Self-regulatory Strategies for Brain Injury Patients. How can the Therapeutic Relationship in Cognitive Rehabilitation Therapy help?

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1. Abstract

1.1 Background and Aim

The research aimed to describe how clinicians use the therapeutic relationship to facilitate the process of training patients use a self-regulatory strategy to aid an executive impairment due to an acquired brain injury (ABI). The research was motivated by the underdeveloped role of the therapeutic relationship in training interventions for promoting self-regulation (Muraven & Baumeister, 2000), the optimal technique for improving patient self-regulation (Muraven & Baumeister, 2000), the sensitivity required to achieve this (Worthington, 2010), the limited awareness of the therapeutic factors affecting the working alliance (Stagg et al., 2019) and the limitations of studies in this field (Heredia-Callejón et al., 2023).

The current study attempted to address this gap in the research by examining how psychologists and therapists integrate and weave together the micro-skills of the therapeutic relationship to facilitate the training of a cognitive rehabilitation intervention. The training process examined in this research was embedded within a meta-cognitive or self-instructional protocol that trained ABI patients with complex executive impairments to use a self-regulatory strategy with fluency in their everyday lives.

1.2 Methodology

Four psychologists, two occupational therapists, three speech therapists, and one cognitive rehabilitation therapist completed a qualitative questionnaire. The clinicians had successfully helped ABI patients use self-regulatory strategies for complex executive impairments. A mixed methods design was used, and the qualitative questionnaires were analysed using thematic analysis.

1.3 Findings

The analysis revealed that clinicians used the therapeutic relationship to train self-regulatory strategies through distinct relational stages: establishing, developing, and maintaining the alliance, and these were embedded across the assessment, treatment, and evaluation stages of the therapeutic process. Core relational processes of empathy, rapport, therapeutic bond, and presence were integral to enhancing clients' awareness, motivation, and emotional regulation during cognitive rehabilitation.

1.4 Conclusion

The findings highlight that effective self-regulatory training in cognitive rehabilitation depends on integrating relational and technical modes of therapeutic engagement. Clinicians used empathy, presence, rapport, and flexibility to cultivate clients' self-awareness, emotional regulation, and motivation across all stages of therapy. This integration of relational depth within cognitive rehabilitation highlights the therapeutic relationship as a central mechanism for internalising self-regulatory strategies through co-regulation, mutual regulation, and relational modelling, leading finally to internalised co-regulation. The study therefore supports a cognitive–relational approach to rehabilitation that fosters both cognitive recovery and the nurturing of a client's sense of personal agency and psychological adjustment.

2. Reflexive statement

2.1 Approach to Reflexivity

Several ideas have inspired my approach to reflexivity in reflexive practice. My approach in this thesis shares many of the concerns of Barrett, Kajamaa, and Johnston's (2020) statement, in which reflexive practice involves recognising one's experiences, biases, and views, which influence the research process and the interpretation of data.

I agree with Wagoner and Jensen's (2015) position that reflexivity could be viewed as a microgenetic evaluation that allows us to study learning as it develops. The microgenetic approach is about developing sensitivity to the details of changes in feeling and thinking throughout time.

I also share the concerns of Scaratti & Ripamonti (2015) that engaging in reflexive practice raises concerns that this will enhance practical importance, producing knowledge that is close and pertinent to problems and able to deliver solutions that are real, meaningful, and sustainable. Scaratti & Ripamonti (2015) also argue that people must specify and negotiate epistemological and ontological assumptions to generate knowledge. Since I draw upon a mixed epistemological approach which utilises both positivist and interpretative/constructivist paradigms, I am therefore attempting to combine ways of reflexion which negotiate both a postpositivist position underpinned by critical realism in which reality can only be imperfectly comprehended and an interpretative/constructivist paradigm underpinned by local and constructed realities.

My methods of reflection involve descriptive, phenomenological, and hermeneutic approaches, focusing on the socio-cultural context of my research practice. This is a difficult task because it first requires holding the tension between different ways of conceptualising and investigating reality whilst finding ways to integrate different theoretical positions and synthesise findings gathered from different methodological positions.

The following sections will explore the professional concerns shaping my approach. Subsequent chapters will unveil my personal reflexive account of my methodology. In my final reflection, I will share how my initial assumptions have evolved, inviting you to join me in this journey of learning and growth and sharing the valuable lessons I have learned along the way.

2.2 My Relationship to the Chosen Topic

My professional experience in conducting cognitive rehabilitation therapies involves using cognitive and behavioural interventions for a range of neuropsychological impairments, including executive, attention and memory problems. I often use goal management training interventions and other self-instructional meta-cognitive strategies for working with dysexecutive symptoms to help patients plan day-to-day activities and help them manage work tasks and social interactions.

Training patients in self-regulatory strategies is a challenging aspect of my work. Adapting evidence-based protocols in cognitive rehabilitation therapies for complex cognitive, behavioural, and social difficulties can be intricate. It often requires relational manoeuvres to engage, motivate, and work with other issues patients present, as well as training them to use specific self-regulatory techniques. As part of my research question, this complexity has prompted me to ponder whether other clinicians face similar challenges and use the therapeutic relationship in different ways in conjunction with training self-regulatory strategies. Moreover, this perspective has influenced the data I have collected by leading me to consider how best to choose methods which will allow me to collect data which will both describe the relational challenges and experiences faced by clinicians when training a self-regulatory strategy.

With patients who find it challenging to learn self-regulatory strategies, I often hold in mind a multidimensional approach to my thinking about the challenges a patient is facing. By drawing on ideas from cognitive rehabilitation theory, cognitive-behavioural therapy and relational psychotherapies, I address the patient's cognitive, neural, behavioural, emotional and psychosocial functioning to identify best how to help a patient learn a self-regulatory intervention.

Moreover, the research has necessitated an epistemological approach which can hold the tension between deterministic and relativist positions. This is important because, inherent in my assumptions, clinician participants may approach cognitive rehabilitation from a multidimensional perspective.

The challenges of working with executive impairments because of acquired brain injuries can often involve working with multiple losses, managing the risk of suicidality as well as finding ways to appraise a person’s previous and current abilities. Working with brain injuries can also involve working with co-morbid complexities in cognitive rehabilitation therapies, including mood disorders, anxiety, depression and PTSD. My

research question has, therefore, also been motivated by an interest in how other practitioners working with executive impairments manage to find ways to train their patients in self-regulatory strategies, given the challenges that acquired brain injury patients often present in cognitive rehabilitation therapies.

In cognitive rehabilitation therapies, the clinician seeks to measure a client's distress regarding co-morbid complexities objectively. In contrast, understanding a client's presentations is also approached through co-constructions of this reality. Therefore, this has implications for my ontological approach underpinning this research. I assume that the client's realities exist and can be measured objectively, but understanding this also involves holding the tension between subjective and objective ways of knowing these realities.

2.3 The Impact of My Position

I have often felt the limitations of what I can offer patients with complex cognitive impairments when the setting I have been working in has been time-limited in terms of the number of therapy sessions I have been able to offer patients for cognitive rehabilitation.

Working within the National Health Service (NHS) in the UK, I am limited in the number of sessions I can provide for cognitive rehabilitation therapy in primary or secondary care settings. In private practice, when I see patients funded by insurance schemes, there are fewer limitations regarding the number of sessions I can provide. However, this can also vary depending on the patient's insurance scheme. Thinking about the professional settings I have worked in and the potential settings of working with acquired brain injury patients has influenced the nature of the research question. Because there is likely to be a wide variation in the settings in which clinicians work, I have avoided making assumptions about the length, duration or frequency of sessions clinicians may provide in training a self-regulatory strategy.

Addressing cognitive rehabilitation interventions in this study, which focuses on executive impairments, will allow me to understand how these treatment interventions were optimised. The assumption is that understanding the relational skills used in training a self-regulatory strategy for executive impairments will help generate hypotheses about how clinicians optimise treatment outcomes.

These concerns set up a series of assumptions about the nature of the training process of self-regulatory strategies underpinning the research question. I assume the

training process is embedded in the broader set of methods outlined in the formulation cycle of assessment, formulation, intervention and outcome measurements underpinning psychological work (HPC, 2015; BPS, 2010; BPS, 2017). Research into Goal Management Training (GMT), the recommended intervention for executive impairments (Floden, 2014; Floden & Reiter, 2024), shows a wide variation in the number of therapy sessions used in the protocol. The number of GMT sessions can vary from 1 to 20, the duration from 0.25 to 4 hours and the number of sessions per week from one to two sessions (Stamenova & Levine, 2019). This has influenced my research by emphasising the need to understand the context in which treatment is optimised, such as treatment from an adjustment-focused, goal or solution-focused approach.

Since the focus and training of self-regulatory strategies in cognitive rehabilitation may also vary across clients and therapists, my assumptions about what therapeutic work can achieve are likely to be limited by the experiences with my clients, and this is an issue I need to consider when analysing the experiences of other clinicians. Self-regulatory strategies for executive impairments tend to be practised within cognitive rehabilitation principles Sohlberg & Mateer (2001), and these mainly pay attention to an approach which primarily focuses on cognitions and behaviours. My training as a counselling psychologist has made me wary of focusing solely on one theoretical position. Moreover, my clinical practice is essentially influenced by a postmodern position of avoiding single therapy models and embracing subjectivity, which is encapsulated in Strawbridge and Woolfe's (2010) thinking. This understanding affects how the research will be conducted. Although my analytic lens will focus on how the therapeutic relationship described by other clinicians may be situated in cognitive and behavioural thinking, it will not be limited to this approach to the therapeutic relationship.

Therefore, my approach to the literature review in this study concerning the therapeutic relationship has been concerned with attempting to hold the tension between different relational approaches to therapeutic practice. Because of my background in cognitive-behavioural and psychoanalytic approaches, I was also drawn to a rapprochement in the literature concerned with understanding the psychoanalytic concept of transference from a socio-cognitive perspective and discussing its relevance to self-regulation (Mirando & Anderson, 2007) in the therapeutic relationship.

Moreover, orienting my analytic lens to only look for cognitive-behavioural or psychoanalytic interpretations of client and clinician experiences may limit my understanding of the reality clinicians attempt to describe. I will try to mitigate this

problem by holding in mind the third stream of therapeutic enquiry in the form of the humanistic approach, which is an alternative approach to deterministic therapies and underpins much of counselling psychology practice Strawbridge & Woolfe (2010).

3. Introduction

3.1 The Nature and Impact of Acquired Brain Injury

Acquired brain injury is defined as a non degenerative injury to the brain which has occurred since birth and consists of either traumatic or non-traumatic injuries. Traumatic injuries might include road traffic accidents, assaults or falls and accidents at home or work. Non-traumatic injuries might include strokes, vascular accidents such as brain aneurysms or brain haemorrhages, brain tumours, infectious diseases (encephalitis or meningitis), hypoxic and anoxic brain injury, metabolic disorders and toxic products taken into the body through inhalation or ingestion (Department of Health and Social Care, 2022).

It has been estimated that the cost of acquired brain injury in the UK is £15 billion (0.8 of GDP) per year (Parsonage, 2016). Neurological conditions such as brain injuries affect personal identity, emotional adjustment and cognitive function (Heilman & Valenstein, 2010).

3.2. Traumatic Brain Injuries

In the UK, 900,000 people attend accident and emergency departments due to a head injury, and 160,000 people are admitted annually (Medical et al., 2022). In the United States, there were 2.8 million traumatic brain injury (TBI) cases, resulting in 2.5 million emergency department visits, 300,000 hospitalisations, and around 60,000 deaths annually (Taylor et al., 2017). In the UK, Canada, and Australia, blast neurotrauma from head injuries produced on the battlefield in Afghanistan and Iraq is thought to affect 5% to 0% of service personnel (Rona & Jones et al., 2012; Tanielian & Jaycox, 2008; Zamorski & Boulos, 2014; Hooff et al., et al..2010).

Although most people recover from a head injury without specific or specialist intervention, some have long-term disability (NICE, 2020) with TBI because of road traffic accidents, the foremost cause of disability in people aged 10–49 years worldwide (GBD 2019 Diseases and Injuries Collaborators, 2020), TBI is also a significant cause of morbidity and mortality (Maas et al., 2017). Although there have been improvements in the management of battlefield trauma in the UK, service personnel are now surviving injuries but living with greater levels of disability (Penn-Barwell et al., 2015). Psychiatric disorders are prevalent after TBI (Duarte et al., 2023), with depression rates ranging from 27% to 64% post-injury (Glenn et al., 2001; Jorge et al., 2004; Osborn et

al., 2014), with depression being the highest disorder after the first year of a TBI (Duarte et al., 2023) with a 27.2% of patients exhibiting a major depressive episode eight weeks after motor vehicle collision TBI (Neylan et al, 2021). In addition, Bertisch et al. (2013) found evidence for the role of anxiety in functional impairments two years after a TBI.

In blast-related injuries in veterans and civilians caught up in terrorist attacks, mild TBI was associated with PTSD, depression, anxiety, sleep, attention and cognitive disorders (Phipps et al., 2020).

In TBI, long-term reductions in cognitive, psychosocial functioning and social isolation (Hoofien et al., 2001; Olver et al.,1996) and motivation lowered social integration (Palmisano et al., 2020), and untreated anxiety influenced long-term functional outcomes (Bertisch, 2013). In addition**,** Weil et al. (2022**)** argue that there is a relationship between pre-injury stress, anxiety disorders and post-injury neuropsychiatric outcomes in TBI; therefore, it is not sufficient to address mental health issues that emerge only after injury; instead, a lifespan approach is needed

3.3. Non-traumatic Brain Injuries

Non-traumatic injuries include strokes, vascular accidents, aneurysms and haemorrhages**.** In the UK 91, 000 people were admitted to hospital between 2022 and 2023 with a stroke, and 17% of patients 6 months post-stroke reported severe anxiety or depression. It was found that the provision of psychological services remains low despite mood and cognitive problems being common among stroke patients (SSNAP, 2023).

In a review, Sexton et al. (2019) found that cognitive deficits can affect between 30 to 60% of people a year after a stroke. In addition, cognitive and emotional disturbance after a stroke has been linked to poor rehabilitation outcomes, morbidity and mortality (Ayerbe et al., 2013; Nakling et al., 2017; Obaid et al., 2020) and persistent loss of energy or permanent sick leave (Singam et al., 2015).

Åkerlund et al. (2021) found a lower health-related quality of life (HRQoL), as well as fatigue, cognitive and executive dysfunctions were common after a stroke, with fatigue accounting for a 20 to 33% variance of HRQoL. Abualait et al. (2021) also found that cognitive and verbal dysfunctions were prominent negative predictors of lower life satisfaction 1-year post-onset. De Wit et al. (2017) also found that five years after a stroke, higher levels of depression, anxiety and disability were associated with lower scores for HRQoL. Fatigue was also found to persist 1 year after a haemorrhage, with one-third of patients only improving negligible over time (Western et al., 2020).

Moreover, the symptoms of fatigue, cognitive, executive and verbal dysfunction, mood disorders and disabilities were predictors of HRQoL in stroke survivors.

Roughly a third or more of patients will suffer a mood disorder after a stroke (Mitchell et al., 2017; Ameida & Xiao**,** 2007; Ferro et al., 2016). Wijeratne & Sales (2021) analysed the inflammatory basis of post-stroke depression, arguing that post-stroke depression may be the norm rather than the exception. Urech et al (2020) highlight how some researchers define mental disorders after a stroke as either minor or major depression or an adjustment disorder (AjD). Untreated mood or AjD leads to negative health or social outcomes (Schmid et al., 2011), cognitive impairments (Serrano et al., 2007) and lower survival rates (Bartoli et al., 2018). In addition, there is some evidence that emotional symptoms may predict longer-term functional impairment than cognitive symptoms, for example, depression, anxiety, fatigue, sleep disturbances (Al-Khindi et al., 2010), mood disturbances (Carod-Artal et al., 2009), anxiety and depression (Gangstad et al., 2009).

3.4 Executive Impairments in Acquired Brain Injuries

One type of cognitive impairment which can emerge from acquired brain injuries is executive dysfunctions in planning and problem-solving (Floden & Reiter, 2024). Stuss and Knight (2013) view novel problem solving as a high-order skill underpinned by processes located in the frontal part of the brain. Executive dysfunctions can often manifest as dysexecutive syndrome, which is characterised by difficulties in executing complex goal-directed behaviour due to problems with organisation, planning, sequencing and strategic selection or implementation and associated with dorsolateral prefrontal damage to the brain (Floden& Reiter, 2024). Executive function is also a complex construct comprising a wide range of cognitive and behavioural competencies, which also include verbal reasoning, problem-solving, sustaining attention, resisting interference, using feedback, multitasking, cognitive flexibility and dealing with novelty (Chan et al., 2008).

Ward (2022) describes dysexecutive syndrome as affecting a person's ability to navigate everyday life, and clients struggle to organise themselves and deal with new issues and problems as they arise. Floden and Reiter (2024) argue that a person may have difficulty with temporal or spatial context memory and show poor recall in context where encoding strategies normally bolster learning and later retrieval. In severe cases of dysexecutive syndrome, a person may require guidance and structure to

accomplish daily activities; in less severe cases, others may see people as forgetful and unreliable (Floden & Reiter, 2024). Fogel (2022) found a moderating relationship between executive functions and daily functioning. For example, executive functions are responsible for starting and stopping or monitoring activities (Burgess & Simons, 2005; Chan et al., 2008) and performing two tasks simultaneously (Godefroy, 2003; Alverez & Emory, 2006; Alderman, 2013). Executive functions are also responsible for daily living, such as food preparation, shopping and managing finances (Chevignard et al., 2000; Fortin et al., 2003; Vaughan & Giovanello, 2010). Disruptions to everyday functioning due to dysexecutive syndrome can affect a person's ability to work, study or sustain relationships (Green, 1996; Goel et al., 1997; Green et al., 2000).

Common executive impairments in moderate to severe ABI include initiating tasks, cognitive flexibility, problem-solving, self-regulation and self-monitoring. (Goodwin et al. 2016; Novakovic-Agopian et al, 2011; Schmidt et al, 2015). Executive impairments can also affect goal setting, application and management, bringing challenges to independent living (Skidmore, 2011; Goodwin et al., 2016; Waid-Ebbs et al., 2014) and planning how to articulate things verbally (Ramsberger, 2005; Fridiksson et al., 2006; Lee, 2013).

In mild TBIs, patients can have problems with executive functioning related to holding attention, remembering information, and organising and planning activities (Vas et al., 2023). In addition, moderate to severe TBIs can disturb a person's vision, perception, and ability to perform everyday tasks such as reading, driving, or navigating the environment (Rauchman et al., 2023).

Saleh et al. (2021) found that apathy is common in stroke patients, and this can affect executive functions such as decision-making. Pisano et al., 2022) identified the common executive functions affecting stroke patients, including responding to novel and challenging tasks of everyday life, since cognitive components such as flexibility, memory, and attention rely on executive processing. In stroke patients, executive impairments are also linked to reduced abilities in planning, monitoring and inhibiting discourse in social interactions (Martin et al., 2003; Champagne-Lavau & Strip, 2009). Moreover, in ABI patients, the main executive impairments include planning, organisation, problem-solving, verbal reasoning, cognitive flexibility, stopping and starting behaviours in actions, social behaviours, self-regulation, and self-monitoring.

3.5 The Relevance to Counselling Psychology

Since 2022, counselling psychologists have been able to apply for specialist training in neuropsychology and enter the specialist register of practitioner neuropsychologists. Before this development, Counselling Psychologists had already contributed to developing a body of Counselling Psychology informed neuropsychological thinking and practice (Ward, 2022).

Neurological services assess and help people adapt and adjust to neurological conditions and brain injuries. Counselling Psychologists play a key role in neurological services (Ward, 2022), from the development of assessment batteries (Robertson et al., 1994) to psychotherapy for executive dysfunction (Ward & Hogan, 2015). There is also an interest in neuropsychology research concerned with guiding how to work therapeutically with neurology patients (Klonoff, 2010; Sohlberg & Maater, 2001), as well as thinking about how therapy may need to be modified for neurology patients (Judd & Wilson, 2005). Ward (2022) argues that Counselling psychologists are ideally placed to deal with the profound adjustment that confronts clients following brain injuries.

Therefore, this research will contribute to the distinct approach that Counselling Psychologists bring to neuropsychology from a relational perspective. This relational perspective is concerned with the use of the therapeutic relationship in the cognitive rehabilitation of executive impairments, for which there is a growing need within the neuropsychology literature (Ward, 2022; Muraven & Baumeister, 2000). Moreover, this research is important to Counselling Psychology competencies. In line with the specific practice competencies assigned to the role of the counselling psychologist (HCPC, 2009), addressing these gaps in the literature are important in extending proficiency in the following areas. Firstly, understanding the therapeutic techniques and processes for working with specific neurological and neuropsychological presentations. Secondly, understanding the therapeutic relationship and alliance as it relates to cognitive rehabilitation therapies. Thirdly, developing formulations to implement interventions, related to the psychological and social circumstances of the patien

4. Literature Review

4.1 Introduction

It is generally thought that cognitive rehabilitation interventions are the best way to train a self-regulatory strategy for executive impairments, such as complex goal-directed tasks, resulting from a brain injury (Prigatano, 1999), Sohlberg & Mateer (2001), Spikeman, 2017), and Sohlberg, Hamilton & Turkstra, (2023). Defining executive functions is complex, and much debate exists about what constitutes an executive function. Sohlberg & Mateer (2001) define executive impairments in initiation and drive (starting behaviours), response inhibition (stopping behaviours), task persistence (maintaining behaviours), organization thinking (organizing actions and thoughts), generative thinking (creativity, fluency, cognitive flexibility) and awareness (monitoring and modifying one's behaviour). Worthington (2010) defines executive problems as 1. Disorders of goal articulation and planning. 2. Disorders of initiation and sequencing. 3. Disorders of inhibition and control. 4. Disorders of monitoring and evaluation. Spikeman (2017) notes the problem of defining executive problems as single functions because they can manifest heterogeneously. Diamond (2013) refers to core executive functions (EFs): inhibition, cognitive flexibility, and working memory, and high-order EFs: reasoning, planning, organisation, problem-solving, and metacognition (insight or awareness). Smilie, the British Psychological Society's (2021) definition emphasises organisation, planning, reasoning, problem-solving, and conceptual dysfunctions. Moreover, Miyake and Friedman (2012) view EFs as a set of interrelated cognitive abilities that coordinate and regulate thinking processes associated with the ability to engage in goal-directed and independent behaviour.

This study defines executive functions drawing on the commonalties across these definitions concerning single functions (e.g stopping and starting behaviours), complex functions (e.g planning and organization) and generative functions (e.g awareness and creativity)

4.2 Cognitive Rehabilitation of Executive Impairments

There is a broad consensus about the role of cognitive rehabilitation approaches in treating executive impairments. Sohlberg & Mateer (2001) focus on managing executive impairments through environmental/ecological methods, training task-specific routines, training selection and execution of cognitive plans and metacognitive/self-

instructional training. For complex goal-directed activities and the self-regulation of behaviours, Sohlberg and Mateer (2001) view metacognitive/self-instructional training as important in rehabilitating these activities. Worthington (2010) also advocates using metacognitive/self-instructional for complex goal-directed behaviours such as reasoning, problem-solving, and self-monitoring. Moreover, Sohlberg et al. (2023) focus on complex goal-directed behaviours, arguing that most evidence for improving executive functions comes from studies of metacognitive strategies for teaching individuals how to regulate their behaviours.

Self-instructional approaches use step-by-step instructions to guide metacognitive processes underpinning a task. In contrast, meta-cognitive approaches address a wider set of cognitive processes concerning regulating one's thinking to undertake a task or solve a problem, involving a range of tasks which are not regulated by one set of instructions.

Goal management training (GMT) has emerged as a significant meta-cognitive intervention for executive functions. Goal Management Training (GMT) aims to improve executive functioning and goal-directed behavior in individuals with brain injuries or cognitive impairments. It emphasises self-regulation, planning, and task execution by teaching strategies to enhance attention, monitor progress, and manage distractions.

In a meta-analysis of studies from 1946 to 2017, Stamenova and Levine (2019) found evidence of GMT's efficacy for executive dysfunctions with a wide range of acquired brain injuries. Tornas et al. (2019) found that although GMT was efficacious after 6 months of treatment, the changes did not remain at a 5-year follow-up. When combined with other strategies, GMT is still efficacious after six months. Bertens et al. (2013) found that an errorless learning approach improved everyday task performance significantly compared to conventional GMT for brain injuries. Emmanouel et al. (2020) found that GMT combined with a working memory training protocol significantly improved post-treatment outcomes compared with GMT alone with ABI patients. Tornas et al. (2016) found that cueing text messages with GMT showed treatment effects 6 months post-treatment with chronic ABI patients. Worthington (2010) is unclear if all components of GMT are necessary, arguing that some stages may be more relevant than others for particular deficits.

Other metacognitive and self-instructional strategies include verbal self-instruction approaches (Lawson & Rice, 1989), verbal mediation (Cicerone & Giacino,

1992), self-monitoring training (Alderman et al., 1995), and problem-solving training (van Cramon & Matthes-van Cramon, 1994).

Four main approaches for training a self-regulatory strategy for executive impairments have emerged:

1. Sohlberg & Mateer (2001) Self-regulation in executive dysfunctions.
2. Worthington's (2010) principles for designing interventions.
3. Toglia and Foster (2021) multi-context approach to executive impairments.
4. Sohlberg et al (2023) plan, implement and evaluate (PIE) method.

Each approach emphasises assessment, treatment planning, interventions, and evaluations as part of the training process, similar to the formulation cycle (HPC, 2015; BPS, 2010; BPS, 2017) that underpins clinical and counselling psychology practice.

Training self-regulatory strategies is problematic with low awareness, memory deficits and severe meta-cognitive impairments. Low-aware patients often require clinician support (Sohlberg & Mateer, 2001; Linhhart & Brady, 2006; Sohlberg & Turkstra, 2011) or environmental support (Worthington, 2010) to use meta-cognitive/self-instructional strategies. Moreover, patients with severe memory or executive impairments may be unable to internalize self-instructional strategies (Sohlberg & Mateer, 2001) and may be best served by learning task-specific routines. Furthermore, patients with frontal lobe damage may be unable to use verbal mediation (Meta-cognitive) strategies (Luria et al., 1964).

Since much of cognitive rehabilitation (CR) is underpinned by cognitive processing and behavioural change (Sohlberg et al., 2023; Prigatano, 1999; Sohlberg & Mateer, 2001; Spikeman, 2017), addressing how cognitive-behavioural therapists train a cognitive strategy is highly relevant to CR. Moreover, Gilbert & Leahy (2006) argue that therapy is not a matter of 'applying techniques'; it involves a human relationship which can either help or hinder the effectiveness of therapeutic interventions. Furthermore, Young et al. (2006) argue that cognitive change requires less focus on cognitive techniques, but change facilitated by new relational experiences.

The use of the therapeutic relationship and alliance is often under-researched when training meta-cognitive / self-instructional strategies for executive functions in acquired brain injuries (ABI). In a review of the empirical research into the working alliance in acquired brain injury (ABI) rehabilitation, Stagg, Douglas, and Iacono (2019) found 10 quantitative studies focused on general rehabilitation rather than specifically training meta-cognitive / self-instructional strategies. Despite the limitations of the

research, the working alliance emerged as complex interactions with many factors and processes at play in the rehabilitation environment influencing outcomes (Stagg et al.,2019). In a systematic review of stroke rehabilitation (involving 1596 articles, from which nine different studies), Heredia-Callejón et al. (2023) found that what develops, maintains or hinders the therapeutic alliance has not been sufficiently explored. The review highlighted that being recognised as a person, collaborating with the therapeutic team, empathising, empowering, confident, having professional skills, maintaining hope, and having the role of the family can influence the therapeutic alliance.

Furthermore, in a meta-analysis, Stamenova and Levine (2019) quantitatively summarised Goal Management Training (GMT) effectiveness using relevant studies from 1946 to 2017 as a treatment for executive deficits, including ABI patients. Although the review considered the number, duration and frequency of GMT sessions, it did not provide any information about the nature of the therapeutic relationship used in these studies. Moreover, within the CR literature, there appears to be a paucity of research into the use of therapeutic relationships to facilitate the training of patients in self-regulatory strategies. Muraven and Baumeister (2000) argue that therapeutic techniques for addressing interventions to promote self-regulation are still in their infancy. Worthington (2010) suggests that interventions need to be undertaken sensitively and rationally to improve a patient's executive functioning. Muraven and Baumeister (2000) argue that we still have much to learn about the optimal therapeutic technique for improving patient self-regulation. In addition, Stagg et al. 2017 argue that there is limited research into the factors affecting the working alliance in neurorehabilitation.

In the next section, I will begin with an outline of how the therapeutic relationship is defined in cognitive therapies. I will then survey the development of the therapeutic relationship in cognitive rehabilitation therapy over the last 25 years to show its underdevelopment in clinical practice and the integration of theoretical perspectives underpinning this practice.

4.3 The Therapeutic Relationship in Cognitive Rehabilitation

4.3.1 Defining the therapeutic relationship

The therapeutic relationship as a concept could be viewed as emerging from early concepts of the working alliance (task or goal-focused) and the therapeutic alliance (personal or therapeutic bond) (Greenson, 1965).

As the concept of the therapeutic alliance developed, Luborsky (1976) viewed it as the client's belief in the ability of the therapist and the therapist's need to provide a safe framework for the client. Bordin (1979, 1994) viewed the therapeutic alliance as the mutual relationship of working on therapy tasks. Hardy et al. (2007) argue that most conceptualisations of the therapeutic alliance are based on Bordin's (1979) definition, which comprises three features: agreement on goals, establishing tasks or goals, and developing a bond. More recently, in cognitive rehabilitation therapy, the therapeutic alliance has become aligned with building rapport, setting goals, and agreeing on a treatment approach with clients (Sohlberg et al., 2023).

From a cognitive perspective, Gilbert and Leahy (2007) view the therapeutic relationship as a range of skills that help patients narrate their stories, nonverbal communications that help them feel safe, and involve explanations of processes that will unfold. Hardy et al. (2007) describe the therapeutic relationship as a series of therapeutic processes involving establishing, developing, and maintaining a relationship. Gilbert and Leahy (2007) describe the main micro-skills of the therapeutic relationship as attentiveness, reflections, empathic connections, paraphrasing, summarising, linking, socratic questions, and validation.

