has also been suggested that narrative reasoning is important for the development of rapport (Cronin and Graebe, 2018) and to engage service users in therapy (Mattingly and Fleming, 2019). Rowen, Frankie, and Jules all spoke about the service user's narrative, and how engaging with this allowed them to be person-centred and to develop a rapport with the service user. Hamilton (2018) suggests that narrative reasoning is characteristic of expert practice, and Unsworth (2001) states that novices are less person-centred than experts. Although they may lack the well-developed narrative reasoning of an expert, students are capable of narrative reasoning (McKay and Ryan, 1995; Knecht-Sabres, 2013). Mattingly and Fleming (1994, p. 33) suggest the main contributors to expertise are "breadth of experience, and depth of reflection on that experience." Also, King et al's, (2008) study demonstrated the importance of motivation,

critical thinking, and caseload complexity for the development of expertise. The participants' motivation to be person-centred and occupation-centred meant that they put a lot of thought and effort into engaging with the service user's narrative and drew on this to inform their reasoning.

Narrative reasoning requires empathy (Cronin and Graebe, 2018) and the participants ability to empathise with the service user was an important factor in enabling engagement with their narrative. Rowan explained that perhaps some of a student's empathy comes from the fact that their position is closer to the service users, as both are in an unfamiliar environment. Not being fully socialised into the setting gives the student a different perspective. Bakhtin (1990, p. 25) describes "an excess of seeing" a position of *outsideness* that provides a different awareness. It could be argued that the empathy is primarily a personality trait (Meskovic and Mirovic, 2019) and is therefore not dependent on years of experience. Perhaps something that does come with experience is a better understanding of the pragmatic restraints to person-centred reasoning, and (if motivated to) the ability to negotiate these and optimise opportunities for person-centredness.

9.4.2.2 Experiences of person-centred and occupation-centred reasoning in the real world

The participants learnt how to manage the complexity of person-centred and occupation-centred reasoning in the real world. Mattingly and Fleming (1994) refer to occupational therapists as having two-bodied practice, one being a medical focus on disease and the other a phenomenological focus on the meaning of the illness to the individual. Charlie experienced balancing person-centred reasoning with the knowledge that what the service user wants may not always be in their best interest. They needed to balance their medically informed procedural reasoning about the service user's condition and their understanding of the service user's narrative. Narrative reasoning involves the construction of a prospective future story for the service user, which shapes intervention (Mattingly and Fleming, 2019). Charlie described sessions as being "very much led through a narrative with them".

Charlie spoke about the importance of collaborating with the service user and explaining their reasoning to facilitate full engagement in the intervention. This process has been termed a shared mind, this is a distributed decision-making process where the service user and therapist think and feel together (Epstien, 2013). Successful collaboration and development of a shared mind requires not just the service user's information needs to be

met but also their emotional needs (Politi and Street, 2011). Charlie provides information that enables the service user to adjust their expectations, whilst demonstrating sensitivity to their emotional response to this. Mattingly and Fleming (1994) suggest that this skilful individualisation of therapy may arise from experience. However, they also surmise that it may be attributable to the “the extent to which therapists were comfortable with the interactive and meaning-making aspects of therapy” (Mattingly and Fleming, 1994, p. 338). The findings of my study exploring students’ reasoning support the idea that this skill may not be solely dependent on expertise.

Reasoning that demonstrates sensitivity to a service user’s emotional response requires emotional intelligence. Emotional intelligence has been defined as the ability to identify, regulate, and respond to emotions (Raz and Zysberg, 2014). It is an important pre-requisite for interactive reasoning, person-centred care, and the therapeutic use of self (Brown et al, 2016; Andonian, 2017; McKenna et al, 2020). The need to exercise emotional intelligence when reasoning is essential in occupational therapy as successful interventions require engagement from the service user. A survey of occupational therapists in the United Kingdom (UK) suggested they had higher emotional intelligence than the general population (McKenna et al, 2020). However, the 808 participants are a small proportion of the over 30,000 occupational therapists in the UK. It is also possible that those with higher emotional intelligence were more inclined to participate, so these findings need to be interpreted cautiously.

Some attempts have been made to explore emotional intelligence in occupational therapy students. Gribble et al (2017a; 2017b; 2018) found that over a 16-month period students’ total emotional intelligence scores increased. However, Yu et al (2021) found that the scores of fourth year occupational therapy students decreased, and they attributed this to the development of better self-awareness. Both studies used self-rating questionnaires which depend on accurate self-assessment. Gribble et al (2017b) interviewed twenty-four students, who had large increases or decreases in scores, they identified service user and practice educator interactions, and feedback and reflection, as the main influences on emotional intelligence. The educator has the potential to be either a positive or negative influence on the development of the student’s emotional intelligence (Gribble et al, 2017b). For Charlie, the practice educator who “would question” them and “prompt” their own reasoning was a positive influence.

In Sam's *key moment*, we saw how difficult it was to "juggle" the individual's need for a conversation, with the prescribed role of the occupational therapist in an acute setting. Mattingly (1998) suggest that it is harder to justify interventions for the illness experience and easier to justify interventions for the diagnosis. Mattingly and Fleming (1994) therefore termed occupational therapists' reasoning around the illness experience as underground practice. This can be seen in Sam's reference to "sneaking in opportunities" for a chat with the service user and seeing the biomedically informed reasoning as being on topic and the illness experience narrative reasoning as being off topic. It has been suggested that the constraints the system imposes on personalising intervention and developing a therapeutic relationship has implications for both the psychological health of occupational therapists and service user outcomes (Brown and Pashniak, 2018). Mattingly and Fleming (1994) suggest the conflict between occupational therapy values and medical model values can result in a narrowing of occupational therapy reasoning. Institutional values can be internalised, and occupational therapists may complacently accept a narrowing of their role (Cronin and Grabe, 2018). Consequently, therapists' reasoning can be constrained by the boundaries of this narrowed role. Sam was resistant to complying with institutional norms and adopting the narrowed role of the occupational therapist. Instead, they demonstrated emotional intelligence and found ways to build a therapeutic relationship and respond to the illness experience of the service user. As previously suggested the outsider status of a student may mean that their empathy is less constrained by organisational norms.

It has been identified that professional reasoning, person-centred practice, and occupation-centred practice, are all important threshold concepts for students in their transformation into an occupational therapist (Nicola-Richmond et al, 2016). Murry et al (2020) found consolidating professional reasoning was also an important threshold for newly qualified practitioners and that using occupational analysis and being person-centred were central to their reasoning. Cohn (2019) suggests, that as occupational therapists, affirming the value of occupation brings confidence and allows us to communicate our competence. We see this when Jules speaks about how they experienced occupation-centred reasoning as "comforting" and being "lucky" to have this as a focus when working with a service user. However, there can be significant challenges to person-centred and occupation-centred reasoning in the practice setting. These will be explored next when I discuss the participants' experiences of reasoning differently from their educator

9.4.3 Reasoning differently from your educator

If they say it, it's not necessarily the right way to do it. It made, I guess it probably made me think, actually I can, I do have my own mind, to have my own thoughts and reasoning (Chris, p. 14).

Identity is about sameness and difference (Hammack, 2015) and development of professional identity involves both identifying with, and differentiating oneself, from others (Fitzgerald, 2020). Some participants identified their approach to reasoning was different to their educators and they resisted socialisation into practices that were incongruent with their own developing professional identity. There is a need for agency and critical judgement in relation to the reasoning being role-modelled by others and deciding what to accept and reject (Ajjawi and Higgs, 2008). When students are exposed to new values they may accept, refine, or reject these (Sarraf-Yardzi et al, 2021). The literature on professional identity and professional socialisation largely focusses on the individual accepting and becoming socialised into the practices of the profession. No literature could be located discussing students' resistance to being socialised into reasoning that is incongruent with their developing professional identity. However, there has been some exploration of resistance in relation to medical students (Shaw et al, 2018; Ellaway and Wyatt, 2021) and moral courage in relation to nursing students (Koskinen, et al, 2021). Shaw et al (2018) found that medical students resisted lapses in professionalism either directly or indirectly. They concluded that this was a demonstration of the students developing professional identity, and that they were motivated by a desire to improve care and empathy (Shaw et al, 2018). It is not easy for students to challenge their educators' practice, a review of the nursing literature (Bickhoff et al, 2017) found some students reported poor practice. However, most students did not speak up when they witnessed this and were "passive spectators and sometimes even active participants" (Bickhoff et al, 2017, p. 71). Ellaway and Wyatt (2021) have suggested resistance should be included in students' education so they can develop agency and resist harmful or inequitable systems.

Occupational therapy students like any other student will sometimes see unprofessional practice. However, the participants in my study were resisting conforming to practice that restricted reasoning informed by their person-centred and occupation-centred values. This is therefore perhaps related to a restricted scope of practice, rather than practice which is unprofessional. Research suggests that the ethical tensions experienced by occupational therapists are largely systemic or resource based (Kinsella et al, 2008; Bushby et al, 2015;

Hazelwood et al, 2019). With difficulties in upholding professional standards in relation to person-centred practice identified as problematic because of systemic restraints (Kinsella et al, 2008; Bushby et al, 2015; Durocher et al, 2016; Durocher et al, 2021). This suggests that the restrictions in the reasoning that the participants discussed were not atypical. Hammell (2015) has suggested that occupational therapists are at risk of upholding rather than challenging an institutional system that is incongruent with the professions espoused person-centred values. Students may not have the power to change systems, but their outsider perspective could be a catalyst that instigates a service to reflect on the compromises made to person-centred, and occupation-centred practice. This could prompt services to change practice and attempt to challenge systems. The student needs to negotiate a difficult balance, between an idealism that is not congruent with real-world practice and compromising on the professions core values to the extent that it negatively impacts on their reasoning and professional identity. This is something they will also need to contend with as a newly qualified practitioner.

Within occupational therapy a study exploring the meaning of role emerging placements concluded that these provided an opportunity to construct an individual professional identity and contrasted this with the students' "passive assimilation of ideas, values, and practices of others on traditional placements" (Clarke et al, 2014). The participants in my study were largely discussing traditional practice-based learning experiences and were very much not passively assimilating the values of others. Role-emerging placements provide greater autonomy and consequently more opportunities for an individual to develop and enact their professional identity. However, these placements also provide less opportunities for students to align and differentiate their developing professional identity to that of other occupational therapists. I would argue that understanding how your values are the same or different to others is an important aspect of becoming an autonomous, self-regulating, ethical, practitioner. My own view (informed by the findings of this study) is that both traditional placements and role emerging placements offer good (but different) opportunities to construct professional identity.

The participants' desire to enact their person-centred and occupation-centred values could mean they reasoned differently to their educators who paid more attention to pragmatic considerations, such as the remit of the service and workload pressures. Eli, Chris, and Rowan, identify the conflict between what their educators saw as the service remit and the service user's goals. On their practice placements some of the participants may have been

experiencing the narrowing of reasoning described by Cronin and Grabe (2018) and Mattingly and Fleming (1994). Rowan uses the terms “narrow thinking” and “robotic” to describe how they experience their educator’s reasoning.

There has been some exploration of the difficulties occupational therapists’ experience in maintaining an occupational focus to their practice. Di Thomasso et al (2016; 2019) investigated recent graduates’ experiences of occupation-centred practice in Australia, they found that a focus on occupation was regarded as a luxury. The graduates based their reasoning on established practice in the setting, conforming to a workplace culture of impairment focused practice (Di Thomasso et al, 2016; Di Thomasso et al, 2019). Carrier et al (2020) found the reasoning of community occupational therapists in Canada was restricted by the institutional context. The therapists only assessed for needs their service could fulfil, this left service users with unmet needs and unaware of other services that could meet these. This narrowing of the occupational therapy role is concerning, as it has been argued that occupation-centred practice expands professional reasoning and enhances professional identity (Gillen and Greber, 2014; Turner and Knight, 2015). The inability to focus on occupation may therefore impair the development of reasoning and the formation of a strong professional identity.

The participants were, in some settings, able to implement interventions informed by their person-centred and occupation-centred reasoning. These interventions differed to those typically offered in the setting. The participants embarked on a quest to make a difference to the service user sometimes surmounting several obstacles in their path. These quests, which were informed by their romantic values, will be discussed in the next section.

9.4.4 The romantic quest

Seeing their affect and deciding, like changing (clicks fingers) the course of action, what we were doing, just to make it a bit more meaningful and motivating for them to kind of lift their mood. (Chris, p. 19).

Bakhtin (1990) describes the romantic hero as embodying an idea and actualising values. For the participants in this study their ideals were to be able to implement person-centred and occupation-centred reasoning. Values have become a focus within the NHS following the Francis (2013) enquiry into the failings at Mid Staffordshire NHS Trust. The six ‘Cs’ of compassionate care (care, compassion, competence, communication, courage, and

commitment) were introduced (NHS, 2013), and the Francis enquiry (NHS, 2013) recommended a focus on staff values as means of improving the quality of care. Consequently, since 2015 education providers recruiting into NHS funded student places have aimed to recruit individuals whose values align with the NHS constitution. These values include, working together for patients, respect and dignity, commitment to quality of care, compassion, improving lives, and everyone counts (NHS, 2021). The person and occupation-centred quests that the participants embarked on were aligned with the values espoused in the NHS constitution but were not always typical of practice in their placement setting. For Chris, Val, Alex, and Eli, using the service user's narrative to inform their reasoning, and embarking on a quest to provide a person-centred and occupation-focused intervention, was a valuable learning opportunity that also improved the quality of the intervention for the service user.

These quests were possible because the participants' practice educators were able to provide opportunities for the student to reason in an occupation-centred and person-centred way, even if this was not normal practice in the setting. The *adventure-time* associated with the *romantic genre* needs space for the adventure to develop (Bakhtin, 1981) and the practice educator provided the time, space, and autonomy the participants needed. Wenger-Trayner and Wenger-Trayner (2020) suggest that enacting an idea in a new context is complex, and opportunism, risk taking, persistence and situational awareness are required. The participants exhibited these qualities and were able to maintain fidelity to the importance of occupation, using this to underpin their reasoning. Wenger et al (2020) suggests social learning involves two narratives, a ground narrative (current practice) and an aspirational narrative (practice that makes a difference that we would like to happen). Supportive practice educators allowed the participants to enact an aspirational narrative informed by their person-centred and occupation-centred reasoning, this provided an important learning experience. The fact that the practice implemented by participants was often aspirational rather than typical suggests that finding time to put patients first and improve their health and well-being may be constrained, despite efforts to implement the structural whole systems changes that Francis (2013) suggested. Arguably, to some extent, this is an inevitable consequence of the financial and time pressures that exist within services. Humbert (2020) has identified that time and resources can limit occupational therapists' person-centredness. This places students in a position where their professional values may be incongruent with the practice they are exposed to and requires them to consider to what extent to resist or align themselves with the practice they are exposed to.

9.4.5 Summary of the romantic genre

My interpretation of the findings suggests that the participants used the *romantic genre* when they spoke about the person-centred and occupation-centred values underpinning their reasoning. When making use of this *genre* to describe their reasoning the participants' language was often more informal and less professional than that used in the *Bildungsroman*. This may be connected to the narrative relating to themselves as an individual and their emerging professional identity. Professional language may have been more predominant in the *Bildungsroman* as this *genre* related to their socialisation into the profession, and an element of this socialisation is the acquisition of professional language. As with the *Bildungsroman*, the *professional genre* was used when discussing the contextual factors influencing reasoning. The participants also used the *professional genre* to justify being person-centred for example citing evidence that this is an effective approach.

A key finding was that empathy and narrative reasoning supported person-centredness and the development of a therapeutic relationship with the service user. This supports findings from previous studies which suggest that both students (Summerfield-Mann, 2010; Ripart et al, 2013) and occupational therapists (Jones, 2016) exhibit strong person-centred values. Empathy was an emotion that came through strongly when the participants narrated their experiences of reasoning. As Rowan suggested, this was perhaps facilitated by the outsider perspective a student had. Not being fully socialised into the system may have assisted in identifying with the service user's perspective. This outsider or peripheral status meant the participants could be less constrained by the institutional norms and systemic constraints restricting person-centred and occupation-centred reasoning. Mackey (2014, p. 175) suggests that "occupational therapists are neither totally free to exercise their individual will nor are they totally constrained by organisational control" and that they need to make ethical reflexive decisions. The participants were resourceful in circumventing obstacles to occupation-centred and person-centred reasoning but acknowledged that it was often the "luxury of being a student" with less demands on their time that made this possible.

Emotional intelligence was important in reasoning that was related to developing a collaborative relationship with the service user. It supported interactive reasoning that was underpinned by a focus on the service user's narrative. This assisted in the skilful individualisation of therapy, a skill which Mattingly and Fleming (1994) postulate may be influenced not only by experience, but also by the individual's personal attributes and being comfortable with interactive aspects of therapy. My findings support this and may suggest

that the interactive and narrative aspect of reasoning are less dependent on experience, and more dependent on individual attributes, such as empathy, than some of the other modes of reasoning.

