Communicative patterns in speech and language therapy sessions conducted with adults in telehealth settings in New Zealand.

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Table of Contents

List of Figures

List of Tables

List of Abbreviations

SLT	Speech and Language Therapy
HCVRCS	Hill Counselor Verbal Response Category System
CBS	Client Behaviour System

List of Symbols

Symbol	Name	Use
[ ]	Brackets	Indicated the beginning and end of overlapping speech.
(-)	Dash in parentheses	Speech which is unclear or in doubt in the transcript
(# of timed pause seconds)	Timed pause	A number in parentheses indicate the time in seconds, of a pause.
(.)	Micropause	A brief pause which, commonly less than 0.2 seconds
ALL CAPS	Capitalised text	Indicates increased volume of speech.
(text)	Parentheses	Annotation of nonverbal activity, change in pitch of the voice and prolonged speech

Attestation of Authorship

I hereby declare that this submission is my own work and that to the best of my knowledge and belief it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material, which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Pary Vaghefi Rezayi

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Abstract

The communication between a speech and language therapist and a client is without a doubt one of the most effective elements in stuttering therapy. The way therapists and their clients communicate with each other during stuttering therapy may vary depending on whether therapy sessions are conducted face-to-face or online by teletherapy. Teletherapy is increasingly used for stuttering therapy, as it alleviates time and travel constraints, so it is important to understand communicative patterns during teletherapy. This study describes the most frequently occurring communication patterns between a therapist and a client during teletherapy sessions for stuttering in New Zealand.

This study employed a Qualitative Descriptive methodology. The data for this study was generated through four video-recordings of stuttering teletherapy sessions to get insight on what happens during communication in a stuttering session, and four semi-structured interviews to understand participant's perspectives about their communication experiences. The video-recordings were analysed using Qualitative Content Analysis and Conversation Analysis. Participant responses to the semi-structured interviews were not analysed and only employed to ensure the accuracy of analysis of video-recordings and give larger context to the available data.

The three most frequently occurring patterns in stuttering teletherapy involved the therapist providing information and the client's agreement in response; the therapist's open-ended questions and the client's cognitive-behavioural or affective explorations; and the client's cognitive-behavioural or affective explorations with the therapist's communicative behaviour of approval.

The findings of this study showed that communication through teletherapy did not limit the therapist. The therapist helped the client with physical or psychological factors associated with stuttering. The effectiveness of communication through teletherapy may differ depending on the age of the client, the experience of the therapist and the client in using teletherapy or occurrence of technical issues in teletherapy. This study however did not find any conflicts in communication.

Chapter 1: Introduction

1.1 Background of the study

This thesis aims to describe the most frequent communication patterns observed during stuttering teletherapy sessions between a speech and language therapist and a client in New Zealand. This study also aims to explore how both physical and psychological factors can be reflected in communication patterns during stuttering teletherapy sessions. On their website, the New Zealand Speech Language Therapists Association states that its members strive to "work in partnership and with integrity" and "be person and whānau centred, working with respect and humility"(New Zealand Speech Language Therapists Association, 2018, About, Our Mission). Speech language therapists work on a wide range of communication difficulties, across a range of settings, with both children and adults ('New Zealand Speech Language Therapists Association', 2018b). Communication difficulties may include but are not limited to: speech difficulties or delays; receptive language (language understanding) difficulties or delays; expressive language (language use) difficulties or delays and stuttering. This thesis will focus on stuttering therapy sessions between a speech language therapist and an adult client.

Stuttering is defined as complex phenomenon that is caused by physical conditions and can be amplified due to one's psychological status: "A behaviour that waxes and wanes in relatively unpredictable ways, its one constant being change" (Conture & Wolk, 1990, p. 200). Stuttering can occur in various forms including not being able to complete a phrase, having interjections, repetition of a whole phrases or words, repetition of a part of a word, prolongation and incomplete words (Jiang,et al. 2012).

Stuttering therapy for adults is commonly a long-term process that allows clients to learn and practise techniques and to establish a changed attitude towards stuttering. Stuttering therapy is complex, because it addresses both physical and psychological factors. This is important because neglecting any of those factors will cause the outcomes to be effective primarily in the short-term or not effective at all (Ginsberg, 2000; Guitar & Bass, 1978).

Adults who stutter may not be able to attend in face-to-face stuttering therapy sessions due to their distance from the therapy service providers. They have to spend higher expenses and longer hours especially if the therapy centre is far from their home (O'Callaghan,

McAllister, & Wilson, 2005). Stuttering teletherapy is a reliable alternative to ease the access to stuttering therapy since it connects therapists to clients via various mediums such as telephone and Skype, without the cost and time spent to travel far distances (Fairweather, Lincoln, & Ramsden, 2016; Pierrakeas, Georgopoulos, & Malandraki, 2006). With the rapid increase in the use of teletherapy rather than face-to-face sessions for stuttering therapy, there has been a growing body of research that studied the technical aspects of stuttering teletherapy such as (Carey et al., 2010; Keck & Doarn, 2014; Wertz et al., 1987). However, there is lack of understanding about the communicative aspect of practicing stuttering teletherapy, particularly in the New Zealand setting. This study aims to fill some of that gap by observing communicative patterns in four teletherapy sessions, involving a client and a therapist.

1.2 The aim of the study

This study seeks to explore communication patterns between a therapist and a client when interacting in the four sessions observed. It aims to answer the research question "what are the most frequent communication patterns in stuttering teletherapy settings?" by presenting a thorough description of communicative behaviours that were employed during four teletherapy sessions between a New Zealand based speech and language therapist and a client. I was only able to focus on one therapist and one client within the scope of this master's thesis because of time constraints. Although communication patterns and behaviours in face-to-face stuttering therapeutic context were studied previously (Blood, Blood, McCarthy, Tellis, & Gabel, 2001a) , this has not been explored in teletherapy for stuttering in New Zealand. I hope that the findings of this study may be benefit for speech and language therapists and clients who attend stuttering teletherapy.

The next chapter reviews the communication studies in a range of medical and therapeutic disciplines to achieve a bigger context in regards to the impact of communication behaviours in different settings.

1.3 The structure of the study

This thesis includes seven chapters. Chapter Two will present a review of the literature on communication in face-to-face therapies and teletherapeutic settings. Chapter Two will review the findings of previous studies about communicative behaviours in face-to-face therapy and teletherapy, before moving to stuttering therapy. It will also discuss the

therapeutic relationship and the role communicative behaviours play in establishing and maintaining this relationship. Chapter Three outlines the methodology of this study and also briefly explains the methods of data collection and analysis. It outlines the rationale for collecting data through observing teletherapy settings and interviewing the participants retrospectively. It also provides a brief description of content analysis and its relevance to this study. Chapter Four presents the findings about the therapist participant's communicative behaviour, discussing these under nine different categories: interpretation, paraphrase, approval, self-disclosure, open-ended question, closed-ended question, confrontation, providing information and direct guidance. Chapter Five describes the observed client participant's communicative behaviours, grouping them under the following eight categories: cognitive-behavioural exploration, affective exploration, recounting, resistance, appropriate request, agreement, insight and therapeutic changes. Chapter Six revisits the aims of the study, before commenting on the communicative interaction between therapist and client in relation to the communicative patterns observed. Chapter Six then details the communication patterns that were developed through different behaviours of the client and the therapist and discusses those patterns within the framework of the existing literature. It also briefly outlines the limitations of the current study, before making suggestions for future studies.

Chapter 2: Literature review

2.1 Introduction

This study focuses on answering the research question "what are the most frequent communication patterns in stuttering teletherapy settings?". In this chapter, I look at the significance of communication in clinical interactions in a range of disciplines including Speech and Language therapy, Psychotherapy, Aphasia therapy, therapy for post traumatic experiences and other healthcare and therapy field. I review findings regarding verbal and non-verbal behaviours their impact on the collaboration in healthcare and therapy settings. I identify the gaps in those studies and situate my study related to them.

2.2 Clinical communication

Caris-Verhallen, Kerkstra, and Bensing (1999a) defined communication as an interaction between a clinician with a client. Communication patterns are made of two main types of communicative behaviours; verbal and nonverbal. Communication in clinical context is important because it allows the therapy providers to understand what a client needs, what a client considers to be a valuable and beneficial therapy service and how a therapy provider can help with those expectations (Schiavo, 2013). Having in-depth understandings of clinical communication also allows current therapy providers to recognise what aspects of communication to emphasise when teaching soon-to-be clinicians and the new generation of therapy providers (Schiavo, 2013).

From the perspective of clients, communication is an important matter because it allows them to feel listened to. For instance, a study of experiences of eight patients showed that they believed that a nurse genuinely listens to them, is empathetic and interested in what they said because of the way nurses communicated with them. The nurses' effective communication was found to be empowering patients (McCabe, 2004).

Empowering clients helps them feel more confident whilst collaborating and engaging in the communication. A client's engagement is a significant aspect to form a successful therapy or healthcare outcome (Silverman, Kurtz, & Draper, 2016). Engagement in communication is important because of its impact on the client's willingness to follow therapeutic instructions outside of clinical settings (Coulter, 2012; Mills et al., 2006). Bright et al.(2017) found that a therapist's communication has a strong impact on a client's

engagement. Therefore, communication in clinical settings matters because of its impact on the outcomes of therapy sessions and its long-term impact on a client's attitude towards the therapeutic issue.

Co-construction of communication helps therapy providers to involve their clients in the process of decision-making, in other words to achieve "a shared understanding of the decision" (Politi & Street, 2011, p. 579). Through communication therapists can assign new meanings to clients' existing experiences, which can impact clients' mindset about their health, therapeutic condition and a process of co-construction of the meaning. Plexico, Manning and Levitt (2009) argue that, in stuttering therapy settings, the clients' mindset about themselves can impact the outcomes of the therapy. As evidenced by one participant who said: "I've spoken a certain way my whole life. And I've seen myself a certain way, and I've seen people's reactions to me a certain way my whole life and it is hard to become this other [fluent] person." (p. 112). This is an example of how existing mindset can make it challenging for adults to engage in therapy. Thus, communication and co-construction of new meanings that can be assigned to clients' perspective has an additional value in the context of stuttering therapy, because it can influence clients' self-perspective, their confidence and their willingness to engage in therapy.

Communication allows a clinician to understand clients' feelings which allows them to establish a bond with each other within the health or therapy settings. Multiple studies have noted the importance of interpersonal communication in clinical settings and measured the success of the therapy or healthcare services based on an existing bond between the therapist and the client (Annells, 1996; Thorsteinsson, 2002; Wilkinson, 1999). Their findings demonstrate that communication is important in developing therapeutic relationships. It is argued that collaborative communication in teletherapy can be relatively more difficult due to the slight time lapse when talking through a video-chat platform (Germain, Marchand, Bouchard, Guay, & Drouin, 2010). This effect however, may not be applicable to all teletherapy sessions since it can be eliminated by providing sufficient technological requirements. Through observing the communication patterns in a stuttering teletherapy session we can study the evolution of a therapeutic relationship in that context which leads us to understand its impact on the outcome of the therapeutic process. The therapeutic relationship is stated to have a direct impact on the outcome of therapy in counselling and psychotherapy (Horvath, Del Re, Flückiger, & Symonds, 2011).

The therapeutic relationship between a client and a therapist is described to be constructed of two main components (Horowitz, 2013): their agreement regarding their therapeutic goals and/or assigned tasks and their rapport or bond. Both aspects of therapeutic relationships can only be established collaboratively. Multiple studies found the roles of a client and a therapist as equally effective in constructing a therapeutic relationship (Ahn & Wampold, 2001; Bordin, 1979; Horvath & Symonds, 1991; Plexico, Manning, & DiLollo, 2010).

The first step in establishing a therapeutic relationship is the establishment of communication: the therapist and the client can convey their ideas regarding an appropriate task and agree or disagree about it. Finally, they can achieve a mutual plan of the tasks and goals of their therapeutic process. The construction of rapport is more abstract and gradual. The therapist and the client must build rapport through building trust, showing sympathy and attention (Horowitz, 2013). Hall, Harrigan and Rosenthal mentioned that "Rapport depends on both the verbal and nonverbal behaviour stream occurring in the clinician-patient dyad" (1995, p. 22). This statement rightfully holds communication accountable for the construction of rapport. However, achieving a mutual understanding about goals and therapeutic tasks without collaborative communication is impossible. Through collaborative communication, clients feel involved in the process of setting therapeutic goals because they can communicate their opinions (Tryon & Winograd, 2011).

Next, I review the different types of categorisation systems of communicative behaviours which have been found significant in face-to-face clinical interactions.

2.3 Communicative behaviours in face-to-face therapy

2.3.1 Taxonomies of verbal communicative behaviours in face-to-face therapy

Verbal communicative behaviours in the health and therapy settings are identified as practices such as expressing empathy, history-taking, sharing information, humour, explanations, and so on (Beck, Daughtridge, & Sloane, 2002).

Historically, many verbal categorisation systems were developed in order to divide therapists' verbal behaviours. According to Stiles (1978, p. 49), employing a taxonomy or a categorisation system enables researchers to identify most occurring themes of verbal behaviour. Most occurring themes can then be examined for their impact on therapeutic

relationships and therapeutic outcomes. There are a few categorisation systems that are commonly used to study therapists' verbal behaviours in SLT settings: Hill's Counsellor Verbal Response Mode Category (Hill, 1978), Friedlander's revised version of Hill's Category System (1982), and Elliot's Response Mode Rating System (Elliott, 1985).

The first version of Hill's Counsellor Verbal Response Mode Category (Hill, 1978) included fourteen modes of verbal behaviours such as minimal encourager, silence, and open questions. This system considers each speaking turn as a unit of analysis and allows researchers to look at the verbal communicative behaviours without consideration of content or the topic. Therefore, short answers (yes, no) and affirmative sounds (aha, mmhm, etc.) are considered as divided units. As stated by Stiles (1978), examining the verbal behaviours free of their content allows a researcher to apply a categorisation system to multiple interactions and to compare them. Therefore, the category systems which were initially developed based on the behaviours of psychology therapists can arguably be applied to the behaviours of therapists who practice stuttering therapy.

Friedlander (1982) later revised the above category system by merging some categories and renaming them. He merged the categories of closed and open-ended questions together and named them as information seeking (Elliott et al., 1987). He made a significant modification by not considering turns without a verb as a unit of analysis. This modification increases the risk of losing insight due to ignoring a part of interaction which does not contain a verb.

Elliot's Response Mode Rating System (Elliott, 1985) includes ten non-mutually exclusive categories, where therapists' verbal responses can be grouped in one (or more) category. The units of analysis of Elliot's (1985) categorisation system are not determined and can be adapted based on the subject of a study.

Hill defined client's verbal behaviours as "overt actions that clients exhibit during a therapy session" (1992, p. 735). An earlier study by Hill et al. (1981) grouped verbal behaviour of clients into nine themes: simple response, request, description, experiencing, insight, discussion of plans, discussion of client-therapist relationship, silence and other. Due to clients usually being respondents during stuttering therapy sessions, the majority of verbal behaviours clients exhibit fall into the description category. Hill's taxonomy (1978) was refined by Hill, Reed and Charles (1993a) and was renamed the Hill Counsellor Verbal

Response Category System (HCVRCS). The modifications were applied to the grouping of behaviours in the initial system (Hill, 1978). The modified version has nine categories which are mutually exclusive, which are: interpretation, self-disclosure, approval, information, direct guidance, close-ended question, open-ended questions, paraphrase, and confrontation.

Categorisation systems that were developed by Friedlander (1982) and Hill (1978, 1993) allow for clear separations in between the therapist's and the client's communicative behaviours. This helps identify client and therapist roles in the co-constructed communicative patterns. Elliot's taxonomy (1985) allows a researcher to explore the possibility of finding more than one communicative purpose in a single communicative behaviour. This can increase the risk of mis-judgement when categorising communicative behaviours because of the lack of a clear line between behaviours. Mis-judgment of categories can also happen when employing the categorisation system by Friedlander or Hill however it can be avoided by having multiple people to judge the accuracy of categorisation (Kruijver, Kerkstra, Bensing, & van de Wiel, 2000) .

Researchers employed Hill and colleagues' (1993) category system to look at the verbal communicative patterns of therapists in face-to-face stuttering sessions (Blood, Blood, McCarthy, et al., 2001a). This study found that the three most used communicative behaviour categories by the therapist during stuttering sessions were providing information, direct guidance and close-ended questions. The findings were stated to be related the chosen approach of the therapist which was informative and educational. This study did not identify the client's role in co-construction of communication in informative and educational stuttering therapy sessions. Acknowledging client's communication behaviours could offer a better insight on how and why the therapist used different communicative behaviours during different instances of therapy.

The current study will address a gap in the literature by analysing the therapist's communicative behaviours in several teletherapy sessions for stuttering therapy using the revised version of Hill Counsellor Verbal Response System (Hill et al., 1993b) and analysing the client's communicative behaviour through the Client Behaviour System (CBS) (Hill, 1992). This is to achieve a clearer vision of what both therapist and client communicate in collaboration with each other that forms their stuttering therapy instances.

To the best of my knowledge no other studies have employed a similar system to investigate communication in stuttering teletherapy.

This study followed Client Behaviour System (CBS) (Hill et al., 1992a) to categorise the client participant's verbal behaviour. This system was initially developed to categorise clients' verbal communicative behaviours during psychological therapy sessions and includes eight categories: resistance, agreement, appropriate request, recounting, cognitive-behavioural exploration, affective exploration, insight and therapeutic changes.

While the content of stuttering teletherapy sessions may be different from psychological therapy, the communicative verbal behaviour pattern is compatible with the Client Behaviour System, since stuttering therapy involves addressing psychological factors and psychological factors related to stuttering (Blood & Blood, 2007; Menzies, Onslow, & Packman, 1999). The current study will address a gap in the literature by analysing communicative behaviours in several teletherapy sessions for stuttering therapy using the CBS to analyse the client's verbal behaviour.

In the next section I review nonverbal communicative behaviour while focusing on the face-to-face therapy settings.