Greenberg (2007) outlines the importance of developing a therapeutic presence in therapeutic relationships through empathy, acceptance, congruence, and the therapeutic bond by fostering understanding and validation and helping clients feel safe. Other therapeutic relationship skills include engaging with transference Miranda and Andersen (2007), understanding and recognising therapeutic ruptures Katzow and Safran (2007), working with attachment styles Liotti (2007), working with difficult-to-engage clients Swales & Heard (2007), using countertransference to understand client resistance Leahy. (2007). Furthermore, the therapeutic alliance and therapeutic relationship are often used interchangeably to describe interactional and relational processes during neurorehabilitation therapies involving the therapeutic alliance, working alliance, rapport, therapeutic bond and therapeutic relationship. (Hansen et al.,

2021, Kayes & McPherson, 2012; Lawton et al., 2018a). The terms therapeutic alliance and therapeutic relationship may sometimes be used interchangeably in the following survey of the development of the therapeutic relationship in cognitive rehabilitation therapy.

4.3.2 History of the Therapeutic Relationship

Prigatano's (1999) approach to micro-skills of the therapeutic relationship was developed whilst treating ABI patients with general cognitive impairments who were confused, frustrated, lacked awareness of their problems or denied they needed treatment. Prigatano (1999) faced clinica challenges of providing supportive, concise, non-punitive feedback to help patients attend to complex problems. Prigatano's (1999) solution involved establishing a therapeutic milieu and the sandwich technique, which was devised to help patients swallow difficult emotions while raising their awareness. The micro-skills comprised the technique otelling patients the topic would be difficult but hoping they would consider the points, then delivering feedback and complimenting them for listening.

In narrating the client's story in cognitive remediation sessions, Prigatano focuses on client strengths and weaknesses. Prigatano (1999) found that ABI patients fatigue quickly, and their processing speed is often slow. Prigatano (1999) focused on building a working alliance using reciprocal cognitive exercises. The micro-skills involve therapists and clients taking turns to monitor each other's performance on cognitive tasks, allowing clients to see that the therapist is willing to expose their strengths and weaknesses. Prigatano et al. (1986) noticed that experienced therapists fail to use this method to build a therapeutic alliance. This type of social comparison can create high levels of shame (Gilbert, 1997; Gilbert, 2003), affecting the therapeutic relationship (Gilbert et al., 2004; Gilbert, 2007a; Gilbert, 2007b). Therefore, building a working alliance may require micro-skills to avoid the potential effects of shaming.

Sohlberg & Mateer's (2001) approach to the therapeutic relationship's micro-skills was developed to treat ABI patients with executive impairments presenting with diminished motivation, behavioural control, and problems initiating tasks. Sohlberg & Mateer (2001) faced clinical challenges of establishing therapeutic rapport to enhance cooperation and increase motivation. Sohlberg & Mateer's (2001) solutions include building therapeutic rapport using Ducharme's (1999) model of reducing maladaptive behaviours in ABI patients by developing the micro-skills of empathy, respect and trust

in line with Horvath & Luborsky (1993) work concerning engaging and helping clients cooperate with the treatment.

The clinical problems Sohlberg & Mateer (2001) found in narrating client stories involved perseveration behaviours due to confusion, fear, pain and dyscontrol. Sohlberg & Mateer (2001) focused on using Ducharme (1999) interaction skills to develop a therapeutic alliance and milieu conducive to therapy. The micro-skills included choosing topics of interest to the client, redirecting attention to other topics or events to prevent preservation, and using non-verbal communication to facilitate open communication. The problem with Sohlberg & Mateer (2001) clinical technique is the focus on tackling maladaptive behaviours rather than a systematic approach to motivate clients. Motivation is a complex concept with the following components only partially addressed: drive (Hull, 1952), hierarchy of needs (Maslow, 1943), self-determination (Deci & Ryan, 2000), expected outcomes (Vroom, 1964), incentives or reinforcements Skinner (1958), arousal (Atkinson, 1957: Zajonc, 1965), achievement (McClelland,1965), conflicting cognitions (Festinger, 1957), attribution of causes (Heider, 1958) and goal setting (Latham & Locke, 1979).

Sohlberg & Turkstra (2011) approach to the therapeutic relationship was developed in treating ABI patients with attention, memory, executive and self-awareness problems. Sohlberg & Turkstra (2011) faced clinical challenges of motivating and engaging patients in treatment. Sohlberg & Turkstra's (2011) solutions encompassed motivational interviewing, errorless learning and self-generated collaborative learning from a client-centred approach.

In narrating client stories, Sohlberg & Turkstra (2011) focus on increasing self-efficacy to address the clinical challenges of increasing client motivation and engagement by building a relationship which influences participation. Sohlberg & Turkstra (2011) nurture self-efficacy through agreement on goals and tasks for therapy using the micro-skills of feedback and encouragement. They also motivate clients by drawing on reflective listening techniques, open-ended questions, and self-supportive pro-change statements from Miller & Rollnick's (2002) motivational interviewing framework to elicit a client's goals. They engaged clients by using the micro-skills of encouraging active processing during training, drawing on the work of Zlotwitz et al., 2010, and nesting this in errorless learning techniques of prompts and cues to aid the learning of a rehabilitation strategy. The problem with Sohlberg & Turkstra's (2011) clinical technique is that emphasis on performance may lead to shame when clients

encounter failures. The therapists will not always be available to address the failure during treatment, and the reliance on family members and others may be limited or low in support.

Sohlberg et al. 's (2023) approach to therapeutic relationships was also developed in treating ABI patients with attention, memory, executive, and self-awareness problems. Sohlberg et al. (2023) also faced the clinical challenges of motivating and engaging patients in treatment whilst working with diminished self-awareness, including denial and anosognosia. Sohlberg et al. (2023) found solutions by using motivational interviewing (MI) to raise motivation, counselling techniques to address denial and anosognosia and discovery learning to raise awareness. In narrating the client's story, Sohlberg et al. (2023) focused on using an ethnocentric approach to increase self-efficacy by focusing on the client's values and preferences, cultural strengths, resources, meaningful goals and their perspective on treatment and the therapeutic relationship. Problems related to narrating the client's story focused on improving client motivation, engagement and self-awareness.

Sohlberg et al. (2023) used MI to facilitate client motivation in meaningful activities and processes for accomplishing the activities. The micro-skills of this process included permission and feedback seeking, open-ended questions, affirmations, reflections, summaries and empathic statements. To work with denial and anosognosia, Sohlberg et al.'s (2023) used the micro-skills of getting to know the client, rapport building, listening and caring about the whole person, listening reflexively and responding to disclosed feelings to build a therapeutic alliance.

To build client awareness, Sohlberg et al. (2023) used MI to address ambivalence about therapy. The micro-skills involved addressing the discrepancies between clients and others by understanding the client's challenges, strengths and personal priorities. In addition, discovery learning was used to invite a client to figure out how to complete a task. The micro-skills involved using open-ended cues or Socratic questions, with self-evaluation facilitating clients considering failures and generating a plan for subsequent attempts. Furthermore, Sohlberg et al. (2023) use of engagement, maintenance and mastery phases in CR also appears to build motivation, engagement and awareness, using a scaffolding process involving developing strategies in 1to1 therapy and transferring these to practice sessions out of therapy by developing support structure to support the mastery of these.

The problem with Sohlberg et al.'s (2023) clinical technique is the emphasis on

performance-driven approaches, which may reduce confidence and motivation when the client fails outside of therapy. In addition, client's motivation for self-discovery may wane when alone undertaking tasks without the therapist or others support. Furthermore, clients may also avoid self-evaluation due to denial or anosognosia. An approach to the CR process is needed, which avoids the shame of failure on performance-driven tasks or denial of failure.

Toglia & Fosters's (2021) approach to therapeutic relationships was developed for treating ABI patients with executive problems. Toglia & Fosters (2021) also faced clinical challenges of building self-efficacy and self-awareness, which they tackled using guided learning and facilitating the self-regulation of clients' emotions. Toglia & Fosters (2021) focused on narrating the client's story by building self-efficacy and self-awareness, presenting the challenge of managing performance errors and a client's negative emotions. In guided learning, Toglia and Fosters (2021) used the following micro-skills: mediation or Socratic questions to support and guide thinking, learning and performance, as well as prompts, open and non-judgemental, active listening, warm tone of voice, encouragement, positive feedback and providing choice. In helping clients regulate emotions, Toglia & Fosters's (2021) used the following micro-skills: helping clients recognise triggers for negative emotional reactions, reframing negative thoughts with positive internal statements, monitoring feelings and emotions, recognising triggers or precursors to loss of emotional control, and apply learning to a variety of situations by building self-efficacy and encouraging treatment activities with an optimal challenge.

The problem with Toglia & Fosters's (2021) clinical technique is that cultivating high levels of awareness may require lots of therapeutic sessions in which the clinician provides scaffolding before clients can function at optimal levels for themselves. In addition, this approach requires careful consideration of developing and maintaining a therapeutic relationship to build high levels of client self-awareness.

Over the last 25 years the therapeutic relationship was developed in the context of either general cognitive impairments (Prigatano, 1999; Sohlberg & Turkstra, 2011; Sohlberg et al. 's, 2023) or specifically for executive impairments (Sohlberg & Mateer's, 2001; Toglia & Foster, 2021). Narrating the client's story in CR appears to be concerned with three approaches. Firstly, an approach focusing on client's strengths and weaknesses (Prigatano, 1999). Secondly, an approach focusing on increasing client self-efficacy (Sohlberg & Turkstra, 2011; Toglia & Foster, 2021; Sohlberg et al., 2023). The third approach by Sohlberg & Mateer's (2001), offers a middle ground between a focus on the

client's interests (Efficacy) as well as expertise (Strengths).

The micro-skills of listening and responding have emerged to enhance the following functions of the therapeutic relationship: building working alliances (Prigatano, 1999; Sohlberg & Mateer's, 2001), motivation and engagement (Sohlberg & Turkstra, 2011; Sohlberg et al. 's, 2023). Various micro-skills of listening and responding have emerged to raise client awareness (Sohlberg et al., 2023) and developing emotional regulation and guided learning (Toglia & Foster, 2021).

There has been a move away from Prigatano (1999) approach to building the working alliance using reciprocal cognitive performance exercises between clients and therapists. This appears to have been replaced by an approach to the working alliance based on a self-discovery / self-generated learning approach (Turkstra, 2011; Toglia & Foster (2021; Sohlberg et al., 2023).

Several variations have emerged concerning the use and focus on the therapeutic relationship in CR. Concerning the feedback process, the working alliance is used either to focus on errors and performance (Sohlberg & Mateer, 2001; Sohlberg et al, 2023) or strategy and process (Toglia & Foster, 2021). Concerning the process of using the working alliances to work with a client's emotions, the focus is either on recognising feelings Prigatano (1999) or the self-regulation of feelings (Toglia & Foster, 2021). More recently, there has also appeared to be a move towards the therapeutic relationship focusing on an ethnocentric approach to capture individual needs and differences more accurately (Sohlberg et al, 2023: Fernandez & Evans, 2022).

My position is situated in the meta-cognitive approach concerning strategy and process (Toglia & Foster, 2021). Fisher & Wells (2009) argue that by addressing meta-cognitive processing, the cyclical nature of perseverative thinking can be interrupted, which is likely to be highly beneficial for working with ABI patients. Returning to my main argument that therapeutic relationships are often under-researched when training meta-cognitive / self-instructional strategies for executive functions in ABI. I will summarise how the history of the therapeutic relationship in cognitive rehabilitation therapy highlights three key points that support my main argument. Firstly, although some of the thinking in CR is now old, this highlights how the field has not moved on much in addressing therapeutic techniques in CR. Secondly, the cannon does not address optimal therapeutic techniques for improving patient self-regulation, which Muraven and Baumeister (2000) noted. For example, although Sohlberg & Mateer (2001) emphasise rapport for patient engagement in treatment, they overlook the complexities

of motivating clients and the best techniques for fostering self-regulation of motivation. Sohlberg & Turkstra (2011) argue that motivational interviewing skills can enhance self-regulation of motivation, but a focus on performance may lead to shame in clients when they face failures, creating issues with motivation and engagement. In addition, Sohlberg et al.'s (2023) emphasis on performance-driven approaches may also reduce confidence, motivation and engagement when patients encounter failure outside of therapy sessions. Thirdly, Stagg et al. (2017) noted the lack of research into factors affecting the working alliance. Toglia & Foster's (2021) technique requires multiple therapy sessions to boost client self-awareness. While they stress the importance of a strong therapeutic relationship, they do not explain how to cultivate or sustain this for better client self-regulation of awareness or engagement and retention. Concerns that the CR literature is not addressing optimal therapeutic techniques for improving patient self-regulation (Muraven and Baumeister, 2000) or factors affecting the working alliance (Stagg et al. 2017) can be observed more clearly when the theory presented in the literature is illustrated in clinical practice. A standard way in which clinical material is presented in medical and neuropsychological literature is through the clinical vignettes (Jaramillo-Castell, et al. 2023). The following extracts from the CR cannon explore how far the therapeutic relationships described in these extracts are orientated towards patient self-regulation and factors affecting the therapeutic alliance.

In the chapter on neuropsychological rehabilitation programmes, Prigatano (1999) presents a case extract of a young adult with memory and information processing deficits and lacking insight into his disturbances following a TBI. Prigatano's (1999) description of the therapeutic alliance only focuses on engaging in reciprocal cognitive exercises to establish rapport; Prigatano (1999) does not show how this relational skill is used to develop or maintain a therapeutic environment.

Sohlberg and Mateer (2001) present a case extract of a 30-year-old male with moderate executive impairments of impulsive responding and disorganized problem-solving. The micro-skills of therapeutic relationships are weaved into training a self-regulatory strategy in the following way. Firstly, validating the patient's experiences during assessments and formulations. Secondly, therapeutic rapport is used through a) collaborative co-construction of a strategy, b) encouragement concerning the patient's progress, helping the patient generate practice ideas so the self-regulatory strategy could be applied to computer tasks. Thirdly, validating the patient and his family's experiences to help the patient move from structured to unstructured tasks. Sohlberg & Mateer's

(2001) example appears to be based on the establishing stages of the therapeutic relationship, but developing and maintaining the working alliance were not explained.

Sohlberg & Turkstra's (2011) case extract focused on Jay, a 25-year-old male with TBI with poor executive functions in social contexts. A collaborative approach in co-constructing a strategy was used to target Jays behaviour in social situations. Jay practised the strategy in social situations. Jays neighbour was co-opted to help observe him. Jay believed he had used the strategy without transgressing boundaries. Jay's neighbour described Jay crossing personal boundaries when out in public. There was no mention in the extract of how Jay had responded to this feedback. We were then told that Jay had decided that he had enough social skills and did not need to continue with therapy. This seemed to end abruptly in light of the client's initial long-term goals to improve his social functioning. I was left thinking, did this seemingly premature ending relate to diminished self-awareness (denial or anosognosia), or was this an impasse in the therapeutic relationship? Moreover, this case extract only addresses how the relationship was established but neglects the problems of developing and maintaining it.

In a case extract, Sohlberg et al. (2023) describe 29-year-old women with a mild TBI and low scores for executive functions in planning and organisation. Collaboration was used to establish the therapeutic relationship and set up an external aid strategy. The relationship is also developed through feedback, including change-promoting messages focusing on strategy and problem-solving rather than performance reductions. Despite the patient's setbacks in implementing and using the self-regulatory strategy, only the technical manoeuvres are described; the emotional tone and consequences of these are not mentioned despite the setbacks to self-regulation these can evoke (Stubberud et al., 2020; ten Broeke & Adriaanse, 2023).

These vignettes highlight a number of limitations concerning the working alliance. Prigatano (1999) does not show how relational skill is used to develop or maintain a therapeutic environment. Sohlberg and Mateer's (2001) vignette describes establishing a therapeutic relationship but does not explain developing and maintaining the working alliance. Sohlberg & Turkstra's (2011) vignette describes how the relationship was established but neglects the problems of developing and maintaining it. In Sohlberg et al. (2023) vignette describes how the therapeutic relationship was established and developed, but how the relationship was maintained when the patient experienced setbacks in self-regulation of the strategy is not explained. What is also underdeveloped in clinical vignettes in CR literature is how the therapeutic relationship

is weaved into the training process. Both Toglia's (2021) and Sohlberg et al. (2023) over-arching approach to therapeutic relationships from a client-centred focus creates a conflation of paradigms due to an apparent lack of theoretical integration. CR is situated predominantly in cognitive psychology and cognitive-behavioural therapy (Sohlberg & Mateer, 2001; Sohlberg & Turkstra, 2011 and Sohlberg et al., 2023). In contrast, as presented in CR, the client-centred approach appears to be underpinned by humanistic approaches (Toglia & Foster, 2021; Sohlberg et al., 2023). CR and a client-centered focus have different approaches to the therapeutic relationship. CR is underpinned by collaborative relationships with a primary focus on education and a goal-oriented therapeutic framework utilizing structured sessions. The therapeutic process in CR involves interventions which focus on current performance data, cognitions and behaviours within the context of current functioning Sohlberg & Mateer (2001).

The therapeutic relationship from a client-centered focus is characterized by Rogers's (1957, 1959) core conditions: empathy, congruence and unconditional positive regard. The therapeutic framework is unstructured and non-directive. The phenomenological therapeutic process allows clients to access their experiences so that conditions of worth on which they might be built can dissolve (Rogers (1951).

In the CR literature, neither Toglia (2021) or Sohlberg et al. (2023) present how to integrate a client-centred focus within a CR framework. Within clinical neuropsychology, Klonoff and Piper (2020) argue that technical eclecticism is a method for integrating different models through a common factors approach. However, neither Toglia (2021) or Sohlberg et al. (2023) show how common factors between a CR and client-centred focus might work in practice.

Furthermore, the underdeveloped role of the therapeutic relationship in CR could be seen in part due to a lack of integration concerning the common factors between CR and a client-centred focus, but also how the micro-skills of very different therapeutic approaches are weaved together into a coherent therapeutic process. Alternatively, there may be another explanation for why there appears to be a paucity of research concerning the optimal technique for improving patient self-regulation and factors affecting the therapeutic alliance. Another explanation could be the slow integration of current research concerning the therapeutic relationship and optimal technique into clinical practice, and because theoretical integration underpinning this is still an open and developing project.

The next section supports this second explanation by exploring evidence

concerning the relevance of the therapeutic relationship in treating ABI patients. The next section argues by way of current research findings that both humanistic, cognitive, and psychodynamic approaches to the therapeutic relationship offer relevant contributions for achieving optimal techniques in the cognitive rehabilitation of ABI patients.

4.4 Humanistic Approaches to the Therapeutic Relationship with ABI

4.4.1 Developing Therapeutic Presence

Developing a therapeutic presence and bond are critical relational concepts in the humanistic approach, which appear to be important in cognitive rehabilitation, but are often discussed in terms of specific person-centred micro skills.

Developing a therapeutic presence involves establishing positive alliances through the skills of empathy, acceptance, and congruence, which allows therapists to be therapeutically present with their clients (Greenberg, 2007). Empathy involves attunement to feelings and meanings. Acceptance involves acknowledging feelings in the moment. Congruence involves disclosing feelings in a non-dominant and facilitative manner. Attunement to feelings and meanings is essential for identifying goals and therapeutic tasks. The process may include affect regulation involving labelling and differentiation of emotions. In addition, empathy and validation provide support and understanding by focusing on perceptions and experiences (Greenberg, 2007). Acceptance fosters belonging and allows acceptance of one's experiences. Unconditionally accepting client's experiences allows them to lose preoccupation with their therapists and turn inward to their own experiences (Greenberg, 2007). Congruence involves real relating in the therapeutic relationship, which enhances the therapeutic alliance and the client's progress (Gelos & Hayes, 1998). Lietaer (1993) presents congruence as two processes: awareness of one internal experience and willingness to communicate what is happening to another. Greenberg (2007) argues that the skills involved in congruence are connected to facilitative congruent communication. When a therapist is not feeling affirming but angry, critical or rejecting, a congruent response must involve a personal disclosure (Greenberg, 2007).

Empathy, congruence, and acceptance underpin the therapeutic alliance in cognitive rehabilitation (Sohlberg & Mateer, 2001; Sohlberg & Turkstra, 2011; Toglia & Foster, 2021; Sohlberg et al., 2023). In addition, empathic skills are essential micro-skills in motivational interviewing, often used in cognitive rehabiliation to nurture a client's awareness and build motivation for treatment (Sohlberg et al., 2023).

4.4.2 Therapeutic Bond

Developing a therapeutic bond involves nurturing the therapeutic alliance to work with cognitive impairments by establishing treatment goals and therapeutic tasks to nurture a therapeutic bond (Sohlberg et al., 2023). Greenberg (2007) defines a therapeutic bond as

an emotionally friendly environment which helps clients access and focus on their painful feelings. Greenberg (2007) presents a method for facilitating this in the first three to five sessions: 1. Accepting client's experiences. 2. Avoid challenging a client's views or suggesting alternative responses. 3. Understand a client's functioning and ways of processing their experiences. Creating emotional safety can help clients explore feelings without fear of criticism or shame. Empathy and compassion could be seen as antidotes to shame, and genuine acceptance ensures therapists do not shame clients. Revealing oneself to an understanding and supportive other is part of developing a therapeutic bond. This enhances emotional work, and as the bond is strengthened, clients become more aware and experience relief and benefits of exploring their experiences (Greenberg, 2007).

Moreover, the therapeutic presence built on the micro-skills of empathy, congruence, and acceptance may nurture positive therapeutic alliances and therapeutic tasks to build motivation among ABI patients, aid emotional regulation, and facilitate communication to nurture awareness among ABI patients. Furthermore, the therapeutic bond may raise ABI patient awareness by nurturing a sense of safety, allowing patients to process their experiences.

4.5 Cognitive Approaches to the Therapeutic Relationship with ABI

4.5.1 Establishing the Therapeutic Relationship

Hardy et al. (2007) describe establishing a therapeutic relationship as the engagement process involving the micro-skills of warmth, genuineness, offering support, empathy, goal negotiation, guidance, and affirmation within a collaborative framework. Establishing a relationship aims to explore the client's expectancies and intentions for therapy and nurture motivation and hope. I will address six factors related to engaging ABI patients in therapy: pacing, rapport, setting clear goals, negotiating goals, managing mood and building awareness.

Pacing is important for creating warmth and genuineness in therapeutic relationships (Greenberg, 2007). This is important for engaging patients in CR; in a qualitative study, Kusec et al. (2023) found that pacing with ABI patients positively impacted engagement in treatment.

Rapport is important for developing the therapeutic alliance (Sexton et al., 2005) and motivation (Reandeau & Wampold, 1991), engaging ABI patients in treatment. Gracey et al. (2020) argue that fostering collaborative rapport with ABI patients allows engagement by allowing clients to reflect and organise their subjective experiences.

Setting clear goals is important for brain injury clients; it helps them manage expectations and engage with the client's social and family needs (Haye et al., 2023). Managing treatment expectations may also require psychoeducation connected to how ABI injuries impact a patient's life (Haye et al., 2023). Moreover, Boakye & Copstick (2023) argue that broader negative societal attitudes (related to gender, sexuality, disability, and nationality) can disrupt the negotiation of treatment goals and patient adjustment, with acceptance and inclusion as key to creating collaborative goals with ABI patients.

Early negotiation of treatment goals improves engagement (Tryon, 2002) and return to sessions (Tryon, 2002; Tracy, 1977). Guidance also improves engagement (Luborsky, 1990; Grover et al., 2020), using techniques for clarification (Waldinger,1987) and information sheets (Heitler, 1976). Safren, Heimberg, and Juster (1997) found that lower client expectations reduced outcomes in CBT group therapy. Tracey (1977) found that therapists who did not share their understanding of a client's problems or negotiate treatment goals resulted in a significant increase in clients not returning for therapy.

Managing mood in ABI patients is important for treatment engagement. In TBI, co-morbidities of PTSD, anxiety and depression were found in blast-related injuries (Phipps et al.,2020), after motor collisions PTSD and depression (Neylan et al., 2020), after severe TBI anxiety, depression and agitation (Torregrossa et al., 2023). After strokes, depression (Wijeratne & Sales, 2021; Kiper., et al., 2022), apathy *(*Saleh, 2021), fatigue (Ghafaji et al., 2023) and anxiety disorders (Pisano et al., 2022) can occur.

Not managing clients with high levels of hopelessness at the beginning of therapy resulted in poorer outcomes than clients whose hopelessness was reduced in the initial sessions (Kuyken, 2004). In a meta-analysis, supportive psychotherapy produced moderate to large effect sizes for the management of depression (Barth et al, 2013). Therapist support was associated with symptom improvement (Mallinkrodt, 2000).

Apathy can be a long-term problem in moderate to severe TBI, resulting reduced engagement to diminished motivation (Marin & Wilkosz, 2005). In stroke rehabilitation training, there are hurdles to motivation due to apathy (Studer et al., 2021). Verrienti et al (2023) argue that motivation is a dynamic phenomenon, which is enhanced or diminished sometimes in short time lapses. Therefore, the consequence of not addressing apathy regularly in ABI patients is the possible decrease in the patient's motivation in rehabilitation (Verrienti et al, 2023).

Impaired self-awareness (ISA) can affect moderate and severe TBI (Sherer et al., 2003); to maximise patient engagement, it is important to assess this for different functional domains (Prigatano, 2014). A collaborative framework is also important for engaging patients in therapy (Hardy, 2007); involving talking rather than remaining silent and encouraging client experiences in sessions (Tryon & Winograd, 2001, 2002). A collaborative approach with ABI patients is important for avoiding race-based norms (Jim et al. (2023) and navigating complex intersectional issues to prevent unintentionally oppressing the patient (Boakye, 2023). The collaborative pursuit of homework task completion has been associated with a reduction in symptoms post-therapy (Worthington, 1986; Schmidt & Woolaway-Bickel, 2000).

Moreover, establishing a therapeutic relationship with ABI patients, which utilises the micro-skills of pacing, rapport, setting clear goals, negotiating goals, managing mood and building awareness, may optimise therapeutic techniques in cognitive rehabilitation therapies by facilitating patient engagement in treatment.

4.5.2 Developing the Therapeutic Relationship

Developing a therapeutic relationship involves exploration, reflection, relational interpretations, providing feedback, and non-verbal communication (NVC) to develop openness, trust and commitment (Hardy et al., 2007).

A therapist's ability to explore reactions to their clients involves attending to one's internal and external reactions, unresolved conflicts (Gelso & Hayes, 2002) or developing sensitivity to counter-transference reactions. Van Wagoner, Gelso, Hayes, and Diemer (1991) refer to managing count-transference as a reflective process. Managing emotional reactions in relation to clients is associated with cultivating better therapeutic alliances (Ligiero & Gelso, 2002). In ABI rehabilitation, there is growing interest in countertransference concerning therapeutic alliances (Pepping, 1993; Lewis, 1999), managing negative emotions (Judd & Wilson, 2005), managing projections to clinicians (Yeates & Salas, 2020) and delivering psychoeducation (Glinac et al., 2022) for improving outcomes.

Relational interpretations address interpersonal links and client themes (Hardy et al., 2007). Chris-Christophy & Connolly (1999) link relational interpretations to increased quality of the therapeutic alliance. In ABI rehabilitation, relational interpretations have addressed post-injury loss and narcissistic injuries (Klonoff & Lage, 1991; Klonoff et al., 1993), mind-body disconnections (Levack et al.,2010), rebuilding meaning (Prigatano, 2012), and relational attachments (Yeates & Salas, 2020). Feedback is about positive reinforcement of a client's behaviour or self-beliefs (Hardy et al., 2007). In ABI rehabilitation, providing positive and motivating messages is associated with increased emotional engagement (Lai et al., 2018; D'hooghe., 2018), improvements in emotional regulation (Glinac et al., 2022); facilitation of implicit learning (Whyte, et al.,2011) and enhancing self-efficacy (Toglia & Foster, 2021)

Ducharme (1999) defines NVC in relation to physical posture, eye contact, and tone of voice, which are used in the context of empathic engagement and re-directing persevering behaviours. Sohlberg & Mateer (2001) argue the importance of nonverbal (NVC) communication in developing therapeutic rapport in treating dysexecutive syndrome.

Hardy et al. (2007) argue that trust and openness are important in high levels of patient engagement. Binder and Strupp (1997) point to a relationship between hostile interchanges and lowered openness and trust in therapeutic alliances. In ABI rehabilitation, Williams and Douglas (2021) found that lower levels of trust and

openness lead to lower patient engagement in treatment. Guidance was associated with building trust (Kayes et al., 2021) by creating a sense of certainty in the earlier stages of the therapeutic alliance (Williams & Douglas, 2021) when treating brain injuries.

Moreover, developing a therapeutic relationship with ABI patients, which utilises the micro-skills of exploration and reflection may improve therapeutic outcomes, relational interpretations may increase the quality of the therapeutic alliance, providing feedback may increase emotional regulation and awareness, and using non-verbal communication may be important in increasing therapeutic rapport and engagement.

4.5.3 Maintaining the Therapeutic Relationship

Maintaining therapeutic relationships involves self-reflection, metacommunications, responsiveness, flexibility, and repairing ruptures or misunderstandings. The objectives are client satisfaction, the working alliance, emotional expression, and understanding the client's changing self-perceptions (Hardy et al., 2007).

Hardy (2007) argues that sometimes therapist behaviours can be intrusive or defensive, or self-disclosure or expression of negative feelings can disrupt the therapeutic relationship. Ruptures to the therapeutic relationship require therapists to reflect on their contribution to the cycle (self-reflection) and facilitate discussions (metacommunications) about therapist-patient interactions (Katzow & Safran, 2007). In client-centred practice, this is seen as practising congruence, i.e. being aware of one's internal experiences and discussing with others what is going on (Lietaer, 1993). Evidence shows that recognising one's negative feelings or behaviours can strengthen the therapeutic alliance (Gelso & Carter, 1985; Safran et al., 2002). Moreover, in the rehabilitation of stroke patients, careful use of self-disclosure (Bishop et al., 2021) and engaging in client-centred interactions (Hersh et al., 2018; Walder & Molineux, 2020) can aid maintaining the therapeutic alliance

Jorna et al. (2021) found that ABI patients had worse negative emotional ratings and anger misattribution rates to social monitoring than non-ABI participants. This highlights the need in clinical practice to detect and treat behaviours of concern (BoC) when working with ABI patients, particularly managing aggression (Alderman & Worthington, 2023).

Flexible interventions appear to be important for good outcomes in TBI rehabilitation. Cicerone et al. (2008) found holistic neuropsychological interventions emphasising metacognitive and emotional regulation techniques for cognitive deficits

facilitate skill transfer, generalisation, behavioural regulation, and better community integration.

In pluralistic therapy, Cooper and McLeod (2011) argue that responsiveness encompasses listening, asking about the client's preferences, and implementing different possibilities emerging from conversations. Moreover, Di Vita et al. (2022) found that focusing on the emotional needs of patients with severe TBI in psychotherapy leads to higher levels of awareness, social functioning, emotional autoregulation, reductions in depressive symptoms and perception of physical problems.