In the discussion of the *Bildungsroman* the professional socialisation of participants meant they adapted and conformed their occupation-centred and person-centred reasoning to resemble the practice they were seeing. In their use of the *romantic genre*, we see active resistance to being socialised into practices that are not congruent with the participants values and developing professional identity. This is in contrast with previous research that has suggested that students on traditional (as opposed to role emerging) placements, passively assimilate the practice and values of others (Clarke et al, 2014). The concept of resistance is a significant finding and will be revisited in relation to the *travel* and *adventure genres* (see Sections 9.5 and 9.6).

For the participants in my study person-centred and occupation-centred reasoning was a means of developing, expressing, and affirming their professional identity. It has been suggested that a strong professional identity contributes to resilience, is a protective factor in the retention of staff, and is key to graduates' successful transition into practice (Edwards and Durette, 2010; Ashby et al, 2016; Brown et al, 2020). When they join the workforce, evidence suggests they may have difficulty enacting these person-centred, and occupation-centred values (Di Tommaso et al, 2016; Di Tommaso et al 2019). This means there is potential for weaker resilience and less well-formed professional identity. Resilience is a quality we expect students and new graduates to develop. However, if we do not provide them with opportunities for person-centred and occupation-centred practice we deprive them of the resources they need to build the professional identity that is a foundation for resilience. Resilience was also a feature of the *adventure genre* and will be revisited in Section 9.6.

The findings related to this *genre* contribute to areas requiring more research. Araujo et al (2022) argued that there was a need for further research into to how occupation and person-centred practice is considered in the reasoning of occupational therapists. My study makes a significant contribution to understanding this in relation to occupational therapy students. This may be useful in informing research with occupational therapists and exploring similarities and differences between students and therapists. Unsworth and Baker's (2016) review of the occupational therapy reasoning literature suggested worldview was an area requiring further research. Values shape our worldview (Unsworth, 2021) and my study

contributes to extending our understanding of this by illustrating how values can influence students reasoning. Finally, Ashby et al (2016) stated that occupational therapy students' professional identity formation is most influenced by their practice-based learning. They suggested qualitative methods could assist in exploring this and my study makes a significant contribution to exploring the role of reasoning in professional identity formation during practice-based learning.

Having discussed the major *genres* identified through analysis and interpretation of the data, the minor *genres* (*travel, adventure, and carnival*) will now be explored. The minor *genres* were less prevalent in the data but discussion of these provides a fuller picture of the participants experiences of reasoning on practice placement. It also assists in preserving the *polyphonic* nature of the data. *Polyphony* allows for independent voices to be combined (Bakhtin, 1984) and provides multiple perspectives.

9.5 The travel genre: non-participation in reasoning

There were points where I shut down because of the anxiety of the pace kind of made my clinical reasoning shut down (Jordan, p.10).

9.5.1 Introduction

In this *genre* the individual does not change, and they experience the world as fragmented and as comprised of differences and contrasts (Bakhtin, 1986). The *travel genre* has been described as a “discourse of difference” involving travel to somewhere which is then compared and evaluated in relation to the individual’s homeland or point of departure (Bakhtin, 1981; Chirico, 2008, p. 28). Some of the participants in this study contrasted what they saw in practice with what they had previously learnt at university (Sam, Rowan, Jules), or on another placement (Jordan). The *travel genre* will be explored in relation to the concept of being a tourist in a community of practice, participants’ experiences of reasoning in acute physical settings, their disassociation from educators reasoning, the difficulty experienced following fast paced reasoning and anxiety inhibiting reasoning.

9.5.2 Tourists in a Community of Practice

Fenton O’Creedy et al (2015b) suggest that students are often passing through a community of practice rather than moving from periphery to centre and that they may do this as either tourists or sojourners. For tourists the community of practice remains a foreign country, engagement is superficial, there is little participation and minimal impact on identity. Whereas sojourners participate and engage in the meaning of practice which then impacts on their identity (Fenton O’Creedy et al, 2015b). When the participants used the *travel genre* they could be seen as identifying with the tourist role, and for some of them we see a shift from this to the *Bildungsroman* and a movement to the sojourner state when there is some form of reconciliation and adaptation to the practice they were seeing. For example, Sam initially experienced acute physical practice as “foreign”, “alien”, and “reductionist”. With more experience of the setting, they viewed it differently, and suggested it is possible to achieve a balance between being “supportive” and being able to “fulfil the role”. This required a change in identity, and they came away from the experience with a better understanding of the occupational therapist they were evolving into. Fenton O’Creedy et al

(2015a) suggest development in identity can be very emotional, and this was evident in the participants narratives. For example, Sam refers to “difficult things that came up emotionally”, “a struggle”, “a challenge”, and Jordan also describes “a struggle”, feeling anxious and “shutting down”.

9.5.3 Reasoning in acute physical settings

For three of the participants (Sam, Jordan, and Rowan) the use of this *genre* was evident when they discussed how they experienced reasoning in fast-paced acute physical settings. In these settings not only did the participants need to reason quickly (which as previously discussed is challenging for novices), they were also inhibited from enacting their romantic person-centred and occupation-centred values. Britten et al (2015) have identified that implementing occupation-centred practice and establishing an identity as an occupational therapist can be challenging in acute physical settings.

For Jordan and Rowan, the speed at which they needed to reason in this fast-paced setting was overwhelming. It heightened Jordan’s anxiety and “shut down” their reasoning and for Rowan “there wasn’t time to think”. Britten et al (2016) found that in acute hospitals occupational therapists modified their reasoning to be rapid and condensed, with condensed reasoning requiring focused questions. As previously discussed, novices find it difficult to determine which cues are important and reason more slowly than experts (Carr and Shotwell, 2018). Recognition of important cues is a skill required for focused questioning, consequently I would suggest that reasoning on acute placements can be challenging for students.

Jordan described their person-centred reasoning as being “stifled” by the lack of time to develop a relationship with the service user and engage with their narrative. The service user’s narrative had previously been a central focus of their reasoning, and without this they felt unable to reason. Crennon et al (2010) found that novices found it more difficult to operate in a person-centred way in an acute setting than experts. The participants in my study very much wanted to engage with service users in a person-centred way, their difficulty was in negotiating a means of doing so that was appropriate to the context. This is a skill that would arguably develop with experience, once fully immersed in the context. Sam’s solution was a pack of services they could refer on to, to address the service users’ occupational needs more fully. Britton et al (2016) found in their study occupational therapists used similar

strategies and acted as advocates for service users' future needs outside the hospital setting, allowing them to practice in a more holistic and authentic way. Looking at the service users' needs beyond the acute hospital setting could support students' and occupational therapists' person-centred and occupation-centred reasoning and thereby strengthen their professional identity.

9.5.4 Disassociation from the practice educator's reasoning

When discussing the *romantic genre*, I explored how the participants' commitment to their person-centred and occupation-centred values meant that their reasoning could be different to their educators' (see Section 9.4.3). When Jules used the *travel genre*, they were disassociating themselves with their educator's reasoning, which they experienced not being person-centred. Their non-participation is emphasised by the comparison of the practice they were seeing to being "like something out of *One Flew Over the Cuckoo's Nest*". Jack et al (2017) suggest that valuable learning can still come from negative role models. Whilst there is a risk the student may emulate the behaviour they see, identity is formed by comparison with others, and the practice educator may act as an anti-role model (Jack et al, 2017). This was the case for Jules who had no intention of emulating the behaviour they saw and felt that they "learnt what not to do". Deciding when to resist conforming and being socialised into behaviours is an important part of professional identity formation.

9.5.5 Difficultly following fast-paced reasoning

Another use of the *travel genre* was related to the experience of listening to an experienced therapist's reasoning. Morgan used this *genre* when explaining their difficulty in following the fast-paced reasoning of an experienced therapist. The difficulties experienced therapists can have in explaining their reasoning in a step-by-step manner were discussed in Section 9.3.4.4. (The practice educator as a role model for reasoning). Morgan's *key moment* illustrates how a novice can experience an explanation of reasoning when an experienced therapist reasons quickly and cannot explain all the steps, including why they pay attention to some cues and ignore others. The discrepancy in the speed of the novice student's and the experienced therapist's reasoning can render the therapist's reasoning largely incomprehensible to the student. As with the participants trying to reason in an acute

setting, Morgan was not able to participate in reasoning when trying to reason at a speed that was beyond their current capabilities.

Morgan experienced their reasoning as having more opportunity to develop when they worked with an inexperienced band five, who they had more of a peer relationship with. It has been suggested that peer learning can reduce anxiety (Markowski and Bower, 2021) and allows a joint approach to reflection and feedback (Price and Whiteside, 2016). When Morgan and the band five reasoned together, this allowed Morgan to contribute more, and work through their reasoning at their own pace. They could discuss their reasoning with someone at a similar level and joint problem solve. When working with an experienced educator Morgan felt under pressure to immediately attempt to get to the right answer, working with the band five removed this pressure. It also allowed them to make a valued contribution, which Rodger et al (2014) suggests influences professional identity and feelings of confidence. However, it remains important for an experienced therapist to develop the skill of adjusting their reasoning to match the pace of a novice.

9.5.6 Anxiety inhibits reasoning

For Val and Eli, the *travel genre* was used when anxiety rendered them unable to reason. Practice placements can be anxiety provoking for students (Gallasch, 2022). Feeling overwhelmed and unable to reason is to be expected, especially when trying to become proficient with new tasks and attempting to model your reasoning on that of a skilled therapist. The relationship with the practice educator is important from a student's perspective for their learning (Grenier, 2015; Rodger et al, 2014; Dunn et al, 2020) and the educator can facilitate or hinder learning (Grenier, 2015). Val's educator accepted that mistakes were a normal part of learning and provided just enough support for Val to regain control of the situation. There was then a transition to the *romantic genre*, as Val recognised that the service user was lonely. Val was able to find a befriending service for the service user and the visit that initially did not go well, was successful. This was facilitated by Val's educator, who was able to judge the amount of support Val needed, and when to provide and when to withdraw support. This suggest the right support can facilitate active reasoning in a situation where the student is initially unable to reason. Val's educator exhibited the qualities that have been found to facilitate learning, a student-centred approach that takes

account of the student's feelings (Rodger et al, 2014) and a respect for the student as a future colleague (Gibson et al, 2019).

Eli identified the pressure of being observed by their practice educator led to increased anxiety and inhibited reasoning. The participants in my previous study also experienced this (Beanlands, 2004). Pinnock et al (2019) suggested that, for medical students, anxiety can inhibit engagement with the complex cognitive practice of reasoning. Observation is important, and useful, but can be experienced as challenging by the individual who is being observed. LaDonna et al (2017) found the unintended consequences of observation of medical students included: anxiety engendered by feeling assessed altering performance, mistakes increasing, and performance becoming more task orientated and less patient-centred. My findings suggest that occupational therapy students can also find observation anxiety provoking, and this can inhibit reasoning. Eli suggested that, when they were not being observed, their anxiety reduced, and their observation skills increased. Providing autonomy, when this is appropriate, may reduce anxiety and allow a student to focus on the complex process of reasoning.

9.5.7 Summary of the travel genre

Participants used the *travel genre* when they experienced an inability to reason at a fast pace, or when their reasoning was inhibited by anxiety. This *genre* was also used when they experienced the theory practice gap as rendering them unable to reason, or when they wanted to disassociate themselves with the reasoning of their educator. The *professional genre* was drawn on when contrasting the professional language of university and placement. For example, the focus on person, environment, and occupation at university, and getting service users commodes and back to baseline on placement. This ironic comparison of professional terminology was used to highlight the differences and contrasts that are associated with the *travel genre*.

Students move through several communities of practice (e.g., different placement settings) and will be involved in more than one community of practice at a given time (e.g., university and a placement setting). Their status as a newcomer in a placement setting places them on the boundary of a community of practice. Boundaries can be challenging and confusing places to be, as different communities of practice have different views on what constitutes competence (Wenger-Trayner and Wenger-Trayner, 2015). We see this as the participants

try to reconcile what they have learnt at university, or on a previous placement, with what they are experiencing on their current practice placement.

It has been identified that students can find the occupation-centred and person-centred practice they learn about at university incongruent with the lack of focus on this during their practice-based learning (Ashby et al, 2016; Gillen and Greber, 2014; Towns, 2014). This theory practice divide is recognised as problematic for students (Zahedi and Rowe, 2021). Healy's (2017) study identified a mismatch between theory and practice and found occupational therapy students experienced challenges enacting their professional identity in a medically dominated healthcare system which impeded person-centred practice. This may be problematic in terms of students not being able to learn to practice in a manner that is congruent with the values of the profession they are becoming part of. However, it is also a learning opportunity as students can refine their professional identity as they negotiate the extent to which they can implement those values in the real world.

In some of the participants' *key moments* a transition from the *travel genre* to the *Bildungsroman* or *romantic genre* is seen and the participant moves from being unable to reason to being able to. For Sam, the transition to the *Bildungsroman* came with more time in the setting and some acceptance of the systemic constraints, whilst still finding ways of implementing their person-centred and occupation-centred values. For Morgan, the time and space to reason afforded by working with a less experienced therapist who reasoned at their speed assisted this transition. Finally for Val, it was the time and space their educator gave them to process information. These findings suggest that the overwhelmed feeling evident in the *travel genre* was alleviated by time and space to reason and opportunities to implement person-centred and occupation-centred values.

The practice educator has an important role in socialisation into reasoning. A participant could experience their practice educator as an anti-role model and resist being socialised into the reasoning they were seeing. Alternatively, a skilled practice educator who was sensitive to the participant's anxiety could facilitate their progress towards reasoning independently. The impact of the practice educator on development of the participants' reasoning is also evident in the next section where I discuss the *adventure genre*.

9.6 The adventure genre - testing of reasoning

Everything I did was always “why did you do it like that? ... that’s not right” ...I just buckled down and thought okay, just do this...it wasn’t the greatest but ... I learnt from that experience. (Frankie, p. 22).

9.6.1 Introduction

In both the *romantic and adventure genres* the individual is tested and encounters trials. However, in the *romantic genre* there is no change in the individual; their identity is preserved and affirmed. Whereas in the *adventure genre* there is change in the individual’s identity primarily because of their own initiative (Bakhtin, 1981). Two participants (Eli and Frankie) used the *adventure genre* in relation to acute physical settings where they experienced their educator’s feedback on their reasoning as unsupportive.

9.6.2 Adventure and transformation

The *adventure genre* centres around transformation and identity and can involve a metamorphosis, through a sequence of guilt → retribution → redemption → blessedness (Bakhtin, 1981). Both participants experience the guilt of disappointing their educators, the retribution of negative feedback from their educators, and redemption when their resilience enables them to meet the educator’s expectations. Both participants end their *key moments* by discussing how they learnt from the experience and how they were ‘blessed’ with skills they could use to convey their reasoning to their educators in future placements. This metamorphosis and transformation in identity suggests that transformational learning was taking place. Transformational learning can be emotionally challenging and is aided by both individuals and an environment that are supportive of this learning (Cranton, 2016; Mezirow, 2000).

9.6.3 The emotional impact of feedback on reasoning

Both participants experienced their educator’s feedback as emotionally challenging. Eli compares their educator’s facilitation style to attending a boot camp, and Frankie described feeling very isolated and as if they were a disappointment to their educator. The participants

experienced a guilt associated with not performing at the level expected by their educator. This testing of the individual is a characteristic of the *adventure genre* (Bakhtin, 1984) and these participants experience their reasoning as being tested by their educators and found lacking. Current models of practice education are based on cognitive and constructivist approaches in which the educator acts as a facilitator of learning, rather than behavioural approaches in which the student is required to emulate their educator (Rodger et al, 2014). Both participants needed to adapt to the more behavioural approach of their educator and conform and emulate their educator's approach to pass the placement. They learnt to copy their educator's way of documenting reasoning, and whilst some learning and development of their reasoning occurred, they were not committed to the approach that was being modelled and took a strategic approach to pass the placement. This approach has been described as one of unengaged alignment in a community of practice, where the required practice is performed but the individual does not align themselves with the community (Kubiak, 2015).

As previously identified, there is a need for facilitators of learning to support students with emotional nature of learning (Fenton-O'Creivy, 2015a et al; Cronin and Graebe, 2018). Frankie and Eli did not experience the emotional nature of learning to reason as being attended to by their educators. This is particularly important as Fenton O'Creivy (2015c et al) suggest feelings of failure have emotional consequences which can threaten identity. Having your contribution valued (Rodger et al, 2014) being respected (Gibson et al, 2019) and experiencing a supportive relationship with your educator (Dunn et al, 2020) are thought to be important contributors to the development of students' professional identity. Eli and Frankie experienced the feedback they received, when they were not able to express their reasoning in the style desired by their educator, as negative. Well-developed feedback skills are important when educators facilitate students' reasoning. Allied health students have rated feedback skills as the most important characteristic of the ideal practice educator (Francis et al, 2016). Studies focussing on occupational therapy students have also found feedback skills to be important (Beanlands, 2004; Rodger et al 2014). Good feedback should be constructive not degrading (Gibson et al, 2018), balanced, positive, and encouraging (Rodger et al, 2014). This appears to bear little resemblance to how Eli and Frankie experienced feedback. Eli describes being told "that I was wrong all the time". Frankie experiences the feedback on their reasoning as "always negative...you don't know anything".