2.3.2 Nonverbal communicative behaviour in face-to-face therapy

In an earlier study about nonverbal communication, DiMatteo, Hays, and Prince (1986) described nonverbal communication as the ability to convey a message without employing words, for example, showing frustration by frowning. DiMatteo et al. (1986) mentioned another aspect of nonverbal communication which is to understand the message that is sent without using words. For example, to understand someone is frustrated judging by their facial expression. Studies have generally explained the nature of nonverbal communication in a healthcare environment (DiMatteo et al., 1986; Wanzer, Booth-Butterfield, & Gruber, 2004), but there is still the need to address how nonverbal communication is conducted within stuttering teletherapy where nonverbal communication may be not similar due to the vision frame limitations.

To study nonverbal communicative behaviours, it is first important to indicate their distinction from other nonverbal behaviours. Burgoon, Guerrero and Manusov (2011) stated that nonverbal behaviours are shaped based on a social coding system; that is

communication codes that are familiar to the speakers. They also explained that a nonverbal communicative behaviour is usually intentionally conveyed by a speaker and interpreted as intentional by a recipient. They said that nonverbal communicative behaviours are regularly practiced between speakers and have a common definition among them. Similarly, Smith (1987) identified nonverbal behaviours to be intentionally conveyed. Smith (1987) defined nonverbal behaviours in therapeutic settings as actions which have a communicative purpose including but not limited to leaning forward, gazing away, and frowning. These movements allow speakers to convey meanings in an interaction without employing words. The difference between her findings and those of Burgoon and colleagues (2011) is that some nonverbal behaviours may not be intended to deliver a message and yet may give an indication of a communicative message. For instance, an act of scratching one's own head can be interpreted as cuing confusion or merely having itchy skin. Based on Smith's study, that act should be considered as a communicative behaviour if it is interpreted as an indicator of confusion whether it is the speaker's conscious intention to convey confusion or not. However, considering the study of Burgoon et al. (2011) itching head can only be interpreted as a nonverbal communicative behaviour if the person scratching his head intentionally aims to show confusion and this behaviour has a mutual meaning to both sides of the communication (speaker and listener). I draw on Smith (1987) in guiding what I count as a nonverbal behaviour: that is a communicative behaviour which may or may not be conveyed intentionally but has a communicative meaning to the listener.

There are three main categories of nonverbal behaviours (Smith, 1987):

1- Kinetics which includes the movements of one's face, hand gestures, and leg movements.
2- Proxemics (also called immediacy) that include leaning forward, body positioning, and body proximity.
3- Paralinguistic behaviours including the pitch of one's voice and intonation.

All aforementioned behaviours can be mutually understood and communicated during therapy sessions. Among these categories I focus on reviewing the literature on gaze, gaze disengagement, smiling and head nods because these behaviours are found to impact the co-construction of communication in both face-to-face and teletherapy (Hall et al., 1995; A.

J. Hill, Theodoros, Russell, & Ward, 2009; Hines, Lincoln, Ramsden, Martinovich, & Fairweather, 2015a; Psathas, 1994).

In the following section, I will review three types of non-verbal behaviours within face-to-face settings: gaze, smile and head nods. They are all non-verbal behaviours that can be communicated in both face-to-face and teletherapy settings, while other non-verbal behaviours such as leg movements and body proximity may not be apparent to the client through teletherapy and have a lower impact in teletherapeutic settings (Robinson, 1998). Reviewing the available literature about them will help this study compare two therapeutic settings together. A study by DeVault et al. (2014)compared these behaviours when developing a computer programme that mimicked face-to-face interactions with clients in teletherapy conditions. The study will then address the gap in the literature by discussing such non-verbal behaviours in several stuttering teletherapy sessions in New Zealand context.

Gaze and gaze disengagement

Gaze in the therapeutic setting is the act of maintaining the eye contact between a therapist and a client. Mast (2007) introduced gaze or eye contact as one of the most important nonverbal behaviours in a therapist-client communication. The importance of this nonverbal behaviour can be due to its dual impact. Both the existence and the lack of this communicative behaviour carry meanings in therapeutic settings. For instance the lack of gaze or gaze disengagement means the lack of engagement in the collaborative communication (Goodwin, 1981; Kendon, 1985). It also indicates lack of attention to the process of therapy.

Tetnowski and Damico (2001) explained about the mutual understanding of gaze and disengagement of the gaze during therapy sessions. According to their study holding the gaze on a speaker while practicing therapy in the conversation showed that it is expected of them to take a turn in the talk. Disengaging the gaze on the other hand, was understood as the cue for an end of one turn of talk and an appropriate time for other speakers to begin taking turns in the conversation.

According to Lowe et al. (2012) gaze disengagement (looking away) is a significant nonverbal behaviour among adults who stutter. This study focused on the communication instances where the adults who stutter with anxiety were to make 3-minutes speeches to an

audience. They concluded that gaze disengagement is a sign of speakers' avoidance due to their anxiety of engaging in an interaction. Lowe et al. (2012) suggested that gaze disengagement as an effective communicative cue which can signal clients' avoidance and anxiety to a therapist. Therapists then may be able to omit factors which are causing the anxiety and help the clients engage in an interaction.

The applicability of those findings is yet to be examined in the adult stuttering therapy settings. Adult stuttering therapy settings may not provoke adult clients' anxiety since a client freely attends the therapy sessions. On the other hand, it may cause stress among clients due to their common shyness (see the section of literature review regarding stuttering therapy).

Smiling

Smiling is generally found to present a therapist as more accepting and have a sense of humour and a client to be engaging in the speech therapy process (Geist, McCarthy, Rodgers-Smith, & Porter, 2008). Communicative studies in psychotherapeutic settings focus on the effect of smiling during moments of synchronised occurrence of it (Bänninger-Huber & Steiner, 1992; Bänninger-Huber & Widmer, 1999). The mutual occurrence of smiling between a therapist and a client during the therapy leads to feeling understood and successfully sharing emotions (Rasting & Beutel, 2005). Therefore, shared smiles allow parties involved in a therapy to construct and maintain a therapeutic relationship.

The therapist's smile is also associated with the client's feelings about the process of the therapy. According to Merten, Anstadt, Ullrich , Krause, and Buchheim (1996) clients can obtain a more positive perspective towards to the process of the therapy if receiving more positive facial expressions such as smiling from their therapists. The existing literature focuses on impacts of the mutual smile and the significance of smiling in psychotherapy settings. To my best knowledge there are still no studies about the impacts of this nonverbal behaviour in a stuttering therapy context.

Head nods

Communicative studies defined head nods as the movement of the head which carry meanings such as affirmation (McClave, 2000). Head nods are also stated to help the "regulation of the interaction, especially changing turns in speaking" (Caris-Verhallen, Kerkstra, & Bensing, 1999b, p. 809). The regulation of the interaction is described as

instances when one employs a head nod to indicate they are prepared to take a turn in the conversation without interrupting the person who is already speaking (Dittmann & Llewellyn, 1968). Another purpose of head nod is defined to be "back channelling". To backchannel means a speaker can avoid taking a verbal turn by just nodding their head rather than verbally responding when addressed to talk (Duncan, 1972). This nonverbal behaviour is predominantly discussed in a conversation setting without considering the context. The purpose of using a head nod can be to convey something different in the therapeutic context.

A therapist's head nod is described to show one's interest, understanding of, and agreement with the topic of the discussion (Caris-Verhallen et al., 1999b). Therefore a head nod is an encouraging act for the clients when they share stories with therapists (Caris, 1997). The information about head nods is mainly focused on the therapist's act of head nodding and the client's perceived message of this behaviour.

2.4 Communicative behaviours in teletherapy

Identifying communicative behaviours in stuttering teletherapy is significant because of the increasing use of teletherapy in stuttering therapy and because it is not known how this method of therapy might impact on communication between the therapist and client. Referring back to the nature of communication in therapeutic setting it is said to be firstly a bridge between a client and a therapist allowing them to share information and make decisions when going through a therapeutic process (Ong, De Haes, Hoos, & Lammes, 1995; Roter, Hall, & Katz, 1988). A study on the nurses and their clients showed that they commonly feel satisfied with their involvement in the decision making while practicing teletherapy (Randles Moscato et al., 2007) . However, the use of communication in decision making process in stuttering teletherapy is yet to be explored. The existing literature regarding the verbal and nonverbal communicative behaviours which co-construct a communication pattern in teletherapy are discussed in the following sections.

2.4.1 Verbal communicative behaviours in teletherapy

Verbal communicative behaviours in teletherapy settings are reported to have an overall similar role to the face-to-face therapy conditions, that is, to convey information (Simpson & Reid, 2014). While such a general statement can be true, some particular communicative

behaviours can be modified due to the teletherapy effect. For instance, studies in SLT show that humour which is a verbal behaviour can be less effective due to the technical issues that can occur in teletherapy (Freckmann, Hines, & Lincoln, 2017; Tucker, 2012). However, there may not be any technical issues during a teletherapy session, and interruptions of therapy can also occur in face-to-face settings (Superstein-Raber, 2015).

Superstein-Raber (2015, p. 29) holds that the tone of voice in teletherapy is stated to have an impact on maintaining the co-construction of communication during psychotherapy sessions: "if either has uncorrected deafness issues, when either speaks too softly or indistinctly, or is too silent to maintain the connection". Superstein-Raber's (2015) findings may also apply to stuttering teletherapy session, since as mentioned before, both require the therapist and the client to engage in the communication and co-construct a shared meaning in the therapeutic context.

To the best of my knowledge the literature has not reported about verbal communicative behaviours which are specifically employed in stuttering teletherapy settings.

2.4.2 Nonverbal communicative behaviours in teletherapy

Previous studies suggest that the nonverbal aspect of communication in teletherapy can be different to face-to-face settings due to the limitations in the vision frame through teletherapy. It is stated "that conversation may become more disjointed when hands are restricted" (Simpson, 2003, p. 117). The exclusion of some nonverbal communicative behaviours leads to intensification of the impact of the other behaviours. Therefore, behaviours such as eye gaze in teletherapeutic settings become even more significant in comparison with face-to-face settings. Multiple studies in the psychotherapeutic field stressed the significance of nonverbal behaviour including gaze, gaze disengagement, head noddiing and smiling in teletherapy due to their role in conveying emotions (Cukor et al., 1998; Mclaren & Ball, 1997; Miller, 2003).

Gaze and gaze disengagement

Due to the nature of teletherapy, a number of nonverbal communicative behaviours become eliminated. However, gaze remains as one of the most significant behaviour in teletherapeutic context (Lowe et al., 2012; Tam, Cafazzo, Seto, Salenieks, & Rossos, 2007). The existing literature focuses on comparing face-to-face and teletherapy contexts. For

instance, a study on teletherapeutic consultations with elderly patients compared the mutual gaze in those two settings and found high amounts of mutual gaze in teletherapy compared to face-to-face interactions (Hilty, Luo, Morache, Marcelo, & Nesbitt, 2002). There is a gap in the literature about the gaze and its significance in communication in teletherapy (particularly in stuttering teletherapy). For instance, holding the gaze within a teletherapeutic context may be challenging due to the positioning of the speakers and cameras. In contrast with the face-to-face settings, a client or a therapist may unintentionally disengage their gaze during their teletherapy. If a therapist holds his or her gaze at the image of their client on the computer screen, the client will not feel a mutual eye gaze. To engage in a mutual gaze the therapist needs to look at the camera or webcam which is usually further up from the image of the screen. This is mentioned as one of the most frequent issues that occurs during communication in a teletherapy session (Tyrrell, Couturier, Montani, & Franco, 2001). Studies do not report about the same phenomenon in the teletherapy via smaller devices i.e. mobile phones in which the camera is located closer to the screen. The closeness of the camera to the image may recreate a mutual gaze as the speakers can look at their screen and the camera more easily.

Smiling

Interacting via teletherapy limits one's vision to the frame of their monitors. While this can omit the impact of some of the nonverbal behaviours such as frequent and rapid finger taps on the knee, it can put the emphasis on other behaviours that are captured by the camera such as facial expressions. Showing empathy and warmth is stated to be a challenge for therapists who practice teletherapy frequently. Smiling less during a teletherapy session leads to therapists being perceived as less empathetic and that can impact the therapy outcome in a negative manner (Elliott, Bohart, Watson, & Greenberg, 2011). They may feel uncomfortable with seeing their own image as they talk to clients. Other reason can be that they just feel self-conscious to show visible facial expressions while practicing teletherapy (Kopel, Nunn, & Dossetor, 2001; Sato, Clifford, Silverman, & Davies, 2009). Studies are yet to compare nonverbal behaviours between novice users and experts with teletherapy and their possible differences in conveying empathy.

Nonverbal cues

Nonverbal cues are key factors of expressing speakers' message during a therapy. In face-to-face therapy settings, head nods and other behaviours such as body positioning and foot

movements are significant behaviours that can show presence or lack of empathy (Hall et al., 1995). However, foot movements and body positioning will be cropped out in a teletherapy session. Head nods are one of the mutual nonverbal behaviours between face-to-face and teletherapy settings, but the significance of the behaviour may vary in teletherapy due to the omission of other nonverbal cues. A recent study reports that therapists employ more frequent and exaggerated facial expressions and head nods when using teletherapy to compensate for the lack of other nonverbal behaviours (Grondin, Lomanowska, & Jackson, 2019). However, this research was designed to examine when teletherapy is conducted via computers and not phones. The change of the screen size from a computer monitor to a phone screen can limit the exaggerations or amplify them. Also, it is yet unclear if the compensation of nonverbal behaviour strategies (exaggeration and more frequent use of visible behaviours) is communicated by clients or is only limited to therapists' communication. The change in using head nods in teletherapy may impact clients verbal and nonverbal responses and this can alter the communication patterns from what occurs in face-to-face settings.

2.5 Stuttering therapy

As mentioned earlier, stuttering is a form of communication difficulty which can occur in various forms. Stuttering may include not being able to complete a phrase, having interjections, repetition of a whole phrases or words, repetition of a part of a word, prolongation and incomplete words (Jiang et al., 2012). For adults who stutter, there may be a sense of shame and negative feelings associated with their experiences of stuttering which can impact their communication (beyond the impact of the physical stutter). For instance, one study reported that adults who stutter employ more hedging words such *as kind of, I don't know* in the beginning of their sentences (Plexico et al. 2009). In addition to a negative feelings about stuttering experiences, some authors found that some adults who stutter prefer not to talk to a stranger (Yaruss & Quesal, 2008). This is another factor that increases the sensitive nature of communication in stuttering therapy. A successful communication between a client and a therapist can encourage the client to focus on altering their mindset about stuttering and decrease feelings of embarrassment or shame. For instance, a study found that clients who were able to maintain effective gaze during their communication with their therapists have lower levels of embarrassment associated with stuttering (Blomgren, 2010). Also, communicative studies show that different

communicative behaviours of therapists can help forming a positive therapeutic relationship (Cape, 2000; Hall, Roter, & Katz, 1988). For instance, in stuttering therapy a positive correlation is reported to exist between communication behaviours that show a therapist's attentiveness and the therapeutic relationship (Sønsterud et al., 2019). Another example from psychological therapy shows that the therapist's verbal behaviour of giving information has been identified to have a positive impact on therapeutic relationship (Putnam, Stiles, Jacob, & James, 1985). As Bordin (1979) holds, the therapeutic relationship is consisted of the collaboration between therapist and a client towards a mutual goal. So, a positive impact on the therapeutic relationship can enhance the collaboration between the therapist and the client. It is stated that if there is an effective collaboration in the therapeutic dyad, the client "may be more likely to invest more in the treatment process and in turn experience greater therapeutic gains" (Ackerman & Hilsenroth, 2003, p. 7).

The co-construction of communication can be impacted by communicative behaviours of both therapist. For example, focusing on either emotional or physical factors in the therapy can alter the pattern of communication in a stuttering therapy depending on the aim of the therapeutic process. A therapist may show more authoritative communicative behaviours such as giving information and direct guidance in sessions that are focused around practicing techniques to overcome the physical factors involved in stuttering (Blood, Blood, McCarthy, Tellis, & Gabel, 2001b). On the other hand, a therapist may employ more affiliative or "persuasive" communication behaviours and show sympathy when the aim is to encourage the client to collaborate in exploring psychological factors associated with stuttering (Leahy, 2004, p. 76). For example, Leahy described how a therapist implements an authoritative tone during stuttering therapy through verbal behaviours (for example taking more turns in the talk), nonverbal behaviours (gesture) and interrupting the client's turn.

Studies about communication in stuttering therapy have focused on verbal communicative behaviours (Blood, Blood, Tellis, & Gabel, 2001). Leahy for example, mainly focused on verbal communicative patterns in face-to-face stuttering therapy settings. She employed frame analysis to describe "how do the voices of a therapist and a client emerge" during their interactions in stuttering therapy sessions (2008, p. 72). She found that a therapist can balance an authoritative and empathetic role by employing different verbal communicative

behaviours. Leahy's study showed that a therapist can use affirmative verbal behaviours by using chiming in and interpreting what has been said by a client. Those verbal behaviours allow for the communicative pattern to show the pattern of empathy. On the other hand, a therapist can follow a more authoritative communicative pattern by using more frequent evaluative comments. Blood, Blood, McCarthy, Tellis, and Gabel (2001b) mainly focused on the therapist's verbal behaviour patterns in relation to the therapist's approach during therapy. They addressed the most frequent verbal behaviours throughout sessions to be providing information, direct guidance and closed-ended questions. Both studies by Leahy and Blood et al. (2001b) analysed the communicative behaviours of Van Riper during modification therapy sessions. Van Riper is a therapist who is well-known for his approach which encouraged clients to decrease their avoidance of engaging in an interaction. Van Riper's modification therapy approach is described to be a suitable educational example for other speech and language therapists who aim to focus on help the clients with both physical and psychological aspects of stuttering (Shames & Rubin, 1986). Studies done based on Van Riper's communicative behaviour take the client's behaviours into the account however, they do not acknowledge the process of co-construction of communication. Blood et al. (2001) the significance of co-construction of communication to therapists: "a clinician asks a question and then she may decide, based on her experience and client feedback, whether to select a silence, approval, or interpretation verbal response" (p.131). The client's feedback is communicated in the form of his or her verbal and non-verbal communicative behaviour which eventually forms a communication pattern with the therapist's behaviours. Findings of Leahy (2008) and Blood et al.(2001b) indicated the existence of patterns of communication in face-to-face stuttering therapy settings however the findings do not indicate the role of client's verbal behaviours in shaping those patterns. Also, in undertaking this literature review I found gap in research about presence (or lack of presence) of communication patterns in a stuttering teletherapy session and as Leahy (2008, p. 72) put it an understanding about how co-constructed patterns "emerge".