Allowing emotional expressions and a changing self-view to maintain therapeutic alliances (Hardy et al., 2007) are highly relevant to working with ABI patients. For example, cognitive exercises used to raise a patient's awareness in CR may lead to performance errors, and these may lead to emotional reactions in which denial and self-awareness are interrelated (Kortte & Wegener, 2004; Prigatano & Klonoff, 1998). Toglia and Foster (2021) argue that a person may show denial reactions in highly valued activities associated with independence but may acknowledge performance difficulties with neutral or less important activities. Not managing the emotional resistance of denial in CR may lead to patients not engaging in treatment (Toglia & Maeir, 2018). Moreover, to help patients accept the change in their performance abilities, Toglia and Foster (2021) argue that without psychological support, a multidisciplinary team and significant other involvement, the patient is unlikely to engage in treatment.

Prigatano (1999) argues that patient productivity plays a role in maintaining patient satisfaction in the therapeutic alliance. There also appears to be a relationship between the strength of the collaboration and the quality of the therapeutic alliance (Winston & Muran, 1996). In addition, poor collaboration is linked to reduced outcomes in stroke patients (Walder & Molineux, 2020), and TBI recovery (Williams & Douglas, 2021).

Moreover, maintaining a therapeutic relationship with ABI patients, which utilises the micro-skills of self-reflection, responsiveness and metacommunications may be important in strengthening and maintaining the therapeutic alliance, flexibility in the use of interventions may also facilitate better outcomes, and repairing ruptures and misunderstandings may also improve patient engagement in treatment

4.6 Psychodynamic Thinking in Cognitive Rehabilitation with ABI

4.6.1 Fragmented Identities

Psychodynamic thinking has also begun to play a role in ABI rehabilitation to explore disruptions to identity**.** Integrating psychodynamic processes and thinking into rehabilitation include reshaping self-narratives by focusing on unconscious conflicts, loss and meaning (Bruguière et al., 2023)**,** the Psychological meaning of symptoms, identity disruption, emotional regulation failures, unconscious defenses, relational patterns, family dynamics, and integrating subjective experience with cognitive-neuropsychological findings for richer formulations (Prigatano & Salas, 2017) containing distress and emotional confusion and meaning (Salas, 2021) helping patients metabolise internal chaos, grief and loss through symbolic expression (Edlow & Kahn, 2023) and containing the process of mourning for lost capacities (Coetzer, 2006). Costa et al. (2023) also highlight the use of psychodynamic thinking in revealing unconscious defences, emotional conflicts, and early relational patterns that may impede engagement in rehabilitation.

Psychodynamic ideas have been used to enhance cognitive rehabilitation therapies by nurturing engagement and addressing resistance when working with impairments to memory, attention and executive functions (Prigatano & Salas, 2017), They have also been used to improve emotional regulation, insight, motivation, identity coherence and therapeutic engagement (Giovagnoli et al, 2025), nurture motivation and relational reintegration through symbolic meaning making (Salas, 2021) and enhance interpersonal functioning (Louw & Straker, 2002).

4.6.2 Transference & Countertransference

Psychodynamic relational processes of transference and countertransference dynamics have also been used to enhance cognitive rehabilitation therapies. Prigatano and Salas (2017) caution that what may appear to be executive dysfunctions may instead reflect unconscious conflict or anxiety related to failure, loss or self-worth, which are behavioural responses emanating from transference[1] defences[2]. For example, difficult tasks in cognitive rehabilitation can lead to unspoken dynamics such as shame and fear of failure, which can lead to ruptures in therapeutic engagement. Prigatano and Salas (2017)

[1] Transference refers to the patient's unconscious feelings, expectations, or attitudes from significant early relationships which becomes re-awakened and transferred as an emotional valence to the therapist.
[2] Defences could include idealisation, defensiveness or dependency as a way of avoiding emotional distress and anxieties.

argue that working through these transference dynamics can help maintain trust and therapeutic engagement. In addition, if a therapist is seen as a validating figure, this transference dynamic can be used to foster a restorative symbolic process for working with identity disintegration (Salas, 2017).

Understanding countertransference[3] reactions[4] is useful emotional data to understand what clients might be projecting or evoking, and it can help a therapist recognise feelings a client struggles to articulate cognitively (Edlow and Kahn, 2023). Furthermore, when a patient's transference centres around dependency, this dynamic can be used to foster self-reflection and insight. In addition, if a therapist can manage their countertransference reactions, such as a need to rescue or overly support a client, by being both supportive and challenging, this can promote cognitive and emotional resilience (Bruguière et al, 2023). Moreover, this resilience can be used to sustain the challenging task of out-of-session practice sessions needed in pursuit of the mastery of self-regulatory strategies in CR.

4.6.3 Projective Identification

Another important facet of a therapist's countertransference reactions is conceptualised by the process of projective identification in which a patient places their unconscious feelings in the therapist, and the task of the therapists is to process these feelings reflectively rather than act them out (Tansey & Burke, 1985). Although there are no published studies on the application of projective identification in cognitive rehabilitation, I would like to argue that this concept can inform a therapist's countertransference and enhance the therapeutic relationship in this context.

Working with projective identification enhances empathy by allowing therapists to recognise and process feelings unconsciously placed into them by clients. Tansey and Burke (2013) argue that projective identification facilitates deeper empathic connections with clients by allowing therapists to access a client's internal experience. Moreover, empathic understanding emerges when a client's emotional communications are reflected upon rather than being reacted to.

Working with projective identifications might look like this in cognitive rehabilitation practice. When disruptions to identity in ABI patients lead to identity fragmentation, patients may project their own confusion, despair or loss of control onto

[3] Countertransference refers to the therapist's emotional reactions to the patient.
[4] Countertransference reactions might include frustration, overidentification or feeling the need to rescue clients.

therapists. A therapist may then experience a sense of being ineffective, controlled or overly burdened by the patients' presenting problems, and then drawn into unconsciously enacting their patients' inner worlds. Recognising these relational dynamics and responding to projective identifications through co-reflection rather than acting them out allows the therapist to develop more empathic attunement and to facilitate more strategic scaffolding of the therapeutic goals and experiments. This is important in CR because executing goals and setting up out-of-session behavioural experiments can often trigger anxieties about competence, which can mobilise feelings of shame, loss or dependency. Since CR work can mobilise high emotional valencies, a patient may attempt to unconsciously use the therapist to contain and process these feelings, especially when a patient is struggling with impaired executive functioning. Moreover, recognising and processing these projective identifications enables three things. Firstly, the therapist avoids acting out a patient's feelings by avoiding overhelping or withdrawing from the patient. Secondly, co-reflecting with the patient about their reactions (when the task is hard and frustrating and brings up a sense of failing) allows co-regulation of emotions with the patient. Thirdly, the therapeutic space is not just a space of cognitive retraining but also symbolic repair and replenishment.

4.7 Conceptualising Therapeutic Relationships in Rehabilitation

Conceptualising the therapeutic relationship in Neuropsychological rehabilitation faces several challenges. In a review of the literature, Ownsworth & Haslam (2016) argue that it needs to address collaboration, emotional attunement, identity scaffolding and relational consistency to allow self-concept changes. Implicit in the systematic review by Cicerone et al (2019) were themes of collaboration, emotional support, strong engagement and the psychotherapeutic aspects of rehabilitation. Prigatano (2013) also supports a holistic perspective, as well as integrating psychodynamic thinking Prigatano (2012), emotional adjustment, identity changes, family dynamics, meaning-making Prigatano (2019) neuroimaging and neuroplasticity concepts into rehabilitation Prigatano (2021).

Counselling Psychology's competencies concerning the 'art and science of therapy' and 'understanding the therapeutic techniques and processes for working with specific neurological and neuropsychological presentations' (HCPC, 2009) uniquely position it to understand the therapeutic relationship in cognitive rehabilitation therapies. Moreover, several emerging areas of expertise within Counselling Psychology may be relevant to addressing the problem of theoretical integration within cognitive rehabilitation.

As early as the 1990s, Petruska Clarkson outlined an integrative framework that combines five types of psychotherapeutic relationships.[5] To describe the therapeutic encounter: the working alliance, the transferential/countertransferential relationship, the reparative/developmental relationship, the person-to-person relationship, and the transpersonal relationship were proposed. Although appearing to represent a developmental sequence or hierarchy sequence, they do not necessarily follow a particular pattern for all clients (Clarkson, 2003). Lapworth Sills & Fish's (2001) also use a multiple framework: the professional relationship (working alliance), the projective relationship (Transference, developmental/reparative), and the personal relationship (real, transpersonal & contextual relationship[6]), to conceptualise the multiple facets of the therapeutic relationship. Furthermore, by way of trying to conceptualise the healing

[5] The working alliance is the client/therapist relationship that enables the client and therapist to collaborate even when the client lacks motivation to engage. The transferential/counter-transferential relationship involves the client projecting unconscious material onto the therapist and the therapist's receptivity to these projections in their emotional and psychological reactions to the client. The reparative/developmental relationship is the therapist's ability to facilitate a corrective or replenishing relationship that was deficient in the client's original experience of being parented. The person-to-person relationship is the real relationship or real relating that exists in the therapeutic relationship, which is not necessarily connected to the therapy process. The transpersonal relationship is the spiritual dimension of the healing relationship.

[6] The contextual relationship considers the client's socio-political and cultural challenges.

process of therapy, Clarkson (2003) outlines seven onto-epistemological levels[7] in which this takes place: physiological, emotional, nominative, normative, rational, theoretical, and transpersonal levels.

More recently, both cognitive relational therapy (Walsh & Frankland, 2011) and pluralistic therapy (Copper & McLeod, 2011) have emerged in Counselling Psychology, offering approaches to integration which might be relevant to cognitive rehabilitation. Moreover, it may be that the ability to work with multiple processes in therapy may maximise therapeutic outcomes in cognitive rehabilitation therapies.

Cognitive relational therapy integrates different therapeutic approaches: person-centred and CBT. From a cognitive-perspective, Walsh & Frankland (2011) argue that a therapist may relate a client's self-talk to their previous experiences with significant caretakers, in order to help a client think about their needs related to the working alliance, but from a person-centred perspective, Walsh and Frankland (2011) argue that these techniques can only occur when a client feels heard and validated, so that a therapist can bring cognitive techniques to the therapeutic process.

Pluralistic therapy integrates different modes: relational and technical ways of being. This is based on overlapping domains of goals, tasks and methods within an overarching perspective that clients might benefit from different things at different times. In Cooper & McLeod's (2011) model, relational processes include encouraging talking about problems and feelings, being accepting and empathic, and technical processes, including techniques and psychoeducation.

Cooper et al. (2015) found that clients in pluralistic therapy (Cooper & McLeod, 2011) reported that the use of relational and technical approaches is helpful in sessions. This may be relevant to understanding how to integrate the factors (empowerment and coallaboration) related to the therapeutic alliance identified by Heredia-Callejón et al (2023). The ‘empowerment’ factor might be contained in goal setting in pluralistic therapy by developing a client's agency (Cooper & McLeod, 2011). Collaboration as a factor might be contained in both a relational and technical set of processes in pluralistic therapy, in which listening and asking a client's preferences are then explored through

[7] Physiological levels include biological, physical, and sensational experience. Emotional levels encompass subjective, experimental, and felt states, which are existential, phenomenological, and unique to each person. Nominative levels include the awareness and labelling of experience and the validation of experience through naming it. Normative levels include norms, values, collective belief systems, and societal expectations. Rational levels include thinking, making sense of things, examining cause and effect, frames and reference, and working with facts and time and place information. Theoretical levels include making sense of human experience through story, metaphor, explanations, and hypotheses to explain or test why things are as they are and why people behave as they do. The transpersonal level concerns the spiritual or the soul, the mystical, the paradoxical, the unpredictable, and the inexplicable.

different options for implementation. In contrast, some models of relational depth from a person-centred perspective focus solely on the therapeutic relationship as the agent of change using Roger's (1957) three core conditions, emotional availability, and willingness to be impacted by the client (Mearns & Cooper, 2005).

From a pluralistic therapeutic approach, a willingness to be impacted by clients can also be viewed as the therapist's careful use of counter-transference to help a client identify unconscious goals (Cooper & McLeod, 2011). Moreover using counter-transference in the service of technical approaches may also offer a way to integrate dynamic thinking into cognitive rehabilitation therapies.

From a Socio-cognitive approach to transference, Miranda and Anderson (2007) outline how working with transference can be used to help clients gain greater self-regulation, particularly in relation to changing self-identities, emotional regulation, and chronically unsatisfied goals by modifying interpersonal schemas and relationship patterns in treatment. Miranda and Anderson (2007) argue that once a significant other representation (Transference) is triggered, this is likely to lead to certain thoughts, feelings, motivations, and behaviours. To understand a client's interpersonal schemas, it is argued that it is important to ask clients to describe their important others personal qualities, quirks, preferences, interests, and ways of relating. This then allows the therapist to understand when these representations are triggered in relation to others as well as the therapeutic alliance, offering the client the opportunity to process information about relational patterns consciously and explore alternative ways of responding.

From an integrative framework to cognitive psychodynamics, Ward & Plagnol (2019) also recognise the importance of exploring a client's interpersonal schemas/patterns, which may be driving the client's behaviours and incongruence. They also argue that the therapeutic relationship is one aspect in which the client's schematic ways of relating play out, which can then be used to allow clients to experience new ways of relating and build new schematic patterns to guide future behaviours. Unlike the process of fostering an interpreting a transference neurosis in psychoanalytic psychotherapy (Renik, 1990), in cognitive psychodynamics, Ward & Plagnol (2019) advocate the use of interpretations from the client's frame of reference so that they do not get enmeshed in the client's relational schemas. In this model, formulations focus on understanding the incongruence and inconsistency the client is feeling in terms of conscious cognitive thought processes, and the ways representational systems may drive these. Ward & Plagnol (2019) also argue that traditional defence mechanisms could also

be seen as motivational schemas, which may occur implicitly as recurring patterns of behaviours. Moreover, motivational interviewing could be enhanced by working consciously with the structural patterns of behaviours that facilitate or hinder a client's ability to change.

This section has highlighted several themes for integrating different modalities into cognitive rehabilitation. Clarkson (2003) provides a framework for integrating different relationships where some will be foregrounded in the present, and others held in mind when not in active use. Lapworth Sills & Fish's (2001) also offers a contextual approach to the therapeutic relationship, which provides a framework for embracing complex intersectional issues. Walsh & Frankland (2011) offer a method for integrating cognitive and person-centred perspectives. Cooper & McLeod (2011) offer a way of integrating relational and technical approaches, which re-frame countertransference reactions as a cognitive approach for identifying unconscious goals. In addition, Miranda and Anderson's (2007) socio-cognitive approach to transference, which is concerned with modifying interpersonal schemas and relationship patterns in treatment, allows a method for working with changing self-identities, emotional regulation, and unrealised client goals. Furthermore, Ward & Plagnol's (2019) framework for cognitive psychodynamics offers a way of integrating psychodynamic thinking into client-centred approaches. For example, in motivational interviewing, they advocate working consciously with implicit motivational schemas, which may hinder a client's ability to change**.**

Another factor concerning clinical and theoretical integration within cognitive rehabilitation also needs to be considered. Treating executive impairments effectively requires clinicians to assess not only the general effects of impairments on the patient's everyday life, but also construct formulations of the patient's specific difficulties in executing complex goal-directed behaviours before selecting an appropriate cognitive rehabilitation intervention and evaluating the outcome of the treatment (Sohlberg & Mateer, 2001; Sohlberg & Turkstra, 2011; Toglia, 2021; & Sohlberg et al, 2023). These activities are explicitly embedded within the formulation cycle of assessment, formulation, intervention and evaluation underpinning psychological work (HPC, 2015; BPS, 2010; BPS, 2017).

The formulation cycle is embedded within the broader therapeutic relationship as a process rather than a one-off event (Dallos et al., 2014). This process Dallos et al. (2014) describe as the therapeutic alliance, involving the degree of agreement on the therapeutic aims and how to achieve change (Toukmanian & Rennie,1992; Paley &

Lawton, 2001; Wampold, 2001; Luborsky et al., 2002; Green & Latchford, 2012). Markin (2014) supports this idea, arguing that the therapeutic relationship is a “pan-theoretical” change agent because it can lend itself as a process to any therapeutic approach. Moreover, Dallos et al (2014) formulation-as-a-process describes this change agent as a process in which the therapist reflects on assumptions and feelings, is aware of the developing relationship with the client, and is sensitive to differences in each other’s formulations.

4.8 Researching Therapeutic Relationships in Rehabilitation

Although case studies, as summarised in clinical vignettes, appear underdeveloped in the CR literature, as a research tool, they have a long history in neuropsychology's development (Luria, 1973). Both quantitative and qualitative approaches play a role. Van Heugten's (2020) chapter on evidence-based treatment outlines the importance of single-case experimental designs (SCED) in neuropsychological rehabilitation research. Van Heugten (2017) differentiates these from case descriptions, case reports, and pre-post designs in that the participants act under their own control. In counselling psychology research, Ward & Hogan (2015) case study addressed executive dysfunction and perseveration behaviours due to a head injury using psychotherapy. Using an ABA design, the research showed that it is possible to work successfully with these issues with some clients using a client-centred approach to therapy. In the neurology literature, the case study has emerged from work by Sacks (1985), who used a narrative approach to describe cases involving visual agnosia and memory impairments (Warriner, 2008).

Qualitative case studies have been used to research barriers to employment faced by TBI patients on college graduation (Roessler, 2017), family resilience following TBI (Gauvin-Lepage, 2019), and factors that support and hinder recovery following TBI's (Woods & Zachry. 2023). Although there may be a paucity of case studies in neuropsychology, this is not underdeveloped as a research tool.

There is also a paucity of quantitative studies focusing on the therapeutic relationship in CR for ABI. In a scoping review, Stagg et al. (2019) found only 10 quantitative studies focused on the working alliance in ABI rehabilitation. The review highlights how the working alliance is a complex process that interacts with many factors and processes in the rehabilitation environment. These are presented as general rather than specific factors, which do not explain how clinicians integrate the micro-skills of the therapeutic relationship into training self-regulatory strategies for executive impairments. Although the review identifies the importance of allowing time for developing a therapeutic alliance, how this is achieved is unclear. For example, the role of the therapist's skills in managing cognitive impairments for forging strong therapeutic alliances and the relational skills and processes needed are not clearly outlined. The limitations in describing the therapeutic relationship's complexity appear in part due to the limitations of the research data and the quantitative approach, which does not lend itself to rich descriptions of complex processes.

There also appears to be a paucity of qualitative studies addressing the therapeutic relationship in CR. In a systematic review of stroke rehabilitation from nine studies, Heredia-Callejón et al. (2023) explored the role of the therapeutic alliance in the neurological rehabilitation process. The research found the importance of the following factors: being recognised as a person, empathy, emotional bonding and trust, collaboration, control and empowerment, the role of health professionals, maintaining hope and the family. Heredia-Callejón et al. (2023) argue that what develops, maintains or hinders this relationship has not been sufficiently explored; this also appears to be connected to the following problems. Firstly, the factors identified are discussed in general terms related to outcomes rather than how they might be used in training a CR strategy. Secondly, although the research focuses on individual factors in relation to skills and processes in conducting rehabilitation, how therapeutic skills are brought together in training rehabilitation strategies is not explored.

Moving beyond the previous research attempts to understand how micro-skills and therapeutic relationship processes are weaved together in training a self-regulatory strategy requires new ways of thinking about accessing data, which will allow these questions to be better understood.

Qualitative methods such as interviews would be useful in exploring how therapeutic skills are weaved together in training rehabilitation strategies because they would allow individual therapists to explain how they do this in practice. Unfortunately, a semi-structured interview might not allow a participant the time and space to reflect on how they successfully used the therapeutic relationship with a particular client. The problem that interviews present is the low level of granularity, which can be achieved by questioning alone.

Highly granular data possesses different levels of detail (Keet, 2013). High levels of granularity in medical narratives refer to having access to textual data concerning a patient's previous history, medical history, physical examinations, and progress notes (Tange et al., 1998). Granularity has become important in several research projects involving acute and critical illness (Wang et al., 2019), minority population healthcare needs (Islam et al., 2010), sharing sensitive health data (Tamuhla et al., 2023) and data access in patient centred policies (Khan et al., 2021). For Counselling Psychologists, access to highly granular data might involve a therapist's clinical and process notes, clinical, medical, or psychological history, and notes kept by team members involved in the patient's care. Moreover, gaining access to highly granular data provides rich sources

for constructing case studies.

Yin (2003) outlines three types of case studies: critical cases, unique cases, typical cases, revelatory cases and longitudinal cases. The single case study design is often used in neuropsychology to represent unique cases such as a syndrome (Solovieva & Quintanar, 2017), or critical cases testing a theory, such as Onsworth et al (2008) case involving an individualized self-awareness intervention following a stroke, which was also able to address the therapeutic process. Since unique cases may not occur very often, they allow patterns to be established, and critical cases allow theory to be confirmed, challenged or extended (Yin, 2003). Single case studies may offer high granularity and detailed insights into analysing patterns and complex relationships between variables, but they do not allow generalizability and have limited external validity (Yin, 2003).

In contrast, multiple cases offer more compelling evidence and are more robust (Herriott & Firestone, 1983) in providing rich descriptions and generalizability. Yin (2003) described two types of case studies: holistic and embedded multiple case studies. In a study into the neuropsychological and electrophysiological profiles of adolescents with ADHD, Soto Hernández et al (2022) used an embedded multiple case study design. The study used an embedded design in a qualitative neuropsychological assessment protocol involving 10 cases diagnosed with ADHD, and 10 cases without a diagnosis as a control group. Yin (2003) notes that multiple embedded case studies embedded in surveys can examine both quantitative and qualitative data. Aita et al. (2020) conducted a qualitative survey using mixed methods to examine physician beliefs and practices regarding malingering. The survey incorporated open-ended and closed questions for quantitative and qualitative data collection. Qualitative surveys are not a recent evolution in self-report methods but can be traced back to Kelly's (1955) use of repertory grids in psychology.

This research study will, therefore, use a multiple case study design embedded in a survey and will focus on the following research question, aims and objectives outlined in section four. The case studies will be embedded in the formulation cycle. Each case study could be seen as a post-hoc longitudinal case study since each case can represent four different time points within the formulation cycle. Each stage in the cycle, assessment, formulation, treatment, and evaluation, will represent different stages, which may reveal different changes in the use of the therapeutic relationship to train a self-regulatory strategy.

5. Research focus

5.1 Research Question

The research question is concerned with how psychologists guide the training of self-regulatory strategies using the therapeutic relationship with brain injury patients presenting with dysexecutive syndrome.

5.2 Research Aim

The study aims to describe how psychologists use the therapeutic relationship to facilitate the training process in which patients learn to use a self-regulatory strategy with fluency and regularity, to address executive impairment following a brain injury.

5.3 Research Objectives

1. Describe the detailed features for the most frequent categories of the formulation cycle, the micro-skills of the therapeutic relationship, and the cognitive rehabilitation techniques and training processes used by clinicians in cognitive rehabilitation therapy for dysexecutive impairments.
2. Use a hermeneutic content analysis to identify significant learning experiences in which clinicians successfully helped a patient learn a self-regulatory strategy for dysexecutive impairments.
3. Describe how clinicians integrate and weave together the micro-skills of the therapeutic relationship using a training process embedded within a meta-cognitive or self-instructional protocol.
4. Develop pragmatic theories about how clinicians integrate and weave together the micro-skills of the therapeutic relationship using a training process with ABI patients.

6. Onto-epistemology

6.1 Ontological Concerns

In this study, attempting to integrate realist and relativist philosophical perspectives prompted me to explore the ontological complexities of combining psychological approaches to research founded on both modernist and postmodernist principles.

Realism is the philosophy that objects exist independently of the observer (APA, 2024). I see elements of realism in psychological research underpinned by modernist approaches. Modernist psychology believes that the nature of the mind (cognition, motivation, emotion) or observable behaviours are knowable (Kvale,1992). Modernism presumes principles of how the mind functions can be discovered; these are rational processes according to Weber (Whimster & Lash, 1987), a product of Enlightenment thinking with the emergent philosophy of empiricism (Porter, 2001; Todorov, 2009; Kvale, 1992). The mind in modernism is knowable through systematic empirical inquiry (Kvale,1992); the controlled experiment is the gold standard (Strawbridge & Woolfe, 2010), increasingly known as the randomised controlled trial (Schwartz et al., 1980).

Another name for these empirical approaches is positivism, which assumes the existence of an objective reality as verifiable and quantifiable (Highlen & Finley, 1996). When empirical methods are used systematically, they aim to prohibit ideology or values from entering descriptions of the subject matter under investigation (Kvale, 1992; Highlen & Finley, 1996). Guba (1981) argues that context is stripped from studies in positivist research by sacrificing relevance for rigour. Ross & Ward (1996) argue that underpinning positivism is naïve realism because you cannot see the world objectively without bias or expect others to interpret information rationally.

Relativism could be seen as occupying the opposite pole to realist ontology. Relativism is the belief that reality comprises finite subjective experiences (Denzin & Lincoln, 2005), and the nature of reality can be differentiated from personal or subjective experiences (Guba & Lincoln, 2005). I see elements of relativism in psychology underpinned by postmodernist approaches to research practices. Hanfstingl et al. (2023) argue that postmodern research in psychology has begun to focus on psychological phenomena requiring involvement beyond traditional science, with more focus on a diversity of researchers and their sociocultural research backgrounds, accepting the contextuality of findings and focusing on theory development as well an empirical and a

pragmatic scientific approach.

Kvale (1992) argues that postmodernist psychology believes the mind (cognition, motivation, emotion) or observable behaviours do not exist as independent objects because nothing can exist separately from linguistic devices, discourses and social processes in which they are embedded. Sugarman (2006) sees prevalent styles of reasoning in psychology in which psychological phenomena are seen as private properties of individual mental and physiological interiors. Instead, Sugarman (2017) argues from a Postmodern perspective for a 'Psychology of person' that considers people in relational terms and captures their social, cultural, historical and discursive constitution. Moreover, Sugarman (2017) argues that postmodern research underpinning a 'Psychology of persons' requires the emergence of unique forms of intersubjectivity and self-reflexivity to understand relational complexities in which the individual is embedded.

Holding tensions between ontological positions grounded in the realism of modernity and the relativism of postmodernity requires epistemological methods that recognise independent objects and finite subjective experiences. Counselling Psychology is built on holding tensions, emphasising competing therapeutic theories and resistance to metanarratives (Strawbridge & Woolfe, 2010). Generating understanding as a reflective practitioner and a scientist (HPC, 2015; BPS, 2017) potentially confounds paradigm rigour without careful theoretical consideration towards integrating contrasting epistemological positions. The following section delineates these epistemological positions.

6.2. Epistemological Positions

To address my project's ontologies, realism of the knowable object, and relativism of subjective experience, I will use a mixed epistemology, drawing on positivist and interpretative/constructivist paradigms.

In positivism, objective reality is assumed to be verifiable and quantifiable. Epistemologically, it is concerned with hypotheses, experiments, and correlational studies. Its limitations relate to generalisations from nomothetic data and the neglect of context in pursuit of scientific rigour.

Interpretivist / constructivist reality is constructed relationally, emphasising subjectivity; it assumes there is no single basis to reality. Epistemologically, a reflexive process generates knowledge. The researcher is a facilitator who participates in the co-

creation of knowledge. Its limitations relate to rich descriptions derived from ideographic data, which lack controls, making generalisation problematic.

6.3. Pragmatic Critical-realism

I have addressed holding these different epistemological positions through a rapprochement between positivism and interpretivist / constructivist positions drawing upon Bhaskar's (1989) approach to critical realism. Critical realism could be seen as an overarching position conceptually concerned with ontology and epistemology. Bhaskar's (1989) critical realism is outlined below.

1. Recognition of different ontological perspectives

Research subjects are viewed as consisting of structures and acts of self-determinacy. Equal status is given to both positions.

2. Interconnection between ontological layers

The social world (external factors) depends on social relationships and cultural power for existence. Deterministic forces (internal factors) can transform our perception of reality. Both ontological positions are seen as interconnected.

3. Causal interdependency

Causal interdependency involves researchers being sensitive to their effects on the research process. Wong and Fui (2010) highlight several points aligning Bhaskar's critical realism with pragmatic epistemology.

1. In natural and social sciences, real structures exist and operate independently.
2. Causal claims do not reflect the actual world based on observations made using experiments in a closed system.
3. Causal powers cannot be observed directly; they should only be theoretically inferred by examining the relational effects of human agency.

Wong and Fui (2010) also view critical realism as pragmatic due to its concern with fallibilism. Roberts (2014) views fallibilism in critical realism as 'responsible rationality' (Manicas, 2009) because our knowledge might be wrong or misleading. Fallibilism is important because there is always a lack of symmetry between theory and its predictive powers (Wong & Fui, 2010). Kvale's (1995) pragmatic view of critical realism is the possibility of specific, local, personal, and community forms of truth. Elder-Vass (2022) is critical, highlighting how, in valuation studies, pragmatic influences have tended to focus on micro levels at the expense of macro levels, emphasising an approach that embraces both levels. Wong and Fui (2010) argue that pragmatic-critical realism

emphasizes researchers engaging in critical reflective thinking by taking an active and personal role in research. This approach challenges intellectual assumptions, opening 7.4.1 the opportunity for various ways to combine qualitative and quantitative methods and inductive and deductive approaches, with no single method seen as superior. Baert (1998) is critical, arguing that this type of realism excludes nothing but extreme positivism. Maxwell and Mittapalli (2010) align with my thoughts, arguing that although pragmatic-critical realism can use various methods, its implications for the conduct of research are more important. Deduction, induction, and abduction form the foundation of pragmatic-critical realism, which I will address next.

6.4. Deduction, Induction, and Abduction

Deduction, induction, and abduction as a trio emerged in Charles Sanders Peirce's writing (Peirce, 1960), but Asvoll (2013) traces Peirce's development of this trio to a series of lectures on pragmatism at Harvard University in 1903. Induction and deduction, as a basis of scientific tradition in natural sciences (Chalmers, 1985), is where Pierce derived these concepts. Abduction is a detective metaphor (Eco & Sebeok, 1985), which links to everyday practical consequences and experiences (Asvoll, 2013) in Peirce's writing. Bateson (1979) builds on Peirce's concept of abduction, arguing that human thoughts cannot emerge without abduction since, as a verbal metaphor, it determines our understanding of reality.

Morgan (2007) outlines a pragmatic paradigm for connecting positivism with constructivism, combining induction with deduction, subjectivity and objectivity, context and generality through a pragmatic approach based on abduction, intersubjectivity and transferability outlined in Table 1 below.

Table 1

Pragmatic Epistemological Approach

	Qualitative Approach	Quantitative Approach	Pragmatic Approach
Connection of theory and data	Induction	Deduction	Abduction
Relationship to the research process	Subjectivity	Objectivity	Intersubjectivity
Inference from data	Context	Generality	Transferability

Morgan, 2007. *Paradigms Lost and Pragmatism Regained*. Copyright 2007 by the Journal of Mixed Methods Research.