9.6.4 Resilience and emotional intelligence

Adaptation to their educator's interpersonal communication style required both participants to be resilient and to manage the emotions associated with the feedback they were receiving. Resilience and emotional intelligence were key features in both participants' accounts, and this facilitated a positive outcome. Eli speaks about the need to "be open" and Frankie "buckled down" and "rather than dwell on it, I looked at what I had taken from the experience". Emotional intelligence has a significant relationship to resilience (Jayalakshmi and Magdalin, 2015). Occupational therapy students have been found to have good resilience levels (Brown et al 2020), which increase because of their practice placements (Rodriguez-Martinez et al, 2021). Abbott (2018) suggests the main competency required in a resilient practitioner is the ability to adapt, and Rodriguez- Martinez et al (2021) suggest that the ability to control your feelings is important. Both participants demonstrate these skills in adapting their approach to be more like their educator's, and managing the feelings engendered by receiving feedback on their reasoning that they experienced as negative. Both internal factors such as locus of control and external factors such as supportive supervision and coaching (Abbott, 2018) have been found to be important for resilience. It appears from Eli and Frankie's *key moments* that they relied on their inner resources in the absence of experiencing supportive supervision and coaching.

Although Eli subsumes their own identity and "adopts" their educator's approach and "totally listens" a level of resistance was evident in the use of parody and their educator is depicted as "militant" and running a SOAP notes boot camp. Parody involves "striking a blow" and "clashing" with another's discourse (Bakhtin, 1984 p. 194), it allows two points of view to be expressed (Bakhtin, 1981). Eli's view is that there is more than one right way of expressing their reasoning in SOAP notes, and the educators that there is a specific way in which these need to be completed. Parody can function as a means of criticism (Denith, 2000), and perhaps for Eli functions as a means of reinforcing their disassociation with their educator's approach and a means of asserting their own professional identity.

9.6.5 Summary of the adventure genre

When discussing the *travel genre*, the participants were operating as what Fenton-O’Creevy et al (2015a) described as a tourist in a community of practice. In their use of the *adventure genre*, the participants positioned themselves as what Fenton-O’Creevy (2015a et al) refer to as a sojourner.

The sojourner unlike the tourist, is involved in identity work. This work though is not aimed at assimilation within the community but accommodation to the practices of that community and its regime of competence to function effectively within and beyond the community. (Fenton-O’Creevy (2015a et al, p. 45).

Both participants take a strategic approach to their learning and to succeed in the placement adopt the style of reasoning modelled by their educator. They could disassociate the approach to learning they did not find helpful, from the learning that took place. They modified what they had been taught about how to express their reasoning and assimilated this into their own professional identity and were then able to draw on this in future placements. Wenger-Trayner and Wenger-Trayner (2015) suggest that when communities of practice do not welcome us, we can experience painful marginalisation. The participants were isolated and the input from their educator was perceived as exacerbating the emotional challenges associated with learning to reason. Resilience and a need for emotional intelligence were key features of this *genre*.

Having discussed the *travel genre* and *adventure genre* I will now conclude this discussion of my findings by exploring the final minor *genre – carnival*.

9.7 Carnival: unpredictability and reasoning

It was kind of this really chaotic situation, it was completely out of my control, and I didn't know how to manage it really except ... not being authoritarian and ... not trying to restrict. (Jules p. 6).

9.7.1 Introduction

My discussion of the minor *genres* concludes with the *carnival genre*. There were three *key moments* in which I identified this *genre*, two from Jules and one from Eli. One of Jules *key moments* focused on reasoning in a placement setting that was free from restriction. Eli's *key moment* and Jules second *key moment* both related to their reasoning when something unpredictable occurred whilst they were working with a service user.

9.7.2 Reasoning without restriction

In the *carnival genre* there is a freeing from authority (Bakhtin, 1984) and in the first *key moment* from Jules the role emerging placement setting is described as having “no processes” “no structure” and it being “madness how it was run”. Here the autonomy that was an important feature of the development associated with the *Bildungsroman* was at a more extreme level, and Jules had no restrictions. Jules experienced this as freeing “I can break out” and “do what I want”. The lack of restrictions enabled Jules to act out their professional identity and “find out... what kind of OT I wanted to be”, without experiencing professional socialisation into the existing behavioural norms for an occupational therapist in this setting. Jules was free to enact their person-centred and occupation-centred values as they saw fit, and this was a central focus of their experiences of reasoning on this placement. As previously discussed, identity is both individual and social (Hammack, 2015; Waterman, 2015). It has also been argued that identity is regulated by the organisation, which shapes individuals' identity to be congruent with the aims of the organisation or community (Alvesson and Willmott, 2002; Fenton-O'Creevy, 2015a p. 38). A placement setting without an established occupational therapy role allows Jules to focus on development of individual identity with little in the way of identity regulation. The other three *key moments* from this placement are narrated predominately in the *romantic genre* and the *Bildungsroman* is not used. This suggests that this role emerging placement may

have offered opportunities for professional identity development but (given the lack of an occupational therapist as role model) perhaps not professional socialisation.

9.7.3 Reasoning with unpredictability

Fredholm et al (2015) suggest that autonomy and authentic learning experiences where students take responsibility for service users are important for their professional development. For Jules and Eli, when they were given autonomy to work with a service user something unexpected happened and their difficulty reasoning in the moment meant they temporarily lost control of the situation.

For Eli it was their romantic values that informed the reasoning to spontaneously implement a person-centred and occupation-centred intervention. Whilst they had used their narrative and interactive reasoning to establish what was meaningful to the service user, their diagnostic and procedural reasoning was not sufficiently well developed for them to assess the suitability of the activity and grade it appropriately. The activity the service user chose involved risk, and as already discussed, the multifactorial nature of the reasoning associated with risk, and in particular the conditional reasoning required to predict likely outcomes is challenging for novices (see Section 9.3.4.4, The practice educator as a role model for reasoning). There is a movement from the spur of the moment decisions and the present day *chronotope* of *carnival* to the more chronological *chronotope* associated with the *Bildungsroman* when Eli becomes aware of the risk and takes steps to mitigate this. Wenger-Trayner and Wenger-Trayner (2020, p. 89) identify that “striving to make a difference in practice usually entails engaging uncertainty in a situation and working through it by paying attention to feedback”. On reflection and with the support of their educator, Eli could recognise the multifactorial nature of the reasoning required.

9.7.4 Carnival and transformation

Carnival has a power that is transformative (Bakhtin, 1984), and Van Schalkwyk et al (2019) suggest that healthcare students actively involved in care provision, when managing complexity and uncertainty, can experience transformative learning. Eli’s educator explaining their reasoning assisted Eli in moving from a frame of reference that sees person-centred reasoning as simply doing “everything that is meaningful to the person” to

understanding the multiple factors that may impact on this and the need to consider these when agreeing a course of action with the service user.

Jules's use of the *carnival genre* related to their reasoning when trying to complete an assessment that became chaotic, with a service user who was "floridly psychotic". The *carnival genre* was used to describe their experience at the time and the *Bildungsroman*, their reflection and learning in retrospect. As previously identified, feedback and support are important qualities in a practice educator (Gibson et al, 2019; Rodger et al, 2014). In this case they were absent, although the educator had suggested carrying out the assessment (which Jules in retrospect concluded was inappropriate) and was present throughout, there is no input from them and no sharing of their reasoning. Jules describes "learning a bit about what not to do" from their educator, who never talked about clinical reasoning, "not ever, not once". They experienced their educator as anti-role model (Jack et al, 2017).

9.7.5 Summary of the carnival genre

As previously discussed, novices experience difficulties in reasoning at speed, and managing unpredictability demands this, so it is not surprising that this was challenging for the participants. This unpredictability arose when the participants were reasoning autonomously. For Jules this was related to either a lack of structure or support in the placement setting and for Eli acting on their romantic ideals without fully weighing the consequences. Autonomy provided the opportunity to apply learning and as Wenger-Trayner and Wenger-Trayner (2020) suggest, even when not successful, there is value in reflection on the process. For both participants although the situations were difficult for them to manage, reflection initiated a transition to the *Bildungsroman*. They learn more about how to reason, and what they would do differently next time. For Eli the educator's input facilitated this learning, and Jules, who did not have this input, was still able to independently reflect on what they learnt from the experience.

Before concluding this chapter, I will discuss my reflexive thoughts on the development of this discussion.

9.8 Reflexivity -discussion

The value-based nature of reasoning and its relationship to professional socialisation and professional identity surprised me when I first began to realise where my discussion was headed. I am not sure what I expected to come out of my study, but it was not this. I was somewhat doubtful and underconfident in taking this approach initially. It was such a big part of my findings but at the time seemed such a small part of the current research on reasoning. Over time, as I engaged more with the professional socialisation and professional identity literature, my thinking changed, and this began to feel obvious. If had not been for that initial flutter of fear that I was going out on a limb, I think I would have begun to feel that I was less data led, I needed to remind myself that I had read all this literature because of what I saw in the participants narratives.

I was also surprised about the emotionality of reasoning, perhaps because so much of the literature had focussed on reasoning as a cognitive process, or as a process of socialisation into a group. It now seems obvious that the transformational nature of learning to reason involves challenges to identity which elicit an emotional response. It has made me realise that this is something I try to pay attention to in the classroom when teaching my module. But it is something I need to give more thought to when preparing educators to support students' learning during placement.

The *Bildungsroman* has for me been the most difficult *genre* to discuss. My open research question and inclusion of multiple perspectives has meant quite a far-ranging discussion. Every draft I sent to my supervisors had more and more suggestions for areas I could elaborate on further. Perhaps this was because the educational focus of this discussion meant they were more confident in providing feedback on this *genre*. I had to make the difficult decision not to discuss every point exhaustively. I needed to balance discussion of this *genre* which largely extended what was known with that of other *genres* which arguably added some of the most original findings. I considered exploring less material in more depth, but this would have impacted on the *multivocal* nature of the findings. I also reminded myself that I purposively set out to select a methodology that could capture the complex, individual and multi-layered phenomenon I understood reasoning to be. It was now my job to manage the consequences of this decision and attempt to produce a readable discussion without obscuring the complexity and individuality of reasoning.

9.9 Summary of discussion of findings

My *dialogical* analysis of the data identified two major *genres*, the *Bildungsroman*, and the *romantic genre*. There were also three minor *genres* (*travel, adventure, and carnival*) used by participants as they recounted their experiences. I have drawn on relevant literature to explore these *genres* and discuss the participants' experiences of professional reasoning during their practice-based learning.

My interpretation of the findings suggested the participants used the *Bildungsroman* to describe experiences of being socialised into reasoning as an occupational therapist. They experienced learning to reason as complex, and found autonomy supported them and allowed the time and space they needed to develop independence in reasoning. There were several scaffolds that assisted participants in managing complexity, these included treatment protocols, documentation guidelines, and occupational therapy conceptual practice models. The practice educator played an important role in scaffolding the development of reasoning. They were able to question the participants to elicit their reasoning, and to expose the participants to a different frame of reference by articulating their own reasoning. This articulation and role modelling of reasoning could be transformational for the participants' reasoning, especially when the educator was able to share their conditional reasoning.

The *romantic, travel and adventure genres* were used to describe the participants' experiences of reasoning as a means of enacting, affirming, and negotiating their professional identity. For the participants in my study professional reasoning was underpinned by romantic person-centred and occupation-centred values. The opportunity to affirm and enact these values when reasoning was important for the development of their professional identity but was restricted by systemic constraints in some settings. There is perhaps a tension between a system that values resilience and a well-formed professional identity but at the same time imposes constraints that inhibit the development of these.

My interpretation of the findings highlights how the participants experienced reasoning when straddling communities of practice. Students already have a developing professional identity informed by multiple communities of practice (e.g., university, previous placements, work) and must negotiate how much of this identity can be enacted in each new placement. When a disjunction between university theory and practice occurs, this can be challenging but it can also be a productive learning opportunity. The participants in my study were able to learn to adapt to realities of practice but were also sometimes able to challenge these. My interpretation of the findings suggest that students may choose to occupy various positions

in a community of practice, and that a straightforward journey from periphery to centre may not always be possible or desirable. When their developing professional identity conflicts with the community they may resist moving towards the centre. Instead, they may develop a position of unengaged alignment (Kubiak et al, 2015) and see themselves passing through as a tourist or a sojourner. The tourist position was evident in the *travel genre* with minimal participation and impact on identity. The sojourner position was evident in the *adventure genre* where the participant was engaged in identity work but not assimilation into the community.

It is known that identity involves identifying both similarities and differences to others (Hammack, 2015). To date the reasoning literature has largely focused on the process of professional socialisation as one in which the individual is assimilated and becomes part of a group (similarities). My findings suggest that students may also identify differences between their own reasoning (informed by their emerging professional identity) and the reasoning they are being socialised into by their practice educator and other occupational therapists. They may therefore resist being socialised into reasoning which is incongruent with their developing professional values and identity. For the participants in my study resistance occurred when they perceived the values they were being socialised into as insufficiently occupation-centred and/or person-centred. Although it is recognised that professional reasoning is a large part of a practitioner's identity (Zubairi et al, 2019) this remains a relatively unexplored concept in relation to reasoning not just in occupational therapy but also in other health professions. My findings make a significant contribution to a conceptual understanding of the relationship between occupational therapy students' professional reasoning during practice-based learning and the formation and affirmation of their professional identity.

The relationship between learning and identity is not new (Lave and Wenger, 1991; Wenger, 1998; Savin-Baden, 2008). Reasoning is arguably a process requiring lifelong learning and learning to reason involves changes to identity that can be emotionally challenging. The emotional nature of identity work and transformative learning meant learning to reason was an emotional as well as an intellectual experience. Gruppen (2017) states that affect is rarely studied in relation to reasoning. A study by Koufidis et al (2020) found that when medical students learnt to reason in the clinical environment their frame of reference was challenged resulting a disjunction with an affective component (uncertainty, frustration, and powerlessness). This has some parallels with my own findings in relation to the participants' experiences of anxiety, frustration, confusion and feeling challenged and uncomfortable

when they experienced disjunctions between an existing frame of reference, and the one they were being exposed to. Koufidis et al (2020) focussed on challenges and difficulties students experienced when reasoning early in their medical training. However, my participants discussed all the events and experiences that were important for reasoning in all their placements, and consequently my analysis identified a much wider range of emotions (a full list of these is provided in Appendix 9: Emotions identified in relation to the different genres). In relation to professional socialisation and the *Bildungsroman*, learning to reason also engendered feelings of determination to persevere when reasoning was not easy, illumination and amazement as reasoning developed, feeling supported in their reasoning, reassured that they could reason, and thankful for time and space to reason. Also, feelings of confidence in their reasoning were very evident in this *genre* as reasoning developed.

Emotions were also a feature of the other *genres*. In the *romantic genre* empathy was an emotion identified in many of the *key moments*. The participants were also passionate about their person-centred and occupation-centred values, and there were feelings of beneficence and a responsibility to do the best they could for the service user. There were also feelings of satisfaction gained by opportunities to enact their values. In the *travel genre* there were feelings of disorientation, being overwhelmed, challenged, pressured, and stifled. These were mainly associated with attempting to reason in fast-paced acute physical contexts. In the *adventure genre* participants spoke about feelings of determination, openness, independence, being challenged, feeling sad, isolated, a disappointment to their educator, and pride in their achievements. These experiences were also in acute physical settings, and this time the feelings were engendered by the participants perception that their educator's approach to their learning was unsupportive. The emotions associated with the *carnival genre* were related to the lack of restriction and unpredictability of the experiences narrated. These included bravery, freedom, impulsivity, irreverence, isolation, loss of control and feeling unrestricted.

Within occupational therapy, although Healy (2017) did not discuss professional reasoning or specific emotions, she did explore emotion management during students' practice-based learning. Her findings related to the students' attempts to appear professional by hiding their emotions, and their discomfort with service users being learning objects. My study is a significant addition to the sparse literature on emotion as experienced during occupational therapy students' practice-based learning. It also makes an original contribution to the

development of a conceptual understanding of the emotionality of professional reasoning as experienced by occupational therapy students during their practice-based learning.

There has been some research on emotional intelligence in occupational therapy, but this has focussed on the measurement of emotional intelligence (Chaffey et al, 2012; Brown et al, 2016). However, my study helps illuminate the emotional intelligence students needed to exercise when on placement. My interpretation of the findings suggested that, when reasoning, emotional intelligence was required to, attend to service users' emotional needs, to respond to educators' feedback, and when negotiating the enactment of their professional identity. This makes an original contribution to the development of a conceptual understanding of how occupational therapy students' exercise emotional intelligence during their practice-based learning.