The co-construction of communication can also change because of the communicative behaviours of a client who stutter (Lee, Van Dulm, Robb, & Ormond, 2015). For instance, studies by Cream, Onslow, Packman & Llewellyn (2003) found that adults who stutter employed verbal behaviours to avoid interacting when they felt they could stutter. This study then evaluated the changes in avoidance verbal behaviours after a series of therapy

sessions. The findings of this study did not indicate a significant change in the level of avoidance verbal behaviours in the communication. This means that the communicative behaviours of an adult client who stutter are sometimes formed because of the client's previous experiences of stuttering which can alter the communication patterns in a therapy. Cream et al. (2003) mentioned that sometimes "therapy was itself a barrier as some participants" (p. 392). This study did not identify the exact behaviours that are considered as avoidance in verbal behaviours. Another study gave an example of avoidance verbal behaviour when stuttering as: "pretending not to know the answer to a question" (L. W. Plexico et al., 2009, p. 89). The findings of these studies do not necessarily mean that stuttering always has a negative impact on the co-construction of communication. They show the importance of the client's communicative behaviours when exploring the communication in stuttering therapy settings. To the best of my knowledge, communicative studies regarding in stuttering have not reported on the relation between communicative behaviours of the therapist and the client and the resulting frequent patterns they form in face-to-face or teletherapy.

This study will report on the findings of observing communicative behaviours in stuttering therapy in New Zealand and interviewing participants retrospectively about their reflections on communicating through the teletherapy process.

2.6 Summary of the chapter

This chapter has reviewed the literature on communication in therapeutic settings (face-to-face and teletherapy) and verbal and nonverbal communicative behaviours in these settings. This review also identified that no research has hitherto examined how communication occurs in stuttering treatment delivered by teletherapy. Given that teletherapy may change communication patterns, it is important to understand how communication occurs in this context and consider the implications for therapy. The current study hopes to fill identified gaps by discussing verbal and nonverbal communicative behaviours in the context teletherapy for stuttering between a speech language therapist and a client in the New Zealand setting. The next chapter will outline the chosen methodological approach and the rationale for choosing this approach.

Chapter 3: Methodology

3.1 Introduction

In this chapter I explicate my methodology, Qualitative Description, and the methods of analysis I used including Content Analysis and Conversation Analysis. I then outline participants' characteristics and review the recruitment process. An overview of research design and methods will be presented. I detail and demonstrate the process of implementing data collection and analysis methods. Finally, I discuss the validity of the research methods related to the chosen methodology.

3.2 Rationale for Qualitative Descriptive methodology

I followed Qualitative Description as a naturalistic approach to describe the communication pattern in stuttering teletherapy sessions in a New Zealand based clinic which has received little attention in the literature. Qualitative Description is defined as a methodological approach that provides a robust and "straight description" of a phenomena (Neergaard, Olesen, Andersen, & Sondergaard, 2009b, p. 54). This approach was developed to allow an event to be studied as it happens in natural settings (Salkind, 2010). Sandelowski (2010, p. 79) clarifies the definition of conducting a Qualitative Description study in naturalistic settings: "entailing a commitment to studying a phenomenon in a manner as free of artifice as possible in the artifice-laden enterprise known as conducting research".

The aim of Qualitative Description is to increase the understanding about a phenomenon that has not been comprehensively studied before (Kim, Sefcik, & Bradway, 2017; Polit & Beck, 2004; Sandelowski, 2010). This can be implemented through holding semi-structured interviews or focus groups with people who experienced the phenomenon and observing the phenomenon as it occurs spontaneously (Sandelowski, 2000). Qualitative Description does not seek to produce new theories or concepts about a phenomenon; instead it aims to generate knowledge about the actual nature of the phenomenon. The descriptions that are generated through Qualitative Description are stated to be beneficial for further theoretical research (Neergaard, Olesen, Andersen, & Sondergaard, 2009a; Sandelowski, 2000). Qualitative Description was suitable for my research since I aimed to provide a straight

description of the communication patterns as they occurred naturally in the course of teletherapy.

3.3 Participants

The research involved one speech and language therapist and one client as participants taking part in stuttering therapy. Therapy sessions were done over telepractice using FaceTime software. I was interested in obtaining participants from both sides of the therapeutic dyad to understand their different perspectives about communication patterns in stuttering teletherapy settings.

3.3.1 Therapist participant

I sought to recruit speech language therapists who were providing stuttering therapy using telepractice. The therapists were eligible for inclusion if:

- They were partaking in ongoing teletherapeutic stuttering therapy.
- They had at least three years of experience as therapist in stuttering therapy field.
- They were working with adult clients who stuttered.
- They were providing therapy in English.
- They were able to provide informed consent.

I was able to recruit one speech and language therapist who met this inclusion criteria.

3.3.2 Client participant

Eligible client participants were those who were receiving stuttering therapy using telepractice. The clients were included in recruitment if:

- They were partaking in ongoing stuttering teletherapy.
- They were receiving therapy in English
- They were able to give informed consent.
- Their therapist consented to take part in the study
- They received therapy services from a speech language therapy centre that provided stuttering treatment for adults.

3.4 Recruitment

The therapist participant was recruited through the professional network of one of my supervisors who is a speech language therapist. She gave a brief explanation about the

study and my contacts to the potential therapist participants. She emailed a research advertisement that had general information about the aim of the research (Appendix B research advertisement); and participant information sheet for further information about the process of the research (Appendix B participant information sheet).

Potential client participants were recruited through the therapist participant. The therapist participant provided brief information about the research purpose and gave my contact details to the potential client participants. The client participants were able to contact me directly or allow the therapist to provide their contact details to me. I sent participant information sheets and consent forms to the potential client participants. One potential client participant contacted me. One therapist participant and one client participant signed consent forms agreeing to take part in this research.

3.5 Sampling

I employed Convenience Sampling to recruit suitable participants for this study. Convenience Sampling is a nonprobability sampling technique which is considered appropriate when the researcher has limited sources (Etikan, Musa, & Alkassim, 2016). The reasons of selecting this sampling method were:

- It is appropriate for an exploratory study in a new area of research when the purpose of the research is to just understand what occurs in the research settings.
- It does not aim to generalise the findings of the study which was aligned with the purpose of this small study.
- It is appropriate for the pragmatic issues regarding the limited time frame of conducting a master's degree study.

3.6 Data collection

The selection of methods of data collection and analysis followed the Qualitative Description methodology. I selected observations and semi-structured interviews as methods of data collection for this study. The purpose of data collection was to obtain insight on what happened during stuttering teletherapy sessions in terms of communication.

This study collected data by observing and recording therapy interactions and semi-structured interviews. This allowed me to explore communicative patterns from different perspectives to gain a comprehensive understanding of communicative patterns in stuttering

therapy (Sandelowski, 2000). Firstly, I employed participant observations to reach an understanding of communicative behaviours as they occurred spontaneously in stuttering teletherapy. Secondly, I employed semi-structured interviews to elicit participants' experiences towards communication in teletherapy settings. This type of interview is stated to give participants the opportunity to discuss their experiences about a phenomenon (Patton, 2002).

The analysis process began while the data collection process was still continuing, so that I could reflect on the process of the data collection; to look back on what has been observed (Sandelowski, 2000). Looking back on the data collection made me more aware on what to observe more closely in the sessions that occurred after I had started analysing data. For instance, after analysing the first two sessions of stuttering teletherapy I understood that I should pay closer attention to the client participant's nonverbal reaction when given direct therapeutic guidance, as that would then give me insight about the interaction between communicative behaviours which led to observation of a bigger picture that is a communicative pattern.

3.7 Observations

The primary source of data was participant observation. Three telepractice sessions were observed. The observations were also video-recorded which allowed for the interactions to be later reviewed and analysed (Maynard & Heritage, 2005; Peräkylä & Ruusuvuori, 2008). Observations were the primary sources of data collection for this study, consistent with Crabtree and Miller (1999) who state that when the purpose of a study is to investigate communication patterns, observations ought to be the primary source of data collection.

Observations took both verbal and nonverbal behaviours into account as both types of behaviours are important in structuring communicative patterns (Goodwin, 1995).

3.7.1 Observation protocol

Four teletherapy sessions were observed and video-recorded. Each session was approximately 45 minutes long. I was able to observe the communicative behaviours of both participants while sitting with the therapist participant. My presence and the presence of the camera was not evident to the client participants because it could not be captured by the camera; although participants knew I was present and recording (see Figure 3.1 for more details). As the presence of the camera in the study location can result in participants'

behavioural alternation (Gross, 1991). I attempted to minimise this effect by positioning the camera outside of participants' gaze directions and not in their telepractice frame I followed the approach of Sidnell and Stivers (2012) by situating the camera at eye level which helped capture facial expressions and gazes more accurately.

The therapist participant ○
The camera ●
The researcher ●
The monitor ▬▬▬▬
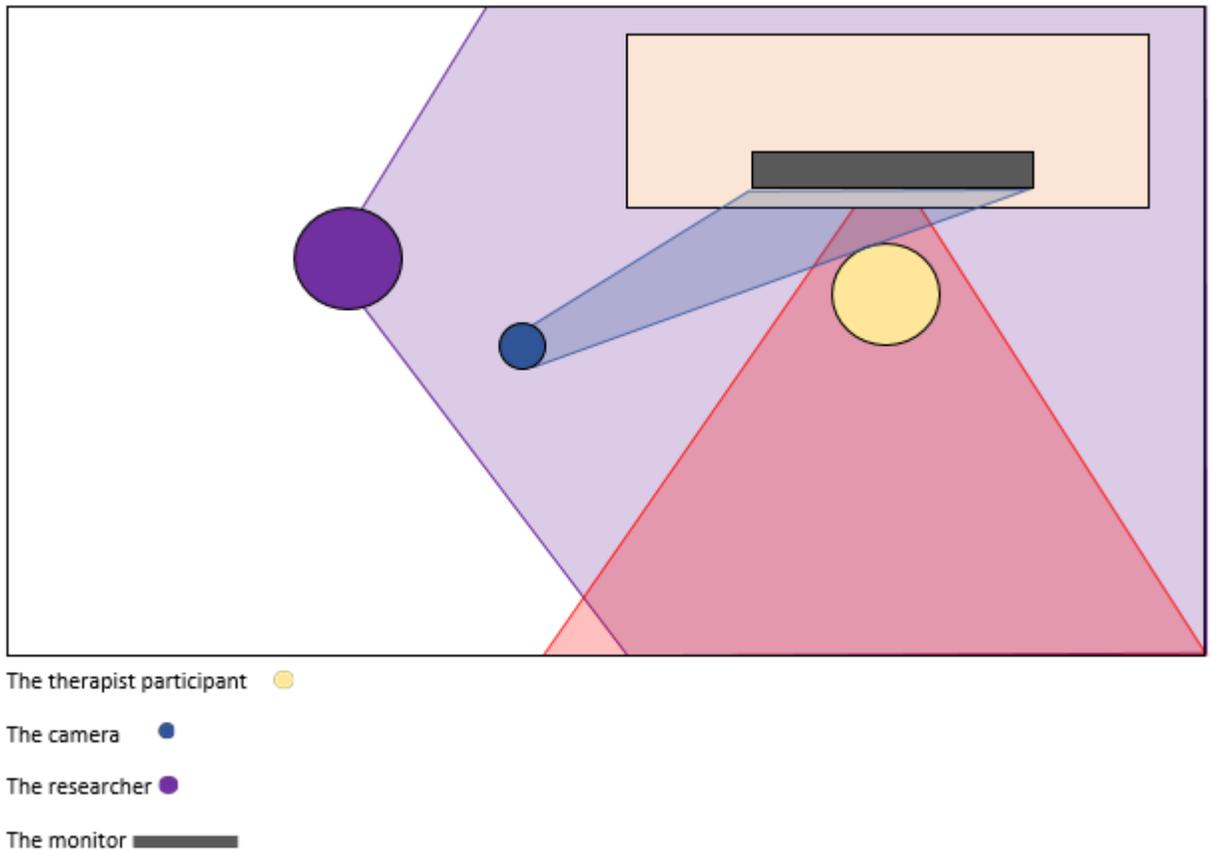
Figure 3.1: The diagram of observation sessions

According to Hunt (2009) when a researcher follows Qualitative Description, they must remain aware of the whole context related to participants' experiences to be able to later describe the phenomenon in-depth. I took fieldnotes to ensure that I captured all nonverbal and verbal behaviours. This was to remind me of the context of conversations and details that could not be seen in the recordings replays later (Crabtree & Miller, 1999). The field notes helped me remember my own perception about a specific communicative moment that was to be analysed later on (Morse, 2011). My supervisors had access to my field notes to keep them informed of my research progress.

3.7.2 Transcription protocol

I transcribed the video-recordings myself to be able to become familiar with the data and remind myself of the context in which a communicative practice had happened when analysing data. To transcribe I followed an adapted format of Jefferson's conventions (see the list of symbols for transcription conventions) noting verbal and nonverbal behaviours in addition to pauses and intonations. Jeffersonian conventions are commonly used in micro-analysis research of talk-in-interactions (Psathas, 1994; Ten Have, 2007). According to Gardner (2001) a study may employ a selection of symbols from conventions of the Jeffersonian style. I adapted the symbols that indicated overlaps of speeches, contextual and nonverbal behaviours, pauses, intonations, and pitches of voice. Pauses and gazes at anywhere other than the screen were timed since it was important to indicate if silences or gaze disengagement were frequent and significant in a teletherapy session. I provided details about the context of communication such as when a participant took notes or when they tapped on a table repeatedly, because this might allow viewers a closer understanding of what occurred during the study.

3.8 Interviews

I conducted a total of four semi-structured interviews. Semi-structured interviews seek to generate in-depth knowledge about participants' experiences towards the communicative aspect of their therapy sessions (Thorne, 2016). I interviewed the therapist participant after each observation session. The first two interviews were done immediately after completion of the first and second recording sessions. The third interview was done two weeks after completion of two recording sessions. I planned to interview the client after each session, however only one interview was conducted due to the client's prior commitments.

The literature suggests structured interviews as a suitable method when interviewing participants with speech and language impairments since it does not require them to communicate in full sentences or phrases. However, stuttering is not categorised as an impairment since it does not affect a participant's ability to respond to open-ended questions (Whiting, 2008). Each interview lasted approximately 15 to 45 minutes, and the interview with the client participant lasted approximately 40 minutes.

I asked approximately six open-ended questions per interview (probing questions are not counted) ensuring that participants did not feel pressured to respond and had time to reflect

and express themselves. Open-ended questions prompted participants to convey their experiences of their communicative behaviours during stuttering therapy sessions (DiCicco-Bloom & Crabtree, 2006; Harrell & Bradley, 2009). Open-ended questions were planned out before conducting the interviews and were revised by my supervisors and the university ethics committee to ensure they were appropriate for the participants. The questions mainly addressed each participant's experience of their recorded teletherapy session and aimed to elicit more in-depth insights about communicative practices such as participant's preferred moments of communication or their reason to follow that certain type of therapy. I asked other questions during the interview to clarify my understanding or reach a more detailed answer, some examples include:

1) How would you show your excitement if it was face to face?

2) What are those cues for when he is feeling upset? How would you pick that up from those cues?

3) What do you mean about where his gaze goes?

4) How would you try to elicit information and kind of tease out the reasons why he is not feeling well?

5) Let's say they are uncomfortable talking about something; what would you do then?

6) What do you think that could go differently? What did you expect to come out of that session?

7) Do you remember what has happened and how did he feel during those two sessions?

8) Did you guys had face to face therapy before? Are these changes usual to happen in face to face; did it happen in that phase as well?

9) When it's face to face, would you do the same as talking; taking notes and gazing down instead of gazing at the person? Would it be the same?

10) So there is no need for clarification?

11) I'm channelling back to when he was not feeling well. So, you could see it, couldn't you?

12) I was wondering if you've got a communicative pattern or an approach that you take for your clients for whenever they are hesitant towards answering something or facing something.

13) How did you deal with it; how do you think you dealt with it?

14) Have you had any other clients that had only had teletherapy and not face to face sessions with you?

15) Do you think it would take as long to build a rapport face to face?

16) What do you think about using humour during your sessions?

17) How do you think you could encourage – the client- to be more active in telehealth, talk more and engage more? How do you think you can encourage him to do so?

18) Even if he wants to; do you think that he would just start talking or would you usually start something?

19) Why would you go through that act of thinking together, finding reasons, finding solutions; if you were to give it a name?

20) How long have you known each other?

21) So, they do that (looking away) when they are face to face with you as well?

22) Do they hide their face? It's… as in conscious… as in they do it on purpose?

23) How do you collaborate with that? How do you show your engagement in terms of communication?

24) What do you mean by a hurry up face? How would you describe it?

25) Would you think that in any sense you are encouraging him to continue talking or there is nothing as in encouraging your clients involved?

26) What would be a different encouraging act if he was having a visit in person?

27) Do you think the encouragement is again collaborative, or do you think it's more one sided?

28) If you could indicate any difference between face to face and telehealth; there is none?

29) How long did you know -the therapist- ?

30) That must feel quite different?

31) How long were the face-to-face sessions?

32) Was it once a month or was it more?

33) What if I don't get a chance to do all those techniques such as face to face then…?

34) But can you generalise it to your sessions as well with -the therapist-?

35) I wonder if that's the same in face to face; is she the same?

36) (The therapist) has always been your therapist, or did you have other therapists before?

37) I was wondering; do you think that could go differently? Did you expect something to come out of that sessions?

38) When you're having a rough week; if you could choose and you had the free time and everything, would you rather have your sessions face to face or over Skype?

39) About just your communication, not the content; what would you change? What do you think can be improved?

40) Do you think it would help you to see more of her office and herself sitting?