1. Abduction

Abduction combines qualitative and quantitative methods sequentially using the inductive goals of a qualitative approach based on the deductive results from a quantitative approach, moving backwards and forwards between qualitative and quantitative data to allow connections to be made (Morgan. 2007). Epistemologically, it is limited by the subjectivity of the best explanation (Magnani, 2001), a lack of clear guidelines for establishing this (Thagard, 1978) and the potential for unfalsifiable explanations (Douven, 2017).

2. Intersubjectivity

Intersubjectivity is the process of creating shared meaning. Since we cannot fully separate ourselves as researchers from our values and ideals embedded in personal history and social and cultural practices, we cannot achieve complete objectivity or subjectivity. Therefore, intersubjectivity highlights what might be implicit or explicit between the researcher and research participants (Morgan, 2007). Epistemologically, it is limited by the subjective core of experience remaining inaccessible to others (Gallagher, 2012), as well as problems related to cultural variability (Gadamer, 1989) and interpretative ambiguity (Ricoeur, 1976).

3. Transferability

Transferability allows strong relationships to be built between causality in quantitative data and trustworthiness and reliability in qualitative data. Transferability aims to avoid the dichotomy of focusing the research on evaluations based on context or generalizability, highlighting how an emerging knowledge base can be transferred to other settings. (Morgan (2007, Shannon-Baker, 2015). Epistemologically, it is limited due to fundamental differences between qualitative and quantitative paradigms (Bryman, 2007) and sampling (Teddlie & Tashakkor, 2009), challenges of context-specific data (Lincoln & Guba, 1985), subjectivity in interpretations (Creswell & Plano Clark, 2011), and the absence of a framework for assessing transferability (Onwuegbuzie & Johnson, 2006).

7. Methodology and Design

7.1 Introduction

The research aims to describe how clinicians use the therapeutic relationship to facilitate the training process of helping patients learn a self-regulatory strategy to aid an executive impairment due to a brain injury. The design uses a qualitative approach grounded in non-experimental methodology, utilising discovery-oriented research questions. This study draws on both realist and relativist ontological assumptions about the nature of reality. Two assumptions underpin this study.

Firstly, the study assumes that using a post-positivist paradigm allows for quantitative and qualitative treatment in the questionnaire, enhancing but not compromising the interpretative depth of a qualitative approach. Moreover, using realist assumptions about reality will allow the broader context in which clinicians use cognitive rehabilitation therapies to be quantified by their frequency, since visual summaries can enhance the findings by illustrating patterns in the data as long as it does not contradict the interpretative findings of a thematic analysis (Braun & Clark, 2006), and because numeric representations can add clarity and aid pattern recognition, without compromising qualitative depth (Sandelowski et al, 2009). In addition, Guest & McQueen (2014) argue that the inclusion of quantitative techniques in thematic analysis adds analytic breadth and rigour since interpretation is supported by the data.

Since self-report measures are concerned with describing what clinicians *report* that they do, rather than what they do, quantifying these findings can only approximate the contextual factors (assessment, formulation, interventions) in which clinicians are embedded. Secondly, the study is also based on the assumption that using an interpretivist/constructivist paradigm will allow for detailed descriptions to be co-constructed about the participant's experiences, as well as the wider clinical context in which they learn to successfully help a patient learn a self-regulatory strategy for a single executive impairment. Moreover, using relativist assumptions about reality will allow for descriptions to be constructed about how clinicians integrate and weave together the therapeutic micro-skills within the self-regulatory training process. This process is also assumed to be embedded within a meta-cognitive/self-instructional intervention, and the relationships between these factors can be co-discovered and described.

7.2. Methodological Reflexivity

This section explains my connection to the critical realist onto epistemology underpinning my methodology and my motivation for pursuing a mixed methods approach to my research study.

Growing up in the green belt of a South Yorkshire city, I lived close to the boundary of two counties. I, therefore, had access to the countryside of Derbyshire, the Peak District National Park, and the large industrial city of Sheffield. I always felt like I lived between two different ways of seeing and being in the world. As a child, I played in the woods and farmers' fields close to my home, and went shopping in a big city from time to time with my parents. Moreover, I always felt like a city and country person, and I still feel like this as an adult. Strangely, rural and urban spatial differences have never entirely felt like separate, clearly demarcated spatial experiences in my mind. Many of Sheffield's suburbs are built on hills, with the city nestled in the valley of seven hills. Curiously, in some of the older suburbs of Sheffield, it is therefore possible to have the experience of having one foot in both the rural and the urban, depending on your level of elevation and perspective. My personal experience of holding tension between things that are ostensibly demarcated by differences also highlighted their interconnectedness in my mind. This is a concern and interest which I am still preoccupied with. Moreover, onto epistemologically, I am interested in how you can combine very different things and make them work together in a coherent whole whilst retaining their unique differences while attempting movement towards a synthesis.

Bhaskar's (1989) approach to critical realism, which recognises different ontological perspectives and the interconnection between ontological layers of reality, resonates with my earlier experiences of holding the tensions between different ways of being and seeing the world. Bhaskar's (1989) approach also offers some ideas for working with my particular onto-epistemological concerns.

Moreover, the rural independence of ploughing one's own field and the urban interdependency of civic complexities appealed to me as ways of being in the world. Therefore, holding these different ontological layers also made me concerned about observing the world with a particular curiosity for the specific details and the context or natural essence of things.

I think a concern for the details and the essence of things was also significantly shaped by my junior school education (ages 7 – 12). Although this level emphasised

numeracy and literacy, my school had an innovative approach to teaching these subjects grounded in arts and crafts, drama and music, sciences and sports and practical skills for life. These school subjects were also underpinned by a discipline geared towards observation, experimentation, questioning, and personal expression. I think this laid the foundation for a natural interplay between measuring and describing the nature of the world in both numbers and words. We were also fortunate to be in the Greenbelt since my junior school was close to the woods, and during the spring and summer months, we would visit this outdoor resource for nature classes. I think school field trips to the wooded areas were pivotal in bringing together both the quantitative and qualitative, as well as the inductive and deductive, in my mind as a child. Morgan's (2007) abduction approach for combining qualitative and quantitative methods sequentially by using the inductive goals of a qualitative approach based on the deductive results from a quantitative approach and vice versa, I think we're alive in these nature classes.

This positioning between quantitative and qualitative approaches has led to my research being situated in the postpositivist paradigm. The implications of the positivist paradigm on my research are the seeking out of multiple perspectives and the questioning of research findings, which are treated as provisional rather than definitive (Strauss & Corbin, 1994). Applying the methods from the positivist paradigm aligns with my belief that objective reality in my research focuses on multiple methods emphasising discovery and theory verification.

7.3 Research Questions and Data Collection

The following research questions were constructed to address the gaps in our understanding of how the therapeutic relationship is used to train self-regulatory strategies in treating executive impairments. Research questions were designed to gather qualitative data as rich descriptions, using visual summaries in the form of frequency charts to illustrate patterns emerging in these descriptions.

1. How do clinicians help patients learn a self-regulatory strategy for an executive impairment?

2. What are the main categories and emerging sub-categories related to the formulation cycle, the micro-skills of the therapeutic relationship, meta-cognitive or self-instructional techniques, and the internalisation training process?

4. What are the detailed features of the most frequent categories and subcategories of the assessment and formulation process, the micro-skills of the therapeutic relationship, meta-

cognitive or self-instructional techniques, and the internalisation of the training process.
5. How do psychologists integrate and weave together the micro-skills of the therapeutic relationship with the self-regulatory training process embedded within a meta-cognitive or self-instructional protocol.

7.4 Research Design

7.4.1 Research Framework

The research study will use an exploratory and descriptive case study design embedded within a survey defined by Yin (2003). A case study within a survey allows each participant to consult their documents and archival data concerning their chosen patient, whom they will describe in the qualitative research questionnaire. This design will allow different professional contexts in which cognitive rehabilitation therapy is conducted to be examined, as well as the many variables involved in the formulation cycle in which the practice of cognitive rehabilitation therapy is embedded.

A multiple case study design will be used, with multiple case studies embedded in a survey obtained from the research participants. The case study will use an embedded case design defined by Yin (2003). The embedded design will allow for multiple contexts to be examined and multiple units of analysis to be embedded within each case study context. The core features of Yin's (2003) case study method are that it allows the investigation of in-depth phenomena in a working context, using multiple sources of evidence and prior theoretical ideas to guide data collection and analysis.

Barker, Pistrang & Elliot (1994) also describe case study designs used in clinical and counselling psychology research as small n-designs. The case study used in this research will be oriented towards what Barker et al. (1994) regard as a systematic case study. The advantage of systematic case studies is that they often address therapy processes and therapy change processes Barker et al. (1994). Moreover, the research study will focus on how the therapeutic relationship in cognitive rehabilitation therapy facilitates the change agent (the self-regulatory intervention). Furthermore, another reason for choosing a case study design is that it allows for both an interpretative and a positivist epistemological approach to be used within the design Crowe, Cresswell, Robertson (2011). Moreover, Yin's multiple-case designs also allow for replication logic, which strengthens external validity, and maintaining a chain of evidence allows for transparency, providing high levels of reliability. Data analysis using Yin (2003) method

also allows for pattern matching, time-series analysis and cross-case synthesis (for multiple cases).

7.4.2 Crafting Rigour: Validity, Reliability and Trustworthiness

Barker et al. (1994) outline some of the problems that can affect a case study's internal validity, including the reliance on memory, anecdotal data collection and narrative smoothing, where as Denzin & Lincoln (2005) reconceptualised of internal validity as credibility goes some way to addressing this problem in qualitative research. Although empirical rigour is sort in this case study design by adherence to concepts of construct and internal validity, external validity, and reliability using Yin's (2003) tests.

For example, construct validity is established using multiple sources and chains of evidence. Internal validity is established using pattern matching and explanation building. External validity is established through replication logic using multiple case studies, and reliability is established using a case study protocol. However, in pursuit of methodological integrity Levitt et al., 2018) argues the case for combining rigour with credibility as well as transparency. To achieve greater methodological integrity this design will approach the assessment and implementation of rigour, by comparing Yin's (2003) case study criteria with Lincoln & Guba's (1985) criteria for trustworthiness using the following quality dimension analogues: construct validity/credibility, internal validity/credibility, external validity/transferability, reliability/dependability and objectivity/confirmability. How these analogues were achieved is outlined further in Appendix I.

7.4.3 Sample Size

Yin (2003) argues that it is incorrect to consider multiple cases like multiple survey respondents, suggesting that sampling logic governing a survey or experiment needs to be replaced with replication logic. Yin (2003) defines replication logic as involving the careful selection of case studies so that they either a) predict similar results (A literal replication) or b) predict contrasting results but for predictable reasons (a theoretical replication).

Concerning the number of case studies needed for literal or theoretical replications, Yin (2003) suggests using two to three cases for literal replications and four to six for theoretical replications. In a multiple-case study design, Yin (2003) advocates using six to ten cases, which would allow for the exploration of literal and theoretical replication.

The focus of the research is both exploratory and phenomenological, as it aims to define and describe the aspects that constitute the therapeutic relationship and to uncover how these can be effectively utilised to train a self-regulatory strategy successfully. Moreover, in determining the sample size for this study, I have considered how a sample of ten research participants compares to other sample sizes within a phenomenological framework. This has been considered because it is important to address, as Collins, Onwuegbuzie, and Jiao (2006) have noted, that sample sizes in qualitative research are controversial.

Within the Counselling/Clinical psychology research literature, Barker, Pistrang & Elliot (1994) recommend 5 to 10 samples for rich protocols derived from interview data and 20 to 50 samples for data derived from thin protocols involving interviews or written questionnaire data. Braun & Clarke (2013) recommend 10 to 50 samples for qualitative research projects using participant-generated text employing a thematic analysis. Sandelowski (1995) argues that sample sizes in qualitative research should not be too small to obtain data saturation. Secondly, Teddlie and Yu (2007) argue that samples should not be too large to undertake a deep case-oriented analysis.

Since the qualitative research questionnaire to be employed in this research study aims to generate thick text-based descriptive responses, the use of 10 research participants appears appropriate for the exploratory phenomenological nature of the research. Since the research is also explanatory, 10 research participants are also appropriate since the explanatory questions are about developing hypotheses and propositions rather than testing them. Using ten research participants will also likely lead to data saturation since it will allow for deep case-oriented analysis.

7.4.4 Rationale for a Qualitative Questionnaire Design

A qualitative questionnaire was developed for participants to share their experiences using the therapeutic relationship to enhance training in self-regulatory strategies. This was part of a cognitive rehabilitation intervention for a patient with executive impairments due to brain injury.

Open-ended questions were developed using the formulation cycle framework: assessment, formulation, interventions, and outcomes. This approach allows respondents to explore a wide range of answers without the constraints of closed-ended questions. It encourages participants to qualify their responses and express complex ideas. The questionnaire also includes theoretical descriptions to prompt diverse insights, enabling

quantification for pattern recognition and respect for individual opinions during data analysis. However, it could be argued that relying on non-interview data limits the richness of insights, as it prevents in-depth probing during the co-construction of meaning (Bryman, 2001).

The strength of using a questionnaire instead of interviews is that it allows respondents more time to reflect on their learning and refer to their clinical case notes, leading to structured reflective writing on one case. Open-ended questions aim to reduce research bias by enabling participants to share their experiences in their own words. Grounding the research in a theoretical context constrains the questions, but breaking them into discrete units facilitates systematic reflection. This approach allows for exploring different ontological layers and comparisons between theoretical constructs and those used by the respondents.

7.4.5 Questionnaire Structure

The questionnaire questions were designed and structured under the following eight headings and sub-headings outlined below. The following list summarises the questionnaire, which can be found in Appendix E.

1) Nature of the brain injury
2) Assessment of executive functions
3) Formulation of dysexecutive impairments
4) Cognitive self-regulatory strategies
5) Use of the therapeutic relationship
6) Training patients to use a cognitive self-regulatory strategy
7) Intervention outcomes
8) Learning from professional experience

The complete list of question items which comprise the questionnaire can be found in Appendix E

7.5 Rationale for a Qualitative Approach

7.5.1 Introduction

The literature review highlighted the paucity of research into the role of the therapeutic relationship in cognitive rehabilitation therapy and helping patients learn a self-regulatory strategy. The literature review also pointed to the lack of clarity concerning the range of micro-skills[8] that constitute the therapeutic relationship and how these are embedded in the training process of helping individuals learn a self-regulatory strategy. Although a framework exists for a training process to help patients learn a self-regulatory strategy Sohlberg & Mateer (2001), the training framework does not explain how this is integrated into a metacognitive or self-instructional intervention. The framework also does not explain how the micro-skills of the therapeutic relationship are to be used within this framework.

A qualitative method was developed to address the lack of clarity concerning the micro-skills of the therapeutic relationship and how the relationship is used to help train a self-regulatory strategy. The existing theory outlined in Appendix F formed the basis of the qualitative questionnaire, which can be found in Appendix E. The theory also formed the basis of open-ended questions 1 to 8 concerning the micro-skills of the therapeutic relationship embedded in the formulation cycle. Thirdly, the questions were analysed into thematic categories using a qualitative hermeneutic-content analysis. The content analysis allowed for graphical representations of the data to highlight patterns, which were then used to support the breadth and rigour in interpreting the data phenomenologically. This then allowed for detailed descriptions of the contest in which the therapeutic intervention skills were used successfully to help a patient learn a self-regulatory strategy.

The qualitative approach is congruent with the project's pragmatic critical-realist approach to epistemology. Moreover, quantitative and qualitative methods are used sequentially to make connections in the research data. The deductive findings from the quantitative visual summaries (applied questions 1 – 8) are then used to inform the inductive goals of the qualitative methods (applied to question 1 to 8). In addition, for connections to be made between the different types of data, a pragmatic process of abduction is required, which involves moving backwards and forwards between inductive

8 The microskills of the therapeutic relationship include: rapport building, psychoeducation, and teaching relaxation techniques, validation of patient experiences, co-construction of tasks, motivating your patient, helping patients reflect, use of attentiveness, empathic connections, paraphrasing, summarising, encouragement, linking and Socratic questioning.

and deductive processes with regards to the data. This is similar to the extrospection process described by Ross & Valle-Tourangeau (2021) in which data coding follows a non-linear and gradual process in its development. This is also important for coding and generating themes within cases and for cross-case comparisons using Yin's (2003) case study method.

7.6. Qualitative Content Analysis

7.6.1 Introduction

Smith (2003) defines content analysis as a method in psychology for coding data into closed categories to summarise findings. He outlines two approaches: a bottom-up approach, where categories emerge from the data, and a top-down approach, where categories come from the researcher's theoretical framework. Content analysis is appropriate for this study as it can transform qualitative data into quantitative data. Kleinheksel et al. (2020) note that it allows for interpretive data processing. Psychologists have utilised content analysis for various data types, including diaries and verbal reports (Coolican, 1995). This study's open-ended qualitative questionnaire combines elements of a reflective diary and text-based descriptions.

7.6.2. Rationale

Kondracki, Wellman, & Amundson (2002) note that texts are rich data sources, revealing valuable insights about specific phenomena. Kleinheksel et al. (2020) emphasise interpreting hidden meanings within the text, while Hsieh and Shannon (2005) highlight that the qualitative analysis process involves engaging with the text through theories and mental schemas to enhance understanding.

Qualitative content analysis aligns with my pragmatic-critical realism approach. It enables the use of Morgan's (2007) abduction process, allowing for a sequential combination of qualitative and quantitative methods. Potter & Levine-Donnerstein (1999) highlight two types of content analysis: latent pattern and latent projective. Latent pattern analysis focuses on identifying objective patterns in the text, while latent projective analysis involves the researcher's subjective interpretations, uncovering unseen meanings.

Roberts et al. (2019) adopt a hermeneutic-content analytic approach that integrates quantitative and qualitative phases, employing a mix of inductive and deductive thematic analysis based on Fereday and Muir-Cochrane (2006). This qualitative content analysis will be used in the current study. Deduction starts with theoretical assumptions, leading to hypotheses, data analysis, and potential acceptance or rejection of theories based on findings. In contrast, induction begins with observations to identify patterns, which inform tentative hypotheses and theory generation outlined in table 2 below.

Table 2

Dual Process of Deduction and Induction

Deduction	Induction
Theory	Observation
Hypotheses	Patterns
Observations	Hypotheses
Confirmation	Theory

Miessler, 1999. *The difference between deductive and inductive reasoning*. (https://danielmiessler.com/blog/the-difference-between-deductive-and-inductive-reasoning). Copyright 2007 by Daniel Miessler.

7.6.3. Strengths

Qualitative content analysis has several strengths, particularly in addressing the criticism of the quantitative approach's contextual neglect. Roberts et al. (2019) highlight that their hermeneutic content analysis examines individual data parts and their relation to the entire dataset. It focuses on identifying relevant themes within the research context and theoretical framework and emphasises the description and interpretation of data to create meaning. Another advantage is the use of intersubjectivity to create shared meaning, acknowledging both implicit and explicit elements between researchers and participants. Personal values, histories, and cultural practices are actively discussed in the research process. Mishler (1996) emphasises that this intersubjective approach involves co-creating meaning between the researcher and the text.

7.6.4. Limitations

Qualitative content analysis has several limitations. Roberts et al. (2019) suggest that a researcher's strong ideology may lead to biased interpretations of data. Kleinheksel et al. (2020) note that evaluative standards often overlook the validity and reliability common in positivist quantitative research, using the term 'trustworthiness' instead, encompassing credibility, transferability, dependability, and confirmability. Moreover, this can create complexity in assessing the quality and rigour of the research.

7.7 The Participants

7.7.1 Study Sample

The study sample consisted of psychologists, occupational therapists, speech therapists and cognitive rehabilitation therapists. All sample members had experience conducting rehabilitation therapy while working in private practice with brain injury patients presenting with executive impairments

7.7.2 Inclusion Criteria

The criteria used to select participants included the following four characteristics concerning professional and clinical experience:

1. Two years post-qualification experience as a qualified psychologist, cognitive rehabilitation therapist, occupational therapist or speech-language therapist.
2. Some experience working with adult patients presenting with an executive impairment due to an acquired (Traumatic or non-traumatic) or non-acquired brain injury. The Department of Health and Social Care (2022) defines brain injury as a non-degenerative injury to the brain which has occurred since birth and consists of either traumatic or non-traumatic injuries. Traumatic brain injuries include road traffic injury, assault, falls and accidents at home. Non-traumatic injuries include strokes, vascular accidents, brain tumours or infectious diseases
3. Experience conducting cognitive rehabilitation interventions 1 to 1, or with the patient and their spouse, parent, caregiver or family, but not as part of group therapy.
4. Experience in the process of training patients to use a self-regulatory strategy. This process may have started in an abstract way in the consulting room or clinic to help the patient devise, pilot or learn a compensatory strategy. The main part of the therapeutic intervention should have involved helping the patient transition to use, manage and monitor the compensatory self-regulatory strategy, which was then successfully employed by the patient in everyday activities such as home, work or their social life.

7.7.3 Participant Profiles

The criteria used to select participants included the following four characteristics concerning professionals. The participant's profiles are outlined in Table 3

Table 3

Participant Profiles

Participant	Gender	Profession	Nature of the Brain Injury	Severity of Executive Impairments
Therapist 1	Female	Clinical Psychologist	Traumatic Brain Injury	Moderate to Severe
Therapist 2	Male	Clinical Psychologist	Traumatic Brain Injury (Complex)	Severe
Therapist 3	Male	Clinical Psychologist	Traumatic Brain Injury	Moderate to Severe
Therapist P	Female	Clinical Psychologist	Traumatic Brain Injury	Moderate
Therapist 5	Male	Cognitive rehabilitation therapist	Traumatic Brain Injury	Severe
Therapist 6	Female	Speech & language therapist	Hemorrhage & Stroke	Moderate to severe
Therapist 7	Female	Speech & language therapist	Brain Infection	Moderate to severe
Therapist 8	Female	Speech & language therapist	Cerebral Palsy & acquired brain injuries	Moderate
Therapist 9	Male	Occupational therapist	Mild Traumatic Brain Injury	Moderate
Therapist 10	Female	Occupational therapist	Autism with spinal cord injury	Moderate

7.8 Sampling Scheme

7.8.1 Stratified Purposeful Sampling

Yin (2003) argues that a rich theoretical framework underpins replication logic, and this is devised in order to make explicit the particular phenomenon likely to be found (a literal replication), as well as those conditions in which it is not likely to be found (a theoretical replication). Moreover, Yin (2003) argues that the theoretical framework also becomes the vehicle for generalizing to new cases, like the role played by cross-experimental designs. The theoretical framework for this research project can be found in both the design of the case study embedded in the survey questionnaire, as well as the theory examined in the literature review.

Collins, Onwuegbuzie & Jiao (2006) argue that the criteria for sample size in qualitative research is not based on probability computations but represent expert opinion. Collins et al (2006) also suggest that sampling designs play a pivotal role in determining which type of generalizations are justifiable. For example, whereas large and random samples allow statistical generalizations, small and purposive samples, Collins et al. (2006) argue, tend to facilitate analytical generalizations and case-to-case transfers.

This research project, therefore, used a stratified purposeful sampling scheme to select participants with expertise, skills, and knowledge concerning cognitive rehabilitation therapy. The framework will be divided into strata to obtain relatively homogenous subgroups. A purposeful sample will then be selected from each stratum. The subgroups will include the following four strata: psychologists, occupational therapists, speech therapists and cognitive-rehabilitation therapists. A purposeful sample was selected from each stratum. The purpose sample will consist of selecting critical cases from the four strata. Critical cases were based on five characteristics because these will provide compelling insight into the phenomenon of interest concerning the use of the therapeutic relationship to facilitate the training of a self-regulatory strategy.

7.9 Ethical Considerations

In March 2023, the School of Social Science and Professions research ethics committee at London Metropolitan University approved this research. The following ethical considerations were considered when recruiting research participants. The research was conducted in accordance with the BPS Code of Human Research Ethics (2014), the ethical guidelines outlined by the Health and Care Professions Council (2015), and the Data Protection Act (2018).

8. The Analytic Process

8.1 Qualitative Analysis

8.2.1. Rationale for a Hermeneutic Content Analysis

There are two reasons for using a qualitative hermeneutic content analysis. Firstly, a hermeneutic approach to qualitative content analysis allows for epistemological consistency with the research's underlying philosophical approach, which draws on pragmatic critical realism. Secondly, a hermeneutic approach facilitates the integration of quantitative (category frequencies) and qualitative (rich descriptions) data, thereby enhancing the validity of the case study methodology. This section begins by outlining the process of code creation and testing in thematic analysis, then shows how this was integrated into the pragmatic theory construction process through cross-case analysis involving literal and theoretical replication.

8.2.2 Process of Code Creation and Testing

The approach to the thematic content analysis is based on Roberts et al (2019) method for conducting a hermeneutic qualitative analysis. I will also outline how this approach was combined with Yin's (2003) case study methodology.

1. Stage 1 - Initial Code Sources

The first stage involved creating a preliminary codebook through a deductive method. This involved gathering information from multiple sources (literature review, theory, and findings from questions 1 to 8). These were analysed as examples of literal replication[9] to substantiate the development of preliminary codes. When themes emerged from some sources but not others (e.g., present in the raw data but not in the literature), these differences were interpreted as theoretical replication, necessitating a closer look at their contextual or theoretical significance. The initial codebook, therefore, aimed to represent shared and contrasting ideas, providing a basis for analytic generalisation in later stages of the analysis.

2. Stage 2 - Initial Code Development

The initial section of the code book development aimed to achieve saturation of the code/themes, using deductive processing involving the following operations. Firstly, consulting the research literature, the research questions, and the content analysis results.

[9] Literal replication in Yin's case study method involves selecting similar cases to test hypotheses and validate findings. This approach reinforces the reliability of research conclusions, by ensuring that consistent outcomes across cases to strengthen the generalizability of the results.

This involved gathering emerging themes from the literature review and the content analysis and reflecting on them while reading a sample of the raw data. Secondly, searching for consistencies and anomalies in the data. In line with Yin's (2003) replication logic, consistencies that appeared across multiple transcripts or sources were interpreted as literal replication, indicating repeating patterns and possible themes. In contrast, anomalies were not treated as outliers but as evidence of theoretical replication, highlighting different sources of meaning or contexts within the data. Thirdly, this involved creating codes using the literature review to inform code development and determining whether the emerging codes fit with the codebook or whether more codes needed to be added. This was achieved by reading the data transcripts until theme saturation was achieved. Recurring themes were identified and coded. Non-recurring comments representing significant thematic differences were retained to reflect theoretical replication. This ensured that the developing codebook captured both recurring patterns and context-specific contrasts.

3. Stage 3 - Code Book Development

This focused on the systematic development of the codebook through the labelling, description, and definition of codes derived from the raw text. Codes were written in accordance with Boyatzis' (1998) framework, including the following elements: label, definition, description, qualifications or exclusions, and illustrative examples. Using Yin's (2003) replication logic, codes that emerged across multiple cases or data sources were seen as evidence for literal replication and assigned to the codebook as potential thematic constructs. Using Yin's (2003) theoretical logic, codes that emerged in some but not other cases and variations that aligned with theoretical expectations were taken as evidence of theoretical replication. These differences in emerging codes and thematic constructs reflected the continuity of themes across both contexts and the significance of differences across cases. Table 4 provides an example of the theme rapport constructed from the data. This example demonstrates how the code emerged from its continuity across the data (Literal replication) and also context-specific contrasts (theoretical replication).

Table 4

Theme Rapport

Code	Definition	Description	Qualifications or Exclusions	Examples
Rapport	Development of the therapeutic alliance	Careful choice of discussion topics	1. Collaborative working on the rehabilitation goals 2. Choosing topics for discussion, which the client is interested in 3. Empathy with emphasis on understanding the challenges experienced by the client 4. Commenting on the progress	Understanding resistance *"My client is very distrusting of all people... I have overcome this by allowing time and using active listening skills, paraphrasing, reflecting back what I have understood, being very curious and asking questions."*

4. Code Book Application

The final section of the code book development involved applying the codes to the complete data set. The full codebook can be found in Appendix F. This section also involved refining the codes with an intercoder co-peer researcher. By reviewing examples of each theme and subtheme, coders sought agreement until an accurate thematic representation was reached.

The application of the codebook involved the following inductive steps. Firstly, codes were applied to the raw dataset. The codebook was used to determine whether the codable units fit it and whether new codes were needed. In line with Yin's (2003) logic of replication, codes and themes that consistently appeared across multiple cases were interpreted as evidence of literal replication.

Secondly, searching for patterns in the raw data involved connecting coded themes to emerging patterns by sorting, clustering, and comparing. Searching for patterns from the raw data involved clustering and comparing coded themes. Differences between cases or stages were not treated as anomalies but as instances of theoretical replication. For example, variations in the sub-themes of *Rapport* between the assessment and treatment stages (Table 8) were interpreted as theoretical differences that added explanatory depth.

Thirdly, individual inferences were further developed by seeking evidence to support them, such as patterns within and between coded sub-themes, to allow rich interpretations to emerge. Table 5 shows that clustering into assessment and treatment stages provides further evidence for the role of rapport in raising awareness. Therefore, evidence for literal replication highlighted the continuity of patterns across cases, whilst theoretical replication highlighted the contextual conditions under which contrasting experiences emerged.

Table 5

Clustering Hypotheses

Hypothesis (Rapport raises a patient's awareness)	
Assessment Stage	Treatment Stage
Sub-themes of Rapport • Systemic working • Working with resistance	Sub-themes of Rapport • Empathy • Collaborative working • Developing understanding

Table 6 shows the emergence of rich, contrasting interpretations of *Collaboration* and *Preventing perseveration* across participants, illustrating how differences in the data contributed to understanding the role of rapport in raising patient awareness in the assessment stage.

Table 6

Developing Rich Interpretations.

How Rapport Raises Awareness in the Assessment Stage	
Systemic Working	Working with Resistance
Therapist 4 described working with a client and a significant other, which helped the client develop insight into their difficulties.	Therapist 10 described building a safe relational space to mitigate the resistance to therapeutic engagement.

8.2.3 The Development of Pragmatic Theories

1. The Theoretical Basis

This section begins by explaining the theoretical basis of pragmatic theory development. Then gives an example of how a theory emerged to explain the role of the therapeutic relationship in the assessment stage of training a self-regulatory strategy, through pattern clustering, involving literal and theoretical replication in cross-case analysis.