In this chapter I have explored my findings using literature to discuss the relationship of these to what is already known, and the new knowledge my thesis adds to what is understood about students' experiences of professional reasoning during their practice-based learning. In the next section I will explore and evaluate factors relating to the quality of this thesis and discuss reflexivity.

9.10 Quality evaluation

9.10.1 Introduction

Mays and Pope (2020, p. 231) suggest that "quality, in qualitative research, is systematic, self-conscious research design, data collection, interpretation and communication" this is something I have attempted to implement throughout my study. I have approached this by clearly delineating the research process (including the reasoning behind the decisions I made), and by including my reflexive thoughts on each stage of the process.

Cho and Trent (2014) suggest a compromise between general and unique qualitative criteria can be a useful approach. As discussed in Section 3.6.3 (Quality criteria), this is an approach I have adopted. Tracy's (2010; 2020) criteria (which are relevant to a diverse range of qualitative paradigms), have been combined with unique criteria for a study using a *dialogical* approach (Sullivan, 2012). The advantage of a combined approach is that my study is considered both in relation to other qualitative studies using global criteria, and in relation to whether it meets specific criteria that are relevant to the implementation of a *dialogical*

approach. My discussion will be organised using the ‘eight big tent criteria’ suggested by Tracey (2010; 2020) and Sullivan’s (2012) specific criteria for a *dialogic* approach will be incorporated into this discussion. Sullivan’s (2012) criteria, and Table 3.1 from Chapter three (methodology) summarising Tracey’s (2010; 2020) criteria are reproduced below.

Sullivan’s (2012) evaluation criteria for a *dialogical* approach.

- *Polyphony* - the interpretation places different voices in contact with each other. This involves syncrisis and anacrisis. Anacrisis refers to enabling others to express their point of view and syncrisis to putting different viewpoints together in a persuasive and coherent manner.
- The analysis should draw attention to *chronotope* (time-space elaboration), *genre* and emotional connection.

Table 3.1 Tracy’s (2010; 2020) ‘eight big tent criteria’

Big Tent criteria (Tracy, 2010; 2020)	
Tracy suggests <u>some</u> (not all) of the practices relating to the criteria will be relevant.	
Criteria	Practices
Worthy topic	The research is relevant, timely, significant and/or interesting.
Rich rigour	The study has sufficient, theoretical constructs, sample, data collection and analysis.
Sincerity	Evidence of self-reflexivity and transparency.
Credibility	Thick description, member reflections., triangulation <u>or</u> crystallisation, multivocality.
Resonance	The research influences and affects the reader through aesthetic and evocative, naturalistic generalisations and/or transferable findings.
Significant contribution	Makes a significant contribution conceptually/theoretically, methodologically, practically and or heuristically.
Ethical	Procedural ethics, situational, and/or relational ethics are considered.
Meaningful coherence	The study achieves what it sets out to, methods fit with the study goals. Literature, the research question, findings, and interpretations are connected

These quality criteria will now be explored in relation to the strengths and limitations of my study.

9.10.2 Worthy topic

Tracy (2020) suggests that a worthy topic may be one that has been overlooked. To a large extent this is true of students' experiences of reasoning during their practice-based learning. No literature could be located which explored reasoning during practice-based learning from the occupational therapy students' perspective. To date the focus has been on interventions designed to improve or assess reasoning on placements rather than exploring the students' experience. This omission of the subjective experience of the student is not confined to practice-based learning, it has been a criticism of all the literature on occupational therapy students' professional reasoning (Márquez-Álvarez, 2021). There is a lack of UK based studies on both students and occupational therapists' professional reasoning. My review of the literature (2006-2022) identified only one published study with a single participant and two unpublished PhD theses (Robinson, 2012; Summerfield-Mann, 2010). This means the reasoning of students and therapists in the UK has not been well documented and this was a worthy topic for further exploration.

9.10.3 Rich rigour

Cho and Trent (2014) suggest that for a qualitative study rigour is considered in relation to the ethical and systematic conduct of the study. Tracy (2020, p. 271) suggests this can involve "moving beyond data and analysis methods that are merely convenient and comfortable". Interviews could be regarded as a convenient and predictable data collection method but as discussed in Section 4.4.1 (Selection of data collection method), these were a good fit with the approach to data analysis, and not overly demanding of the participant's time.

The approach to data analysis was neither convenient or comfortable due to my unfamiliarity with it and the considerable amount of time I needed to invest in reading literature and developing the skills I thought were required to implement this method robustly. However, this "intense effort and intellectual rigour" (Howitt, 2019, p. 384) does contribute to the quality of the study. The risk with selecting such a time-consuming method of data analysis is that it allows less time to develop other aspects of the study. It has detracted from my ability to disseminate the findings, as although data analysis began early, the analysis and

identification of key points to consider in the discussion of my findings continued until a few months before submission of this thesis. It is, however, this method of analysis that adds to the originality of the study, and the time invested in developing the knowledge required to implement it adds to the rigour of the data analysis process. Tracy (2020) suggests rigour requires discussion of the process by which the raw data is transformed, and this process has been explained in Section 4.5 (Data analysis). Pope and Mays (2020) state that sufficient data needs to be provided for the reader to reach a judgement about whether this supports the researcher's interpretation. The length of the quotes in the findings section allows the reader to see the relationship between these and my interpretations and provide an opportunity for the reader to arrive at their own interpretation. This is an important feature of a *dialogical* approach as Sullivan (2012) suggests short quotes can muffle participants voices.

9.10.4 Sincerity

Yoon & Uliassi (2022) suggest the researcher's self-reflexive description and sharing of their identities is required to meet the criteria of sincerity. I have endeavoured to do this throughout this thesis in the reflexivity section of each chapter and in this appraisal of the quality of this study. I have used the first person throughout this thesis (Tracy, 2020) suggests this is important as it makes the influence and presence of the researcher more evident.

Tracy (2020) states that transparency is another element of sincerity, and that this involves clearly explaining the conduct of the study. Throughout this thesis I have aimed to justify the decisions I made and the processes I followed. I have also explained my relationship with the participants and considered some of potential implications of this, for example the risk that they would assume they needed to use professional language when speaking with me and that this would inhibit their narrative (see Section 4.4.2 Interviews and Appendix 5: Participant information sheet).

9.10.5 Credibility

Tracey (2002) suggests that researchers can either use triangulation or crystallisation to strengthen credibility. Triangulation is a realist concept aimed at reducing bias and "finding convergence on a single reality" (Tracey, 2020, p. 276) and therefore is not compatible with the *polyphony* and *unfinalisability* associated with a *dialogic* approach. Crystallisation is

based on the idea that, in the same way as a crystal refracts and reflects light as it is moved, the research text can reveal many different layers of meaning (Denzin and Lincoln, 2012). One aspect of crystallization is *multivocality* which involves the inclusion of multiple viewpoints and interpretations (Tracy and Hinrichs, 2017). This is akin to Bakhtin's *polyphony* which involves putting different voices in contact with each other (Sullivan, 2012). During the analysis and discussion, I have attempted to preserve the uniqueness of an individual's experience whilst connecting different voices sometimes drawing out contrasting experiences at other times similar experiences. A strength of my study was the inclusion of the minor as well as major *genres*. This allowed more of the participants voices to be represented in the data and helped to preserve *polyphony*. This supported the exploration of the individual and multi-layered nature of reasoning.

Researchers are increasingly moving toward viewing member checking as an inappropriate quality criterion for qualitative research (Morse, 2015; Tracy, 2020; Moutulsky, 2021). Member checking has an emphasis on verification, checking and validation (Tracy, 2020) and it has been argued that this has little value once data has been abstracted and interpreted (Morse, 2015). Tracy (2020) suggests member reflections as an alternative to member checking and suggests these provide additional insights, for example on the analysis. These were not something I included in my study. This was informed by several factors.

- The *dialogical* methodology which suggests that *outsideness* is important (we can never fully see ourselves).
- The burden on participants of reading and responding to my findings and discussion.
- Given the time that would have elapsed the participants would be established in a work role and perhaps somewhat disconnected from their position as a student.

Nonetheless it might have been interesting to explore the participants reflections on the findings. It could be argued that the reflections of other students who did not participate, academics and practice educators would also be important, and this is something I hope to find out more about as I disseminate my findings.

9.10.6 Resonance

Resonance relates to the meaningful impact of a study on the reader, its relevance to them and how the reader connects with the findings and discussion (Howitt, 2019). The inclusion of longer quotations provides an opportunity for the reader to interact with the original data, and for this, as well as my interpretation, to resonate with them. Resonance is connected to the aesthetic skill the researcher demonstrates when crafting their representation of their findings (Tracy, 2020). Although this is something I have tried hard to achieve this is very much a skill, as a researcher and writer with limited experience, I am still in the process of developing. Sullivan (2012) suggests the use of syncrisis and anacrisis are important. Anacrisis refers to enabling others to express their points of view and syncrisis to putting different viewpoints together in a persuasive and coherent manner. The structure of the findings and discussion chapter aimed to achieve this by the inclusion of quotes long enough to convey the participants viewpoint and by bringing together the viewpoints of different participants.

9.10.7 Significant contribution

Tracy (2020, p. 281) argues that significant findings “extend, transform, or complicate a body of knowledge, theory, or practice in new and important ways”. My study set out to explore occupational therapy students’ experiences of reasoning during their practice-based learning. My findings make a significant contribution to a conceptual understanding of students’ experiences of reasoning, as both a means of being socialised into the reasoning of an occupational therapist, and a means of enacting and affirming a developing professional identity. They extend our understanding of what scaffolds and is transformational for students when being socialised into reasoning. They illuminate the occupation-centred and person-centred values underpinning reasoning, and that students may resist being socialised into reasoning incompatible with these values and their developing professional identity. My findings also make an original contribution to developing a conceptual understanding of the emotionality of learning to reason, and how students exercise emotional intelligence and resilience. In addition, my study extends our theoretical and conceptual understanding of the contribution of a *dialogical* methodology to health and social care research. The contribution my findings make is elaborated on in Chapter ten (Conclusion).

9.10.8 Ethical research practice

Gordon and Patterson (2013) suggest that ethics is central to the quality of qualitative research. As previously discussed, as well as following ethical procedures, situational and relational ethics are important (Goodwin et al, 2020). Ethical procedures have been discussed in Section 4.2 (Ethics), situational and relational ethics will be explored here. Situational ethics relates to ethical issues connected to the context or population and relational ethics to consideration of the researcher participant relationship (Tracy, 2020).

Situational ethics – recruiting students from my own university increased the risk of these individuals being identified. This informed my decision not to collect demographic information and to remove identifying information including gender (given the relatively small number of male occupational therapy students and male occupational therapists). It is argued that the data you wish to collect must come secondary to confidentiality (Damianakis and Woodford, 2012; O’Leary, 2014). This has impacted of the richness of the data in terms of the amount of contextual detail that is available to the reader, but I considered confidentiality to be of primary importance. I would argue that this thesis provides some rich contextual detail in the findings’ chapters. These contain lengthy quotes from participants which provide a good sense of the individual in context. Combining these quotes with participants’ characteristics would have increased the risk of breaching confidentiality. Had my research question sought to explore the intersection of participant characteristics such as age and gender with professional reasoning, it would of course have been important to include this data. However, this would have necessitated the use of a methodological approach which included less contextual detail in the findings’ chapters. Vainio (2012) suggests that anonymity facilitates the reporting of findings that may be unfavourable as well as those which are favourable. This has allowed me to include the participants’ negative experiences of their educators’ facilitation of their reasoning as well as the positive experiences.

Ethical issues can unfold as the research progresses as well as in the planning stages (Wiles, 2014). At the end of the interview, I asked the participants if there was anything they were concerned about regarding confidentiality. One participant identified some information that they wanted to remain confidential. So, once I had selected *key moments*, I emailed them the section of the transcript that I wanted to use, and they confirmed they were happy with the steps I had taken to preserve confidentiality. Also, one participant made some comments after we had concluded the interview and before I had switched off the audio recorder, so I

checked with them if they were happy for me to include this in my analysis. Goodwin et al (2020) suggest it is important in qualitative research to give thought and attention to ethical issues as these unfold. The examples I have provided illustrate my attempts to do this and demonstrate awareness of situational ethics.

Relational ethics – Tracey (2020, p. 285) suggests this involves “treating participants as whole people rather than subjects from which to wrench a good story”. As my study progressed, I became aware that the extracts of text I needed to present in the findings were a lot longer than the quotes typically used in thematic analysis. I realised that the participants may not have anticipated so much of what they had said, and the context being preserved. This informed my decision to prioritise confidentiality over including more information about the participant and placement context. However, I think if I were using this methodology again, I might discuss with participants how their data might appear in the write up of the findings.

9.10.9 Meaningful coherence

Coherence relates to the different element of a study working together, and the extent to which the study makes sense as a whole (Grenville et al, 2021). Tracy (2010; 2020) suggests that coherent research accomplishes its stated purpose, has a clear relationship between methods and methodology, and connects literature to the study purpose, methods, and findings. I have tried to be thoughtful about the relationship between my research question and methodology and methods. The fact that the research question was used as the interview prompt, to inform selection of *key moments* and as a focus for the discussion helps contribute towards the coherence of my study.

Reading Bakhtin so extensively, although time consuming, has been instrumental in achieving coherence between the different elements of my study. It has informed the methods I used, for example the selection of an unstructured rather than semi structured interview (see Section 4.2, Interviews). Tracy (2020) argues that coherence should also be evident in the way of writing, so for example my findings, discussion and conclusion should reflect the *dialogical* methodology underpinning my study. I have taken steps to ensure this is the case. For example, *chronotope* (time space elaboration), *genre*, and emotional connection informed my identification and discussion of *key moments*. A *dialogical* analysis pays attention to the “self-other axis” and “the emotional and moral connection to what is said” (Sullivan, 2012, p. 168). This assisted me in identifying how the student positioned

themselves in relation to others, and how, as well as accepting the reasoning they were being socialised into, they may also reject or modify this. Exploration of the emotional connection in the *key moments* has facilitated identification of the emotionality of learning to reason during practice-based learning.

9.11 Limitations of the study

In section 9.10 I have quality appraised my study and considered its strengths and limitations. Polarising aspects of the study into being a strength or a limitation would have been an oversimplification when some were both simultaneously. For example, the time-invested in data analysis could be considered a strength in relation to the rigour and coherence of the study, but could also be considered a weakness in that it limited the time available to disseminate and receive feedback on the findings whilst writing the thesis. Not dichotomising this discussion into separate sections on strengths and limitation highlights some of the tensions that exist in research practice. It allowed for a more nuanced and analytical evaluation and aided clarity regarding the reasoning for the decision I ultimately made. However, I have summarised the limitations I identified here for the reader.

- 9.10.3 rich rigour – the time-consuming nature of the analysis leaving less time for other aspects of the study
- 9.10.5. credibility - it may have been interesting to obtain participants reflections on the findings
- 9.10.6. resonance – that this may be impacted by my novice status as a writer.
- 9.10.8 Ethical research practice - not discussing with participants how their data would appear in the findings chapter.

9.12 Chapter Summary

In this chapter I have discussed the findings of my study and the contribution a *dialogical* approach has made to our understanding of how occupational therapy students experience professional reasoning during their practice-based learning. I have also evaluated the quality of my study with reference to Tracy's (2010; 2020) 'eight big tent criteria'. The discussion of my findings and evaluation of quality will feed into the conclusion chapter which follows.

Chapter 10

Conclusion

10.1 Introduction

My study aimed to explore how occupational therapy students experienced professional reasoning during their practice-based learning. Practice-based learning plays a significant role in occupational therapy education making up a third of the curriculum. There are a lack of UK studies exploring professional reasoning in occupational therapy, and existing research largely explores the impact of a specific university instigated interventions on reasoning. There were no studies that explored occupational therapy students' experiences naturalistically (in the absence of an intervention) from the students' perspective. The existing literature had suggested that professional reasoning is an individual, multi-layered, social, and contextual phenomenon. A *dialogical* methodology was employed as it provided the opportunity to preserve individual difference and capture the social and contextual nature of professional reasoning. Data from interviews with occupational therapy students were analysed using a *dialogical* approach and my interpretation identified several *genres* (*Bildungsroman*, *romance*, *professional*, *travel*, *adventure*, and *carnival*) used by participants when discussing these experiences.

In this concluding chapter I will begin by discussing the original contribution this thesis makes, the implications of my findings and recommendations will be considered, and the strengths and limitations of the study will be summarised. I will include my reflection on the research process, plans for dissemination of the study findings, and my final conclusions.

10.2 Original contribution

My interpretation of the findings suggests that reasoning during practice learning is experienced as:

- a) A means of being socialised into how occupational therapists reason in the 'real' world (*Bildungsroman*).
- b) A means of enacting and affirming a developing individual identity as an occupational therapist (*romance, travel, adventure, and carnival*).

Given the absence of previous research on professional reasoning from the perspective of occupational therapy students this study makes an original contribution to the development of a conceptual understanding of this phenomenon. This is elaborated on in the discussion which follows (Sections 10.2.1, 10.2.2 and 10.2.3).