41) In terms of the timing of your talks and how you talk to each other; do you see something could change or do you think it's the best that it can be?

42) The silencers are easier to have in face to face conversation than in video chat?

43) If you think about the last two sessions, right? I want to know the most memorable or whatever stuck on your mind that Anna did or said during the conversation that just stuck with you?

44) Have you caught it in the last two sessions; that's she's doing it?

45) If it was in person and she would take just a bit longer to do that, you wouldn't mind that?

The interviews were audio-recorded (Crabtree & Miller, 1999). Both of the participants had recently contributed in the video recorded therapy sessions and employing an audio-recorder did not appear to concern them. I also took notes as it was essential to remember the context in which the responses were given (Opdenakker, 2006). The interviews were transcribed verbatim, because it allowed me to get closer to the data and to listen more carefully and repeatedly to participants' experiences.

3.9 Data analysis

I applied Content Analysis to all the transcripts generated from observations and semi-structured interviews. I then applied Conversation Analysis to analyse significant moments including when patterns reoccurred similar to what studies found in other disciplines and when interactions did not follow patterns similar to the findings of other studies. Data analysis sought to achieve a robust description of the patterns of communication in stuttering teletherapy settings between a therapist and an adult in a New Zealand based clinic.

3.9.1 Content Analysis: Macro-level analysis

The primary method of analysis in this study was Content Analysis, which Sandelowski described as an analysis method which allows the researcher to summarise the observations of "verbal and visual" information (2000, p. 338). In this study visual information comprised the nonverbal communicative behaviours. The purpose of this method was to categories the data into groups to understand which patterns occurred most often and then describe what I saw happening in those patterns in more depth. In Qualitative Description methodology, the Content Analysis method is not supposed to show the final description of the research; it merely allows for further explanation of what is happening in the data (Sandelowski, 2000).

I followed a deductive approach and applied existing categorisation systems of communicative behaviours of a therapist and a client to categorise participants' behaviours. Deductive Content Analysis is an approach that enables a study to base the categories on earlier efforts of other studies. The findings of earlier studies can include theories, or developed models (Hsieh & Shannon, 2005; Polit & Beck, 2004; Sandelowski, 1995). I chose a deductive approach, because this study was my first attempt at applying Content Analysis and as a novice researcher who aimed to conduct an exploratory study, it was more logical to follow in the footsteps of others who have employed Content Analysis in similar, though not identical areas of research.

To ground the analysis, this study developed two unconstrained categorisation matrices from earlier studies of verbal behaviours. These two categories were appropriate since both have been used and referred to in earlier studies with similar approaches, namely to study the communicative behaviours of a therapist or a client in a naturalistic setting which can be face-to-face therapies or teletherapies (Bischoff & Tracey, 1995; Blood, Blood, McCarthy, et al., 2001a; Iwakabe, Rogan, & Stalikas, 2000; Shechtman, 2004; Shechtman & Rybko, 2004). The first categorisation matrix explicates the therapists' verbal behaviours in a therapy setting and is based on a revised version of the Hill Counselor Verbal Response Category System (HCVRCS) (Hill et al., 1993a). The reliability of HCVRCS has been established through multiple revisions; studies addressed its validity to be good (Elliott et al., 1987)The value of kappa of the HCVRCS is measured to be 0.67 to 0.79 and it consists of nine mutually exclusive categories.

This categorisation system was appropriate for this study since it allowed the findings of this research to be measured against existing findings about therapists' communicative behaviours and for similarities or differences to emerge. Another reason that I chose this categorisation system was to employ it in an innovative way. I put two sets of communicative behaviour categories against each other which allowed me to see the interaction between behaviours and frequent communication patterns between them. Table 3.1 below identifies the categories of HCVRCS in accordance with stuttering therapy settings.

Table 3-1: Categorisation matrix of therapist's verbal communicative behaviour modes

Approval - The therapist shows empathy by uttering verbal confirmations. Short answers such as "good" and "absolutely" can be categorised as approval communicative behaviour if they were not said only to hold the conversation. Approval should particularly support the client by giving "reinforcements and/or reassurance" (Blood, Blood, McCarthy, et al., 2001a, p. 142).
Closed question - The therapist looks for a specific answer. The questions that can be answered by yes and no responses or very short answers (one or two words)
Confrontation - The therapist addresses a contrast in the client's behaviours or statements. To confront the client the therapist may address the prior behaviours or statements and remind the client of them.
Direct guidance - The therapist gives directions of what to do to the client. The directions are about the therapeutic phenomena that is discussed. They can be in forms of telling the client how often a practice needs to be repeated until next session or how to conduct a practice.
Interpretation - The therapist rephrases a client's statement and offers new information by 1) drawing a pattern in the client's behaviours/thoughts, 2) addressing and explaining client's resistance, 3) introducing a new concept of client's issue or behaviour/thoughts
Open question - The therapist looks for the client to do reflections and "explorations" (Blood, Blood, McCarthy, et al., 2001a, p. 142). The responses to an open question can be infinitely various.

Paraphrase - The therapist reflects on his or her understanding of the client's statements. During paraphrase behaviours, the therapist does not offer any additional insight in to what has been said.
Providing information - The therapist offers information about the therapy including about the therapy subject, the date of a future session or data relevant to the therapy.
Self-disclosure - The therapist shares information about one's own life, experiences, thoughts and opinion. Self-disclosure is commonly identified due to the use of using the pronoun "I" in the statements.

The categorisation matrix of the client's verbal behaviour was based on the revised version of Client Behaviour System (CBS) (Hill et al., 1992). I employed this categorisation system because it was developed by the same researcher, and this allowed for categorisation to follow a consistent measurement for units of analysis. I also found this categorisation system suitable for my study since it viewed the client's behaviours as independent and not as responses to the therapist's communication. This was similar to my perspective of viewing the client as an independent participant in the research.

Hill et al. (1992a) tested the revised version of CBS and found a kappa value of 0.59 across all categories which indicates a fair to good rate of agreement among judges. Further analysis on the reliability of the categories of CBS shows that the categories of this system do not occur by chance and have a predominant presence in the therapeutic context (Hill et al., 1992a). The researchers who developed CBS mentioned that it is suitable for using when observing the client's communicative behaviour in a course of therapy sessions which was aligned with the aim of this study (Hill et al., 1992a). Table 3.2 identifies the categories of CBS with reference to previous studies that followed it for similar purposes in other fields of therapy (Shechtman, 2004).

Table 3-2: Categorisation matrix of client's verbal communicative behaviour modes

Resistance - The client signals defensiveness or hesitation towards discussing a topic in the therapy
Agreement - The client addresses having a mutual agreement or a similar opinion to the therapist
Appropriate request – The client asks the therapist for advice regarding a therapeutic enquiry or clarification on a matter that is not clear. This is to ensure the accuracy of understanding during the therapeutic process
Cognitive-behavioural exploration - The client reflects on his or her thoughts or behaviours associated with the therapeutic changes, therapeutic process or the topic of the therapy
Affective exploration - The client reflects on his or her feelings and emotions associated with the therapeutic changes, therapeutic process or the topic of the therapy
Insight - The client arrives to a new understanding associated with his or her therapeutic process
Recounting - The client recalls the past events or experiences.
Therapeutic changes - The client evaluates the changes in his or her therapy-related status

To code the data, I used N-Vivo Plus; a Content Analysis software programme which is commonly used in qualitative descriptive studies (Jha, Lin, & Savoia, 2016; Thorne, Con, McGuinness, McPherson, & Harris, 2004). An important part of this phase was to refer to my research question: "What are the most frequent communication patterns in stuttering teletherapy sessions?" I copied the research question as a reference in N-Vivo; this allowed me to repeatedly remind myself of what I was looking for. Each unit of analysis was a meaningful phrase or sentence. I also considered short answers or phrases without verbs for example, "Absolutely, right", as a unit of analysis. This was because this phrase marked a

speaker's complete turn; the other speaker started a new turn of talk in response to short answers. The other speaker would not start to respond to a short answer unless he/she considered it to convey a complete message.

Qualitative Content analysis included coding four verbatim transcripts into nodes. A node is a code that is created in the N-Vivo software and includes all the same instances of a communicative behaviour across data. I considered each communicative behaviour category e.g. affective exploration a parent node that consists of smaller categories that are called children nodes and are more specific. Affective exploration node consisted of three children nodes: exploration of feelings towards challenges due to stuttering, exploration of feelings towards stuttering and exploration of feelings towards therapeutic changes. I gave each parent node a brief description in N-Vivo to refer to and avoid potential mistakes during analysis. Figure 3.2 was generated by N-Vivo to show the hierarchy of parent and children nodes. This figure lists the N-Vivo nodes and provides a brief explanation of each category.

Table 3-3 List of N-Vivo nodes

Name	Description
Affective Exploration	Client's attempt to look into his feelings
exp.feeling.challenges	
exp.feelings.reg.stuttering	
exp.feelings.therapeutic changes	
Agreement	Client's cue of mutual understanding without adding a new point of insight.
agr,with,provide information	
agr.with.interpretation	
agr.with.paraphrase	
agre.with.confrontation	
agre.with.direct guidance	

Name	Description
Appropriate Request	Client's request for professional advice/clarification
req.appointment	
req.clarification	
Approval	Therapist shows sympathy/encouragement/reinforcement. ex:sweet, perfect
app.client.challenge	
app.client.exploration	
app.statement	
Closed questions	Therapist asks yes/no Qs.
que.confirm.understanding	
que.stuttering	
Confrontation	Therapist points out a contrast
conf.reg.contradiction in statement	
conf.reg.stuttering	
Conitive-behaivoural Exploration	Client's attemp to look deeper into his own behavior and thoughts
exp.challenges.stuttering	
exp.stuttering.improvement	
exp.therapeutic changes	
Direct Guidance	Therapist advise/request therapy related action to take place.
dg.executing techniques	

Name	Description
dg.reg.mindset	
Insight	Client's identification of a pattern or relation between his thoughts/behaviour regarding stuttering.
ins.reg.challenges	
ins.reg.improvment	
ins.reg.stuttering status	
Interpretation	Therapist adds info. to what she hears
int.reg,client.statement	
int.reg.client.eperience	
int.reg.client.stuttering.challenge	
Open-ended Questions	Therapist asks open-ended Qs.
que.further details	
que.general topic	

The names of the nodes were inspired by the categories of matrices that are explained in table 3.3 and 3.4 below.

Table 3-4: Category coding outline of therapist's verbal communicative behaviour modes

	Self-disclosure	Information	Approval	Interpretation	Open-ended questions	Close questions	Parphrase	confrontation	Direct guidance
What are the significant categories of verbal behaviours of a therpist in stuttering therapy settings?	Self-disclosure about other clients	Informing client of therapist's opinion	Approving client's challenge	Interpretation of client's utterance	Qustion for opinion	Question to confirm understanding	Paraphrase a statement about stuttering	Confrontation about stuttering	Direct gidance for executing a technique
	Self-disclosure about personal experiences	Informing the client about a tecnique	Approving client's improvement	Interpretation of client's stuttering situation	Question for further details	Questions regarding stuttering	Paraphrase to confirm understanding	Confrontaion about contradiction in talk	Direct guidance about mindset
		Informing a client about his status	Approving client's idea/opinion	Interpretation of client's experience	Question for rephrase/ repeat topic		Paraphrase to draw conclusions		
		Informing about stuttering nature/ process			Question about stuttering				

The client participant's behaviour was analysed following the same procedure.

Table 3-5: Category coding outline of client's verbal communicative behaviour modes

	resistence	agreement	request	recounting	Cognitive-behavioural explorations	Affective explorations	insight	Therapeutic changes
What are the significant categories of verbal behaviours of a client in stuttering therapy settings?	Resistence to discuss stuttering	Agreement about an interpratation	Request for setting appoitment	Recounting an experience	Exploring challenges in stutterning	Exploring feelings about stuttering	Insight about stuttering status	Changes in therapeutc routin
	Resistence to recount an experience	Agreement about a paraphrase		Recounting last therapy sessions	Exloring reasons of improvement	Exploring feelings about therapeutic process	Insight about reasons of improvement	Change in stuttering level
	Resistence to discuss a topic further	Agreement with an directi guidance			Exploring personal progress between since last session		Insight about stuttering challenges	Change in mindset regarding stuttering
	Resistence to give straight-forward reponses	Agreement with confrontation						

After putting instances into children nodes, I aggregated them into their identified parent nodes. Figure 3.3 shows the results of aggregating nodes in N-Vivo in the process of analysis.

Nodes

Name	Files	References
Affective Exploration	2	28
exp.feeling.challenges	2	7
exp.feelings.reg.stuttering	3	11
exp.feelings.therapeutic c	2	7
Agreement	2	19
agr,with,provide informati	1	1
agr.with.interpretation	1	2
agr.with.paraphrase	1	1
agre.with.confrontation	1	4
agre.with.direct guidance	0	0
Appropriate Request	1	4
req.appointment	0	0
req.clarification	0	0
Approval	2	33
app.client.challenge	1	1
app.client.exploration	1	5
app.statement	2	3

Figure 3.2: Aggregation outcome mid-analysis in N-Vivo

After completion of coding and aggregating children nodes within parent nodes, I exported an outcome diagram (see Figure 3.4), to simply outline the recurrent communicative behaviour across the data. The presence of each behaviour was measured by the frequency of instances over four sessions of teletherapy.
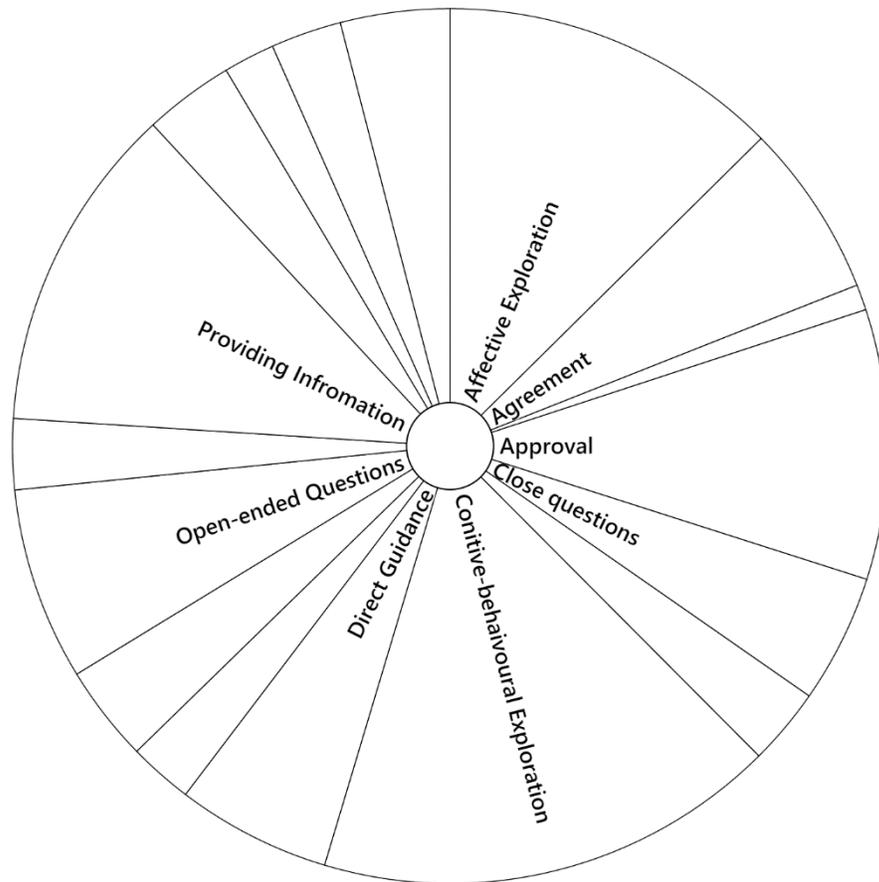
Figure 3.3: N-Vivo results of frequency of the occurrence of communicative behaviours

For the last stage of Qualitative Content Analysis, I looked for all instances of each parent node by opening the reference of each child node. For example, figure 3.5 shows some of the references of nodes that were included in parent node of Approval.
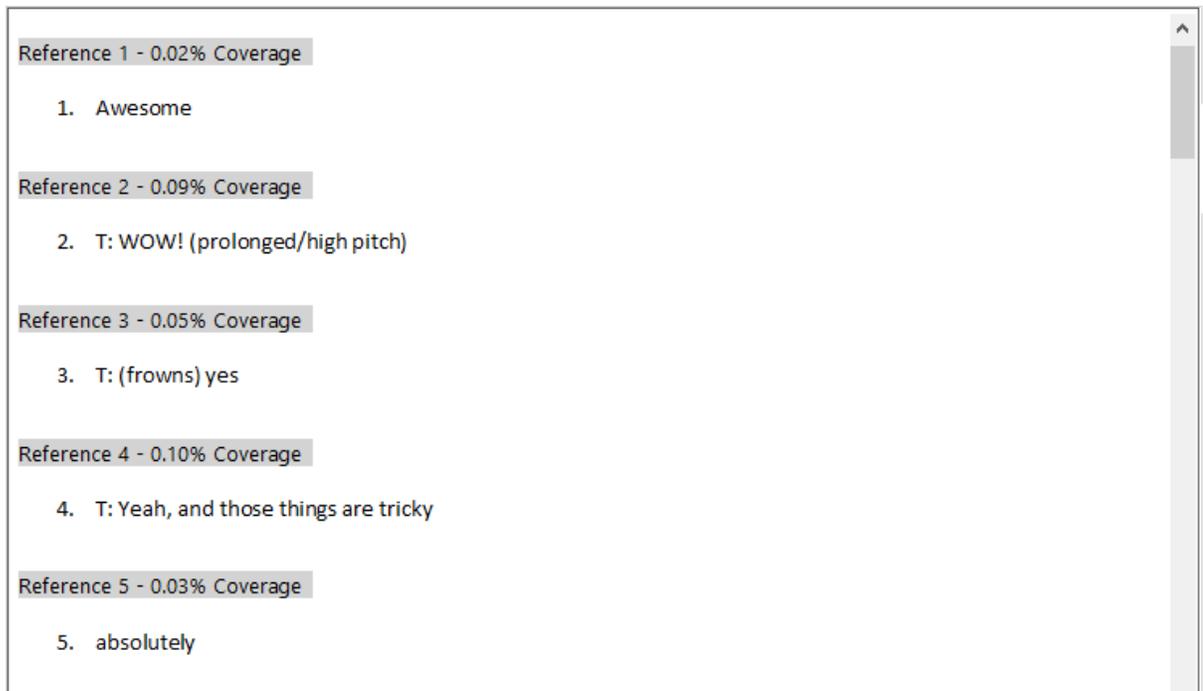
Figure 3.4: References of nodes in texts

I then opened the reference links for nodes which allowed me to see the topic of talk and the context in which that node occurred. Figure 3.6 is an example of how I read nodes in their context in N-Vivo:

the camera)

8. C: yeah (nods his head) yeah

9. C: It's probably a good as it has ever probably been (looks directly in camera)

10. T: Awesome!(high pitch) (very big smile)

11. C: (smiles)(nods his head)

12. C: Really yes (nods his head)

13. T: (Smiling)

14. C: Probably hasn't ever been any better (looks away) which is fantastic (smiles)

15. T: WOW! (prolonged/high pitch)

16. T: So what do you put that down to?(gazes directly into the camera)

17. C: (brief pause/looks away briefly) well it comes down to two things (nods his head) it's probably the technique aspect (hand gestures an imaginary piece in the air)

18. T: yeah (nods her head)

19. C: (nods head) which comes into it

20. T: (nods her head)

Figure 3.5: Nodes in the text context

After this, I began to apply Conversation Analysis to identify which verbal and nonverbal behaviours led to occurrence of the highlighted instances and to identify what communicative behaviours followed those instances.