Coker, Rudin & King, G. (2021) view theory as emerging through multiple inferences. Green & Hall (2010) adopt a pragmatic stance toward inferences, arguing that they should produce actionable knowledge that can improve the practical problem under study. Morgan (2007) argues that the theory-data connection is inductive, deductive and abductive (Inductive and deductive), and the basis of inference is context (context-specific), generality (generalizability) and transferability (applicable to other persons and contexts based on similarity of research conditions). Moreover, Carpiano & Daley (2006) challenge the interchangeable use of the terms 'conceptual framework' and 'theory'. They argue that conceptual frameworks identify sets of variables and their relationships. In contrast, theory explicates a denser and more logically coherent set of variables, including direction, hypotheses, and how variables covary. Moreover, theories are nested within conceptual frameworks that make assumptions to explain processes and predict outcomes.

In this section of the analytic process, inferences from the qualitative data will be used to build conceptual frameworks, which will then be used to construct a series of pragmatic theories. The conceptual frameworks within which theories are nested are then explained in rich interpretative detail, forming the main body of the findings section. The rich interpretations will then be used to explain how clinicians integrated and weaved together the micro-skills of the therapeutic relationship to successfully train a cognitive rehabilitation therapy intervention for executive impairments.

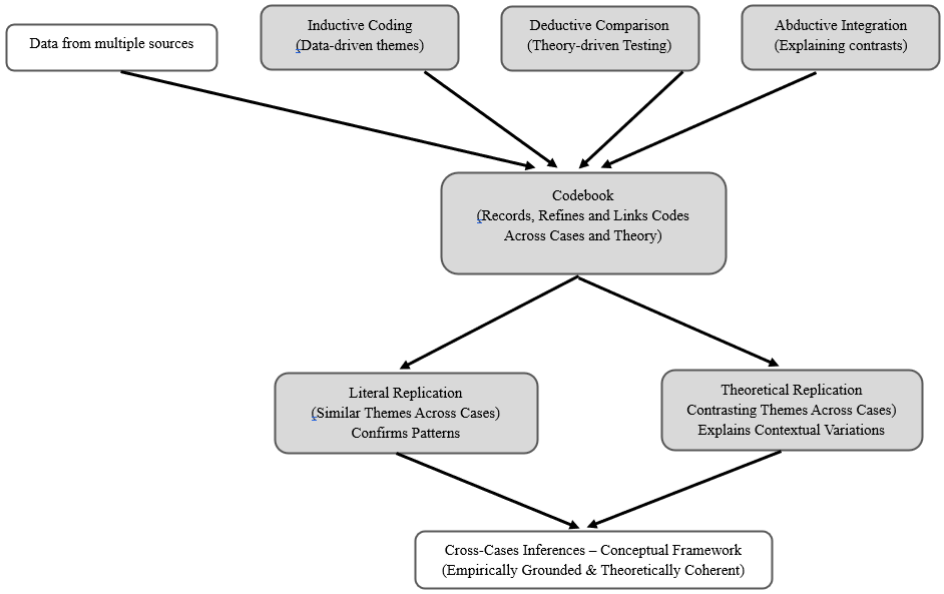
2. Developing a Conceptual Framework

The process of developing a conceptual framework is illustrated in Figure 1. The diagram highlights how inductive, deductive, and abductive reasoning, using cross-case replication, generate inferences that inform a conceptual framework through pattern clustering. Firstly, developing inferences begins with inductive coding, where patterns derived from multiple cases are used to refine emerging themes in the codebook. In addition, making deductive comparisons allows these patterns to be examined against existing theoretical constructs. Furthermore, abductive thinking enables the interpretation of unexpected or conflicting findings. Secondly, by conducting cross-case analysis, literal

replication (recurring themes across cases) highlights the generalisability and empirical support for the findings. In contrast, theoretical replication (systematic contrasts across cases) highlights the different meanings and theoretical boundaries to these differences across various contexts. Combining these processes through cross-case inferences, therefore, allows a conceptual framework to emerge which is empirically and theoretically grounded in the data.

Figure 1

Developing a Conceptual Framework



3. Identifying literal replication.

The following process highlights how literal replications are identified in the data. Figure 2 shows the frequency of each theme across the ten cases. The bar chart shows the most frequently repeated themes, providing evidence of literal replication across the dataset. For example, working with the client's awareness and insight appeared to represent an important core experience shared across all ten cases, highlighting this theme as an overarching focus in the therapeutic relationship during the formulation cycle's assessment phase. This is complex; 'Working with the impact of client awareness' was expressed differently across the 10 cases.

Figure 2

Therapeutic Relationship Challenges

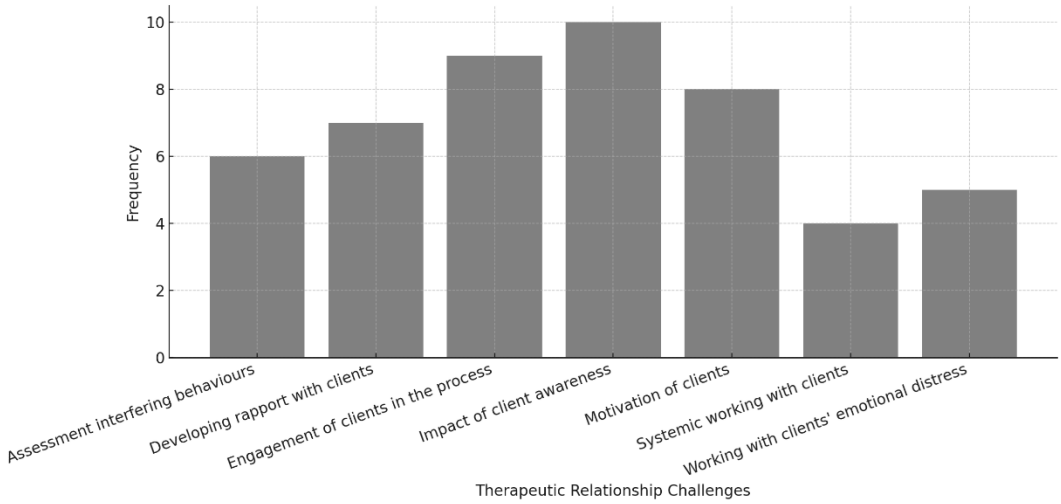


Table 7 presents the distribution of themes across the ten cases. The matrix enables comparison at the case level (row totals) and the theme level (column totals). Cases such as Case 4, 7 and 10 exhibit high thematic richness (six or seven themes present), cases 1, 5, 6 and 9 show good thematic content (Five or four themes present), whilst cases 2, 3 and 7 show fewer themes (two or three themes present), suggesting differences in the breadth of experiences reported.

Table 7

Frequency Distributions

	Assessment Interfering Behaviours	Developing Rapport with Clients	Engagement of Clients in the Process	Impact of Client Awareness	Motivation of Clients	Systemic Working with Clients	Working with Client's Emotional Distress	
Case 1		✓	✓	✓	✓			4
Case 2	✓			✓		✓		2
Case 3	✓		✓	✓	✓			3
Case 4		✓	✓	✓	✓	✓	✓	6
Case 5		✓	✓	✓	✓		✓	5
Case 6		✓	✓	✓	✓	✓		5
Case 7	✓		✓	✓	✓			3
Case 8	✓	✓	✓	✓	✓	✓	✓	7
Case 9	✓	✓	✓	✓			✓	5
Case 10	✓	✓	✓	✓	✓		✓	6
	6	7	9	10	8	4	5	

4. Identifying Emerging Theory

Table 11 illustrates how the conceptual integration of themes into higher-order categories can lead to an emerging theoretical framework. In this process, themes identified through cross-case analysis were grouped into three overarching categories (Establishing, developing, and maintaining a therapeutic relationship), which aligned with the codes identified in the codebook and the theoretical perspectives on cognitive approaches to the therapeutic relationship outlined by Hardy et al. (2007).

Good levels of theoretical replication were achieved related to establishing a therapeutic relationship, with 5 of the 10 cases showing themes clustered around empathy (Working with emotional distress) and rapport (Working systemically and preventing perservations), highlighting links to the process of establishing a therapeutic relationship. Good levels of theoretical replication were achieved regarding the development of a therapeutic relationship, with 5 of the 10 cases showing themes clustered around the therapeutic bond (engaging clients in the process) and reflection (working with therapy-interfering behaviours), highlighting links to the process of developing a therapeutic relationship. Good levels of theoretical replication were achieved related to maintaining a therapeutic relationship, with 4 of the 10 cases showing themes clustered around providing feedback (Motivating clients and systemic working) and responsiveness (Working with negative reactions), highlighting links to the process of maintaining a therapeutic relationship. Table 11 highlights the emerging conceptual framework for building a client's awareness and insight during the assessment stage.

Table 8

Building the Client's Awareness & Insight in Assessment

Building the Client's Awareness and Insight							
Establishing the Therapeutic Relationship				Developing the Therapeutic Relationship		Maintaining the Therapeutic Relationship	
Empathy	Guidance	Rapport		Bond	Reflection	Feedback	Responsiveness
Working with emotional distress	Providing advice and education	Systemic Working	Working with resistance	Engaging clients in the process	Working with therapy-interfering behaviours	Change promoting messages	Cultivating self-efficacy concerning negative reactions

5. Constructing Rich Interpretations

The final section of the analytic process focused on rich interpretations that served as the basis for the results section. This section outlines in more depth how participants used micro-skills of the therapeutic relationship to help their clients train a self-regulatory strategy at all points in the formulation cycle. This section also illustrates, in practice, how the overarching theory of raising a client's self-awareness was built on a range of micro-skills across various stages of the therapeutic relationship. The findings section also details how the overarching theory of raising a client's self-awareness and insight was replicated across all stages of the formulation cycle.

9. Findings

9.1 Introduction to Theory, Themes and Subthemes

9.1.1 The Pragmatic Theory of Nurturing Awareness.

The main findings of the thematic analysis highlighted an overarching pragmatic theory: how the therapeutic relationship supported the training of self-regulatory strategies by raising a client's self-awareness and insight, a significant pattern in both theoretical and literal case study replications across all stages of the formulation cycle.

9.1.2 Themes and subthemes of the therapeutic relationship

The main themes were establishing, developing and maintaining relationships. The establishing relationship had subthemes of empathy, guidance, rapport, collaborative framework, therapeutic rapport, bond, and presence. The developing relationship had subthemes of therapeutic bond, reflection, feedback, and interpersonal interpretations. The maintaining relationship had subthemes of feedback, responsiveness, repairing ruptures, and flexibility.

9.1.3 Themes and Subthemes of the Therapeutic Context

The main themes were emotional regulation and building motivation. The subthemes of emotional regulation include building co-regulation, feeling and awareness, and staying with difficulties. The subthemes of building motivation included collaborative goals, engagement through connection, collaboration & accountability.

9.1.4 The Research Questions and Rich Interpretations

The findings of the research[10] questions are presented as they relate to the four stages of the formulation cycle. Each section is structured to present a rich interpretation of the role of the therapeutic relationship in raising awareness and insight by presenting a pragmatic theory, the relationships, micro skills, the context and a summary of this process

[10] 1.The role of the therapeutic relationship in each phase of the formulation cycle when training a self-regulatory strategy. 2. The significant learning experience of the clinicians in using the therapeutic relationship when training a self-regulatory strategy. 3. How particular micro skills of the therapeutic relationship are integrated into the training of a self-regulatory strategy. 4. Pragmatic theories of how clinicians integrate and weave together micro skills of therapeutic relationships into the training process.

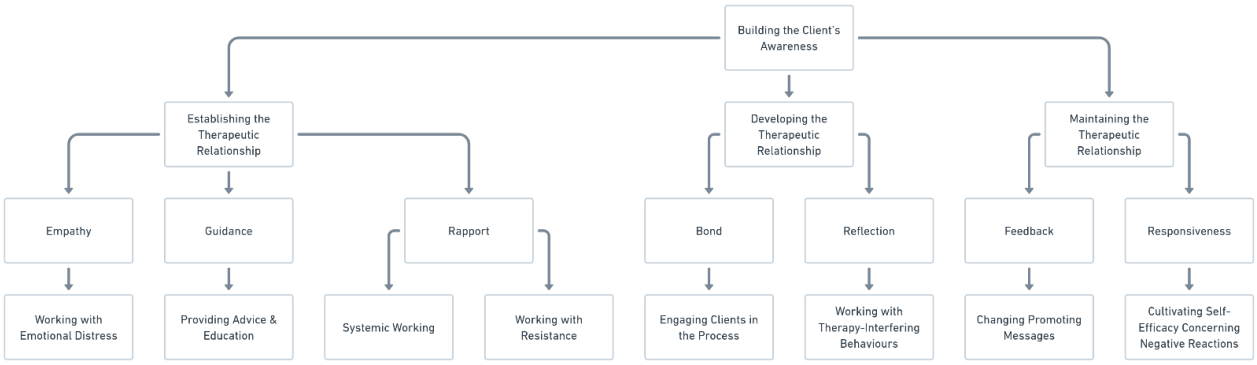
9.2. Nurturing Awareness in the Assessment Stage

9.2.1 Theory of nurturing awareness in the assessment stage

Throughout the assessment stage, three interrelated forms of relationship establishing, developing, and maintaining appeared to shape the client's growing self-awareness and insight as they learned self-regulation strategies. Rather than a linear approach, therapists experienced this process as an unfolding relational journey. Within this unfolding journey, micro-skills of empathy, guidance, rapport, the therapeutic bond, reflection, feedback, and responsiveness were not isolated interventions, but relational or technical manoeuvres to facilitate a client's growing awareness and insight about themselves and their difficulties, as summarised in Figure 3. The following sections describe how these relational processes were established, developed, maintained and experienced by participants as integral to cultivating awareness and insight within the assessment stage.

Figure 3

Building Awareness in the Assessment Stage



9.2.2 Establishing the Therapeutic Relationship

In the early stage of assessment, participants described *establishing the therapeutic relationship* as the foundation where the client's awareness and insights could begin to grow. The therapeutic encounter at this stage was experienced as a negotiation of emotional distance and closeness, in which understanding the client's cognitive and emotional landscape became central to assessing their level of awareness and insight into their difficulties and challenges. This involved a process of empathic attunement, requiring the therapist to enter the client's world with curiosity, empathy, and patience.

9.2.2.1 Empathy

Therapists experienced empathy as emotional understanding, a way of *seeing through the client's eyes*. Therapists spoke of entering their clients' emotional worlds to recognise the subtle patterns that shaped avoidance, anxiety, and threat. One participant reflected on how an empathic approach facilitated working cautiously and collaboratively:

"In this I learnt there was a pattern of demand avoidance and a sense of threat for him if he feels demands. I have tried cautiously to navigate this by empowering him to consider solutions, or offering options to allow him to select what feels right for him."

(Participant 10)

Empathy became a way to contain difficult emotions and a means of understanding and mirroring the client's experience, so that the client's awareness of their difficulties could emerge by carefully managing and negotiating their anxiety and mitigating potential defensive behaviours.

9.2.2.2 Guidance

Guidance became a natural extension of empathy, involving translating understanding into *practical and educational support*, encouraging clients to participate in their own process of moving towards greater awareness and insight. Participants described how offering advice and educational resources became more effective when grounded in trust and honesty.

"Having a good relationship is essential for people being able to take on any advice and strategies you are providing, particularly where insight may be an issue and the person is finding it hard to believe that there is a problem to be worked on."

(Therapist 4)

Another participant echoed this co-constructed partnership and responsibility:

"I was honest with him about this being a potential outcome but reassured him that we would try everything possible to help him, but the first step being his direct involvement and effort in the process. Education was the initial key."

(Therapist 5)

Guidance appeared to become an ethical stance and a collaborative act, fostering ownership and self-reflection to nurture self-awareness and insight.

9.2.2.3 Rapport

Rapport emerged as the relational cement to hold empathy and guidance together. Participants described developing rapport with individual clients and, systemically, with partners or family members in therapy sessions. These relational manoeuvres appeared to help clients make breakthroughs in becoming aware of their difficulties.

"Navigating such three-way sessions was difficult, but ultimately beneficial for the client as they were able to see the difficulties in a way they weren't able to before. The middle session was a turning point in the client accepting the need for support in this area and being more willing to work on it."

(Therapist 4)

For others, rapport involved working with resistance to the therapeutic encounter by using active listening and curiosity to sustain engagement.

"My client is very distrusting of all people... I have overcome this by allowing time and using active listening skills, paraphrasing, reflecting back what I have understood, being very curious and asking questions."

(Therapist 10)

Rapport emerged not just to achieve conflict-free collaboration, but also to build *a safe relational space* where a client's self-awareness could grow in the face of fear, defensiveness and resistance to insights.

Research literature echoes the importance of rapport in facilitating engagement. Nurturing relational experiences to create emotional and meaningful connections in the first therapy session is associated with high levels of therapeutic alliance (Sexton et al., 2005). Education is associated with improved engagement, including guidance (Luborsky, 1990; Grover et al., 2020), information sheets, and educational sessions (Heitler, 1976).

9.2.3 Developing the Therapeutic Relationship

As the therapeutic relationship developed, therapists described moving beyond initial engagement toward a more collaborative and reflective space relationally.

The process was less about applying specific skills and more nurturing mutual understanding, enacting a relational valency that allowed trust, honesty to emerge naturally. The micro-skills of *building the therapeutic bond* and *reflection* became keyways through which the client's awareness and insights were co-constructed through this process.

9.2.3.1 Therapeutic Bond

Therapists described how developing this bond required actively engaging the client in therapy and establishing rehabilitation goals that were meaningful and personally relevant, through a shared commitment to the process of nurturing awareness and insight itself. This involved gaining the client's permission to explore their difficulties and inviting them into a partnership of mutual trust.

"I also gained permission from him to feedback his problems every time I noticed them, at the time they happened. The aim of this was to help his awareness. The assessment process was very straightforward after this."

(Therapist 5)

For therapists, seeking a client's permission symbolised a shift from directive guidance to co-creation. This appeared to mark the relationship's transformation from initial engagement to one grounded in respect and collaboration in co-narrating the client's growing awareness and insights into their difficulties and challenges.

9.2.3.2 Reflection

Reflection emerged as a way in which therapists attempted to manage their emotional responses to their clients, whilst using these to facilitate their clients' self-understanding. Therapists described becoming aware of their countertransference reactions, experienced as moments when their own feelings appeared to highlight the emotional dynamics at play in the therapeutic relationship. By attending to these reactions with curiosity rather than judgement, therapists used them to inform and deepen their connection with their clients.

"My client is also prone to people-pleasing; therefore, I have to encourage and promote honesty. I have overcome this by allowing time and using active listening skills, paraphrasing, reflecting back what I have understood, being very curious and asking

questions."

(Therapist 10)

Managing countertransference reactions provides a reflective process of self-insight, self-integration, empathy, anxiety management, and conceptualisation (Van Wagoner, Gelso, Hayes & Diemer, 1991), as well as opportunities to facilitate feedback to clients by delivering change-promoting messages about their behaviours, which may interfere with therapeutic engagement (Hardy et al, 2007). It is also thought that therapists may use countertransference reactions during the assessment session to help the client identify unconscious goals and build motivation, as in the pluralistic approaches described by Cooper and McLeod (2011). In addition, participant 10 highlights how the use of countertransference, involving reflecting on a client's emotional communications rather than reacting to them, can facilitate deeper empathic connections. This is very similar to the process which Tansey and Burke (2013) refer to as projective identification, which allows therapists to access a client's internal experience. Through a reflection on countertransference reactions, therapist were able to hold space for honesty, allowing their clients to confront avoidance and inauthenticity in a gentle, non-threatening way. The developing relationship therefore became a site of mutual learning, where awareness was not merely discussed but *embodied* by the therapist.

9.2.4 Maintaining the Therapeutic Relationship

In the maintaining stage of the therapeutic relationship, therapists described a dynamic process of *holding, containing, and guiding* the client's emerging awareness and insight. This stage involved sustaining trust, inviting reflection, challenging beliefs, and nurturing safety. Awareness, at this point, was not simply cultivated but continually tested and renewed as a delicate relational balancing act. The micro-skills of *feedback* and *responsiveness* became relational manoeuvres through which therapists managed tension, encouraged agency, and maintained a space where awareness and insight could continue to unfold.

9.2.4.1 Feedback

Participants described how feedback using changing promoting messages, when delivered within a good relationship built on a strong rapport, could act as a mirror, allowing clients to see the patterns that sustained their difficulties.

"Part of the process of therapy involved building a good relationship so I could challenge some of his thinking about his behaviour to raise his awareness."

(Therapist 4)

For therapists, the act of providing feedback was not just about cognitive education in pursuit of awareness-raising and insight; it was an embodied, empathic process, a way of *staying with* discomfort long enough for insight to emerge, which is why honesty, trust and courage were essential to hold this level of uncertainty in the face of distress. Feedback was therefore experienced as both supportive and challenging: it aimed to affirm the client's capacity for change whilst requiring the sensitivity needed to confront the behaviours or beliefs that restricted awareness.

9.2.4.2 Responsiveness

Responsiveness was experienced by participants as the capacity to *read, contain, and respond* to the client's emotional world as it unfolded in each moment. Responsiveness was not reactive but attuned, shaped by empathy and a commitment to preserving both the therapeutic bond and the therapeutic process, involving sensing when to pause, when to encourage, and when to step back.

"In this I learnt there was a pattern of demand avoidance and a sense of threat for him if he feels demands. I have tried cautiously to navigate this by empowering him to consider solutions, or offering options to allow him to select what feels right for him."

(Therapist 10)

It could be viewed that responsiveness involved acknowledging resistance without judgment, whilst holding the goal of cultivating the client's self-efficacy as a path toward sustained awareness and insight. The therapeutic relationship, therefore, became both a safe emotional container and a potential for transformation through choice and fostering autonomy, which allowed an emotional space where awareness and insight about needs could continue to grow even in the presence of extreme distress.

Di Vita et al. (2022) found that focusing on the emotional needs of patients with severe TBI in psychotherapy leads to higher levels of awareness, whilst Stiles, Honos-Webb & Sturko (1998) emphasised the importance of focusing on what a client feels will work for them. In addition, Cooper & McLeod (2011) describe pluralistic therapy as emphasising listening and asking clients about their preferences, then exploring and implementing different possibilities that emerge from conversations. Moreover, this process may be how therapists modulate between a relational and a technical mode in nurturing a client's awareness.

From a psychodynamic perspective, the micro skills of responsiveness highlighted in Participant 10's extract could also be viewed as an example of working with identity fragmentation, with the patient attempting to project this confusion onto the therapist. Instead of being drawn into unconsciously enacting their patient's inner worlds, the therapist developed empathic attunement to these potential projective identifications through co-reflection rather than acting out.

9.2.5 Micro Skills, Learning Experiences and Integration

Rather than functioning as a protocol-driven evaluation, the assessment stage was experienced by therapists as a *dialogue of discovery,* involving collaborative and reflective processes which attempted to integrate emotional understanding with cognitive insight. Through the micro-skills of empathy, guidance, rapport, reflection, feedback, and responsiveness, therapists facilitated a shared exploration of the client's cognitive and emotional world, modelling a reflective stance, which became essential for nurturing self-regulation.

Concerning the role of *relational and cognitive factors in* supporting awareness and insight building. The micro skills of empathy and guidance established trust; rapport and reflection deepened understanding; feedback and responsiveness empowered clients to confront and adjust maladaptive patterns. Concerning the significant learning experiences of therapists. Awareness and insight were co-created through emotion, as therapists transformed distress into reflection or containment into motivation. These experiences appeared to represent *embodied experiences* of self-regulation in practice**.** Concerning how therapists wove together relational micro-skills. A dynamic feedback system mirrored self-regulation through observation, reflection, and adjustment in the therapeutic session. The emerging pragmatic theory, therefore, locates the assessment process as the *first active phase of metacognitive training*, in which co-regulation is nurtured between therapist and client through empathy and rapport to facilitate client awareness and insight.

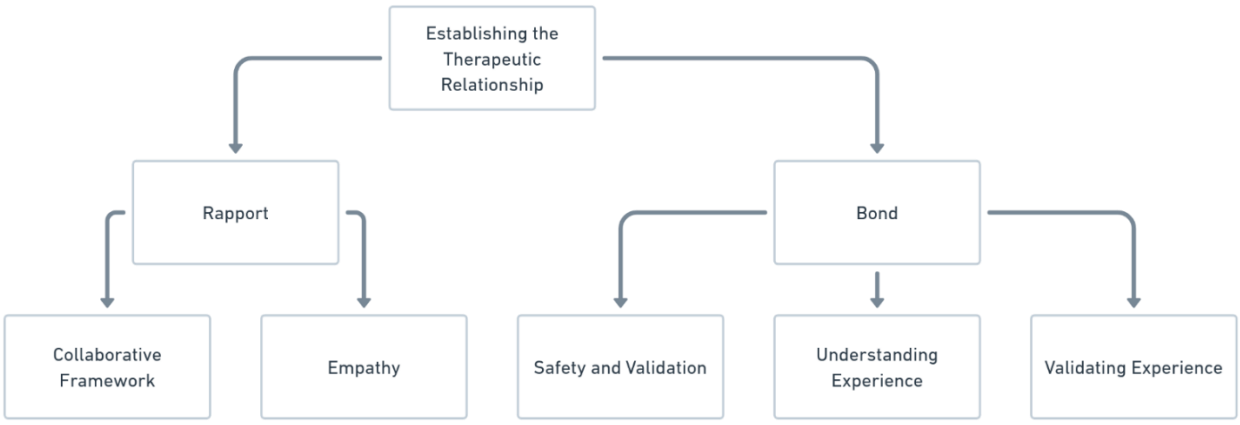
9.3. Nurturing Awareness in the Formulation Stage

9.3.1 Theory of Nurturing Awareness in the Formulation Stage

Therapists described how *establishing the therapeutic relationship* during the formulation stage of treatment planning was not merely a precursor to devising a set of interventions, but the *heart of the work itself*. Within this stage, the client's awareness and insights were nurtured through two interrelated relational processes: *therapeutic rapport* and *the therapeutic bond*, outlined in Figure 4. The pragmatic theory that emerged during the formulation stage appeared to suggest that awareness and insight-building are relational phenomena. Awareness and insight were not transmitted but *co-constructed* through empathy, safety, and collaboration; these were relational manoeuvres that allowed the client's internal experience to be reflected, named, and transformed as part of the process of becoming more aware and gaining insights about one's challenges and difficulties. The therapeutic relationship appeared to emerge as a vehicle for building emotional connections, and in these moment-to-moment exchanges, understanding emerged as mutual discovery.

Figure 4

Building Awareness in the Formulation Stage



9.3.2 Establishing the Therapeutic Relationship

During the formulation stage, therapists experienced establishing the therapeutic relationship as an important amalgam of relational manoeuvres and microskills for nurturing their clients' awareness and insight. Therapists described how the relational qualities of rapport, *empathy* and *collaboration,* created the conditions for clients to begin to recognise and articulate their own experiences. Awareness and insight, in this context, were experienced as emerging within the relationship itself, taking the form of a shared discovery shaped by trust, curiosity, and a mutual commitment to open dialogue about therapy goals.

9.3.2.1 Therapeutic Rapport

Developing therapeutic rapport was experienced as an active, co-creative process, a negotiation of shared meaning and purpose. Therapists emphasised that rapport was not simply about reciprocal friendliness, but about nurturing a *collaborative framework* that allowed clients to engage in the formulation process. This involved encouraging clients to explore their difficulties and aspirations within a space of mutual respect and curiosity.

"Because of his brain injury, I learnt to take a paced approach and avoid imposing solutions. I encourage my client to think about his goals for therapy, what needs to be considered, what he is finding difficult, and what we might not be addressing."
(Therapist 3)

This reflective and collaborative approach allowed the therapeutic relationship to grow into a shared inquiry. Therapists described how reviewing the relationship itself, by taking time to explore the therapeutic goals, pace, and emotional climate of the therapeutic work, permitted clients to articulate their own perspectives. In these moments, awareness and insight were *co-constructed* through a therapeutic conversation, as both therapist and client engaged in meaning-making about what therapy appeared to be and what it could become, an *embodied expression of mutual respect and agency*, allowing awareness and insight to unfold gradually through conversation.

Empathy was experienced as the emotional thread that bound collaboration to understanding. Empathic sensitivity enabled therapists to balance the dual tasks of supporting and challenging, involving listening actively while gently allowing clients to explore and consider new perspectives.

"To set clear patient-centred goals, to use self-reflection, positive language, and physical experiences in which to learn and continually adapt the plan to meet his continually

adjusting needs. It is important to be highly flexible and problem-solve with the client." *(Therapist 8)*

For many therapists, empathy meant *staying close* to the client's emerging sense of self, adjusting goals, reframing challenges, and co-creating a language through which awareness and insight could emerge. Therapists reflected that empathy could also involve the willingness to let go of preconceived ideas and to remain open to uncertainty. It required "being with" rather than "doing to", allowing awareness and insight to emerge as a shared recognition rather than an attempt to impose understanding.

This slow and considered process of cultivating a client's awareness and insights appears to be supported in the research literature. Self-awareness difficulties may go undetected in TBI patients because they can affect multiple functional domains (Prigatano, 2014) and lead to suboptimal outcomes if left untreated (Prigatano & Sherer, 2010). In addition, Gracey et al. (2020) argue that fostering collaborative rapport with ABI patients allows engagement by allowing clients to reflect and organise their subjective experiences.

9.3.2.2 Therapeutic Bond

Therapists described the *therapeutic bond* as the emotional and relational foundation in which the co-construction of treatment goals became an ongoing dialogue about *safety, trust, and mutual commitment* to establishing strategic goals. Through the therapeutic bond, therapists co-created a relational and emotional space in which clients could begin to feel seen and understood, a space that allowed awareness and insight to emerge naturally through validation and shared understanding shaped by honouring each client's relational history and emotional needs

Therapists experienced establishing safety as an essential first step in nurturing the therapeutic bond, involving more than reassurance; it required a *genuine validation* of the client's prior relational experiences and an openness to learning from them. By exploring what had been helpful or harmful in past relationships, therapists could model a more attuned relational engagement with their clients.

"I like to build on what the client had found helpful in the past. I find that engaging with things the client is familiar with can create a feeling of safety to do the work together" *(Therapist 3)*

Therapists found that when clients felt recognised and understood in relation to their past, they became more able to engage reflectively in the present. Safety, therefore, was

experienced as the quiet ground upon which awareness and insight could begin to unfold, an emotional holding that allowed clients to encounter themselves without fear of judgment.

Therapists described understanding not merely as a cognitive interpretation but as an embodied form of empathy, in which they sought to perceive the client's inner logic and modes of processing. Through this process, awareness was built collaboratively, as the therapist mirrored and clarified aspects of the client's experience that had previously remained implicit or unexamined. Therapists also experienced understanding as emerging *systemically*, extending beyond the individual to include family and significant others. The bond was strengthened when the therapist facilitated joint awareness with those who shared the client's world, allowing new awareness and meaning to emerge.

"Navigating such three-way sessions was difficult, but ultimately beneficial for the client, as they were able to see the difficulties in a way they weren't able to before. The middle session was a turning point in the client accepting the need for support in this area and being more willing to work on it."