10.2.1 Professional socialisation (*Bildungsroman*)

The role of professional socialisation in reasoning has begun to feature in the health and social care literature. However, the absence of existing research means we do not know the relevance or applicability of this theory to occupational therapy students' experiences of reasoning during their practice-based learning. My findings provide empirical evidence to support what the existing literature suggests about the complexity of reasoning for novices and the importance of autonomy for development of reasoning. Whilst the value of scaffolds for reasoning during practice learning is established, the specific scaffolds utilised by occupational therapy students has not been explored. My findings indicated that the participants in my study used treatment protocols, documentation guidelines, occupational therapy conceptual practice models, the educator's questioning of the student and the educator's explanation of their own reasoning to scaffold their reasoning. An interesting finding was that the educator's explanation of their reasoning around risk and positive risk-taking, enabled the student to engage with conditional reasoning and transform their frame of reference (worldview). This extends our theoretical understanding of what scaffolds, and is transformational, for occupational therapy students' reasoning during their practice-based learning.

Although the emotionality of learning is well established, the emotionality of learning to reasoning has received limited attention. The *dialogical* methodology, which paid attention

to emotion, facilitated exploration of the emotional dimensions of reasoning. The participants experienced socialisation into reasoning as, anxiety provoking, frustrating, overwhelming, confusing, and uncomfortable. However, more frequently mentioned were positive emotions, these included, feeling determined, feeling confident as their reasoning developed and experiencing illumination as they came to understand a perspective that was different to their own. They also felt supported and reassured by the scaffolds that assisted them to reason. This study provides an insight into the emotionality associated with socialisation into reasoning and thereby extends and makes an original contribution to what is understood about this process.

My findings illustrate the pivotal role of the practice educator in socialising students into reasoning. This requires a level of skill in balancing autonomy and support, selecting the 'just right challenge', and adapting their approach to accommodate the slower speed at which novices' reason. My findings demonstrate that transformational learning can still occur even when educators do not achieve this skilful balancing act. However, if a practice educator can individualise their approach and balance these factors, this can help support students with the emotional challenges associated with transformational learning.

10.2.2 Professional identity (romance, travel, adventure, and carnival)

My findings suggested that person-centredness and occupation-centredness were values that were central to the participants reasoning and were important constituents of their professional identity. These are established threshold concepts that it has been suggested occupational therapy students need to master. My study extends and makes an original contribution to our theoretical understanding of how students engage with these concepts during their practice-based learning and the central role they take in their reasoning. It also contributes to an understanding of how they negotiate the pragmatic practice-based issues impacting on operationalisation of these concepts. A significant finding was that the opportunity to draw on these concepts during their practice-based learning was experienced as fulfilling and reinforced the participant's developing identity as an occupational therapist.

The participants' empathy and person-centredness enabled them to engage with the service user's narrative. They were able to demonstrate (in my view) expertise in person-centred (interactive and narrative) reasoning despite their novice, student status. Perhaps because some aspects of reasoning are more closely associated with professional knowledge,

whereas others are more dependent on personality traits and life experience, for example empathy and emotional intelligence. Therefore, whilst a novice in a new practice setting may lack the knowledge needed for expert diagnostic, pragmatic, procedural and conditional reasoning, their interactive and narrative reasoning may be at a more expert level. A fully developed expert would demonstrate expertise in all aspect of reasoning and be able to integrate the different modes of reasoning. However, my findings suggest that it is possible to demonstrate a level of expertise in some modes of reasoning whilst at the same time being a relative novice in others. This extends and makes an original contribution to our understanding of the development of expertise in occupational therapy students' professional reasoning.

Identity is generally considered to be both socially (group) and cognitively (individually) constructed. Professional identity has been conflated with professional socialisation in much of the literature and it is rarely explored at the level of the individual. The focus has largely been on professional socialisation and the social process of an individual becoming a part of a group, and the individual development of identity has received less attention. In the occupational therapy literature, professional identity has largely been considered at the level of the profession rather than the individual. Professional reasoning is a means of enacting professional identity, and the participants' reasoning was based on the occupational therapist they envisioned themselves becoming. The participants resisted socialisation into reasoning that was incompatible with their envisioned professional identity. This is not a topic that has received attention in the literature with the focus being on assimilation into a group. It has been suggested we value narratives that conform to the *Bildungsroman*. These are narratives where the individual "has arrived at a knowledge of the self that equates with social legitimacy and individualism (identity) is comfortably reconciled and coherent with the institution the individual has become socialised into" (Michelson, 2012, p. 205). My findings suggest that individual identity was not always "comfortably reconciled and coherent" (Michelson, 2012, p. 205) with the reasoning the participants were being socialised into during their practice-based learning. This study provides an insight into occupational therapy students resistance to socialisation into reasoning that is incongruent with their developing professional identity. This finding extends and makes an original contribution to our theoretical understanding of occupational therapy students' experiences of professional socialisation.

Another significant finding was that the reduced time to reason and limitations to implementing person-centred and occupation-centred reasoning in acute physical contexts could be challenging for students.

10.2.3 Emotional Intelligence and resilience

My interpretation of the findings suggests that learning to reason is an emotional experience. Development of professional reasoning required the participants to exercise emotional intelligence and resilience. These were required to manage the difficult emotions that can be associated with being socialised into reasoning, to respond to service user's emotional needs, and when negotiating expression of their developing professional identity. To date the focus has been on measuring the development of emotional intelligence in occupational therapy students. My findings make an original contribution to a conceptual understanding of occupational therapy students' use of emotional intelligence during their practice-based learning.

10.2.4 Dialogical methodology

My study makes a significant contribution to extending our theoretical and conceptual understanding of the contribution of a *dialogical* methodology in the context of research in health and social care, and education. My study demonstrates this is a methodology that has a lot to offer researchers who wish to explore differences as well as similarities in their data and maintain heterogeneity rather than achieve homogeneity in data analysis. It has proved valuable in preserving individuality and context. It has also facilitated the exploration of emotionality and identity. The methods section of this thesis offers some insights into the practical considerations for researchers implementing this methodology. The inclusion of minor *genres* in the analysis was a novel approach which increased the *polyphony* (*multivocality*) of the findings and discussion. This provided a fuller and more inclusive representation of the phenomenon than focusing exclusively on major *genres* would have, adding to the credibility of the study.

10.3 Implications of findings and recommendations

In this section I will discuss the implications of the study findings and my recommendations for, education, practice, policy, and further research.

10.3.1 For Education

A recommendation informed by my findings is that students should be prepared for the emotionality associated with learning to reason during their practice-based learning, and the challenges to identity that are associated with transformational learning. Emotional intelligence and resilience are currently addressed towards the end of the course before the students' final placement. The emotionality associated with learning to reason also needs to be considered towards the beginning of the curriculum. It is at this early stage that students may have less well-developed support networks to assist them in negotiating these emotional challenges. This could, for example, be addressed prior to their first placement and/or during the university days associated with this (the weekly university day aims at connecting theory and practice). University days are facilitated by an academic but also offer important opportunities for peer support.

Content could include,

- Exploring the uncomfortableness and disjunction that can occur when your frame of reference (worldview) is challenged. Strategies for negotiating this process could be discussed, for example, reflection.
- The position of the student on the periphery of a community of practice could be discussed. This could include an exploration of the valuable learning that can come from the disjunction between theory and practice.
- Emotionality and practice-based learning – including emotional intelligence and how the students are experiencing managing both their own emotions and those of others (e.g., service users, practice educator). Discussing support strategies available to them.

Practice educators should be prepared to support students with the emotional nature of learning to reason. This could be addressed in the sessions preparing practice educator to support students during their practice placements. Content could include,

- Information about transformational learning theory, the important role of the educator as a learning bridge.
- Methods of scaffolding the development of reasoning, including the importance of articulating their own reasoning. Educators could also be reminded about the need to accommodate the slower speed at which a novice reasons.
- Increasing awareness about the emotionality associated with disjunction, when the students frame of reference is challenged, and supporting students in the development of emotional intelligence. Strategies to address this could include, providing time and space to process emotions, reflection, and acknowledgement that emotionality has a valid role in learning.

10.3.2 For Practice

These recommendations relate to importance of person-centred and occupation-centred reasoning for the development of professional identity.

- Practice educators could set students a self-directed learning task in which they are required to identify person-centred and occupation-centred aspects in their own and their educators reasoning. This could be followed by a discussion exploring the complexity and messiness associated with contextually influenced reasoning.
- The practice educator should articulate their own person-centred and occupation-centred reasoning, and how they negotiate pragmatic constraints impacting on this. This could facilitate the student in developing a deeper understanding of the multifactorial nature of reasoning. It could also benefit the practice educator by making explicit the person-centred and occupation-centred aspects of their own professional identity. This is important given that it has been suggested that a well-developed professional identity plays an important role in retention of practitioners.
- Educators should support students' reflection on their professional reasoning. For example, the different modes of reasoning could be reflected on in relation to a service user using a structured reflection (see Appendix 10). This could prompt

students to explore the modes of reasoning they may be less focused on and scaffold an exploration of the complexity of reasoning. This would also allow the practice educator to identify aspects of reasoning that could be developed and to support the student in the integration of the different modes of reasoning.

10.3.3 For Policy

- If newly qualified practitioners cannot see opportunities for person-centred and occupation-centred practice this may undermine both their professional identity and resilience. Currently some generic recommendations for preceptorship are made in the College of Occupational Therapists (COT) (2015) Supervision guidelines. These guidelines should be extended to explicitly recommend that preceptorship programmes address the development of the individual's professional identity as an occupational therapist. This should include supporting newly qualified occupational therapists to negotiate the complex nature of enacting occupation-centred and person-centred values in the context of pragmatic constraints. This has the potential to strengthen professional identity and improve the resilience and retention of newly qualified practitioners.

10.3.4 For research

- A *dialogical* approach would be valuable in exploring:
 - The professional reasoning of new graduates and experienced therapists. This would add to what is known about the contextual, social, and individual nature of reasoning and the role of identity and emotion in reasoning.
 - Explore identity, including professional identity in the health professions, as a dialogical approach allows the researcher access to how the individual positions themselves in relation to others.
- There is a need for more UK based research on person-centred and occupation-centred reasoning in acute physical settings because existing studies have largely been conducted with newly qualified practitioners in Australia. This research could explore the role of preceptorship in supporting the development of professional

identity and how the systemic constraints on professional values can be negotiated and overcome.

- When researching professional socialisation an individual's resistance as well as acquiescence into socialisation into the profession should be explored. This would develop our theoretical understanding of how an individual exercises judgement about when to comply and when to resist, as part of the process of becoming an ethical, autonomous self-regulating practitioner.
- Research into occupational therapy students' and occupational therapists' development of expertise could explore whether individuals are uniformly novice/expert in all the stands (modes) of reasoning or whether there is disparity between levels of expertise between different strands.
- When using a *dialogical* approach, inclusion of minor *genres* can add value to the findings by increasing the polyphonic nature of the findings. When including minor *genres*, researchers should consider participant numbers carefully given more of the data will require discussion.

10.4 Strengths and limitations

10.4.1 The dialogical approach

The use of this approach elicited a rich representation of students' experiences of reasoning during their practice-based learning.

The unstructured approach to interviews worked well in foregrounding the students' perspectives, but this approach needs a skilled interviewer to elicit lived experience over abstract opinion and to engage with the emotional aspects of the experience. I gained confidence in exploring how the participants felt about their experiences and the emotions these elicited as the interviewing process progressed. In future I would aim to prompt for this from the beginning.

A considerable investment of time is required to develop knowledge and skills required for data analysis, when using a dialogical approach for the first time. It is therefore perhaps of limited utility for the researcher looking for an approach that they can grasp quickly.

However, for the individual prepared to invest the time it offers the opportunity to:

- Explore emotion and identity, concepts that are afforded less focus in some other methodologies.
- Investigate a phenomenon that is heterogeneous in nature, and where amalgamation into codes and themes may obscure context and some of the richness and variety in the data.

10.4.2 The balance between breadth and depth

The open research question and unstructured interview elicited a lot of relevant data which was challenging to manage. Consideration should be given to recruiting less participants when the research question is broad, the experience being discussed includes several separate events, and both major and minor *genres* are to be discussed. A more focused research question, a semi-structured interview, a more circumscribed phenomenon, and a focus on only selecting and discussing major *genres* would all contribute to the inclusion of more participants. In my study the openness of the research question and unstructured nature of the interview were important in foregrounding the participant's experience and voice over the researcher's.

Preservation of the heterogeneity of the data has resulted in a substantial proportion of the thesis being dedicated to the study findings and limited the depth in which some aspects of these findings could be discussed. However, this has provided a rich and varied picture of students' experiences of reasoning during their practice-based learning and led the development of new knowledge (particularly in relation to emotionality and professional identity).

A smaller sample group may have allowed for more discussion of mixed *genres* (when all the *genres* identified in a *key moment* are explored). This approach was adopted in relation to discussion of the use of the *professional genre* in relation to the *Bildungsroman* and the *romantic genre*, and in discussion of the minor *genres* where other *genres* were identified and explored. Analysis of transitions between *genres* provided an insight into reasoning

throughout an experience. For example, in 8.4.5 Eli begins with a romantic discussion of person-centred and occupation-centred reasoning, we see the use of *carnival* when reasoning in the moment and an interweaving the professional and *romantic genres* as reasoning is discussed. They conclude using the *Bildungsroman* when discussing their learning and development. Fuller exploration of more *key moments* in this way may have identified allowed for a more in-depth exploration of the relationships between *genres*.

10.5 Reflection on the process

At the beginning of this thesis, I introduced myself as a lecturer, former practice educator, a recipient of occupational therapy and as a researcher interested in how students learn to reason. I also spoke about how I valued listening to the student's perspective. I have explored reflexivity throughout this thesis by examining this from the perspective of endogenous and referential reflexivity (May and Perry, 2017). I have discussed my reflexive thoughts on my choice of methodology, the interviews, including my relationship with the participants, how I experienced data analysis, and how some of the data resonated with me. I have also explored situational and relational ethics and reflexivity as a contributor to the quality of the study.

When I adopted the endogenous and referential approach to reflexivity, I originally thought I might discuss these independently of each other, but they are so interrelated this proved impossible. If I had not adopted this approach, I think I would have focussed less on the endogenous aspect of who I am. Focussing on who I am felt quite exposing as this involved exploring aspects of my personal life as well as my professional life. This approach did make me think more deeply than I might otherwise have done. For example, I am not sure I would have got to the bottom of why valuing difference was so important to me without this approach. Arguably a better understanding of yourself leads to a more developed understanding of the impact of this on your relations with others.

In Bakhtinian terms my PhD journey and the development of this thesis is a conglomeration of some the *genres* I have discussed. It has resembled a transformative adventure when I have needed resilience to overcome the trials and hurdles typical of this journey (some of these are discussed in the reflexivity sections of the preceding chapters). Reflective of the *Bildungsroman* this has been a transformational and I have learnt something about myself as a researcher and writer in this process. For example, my need to write to think, and to

write about the whole before I can perfect the parts. On this journey there have been times when my experiences have been more akin to the *travel genre*. Feeling overwhelmed by some of Bakhtin's dense and (for me) difficult to digest writing, the data, pulling together a discussion and producing an intelligible thesis. Finally, the participants passion for their person-centred and occupation-centred values has reignited some of the romance of occupational therapy for me.

I have emerged with a transformed understating of the complexity of professional reasoning, and its value mediated, individual and social nature. I have a profound respect for the resilience of students as they navigate a path that involves emotionally intelligent judgements about how to enact their professional identity, and to what extent they will allow themselves to be socialised into the reasoning they are exposed to during their practice-based learning.

10.6 Dissemination

In this section I will discuss the dissemination of my findings.

10.6.1 Dissemination to date

Presentation at LSBU Health and Social Care Doctoral Support Group on preparation for interviews in relation to data analysis (1st February 2018)

Presentation at LSBU Health and Social Care Doctoral Support Group on unstructured interviews (7th March 2019).

Presentation at LSBU Health and Social Care Doctoral Support Group on my study methodology and findings (9th June 2022).

Incorporation of early findings into student teaching on professional reasoning (February 2022 and ongoing).

Incorporation of some of the early findings into LSBU occupational therapy practice educator course (April 2022 and ongoing).

Incorporation of some of the early findings into post-registration Allied Health Clinical Supervision Study Days (March 2021 and ongoing).

10.6.2 Next steps

The first step in dissemination of the findings of my study is to submit a findings paper to a peer reviewed journal within the next six months. The British Journal of Occupational Therapy appears to be most appropriate because of its wide occupational therapy readership and Impact Factor of 1.275. The peer review process associated with this means it is an important first step in gaining peer recognition of the quality and importance of the study. The impact of a successful publication would be to make educators and students more aware of the relationship between reasoning and professional socialisation and professional identity. It would also increase awareness of the emotionality of learning to reason during practice-based learning for both students and practice educators. It would enhance the practice educators' understanding of how best to support students' reasoning during practice-based learning.