3.9.1   Conversation Analysis: Micro-level analysis

While Content Analysis gives us detail about the types of communication that occur in the stuttering teletherapy (i.e. descriptive account of the nature of communication), Conversation Analysis gives us the insight as to how those types of communication build a larger pattern. Leahy (2004) mentioned the importance of understanding which communicative behaviours shape an interaction in stuttering therapy settings through using Conversation Analysis.

I applied the Conversation Analysis method to the data to first indicate which nonverbal behaviours (such as gaze) helped form patterns which were identified by Content Analysis. The second purpose was to look at examples of categories within the context of the talk. Conversation Analysis allowed me to look at how conversation was co-constructed; and how each person's communication informed and shaped the other person's. This helped me put the categories which emerged into in a larger frame which then demonstrated a communication pattern.

According to Hutchby and Wooffitt (2008), Conversation Analysis is commonly applied to conversations that occur in natural settings. Conversation Analysis evaluates the occurrence of talk and communicative behaviour in accordance with conversation principles (White, 2018). It is founded on two principles:

1. The structural aspect of the talk is achieved by following an order in taking turns while communicating (Sacks, Schegloff, & Jefferson, 1978). The conventional order is not implicitly taught or noted between speakers, however speakers notice the absence of the order in the organisation of turn-taking (Ten Have, 2007).

2. Speakers gradually and collaboratively structure the path they want a communication pattern to follow. Therefore, they employ each turn not only as the medium of shaping the preceding talk further, but also as the tool for adapting and altering context for following turns (Atkinson, Heritage, & Oatley, 1984). Therefore, a researcher who is using Conversation Analysis cannot use individual turns of talk as the units of analysis.

I considered the first principle when applying Conversation Analysis to the data. This helped me identify and describe if and how the therapist participant and the client participant were able to maintain the structural aspect of talk despite conversing through FaceTime. In Content Analysis, I focused on individual utterances whereas in Conversation Analysis, I looked at turns and considered the different utterances from the different individuals within those turns.

I identified the units of the analysis considering the second principle outlined above. Each unit of analysis included all the turns taken to address a topic. A unit of analysis was only identified as complete when one of the speakers changed the topic in the proceeding turn, as shown in Extract 3.1:

Extract 3.1

> 1. T: WHAT'S that noise? OH is that your phone making some sort of?(smiles)
>
> 2. C:Yes it's my phone buzzing.
>
> 3. T: it sounded like a um a ferry horn? worn that was weird (smiles)
>
> 4. C: (laughs) oh did it?
>
> 5. T: Yeah on THIS side (laughs)
>
> 6. T: Em okay so (.) so the important thing to look at so yeah stuttering fluctuate sometimes (.) you know why sometimes don't know why sometimes you DO know why but you can't do anything about it sometimes like now you don't really know why and therefore you it's hard for you to control that particular factor but you do still have control and the (looks away briefly) the important thing about the acceptance and the kindness and the patience is that you do have control about whether becomes then a slippery slope into worst of an increase in stuttering

In the example above, the first 5 turns are about a similar topic. The unit of analysis which contains those turns ends when the therapist participant begins talking about a different topic. Therefore turn 6 is the start of another unit of analysis.

To bring the methods of analysis together to achieve the purpose of the study, namely to describe communication patterns, I followed these steps:

1. Developed categories through Qualitative Content Analysis
2. Selected instances from each communicative category
3. Used the selected instance as the starting point of choosing the unit of analysis for Conversation Analysis
4. Analysed that unit by looking at the responses to the selected instance from the category
5. Repeated steps 1-4 in multiple instances in relation to multiple instances belonging to the first category as the first unit of analysis
6. Looked for a repeating pattern of communication among all units of analysis.
7. Mark any repeating pattern as "reoccurring".
8. Described that pattern by explaining the string of communicative behaviours of participants from the start until the end of an interaction around a particular topic.

3.8 Rigour

According to Sandelowski (1986) the first component required to maintain rigour in a qualitative study is to maintain the truth value. The truth value commonly found in this type

of study is defined as investigating a phenomenon from the eyes of the people who experience it. To stay faithful to the participant's experiences, this study employed extracts of data when presenting the findings. The instances of interaction are fully transcribed, mentioning the details of behaviours. The semi-structured interviews with participants also helped obtain insight about the participant's perspectives on the teletherapy sessions.

Another way to remain true to presenting the subjects' experiences without the interference of a researcher's experience was to identify my own experiences towards the topic. By outlining my experiences and thoughts before conducting the research I became aware of their impact on the analysis and reporting processes. For instance, I initially thought that the client's stuttering might interfere with the communication process and that the turns of talk would often be disjointed. Therefore, my initial focus was to see if there were many overlaps or interruptions in the participants' talks. This however, was not applicable to my participants since they both paused to avoid interrupting the other speaker. My initial thought led me to focus on how the participants managed their turn-taking through nonverbal communicative behaviours which I talk about in the discussion chapter of this study.

Sandelowski (1986) also warned researchers about not trying to force their data to fit certain categories when they want to situate their studies within the literature. Through my findings I intended to show both instances of data falling into patterns and times when the data is divergent.

The second component to ensure rigour is the applicability of the study. As Sandelowski (1986) stated, qualitative description requires a study to be conducted in natural settings. Since this study collected data from observations of on-going stuttering teletherapies, I aimed to observe how a teletherapy session is practiced in real life with the least controlled variables possible. Furthermore, the applicability of a study to an audience does not mean it is generalizable to them. The experiences within the findings may be similar to those of other therapists and clients who practiced stuttering teletherapy. However, they may not necessarily occur to everyone since an experience is a subjective matter.

The third component of rigour is auditability. This means the process of the research must be clear and easy to follow for audience, including peers who are interested in conducting similar studies (Sandelowski, 1986). To achieve clarity, there are a number of essentials to

be noted: the reason of interest in the selected topic, the purpose of the study, the methods of finding participants, how they were approached, the settings of collecting data, the systems to categories the data, the outlines of categories, in addition to memos and fieldnotes. This chapter has described all these essentials. The memos, fieldnotes and outlines of the categories are listed and available to read as appendices (Appendix B and following).

3.10   Ethics approval

Conditional ethics approval was initially granted on 19 September 2018. I obtained my final ethics approval from Auckland University of Technology Ethics Committee (AUTEC) on 9 October 2018. A copy of the approval form is attached (Appendix A). The amendment correspondences and the other ethical evidence including observation protocol, interview guide, open-ended questions, information sheets, and consent form advertisement sheets are attached to this study as well (Appendix).

The next two chapters will describe my findings in terms of the communicative patterns in stuttering teletherapy I observed between a therapist and a client in a New Zealand based clinic.

Chapter 4: Communicative behaviour types used by the therapist participant

4.1 Introduction

This research aimed to describe the core communicative behaviours used in stuttering teletherapy. In this chapter, I present the findings of this study regarding the types of communicative behaviours of the therapist participant (mentioned as the therapist henceforth) while interacting through teletherapy. Sections 4.2 to 4.10 are dedicated to describing eight categories of communicative behaviour which were identified through Qualitative Content Analysis based on Client Behaviour System (CBS) (Hill et al., 1992b). In section 4.11, I describe the therapist's perspective about communication in stuttering teletherapy settings. In section 4.12, I summarise the core findings of this chapter.

4.2 Providing information

Providing information is a general term that is assigned to communicative behaviours that a therapist uses to inform a client about the therapeutic phenomena (Blood, Blood, McCarthy, et al., 2001a). This study found providing information as the most occurring verbal behaviour throughout the observed sessions of stuttering teletherapy. The therapist discussed the facts about stuttering; explained psychological aspects of stuttering; gave further insight to the client's explorations (see Chapter 5 for cognitive-behavioural and affective explorations) using this category of the verbal behaviour. Even discussing the information about the possible schedule of a proceeding session is stated to be a part of this category. Due to the significance of this behaviour multiple instances need to be discussed. This allows highlighting the context of these instances and responses that they received.

The instance below in Extract 4.1 shows the therapist providing information a therapeutic approach:

Extract 4.1

408.	T: the more (looks < 1 sec) the more that your body is going to um [follow that command and actually not be able to do it]
409.	C: [(nods his head) (smiles)]
410.	T: um (looks away briefly) (pauses < 1 sec) so there are (hand gestures number two), there is only (puts her hand down) kind of desensitisation to this (smiles) (nods her head) to those sorts of [thing]
411.	C: [(yeah) (smiles) (nods his head)]
412.	T: to prove to yourself that you can do it BUT there is a very, there is a greater approach to that so it's not about throwing yourself in the deep end having anxiety a hundred out of a hundred when you answer that phone it's about thinking are there phone calls (looks away < 1 sec) where I can answer it and I can't (looks away < 1 sec and I can say [Hi it's "s"?]
413.	C: [(nods his head)]

While the therapist is explaining about the therapeutic approach, she looks away multiple times every time for less than a second. In the first interview session with the therapist she mentioned that these pauses are necessary for her to disengage from the conversation briefly to find the right words to say. These brief moments are sometimes accompanied with a short pause (Line 410) which supports the idea of temporary disengagement. The client does not demonstrate any behaviours which cue dissatisfaction from brief pauses and gaze disengagement. In fact, the client responded to turns with disengaging behaviour with verbal agreement (line 411), smiles (lines 409 & 411) and head nods (lines 409, 411 and 413).

This study found that the therapist uses providing information communicative behaviour to make sense of what the client feels while stuttering as shown in Extract 4.2:

Extract 4.2

303.	T: your stutter is varying your stutter is going up and down and you're at the mercy of unseen forces and there is nothing you can do about it which is often the sort of feeling that then leads to the stuttering becoming even worse
302.	C: (nods his head)
303.	T: because that is not the place of patience and (laughs) kindness to your self
304.	C: yeah (laugh)

Line 303 shows an instance when the therapist used her interpretations of what the client has said to provide further information about stuttering. While this instance can easily be

mistaken for interpretation, the tone of the sentence shows that it is providing information. If it was interpretation, we would expect that the therapist would employ a doubtful intonation to first seek the client's confirmation about the interpretation and then carry on with her turn. However, in this case the tone of line 303 is certain and there are no pauses. That can show that the therapist focused on the last part of line 303 which is offering insight into how the client's emotions impact his stuttering level.

This study found another purpose of the providing information response category, that was to explain the potential results of applying therapy methods to give further insight to the client, as shown in Extract 4.3:

Extract 4.3

> 329. T: [I think] I think you're absolutely right I mean the way that I look at it that your (looks away) so you had this speech system which is prone to stuttering and all things being best case scenario meaning there is no fear of being it's not so much of stuttering it's the fear of being judged for stuttering or being found out for stuttering or being noticed for stuttering
> 330. C: Yeah
> 331. T: Those are some of the primary drivers of stuttering happening or not because your (.) speech system in an environment of no stress what so ever
> 332. C: (nods his head)
> 333. T:Your body being well rested your mind not having too many other thought (.) coming thoughts about jobs in the UK (.) oh no jobs in the Auckland versus going overseas
> 334. C: (Smiles) (nods his head) yeah
> 335. T: If everything else (.) if we can take all of those other demands on your brain power and your mind space (looks away-1 second) not mind space (looks away-2 seconds) head space out of the picture your coordination is perfectly and utterly sufficient to get the speech out smoothly
> 336. C: (nods his head)
> 337. T: Ninety nine percent at the time there's still that element of glitchy-ness that just happens but when all those things are not there then those little glitches (Pause-1 second) you don't have to think about them because there's no fear of judgement there is no fear of being found out there is none of that fear that kicks in

The underlined instances demonstrate that the therapist participant conveys information regarding therapy that the client participant did not know about. The analysis found that once again the therapist integrates her interpretations (line 333) to bridge the current conditions to providing information about the possible future. The turns of talk during the moments of providing information (line 331 to line 337) show that the therapist takes significantly longer turns in comparison with the client and does not employ any hedging in her talk while the client only responds with nonverbal or brief verbal affirmative gestures. The predominance of this communicative behaviour is aligned with the existing literature

regarding the key factors of a successful therapy from clients' perspectives. The importance of the therapist's behaviour of providing information for adult clients is addressed in a study by Blood, Blood, McCarthy, et al.,(2001a); it helps a client first understand the stuttering from clinical and psychological aspects. Then the client can modify his or her approach to stuttering according to the new insight. The importance of this communicative behaviour in the stuttering therapeutic settings with adults is linked with its high occurrence throughout the observed teletherapy sessions.

4.3 Approval

In a stuttering therapy setting, approval is described as a sympathetic act by therapists to "provide emotional support, approval, reassurance or reinforcement" (Blood, Blood, McCarthy, et al., 2001a, p. 142).Short answers such as "perfect" and "sweet" are also categorised as approval acts. This study identified a certain approval moment which was later marked as significant by the client during an interview. The following instance was observed during a teletherapy session when the client said he thinks his stuttering has never been better, as shown in Extract 4.4:

Extract 4.4

```
 9.  C: It's probably as good as it has ever probably been (looks directly in camera)
10.  T: AWESOME!(high pitch) (very big smile)
11.  C: (smiles)(nods his head)
12.  C: Really yes (nods his head)
13.  T: (Smiling)
14.  C: Probably hasn't ever been any better (looks away) which is fantastic (smiles)
15.  T: WOW! (prolonged/high pitch)
```

The approval is conveyed along with a high pitch in the therapist's voice. This paralinguistic feature of the behaviour shows the therapist's attempt to show not only approval but her excitement, reflecting her engagement. In the interview I asked the client "what is a moment of the teletherapy that stuck in your mind?" He gave the following response:

> *"I think it would be around in the first one where I was talking about how my stutter has been as good as it has been as far back as I can remember which isn't too far. I've been doing it since I was I only remember up until three-four years ago actually stuttering ...I think she showed genuine... by that fact. She was genuinely*

pleased for me, and I was quite excited almost kind of thing which is quite cool.
That stuck; it was beyond that 'let's go through the motions; let's do this and that".

This intonation was interpreted as genuine by the client. It helped him build a bond with the therapist participant and feel mutually constructed engagement in the therapeutic progress between himself and the therapist. It is evident that the therapist's intonation had a role in making this approval a distinct instance in the client's memory from the rest of the teletherapeutic experiences.

4.4 Open-ended questions

Open-ended questions allow therapists to explore clients' perspectives based on their responses. These questions are commonly not limited to certain answers and can elicit clients' explorations. According to Blood et al. (2001a), this behaviour in the therapist's communication usually generates an explorative response on the client's side. This study found a high frequency of occurrence of open-ended questions which were used from the opening stages of a teletherapy session and carried on until the end of sessions. The therapist employed this communicative behaviour often in the beginning of the sessions to ask the client about any updates regarding the stuttering in between the sessions. The instance below shows an observed opening session of a stuttering teletherapy session, as shown in Extract 4.5:

Extract 4.5

1. T: alright so how are you doing?
2. C: yeah [pretty good] [pretty good]
3. C: It is kind of I think progressing (pause) which I think is good
4. T: How's your (stretched utterance) (short pause) speech?
5. T: cause last time (short pause)
6. C: (looks away from the camera)
7. T: well it was a month ago that we spoke (nods her head) so (pause/looks down and away from the camera)
8. C: yeah (nods his head) yeah

Lines 1 and 4 show two different aims of open-ended questions. The therapist first asked about the client's general feeling. She then decided to ask about the client's speech immediately. Other observations show that the therapist avoids immediate questions about the client's speech if his response shows that he is not generally feeling well. The reason of feeling unwell was not yet clear at that point of the therapy session. It could be a general

sickness, tiredness or related to stuttering. The example below shows the opening stage of another teletherapy session, as shown in Extract 4.6:

Extract 4.6

1. C: How are you?
2. T: Good (high pitch) how are you?
3. C: (looks down briefly) ugh not too bad [thank you] not too bad
4. T: ugh (tils her head) **not too bad (stretches her words)?**
5. C: awh (frowns)(rubs his eyes) just tired (laughs)
6. T: (closes her eyes) (shakes her head) yes
7. C: Monday morning is rough

The client's response in the above interaction communicated that he is generally not feeling as good as other times. The therapist did not take another turn to ask about his speech immediately. She carried on focusing on the client's feeling instead of changing the topic to the evaluation of the recent changes in stuttering. Moreover, this study recognised the open-ended question as a significant communicative guide for the therapist. This communicative behaviour allowed the speaker to plan out her next turns in the talk and have an effective collaboration with the client. This study found similar relations between open-ended questions and explorative behaviours in teletherapy as in face-to-face stuttering therapy sessions (Blood, Blood, McCarthy, et al., 2001a).