(Therapist 4)

Therapists described these systemic conversations as pivotal moments of realisation, when the therapeutic bond extended beyond the therapist-client dyadic to embrace a wider range of relational understanding. The therapeutic space, therefore, became a mirror not only for the client's internal world but for the patterns of communication and connection shaping their everyday relationships.

Therapists also reflected on the importance of validating the client's unique ways of processing and communicating, especially when these were shaped by neurodiversity or trauma. Understanding these types of clients requires an active and compassionate approach that involves listening with curiosity, reflecting, and adjusting to the client's pace and rhythm in sessions.

"My client is very distrusting of all people, I believe in part due to his autism affecting how he interprets social cues and communication, but also due to significant childhood trauma... I have overcome this by allowing time and using active listening skills, paraphrasing, reflecting back what I have understood, being very curious and asking questions."

(Therapist 10)

For many therapists, building a therapeutic bond in the formulation stage was oriented to building awareness through careful attention to the client's relational needs and cognitive capacities, and how validating a client's experiences can facilitate an emotionally safe environment. This process appears to align with Greenberg's (2007) argument that nurturing a safe environment allows clients to reveal the depth and extent of their feelings without fear of criticism or shame. Pacing is also important for creating safety, as it fosters warmth and genuineness in therapeutic relationships (Greenberg, 2007), and with ABI patients, positively impacts engagement in treatment (Kusec et al, 2023)

9.2.3 The Context of Raising Awareness

Therapists described the process of *raising awareness and insight* during the formulation stage as also emerging within a broader relational and emotional context, connected to build the client's capacity to regulate emotions, as well as nurturing their motivation to engage in therapy. Therefore, nurturing awareness and insight was not experienced as a purely cognitive task but also as an *affective and relational process* in which emotional balance, trust, and engagement were cultivated alongside cognitive awareness and insight.

9.3.3.1 Emotional Regulation: Building Co-regulation

Before clients could begin reflecting on their behaviour or applying self-regulation strategies, they first needed to feel *emotionally stabilised within the relationship*. Co-regulation of emotions, in this broader context, was not a passive calming intervention but a *mutual emotional rhythm*, in which the therapist's empathic attunement enabled the client to feel understood and emotionally grounded.

"I believe it is the critical factor. This client needed someone to understand him. He has felt misunderstood his whole life and this drives anxiety and further disconnection in a man who is very socially isolated. I believe he is living in severe chronic stress, and I hope that I can co-regulate with him, which I feel I have managed. Without this co-regulation, I feel it would have been even harder to address frontal lobe deficits. He has come to value our weekly sessions and prioritises them, which demonstrates its effectiveness."

(Therapist 10)

For many therapists, co-regulation was experienced as the *emotional bridge* between awareness, insight and action. The therapist's emotionally receptive presence became a form of modelling, showing clients how to manage internal states by experiencing safety in a relationship. Over time, the relational stability nurtured by emotional regulation enabled clients to engage in self-exploration without fear or defensiveness.

These research findings highlight the importance of a preliminary stage in beginning the goal-planning process, focusing on emotional regulation. Moreover, managing mood disorders is important for treatment engagement in TBI (Torregrossa et al., 2023) and strokes (Pisano et al., 2022; Kiper et al., 2022)

9.3.3.2 Building Motivation: Collaborative Goals

Therapists described the process of nurturing motivation as emerging relationally, through moments of shared focus, empathic sensitivity, and collaboration on the therapeutic goals. Within this process, two interconnected modes of engagement, *collaborative working on goals* and *empathic understanding*, became key relational manoeuvres for raising awareness, insight and sustaining therapeutic engagement.

Therapists experienced collaborative goal-setting as both a motivational and a reflective process. By openly discussing possible outcomes with clients, therapists invited them to actively participate in shaping their own rehabilitation fostering a sense of ownership and self-efficacy.

"I was honest with him about this being a potential outcome, but reassured him that we would try everything possible to help him, but the first step being his direct involvement and effort in the process. Education was the initial key."

(Therapist 5)

Through these types of relational manoeuvres, motivation arose not from external encouragement but from the *client's recognition of their own agency*, facilitated by honesty, shared planning, and the therapist's genuine belief in the client's capacity for change.

Empathic understanding deepened this motivational process by allowing therapists to connect the client's goals to their *current cognitive, emotional, neurological, and functional capacities, facilitating* sustainable treatment planning. Awareness and insight, in this context, required an appreciation of the client's cognitive and emotional world, their potential lived experience of limitations, confusion, and hopelessness, and the therapist's commitment to working with that reality rather than against it.

"Understanding TBI and EF and engaging and establishing a TR is essential — repeated reminders and engagement, motivational interviewing, consideration of capacity and BI, least restrictive, facilitation and establishing reinforcement reward and working to goals are constant revising."

(Therapist 1)

For therapists, empathic understanding was experienced as tuning into the client's capacities and personal rhythms and adjusting therapeutic interventions and expectations to meet them where they were. This adaptive, iterative process required patience and flexibility; it represented awareness and insight-building as a *shared journey of*

adjustment rather than a one-sided effort to instil change.

It is known that early negotiation of treatment goals improves engagement (Tryon, 2002) and a return to sessions (Tryon, 2002; Tracy, 1977). This idea is also supported by Haye et al. (2023), who argue that, with brain injury clients, it is important to set clear, meaningful goals with patients rather than generic goals. These findings also resonate with Cooper & McLeod's (2011) approach to goal setting in pluralistic therapy, which emphasises a client's rights, strengths and the ability to develop agency.

9.2.4 Micro Skills, Learning Experiences and Integration

The formulation stage, rather than functioning solely in relation to goal setting and pre-treatment planning, it also represented a dynamic, co-constructed experience through which therapists collaboratively worked with their clients to develop their awareness and insight, emotional regulation, and motivation.

Concerning the interweaving of therapeutic micro-skills: rapport, empathy, validation, and collaboration, became the means through which clients began to reflect on their current cognitive functioning and begin to participate in the formation of goals for therapy.

Concerning the significant learning experiences of therapists. These arose not from instructional activities but from relational discovery: nurturing awareness was *felt into being* through attunement, reflection, and feedback within the safety of the therapeutic bond. The formulation stage thus operated as a *microcosm of metacognitive training*, modelling the same self-reflective processes it aimed to cultivate.

Concerning the weaving of micro skills into metacognitive strategies. The findings suggest that therapists implicitly integrated these micro-skills within a metacognitive framework, transforming formulation into a relational system of mutual regulation. This system of mutual regulation had the following four features in the formulation stage: 1. Through empathic collaboration, therapists modelled the very self-regulatory stance they sought to teach, balancing structure with flexibility and honesty with containment. 2. The formulation stage, therefore, functioned as a *pragmatic and phenomenological space of learning*, where the relational, emotional, and cognitive dimensions of rehabilitation converged. 3. Building awareness and insight was not taught but co-constructed through dialogue, trust, and shared reflection, thereby illustrating how the therapeutic relationship itself becomes the medium of cognitive change. 4. Finally, the formulation stage represents the first expression of self-regulation in practice: a dynamic form of learning where both therapist and client participate in the ongoing creation of understanding.

9.4. Treatment Stage

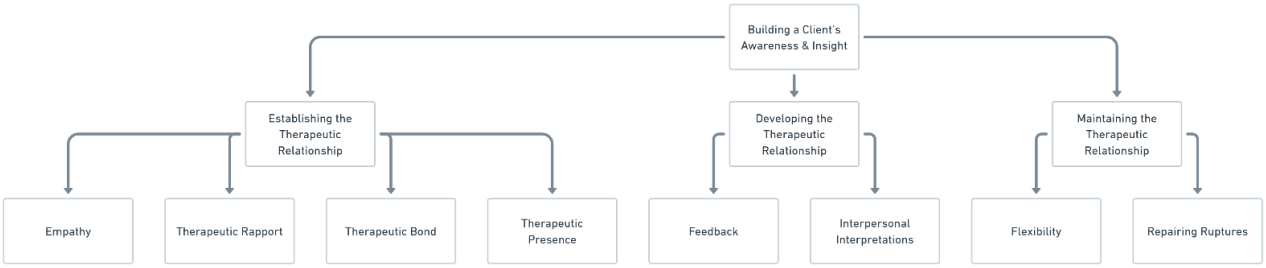
9.4.1 Theory of Nurturing Awareness in the Treatment Stage.

In the treatment stage, the establishment, development, and maintenance of the therapeutic relationship became an ongoing process through which a client's awareness and insight were nurtured, as outlined in Figure 5. However, it was also inseparable from other processes concerned with building a client's motivation and mood regulation.

The emerging pragmatic theory at this stage, therefore, positioned treatment not as a formulaic application of strategies but as a mutual process of learning and regulation, facilitated by the therapeutic relationship. The therapeutic relationship, therefore, served as a method, medium, and mirror, helping clients recognise, tolerate, and transform their experiences through empathic connection, reflective dialogue, and the continual renegotiation of meaning. Moreover, awareness and insight were not taught processes but were embodied, co-constructed, intersubjective experiences of practising self-regulation together

Figure 5

Building Awareness in the Treatment Stage



9.4.2 Establishing the Therapeutic Relationship

Therapists experienced *establishing the therapeutic relationship* as a continuing process of engagement rather than a new relational task. The process focused on cultivating emotional attunement, trust, and shared understanding so that clients could begin to become aware of themselves and gain insights into their difficulties.

Through empathy, rapport, bonding, and therapeutic presence, awareness and insights were not only discussed but *also lived into being*, allowing self-regulation to unfold through the emerging relational connections between therapist and client**.**

9.4.2.1 Empathy: Entering the Client's World

Therapists experienced empathy as the ability to enter the client's world both cognitively and emotionally, to *see and feel* from within the client's lived experience.

"Identify the specific circumstances (tasks/activities) where shifting deficits cause the client distress. This requires rapport and trust… appreciation of how to complete task/activity analysis for both work roles as well as day-to-day participation roles."
(Therapist 9)

Empathy required an attunement to moments of a client's discomfort and the courage to stay present as distress surfaced, allowing a bridge to awareness and insights.

Therapists also sought to steer a client's attention to the connection between body, emotion, and awareness, using mindfulness and embodied reflection.

"Meditation at the start of each session to encourage practice of noticing thoughts, feelings and body sensations."
(Therapist 10)

Through these practices, empathy was experienced as an embodied connection: therapists listened actively, helping clients encounter their sensations and emotions as integral to learning self-regulation. This appears critical because mood disturbances are common after a TBI: anxiety and depression after blast injuries (Phipps et al.,2020); PTSD and depression after motor collisions (Neylan et al., 2020); anxiety, depression and agitation after severe TBIs (Torregrossa et al., 2023). Mood disturbances after strokes include depression (Wijeratne & Sales, 2021; Kiper et al., 2022), apathy *(*Saleh, 2021), fatigue (Ghafaji et al., 2023) and anxiety disorders (Pisano et al., 2022). In addition, not managing high levels of hopelessness at the beginning of therapy may result in poorer outcomes (Kuyken, 2004).

9.4.2.2 Rapport: Meeting Loss and Adjustment

Therapists described rapport not as a form of comfort, support or agreement, but as *empathic recognition* of what had been lost and what could still be rebuilt by accompanying clients through loss and adjustment.

"Part of building the therapeutic relationship… is that you are helping the person come to terms with the loss of how their life was… and what things they can put in place to try and live with those changes. Adjustment to their sense of self is also an embedded part of the work."
(Therapist 4)

Therapists also found that focusing on a client's grief, frustration, and identity discontinuities or fragmentation was essential to nurturing genuine awareness and insight.
"It is critical to appreciate that there is an emotional component of cognitive compensation strategies… Without first ensuring that emotionally they have adjusted to their disability… many well-meaning strategies have limited effectiveness."
(Therapist 9)

Moreover, it seems likely that developing empathic sensitivity to a client's lost aspects of self or distress during cognitive rehabilitation activities can provide what Gracey et al. (2020) refer to as collaborative rapport, which can nurture new meaning by allowing clients to reflect on and organise their subjective experiences. This may also allow clients to address their limitations and possibilities, preparing the emotional ground for cognitive change.

9.4.2.3 Bond: Fostering Safety and Understanding

Therapists described safety as a *felt condition* that enabled honesty, humour, and collaborative exploration to unfold through the therapeutic bond sustained through responsiveness, transparency, and humility.
"To develop a relationship where the client could trust me with their concerns and be willing to accept my feedback and guidance. Humour was important… a shared accent also helps people feel more comfortable."
(Therapist 4)
The bond also facilitated understanding: some therapists drew on their knowledge of neuropsychology, personality changes, and the overlapping nature of executive functions to help clients make sense of their own cognitive experiences.
"It made me realise that this client group cannot be effectively treated without a good understanding of the relationship between biological theory of frontal functions and the implementation of cognitive/behavioural therapy."
(Therapist 2)
"Clearer knowledge of different aspects of executive function and overlap between aspects, particularly neurobehavioural difficulties."
(Therapist 4)
Understanding was cultivated through *dialogue and discovery*: therapists and clients explored strengths, impairments, and challenges across real-life contexts, generating a shared language that clarified what self-regulation meant for that individual.

“The patient needs to know what their problems are in clear, unambiguous language before they can be expected to work on them. Insight should be the driving factor in all rehabilitation.”

(Therapist 5)

The findings appear to resonate with Greenberg’s (2007) idea that a therapeutic bond is an emotionally friendly environment which helps clients access and focus on their painful feelings. It also appears that creating emotional safety can help clients explore feelings without fear of criticism or shame. Again, these ideas are echoed by Greenberg (2007), who argues that if clients are to reveal vulnerable aspects of themselves, they need to experience being understood. Moreover, the therapeutic bond appears to function as the *intellectual and emotional architecture* that is capable of sustaining a client's motivation for awareness and personal insight.

9.4.2.4 Therapeutic Presence: Acceptance and Congruence

Therapists described therapeutic presence as the ability to strike a delicate balance between acceptance and congruence, to be fully engaged, authentic, and receptive within each therapeutic interaction, a relational manoeuvre that involved being transparent without dominating and guiding without imposing.

Acceptance involved offering clients a consistent sense of respect and unconditional positive regard, expressed through small acts of hospitality and genuine interest.

“Unconditional regard, warmth, approachable, meaningful, relevant to their life, not censored or judged… control and choice, positive feeling, end on a positive, nice environment.”

(Therapist 1)

Congruence, meanwhile, reflected honesty and emotional authenticity. Self-disclosure and genuine enthusiasm were used not as personal confession but as *relational modelling* of openness and engagement.

“Trust was established to be honest and direct, use of interest in his progress and demonstrated excitement as he began ‘to get it’.”

(Therapist 5)

Presence, therefore, became the *embodied heart* of therapy, the moment-to-moment relational manoeuvres through which clients experienced what safe, authentic

connection feels like, and how awareness and personal insights can be cultivated through mutual honesty.

These findings resonate with Greenberg's (2007) ideas that when therapists offer unconditional acceptance, clients can turn inward and connect with their own experience, which may help motivate them to engage in the training process of developing a self-regulatory strategy. Greenberg (2007) and Gelos & Hayes (1998) also argue that congruence can enhance the therapeutic alliance and a client’s progress.

9.3.3 Developing the Therapeutic Relationship

This stage was experienced as a balancing act between empathy and challenge, between holding the client's emotional world with compassion and inviting them to step into new perspectives, a deepening process of collaboration and reflection. Through feedback and relational interpretations, awareness and insight were *negotiated in relationship* and continually refined through dialogue, resistance, and shared understanding.

9.4.3.1 Feedback: Reflection and Challenge

Therapists described feedback not as a one-directional form of information giving, but as an *interactive process*, a dialogue that helped clients gain insights into themselves. The process was structured yet fluid, involving written reflections, collaborative goal setting, and discussions about progress and challenges.

"When using therapy programs, developed personalised online programs with set activities... results are emailed directly to the SLT... enabling home exercises to be assigned and intensity of therapy tracked."

(Therapist 7)

Feedback was often co-constructed, with therapists and clients jointly monitoring ratings or progress logs, using discrepancies as openings for reflection. This was also echoed in ABI rehabilitation, where motivating messages are used to facilitate implicit learning and emotional engagement (Whyte et al., 2011; Lai et al., 2018; D'hooghe, 2018).

"Using X and partner's monitoring ratings as the basis for discussion, being open and curious about discrepancies, allowing X to discuss their views... reflecting on differences between before and now."

(Therapist 4)

These co-constructions highlighted how feedback functioned as a *mirror of awareness*: a collaborative effort to see, name, and adjust the therapeutic work with clarity of communication, using direct and accessible language, essential for nurturing insight.

"The patient needs to know what their problems are in clear, unambiguous language before they can be expected to work on them."

(Therapist 5)

In many experiences, feedback required the courage to name difficult truths that could unsettle the client's self-perception, and the patience and skill to do so with

empathy and respect.

“Keeping the therapeutic relationship on track when you are effectively challenging someone’s felt sense of the world can be hard.”

(Therapist 4)

Therapists described this as *feedback-in-relationship*: a careful interplay between confrontation and compassion, in which clients were invited to witness their own cognitive and emotional patterns, transforming self-awareness into the first step toward regulation. This was also echoed in ABI rehabilitation, where motivating messages are used to improve self-efficacy and self-regulation (Toglia & Foster, 2021; Glinac et al., 2022).

“Having compassion for the difficult situation the patient is in is key... we cannot expect the patient to simply go ‘ok then’. This is a process... balanced between being honest and direct but being kind with understanding too.”

(Therapist 5)

Moreover, in these extracts, therapists appeared to be managing their countertransference reactions to their clients, avoiding the need to rescue or overly support them, promoting cognitive and emotional resilience (Bruguière et al., 2023).

9.4.3.1 Interpretation: Experiences and Relationships

As the therapeutic relationship deepened, therapists described how *interpersonal interpretations* became another vehicle for insight. Through relational interpretations, therapists helped clients trace the emotional and behavioural patterns that linked their current challenges to earlier relational experiences.

“Part of the work also focused on how he would often overreact in social situations, which resonated with past experiences from his teenage years.”

(Therapist 3)

These interpretations were offered not as analyses but as *invitations to reflect*, encouraging clients to see how past patterns of inflexibility or self-criticism shaped their present struggles. These therapeutic manoeuvres also resonate with Walsh and Frankland's (2011) cognitive-relational approach to therapy, in which they suggest that therapists need to become aware of how their clients' self-talk relates to clients’ previous experiences with significant caretakers or parents as part of building the therapeutic relationship.

Therapists also reflected that resistance, often seen as denial or defensiveness, was itself meaningful. Since it revealed the *tension between insight and protection*, between awareness and the fear of change.

"During the appointments there was sometimes resistance to change... This takes careful unpicking during therapy, being able to reflect back to the client and also challenge where necessary in order to facilitate change."

(Therapist 4)

Interpretations, therefore, allowed clients to understand not only *what* they felt or did, but *why*. Through these insights, awareness became integrated into self-understanding, and self-understanding became the groundwork for self-regulation. These findings resonate with the role of relational interpretations in addressing post-injury loss (Klonoff & Lage, 1991; Klonoff et al., 1993) and rebuilding meaning (Prigatano, 2012) in ABI rehabilitation. Moreover, by attempting to understand their countertransference reactions, therapists developed the capacity to help clients recognise feelings they were struggling to articulate cognitively (Edlow & Kahn, 2023).

9.3.4 Maintaining the Therapeutic Relationship

As the therapeutic relationship developed, therapists described maintaining it as an ongoing process of responsiveness and flexibility. In this stage, relational work focused mainly on deepening the therapeutic relationship and *sustaining it through addressing uncertainty, resistance, and relational ruptures*. The relationship itself became a living model of adaptability in which awareness and insight were re-negotiated session by session, and ruptures were treated not as failures but as opportunities for cultivating insight through reparative relational manoeuvres.

9.4.4.1 Flexibility: Adapting Process, Reinterpreting Rules

Therapists experienced flexibility as the *embodied expression* of responsiveness, an openness to adjusting methods, expectations, and even the "rules" of therapy to fit the unfolding reality of the client's experience. Flexibility meant listening not only to words but to silences, moods, and subtle shifts in engagement.

"To set clear patient-centered goals, to use self-reflection, positive language, and physical experiences in which to learn and continually adapt the plan to meet his continually adjusting needs. It is important to be highly flexible and problem solve with the client."
(Therapist 8)

Therapists spoke of developing an *intuitive approach*, guided by both a felt sense as well as clinical reasoning.

"One of the other skills is knowing when is the right time to start this sort of training… I feel I have quite an intuitive approach to my practice and it is hard to always articulate exactly what or why I am doing."
(Therapist 10)

Flexibility also involved inviting family members or partners into the therapeutic process, recognising that awareness often deepened in the presence of those closest to the client.

"Partner openly discussed the problems they felt they had… becoming very distressed and tearful. This was a turning point for X, and in subsequent sessions X discussed what a shock it was to see partner so distressed… this helped X to understand their contribution to the situation.
(Therapist 4)

These particular moments revealed that flexibility was not a deviation from cognitive protocols but a *practice of relational intelligence*: knowing when to shift, when

to hold, and when to include others. The therapeutic advantage of cultivating flexible interventions is aligned with good outcomes in rehabilitation work. Cicerone et al**.** (2008) found that holistic neuropsychological interventions emphasising metacognitive and emotional regulation techniques for cognitive deficits facilitate skill transfer, generalisation, behavioural regulation, and better community integration. Di Vita et al. (2022) found that focusing on the emotional needs of patients with severe TBI in psychotherapy leads to higher levels of awareness, social functioning, emotional autoregulation, reductions in depressive symptoms and perception of physical problems.

9.4.4.2 Ruptures: Disconnection into Understanding

Therapists described how misunderstandings, resistance, and withdrawal were common features of work with clients experiencing low awareness and insight. Relational ruptures, while emotionally challenging, were understood as *integral to the process of growth*.

"During appointments where you are trying to encourage people to take on strategies and new ways of thinking… it can be hard when there is a rupture. It is fairly common with the level of insight difficulties of the people I work with that there is a rupture where I am as gently as possible trying to highlight the role of brain injury and the person is adamant that it is other people. Thought then needs to be given to repairing on the spot, revisiting at the next session etc."

(Therapist 4)

Therapists framed rupture not as a therapeutic breakdown but as a *therapeutic dialogue under strain*. Repairing these ruptures required humility and patience even when the connection was shaky. Therapists emphasised the importance of addressing tension immediately, using empathy and reflection to transform confrontation into collaboration. These working practices align with the thinking of Katzow & Safran (2007), who argue that ruptures to the therapeutic relationship require therapists to reflect on their contribution to the cycle (self-reflection) and to facilitate discussions (metacommunications) about therapist-patient interactions. This is important because Jorna et al. (2021) found that ABI patients had worse negative emotional ratings and anger misattribution than non-ABI patients.

Rupture and repair reflected the process of engaging in difficult conversations, acknowledging the client's perspective, and thereby modelling relational resilience that clients could later internalise. Maintaining the relationship, therefore, became both the medium and the *metaphor* of self-regulation, showing that repair, rather than perfection,

sustains growth. Research indicates that acknowledging negative emotions or behaviors can enhance the therapeutic relationship (Gelso & Carter, 1985; Safran et al., 2002), and with stroke patients, careful use of self-disclosure (Bishop et al., 2021) and engaging in client-centred interactions (Hersh et al., 2018; Walder & Molineux, 2020) can maintain the therapeutic alliance

9.3.5 The Context of Raising Awareness

Therapists described *raising awareness* during the treatment stage as occurring across a wider set of therapeutic interventions that encompassed nurturing motivation and emotional regulation as part of training a self-regulatory process. Through rapport, the therapeutic bond, and therapeutic presence, therapists nurtured the client's motivation to engage and their emotional capacity to tolerate the challenges of change.

9.4.5.1 Motivation: Engagement through Connection

Motivation was experienced by therapists as a *mutual awakening*, a shared process of discovering what mattered to the client and aligning therapeutic work with this emerging sense of meaning. Rapport provided the foundation for this alignment: therapists listened deeply to client's wishes and perceptions, ensuring that therapeutic goals resonated with their personal values and were relevant to their current needs.

"Beginning with listening well to the client before embarking on goals to ensure motivation… and respect their wishes to adjust how they wish to proceed or the goal they wish to attain."

(Therapist 8)

"Ensure that the client agrees that addressing the circumstances is important and worthy of their time and effort… it is critical to ensure that the client is not only aware there is a problem but invested in developing a compensation strategy in partnership with you."

(Therapist 9)

Motivation was not imposed but *cultivated through respect and shared authorship*. Therapists found that when a client's goals were self-directed and connected to meaningful aspects of their lives, motivation became self-sustaining.

"Goals were achieved successfully across his social and work life… Client most motivated when this was self-directed and highly relevant to his social life."

(Therapist 8)

These ideas are congruent with Verrienti et al. (2023) argument that a client's motivation should be regularly assessed and aligned to therapeutic strategies. This is also important because of diminished motivation after ABI (Palmisano et al., 2020) and after moderate to severe TBI (Marin & Wilkosz, 2005) and because stroke rehabilitation is also subject to motivation hurdles (Studer et al., 2021).

The therapeutic bond nurtured motivation further by challenging post-injury beliefs and inviting clients to reimagine their capabilities.

“Because this type of work requires you to challenge post-injury beliefs… becoming more skilled at how to appropriately navigate, motivate, and inspire is critical.”

(Therapist 9)

Greenberg (2007) argues that as the therapeutic bond is strengthened, clients become more aware and experience relief and the benefits of exploring their experiences. Through empathic understanding, therapists sought to connect with each client’s personal metaphors, language, and worldview, transforming therapeutic dialogue into an emotionally alive and meaningful experience.

“A client with a practical and manual pre-morbid history responded better to metaphors and strategies that had utilitarian purpose.”

(Therapist 2)

“My theory is simple, and it is based on an empathetic approach, patient-centred, geared towards the patient’s goals and motivation.”

(Therapist 7)

Therapists, therefore, attempted to nurture motivation through empathic engagement, attunement to the client’s value system, and co-creation of goals aligned with the client's current needs. This client-centred focus also appeared to be oriented toward what Sohlberg et al. (2023) refer to as an ethnocentric approach concerned with the client’s preferences, strengths, and personal meanings, and this therapeutic focus appeared to be used to nurture a client’s motivation.

9.4.5.2 Emotional Regulation: Feeling & Awareness

Therapists described emotional regulation as the *emotional counterpart* of cognitive awareness, a process through which clients learned to recognise, tolerate, and reflect upon their emotional experiences. Therapists recognised that emotional capacity was a precondition for learning; without sufficient adjustment to the loss and identity changes following injury, training cognitive strategies is limited.

“It is critical to appreciate that there is an emotional component of cognitive compensation strategies… without first ensuring emotional adjustment, many well-meaning strategies have limited effectiveness.”

(Therapist 9)

Through therapeutic presence, therapists nurtured empathy as *a regulating manoeuvre*. This required an understanding of the client's *psychological metabolism*, their unique pace of processing, and emotional meaning-making.

"In this particular, very difficult case, I found that a perception of the client's 'psychological metabolism' was a critical factor."

(Therapist 2)

Presence was also nurtured through *acceptance and congruence*. These relational qualities were instrumental in nurturing a secure emotional base where clients could explore vulnerability without fear of judgment.

"Unconditional regard, warmth, approachable, meaningful, relevant to their life, not censored or judged… control and choice, positive feeling, end on a positive."

(Therapist 1)

At times, therapists used gentle self-disclosure and genuine emotional expression to model congruence and to foster trust.

"Trust was established to be honest and direct… demonstrated excitement as he began 'to get it.'"

(Therapist 5)

Through the therapist's therapeutic presence, the client learned that difficult emotions could be acknowledged, explored, and integrated rather than avoided. The relationship thus became a space where emotion, awareness, and motivation converged, where self-regulation could be felt before it was mastered. These findings also align with the research literature on the role of emotional regulation in cultivating self-awareness. Without high levels of acceptance of a client's emotional changes during treatment stages, clients are less likely to turn inward and contact their experiences (Greenberg, 2007), and to maximise the development of an internal self-regulatory process (Sohlberg & Mateer, 2001). Moreover, empathic sensitivity to clients' feelings and meanings allows therapists to perceive their clients' goals (Greenberg, 2007). This could enhance the treatment process, allowing therapists to connect with a client's unconscious goals (Cooper & McLeod, 2011).

9.4.6 Micro Skills, Learning Experiences and Integration

Within the treatment stage, therapists described training a self-regulatory strategy as a *living, relational process* in which motivation and emotional regulation were continuously co-created, an evolving dialogue of *attunement and adaptation*, where empathy, feedback, and relational flexibility became vehicles for cultivating awareness and autonomy.

Concerning the use of therapeutic micro-skills. Empathy, rapport, feedback, flexibility, and presence were not employed sequentially but were dynamically intertwined. These skills were used to support clients in recognising their cognitive and emotional patterns, managing distress, and learning to self-monitor and self-correct.

Concerning therapist learning experiences. Significant *moments of learning* were points at which clients confronted loss, resistance, or emotional rupture, and, through reflective dialogue, re-formed their sense of self as capable of self-regulation and self-reinvention.

Concerning the weaving of micro skills into metacognitive strategies. The findings suggested that Feedback and interpretation served as mirrors for insight; flexibility and repair demonstrated adaptive regulation; and empathic presence grounded clients in a shared sense of emotional safety. These skills were integrated into a metacognitive framework as processes which embody the *pragmatic theory* that self-regulation is learned through co-regulation. The therapeutic relationship was the medium in which co-regulation was learned, and functioned simultaneously as *method, medium, and model*. This was a dynamic field where reflection, regulation, and resilience were not only discussed but enacted, in which awareness is not taught but lived into being.

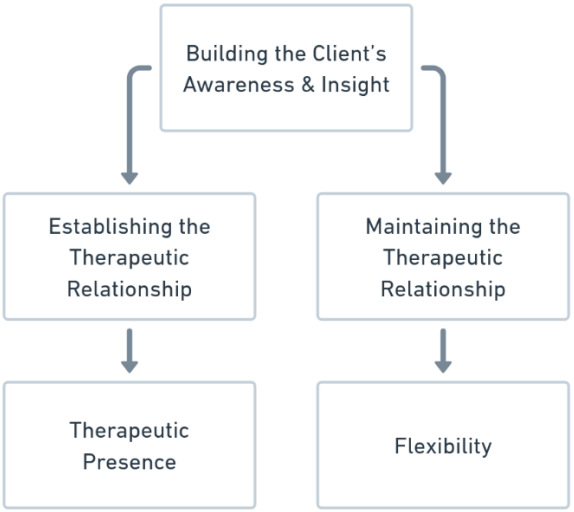
9.5. Evaluation Stage

9.5.1 Theory of Nurturing Awareness in the Evaluation Stage

During the evaluation stage, therapists described raising awareness as deepening reflection, an opportunity for clients to consolidate what they had learned and integrate self-regulatory strategies into daily life. The therapeutic relationship at this stage was experienced as both a *container and a mirror*: a relational space where clients could test their new capacities, encounter emotional responses, and re-evaluate their self-understanding, considering both their progress and setbacks. Therapists experienced the dual processes of *establishing and maintaining* the relationship as circular rather than sequential, with therapeutic presence and flexibility functioning as key mediators of reflective awareness. The relationship became a *reflective field* where awareness could be examined and refined, rather than newly constructed.