Following this there are specific aspects of the findings that will be developed for inclusion in academic journals or conference proceedings, for example, a focus on professional identity, or experiences related to acute physical settings. Aspects of the methodology will be shared in academic journals, for example, the dialogical approach and inclusion of minor as well as major genres, the tension between maintaining anonymity and including contextual detail such as participant characteristics.

I have joined the Health Education England sponsored RCOT Project Advisory Group: Early Career Support. I have shared my findings regarding the importance of supporting newly qualified practitioners in the development of a strong professional identity with this group. I have spoken about the need to assist newly qualified occupational therapists in negotiating the challenges associated with occupation-centred and person-centred reasoning in a real-world context. I will continue to contribute to this group and any other relevant longer-term projects that emerge from this work.

The findings will also be incorporated into the universities practice educator course (see Section 10.6.1) with the aim of enabling them to better support students' reasoning during practice-based learning. Emotionality and resilience will be discussed with the occupational

therapy team in relation to preparing students for learning to reason during their practice-based learning.

10.7 Final conclusion

My study demonstrated that the participants professional reasoning during their practice-based learning was influenced by their individual professional identity as well as socially constructed through a process of professional socialisation. For the participants in my study person-centred and occupation-centred reasoning was a means of developing, expressing, and affirming their professional identity.

My findings make a significant contribution to our theoretical understanding of the role of professional identity in reasoning, and how occupational therapy students experience being socialised into reasoning. The findings extend our understanding of the emotionality of learning to reason, and the resistance students can exhibit to socialisation into reasoning incongruent with their professional identity.

This thesis demonstrates the promise of a *dialogical* methodology to explore a complex and highly individual phenomenon. My findings illustrate its value in exploring identity and emotionality and the potential for inclusion of the minor *genres* to provide a more inclusive representation of the phenomenon.

Final conclusions are difficult to draw in a thesis underpinned by a philosophy that does not ascribe to finalisation. There is a danger of the author's synthesis monologising (Bakhtin, 1984) and not allowing room for other voices. Bakhtin (1986, p. 146) states "There can be neither a first nor a last meaning; it always exists among other meanings as a link in the chain of meanings...this chain continues infinitely". It is therefore not my intention to provide a finalised answer to how occupational therapy students experience reasoning during their practice-based learning, instead I hope I have provided a link in the chain for others to engage and dialogue with.

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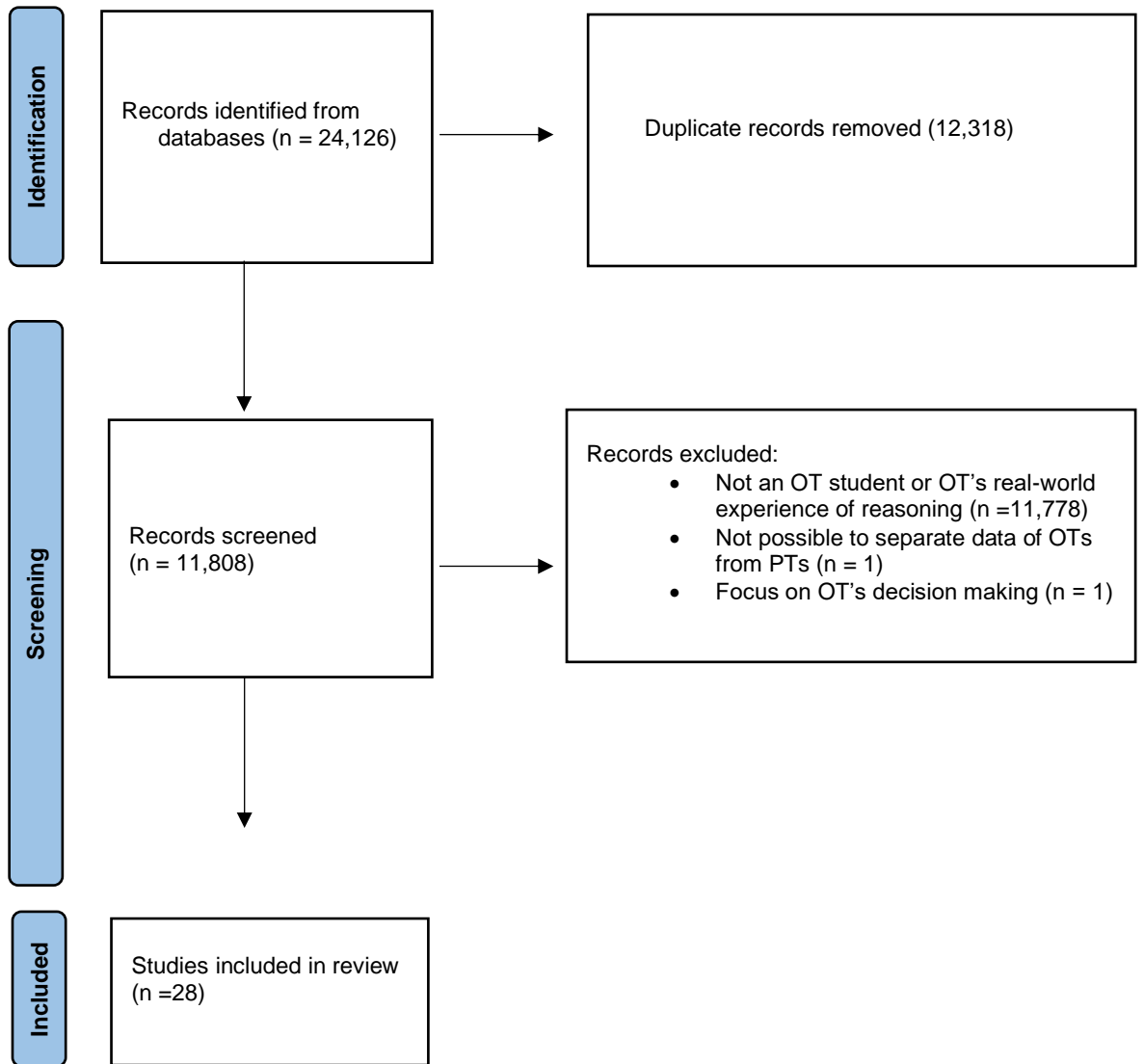
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Appendix 1: Search terms and databases

Search terms	Databases	Number of hits after duplicates removed(all titles and/or abstracts reviewed)	
		2006-2016	2016-2022
"clinical reason*" or professional reason* and "occupational therap*"	Academic search complete, AMED*, CINAHL, Medline, Soc Index, ERIC, Education Research complete	1195	3870
"clinical reason*" or "professional reason*" or "clinical judgement" or "clinical decision making" or "clinical thinking" and "placement" or "fieldwork"	Academic search complete, AMED*, CINAHL, Medline, Soc Index, ERIC, Education Research complete	1,201	795
"clinical reason*" or "professional reason*" and develop*	Academic search complete, AMED*, CINAHL, Medline, Soc Index, ERIC, Education Research complete, PsychINFO*	936	1282
"clinical reasoning" and "student"	AMED*, CINAHL, ERIC, Medline, PsychINFO*	785	560
"professional reasoning" and "student"	AMED, CINAHL, ERIC, Medline, Psych INFO	16	17
clinical reasoning or professional reasoning (no limiters)	OTDbase	100	n/a
clinical reasoning or professional reasoning	OT seeker	16	16
clinical reasoning or professional reasoning	Cochrane Library	447	498
"allied health profession*" and "clinical reason*"	Academic search complete, AMED*, CINAHL, Medline, Soc Index, ERIC, Education Research complete	51	23

* The library had ceased subscribing to these data bases when the second search was completed in 2022.

Appendix 2 – PRISMA Diagram



Appendix 3: Table of research studies included in the literature review

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Araujo et al	2022	The American Journal of Occupational Therapy	n/a	Scoping review of qualitative and conceptual articles published between 2010 and 2019	n/a	Scoping review	Data extraction tool	Thematic	<p>Themes included, factors influencing reasoning, reasoning processes, frameworks to guide reasoning, and emergent and innovative perspectives</p> <p>Recommendations for research, embodiment, intuition, underground practice, reflection and reasoning, context and institutional environment, frameworks, how ideological perspectives shape reasoning, person-centred and occupation-centred reasoning, social justice, and bias.</p>	<p>Robust review with a clear question, explanation was provided regarding identification and selection of studies, synthesis, and results.</p> <p>No explanation of adaptation of data extraction tool for conceptual studies (tool included study objective, participants, methodology and methods).</p> <p>Discussion is well informed.</p> <p>Authors identify strengths and limitations.</p> <p>Conflation of research and conceptual literature provides an indication of the state of scholarship but make it difficult to identify the state of current research.</p>

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Berndt (et al)	2022	Australian Occupational Therapy Journal	Australia	Explore reasoning of OT's related to driver rehabilitation interventions.	12 OT's	Qualitative no methodology stated.	Semi-structured interviews (n.7) one focus group (5 participants)	Modified template analysis approach deductive coding using different modes of reasoning informed by Unsworth's Model of reasoning	Therapists used, ethical, procedural, interactive, conditional, narrative, scientific and pragmatic reasoning to plan and implement driver rehabilitation interventions.	<p>State no new modes of reasoning emerged but their Interview prompts direct participants to discussing different aspects of clinical reasoning already identified in the literature and then transcripts coded for these.</p> <p>State findings member checked but do not discuss outcomes of this.</p> <p>Reasoning for interviewing 7 participants and a focus group for 5 was convenience. A focus group may have inhibited the exploration of each therapists individual reasoning. It is unlikely each of the 5 therapists would have been able to give an individual response to each one of the 18 interview questions.</p> <p>18 may be a large number of interview questions interviews (? inc. focus group) 25-118min average 50 mins (2-3 mins per question). Reported focus group responses as more in-depth.</p> <p>Some interesting findings re how the different modes of reasoning are utilised in the context of driver rehab interventions.</p>

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Haines & Wright	2021	Occupational Therapy in Health Care	UK	To explore a therapist's narrative reasoning.	1 OT's work with 5 service users	Critical ethnography, case study methodology	17 participant observation, 25 interviews (OT, support workers, manager) document/artifact analysis.	Inductive thematic analysis (Bazley, 2020; Braun & Clarke, 2013), NVivo, open coding, categories & themes, constant comparative analysis, memo's. Dramaturgical coding (Saldana)	The participant elicited, told and created stories about the service users allowing intervention for 5 individuals with learning disabilities to be individualised to the context.	<p>Process of recruiting participant not elaborated on – how was interest sought?</p> <p>It is not specified from whom ethical approval was sought just that obtaining this was complex. Consent of OT and support workers manger etc. not discussed.</p> <p>Prolonged engagement – 1 year.</p> <p>Analysis described as thematic, but process followed is in keeping with grounded theory although no specific sources cited for this. Also, dramaturgical coding. Possibly authors own approach informed by 3 separate texts. Also, the OT participating jointly constructed findings. Needs clearer explanation re how all these different approaches worked together.</p> <p>Discussion relies on one author (Mattingly) and is primarily a description of the participants reasoning in relation to this authors conceptualisation of narrative reasoning. The critical ethnographic approach does not appear to have influenced discussion of findings.</p> <p>It was not clear why both a case study and a critical ethnography approach was required.</p>

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Lam Wai Shun et al	2021	Australian Occupational Therapy Journal	Canada	To investigate factors influencing reasoning and how they reasoned when assessing stroke and TBI patients' rehabilitation potential	10 OT's	Constructivist grounded theory	Think aloud protocols and head mounted video camera during initial assessment, and semi structured interviews.	Constant comparative analysis.	Patient, clinician, and organisational factors influenced reasoning. Interpreted these to predict recovery, estimate rehab potential and suitable rehab programmes. OTs used both top down (observation of performance) and bottom-up (medical & nursing notes) scripts to build a picture of rehabilitation potential.	<p>Researchers worked in acute care their relationship (if any) to the therapists was not discussed.</p> <p>Data analysis process clearly explained and is robust.</p> <p>Some evidence of theoretical sampling and saturation.</p> <p>Quotes used to support findings are very unevenly distributed e.g., 9 from one participant 1-4 from other and none from 2 participants.</p>
Carrier et al	2019	Health and Social Care in the Community	Canada	Describe elements of the institutional context involved in reasoning	10 OT's 12 key informants	Institutional ethnography	Semi-structured interview, administrative documents	Institutional ethnography analysis process	Institutional procedures including, organisations basket of services, OT's mandate, and waiting times restrict reasoning of community OT's. Only solutions within the bounds of these are considered.	Coherent, methodologically informed throughout. A robust study.
Bolton & Dean	2018	Journal of Occupational Therapy Education	USA	Examine effectiveness of university course that had direct service user contact weekly over twelve weeks.	36 occupational therapy students	Mixed methods	Self-Assessment of Clinical Reflection and Reasoning (SACRR). Reflective journal assignment	Repeated measures ANOVA. Identified holistic themes. Then used self-determination theory as framework to complete more detailed deductive coding.	<p>Results of SACRR indicated an increase in self perceived reasoning.</p> <p>The qualitative findings concluded clinical reasoning develops from competence in performance to relatedness to other and finally to autonomy in decision making.</p>	The prompts provided for the journals to encourage self-reflection may have contributed to the identification of self-determination theory as a framework. Quotes are used to support themes, but these are not attributed to individuals.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Shafaroodi et al	2017	Iranian Rehabilitation Journal	Iran	To understand how the clinical reasoning process is formed.	15 OT's	Grounded theory (Strauss & Corbin)	Interviews (20-70 mins) 4 sessions videoed and observed.	Constant comparative method	Core category = reaching an observable change. Reasoning constrained by dominance of medical perspective and lack of insurance. Reasoning facilitated by experience, up to date knowledge and reflection to be client-centred	Some evidence of theoretical sampling but this mainly seems focussed on maximum variation, rather than on developing the emerging theory. 2 participants interviewed twice to clarify ambiguities.
Unsworth & Baker	2016	British Journal of Occupational Therapy	n/a	To establish 1) the nature and volume of professional reasoning literature 2) what is known about the development of professional reasoning in students through literature exploring novice expert differences.	n/a	Systematic review (1982-2014)	n/a	Narrative	In relation to the volume and nature of the literature 140 articles were categorised into, what is professional reasoning, ethics and moral reasoning, methods of studying reasoning, reasoning in specific practice areas, novice expert differences, reasoning of assistants. In relation to novice expert differences 14 articles were identified only eight of these were rated as strong following critical appraisal. They concluded there was little consistency as to how expertise was defined and that not all occupational therapists become experts.	The literature for question 1) was not critically appraised and 32% of the articles did not include any data analysis. The question lacks the PICO or PEO focus expected in a systematic review and perhaps is more suitable for a literature or scoping review which is effectively what has been provided. The mention of students in the second question infers this is the population however none of the studies included students all the participants were OT's. Search strategy is robust. Articles relating to question 2) are quality appraised Several measures to enhance the quality of their review including independent data extraction and review of data analysis by the second author.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Skubik-Pelaski et al	2015	Physical & Occupational Therapy in Geriatrics	USA	Explore OTs decision making processes about which in-patient stroke rehab environment to work in. Arose out of larger study that identified the environment selected influenced intervention.	3 OTs	Qualitative descriptive	Focus group (3 OTs) and individual interviews	Analytic coding and thematic development	Reasoning in relation to selection of stroke rehab environment was influenced by habits and routines. The choice of environment influenced intervention. Less likely to do an occupation-based intervention in gym. Gym was a safe place with support from others. Occupation-based intervention required more reasoning and preparation.	<p>A small number for a focus group and no reasoning provided for this approach. No indication of how long the interviews and focus group took.</p> <p>The questions appropriately informed by observation of the therapists that took place in the larger study.</p> <p>Process of analysis minimally described and does not appear to clearly follow an established approach.</p> <p>Minimal reference to other literature in introduction and discussion.</p>
Du Broc & Pickens	2015	Occupational Therapy in Health Care	USA	Exploration of occupational therapists reasoning in home modifications as they develop from novice to expert	8 OT's	Grounded theory	2x Interviews	<p>NVivo used to look for skill acquisition (Dreyfus & Dreyfus) to categorise therapists' novice-expert</p> <p>Then line by line coding (Corbin and Strauss)</p>	With expertise came a shift from systematic reasoning steps to more habitual comprehensive, client-centred and contextually informed reasoning in relation to home modifications	<p>Snowball rather than theoretical sample. No justification for sample size other than stating saturation achieved after 8th participant but not evident on what basis this claim is made.</p> <p>Member checks with participants to confirm categories (4 responded)</p>