4.5 Direct guidance

The direct guidance behaviour of response is defined as when a therapist asks or advises a client to take on an action (Blood, Blood, McCarthy, et al., 2001a). This study found direct guidance instances taking place when the therapist participant gave technique training to the client participant, as shown in Extract 4.7:

Extract 4.7

421. T: [(nods her head) yes yeah] so (looks away- 2 seconds)(pause-2 seconds) it would be (brief pause) it would be (hand gesture) looking at who can we get to call you to help you [(laughs) with] this as well
422. C: [(laughs)]
423.   T: so (brief pause)
424.   C: (rubs his eye) (smiles) yeah
425.   T: I mean and I'm thinking your mum or [your sister]
426.   C: [(nods his head)]
427.   T: and say you know what I just need your help for the next two weeks we're going to put reminders in [their phones (uses pen to point at the camera)]
428.   C: [(laughs)]
429.   T: to call you also at a time when you're [not possibly]
430.   C: [(laughs) (shakes his head) yeah]
431.   T: well not possibly we're going to start with these phone calls when you're [not at work]
432.   C: [(nods his head) yeah]
433.   T: so the reminder for them to call you while you are on the ferry on the way home from work
434.   C: [(nods his head)]
435.   T: so that you answer the phone BUT the (points with a pen to the camera) the key there is that you answer it even though [it's them]
436.   C: [(yeah) (nods his head)]
437.   T: instead of saying hello? You say hello this is C speaking

During the exchange, the therapist participant was giving direct guidance to the client participant on how to become desensitised towards answering phone calls. Desensitisation is a therapeutic process that allows clients to become more confident facing a situation. As Leahy (2008) explained it, desensitisation decreases the client's anxiety level towards a situation of stuttering and hence improves the client's speech in similar conditions. The direct guidance of the therapist participant breaks into 6 turns integrated with the client participant's affirmative communication.

During line 427 the therapist participant uses first person plural pronouns to give direct guidance. Employing first person plural pronouns is a common communicative strategy in therapeutic context. The purpose of this strategy is to establish a common goal and allow the client to feel more actively involved in the process of decision-making during the therapy (Kinsman et al., 2010). The client participant's responses (laughs and head nods) show his agreement with the process of decision-making and the given guidance. However, he still does not take a full turn to suggest things differently to the given direct guidance.

This shows that both of the participants have a mutual understanding of their subject positions during direct guidance instances, despite the chosen communicative strategy.

4.6 Close-ended questions

Earlier communication studies in psychological therapy settings identified close-ended or closed questions as the questions that require a yes or no response. They are used to obtain the client's confirmation regarding a specific topic (Blood, Blood, McCarthy, et al., 2001; Hill et al., 1988). This study found this communicative behaviour as the least frequent across the therapist participant's communicative behaviour. However, the response to closed questions in this study, often contained a series of explorations from the client rather a simple yes, no or a clarification, as shown in Extract 4.8:

Extract 4.8

---

169. T: Cause we talked about that (high pitch)

170. T: that has happened has that improved (pause -1 second) by any chance (high pitch)?

171. C: emm (looks away)

172. T: (rests her chin on her hand)

173. C: that's a really funny one that's I find that is very much determined a little bit by how I'm kind of feeling quite quite a bit (looks away briefly) if I'm feeling confident quiet kind of

---

The therapist usually used closed questions to bring a topic back to the client's attention. The different nature of this type of behaviour that serves as an exploratory device in stuttering teletherapy sessions could be due to the relatively long time of the therapy sessions.

4.7 Interpretation

As stated by Blood et al. (2001a), the interpretation behaviour occurs when a therapist conveys a new perspective about a topic by rephrasing it and saying it back to a client. This communicative behaviour allowed the therapist to indicate an unseen pattern or a relation between stuttering and factors that impacted it for the client. The observed sessions of stuttering teletherapy contained a relatively high occurrence of this behaviour, which was observed primarily when the therapist clarified what she understood from the client's statement and then added her own perspective to that understanding, as shown in Extract 4.9.

Extract 4.9

> 388. C: you know you're doing something completely different and then you have a defined period of time [(laughs) (shows a limited space by hand gesture) to press that green button]
>
> 389. T: [(shakes her head slowly)(laughs)] yes
>
> 390. C: something between (shakes his head) where the number come up on the phone and it starts [vibrating].
>
> 391. T: [yeah yeah]
>
> 392. C: and (----) you actually do it , it's just like panic stations (smiles).
>
> 393. T: and and so makes perfect sense so there are there are (looks away briefly) pressures on you, that you just described (.) so the time pressure and not only (looks away briefly) so there is pressure to answer in a certain period of time (hand gesture a piece of something) and there is also the pressure to answer with one of the very small (looks away briefly) one of the small set of [words].

The interaction above occurred when the client participant was discussing his stuttering when answering phone calls and his feelings and thoughts about this matter. The interpretation occurred after the client completed conveying his thoughts. During the interpretation behaviour in line 393, the therapist participant gave new insight about the reasons for the phone calls to be stressful for the client participant. The client's response to the interpretation (line 393), informed the therapist that the interpretation is accurate, as shown in Extract 4.10.

Extract 4.10

> 394. C: [(nods his head)]
> 395. T: (hand gesture) so you got a pressure to say a particular word and to say that particular word in a [particular timeframe]
> 396. C: [(nods his head)]
> 397. T: [em] (looks away-1 second)
> 398. C: [yeah (nods his head)]
> 399. T: BUT the [good news is (smiles)]
> 400. C: [(laughs)]
> 401. T: those sorts of patterns can be broken

Line 395 shows that the therapist carried on with the interpretation behaviour. The therapist indicated that there is a solution for what was bothering the client participant. The nonverbal behaviours such as nodding his head (lines 396 & 398) and laughing (line 400) signals the client participant's agreement with the therapist participant's interpretations.

As stated by Ackerman and Hilsenroth (2003), accurate interpretations can improve a therapeutic affiliation significantly. I observed that the therapist's interpretations were mostly accurate throughout the observations based on the client's responses to those interpretations. Thus, this verbal behaviour of therapist participant was one of the components which contributed to maintaining an effective therapeutic relationship during stuttering teletherapy sessions.

4.8 Paraphrase

Hill Counselor Verbal Response Category System (HCVRCS) defined paraphrasing as a therapist's restatement of what a client stated without adding new insight to it (Blood, Blood, McCarthy, et al., 2001a). This means paraphrases are different from interpretation in that their purpose is to repeat a statement rather than to explain it. This study found similar functions of instances of paraphrase throughout all observed sessions in the therapist's behaviour which was to confirm accurate understanding of the client's statements, as shown in Extract 4.11.

Extract 4.11

```
394. C: [(nods his head)]
395. T: (hand gesture) so you got a pressure to say a particular word and to say that particular
        word in a [particular timeframe]
396. C: [(nods his head)]
397. T: [em] (looks away-1 second)
398. C: [yeah (nods his head)]
399. T: BUT the [good news is (smiles)]
400. C: [(laughs)]
401. T: those sorts of patterns can be broken
```

The interaction occurred after the client participant mentioned the factors that caused him to have a lower stuttering level in a certain period of time. During the underlined turns, the therapist participant summarised and restated the client participant's statements. She categorised the effective components into two main areas; that the client's life has been generally better, and that the client participant has practiced stuttering techniques between sessions.

Line 66 is the beginning of paraphrasing and shows the therapist's attention to give an accurate restatement to what she has heard. This line contains multiple pauses and a brief

act of gaze disengagement. A study in face-to-face speech therapy with aphasic clients showed that pauses were used by therapists as the tools giving them time to collect their thoughts (Bryan, McIntosh, & Brown, 1998). This study found similar function for pauses throughout communication in observed sessions. The therapist rephrased her restatement by repeating *"so"* and taking two pauses. The third pause however was taken by the therapist to give the client the chance to take a turn in the conversation. This turn allowed the client to confirm if the therapist's paraphrase is accurate. The therapist followed her initial and relatively more general paraphrase of the client's statements with more specific additional reflections. The initial confirmation from the client helped the therapist to pause less frequently. The purpose of the pause was not to gather thoughts but to let the client participant take a turn in the talk.

Another function of paraphrasing that was observed across the sessions was for the therapist to show empathy in addition to confirming understanding, as seen in Extract 4.12:

Extract 4.12

155. C: yeah I wouldn't say it's a kind of passing in the halls in a certain time but it's a kind of you want to say it at this particular [time]

156. T:[Yeah yeah yeah] that they haven't walked off before you're able to say [it]

157. C: yeah

158. T: So it's not the matter that someone says hi how you doing and you're trying to get the hi going and they're [already] thinking how rude

The above interaction shows an occurrence of the paraphrase behaviour. It happened in response to the client's description of a stuttering obstacle at the workplace. Line 156 shows an affirmative tone tied with the paraphrase rather than a simple restatement. The function of paraphrasing with this tone is for the therapist participant to show her understanding of the client participant's feelings and experiences. This is similar to earlier findings of Tomori and Bavelas (2007) that stated the aim of affirmative paraphrases to allow therapists to show their empathy which can help build a closer therapeutic relationship. The function of paraphrasing behaviour was similar across data

Furthermore, the therapist used a humorous tone when talking about attitudes of others towards stuttering. The client interpreted that statement in a humorous way too and hence did not feel ashamed.

4.9 Confrontation

Throughout the course of multiple therapy sessions, clients might demonstrate a change in their thoughts or behaviours towards stuttering. Therapists can refer to their notes or records of the previous sessions and discuss the difference and its reasons with their clients. The therapist's verbal behaviour of confrontation aims to point out an inconsistency in the client's behaviour or statements (Blood, Blood, McCarthy, et al., 2001a). This study did not find this behaviour commonly present, however there were moments that the therapist employed this behaviour, as shown in Extract 4.13:

Extract 4.13

```
44  T: that you were necessarily just deciding whether an interaction was a success or a failure based
    on whether you stuttered or not (hand gestures) they were other things(.) do you remember that?
    (rising intonation) (high pitch)
45  C: (looks away<1 second)
46  T: do you remember talking to me about that?
47  C: ah yeah (rolls his eyes) ( touches his shoulder) yeah (smiles) yeah pretty yeah
48  T: cause I thought [I thought ] cause (high pitch) that was really exciting
49  C: yeah em (looks away=2 second) I don't know
50  T: funny how that distinct out in [my mind]
51  C: [yeah (laughs)]
52  T: Super super clearly and it's gone in yours
53   C: Yeah (looks away-1 second)
54  T: Yeah
55   C:  Yeah I've recalled saying it and I guess I'm just trying to think (look away<1 second) you
    know whether I kind of relate to it now [you know]
```

The above instance happened since the client was considering his stutter to be a significant hindrance for him to achieve success in the workplace. The therapist's confrontation communicative behaviour began with a reference to earlier sessions and then became a direct confrontation by asking the client if he remembers his previous conclusions of those sessions. The client preferred not to answer and disengaged his look (line 45). As discussed earlier in chapter two in the gaze section of the literature review, this nonverbal behaviour is a significant cue of hesitation and resistance towards discussing a topic. The therapist insisted on the confrontation by repeating her question. Line 46 was not accompanied by any hedges, for instance *"Do you think you can perhaps remember you told me before?"*. It also emphasised that the therapist was just a listener and earlier opinions were the client's hence the emphasis on *"you remember talking to me"*. Lines 47,48 and 49 show an

ongoing resistance in the client's behaviour. The therapist then proceeds to employ the self-disclosure verbal behaviour (see the section self-disclosure in this chapter). Finally, she conveyed that the contrast is evident to her and not to the client which led the client to further explain the reason of this difference in his opinion. The client's attempt to give an explanation allowed a cognitive-behavioural exploration to begin. That in turn allowed the client to reflect on his mind-set about stuttering while the therapist offered professional advice about it when needed.

4.10 The therapist's perspective

The therapist believed that communication in stuttering teletherapy sessions was similar to face-to-face sessions. When asked if she felt any difference between two settings, she says *"I can't tell you anything different. I don't think I do anything different."*

I then focused on any difference in ways to convey empathy to the client. The therapist stated that she used similar verbal and nonverbal communicative behaviours to show her empathy to the client:

> *I wouldn't get up and give him a hug and there wouldn't be any physical contact. I guess in our face- to-face session he would see more about my body moving, but I think the main indicator of my joy at his success would be in my facial expressions, and it would also be in my tone of voice, and it would be in the words that I say, and all three of those are well conveyed.*

The therapist mentioned that she employs a slightly more exaggerated facial expression and head nods to show empathy and attentive listening. This aligned with the findings of another communicative study in teletherapeutic settings that reported: "The therapist was aware that her posture and movements were pronounced, almost exaggerated, as if to compensate for not being in the same room" (Manchanda & McLaren, 1998, p. 55).

I asked the therapist about roles in a collaborative process of constituting a communication pattern in teletherapy. She said:

> *every conversation is turn taking and is collaborative. So, he gives some information and I give some. Because I'm the clinician I have certain types of information but my information is the skills I need, the knowledge that I have are not going to be useful unless we put it together with the skills and information that he has had about who he is and what's going to work in his life, so all of it is collaborative. The therapeutic process is very collaborative.*

This approves the findings of the study of patterns in which the therapist had an expert role and the client was a not just a listener but supply information and actively contribute in the communication during therapy sessions. It also explains the strong relationship between the therapist's acts of providing information and the client's cognitive-behavioural and affective explorations.

4.11 Summary of the chapter

This chapter discussed different types of communicative behaviour of the therapist participant that were observed during teletherapy sessions. The sections 4.2 to 4.10 each focused on one type of communicative behaviour. Each section first gave a definition of a communicative behaviour in stuttering therapeutic context based on the indications of available literature. The description of an instance of communicative behaviours included the verbal/nonverbal communicative behaviours that occurred whilst the instance was taking place. In section 4.12, I described the therapist's perspective about using telepractice for stuttering teletherapy.

The next chapter will present the findings about the types of communicative behaviours of the client while practicing stuttering teletherapy.

Chapter 5: Communicative behaviour types used by the client participant

5.1 Introduction

This chapter presents the communicative behaviours that were employed by the client participant (referred to as the client henceforward). The different types of client's communicative behaviours are grouped into nine categories based on the Client Behaviour System (CBS) (Hill et al., 1992b): cognitive-behavioural exploration, affective exploration, recounting, resistance, appropriate request, agreement, insight, and therapeutic changes. I present each category of communicative behaviour by describing its instances throughout four sessions of teletherapy. Communicative behaviours were categorised through Qualitative Content Analysis and their instances are thoroughly described via Conversation Analysis. In section 5.10 I describe the perspective of the client regarding communicating through teletherapy.

5.2 Cognitive-behavioural exploration

Based on the Client Behaviour System (CBS), the cognitive-behavioural explorations occur when a client thinks about the factors associated with their therapeutic process (Hill et al., 1992b). In this study, the instances during which the client reflected about the significant components regarding stuttering were categorised in cognitive-behaviour category. This category also includes the moments where the client did not appear to demonstrate a complete understanding of a problem and hence engaged in a collaborative communication with the therapist to achieve a mutual understanding.

This study found instances of cognitive-behavioural exploration category to be the most frequently occurring communicative behaviour across the observation data, as shown in Extract 5.1.

Extract 5.1

> 16. T: So what do you put that down to (gazes directly into the camera)?
> 17. C: (brief pause/looks away briefly) well it comes down to two things (nods his head) it's probably the technique aspect (hand gestures an imaginary piece in the air)
> 18. T: yeah (nods her head)
> 19. C: (nods head) which comes into it
> 20. T: (nods her head)
> 21. C: and then I think (hand gesture indicates multiple pieces) I (-) a little bit it with some of the external kind of factors (brief pause)

The underlined turns occurred in response to the therapist participant's initial open-ended question. The question probed if the client participant was able to identify the reasons of the decrease in his level of stuttering. This was aligned with the findings of Apodaca et al. (2016) which stated that cognitive-behavioural explorations commonly occur in response to therapists' open-ended questions. The purpose of these open-ended questions is particularly to provoke clients' self-explorations and elicit personal perspectives. In some instances, such as in lines 17 and 21, the cognitive-behavioural behaviour continued until the participants reached a mutual understanding. The mutual understanding is usually marked by speakers drawing conclusions together and then moving on to a new topic of speech. In these instances, the therapist client usually asked a new question. The instance below shows the moment of mutual understanding between the participants, as shown in Extract 5.2.

Extract 5.2

> 23. C: feeling quite comfortable at the job (brief pause) feeling good in general
> 24. C: (hand gesture) lots of stuff (frowns) also stress
> 25. T: (frowns) yes
> 26. C: so kind of both of them contribute (nods his head) a bit
> 27. T: yes yes
> 28. T: do you think that (brief pause) the (brief pause/looks away) there's an element of mindset around stuttering that's coming into it as well?

The client carried on identifying the factors he thought were significant regarding his stuttering improvement. The turns in lines 27 and 28 were taken by the therapist which shows that the client did not take his turn. This was a cue that the client had nothing further to add, thus the therapist arrives at a mutual understanding and asks a new question.

According to Cook and Fry (2006, p. 380) "therapy targets cognitive change, the development of effective speech management skills, and the development of more

confidence in social communication." To modify a client cognitive shift, the therapist needs to encourage them to reflect on their own cognition and behaviours regarding stuttering. This can be the reason for the high frequency of this behaviour throughout the observed teletherapy sessions in this study.

5.3 Affective exploration

The affective exploration behaviour commonly occurs when a client is looking into their feelings that are associated with an event which involved stuttering. According to CBS, explorations can only be considered as affective if the verbal content includes words which describe feelings for example "I feel","It makes me feel" (Hill et al., 1992b). Another cue for affective exploration is *"clearly visible nonverbal behaviour"* (Hill et al., 1992, p. 548). These behaviours can include crying and sudden fidgeting. I did not observe any sudden fidgeting or similar nonverbal behaviours.