Figure 6

Building awareness in the treatment stage



9.5.2 Establishing the Therapeutic Relationship

Therapists described *establishing the therapeutic relationship* not as a new beginning, but as a *renewal of attunement*. They worked to match the tone, pacing, and depth of dialogue to the client's emotional state and level of awareness and insight. Pacing also appears pivotal here, because it is associated with creating warmth and genuineness (Greenberg, 2007) and positively impacting engagement in treatment with ABI patients (Kusec et al, 2023).

9.5.2.1 Therapeutic Presence: Responsive presence

Empathy and rapport were no longer tools of introduction, but *instruments of calibration*, used to discern what form of support or challenge the client now needed.

"The avoidance of traditional 'empathic' elements. I quickly noted that these were found to be provocative."

(Therapist 2)

"I am often concerned about providing too much structure, so I often reassess this to fit his current progress and motivation."

(Therapist 3)

These reflections highlight a nuanced awareness of empathy as a relational act. Therapists recognised that genuine attunement sometimes required restraint rather than expression; sensitivity could mean holding space rather than offering support or understanding. Through refining empathy, therapists enacted a form of *responsive presence*, adjusting their emotional and verbal contributions in proportion to the client's readiness. In doing so, they preserved the integrity of the therapeutic space as one in which awareness could mature organically, with the therapist's restraint allowing the client's reflection to take the lead.

9.5.3 Maintaining the Therapeutic Relationship

Therapists described this phase as a balancing act, involving retaining flexibility and allowing emotional endurance.

9.5.2.2 Flexibility: Relational Adaptability

Flexibility at this stage was less about methodological variation and more about *relational adaptability*: involving the capacity to adjust one's stance, tone, and presence to match the client's evolving self-awareness and insights.

"We worked closely over a number of sessions, using a variety of sources to try and improve X's insight into his difficulties."

(Therapist 4)

Flexibility was expressed through the therapist's openness to explore multiple sources of feedback, combining reflections from clients, family members, and support workers, to help consolidate awareness from different perspectives. This collaborative flexibility allowed clients to test their insight against the real world, reinforcing the link

between self-awareness and adaptive functioning in the mastery of a self-regulatory strategy.

Therapists also described moments when maintaining the relationship meant *loosening the scaffolding*, allowing clients to take increasing ownership of reflection, even when this involved relapses or failures. This letting-go required trust in the client's developing capacity for self-regulation and the therapist's confidence to tolerate uncertainty. Through this shared adaptability, the relationship modelled a mature form of regulation which became steady, responsive, and resilient.

9.5.4 The Context of Raising Awareness

Therapists described the *context of raising awareness* during evaluation as a complex interplay between motivation, reflection, and emotional regulation. The focus was less on teaching strategy and more on sustaining motivation and emotional stability as clients internalised the reflective habits developed in earlier stages in pursuit of mastering a self-regulatory strategy.

9.5.4.1 Building Motivation

Therapists cultivated motivation by developing a collaborative framework which often included *support workers or family members* who reinforced the client's progress in everyday contexts.

"Client at times would mask his challenges. These were overcome with joint working with the support workers to understand where he would like to progress."
(Therapist 8)

This type of collaboration extended the therapeutic alliance into the client's environment, transforming motivation from a relational spark into a *shared network of accountability and encouragement*. In addition, the collaborative pursuit of homework task completion has been associated with a reduction in symptoms post-therapy (Worthington, 1986; Schmidt & Woolaway-Bickel, 2000).

9.5.4.2 Emotional Regulation: staying with difficulties

Emotional regulation remained an essential process in awareness-building in the evaluation stage. Therapists used their responsiveness to help clients interpret and manage negative emotional reactions, particularly frustration, self-criticism, or perceived failure when applying self-regulatory strategies independently.

"Navigating the emotional implications of this helped him stick with the iterative strategy generation process… helped him appreciate that objectively his 'errors' may more accurately be considered reductions in efficiency rather than mistakes."
(Therapist 9)

Therapists' flexibility and presence allowed emotional setbacks to become growth opportunities, reinforcing the pragmatic insight that self-regulation is as much about *staying with difficulty* as it is about overcoming it. The research literature also supports these ideas. Moreover, emotional regulation is essential for treatment engagement and recovery following acquired brain injury (ABI). Depression, anxiety, apathy, and fatigue commonly disrupt motivation and self-regulation (Phipps et al., 2020; Torregrossa et al., 2023; Saleh, 2021). Early management of emotional distress improves outcomes (Kuyken, 2004), while therapeutic support enhances motivation and symptom improvement (Barth et al., 2013; Mallinckrodt, 2000), and sustained emotional regulation fosters engagement, resilience, and effective self-regulatory learning (Verrienti et al., 2023).

9.5.5 Micro Skills, Learning Experiences and Integration

The evaluation stage represented the culmination of the therapeutic process, where awareness, once co-created, was internalised through reflection, emotional regulation, and flexible autonomy.

Concerning the interweaving of micro skills. Empathy, presence, and flexibility, emerged as the principal micro-skills, now refined into instruments of calibration rather than relational initiation. The therapist's role became less directive and more attuned, guiding clients to integrate their self-awareness and insights across contexts and relationships.

Concerning the therapist's learning experiences. Significant learning experiences involved reflection, deepened awareness: moments of emotional challenge, self-recognition, and the re-interpretation of perceived "failures" as opportunities for adaptation. These were not discrete insights but *lived recognitions*, embodied instances in which clients re-evaluated their functioning and identity within a safe relational frame.

Concerning the weaving of micro skills into metacognitive strategies and the pragmatic theory that explains this process. The evaluation stage highlighted how clinicians wove together empathy, flexibility, and presence within a *meta-cognitive framework*. Feedback and reflection served as mirrors through which clients observed

their own regulatory processes, while collaborative frameworks with families and support workers extended awareness and insight beyond the therapy room. Flexibility, both relational and procedural, modelled the very self-regulation being taught. The resulting *pragmatic theory* positions evaluation as a relationally embedded act of integration, where the therapeutic relationship itself becomes a dynamic mirror of self-regulation. Here, awareness is no longer nurtured by the therapist but sustained by the client, marking the transition from co-regulation to self-regulation and, ultimately, to therapeutic closure grounded in reflective autonomy.

10. Discussion

10.1 Summary of the Research Findings

Pragmatic theories developed from clinicians' experiences revealed how the micro-skills of the therapeutic relationship evolve across the formulation cycle to support self-regulatory learning. In the assessment stage, empathy and rapport established a pragmatic theory of 'Co-regulation' as the foundation for awareness. During the formulation stage, the pragmatic theory of 'Mutual regulation' consisted of shared reflection and goal setting, fostering collaborative insight through integrating cognition and emotion. In treatment, flexibility, feedback, and presence were integrated into a metacognitive framework as processes which embody the pragmatic theory that self-regulation is learned through co-regulation. The therapeutic relationship was the medium in which co-regulation was learned. A dynamic field where reflection, regulation, and resilience were not only discussed but enacted through 'Relational Modelling'. In the evaluation stage, clients internalised these relational functions through reflective autonomy, marking the shift from co-regulation to self-regulation. In the evaluation stage 'Internalised coregulation' was viewed as a relationally embedded act of integration in which the therapeutic relationship was a dynamic mirror of self-regulation, in which the therapist no longer nurtures awareness; clients sustain this themselves through reflective autonomy outlined in table 9.

Table 9

Role of the Therapeutic Relationship to Internalise Self-regulation

Assessment	Formulation	Treatment	Evaluation
Co-regulation: Awareness develops through empathy and rapport within a secure relational field.	Mutual Regulation: Collaborative reflection and goal setting integrate emotional and cognitive insight.	Relational Modelling: Self-regulation is learned through adaptive relational exchanges that embody regulation.	Internalised Co-regulation: Clients sustain self-awareness and regulation independently, transforming co-regulation into reflective autonomy.

10.2 Implications for Counselling Psychologists

10.2.1 Assessing & Helping People make Adjustments Following a Brain Injury

It is well understood that Counselling psychologists can play a key role in neurological services (Ward, 2022). The research findings propose that Counselling Psychologists can play a pivotal role in helping clients with acquired brain injury (ABI) develop self-regulation and emotional adjustment through relational attunement and reflective practice.

The research findings align with prior research literature emphasising that emotional regulation and self-awareness are important in post-injury adjustment (Ownsworth & Haslam, 2016; Cicerone et al., 2008; Prigatano, 2019). The findings assume that co-regulation processes, developed through therapeutic presence and responsiveness, provide the foundation for metacognitive learning and adaptation. Clients internalise self-regulation through lived, reflective dialogue rather than didactic instruction alone. This suggests that therapeutic growth in ABI rehabilitation arises not from symptom reduction but from meaning reconstruction within a relationship. Moreover, a Counselling Psychologist's sensitivity to emotion, identity and working relationally uniquely places them to facilitate this process.

While the relational model offers insights into nurturing adjustment and resilience, it may risk undervaluing cognitive and behavioural components of rehabilitation. Counselling Psychologists, who integrate *relational depth* with *structured neuropsychological assessment,* are therefore likely to maintain both validity and therapeutic precision. These findings challenge conventional time-limited or protocol-based interventions, highlighting the need for long-term relational engagement and interdisciplinary collaboration. In practice, these findings call for a relationally integrative model of rehabilitation in which Counselling Psychologists balance empathy with structure, emotional containment with cognitive strategies, and reflection with measurable outcomes. Therefore, Counselling Psychology training and supervision could emphasise attunement, systemic awareness, and flexibility to ensure that psychological adaptation after brain injury is supported as both a neurocognitive and existential recovery involving the capacity for self-awareness, choice, authenticity and new realities.

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10.2.2 Understanding Neuropsychological Presentations (HCPC Competency)

Understanding the therapeutic techniques and processes for working with specific neurological presentations is a Counselling Psychology competency (HCPC, 2009).

The research findings indicate that for successful outcomes, therapeutic techniques and processes in neuropsychological rehabilitation need to be relationally adaptive, emotionally attuned, and neurocognitively informed. Therefore, Counselling Psychologists require an integrated therapeutic framework that bridges psychological depth with cognitive interventions.

Across the formulation cycle, clinicians used empathy, feedback, and reflection to enhance awareness, insight and emotional regulation, while adapting engagement and intervention strategies to match a client's cognitive and emotional capacities. Techniques such as guided reflection, graded feedback, and environmental structuring were interwoven with micro-skills like presence, flexibility, and repairing relational ruptures. These techniques integrate relational and neuropsychological principles, with emotional attunement supporting cognitive self-monitoring, while structured feedback promotes metacognitive learning. When clients present with reduced self-awareness or emotional dysregulation, both empathic containment and cognitive scaffolding are required. Research supports this integration. Emotional regulation and therapeutic alliance are predictors of cognitive rehabilitation success (Prigatano, 2019). Effective interventions combine emotional co-regulation with meta-cognitive frameworks (Cicerone et al., 2019; Levine et al., 2011; Ownsworth & Haslam, 2016).

However, neuropsychological services often prioritise functional outcomes over relational depth, risking procedural rigidity from manualised protocols. In contrast, Counselling Psychologists might approach neurorehabilitation as a dynamic interplay between cognitive and relational processes. Interventions and clinical techniques, therefore, need to pivot between structured and experiential guided methods, informed by the client's neuropsychological profile but grounded in empathic attuned presence. Moreover, this type of integration appears to promote both neurocognitive recovery, positioning the therapeutic relationship as the medium through which psychological, neurological, and emotional changes can emerge.

10.2.3 Developing Psycho-social Formulations and Interventions (HCPC Competency)

Developing formulations to implement interventions, related to the psychological and social circumstances of the patient is a Counselling Psychology competency (HCPC, 2009) relevant to working with neurological clients. The research findings highlight that an effective formulation in neuropsychological rehabilitation must integrate psychological meaning and social context alongside cognitive assessment. Counselling Psychologists therefore need to develop formulations that are not only diagnostically rigorous but *psychosocially situated*, linking neurological impairment with lived experience, relational context, functioning, and social identity.

The research findings highlighted how clinicians formulated client difficulties by weaving together cognitive profiles, emotional adjustment, and interpersonal functioning. During the *Formulation Stage*, therapists used empathy, reflection, and collaboration to co-construct goals sensitive to clients' family dynamics, social roles, and emotional capacity. In the *Treatment and Evaluation Stages*, feedback, flexibility, and presence were used to continuously revise these formulations, taking into account changes in self-awareness, social and environmental demands.

Contextualised formulations, therefore, allow interventions to target not only cognitive deficits but also the emotional and social consequences of brain injury, such as role loss, relational ruptures, and existential and identity fragmentation. Relationally informed formulations improve adjustment and treatment adherence (Prigatano, 2013, 2019; Ownsworth & Haslam, 2016), rehabilitate social identity and meaning (Cicerone et al., 2019; Ownsworth & Haslam, 2016), allow therapeutic work with concrete and symbolic losses (Bruguière et al., 2023) as well and maintain therapeutic engagement (Heredia-Callejón et al., 2023).

However, Neurological services often favour medicalised formulations that overlook psychological nuance and systemic factors. Therefore, Counselling Psychologists must advocate for reflective, narrative-based approaches that balance evidence-based protocols with relational depth. Clinically, this means developing *dynamic, co-constructed formulations* that evolve through ongoing dialogue and reflection. By integrating emotional understanding, social context, and neurocognitive insight, Counselling Psychologists can tailor interventions that nurture both psychological adjustment and social reintegration, transforming rehabilitation from a solely medical process into a shared journey of meaning-making, cognitive recovery, and self-reinvention.

10.3 Implications for Cognitive rehabilitation therapies

10.3.1 The Training of Self-regulatory Strategies for Executive Impairments

The findings indicate that training self-regulatory strategies is a relational, metacognitive, and iterative learning process rather than a linear application of techniques. The research findings demonstrate that practitioners used therapeutic micro-skills of empathy, feedback, flexibility, and reflection to scaffold client's awareness, motivation, and self-monitoring capacities within structured cognitive frameworks. throughout the formulation cycle of the rehabilitation process. The findings also highlight that training self-regulation was achieved through iterative processes of feedback, loops, graded challenge, and co-constructed goal setting, with clients gradually internalising these strategies as self-guiding mechanisms through mutual learning.

These findings also mirror models of metacognitive rehabilitation (Sohlberg & Mateer, 2001; Toglia & Foster, 2021), which emphasise experiential learning through self-observation and guided reflection to help clients internalise self-regulatory strategies. The therapeutic relationship is recognised as a predictor of success in neurorehabilitation (Prigatano, 2019) providing emotional safety and engagement necessary for clients with neurological conditions to tolerate awareness of deficits, process frustration, and sustain motivation. Evidence-based reviews also support emotional attunement and scaffolding (Ownsworth & Haslam, 2016) and psychosocial and emotional support (Cicerone et al., 2019) to balance emotional regulation with cognitive challenges from a patient-centred training approach.

However, practice settings often prioritise measurable, time-limited, outcome-driven interventions, which limit the depth of relational engagement, flexibility and iterative feedback essential for self-regulation training. In addition, relational techniques must be integrated with protocols for systematic measurement of progress to satisfy evidence-based requirements. Organisations may lack frameworks for integrating relational skills in cognitive programmes, resulting in fragmented care or inconsistent approaches to emotional attunement. These findings highlight how the training of self-regulatory strategies needs to evolve into a dynamic relational approach in which cognitive retraining, emotional attunement, and reflective dialogue are interwoven. This means embedding technical skills alongside person-centred care: empathy, collaboration, and reflective dialogue into cognitive frameworks, professional training and supervision.

10.3.2 Managing Setbacks in Training Self-regulatory Strategies

Managing setbacks relies on the therapist's ability to maintain relational and emotional safety, flexibility, and empathic sensitivity by reframing them as integral to metacognitive growth rather than as obstacles to it. From a relational depth perspective, the management of setbacks involves moments when emotional regulation, relational attunement, and reflective feedback are used to deepen a client's awareness and foster resilience

The research findings highlighted how therapists experiencing setbacks in cognitive rehabilitation therapies frequently reframed challenges such as frustration, defensiveness, or disengagement not as signs of treatment failure but as critical moments that revealed the emotional and cognitive limits of a client's emerging capacity for self-regulation. These critical moments required the therapist to maintain flexibility, responsiveness, and empathy, using micro skills of the therapeutic relationship as a stabilising structure through which emotional distress could be contained and reflected upon. By taking a relational approach to setbacks, therapists modelled self-regulation within the relationship itself by repairing ruptures, providing compassionate, honest feedback, and engaging in co-reflection to help clients transform experiences of failure into opportunities for metacognitive learning and emotional insight.

The research literature primarily supports the interpretation of these findings. Greenberg (2007) and Gilbert and Leahy (2007) emphasise that empathy, validation, and reflective presence buffer the emotional impact of failure, promoting resilience and engagement. In addition, metacognitive and self-instructional frameworks (Sohlberg & Mateer, 2001; Toglia & Foster, 2021, Shohlberg et al 2023) identify adaptive feedback and reflection as essential to developing self-monitoring and executive control. Furthermore, Prigatano (2019) and Ownsworth and Haslam (2016) emphasise that progress in rehabilitation depends on sustaining engagement during emotional and motivational fluctuations, which are common when clients confront awareness of deficits.

However, many standardised interventions, such as Goal Management Training (Levine et al., 2011), risk overemphasising performance outcomes, privileging cognitive outcomes over process-oriented growth. Without relational depth, clients may experience shame or demotivation, especially those with low self-awareness or frontal-lobe damage; setbacks remain as disruptions rather than developmental turning points, with opportunities for insight and emotional integration being lost. Maximising therapeutic outcomes in cognitive rehabilitation therapies, therefore, requires integrating metacognitive strategy training with relational depth, emotional awareness, and regulation

into structured feedback loops. This transforms the therapeutic relationship into a living model of self-regulation in which the management of setbacks is also a pathway to nurture awareness and insight through co-regulation and emotional safety, which also fosters cognitive and existential recovery

10.3.3 Conceptualising Therapeutic Relationships in Cognitive Rehabilitation Therapies

The findings of this research conceptualise the therapeutic relationship in cognitive rehabilitation as an integrative construct that bridges and unites both cognitive, client-centred, and relational perspectives.

Throughout the formulation cycle, the therapeutic relationship functions at both a technical level to facilitate cognitive awareness and a relational container layer to nurture emotional regulation, motivation, and personal insight. Across the formulation cycle, therapists used client-centred skills to co-construct awareness and insight, creating a relational context in which metacognitive learning could emerge. In the assessment stage, empathy and rapport were used to establish trust and attunement; in formulation, the bond and collaborative goal-setting created safety for reflection; in treatment, feedback and flexibility scaffolded insight; and in evaluation, responsiveness and presence sustained awareness and emotional balance. Therapists also used psychodynamic skills: reflecting on countertransference reactions and projective identifications to understand and work with fragmented post-injury identities, suggesting that relational depth was essential for helping clients develop personal insights. The therapeutic relationship, therefore, functioned simultaneously as a cognitive scaffold and an emotional container, facilitating both task-based learning and cultivating personal insights in the process of nurturing adaptation to neurological change.

These findings align with literature recognising the therapeutic alliance as the foundation of successful engagement and self-efficacy in metacognitive training (Prigatano, 2019; Sohlberg et al., 2023). Cognitive frameworks such as Goal Management Training (Levine et al., 2000) and metacognitive strategy interventions (Toglia & Foster, 2021) highlight the importance of feedback and collaboration, yet often neglect the relational manoeuvres that enhance and maintain engagement. By integrating client-centred principles (Rogers, 1951; Greenberg, 2007) and relational depth (Mearns & Cooper, 2018), including psychodynamic elements (Prigatano & Salas, 2017), the research findings show how empathy, containment, and countertransference extend these findings to show how work with emotional repair transforms moments of rupture and self-loss into opportunities for growth. The integration highlighted in the findings reflects pluralistic (Cooper & McLeod, 2011) and cognitive-relational (Frankland & Walsh, 2011) approaches, both of which argue for therapeutic flexibility grounded in collaboration and meaning-making.

However, empirical studies frequently prioritise technical competence or outcome measures (Stamenova & Levine, 2019) while under-theorising the relational mechanisms that sustain engagement and emotional regulation (Heredia-Callejón et al., 2023). The absence of an integrated framework limits clinical coherence and risks overlooking the therapist's subjectivity and empathic skills within metacognitive interventions. Moreover, performance-driven models (Sohlberg et al., 2023) may inadvertently evoke shame or defensiveness in clients, particularly when relational repair is neglected or seen as secondary to a treatment protocol. A pluralistic, cognitive-relational model of the therapeutic relationship offers a coherent framework for integration. Drawing on Clarkson's (2003) five-relationship model: working alliance, reparative, person-to-person, transpersonal, and transferential, the research findings can be interpreted as evidence of how these dimensions could interact dynamically across the rehabilitation cycle. Alternatively, a formulation approach could function as the central integrating process, allowing the cognitive (structured, goal-directed), client-centred (collaborative, empathic), and psychodynamic (reflective, intersubjective) dimensions to converge. Conceptualising the therapeutic relationship in this way positions relational depth as a *metacognitive mechanism* through which awareness, regulation, and identity repair unfold, a stance that aligns with Cooper's pluralism and Frankland and Walsh's (2011) cognitive-relational integration, extending cognitive rehabilitation toward a more holistic, relational science of cognitive and emotional recovery.

10.4 Implications for Researching the Therapeutic Relationship

10.4.1 Balancing depth with breadth in case study design

By embedding multiple case studies within the formulation cycle, this approach captures nuanced, contextual, and longitudinal insights into how clinicians integrate micro-skills of the therapeutic relationship when training self-regulatory strategies. Quantitative methods alone provide only generalised accounts of therapeutic alliance factors (Stagg et al., 2019), whereas qualitative interviews often lack the reflective depth to uncover complex therapeutic processes within a single interview. In contrast, a multiple case study design embedded in a survey (Yin, 2003) allows for fine-grained, context-rich analysis by capturing data across multiple cases and multiple points in time across the therapeutic process. Through literal replication, relational themes of empathy, feedback, and responsiveness were identified across cases, while theoretical replication revealed how contextual variations in these themes shaped client awareness and adaptation.

Yin (2003) and Herriott & Firestone (1983) argue that multiple embedded case designs strengthen analytic generalisation by combining literal and theoretical replication. Roberts et al. (2019) 's hermeneutic content analysis approach allows for the integration of interpretive depth and pattern replication to build conceptual frameworks. This design thereby balances data *depth (granularity)* with theoretical *breadth (generalisation)*, addressing calls in neuropsychology and counselling psychology to explore further bridges between integrating idiographic and nomothetic knowledge.

Integrating multiple case studies presents many challenges. The approach can conflate narrative and analytic aims, risking descriptive overinterpretation if reflexivity and replication logic are not rigorously maintained. Furthermore, the interpretive nature of hermeneutic content analysis may introduce researcher bias, necessitating reflexive documentation and triangulation across analytic stages. While this design enhances granularity and theoretical generalisability, it does not address statistical generalisability, so it is not possible to make inferences about causality. By embedding multiple longitudinal cases within a hermeneutic-analytic framework, can capture both *recurrent relational mechanisms* (literal replication) and *contextual divergences* (theoretical replication), producing a multi-layered understanding of how therapeutic relationships function in training self-regulatory strategies. This methodological integration advances counselling psychology research, offering a model for developing empirically grounded yet contextually sensitive theories of therapeutic change in neurorehabilitation.

10.4.2 Further Research Needed.

10.4.2.1 Expanding the Theoretical Scope

Future research could use larger samples of clinicians and patients to provide empirical evidence of the importance of raising awareness when working with the cognitive rehabilitation of brain injuries. Quantitative or mixed-methods research could statistically model the interaction between *relational depth*, *metacognitive engagement*, and *improvements in awareness and insight.*

10.4.2.2 Longitudinal and Process-based Research

Since the findings identified the importance of *developing awareness over time*, longitudinal case studies could track how relational processes evolve across the formulation cycle. For example, conversational analyses could provide data on how relational micro-skills (such as empathy, feedback, or flexibility) nurture awareness and insight needed for self-regulatory changes and sustained adjustment post-injury.

10.4.2.3 Cognitive-relational Integration Models

This study proposes a Cognitive–Relational Integration Model. Further conceptual and empirical work could test this framework in applied neurorehabilitation contexts. Future research might operationalise "relational depth" within neuropsychological rehabilitation to examine its relationship with improvements in executive functioning (Awareness and insight), emotional regulation, and motivation. Controlled studies could further evaluate whether relationally informed training protocols improve outcomes compared with traditional cognitive rehabilitation methods.

10.3.2.4 Patient and Family Perspectives

Further research could also include patients and family members to build a broader understanding of co-constructed therapeutic change, exploring patients' and carers' experiences of awareness-building and relational engagement.

10.3.2.5 Theoretical Integration

Further theoretical development is needed to outline the integration between relational, cognitive, and psychodynamic paradigms. This requires new research questions to be addressed so that a coherent integrative framework can be constructed that links affective, cognitive, and unconscious processes in therapeutic change following brain injury. For example, how do relational dynamics (e.g., empathy, attunement, transference, alliance) interact with cognitive and metacognitive processes (e.g., self-monitoring, executive control, awareness) during rehabilitation? In addition, how do psychodynamic

mechanisms (e.g., projection, internalisation, defence) shape or interfere with cognitive adaptation and relational engagement?

11. Conclusion

11.1 Introduction

This thesis explored how clinicians use the therapeutic relationship to facilitate the training of self-regulatory strategies in individuals with executive impairments following acquired brain injury (ABI). The research aimed to address an important gap in the literature regarding how the relational processes underpinning cognitive rehabilitation contribute to successful learning and internalisation of self-regulatory strategies. Using a qualitative, hermeneutic content analysis, the study examined how clinicians integrate relational micro-skills within the formulation cycle to nurture self-regulation.

The findings highlighted how clinicians used relational processes to motivate therapeutic engagement, scaffold awareness, regulate affect, and co-construct meaning across the formulation cycle. From the assessment stage through to the evaluation stage, relational and cognitive processes were interwoven in a reciprocal, iterative learning cycle.

11.2 Summary of Key Contributions

The study's main contribution is the outline of a theory of *nurturing awareness* across the four stages of the formulation cycle, which scaffolds the therapeutic process in cognitive rehabilitation. Each stage revealed distinct but interconnected micro-skills that clinicians used to foster self-regulation: empathy, guidance, feedback, responsiveness, flexibility, and therapeutic presence. These findings expand current understandings of cognitive rehabilitation by showing that self-regulation is nurtured through relational and empathic attunement rather than merely taught as a cognitive skill. The therapeutic relationship, therefore, becomes the *medium* through which cognitive and emotional restructuring and self-regulation occur, enabling clients to internalise self-regulatory strategies for managing their own behaviour, emotions and thoughts facilitated by relational manoeuvres involving co-regulation, mutual regulation, relational modelling, leading finally to internalised co-regulation

This research challenges the separation between the technical and interpersonal dimensions of therapy that has traditionally characterised neurorehabilitation. The findings resonate with relational and humanistic theories in counselling psychology (Mearns & Cooper, 2018; Cooper & McLeod, 2011), as well as with cognitive frameworks that emphasise metacognition and self-monitoring (Toglia & Foster, 2021).

By bridging these different dimensions of therapy, the thesis advances a pluralistic understanding of rehabilitation in which the therapist's relational stance is integral to the development of metacognitive competence.

11.3 Theoretical Implications

The study advances the idea of theoretical integration across cognitive, relational, and psychodynamic paradigms. From a cognitive perspective, it supports the view that metacognitive training depends on fostering awareness and feedback loops through collaborative dialogue (Sohlberg & Mateer, 2001). From a relational perspective, it aligns with theories of relational depth and therapeutic presence (Mearns & Cooper, 2018), which position authenticity, empathy, and acceptance as transformative agents. From a psychodynamic perspective, the findings suggest that countertransference and projective processes may shape how clinicians engage with clients struggling with fragmented self-awareness.

The thesis advocates a Cognitive–Relational Integration Model which synthesises these three perspectives. The underlying premise of this mode is the proposition that the therapist's attuned presence enables the client to *feel* and *think* simultaneously, thereby regaining self-coherence after a brain injury. Therefore, self-regulation training becomes a process of restoring not only cognitive control but also relational and existential connection. Moreover, this model contributes to the evolving theoretical discourse within counselling psychology on the role of the Counselling Psychologist in neuropsychological settings by positioning *relational meaning-making* as a vehicle for neuropsychological recovery.

11.4 Methodological Contributions

This study demonstrates how qualitative case-based inquiry can achieve both rigour and depth in psychological research. Using Yin's (2003) framework for case study design alongside a hermeneutic content analysis, the study achieved rigour by implementing quality assessment dimension analogues based on Yin (2003) and Lincoln & Guba's (1985) criteria for achieving methodological integrity. The use of practitioner participants ensured external/ecological validity, grounding theory in the lived context of clinical work.

The study's abductive reasoning, which involved moving between data, theory, and reflexive interpretation, thereby allowed for the development of pragmatic theories that remain sensitive to complexity and context. By combining methodological rigour

with analytic reflexivity, the research demonstrates that qualitative inquiry can produce empirically robust and phenomenologically nuanced insights, addressing calls for greater methodological integration in counselling psychology (Levitt et al., 2018) underpinned by critical realist principles (Levitt et al., 2021).

11.5 Clinical and Professional Implications

Clinically, these findings underscore the need for rehabilitation services to embed relational competence within their training and practice frameworks. Counselling psychologists, who work alongside neuropsychologists and therapists, are well placed to translate relational insight into structured interventions that address both cognitive and emotional recovery. The integration of relational depth perspectives within neurorehabilitation promotes client-centred care, supports emotional adjustment, and positions relational engagement as a core mechanism for sustained neuropsychological and existential recovery.

The findings also challenge conventional time-limited and protocol-driven interventions, suggesting that enduring therapeutic change requires long-term relational engagement and interdisciplinary collaboration. In practice, this implies that service models should allow flexibility for relational processes to unfold across time, with space for reflection, meaning-making, and relational repair after ruptures or setbacks to the treatment process.

11.6 Reflexive Considerations

My reflexive research journey underpins the epistemological tensions inherent in integrating cognitive and relational paradigms. As both a practitioner and a researcher, I faced the dual challenge of maintaining scientific rigour while remaining sensitive to what it means to be human. Therefore, the process of interpreting clinicians' narratives demanded continuous negotiation between *knowing* and *being*, between the precision of analysis and the empathy required to understand clinical meaning.