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Crowe	2014	Physical & Occupational Therapy in Geriatrics	USA	What is the professional reasoning process of OT's using multi-sensory environments (MSE) with clients with dementia	7 OT's	Qualitative	Semi-structured interview	Constant comparative method using NVivo	Participant believed their use of MSE was client-centred, it facilitated neural change and emotional connection. Author concluded the participants were not using evidence to inform their reasoning and instead relied on personal assumptions and clinical experience.	Some evidence of reflexivity. Quotes not attributed. Stated approx. 7 hours of interviews generated a lot of data. Information unrelated to research question was not analysed. Some further explanation e.g., nature and amount of unrelated information would add to robustness. Discussion limited and does not consider alternative perspectives e.g., the difficulties inherent in obtaining unequivocal evidence of effectiveness for all interventions. A research team rather than a single researcher may have assist in the exploration of a variety of perspectives.
Hess & Ranmugondo	2014	British Journal of Occupational Therapy	South Africa	The clinical reasoning used by occupational therapists to determine the nature of spiritual occupations in relation to psychiatric pathology.	5 OT's	Case study	Interviews, documentation, field notes.	Thematic analysis	Found participants shifted rapidly between scientific/diagnostic and humanistic client-centred modes of reasoning. They found clinical reasoning to be complex, non-linear, and multi-layered. The participants weighed up information and saw other people as an important resource to inform their reasoning.	Recruitment process clear and interview questions provided. Some evidence of reflexivity – the authors acknowledged the binary divide between spiritual occupations being manifestations of psychiatric illness or a health seeking behaviour. However as this informed the study aim and interview questions and therefore the findings need to be interpreted with this in mind.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Shafaroodi et al	2014	Medical Journal of the Islamic Republic of Iran	Iran	Identify and evaluate factors influencing clinical reasoning of OT's.	12 OT's	Not stated	Semi-structured interviews	Qualitative content analysis	Reasoning was influenced by 1) Sociocultural factors (client's beliefs, therapists' values and beliefs, social attitudes to disability. 2) Individual attributes (clients attributes, therapist attributes). 3) environmental conditions (managers lack understanding of OT, lack of supportive teamwork, limited facilities and resources	Themes and sub themes revised by 3 PhD supervisors, participants, and a qualitative researcher – not clear if or how consensus was reached. Lacks a clear methodology. Quotes not attributed so unclear how well they represent participants. Some interesting findings re the social cultural context.
Knecht-Sabres	2013	Journal of Experiential Education	USA	To explore development of OT related skills and clinical reasoning related to an experiential learning opportunity involving working with an older adult in the community supervised by a lecturer.	36 OT students	Mixed methods pre-test post-test	Questionnaire, journal, feedback on experience	Paired t-tests, descriptive framework approach for qualitative data	Scores on the questionnaire increased significantly (P = 0.5 for 4 items and P = .001 for 6 items). The analysis of the qualitative data suggested the experience provided an opportunity to develop person-centred care, gains skills and confidence and improve professional reasoning.	Quotes were used to support conclusions but not attributed to individual participants. Would be strengthened by the questionnaire being administered to a control group to demonstrate whether the improvement in group receiving the intervention was greater. The questionnaire was developed by the researcher and its reliability and validity was not established.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Wild et al	2013	International Journal of Therapy and Rehabilitation	Ireland	Explore the influence of a blog completed during placement to support clinical reasoning and reflection.	27 OT students	'Descriptive investigation'	Online survey	Descriptive statistics	The students' reported finding the blog a burden and as not being useful for development of clinical reasoning skills, they preferred to use Facebook	27 students (40%) responded, and these did not answer all questions with up to 8 omitting a question. The non-compulsory nature of the blog and the fact that it was not summatively assessed may have limited students' engagement with the activity.
Kristensen et al	2012	Scandinavian Journal of Occupational Therapy	Denmark	Gain a deeper understanding of the aspects affecting occupational therapists reasoning when implementing evidence-based practice in stroke rehabilitation	25 OTs	Phenomenological hermeneutical and action research	Participant observation (41) focus groups (4) individual interviews (13)	Phenomenological hermeneutical interpretation (Ricoeur)	Values and beliefs of local OT culture embedded in reasoning. OTs used procedural, interactive, and conditional reasoning when implementing evidence-based practice.	Consent appears to have been gained from leader in the setting, but it is not clear that the individual therapists gave signed consent. Methodologically robust, extensive data collection and time in field. Robust data analysis process which is explained in detail.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Robinson	2012	PhD Thesis	UK	How critical thinking and clinical reasoning developed in new OT graduates	6 graduates, 7 supervisors and 7 managers	Interpretative phenomenological analysis	Semi structured interviews	Interpretative phenomenological analysis	The new graduates did not feel well prepared for the workplace demanded. They found their supervisor were a key source of support and knowledge, and support from peers and preceptorship supplemented this.	One participant was excluded after interview as it was felt they did not have sufficient UK work experience and the interview was difficult to transcribe and the focus of the interview was on adjusting to work in the UK. Perhaps recruitment criteria needed to be more robust.
Unsworth	2011	Canadian Journal of Occupational Therapy	Australia	Clinical reasoning used by an expert occupational therapist in an on-road driver assessment	1 OT	Prospective single case focused ethnography	Head mounted video camera and debrief session whilst watching the video	Coding using types of reasoning and thinking categories	The therapist used many different forms of reasoning (procedural, narrative, interactive, conditional, pragmatic reasoning, and generalisation).	Single participant Use of a video assisted in eliciting reasoning captured some reasoning as it occurred and acted as a prompt for discussion.
Chaffey et al	2010	British Journal of Occupational Therapy	Australia	To explore occupational therapists use of intuition in mental health practice	9 OT's	Ground theory (Strauss & Corbin, Charmaz)	Interview (16-70 minutes)	Line by line, focused and axial coding	Professional experience (tacit knowledge) and emotions contribute to intuition. Intuition increased with experience. Awareness and use of own and other emotions contributed to intuition. Some therapists oscillated between intuition and analysis.	The axis/theory (therapist's use of intuition), was the same as the study aim and perhaps not a theory? The OTs were opportunistically sampled at a conference. It is not clear how many were in the original purposive sample and how the researcher transcribed and coded data at a conference before theoretically sampling. It is not clear how the emerging codes informed the theoretical sample. Some interesting findings that are discussed well with reference to relevant literature.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Coker	2010	Journal of Allied Health	USA	To evaluate clinical reasoning and critical thinking skills following delivery of constraint-induced movement therapy in a weeklong day camp for children with cerebral palsy	25 OT students'	Quasi-experimental pre-test post-test design	Self-Assessment of Clinical Reflection and Reasoning (SACRR)	Wilcoxon signed rank test, paired t-test, test of normality	They demonstrated a statistically significant ($p = 0.001$) improvement on 84.6% of the items on the SACRR measure.	This study lacked random allocation and a control group for comparison making it difficult to determine if the improvement in reasoning occurred because of the intervention. Also, the highly individualised nature of the intervention and environment limits transferability to other settings.
Bazyk et al	2010	Occupational Therapy in Health Care	USA	To explore the perceptions of students delivering eight weekly sessions at a faith-based after school club for young people established by the lead author	18 OT students	Phenomenology	Journals 2 focus groups	Giorgi's data analysis strategies as explained by Polkinghorne.	The authors claimed that the experience facilitated the development of clinical reasoning which they felt progressed from procedural to interactive and then conditional.	Achieving consensus between the five analysers when identifying themes may have meant any negative cases were not reported. The selection of journals based on detail and depth may have favoured students making positive progress with reasoning. Quotes are not attributed to individuals, and it is not clear whether they are taken from focus groups or journals. It is difficult to have confidence that data analysis was inductive (the process was not explained) this could mean that only data confirming the researchers' hypothesis was selected.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Newton Scanlan et al	2010	Australian Occupational Therapy Journal	Australia	Online discussions during placement to facilitate clinical reasoning	OT Students (approx. 90)	Pre-test post-test non-equivalent group	Students' postings were analysed for cognitive elements of clinical reasoning and the SACRR was completed pre and post placement	RASCH analysis was used to convert the SACRR ordinal data into interval data	The authors reported an increase in evaluative elements to clinical reasoning when using the structured framework and a significant increase in SACRR scores (P=0.001). The analysis of postings did not demonstrate an increase in metacognitive aspects of reasoning.	The review of postings alongside the students' self-assessment helps triangulate the results and overcomes some of the problems associated with self-rating. Non-equivalent group for the analysis of postings strengthens the design. However, the non-equivalent group only had 14 participants a larger number would have increased confidence that the data for this group was likely to be normally distributed. The authors suggest that in-depth interviews with students may be a more profitable way of accessing the development of clinical reasoning.
Vachon et al	2010	Work	Canada	Explore clinical decision-making process in relation to evidence-based practice.	8 OT's	Collaborative research methodology	12 reflective practice groups Critical incident descriptions Reflective journals	Grounded theory	OTs decision making modes were 1) defensive, 2) repressed, 3) cautious, 4) autonomous intuitive 5) autonomous thoughtful. These modes were influenced by their emotional state. Through a process of self-understanding (deliberateness) participants moved to more shared decision making (client-centredness) and bring about change at the system level (system-mindedness).	Data collection over 15 months allowed the researcher to analyse data and go back to participants multiple times. Preliminary results presented to participants for validation but outcome of this not discussed. Principal investigator was group facilitator, but debriefing took place with co researcher.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Summerfield-Mann	2010	PhD Thesis	UK	To explore the acquisition of reasoning in the students' PBL curriculum	52 OT Students	Mixed methods (Only qualitative component relevant)	Pre-existing reflections on learning	Content analysis	Themes emerging from the analysis were 1) different ways of working; different ways of learning, 2) team working and collaboration, 3) becoming an OT, 4) the real world, 5) being client-centred. Concluded that the clinical learning environment and the student's ability to self-direct were important in the development of clinical reasoning and that reasoning is individual, complex, and socially situated.	Robust analysis. The secondary (pre-existing) nature of the data needs to be considered when extrapolating findings. The aim of the qualitative analysis was to determine how placement settings support the development of clinical reasoning. The students were not asked how the placement setting supported development of their reasoning; this data was extracted from the written reflection section of an assignment. The reflection was structured around different modes of reasoning (narrative, interactive, pragmatic, procedural, conditional) and related to the students experience of working with one service user. Some interesting findings and discussion.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Carrier et al	2010	Australian Occupational Therapy Journal	n/a	To synthesise current knowledge regarding community OT's clinical reasoning.	n/a	Scoping review (2000-2009).	Scientific articles, textbooks, grey literature.	n/a	Community occupational therapists reasoning is influenced by internal factors (experience, perception of complexity of problem) and external factors (practice context).	<p>It is not clear how many of the authors completed each aspect of the review.</p> <p>Although the scoping review focussed on community OT's reasoning only 6 of the 25 articles and textbooks addressed this. However, this data is presented separately so can be extracted.</p> <p>The scoping review methodology used refers to studies but not textbooks. Therefore, the authors decision to include 15 textbooks needs justification.</p> <p>The method and process of charting the data is not elaborated on.</p> <p>Perhaps more of literature review that has been completed systematically than a scoping review.</p> <p>Some helpful discussion of the 6 relevant articles and suggestions for further research.</p>

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Kuipers & Grice	2009	Australian Occupational Therapy Journal	Australia	To explore & measure change in novice and expert occupational therapists reasoning post training in use of a protocol for upper limb hypertonia.	21 OT's	Personal construct theory	2 reparatory grid interviews with 13 novice and 8 expert OT's. Prior to and after exposure to a protocol.	Multivariate analysis identified variability in rating data. Components structured into themes.	Found statistically different change in novices reasoning after exposure to protocol ($P < 0.004$) but not in that of experts. Novice's reasoning evolved to reflect experts reasoning more closely, in that it was more structured and theoretical. This suggests that protocols may be most effective for novices.	Methodologically coherent. Authors do not consider the strengths and limitations of their approach. It is unclear who interviewed participants and whether this was the first author who developed the protocol and ran the workshop. Some interesting findings and discussion.
Toth-Cohen	2008	Scandinavian Journal of Occupational Therapy	USA	The context of clinical reasoning for OTs in a home-based programme for service users with dementia.	4 OT's	Focussed ethnography	Observation, document review, interviews x2 (60-90 mins).	Contact summaries Charting of conflicts and congruence Thematic analysis (Strauss) Nud*IST (open coding, axial coding, core categories, selective coding)	Sources of conflict (best environmental strategies and expectations of OT's and care givers roles) and congruence (intervention protocols and OT's treatment approaches developed to modify living arrangements) identified. Identified a different approach to reasoning in which caregivers/service user and OT co-construct OT intervention.	Convenience sample known to researcher. Theoretically informed by cultural historical activity theory. This framework is justified and clearly discussed. A coherent study. Part of a larger mixed methods study. Data analysis robust and clearly described. Evidence of prolonged engagement. Elaboration on how reasoning was co-constructed maybe a little constrained by polarisation into conflict and congruence. Although this does provide an interesting perspective.

Author	Year	Journal	Country	Study aim & context	Population	Methodology	Data collection methods	Analysis	Findings	Critique
Falk-Kessler & Ciaravino	2006	Occupational Therapy in Health Care	USA	How a course on chronic illness (involved voluntary work with service users) helped students' broaden their interactive reasoning skills.	26 occupational therapy students	Phenomenology	Reflective journals	Unclear - immersion in data to identify themes	Students developed greater self-awareness, recognised the importance of narratives, and learnt to ask service users questions for clarification, and gained greater insight into conditions	The researchers stated they used a phenomenological design but did not elaborate on this when discussing sampling, data collection and data analysis. The authors do not discuss whether the themes identified were reflective of all 26 journals and supporting quotes are not attributed to individuals. It is therefore unclear whether the findings represent all or just some of the participants.

Appendix 4: Ethical approval letter



School of Health and Social Care

Dr. Adèle Stewart-Lord
Associate Professor
Chair HSC School Ethics Panel
School of Health and Social Care
London South Bank University | 103
Borough Road, London, SE1t: +44
(0)20 7815 7931 | 0AA
e: stewara2@lsbu.ac.uk

Claire Beanlands

8 November 2017

Dear Claire

RE: Occupational therapy students' experiences of professional reasoning during practice learning – a dialogical analysis

Thank you for submitting your response to the reviewers' comments and for your amendments to the Participant Information Sheet and Consent form.

I am pleased to inform you that full Approval for this study has been given by Dr. Adèle Stewart-Lord, on behalf of the School of Health and Social Care School Ethics Panel.

If you wish to make any changes to the research protocol or any of the documents related to this study you MUST seek approval from this panel before making those changes.

Please include your reference number HSCSEP17/15 in any future correspondence. Please ensure you include this reference number and the hscsep@lsbu.ac.uk email address on all PIS and Consent forms.

I wish you every success with your research.

Yours sincerely,



Dr. Adèle Stewart-Lord
Associate Professor
Chair HSC School Ethics Panel
School of Health and Social Care

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Appendix 5: Participant information sheet



Participant Information Sheet

Occupational therapy students' experiences of professional reasoning during practice learning – a dialogical analysis

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

What is the purpose of the study?

This study aims to understand more about the lived experience of developing professional reasoning skills within the context of students' practice placements. This would add to our existing knowledge of this topic and would give students a voice which is absent in the current literature. It is a qualitative study and data will be collected via individual interviews. This study is being carried out as part of a PhD for which the completion date is April 2022.

Why have you been asked to participate?

You have been asked to participate in this study because you will have undertaken and completed four practice placements where the development of your professional reasoning has been part of the placement experience. All final year occupational therapy students on the BSc & PgDip/MSc Occupational Therapy courses have been invited to participate in the study. You will need to have completed all four placements by the normal end point of the course in order to participate in this study. I hope to recruit 12-15 participants.

It is voluntary to take part

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. You can withdraw from this study by contacting the researcher whose contact details are at the bottom of this information sheet. You will not be able to withdraw from the study once your data has been merged with other data.

Choosing to either take part or not take part in the study will have no impact on your marks, assessment, future studies or reference for employment.

What will happen if you decide to take part?

If you decide to participate in this study you can contact me and I will email you to arrange a mutually convenient time for an interview.

The interview will begin with this prompt "Can you tell me about professional reasoning during your placements, all the events and experiences that were important for you?" You can answer this question using language and words that you feel comfortable using, you are not expected to use theoretical terms (unless you find this helpful) or to discuss your reasoning in a specific way. I want you to feel able to speak freely and naturally about the events and experiences on each of your placements that were important for your professional reasoning. The interview will be audio-recorded.

The time the interview takes is likely to vary between participants but is likely to be 1-2 hours. The interview can either be carried out after your final placement (PP4) or during the final two weeks of this placement – you can decide. I will book a private room at the university for the interview.

What are the possible disadvantages of participation?

There are no anticipated risks or disadvantages. However, you will need to be prepared to set aside up to 2 hours of your time for the interview. The interview may not take this long but it is important that you have the opportunity to respond fully without feeling pressured for time and it is difficult to predict in advance how long might be needed. If you have experienced difficult situations which are associated with your reasoning it is possible you may find it distressing to recount these.

If unsafe practice is disclosed in the interview, this will first be discussed with you and any others involved confidentially. If further action is required this will be guidelines set out in the LSBU occupational therapy placement handbook and also those of the Health and Care Professions Council and the College of Occupational Therapists' code of ethics. This may involve communication with the placement team.

Possible benefits to participation

It is anticipated that participating in this study will help to enhance our understanding of how occupational therapy students experience professional reasoning during their practice placements. It will provide you with an opportunity to reflect on your professional reasoning and this may help prepare you for your future practice as a qualified occupational therapist.