Extract 5.3

160. T: Cause we talked about that (high pitch) that has happened has that improved (pause -1 second) by any chance (high pitch)?
161. C: emm (looks away)
162. T: (rests her chin on her hand)
163. C: that's a really funny one that's I find that is very much determined by how I'm kind of feeling quite quite a bit (looks away briefly) if I'm feeling confident quiet kind of like I'm bounding somewhere to go get something done or you know yeah I find that I've tried that and more on the outside I don't stutter as[much]

In the underlined turn in Extract 5.3, the client associated the occurrence of his feelings in a daily situation where stuttering could commonly take place. Some studies suggest that the use of language allows clients to achieve a tangible explanation of how they feel and see their feelings in relation to their experiences of stuttering, leading them to achieve a better outcome of the therapeutic process by identifying negative feelings and reflecting on them (Chung & Pennebaker, 2007; Greenberg & Pascual-Leone, 2006). In this case, the client first drew a general conclusion and said that stuttering depends on how he feels. To put this relation in a bigger context he used an example of a moment that carries less stutter and then the significance of his feeling of confidence in that moment.

Despite that conclusion, the client's affective exploration (line 163) did not achieve a satisfactory understanding as to whether he stuttered less often in spontaneous situations.

This is evident due to the presence of an instance of resistance behaviour in line 165. This caused the therapist to collaborate by providing information (see the section on providing information in Chapter 4).

5.4 Agreement

The act of agreement is described as a client's approval toward the therapist's statement or when a client shows a mutual understanding without adding a significant point to the therapist's statement. This category excludes short answers such as yes or 'mhhm' since they are considered as conversation holders. Conversation holders are the sounds or short answers which a speaker uses to acknowledge that they are following the conversation.

Extract 5.4

> 284.T: Being whipped around whereas now it feels which I'm hoping when I hear you talk it feels like you do have still some level of control and less negativity about it
>
> 285.C: it's definitely true

The client's behaviour in line 285 in Extract 5.4 is simply definable as agreement since it does not add new information to the previous talk. According to Safran (1990) agreement may be conveyed by the clients as immediate responses to their therapists with no further discussions or actions. This type of agreement can cue a predominant power-imbalance and low involvement of the client in the therapeutic process. Due to the imbalance in power, the client may feel the need to agree with what is said by the therapist despite an inner feeling of disagreement. By contrast in this study the agreements were followed by collaborative explorations as shown in the exchange in Extract 5.5:

Extract 5.5

```
286. T:Um
287. C: And now I think I kind of that November kind of period I think it might be external stuff as
     well
288. T: Um
289. C: Which can definitely you know kind of effect the whole picture
290. T: yeah
291. C: So I was nearly end of long six months you know rotation
292. T:Yeah
293. C:Um
294.      T: Which wasn't very positive
295.      C: Yeah when you couple that with the stutter getting worse I mean maybe there is a
     relation
296.      T: Probably
```

During the turns that were taken after the agreement behaviour occurred, both participants collaborated to achieve a mutual conclusion. Thus, the instances of agreement in this study, demonstrated an effective therapeutic relationship and this was is in contrast with findings about agreement and power-imbalance by Safran (1990).The therapist allowed the client to reflect on the agreement and to add his own thoughts to it. Lines 287, 289, 291, and 295 show a high level of involvement from the client, which changed the agreement behaviour to begin cognitive-behavioural explorations (as referred to in section 5.2). As already stated, explorations obtain optimum significance in stuttering teletherapy and the agreement behaviour was found to occur frequently following cognitive-behavioural and/or affective explorations.

Extract 5.6

```
164. T: uhum
165. C: but if I'm kind of (looks away-4 seconds) I don't know it's just hard to describe if I'm
     kind of (pause- 1 second) just going up my business kind of thing em
166. T: You're not on a mission
167. C: Yeah and then suddenly kind of pops up you know I think I'll be a little bit less em (pause
     briefly) fluent
168. T: Yeah but that makes (looks away- 2 seconds) I mean from my point of view that makes
     perfect sense because it' (looks away) fluency is tied in with confidence the more confident
     you are the less you have that negative expectation of it's going to get stuck the stutter will
     happen
169. C: Yeah
170. T: And then that ties into an increase in anxiety which makes it more likely for the stutter to
     happen so confidence makes a huge difference
171. Yeah
```

The affective exploration in Extract 5.6 allowed the client to describe his feelings partially and let the therapist participant collaborate with him towards a better understanding. As Richels and Jessica (2013) found, it is crucial for clients who stutter to achieve a comprehensive understanding about their emotions in relation to stuttering. Such knowledge increases the clients' ability to avoid negative emotions and employ the correct therapeutic techniques in stuttering situations.

Furthermore, both affective and cognitive-behavioural explorations allowed the client to achieve a better understanding of his stuttering in this study. As Leahy and Collins (1991) explained, gaining new understandings about stuttering with the aid of such collaborative methods will result in better outcomes for clients. Based on my observations, that is because the client will reach a comprehensive understanding about stuttering. The understanding includes personal factors because of a client's exploration and professional insights because of a therapist's input. Therefore, the affective and cognitive-behavioural exploration behaviours are both considered to have a great impact on the process and outcomes of stuttering teletherapy sessions.

5.5 Therapeutic changes

The therapeutic changes category occurs when clients discuss alterations in their level of stuttering with their therapists (Hill et al., 1992b). This study found that instances of this behaviour were usually in direct response to the therapist's questions about any change in

the stuttering in between the teletherapy sessions. This study found that the client used comparative words in his talk, when describing the therapeutic changes, as per Extract 5.7.

Extract 5.7

78. T: An how your speech been going

79. C: Aw (looking away-) it's been kinda of good for the first maybe week and then last week it's kind of been just a little bit notably a little bit worse

80. T: Do you and any thoughts about why?

81. C: (pause) It's one of those things when it's really fickle [and it doesn't have to be for a reason it]

The client used the word "worse" and compared his speech between two weeks. He needed to review previous conditions and events to be able to draw a conclusion on what has changed since. This instance shows that the client evaluates his own speech and then reports his idea of the therapeutic change. The therapeutic change behaviours were usually followed by further questions from the therapist in Extract 5.8:

Extract 5.8

80. T: Do you and any thoughts about why?

81. C: (pause) It's one of those things when it's really fickle [and it doesn't have to be for a reason it]

82. T: Absolutely totally ad utterly true yes

The therapist's question about the therapeutic change asked for the client to look for the reasons behind the mentioned therapeutic changes. The client mainly used cognitive-behavioural exploration and affective exploration to search for a rationale for the therapeutic change. The therapist was also involved in the process that followed instances therapeutic change. She showed approvals or asked further questions which served as a transitional help to the client to reach the stage of cognitive-behavioural exploration or affective exploration. Therapeutic change was found to occur in the opening parts of the conversation between the therapist and the client. This behaviour was generally a starting point for the client to commence a therapy session.

5.6 Recounting

Recounting is defined as the client's verbal behaviour when the talk is limited to recalling an experience. This communicative behaviour is similar to cognitive-behavioural and affective exploration since it involves remembering an event. However, it is distinct from an affective or cognitive-behavioural exploration because it is limited to telling a story and not reflecting on it, see Extract 5.9:

Extract 5.9

464.	C: (nods his head) aw definitely aw I had a call from him my boss (looks away-2 seconds) on my first day on this [new rotation that I was in (laughs)]
465.	T: [(face gesture)(laughs)]
466.	C: aw it was [just horrific (leans back)(smiles)]
467.	T: [(laughs)]
468.	C: I just couldn't [say it (laughing)]
469.	T: [(laughs)]
470.	C: oh yeah nice happy new year or something it was not coming out (laughs) (swings body back and forth)
471.	T: (smiles) awh

In this instance, lines 464 and 468 demonstrate the communicative behaviour of recounting because the client focused on recalling an event simply as it happened. On the other hand, lines 466, and 470 were about the client's feelings and thoughts towards what had happened which are affective and cognitive-behavioural explorations.

Laughter can be a sign of "emotional flooding" (Falk & Hill, 1992, p. 39). Emotional flooding is a term which describes a client's intensified emotions towards the topic of their talk. Some instances of recounting in this study, such as the aforementioned examples, show the client participant's intensified emotions towards his own statements. This is expected since the client participant is often recounting an event which involved occurrences of stuttering in a public situation in his daily life. The client associated embarrassment and discomfort with that stuttering experience. Remembering those moments brought the associated emotions back and it showed through laughter.

Line 464 shows a brief act of disengagement in the beginning of recounting. This implies that the topic of the recounting behaviour could be unpleasant for the client participant to

recall. The act of laughter occurred initially after the brief act of gaze disengagement (see Chapter 2). It is important to note this substitution since it can be a sign of the existing bond between the therapist and the client. This confirms the findings of Mahrer and Gervaize (1984) who suggest that a client's laughter during therapy is a sign of feeling close to their therapist.

5.7 Resistance

Resistance is defined as a communicative behaviour of a client, in which they tend to avoid speaking about a given topic (Hill et al., 1992a). This behaviour can also emerge when a client does not accept the responsibility for an event that had happened before and is brought up during the therapy session (Hill, 1992). This study showed less than ten instances of resistance in the client's communicative behaviour throughout the four sessions of stuttering teletherapy. The resistance behaviour often emerged when the client participant did not want to participate in further discussion regarding a topic. Below is an example of when this behaviour occurred in the opening part of the second observed teletherapy session, as per Extract 5.10:

Extract 5.10

> 2. T: Good (high pitch) how are you?
> 3. C: (looks down briefly) ugh not too bad [thank you] not too bad
> 4. T: [ugh] (tils her head) not too bad (stretches her words)?
> 5. C: aw (frowns)(rubs his eyes) just tired (laughs)

The client did not say he is "good", instead saying that he is "not too bad" in response to the line 2. The verbal content of line 3 shows the speaker's avoidance of identifying exactly *how* he was feeling (not good/ bad) by employing a hedging technique. While the client's tiredness caused him not to feel well (line 5) it was still unclear why he was feeling tired. Thus, this line also shows resistance of identifying a particular reason for not feeling great.

The nonverbal behaviours including gaze disengagement and rubbing the eyes were further evidence of resistance. In Line 3, the client looked away and down from the screen while answering the therapist participant which led to disengaging his eye contact (gaze). In line 5 the client rubbed his eyes which had a similar effect as looking away since it hinders eye contact by hiding the eyes, so this can also be considered as a safety behaviour. Gaze

disengagement is stated to be commonly used by adults who stutter as a behaviour that decreases their anxiety while talking (Lowe et al., 2012).

This type of behaviour was later discussed with the therapist. She acknowledged the act of disengaging the gaze and stated, *"If someone is feeling down, they are likely to look down more and break eye contact if they're talking about something that they feel upset about".* Therefore, the therapist was familiar with this type of behaviour and perceived it as a signal of resistance during the sessions I observed, as shown in Extract 5.11:

Extract 5.11

```
5.  C: awh (frowns)(rubs his eyes) just tired (laughs)
6.  T: (closes her eyes) (shakes her head) yes
7.  C: Monday morning is rough
8.  T: it is yeah Monday morning (shakes her head) [(smiles)]
9.  C: [(shakes his head) (smiles)]
10. T: and you? You must get up early and catch ferry early and things (frowns)?
11. C: emm (looks away briefly) I'm up at six.
12. T : yeah (raises her eyebrows) that's early
13. C: (shakes his head) it's alright (laughs)
14. T: yeah (stretched) yes
15. C: gotta do what you gotta do
16. T: indeed
17. T: and it's got to be a countdown as well for this particular routine for you?
```

Lines 6, 8, 12, 14 and 16 show the therapist's main response to the resistance behaviour, which was approval (see Approval section in Chapter 4). The therapist's approving responses impacted the client apparent resistance by first encouraging the client to take more turns in the talk. This allowed the client to talk about his feelings and recount events that were relevant to why he was tired. Moreover, the approval behaviour conveyed the therapist's understanding and empathy with the client. The empathic tone of talk is suggested as a main method of dealing with client's resistance during communication in therapy settings (Newman, 1994a). The resistance behaviour continued to occur despite approval responses from the therapist. The client took only short turns and continued disengaging his gaze (line 11, 18) while not answering the initial question. However, the resistance did not continue after line 18 when the client identified the event that was associated with him feeling anxious, as seen in Extract 5.12.

Extract 5.12

> 18. C: (looks away-4 seconds) yes well it's going to be very interesting I've got offered a em (brief pause) offered a job (looks away-2 seconds)
> 19. T: ooooow (stretched pronunciation)
> 20. C: so that was big (widens his eyes) yeah
> 21. T: that
> 22. C: so now it's kind of a place that I'm like (shakes his head) do I take it work for a year earn pretty good you know money and then used that to try to survive on (laughs nervously) when I become a student again or something?

This study found that the client showed apparent nonverbal communicative behaviours which cued resistance, as per Extract 5.13.

Extract 5.13

> 29. T: do you think that (brief pause) the (brief pause/looks away) there's an element of mind set around stuttering that's coming into it as well?
> 30. C: (frowns/nods his head) (pause> 1 second) (looks away)
> 31. C: yeah (.) yep I think it is one of the things that takes a little bit longer (pause)
> 32. T: Yeah (nods her head)
> 33. C: To come right (hand gestures quotes)
> 34. C: (looks away) em (pause> 2 seconds)
> 35. C: it's still (looks away) still quite embarrassing (frowns/rubs his forehead and eye)

In lines 30,34 and 35, nonverbal behaviours such as long pauses, frowning, gaze disengagement and rubbing his forehead and his eyes showed the client's hesitation while addressing his stutter. Long pauses are significant cues of clients' resistance communicative behaviour (Newman, 1994b). This may have triggered his sense of avoidance and lead him to showing resistance in his communicative behaviour.

5.8 Insight

As stated in CBS, the insight verbal behaviour occurs when clients identify a relation within their own behaviour or thoughts related to the therapeutic phenomena (Hill et al., 1992b). In this study, there were moments during which the client observed patterns between factors which impacted his stuttering that could alter the level of stuttering, as per Extracts 5.14 and 5.15:

Extract 5.14

```
297. T: Which wasn't very positive
298. C: Yeah when you couple that with the stutter getting worse I mean maybe there is a relation
299. T:Probabaly
```

Extract 5.15

```
8.   T:Um
9.   C:And it kind of happens and then it's gonna happen again and then it is a little bit of a slope
10.  T:Yeah it is a kind of spiral
11.  C:And I think at the moment I'm kind of riding with it (pause)
12.  T:That's good
```

Insight communicative behaviour commonly happened after multiple and consecutive occurrences of cognitive-behavioural and/or affective explorations. This means that the occurrence of the insight behaviour was usually a result of the client's explorations and reflection on his thoughts and feelings about stuttering. However, this behaviour did not occur as frequently as cognitive-behavioural and affective exploration behaviours, meaning that not all of explorative behaviours led to the client achieving an insight. Achieving an insight by a client is not necessary but is desirable in the process of the therapy. The therapist usually pointed out the possible relation to the client based on their collaborative explorations. Thus, the client usually relied on the therapist's expert opinion regarding identifying a possible relation between his behaviours, thoughts and experiences with his stuttering.

5.9 Appropriate request

Clients' requests regarding professional advice, clarification and information are categorised as appropriate requests. This behaviour was found to be the least common among all communicative behaviours in the sessions observed. While there were no instances of the client directly seeking professional advice from the therapist, this behaviour was used when clarifications were needed. All of the observed instances of appropriate request behaviour were found to be in question form, as per Extract 5.16 and 5.17.

Extract 5.16

397.	T: I've got to turn my computer on hopefully it will
398.	C: In two weeks you think?
399.	T: Yeah I'm pretty sure that would work

Extract 5.17

241.	T: [uhum (nods her head)]
242.	C: um (looks down) (suddenly turns head) did I give you an answer?
243.	C: (shakes his head) I [can't remember]
244.	T: [Well we're GETTING THERE (laughs)]

As demonstrated above, the questions were related to the process of the therapy and the scheduling of the coming sessions.

5.10 The client's perspective

The client found communication in teletherapy to be different from his experience of face-to-face therapy. He preferred communicating in stuttering teletherapy settings in comparison with face-to-face sessions. The reason of the client's positive perspective towards the perceived difference, may be entirely because of having an existing therapeutic relationship with the therapist prior to teletherapy sessions: *"It is quite different. I think it's better because I've done the foundation face to face, and then you move on. You are trying to build a rapport almost around trying to get to know her."* Later on in the interview, the client explained the reason of this preference to be the casual form of communication through teletherapy that is less resembling to a traditional stuttering therapy:

> *I think it's to make it a little bit different between the skype session and the face to face. I think with skype we tend to do a bit more conversation-based stuff. It was very casual, less speech therapy per se, and then you've got your expectations of it might actually be. But, then again that's because we've already established that rapport. I don't kind of learn anything new. It's like just checking in - almost; going through any kind of things that have cropped up.*

Another difference between communication in teletherapy and face-to-face therapy is the difficulty in identifying an appropriate moment to take a turn when another speaker has

stopped talking: "*I think it's probably more awkward on a skype-based, video-based [31.45] because you can't necessarily tell with the other persons; taking a pause on purpose.*" Based on my observations this might impacted the client's communicative behaviours by pausing frequently in the beginning of his turns to ensure that he was not interrupting the therapist.

There was no statement like the one above mentioned in the therapist perspective and was only highlighted by the client. So only the client may perceive this difference since the therapist employs his method more often and is used to reading cues and identifying when to take a turn.

The client's perspective was similar to the therapist about the communication of empathy via teletherapy:

> "*I said that [33.33] that period of time before is as good as it has been and then when (A)… I think she showed genuine… by that fact. She was genuinely pleased for me, and I was quite excited almost kind of thing which is quite cool. That stuck; it was beyond that 'let's go through the motions; let's do this and that.' It was really genuine; genuinely 'this is amazing - it's really cool.' I probably hadn't thought about that too much myself. I think she attached a lot more 'me' into it that I had which made me think about how cool it actually is.*"

This shows that the client associated the therapist's tone with empathy and genuineness. As the therapist mentioned in her perspectives, the tone of the voice is one of the mediums of the conversation that is similarly effective in teletherapy and face-to-face settings.

5.11 Summary of the chapter

This chapter firstly described nine main categories of communicative behaviours that were conveyed during stuttering teletherapy sessions by the client. While all the categories of communicative behaviour occurred at some point, the high repetition of certain communicative behaviours followed by other communicative behaviours made very frequently occurring patterns. The next chapter will look at the frequent patterns between the most common occurring communicative behaviours of the client and the therapist.