This tension became a source of theoretical creativity, enabling me to appreciate that therapeutic knowledge in neurorehabilitation is *dialogical*: it arises in the space between the therapist's understanding and the client's lived experience. The research, therefore, I feel, affirms counselling psychology's philosophical commitment to reflexivity, pluralism, and relational ethics as foundations for integrative practice.

11.6 Limitations and Future Research

Although the findings can provide valuable insight into the relational processes of rehabilitation for executive impairments, the study's small sample of clinicians experiences limits generalisability. Future research could employ longitudinal and multi-variable designs, incorporating clients, family members, and multidisciplinary teams to deepen understanding of relational mechanisms across different contexts. Further theoretical development is needed to outline the integration among relational, cognitive, and psychodynamic paradigms, possibly through approaches that explore a meta-theoretical or underpinning philosophical synthesis.

Moreover, future research might explore how therapeutic presence evolves over the course of rehabilitation and how relational ruptures and repairs influence self-regulation outcomes. Investigating these micro-relational skills and processes through video and/or conversation transcripts could enhance data granularity and highlight causal inferences regarding the relational mechanisms of change underlying the internalisation of self-regulatory strategies.

11.7 Synthesis and Final Reflections

This thesis contributes to the growing recognition that neurorehabilitation is not just about the restoration of somatic or cognitive function but also the reconstruction of meaning. This research study has highlighted how the therapeutic relationship provides the relational medium through which cognitive rehabilitation, emotional adaptation, and self-regulation can occur. Across the therapeutic process, clinicians use relational micro-skills as scaffolds for awareness and insight, motivation, and emotional regulation, allowing clients to reconnect with a sense of agency and self.

By integrating insights from cognitive rehabilitation, counselling psychology, and psychodynamic practice, this research offers a pluralistic and relational account of neurocognitive recovery. It reframes the therapeutic relationship not as a background or adjunct process connected to emotional soothing, but as the *core facilitator of change*, the process through which neurological, psychological, and emotional dimensions of self-regulation are re-integrated.

To conclude, this thesis argues that the heart of effective cognitive rehabilitation lies in *relationship-centred practice*. When clinicians approach the rehabilitation of executive impairments with both technical precision and relational depth, they create a space where clients can re-learn not only how to think, but how to *be*. This integration of

relational and cognitive science offers a way forward for counselling psychologists and rehabilitation professionals seeking to restore both cognitive function and meaning in the lives of those recovering from brain injury.

12. Final reflexivity

In this thesis, my reflexivity focused on four areas: my theoretical approach to reflexivity, my relationship to my interest in this topic, the impact of my position on this topic, and my personal connection to pragmatic critical realism. My final reflexivity will focus on data collection, analysis and interpretation.

Wagoner and Jensen's (2015) microgenetic evaluation approach emphasises changes in one's thoughts and feelings over time, and it is from this perspective that I begin this final reflection on my data collection and analysis. In addition, I will try to reflect by connecting with my onto-epistemological concerns, holding the tension between the descriptive, the phenomenological, and the hermeneutic, and focusing on the challenges, changes and influences on this project.

12.1 Challenges

The main challenge was finding the right number of clinicians with high levels of expertise to describe qualitatively how they used the therapeutic relationship in training a self-regulatory strategy. The challenge involved staying true to the nature of the phenomenon of training self-regulatory strategies, which were then applied in patients' everyday lives. Since the research design was a case study embedded in a survey, the data needed to be of sufficient quantity and quality to allow high levels of granularity in the written feedback from the questionnaire to identify the research phenomena.

My assumption regarding the data collection strategy was that I could obtain sufficient data samples through direct email sampling within one month. After a month had passed, I had received only one research participant. Two initial reasons emerged from the feedback from those who responded to my email but could not participate: 1. They were not using CR because patients found it too abstract. 2. The time frame to complete the questionnaire was too large for their time scale. Although I was beginning to realise that CR was underutilised in the UK and that the questionnaire was perhaps too long and detailed, I was buoyed by obtaining one participant's response, and the fact that there was a good evidence base for CR. I therefore moved my participant search to also include the US. After 6 months, I recruited 12 participants, of whom 10 met my inclusion criteria, including 2 from the US and 8 from the UK.

12.2 Influences

Initially, I assumed that it might be relational skills that facilitate the internalisation of a self-regulatory strategy, which may have limited my first reading of the raw data. When relational skills did not seem to merge into categories, as I initially assumed they might, I thought I needed to look harder at the data to find these themes. I wrestled with the data, but eventually it won. I conceded that the data indicated that relational skills and processes appeared to facilitate broader processes of awareness, motivation, and emotional regulation. Without these, the process of internalising a self-regulatory strategy was limited. These data findings also helped me to revisit awareness as defined by Sohlberg & Mateer (2001) as the ability to monitor and modify one's behaviour, and to view this more as an overarching executive function which needs to form part of the main focus of the therapeutic relationship with moderate to severe brain injury clients.

My socio-cultural practices underpinning traditional psychotherapeutic work were also potentially a limiting factor. For example, although one-to-one, 50-minute, and weekly sessions can be helpful in CR, the data also pointed to critical systemic elements in helping clients internalise self-regulatory strategies, such as partners, families and mental health teams.

12.3 Changes

Although it took many months to understand what the data was describing, once I had realised that it was describing how, in training a self-regulatory strategy, the therapeutic relationship appeared to be part of facilitating broader processes of awareness, motivation and emotional regulation, on reflection, this was the easy part of the research. The hardest part of the research was then to articulate these findings. Many changes were then eschewed as part of the process of describing this overarching theme that united the data.

Research question one focused on the formulation cycle as an overarching perspective for describing the role of the therapeutic relationship in training a self-regulatory strategy, and this provided a major framework for interpreting the phenomenological findings. Initially, I presented the findings as a continuous narrative without breaking it down into the four stages of the formulation cycle. Although this creates a sense of continuous narrative flow, I also felt it demanded too much of the reader, given the limited signposting.

The second change involved describing the clinician’s experiences of integrating and weaving together the micro-skills of the therapeutic relationship to raise awareness as

part of training in a self-regulatory strategy. These processes are varied and complex. Initially, I presented them as fragments within each stage of the formulation cycle in the form of table summaries, followed by extracts and interpretations. With help from the viva, I realised that in this format, the story of the data's phenomena was being lost. By way of a change, I then decided to tell the story of each section of the formulation cycle in raising a client's awareness as part of the training process.

The third and final change grew out of a sense that the story was still being lost because it was also part of a series of micro-stories within each section of the formulation cycle. The final change was then to signpost these micro stories within each section, so that these themes could be immediately recognised from the contents section, or from a brief glance at each narrative. Although this is not perfect, I am sure there are probably better ways to tell this story. Finally, I strived to stay as close to the data as I could when writing up these findings, given the time available to complete this thesis.

Word count 28, 828

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14. Appendix

Appendix A: Participant Information Sheet

Dear Participant

You are being invited to participate in a study exploring how psychologists use the therapeutic relationship to help train patients to use a meta-cognitive or self-instructional protocol, with patients presenting with an executive impairment due to a brain injury.

My hope is that by carrying out this research, we will be able to uncover the specific micro skills of the therapeutic relationship psychologists find useful in successfully training patients to use self-regulatory strategies. I am hoping that this research will make explicit which skills and processes could be used to help improve outcomes in cognitive rehabilitation therapies for executive impairments.

The study involves completing a questionnaire of eight questions. Questions 1 to 7, I have found is likely to take 30 minutes to complete. Question 8 is broken down into 12 sections, and is likely to take 45 -60 minutes to complete. It is possible to complete the questions in a number of stages, and to save them as you progress through the questionnaire. To complete the questionnaire you will need to consult your case or process notes. As a rough guide, questions 1 to 7 can be answered as a sentence or paragraph. Question 8 requires more in depth reflection in order to answer the 12 sub sections.

Your identity will be protected through the use of secure research codes which are separate from the research data. Any material used from your completed questionnaire in the results section of this research, will be anonymised by stripping it of names, features or contexts which could identify you or your patient.

Inline with GDPR data regulations, you will be able to have access to any data kept about you as part of this research project. The only people who will have access to your questionnaire are a peer-researcher and my university supervisor. Your data will be stored offline in encrypted files, and then deleted electronically when the research is completed. Please note that my director of studies or the external examiner may request access to the raw data for verification purposes. Also, I am intending to submit the completed study for publication with an academic journal. Successful publication would require me to retain all data for a certain length of time. This could be around five years, depending on the journal.

If you do decide to take part in this research study you will be asked to sign a consent form. You are free to withdraw this consent at any time and without giving a reason. If you have any questions, comments or complaints about this study please get in touch with me via phone or email.

Kind regards
Philip Stone
CPsychol, HCPC.reg, BACP(Accred), AFBPsP,

Appendix B: Debriefing Sheet

Dear Participant

Thank you very much for taking part in this study. Your time and effort are greatly appreciated.

It may be possible that you find writing about your experiences of using the therapeutic relationship with your patients to be a very personal, and potentially emotional experience. If this happens it is ok to take a break from answering the questions, and perhaps returning to completing them later when you feel able to. If you find any of the questionnaire questions difficult or intrusive, you do not have to answer them, and there will be no pressure put upon you to complete them.

You are also free to withdraw the study without giving reasons for doing so. In case of emotional stress incurred when answering the questions, I have attached a link to counselling services where you would be able to find support.
https://www.bacp.co.uk/about-therapy/using-our-therapist-directory/

If you have any questions, comments or complaints about this study please get in touch with me via phone or email.

It is also possible for you to request a copy of the completed study. This will be available in September 2023. Please indicate your interest after completing the research questionnaire and email me on the address below.

Kind regards

Philip Stone CPsychol, HCPC.reg, BACP.(Accred), AFBPsP.

Appendix C: Consent Form

Consent Form

Topic of Study:
Treating dysexecutive syndrome in brain injuries.
How do psychologists guide the training of self regulatory strategies using the therapeutic relationship in cognitive rehabilitation therapies. A mixed methods study

Researcher: Philip Stone

1. I confirm that I have read and fully understand the participant information sheet for the above study and have had the opportunity to ask questions.
Please confirm by highlighting yes or no YES / NO

2. I confirm that I have read and fully understand the debriefing sheet.
Please confirm by highlighting yes or no YES / NO

3. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.
Please confirm by highlighting yes or no YES / NO

4. I agree to take part in the above study.
Please confirm by highlighting yes or no YES / NO

Name of Participant ……..…….. Date
Signature …….…….….

Name of Researcher ……..…….. Date
Signature …….…….….

Appendix D: Recruitment Email

Dear (Name of the Psychologist)

I hope you do not mind me contacting you.

I selected you from the BPS directory of psychologists because of your work in neuropsychological rehabilitation. I would like to ask if you could participate in a research study. I am investigating how psychologists use the therapeutic relationship to help train patients to use a meta-cognitive or self-instructional protocol, with patients presenting with an executive impairment due to a brain injury.

To gain a better understanding of how psychologists train patients to use meta-cognitive or self-instructional protocol, it is extremely important that I get your knowledge and expertise on this topic. The research involves completing a short questionnaire of eight questions. It is possible that participating in the research could help you begin to formalise your tacit knowledge and skills, concerning working with executive impairments and nurturing the self-regulation of behaviours in your patients. It is also possible that reflecting on the research questions might also stimulate ideas for CPD activities.

I am looking for psychologists with the following experience:

- 2 years post-qualification experience as a psychologist
- See brain injury patients presenting with dysexecutive impairments
- Use meta-cognitive / self-instructional approaches to cognitive-rehabilitation therapy

I am a Chartered and HCPC registered psychologist working in the area of neuropsychology, and also a research student on the Top-up Doctorate at London Metropolitan University. My study is being supervised by Dr Catherine Athanasiadou-lewis, who can be contacted by email at c.athanasiadoulewis@londonmet.ac.uk. The study has been approved by the university's ethics committee.

If you would be interested in participating in my research, I have attached the research survey, and three other supporting documents including information about the research, a debriefing protocol and a consent form.

To take part in the research, all I need you to do to sign and return the consent form, before answering the research questions. I am happy to answer any questions about my research either by phone or email.

I look forward to hearing from you and appreciate your help with this research project.

Philip Stone CPsychol, HCPC.reg, (Accred), AFBPsP

Appendix E: Qualitative Questionnaire

The Research Questionnaire

Instructions

To complete the questionnaire you will need to consult your case or process notes. Choose one patient with an acquired / non-acquired or traumatic brain injury you were successful in training to use a self-regulatory strategy. In addition, choose a patient you worked with on a 1 to 1 basis, or with the patients spouse, parent, caregiver or family, but not as part of group therapy. The patient will have obtained fluency and regularity in using the strategy in order to mitigate a single or multiple dysexecutive impairment in their everyday activities such as home, work or social life. Answer the following eight questions based on referring to this one patient. When completing the questionnaire, please ensure you provide anonymised accounts for each question, by stripping these of names, specific features or contexts which could identify yourself or your patient, or your patient with their spouse, parent, caregiver or family. As a rough guide, questions 1 to 7 can be answered as a phrase or sentence. Question 8 requires more in depth reflections in order to answer the sub sections.

1. Nature of the Brain Injury

The question concerns the nature of your patients acquired or non-acquired or traumatic brain injury.

Question 1.1 – Describe the type and nature of your patients acquired brain injury (Traumatic or non-traumatic) or non-acquired brain injury or other injuries your patient presented with.

Question 1.2 – Describe your rationale for selecting cognitive rehabilitation therapy as the treatment intervention for your patients executive impairment.

2. Assessment of Executive Functions

This question concerns how you assessed your patients executive impairments

Question 2.1 – Describe the main assessment methods including any interviews, observations, psychometric instruments, questionnaires, rating scales or other methods you used in the process of assessing your patients executive impairments.

Question 2.2 – What conceptual or protocol challenges did you encounter when assessing your patients executive impairment, and how did you over come them?

Question 2.3 – What therapeutic relationship challenges did you encounter when assessing your patients executive impairment, and how did you over come them?

Question 2.4 – What cognitive rehabilitation principles underpinned your work when assessing your patients executive functions.

3. Formulation of Dysexecutive Impairments

This question concerns how you formulated your patients dysexecutive impairment.

Question 3.1 – Name and describe the executive functions you identified in your patients everyday life and/or work based or social activities.

Question 3.2 – Describe your rationale for selecting to work with your patients single executive impairment in cognitive rehabilitation therapy.

Questions 3.3 – Describe how you developed a formulation for your patients single executive impairment.

Questions 3.4 – Describe the severity of your patients single executive impairment you choose to work with.

Question 3.5 – What conceptual or protocol challenges did you encounter when developing a formulation for your patients executive impairment, and how did you over come them?

Question 3.6 – What therapeutic relationship challenges did you encounter when developing a formulation for your patients executive impairment, and how did you over come them?

Question 3.7 – What cognitive rehabilitation principles underpinned your work when developing a formulation for your patients executive impairments.

4. Cognitive Self-regulatory Strategies

The next question concerns the self-regulatory strategy you used in training your patient to mitigate a single dysexecutive impairment, by helping your patient develop fluency and regularity in using this strategy.

Question 4.1 – Which protocol did you choose to assist your patient mitigate their executive impairment?

For example did you choose a metacognitive, self-instructional method, or another cognitive rehabilitation approach. Name and describe the approach you used.

5. Use of the Therapeutic Relationship

The next section concerns the therapeutic relationship skills you used to train your patient to use a self-regulatory strategy, in order to help them mitigate a single dysexecutive impairment.

Question 5.1 – Name and describe the micro skills of the therapeutic relationship you used with your patient to help train them to use a self-regulatory strategy. For example, micro skills of the therapeutic relationship might include listening, engagement, responding, alliance building or other therapeutic skills.

6. Training Patients to Use a Cognitive Self-regulatory Strategy

The next questions concerns how you trained your patient to use a cognitive self-regulation strategy, and how you used the therapeutic relationship to aid this process.

Question 6.1 – Think about the process you used to help your patient use a self-regulatory strategy. Name and describe the steps you used to help your patient use the self-regulatory strategy with fluency and regularity.

Question 6.2 – Write out all the steps you described above in the box below.
For each step, describe how you used various micro-skills of the therapeutic relationship to achieve each step in your training process.

Question 6.3 – When training your patient to use a self-regulatory strategy, in order to obtain fluency and regularity in using the strategy to mitigate a single executive impairment:
a) Describe the total number of sessions which were provided.
b) Describe the duration of each session provided (for example 20 minutes, 1 hour, 2 hours or other durations).
c) Describe the frequency of sessions provided (for example weekly, fortnightly, monthly or other formats).

Question 6.4 – When training your patient to use a self-regulatory strategy, name and describe any other interventions (environmental modifications, remediation or other techniques) you used to aid this process.

Question 6.5 – What cognitive rehabilitation principles underpinned your work when training your patient to use a self-regulatory strategy?

7. Intervention Outcomes

The next set of questions concern how you measured the improvement in your patients executive functioning following the interventions you conducted with your patient.

Question 7.1 – Describe how successful you were at helping your patient use a self-regulatory strategy.

Question 7.2 – Describe any observational protocols, questionnaires, psychometric instruments or other methods you used, in order to help you measure the improvements in your patients executive functioning.

Question 7.3 – What conceptual or protocol challenges did you encounter evaluating your patients executive impairment, and how did you over come them?

Question 7.4 – What therapeutic relationship challenges did you encounter evaluating your patients executive impairment, and how did you over come them?

Question 7.5 – What cognitive rehabilitation principles underpinned your work when evaluating your patients executive functions following the interventions you conducted with your patient?

8. Learning from Professional Experience

This section is concerned with exploring in more detail the experience of successfully training a patient to use self-regulatory strategy, and what this taught you about how to use the therapeutic relationship to optimise the process. The next set of explanations and questions concerning professional learning experiences have been adapted from Kolb's (1984) experiential learning model.

8.1. Reflecting on Your Experience

Reflecting on a positive experience can help us assess how our actions contributed to managing a particular situation optimally. When we negotiate a situation successfully in our practice, a number of things happen which we may acknowledge only implicitly rather than explicitly. It may be that we changed our approach to practice with a particular patient, sought the views of others, consulted a book or journal article or other forms of expertise. Think carefully about the optimal experience you had of helping train a patient to use a self-regulatory strategy and then answer the following questions.

Question 8.1.1 – What were your thoughts about the therapeutic relationship before, during, immediately after, and sometime after a training session or set of training sessions you conducted with your patient?

Question 8.1.2 – What were your feelings about the therapeutic relationship before, during, immediately after, and sometime after a training session or set of training sessions you conducted with your patient?

Question 8.1.3 – How did the therapeutic relationship effect your work in helping your patient use a self-regulatory strategy with fluency and regularity.

Question 8.1.4 – What were the main features of the therapeutic relationship you experienced with your patient?

8.2. Generating Theory from Practice

When we reflect on our experiences it placed us in a good position to form our own concepts about what works in practice. Reflecting on the concepts which we begin to recognise in our practice, also allows us to begin to formulate a theory about how best to proceed in practice situations. Think again about the reflections you developed in the 8.1 question set. Focus again on how the therapeutic relationship optimised your work in training your patient to successfully use a self-regulatory strategy, then answer the following questions.

Question 8.2.2 – Write down what you think you learned from the experience of working optimally with your patient.

Question 8.2.3 – Try to identify ideas, principles or connections you learnt about helping patient successfully use a self-regulatory strategy.
Ideas = A thought about a possible course of action
Principles = A foundation for a system or chain of reasoning
Connections = The relationship which is linked or associated with something else.

8.3 Conceptualising How you Apply Theory in Practice

In clinical practice we are often test our theories to see if they work. If our theories work they become part of our repertoire of clinical skills and knowledge. If they do not work with either modify them or discard them. When we begin to see connections emerging in the way we practice our clinical skills, we are then more likely to be able to form theories about our practice, and then generalise these to other or similar situations. Think carefully about your optimal experience of training a patient to use self-regulatory strategy with fluency and regularity, and then answer following questions

Question 8.3.1 – Describe the lessons learnt and how you used these in subsequent situations.
Question 8.3.2 – Describe the skills acquired and how you used these in subsequent situations.
Question 8.3.3 – Describe the knowledge acquired and how you used this in subsequent situations.
Question 8.3.4 – Think about your experience in which your handling of a situation was better as a result of the previous experience. Describe how you handled the situation better
Question 8.3.5 – Think about your personal theory for working optimally, which helped you train your patient to use a self-regulatory strategy with fluency and regulatory.
Describe the key features of your theory

Appendix F: Coding Book

Themes	Sub-themes	Descriptions
Establishing the Therapeutic Relationship	Empathy	Understanding the client's world emotionally and cognitively
	Warmth & Genuineness	Conveying caring. Use of pacing, humour and NVC
	Negotiation of Goals	Discussing and agreeing on the aims of therapy with clients
	Collaborative Framework	Avoiding silences, encouraging client experiences and homework
	Support	Allowing a reflective space for clients to talk & listening to how they feel.
	Guidance	Providing advice, information sheets and educational sessions
	Affirmation	Validating, interpreting, normalising, and summarising clients feelings
Developing the Therapeutic Relationship	Exploration	Recognising internal & external reactions of therapists unresolved conflicts
	Reflection	Managing counter-transference reactions in relation to the client
	Feedback	Providing the client with change-promoting messages about behaviours or beliefs
	Relational Interpretations	Addressing interpersonal links, themes or connections within client stories
	Non-verbal Communications	Body posture, eye contact and tone of voice (See NVC below)
Maintaining the Therapeutic Relationship	Self-reflection	Recognising and owning on negative feelings and behaviours towards clients
	Meta-communications	Discussing the therapist-patient interaction as it occurs in a session
	Flexibility	Maintaining a flexible approach to treatment strategies and interpretations
	Responsiveness	Responding to negative client reactions and containing and managing these
	Repairing Ruptures	Attending to misunderstandings, disagreements or withdrawal behaviours
Therapeutic Rapport	Choice of Discussion Topic	Choosing topics for discussion which the client is interested in
		Collaborative working on the rehabilitation goals
		Empathy with emphasis on understanding challenges experienced by the client
		Commenting on the progress the client is making
	Preventing Perseverating on Upsetting Situations	Providing subtle redirection
		Diverting attention to other topics or events
		Reinforcing responses to more adaptive topics
	Use of NVC	Open and receptive physical posture
		Eye contact, which demonstrates respect and concern
		Tone of voice needs to be sincere and caring
Therapeutic Presence	Empathy	Becoming attuned to clients feelings and meanings
	Acceptance	Acknowledgement of what the client is feeling in the moment
	Congruence	Disclosing feelings in a non-dominant & facilitative way with appropriate NVC
Therapeutic Bond	Understanding	Understanding clients functioning and ways of processing
	Validation	Validating a clients experiences
	Helping a Client Feel Safe	Nurturing trust and support to facilitate client self-disclosure

Appendix G – Ethical consent awarded

Date of approval	19April2023
NB: The Researcher should be notified of the review outcome within two weeks of the submission of the application. If the outcome is re-submission of the application because of requests for further information or suggested adjustments of the project, a further two weeks from receipt of the re-submitted application applies, and so on. A copy should be sent to research@londonmet.ac.uk.	
Signature of RERP chair	

Appendix H: Theoretical Sources

1. Nature of the Brain Injury

Questions 1 to 7

Underpinning questions 1 to 7 is the scientist-practitioner and reflective-practitioner model which incorporates a cycle of assessment, formulation, intervention and evaluation HPC (2009), BPS (2010), and which underpins psychological work.

Question 1.1, 1.2 & 1.3 - The type & nature of acquired brain injury

The Department of Health and social care (2022) define acquired brain injury as either a non-degenerative injury to the brain which has occurred since birth, and consists of either traumatic or non-traumatic injuries.

A. Traumatic Brain Injuries (TBI)

Question 1.3 - Rationale for patient receiving cognitive rehabilitation therapy

Worthington (2010) outlines nine important factors including These criteria usually effect the selection of patients for compensatory therapies (Meta-cognitive / self-instructional therapies) in cognitive rehabilitation therapies.

2. Assessment of Executive Functions

Question 2.1 & 2.2 - Assessment of executive impairments & methods used

The principles of neuropsychological assessment were first oultined by Luria (1966) in which it was argued that assessments should begin by data collection and assessment of the correlations and contradictions between various sources of information. Vakil (2011) outlines the following six principles based on the work of Luria (1966) for gathering information: 1. Self report and family reports. 2. Records and documentation. 3. Observation. 4. Psychoaffective evaluation. 5. Psychosocial assessment. 6. Cognitive assessments.

3. Formulation of Dysexecutive Impairments

Question 3.1, 3.2 & 3.3 - Developing a formulation

Sohlberg and Mateer (2001) categorise the cognitive and behavioural disorders of dysexecutive syndrome as six categories split into the domain and functions. Worthington (2010) argue the case for establishing an index of the compromised executive problems, with the focus of assessment on executive dysfunctions in everyday life, behaviours at work or at home and changes in a persons personality. Sohlberg and Mateer (2001) use the terms mild, moderate and severe when discussing executive function impairments.

4. Metacognitive / Self-instructional Training Protocols

Question 4.1 - Tbe self-regulatory strategy used

Self-regulatory strategies are metacognitive techniques of which there area number of different types: WSTC approach (Lawson & Rice, 1989), self-monitoring (Cierone & Giacino, 1992), verbal mediation (Cierone & Giacino, 1992), problem solving process (Von Cramon & Matthes-von Cramon, 1994) and goal management training (Levine et al, 2000)..

5. Use of the Therapeutic Relationship

Question 5.1 & 5.2 - Micro skills of the therapeutic relationship

The role of the therapeutic relationship in cognitive rehabilitation therapy has been documented by Sohlberg & Mateer (2001) who point to the importance of building rapport, validating the patients experience, offering psychoeducation and teaching relaxation techniques in order to help clients manage emotional difficulties during cognitive rehabilitation therapy. In addtion Gilbert & Leahy (2007) describe the micro-skills in cognitive therapies as attentiveness, reflections and empathic connections, paraphrasing and summarizing, linking, socratic questioning and validation.

6. Training Patients to use a Metacognitive or Self-instructional Strategy

Question 6.1, 6.2 & 6.3 - Using therapeutic relationship skills to train a self-regulatory strategy

Sohlberg and Mateer (2001) summarise the main compenents of metacognitive/self-instructional training as consisting of the following steps as a ten point protocol. Stamenova & Levine's (2019) meta-analysis highlight that the total number of individual sessions in GMT studies is between 1 and 24 sessions, the duration of sessions extends from 0.25 hours to 4 hours, and the most common number of sessions per week being one or two or 3 sessions as part of a 3 day training programme.

7. Intervention Outcomes

Question 7.1, 7.2, 7.3 - Measuring executive improvement

Sohlberg & Mateer (2001) outline two methods for assessing executive functioning. Firstly,. Naturalistic observation methods using scales such as Executive Control system by Braswell et al (1993), and the Executive Function-Finding system by Boyd, Sautter, Bailey, Echols & douglas (1987) and Lezak (1993). Secondly, questionnaire

administration using the Dysexecutive Questionnnaire by Burgess et al (1996), or Brock Adaptive Functioning Questionnaire by Dywan & Segalowitz (1996)

8. Learning from Experience

Questions 8.1, 8.2 & 8.3 - Reflecting on experience, generating theory and putting theory in to practice. The Kolb (1984) reflection model can be used to structure the reflection of professional learning experiences, and professionals reflect systematically on their learning. The Kolb's (1984) experiential learning model is built on the following four reflection elements: 1. Identifying your experiences, 2. Reflecting on your experiences, 3. Generating theory from practice, 4. Conceptualising how you apply theory in practice

Appendix I: Assessing and Implementing Rigour

Quality Assessment Dimensions	Yin's (2003) Case Study Criteria	Lincoln & Guba's (1985) Trustworthiness Criteria	How the Thesis Achieved Rigour	Evidence of Rigour in the Thesis Chapters
Construct Validity / Credibility	Establishing correct operational measures for studied concepts.	Findings authentical represent participant meanings.	1. Construct validity ** Operationalisation of the main concept using existing theoretical sources and canons.* 2. Credibility ** Triangulation of multiple data sources (clinician narratives, survey-derived case contexts)* ** Reflexive awareness of researcher influence and professional position.*	Ch. 7 (*Design*), Ch. 8 (*Analytic Process*), Ch. 9 (*Findings – Assessment to Evaluation Stages*).
Internal Validity / Credibility	Demonstrating causal or theoretical coherence across data and findings.	Findings authentical represent participant meanings.	1. Internal validity ** Hermeneutic content analysis established iterative checking between data and interpretation • Literal and theoretical replication across 10 embedded cases (Yin, 2003).* *• Systematic coding, memos, and theme refinement.* *• Cross-case synthesis to identify recurrent and divergent mechanisms.* 2. Credibility ** Co-researcher & Peer-researcher comparisons in coding * Direct participant quotations to support theme development.*	Ch. 8 (*Analytic Process*), Ch. 9 (*Cross-Case Analysis*).
External Validity / Transferability	Extent to which findings can be generalised to broader theory (analytic generalisation).	Applicability of findings to other contexts through rich contextualisation.	1. External Validity ** Embedded multiple-case design to enhance theoretical generalisation.* *• Detailed case descriptions enable readers to assess transferability.* *• Findings linked to wider frameworks (e.g., Prigatano, 2019; Cooper & McLeod, 2011; Cicerone et al., 2019 etc).* 2.	Ch. 7 (*Methodology & Design*), Ch. 10 (*Discussion & Conceptual Integration*).

Quality Assessment Dimensions	Yin's (2003) Case Study Criteria	Lincoln & Guba's (1985) Trustworthiness Criteria	How the Thesis Achieved Rigour	Evidence of Rigour in the Thesis Chapters
			Transferability ** Thick description of therapeutic processes and context.*	
Reliability / Dependability	Demonstrating that the study could be repeated following the same logic and procedures.	Ensuring research findings are stable and traceable	1. Reliability * Comprehensive audit trail including coding matrices and analytic memos. • Hermeneutic approach enhances interpretive depth while maintaining analytic traceability. 2. Dependability • Peer supervision and iterative feedback enhance dependability.	Ch. 7 (*Methodology & Design*), Ch. 8 (*Reflexivity & Audit Trail*).
Objectivity / Confirmability	Logical chain of evidence; transparency between data, analysis, and conclusion.	Ensuring the findings are grounded in the data rather than research bias	1. Objectivity * The study integrates Yin's structured case logic with Braun & Clarke's (2019) reflexive thematic analysis. • Case study protocol aligned with Yin (2003) ensures procedural transparency. • Pragmatic critical realist stance balances cognitive structure with relational meaning. 2. Confirmability • Reflexive journal maintained throughout the study (documented in multiple sections).	Ch. 2, 7–10, 12 (Methodology through Discussion).

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