Data collection and confidentiality

All the information collected about you and other participants will be kept strictly confidential (subject to legal limitations).

Data generated by the study must be retained in accordance with the University's Code of Practice. All data generated in the course of the research will be kept securely in paper or electronic form for a period of 10 years after the completion of a research project (April 2032).

Any identifying information will be removed from transcripts, for example names and locations. Your name will be replaced by a pseudonym in transcripts, the dissertation and any publication. Any other identifying information will be removed or changed.

What will happen to the results of the research study on completion

The results of this study will be used in my PhD thesis. They may also be included in journal articles or conference presentations.

Who is organising and funding the research

I am conducting this research as a PhD student in the Department of Allied Health Sciences, School of Health and Social Care at London South Bank University.

Who has reviewed the study

This study has been approved by the Ethics Panel of the School of Health and Social Care, London South Bank University,

Who to contact for further information

If you would like further information you can contact

Researcher

Clare Beanlands
Department of Allied Health Sciences
School of Health and Social Care

Study Supervisor

Dr. Lynn Summerfield-Mann
Department of Allied Health Sciences
School of Health and Social Care

London South Bank University
Email: clare.beanlands@lsbu.ac.uk
Tel: 020 7815 6794

London South Bank University
Email: summerl@lsbu.ac.uk
Tel: 020 7815 8197

If you have any concerns about the way in which the study has been conducted, you can contact the study supervisor Dr. Lynn Summerfield-Mann (Email: summerl@lsbu.ac.uk Tel: 020 7815 8197)

If you would like any further information please contact the researcher (Clare Beanlands) or the study supervisor (Dr. Lynn Summerfield-Mann).

Appendix 6 – Consent form



Research Project Consent Form

Full title of Project: Occupational therapy students' experiences of professional reasoning during practice learning

Ethics approval registration Number:

Name: Clare Beanlands

Researcher Position: PhD student

Contact details of Researcher: Clare Beanlands, Senior Lecturer, Department of Allied Health Sciences, School of Health and Social Care, London South Bank University, email: Clare.beanlands@lsbu.ac.uk

Tel: 020 7815 6794

Taking part (please tick the box that applies)	Yes	No
I confirm that I have read and understood the information sheet and/or the student has explained the above study. I have had the opportunity to ask questions.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my participation is voluntary and that I am free to withdraw at any time, without providing a reason.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to take part in the above study.	<input type="checkbox"/>	<input type="checkbox"/>

Use of my information (please tick the box that applies)	Yes	No
I understand my personal details such as phone number and address will not be revealed to people outside the project.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my data/words may be quoted in publications, reports, posters, web pages, and other research outputs.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to the interview being audio recorded.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to the use of anonymised quotes in publications.	<input type="checkbox"/>	<input type="checkbox"/>

Name of Participant

_____ Date

_____ Signature

Name of Researcher

_____ Date

_____ Signature

Project contact details for further information:

Project Supervisor Dr Lynn Summerfield-Mann

Email address: summerl@lsbu.ac.uk

Tel: 020 7815 8197

Appendix 7 – Example of post interview reflection

Who was I to my participant? How did they address me?

They know that I am a lecturer, but I did not know this participant and will have had minimal contact with them throughout their studies. I felt they largely addressed me as a researcher and a lecturer with a shared understanding of occupational therapy e.g., checking their understanding of pragmatic reasoning with me. They seemed hesitant initially but as the interview progressed seemed willing to expose their difficult moments and did not seem to be concerned about judged.

Were there avenues I could have followed and didn't? Why not?

This participant was a bit tangential in some of their discussion and would break off in the middle of a sentence or story and start talking about something else. This meant either interrupting a lot or trying to hold areas I wanted to return to in my head so I could come back to them. At times I did not follow up on tangents as I wanted to hear the rest of the original story at other times I would follow the tangent - it was quite hard to decide whether to or not, and I did what I felt was best at the time.

This participant mentioned MOHO in relation to PP3 right at the beginning before moving onto other things I didn't manage to keep this in my head to follow up on when we discussed PP3 later but would have done if I had remembered it.

Did my assumptions get in the way?

Not sure. I can't identify anything specific.

Were there difficult moments? How did I manage these?

At times I found it a little difficult to follow them as they didn't structure their stories chronologically. They would start in the middle and move backwards and forwards particularly at the start of the interview. They mentioned they'd lost their train of thought at a couple of points and at another asked to read the initial question from the participant information sheet again. I felt I was getting some rich data from this participant, they were becoming quite expressive and forthcoming as the interview progressed and this gave me a good sense of what the experiences they were discussing had been like for them. I felt this was helpful and wanted to reassure them as I was concerned that they might draw back into themselves if they felt they weren't 'getting it right'. At times I tried a bit of directing them back to the original topic, but as I felt I was getting some good information I mostly just let them run with things only trying to get them back on track where I felt it would be helpful for obtaining data. On reflection I think my direction was not always that helpful as I was potentially interfering with the chronotope of their narrative and endeavouring to impose a more chronological one.

Did I maintain a narrative stance?

I think so. I tried to focus on events and situations and used prompts for elaboration and completion. Although as stated above I need to be careful about inadvertently imposing a structure with my prompts.

Anything not already mentioned that I did well?

I think I managed to engage the participant in the interview and they became more relaxed and forthcoming as the interview progressed. Whilst reading back I can see things I might have

done differently I think on the whole I managed the interview quite well considering I had difficulties keeping track of the participants narrative at times. I tried a number of different approaches to try to find one that helped the participant e.g., prompting vs not prompting, reassurance, thinking time.

Anything not already mentioned that I did not do as well?

At one point I tried to dig down into how they had reasoned about a client's response to their intervention. I am not sure this came totally from the position of a researcher it was perhaps more of an educator perspective. As soon as they tried to respond I realised what I had done and was able to switch back into researcher mode (p5) and be mindful of this throughout the interview.

What can I learn from this that will be useful in future interviews?

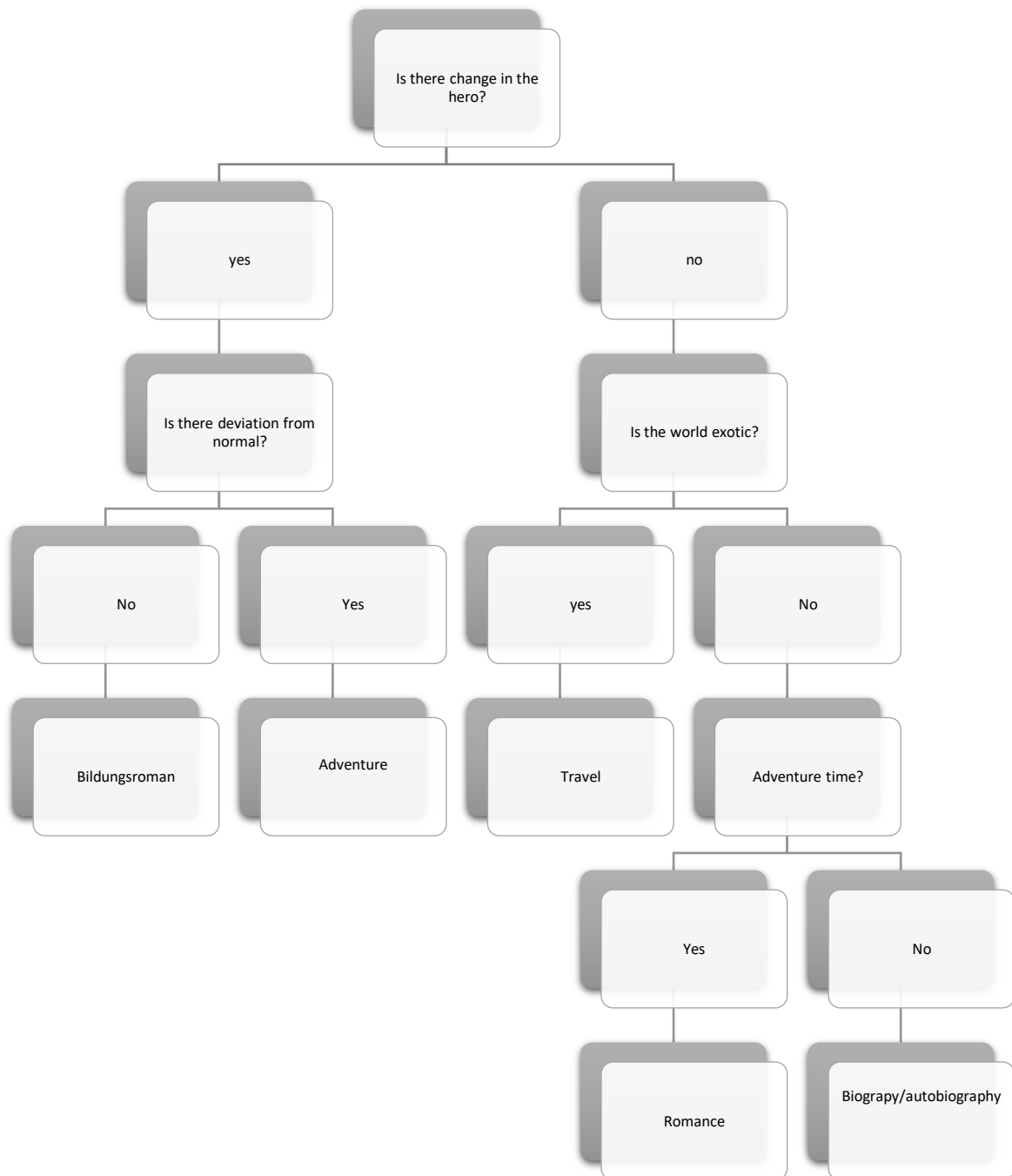
That you can try different approaches to see what will help the participant most.

That too much scaffolding with questions, even when someone struggles maintaining a focus, can be disruptive, but can also elicit some useful material, and that you need to do your best to judge in the moment what seems most helpful, but be prepared to change your approach. Be careful that your scaffolding does not disrupt the chronotope the participant is using e.g., do not impose a chronological structure on something that is not being recounted in a chronological way.

That if you can reassure and try to help the participant relax you can obtain richer data.

Reflective prompts are based on Josselson, R. (2013) *Interviewing for qualitative inquiry: a relational approach*. New York: Guilford Press.

Appendix 8 - Genre decision making aid



Appendix 9 - Emotions identified in relation to the different genres

Emotion/feelings of ...	Bildungsroman	Romance	Travel	Adventure	Carnival	Professional
Anxiety			3			
Amazement	3					
Beneficence/responsibility	1	7				2
Bravery					1	
Challenged	3	2	4	1		
Confidence	12	2			1	2
Confused	1					
Dependent			1			
Determination/resilience	5	3		2		
Disappointment		1		1		
Discomfort	2					
Disorientation			4			
Doubt	1					
Embarrassment			1			
Empathy		16	1			
Fear	1					
Freedom	2				1	
Frustration	2	3	1			
Illumination	7	1				
Impulsivity					1	
Inadequacy	1					
Independence				1		
Irreverence					1	
Isolation				1	1	
Loss of control					1	
Openness	1			2		
Overwhelmed	2		4	1		
Passion		8				
Positivity		1				
Pressured			3			
Pride	1	1		1		
Reassured/thankful	6					
Relief	1					
Resignation	3					
Resistance	1					
Respectfulness	1					
Rueful	1					
Sadness		1		1		
Safety	1					
Satisfaction/achievement	2	5				
Stifled			1			
Support	5					

Emotion/feelings of ...	Bildungsroman	Romance	Travel	Adventure	Carnival	Professional
Traumatised	1					
uncertainty	1	2				
unrestricted					1	
unsupported			1			

Appendix 10: Reflecting on your reasoning

Reflecting on your Reasoning

This exercise aims to encourage metacognition (thinking about your thinking). Think about an individual you have worked with/are working with. Use the headings below to explore your reasoning, this can be carried out individually or with a 'critical friend' interviewing you.

Please maintain confidentiality.

Diagnostic Reasoning (Boyt-Schell & Benfield, 2018)

Investigating and analysing cause or nature of conditions requiring your intervention

Areas to think about include

- Why the service user is experiencing problems using client-based and science-based information
- Occupational performance problems identified and how impairments or performance contexts contributes to these
- How problems are manifested (skills, roles, routines)

How did you use diagnostic reasoning?

Identify any challenges you faced with your diagnostic reasoning and how you overcame these.

Summarise how you feel about your diagnostic reasoning in relation to this individual and identify any areas you could develop.

Procedural Reasoning (Boyt-Schell & Benfield, 2018, Fleming, 1991, Mattingly and Fleming, 1994)

Thinking about the service user's diagnosis and deciding on the interventions you might use

Areas to think about could include

- Were there intervention protocols or best practice guidelines to follow
- Interventions that are generally used with this type of service user in this practice setting

How did procedural reasoning inform your intervention?

Identify any challenges you faced with your procedural reasoning and how you overcame these.

Summarise how you feel about your procedural reasoning in relation to this individual and identify any areas you could develop.

Interactive Reasoning (Boyt-Schell & Benfield, 2018, Fleming, 1991, Mattingly and Fleming, 1994)

This involves collaboration with the individual and significant others.

Areas to think about could include:

- Choices you created for the individual e.g. in relation to interventions.
- Ways in which you devised treatment activities to fit the individual's particular interests which also achieved the set goals e.g. consideration of cultural factors.
- Ways in which you structured success – and provided the 'just right challenge' for the individual.
- Joint problem solving – involving the service user in problem solving.
- Thinking about how best to relate to the individual and develop a therapeutic relationship.

Describe ways in which you used interactive reasoning.

Identify any challenges you faced with your interactive reasoning and how you overcame these

Summarise how you feel about your interactive reasoning in relation to this individual and identify any areas you could develop.

Narrative reasoning (Boyt-Schell & Benfield, 2018, Mattingly 1991, Mattingly & Fleming 1994)

Areas to consider include

- What you know about this individual's life story and how you used this knowledge.
- Considering the impact of their illness/disability on their life story.
- Thinking about the person as an occupational being – activities/roles/routines that are an important part of their life story.
- Thinking about how your intervention fits into their life story.
- Stories you told about this individual to colleagues e.g. describing a treatment session or a challenge you were facing and the impact of this on your reasoning.

Describe ways in which you used narrative reasoning

Identify any challenges you faced with your narrative reasoning and how you overcame these.

Summarise how you feel about your narrative reasoning in relation to this individual and identify any areas you could develop.

Pragmatic reasoning (Boyt-Schell & Benfield, 2018, Boyt-Schell, 2018)

Practical issues that impact on clinical action

Areas to consider include:

- Impact of real practice environment e.g. organisational norms and policies, time available, physical resources (space, equipment), caseload, discharge options.
- Who referred the person - what are their expectations of you?
- To what extent the family caregiver can support your intervention
- Your practice educators/the departments/services expectations of you.
- The extent of your own clinical experience, values and knowledge.

Describe ways in which you used pragmatic reasoning.

Identify any challenges you faced with your pragmatic reasoning and how you overcame these.

Summarise how you feel about your pragmatic reasoning in relation to this individual and identify any areas you could develop

Ethical Reasoning (Boyt-Schell & Benfield, 2018, Bushby *et al*, 2015)

Reasoning focussed on analysing an ethical dilemma and taking action.

Areas to consider include:

- Benefits vs risks.
- What to prioritise.
- Impact of resource and systematic issues.
- Ethical issues relating to vulnerable clients.
- Ethical conflicts – with service users, family members, other professionals.
- Difficulties upholding professional standards –e.g. implementing client-centred practice, evidence informed practice.
- Maintaining professional boundaries.

Describe ways in which you used ethical reasoning.

Identify any challenges you faced with your ethical reasoning and how you overcame these.

Summarise how you feel about your ethical reasoning in relation to this individual and identify any areas you could develop.

Conditional Reasoning (Boyt-Schell & Benfield, 2018, Fleming, 1991, Mattingly and Fleming, 1994)

A blend of all forms of reasoning. Understanding the whole person in the context of their life-world considering the influence the disability will have on that individual's future. It is based on social and cultural processes of understanding one's world, oneself and others. (Comes with experience).

Areas to think about could include:

- The meaning the illness has/will have for this individual, their family and the social and physical contexts in which the person lives.
- How the various therapy options are likely to play out given this individual's health status, economic status and socio-cultural situation.
- Possible future/s for this individual. It may help to think about a specific length of time e.g. 6 month, 2years.
- Ways in which you were able to facilitate the participation of the patient in constructing an image of their possible future.

Describe ways in which you used conditional reasoning

Identify any challenges you faced with your conditional reasoning and how you overcame these.

Summarise how you feel about your conditional reasoning in relation to this individual and identify any areas you could develop.

Overall

Did you prioritise some types of reasoning and neglect others that would have been relevant? Explore why.

Were there times when different types of reasoning worked in harmony? Explore why.

Were there times when one type of reasoning conflicted with another? Explore why and how you resolved this conflict.

Was reasoning a collaborative process with other team members?