Chapter 6: Discussion and conclusion

6.1 Introduction

In this chapter, I first review the original aim of this study in this section. In section 6.2, I will present a summary of my findings and then discuss their relations to the research question and the existing body of knowledge. I continue discussing my findings in that section and suggest the implications of them for speech and language therapists and clients who practice stuttering in teletherapy settings. In section 6.3, I explain how communicative patterns helped to address factors related to speech, anxiety and attitude. In section 6.4, I discuss the limitations of this research and my chosen methodological approach and then suggest areas for further research in section 6.5. In the last section I present some concluding remarks.

The aim of the study was to describe the mostly frequent communication patterns that were observed in stuttering teletherapy sessions between a client and a speech-language therapist in Auckland, New Zealand. And to explore how both physical and psychological factors are reflected in communicative patterns observed in teletherapy sessions.

6.2 Overview of the research question and findings

6.2.1 Answering the research question

What are the most frequent communication patterns in stuttering teletherapy sessions?

This study intended to answer this research question by observing and analysing four stuttering teletherapy sessions and conducting total of four follow-up semi-structured interviews with participants. I then used Qualitative Content Analysis and Conversation Analysis to explore the data that was collected through observations.

The study found that there were communicative patterns employed by the participants, which frequently occurred during all observations. All identified patterns were constructed by the therapist and the client together. This initially showed that teletherapeutic communication was collaborative and meanings were co-constructed. Existing literature points out that co-construction of meaning during therapy or medical care sessions has a significant role in understanding a client or patient and to guide the client towards desired goals (Goodwin,

1995; Meiers & Tomlinson, 2003). This brings me to discuss the co-constructed communicative patterns that were most frequently occurring in light of available literature regarding teletherapy and face-to-face stuttering therapy.

The most frequently occurring communicative patterns were determined by identifying the most frequent communicative behaviours by participants by Qualitative Content Analysis. I then identified most frequently occurring orders of communicative behaviours which shaped repeating patterns of communication throughout observed teletherapy sessions.

The study identified three common communication patterns, namely information-agreement, cognitive-behavioural exploration-approval, and open-ended question- cognitive-behavioural exploration. This study found the most occurring communicative pattern to be providing information-agreement; which is constructed between the therapist's communicative behaviour of providing information and the client's communicative behaviour of agreement. Throughout this pattern the therapist offered insight regarding stuttering and social, physical and psychological factors associated with it for an adult client. While the information was communicated, the client employed verbal and nonverbal communicative behaviours to convey his understanding of the information. After the therapist completed providing information, the client communicated that he agreed that the information suited his situation, was relevant to his condition and is useful to his therapeutic process.

I also found that the therapist's communicative behaviour of approval formed a pattern with the client's affective and cognitive-behavioural exploration. The therapist frequently communicated approval to encourage the client to continue exploring his behaviours, thoughts and feelings regarding stuttering. The approval was in forms of showing empathy to the client and showing affirmation of the client's statement and staying attentive throughout the client's explorations. The findings also showed a highly frequent pattern in the therapist's open-ended questions that encouraged the client to carry on with the process of affective or cognitive-behavioural exploration.

6.2.2 Communicative pattern between providing information and agreement

The first frequently occurring pattern was the communicative pattern involving the provision of information and the expression of agreement. This pattern consisted of a few long turns of providing information by the therapist, a few short answers by the client, and concluded with an agreement expressed by the client. The following communication map illustrates the order of communicative behaviours that formed the most frequent communicative pattern. Note that the number of short responses could vary in different instances of above pattern, however the sequence and order of the pattern remained similar. The short responses of the client were usually limited to him nodding his head, giving short answers (yes, yeah) and affirmative sounds (mhm, uhum). The therapist's response to the client's short answers was to carry on with providing information. This means that the therapist did not expect the client to add any information of his own. In other words, the therapist stayed in an expert position who actively offered information while the client occupied a more passive position by being the listener without adding his own opinions.
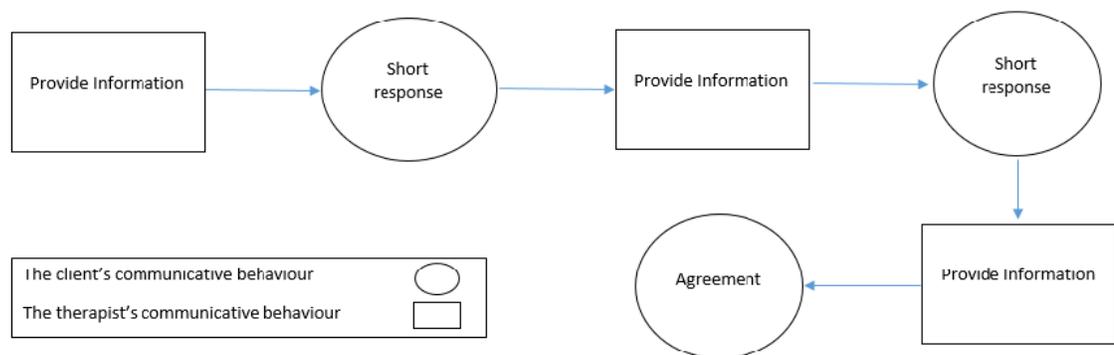
Figure 6.1: Providing information and agreement pattern

The aforementioned sequence of behaviours in this pattern (see figure 6.1) shows a co-construction of information because co-construction of information requires the therapist to pause often and ensure that the client perceived what was communicated (Thompson, Parrott, & Nussbaum, 2011). This pattern is similar to what was found to occur frequently in stuttering therapeutic settings (Blood, Blood, McCarthy, et al., 2001a; Leahy, 2004). This study found this communication pattern (providing information-agreement) to be generally similar to what occurs not only in face-to-face stuttering therapy, but also in other medical consultation settings and is due to patients' desire to receive more health and therapy-related insight about their conditions (Tang & Newcomb, 1998).

Previously, a review of 32 communicative studies in health consultation (between 1966 and 1998) addressed a lack of description of impact of telepractice on any verbal or non-verbal behaviours (Mair & Whitten, 2000). This study found that using telepractice did not impact the verbal behaviours of providing information negatively because the therapist and the client carried an effective co-construction of communication throughout the pattern of providing information-agreement. It is stated that the con-construction of communication allows patients to remember conveyed ideas in the communication better than information conveyed in diagrams (DiMatteo et al., 2003). Findings of this study about providing information-agreement pattern in relation to findings of Mair and Whitten (2000) and DiMatteo et al. (2003) can describe that telepractice did not have a negative impact on the verbal and non-verbal behaviours of the therapist or the client and their effective communication. Therapists who practice teletherapy can pay greater attention to maintaining the co-construction of information in this pattern to bring about effective communication.

The communication pattern found in this aspect of the study included multiple speaking turns by the therapist giving further information about a particular stuttering experience where the client stated that he did not know why it recurred. The therapist then explored some possible psychological factors involved in the severity of the client's stuttering and general facts about stuttering that the client was not familiar with. The client's response I observed was to first acknowledge listening to the therapist and then agree with the information given. In agreeing, the client let the therapist know that the information had changed his perspective or completed his understanding

This type of pattern was regulated by the client's short answers. Since conversations took place over the course of teletherapy, short answers served a dual purpose: to acknowledge the client's attention to what was said and to show the stability of internet connection. The findings of this study show a contrast with earlier findings about speech therapy that was delivered through teletherapy. Previous studies which compared teletherapy with face-to-face settings stated that younger clients (children and adolescents) can be distracted in teletherapy settings. They related these findings the client's limited vision of therapists' during teletherapy (Hines, Lincoln, Ramsden, Martinovich, & Fairweather, 2015b; Lincoln, Hines, Fairweather, Ramsden, & Martinovich, 2014). The findings of earlier studies may be only applicable to younger clients. My observations showed that this is not true in case of

an adult client because the client demonstrated his attention throughout all four sessions in his communication behaviour.

Providing information-agreement had another function when the client received information that was not known to him before. Earlier findings referred to a client's agreement with information that was provided as a client's "acceptance" (Kamm & Wrenn, 1950). The acceptance or agreement appeared to allow clients to feel comfortable with the therapeutic environment and the relativeness of information with an immediate problem of the client. This can be interpreted due to the fact that the client in the current study was comfortable with using teletherapy and found the therapist's information to be relevant to his condition. Therapists who practice teletherapy can consider this communicative pattern in order to evaluate if the information they provide is perceived as relevant by a client based on the frequency of their agreement with information. Therapists can also ensure that clients are feeling comfortable using teletherapy by paying attention to their agreement. This pattern has been described as desirable by patients in previous studies in face-to-face therapeutic settings that identified as a desirable communication pattern in stuttering therapy with adult clients (L. Plexico, Manning, & DiLollo, 2005). Participants of that study mentioned that they preferred to receive professional insights from the speech and language therapist because it can modify the way they think about stuttering and thus helps them understand that stuttering is not something to be ashamed of.

During the current study, I observed some occurrences of this pattern during which the therapist helped the client overcome a negative feeling about a stuttering experience or challenge by providing further information. There were moments that the client expressed negative feelings or shame about a past moment of stuttering. The therapist first allowed the client to express his thoughts and feelings. Then informed the client about the reasons and factors involved in that experience. I found that the therapist's information helped the client not to blame himself for a stuttering moment and focus on factors that can be controlled in future situations. It is stated that clients can manage their shame towards their conditions with the help of therapist's further knowledge (Pattison, 2000). Studies in teletherapy settings - not particularly SLT settings - found that the distance between a therapist and a client is sometimes helpful in encouraging the client to express his or her shame and negative feelings (Simpson & Reid, 2014; Simpson et al., 2003). The current study show that the previous findings are also applicable to the context of stuttering therapy. Therapists can use the pattern

of providing information-agreement mindful of its impact on helping clients overcoming negative emotions towards stuttering. This pattern occurred in the context of when the client already had completed a cognitive-behavioural or affective exploration and yet could not draw a conclusion or find an answer to a question about stuttering challenges or stuttering experiences. This can be the reason that the therapist stepped in to offer more information and the client listened to be able to then relate new insight to self-made explorations. One other function of this pattern was seen when the client's short answers acknowledged the stability of the internet connection and that he was able to hear the therapist. The client noted that the internet connection sometimes makes it difficult to recognise if the therapist has stopped talking and waiting for a response or it is just a glitch in the telepractice. Previous studies in speech and language therapy showed that internet connection and other technical errors including disruption in the visuals of telepractice and voice delays are the biggest hindrances during teletherapy sessions (Hill et al., 2009; Tucker, 2012). The findings of this study show how participants in teletherapy settings co-constructed this communication pattern to acknowledge their faultless internet connection. Therapists who are using telepractice can consider taking frequent pauses to give their clients the opportunity to ensure clients are attentive and that there are no technical issues.

Studies in speech and language therapy that were conducted in face-to-face settings suggest that the therapist's open questions cause the client to explore his or her own actions and thoughts both during and outside of the therapy settings (Hill & O'Brien, 2004). This pattern (open ended question-exploration) is suggested to have a positive impact on establishing and maintaining an effective therapeutic relationship (Hill & Kellems, 2002).

6.2.3 Communicative pattern between cognitive-behavioural exploration, affective exploration and approval

This study found the second most occurring communicative pattern based on frequency of occurrence involved the client's cognitive-behavioural or affective exploration and the therapist's approval. Cognitive-behavioural and affective exploration of the clients has long been found to be a core behaviour in successful psychotherapeutic field (Alexik, 1966; Braaten, 1961; Van der Veen, 1967). The success of the therapy session is determined by the changes in behaviour or perspective a client feels ready to implement due to their exploration of feelings, thoughts and behaviours. The high frequency of the communicative

pattern of open-ended question and cognitive-behavioural or affective exploration shows that the client felt open to making changes and the communication in teletherapy affectively impacted the therapeutic process. After the client had already taken a few turns in the talk and made some progress in thinking more deeply about the topic, the therapist communicated her approval of the client's statement or opinion. The client took pauses after each few sentences and would carry on with explorations after the therapist approval. The communication map below shows the order of the behaviours:
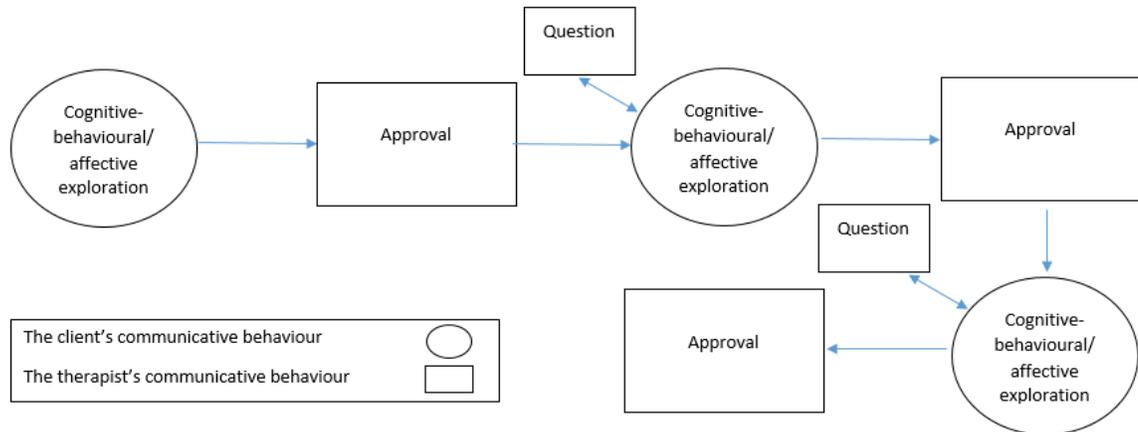
Figure 6.2: Cognitive-behavioural or affective exploration and approval pattern

In the current study, the client's cognitive-behavioural exploration and affective exploration behaviour were more frequent than the therapist's approval. That means the therapist did not use approval in response to all of the explorations. As showed in the figure 6.2, approval could change to a question sometimes, however the client response would be followed by the therapist communicating her approval again. This may be because the overuse of approval in the communicative pattern could hinder the therapeutic process since it prevented the therapist from challenging and motivating the client to think deeper. As another study found, the overuse of approval by a therapist can lead to a client to feel he/she had sufficient answers and would not need to reflect further on the therapeutic process (Hill et al., 1988).

In the communicative patterns that I observed, the therapist used closed/open questions, paraphrase and interpretation after expressing approvals. The open-ended questions were about the topic that the client was exploring and did not suggest a new topic. As stated earlier their purpose was to encourage further exploration. This pattern of approval, open-

ended questions, paraphrase has been identified as a core behaviour in motivational interviewing, allowing therapists to encourage clients' explorations of their behaviours (Lovejoy, Heckman, & Team, 2014; Tutty, Spangler, Poppleton, Ludman, & Simon, 2010). In the studies by Lovejoy et al. (2014) and Tutty et al. (2010) the co-construction of communication pattern in teletherapy - not particularly SLT - is described as motivational interviewing-cognitive-behavioural exploration. However, the findings of this study in stuttering teletherapy settings, the client's communicative behaviour was not limited to cognitive-behavioural exploration; instead sometimes it was an affective exploration behaviour. Also, the therapist mainly employed approval behaviour and less often employed other categories in motivational interviewing, likely reflecting that stuttering therapy has a different focus to motivational interviewing.

The predominant use of approval along with some further questions indicated to the client that while he was close to drawing a conclusion from his cognitive-behavioural or affective explorations, he had not yet obtained an explanation that the therapist considered as their mutual understanding of a topic. A mutual understanding in therapy is described as when the therapist and the client agree about an insight that was obtained through communication (Bitti & Garotti, 2011). The participants moved on to another topic only after achieving a mutual understanding. This shows that the participants of the current study considered their mutual understanding very important which is a beneficial factor for successful teletherapy. Other therapists and clients can also consider the importance of achieving a mutual understanding in when applying this communicative pattern in a stuttering teletherapy session.

Previous literature which suggests that communication patterns in stuttering therapy for adult clients show therapists' aim to encourage clients to carry on with their affective and cognitive-behavioural explorations about stuttering (Blood, 1995; Leahy, 2004). The therapist's approval behaviour was usually followed by open questions, brief interpretations or paraphrases. This was similar to earlier studies in psychotherapeutic settings that described therapists' communicative behaviours when their clients reflected on their thoughts, behaviours and feelings towards their speech deficit (Hill, 2005; Reik, 1948). The high frequency of approval behaviour occurrence during this pattern can mean that the therapist did not find it difficult to convey her approval in a teletherapeutic setting. This is in contrary to the findings of a study stating that nurses had problems with conveying their

understanding and approval through telepractice, particularly through video-chat (Tam, Cafazzo, Seto, Salenieks, & Rossos, 2007b; Wakefield et al., 2008). The findings of the current study can be due to the therapist's experience in using telepractice. It is beneficial for therapists to obtain experience in using telepractice to ensure encouraging clients' cognitive-behavioural and affective exploration and thus positive therapeutic outcomes.

6.2.4 Communicative pattern between cognitive-behavioural exploration, affective exploration and open-ended questions

This study found the third most occurring communicative pattern to include the therapist communicative behaviour of open-ended questions and the client's behaviour of cognitive-behavioural exploration. Note that these questions were different from what was discussed in the previous section since they asked about a new topic that the client had not been talking about before being asked. The reason for the importance of asking open-ended questions in teletherapy is believed to be its impact on establishing a therapeutic bond (Rautalinko, 2013). The current study found that another important aspect of open-ended questions is their impact on provoking clients' behaviours or thoughts (cognitive-behavioural exploration) or on feelings (affective exploration). Similar patterns of communicative behaviours in face-to-face context are found in the psychotherapeutic context: "regarding individual therapist behaviours, the use of reflections and open-ended questions seemed to facilitate client exploration" (Apodaca et al., 2016, p. 7).

During the client's cognitive-behavioural or affective exploration, the therapist showed her attention by taking speaking turns for short responses, and/or making affirmative sounds, although nonverbal behaviours such as frowning, smiling and head nodding were not limited to the therapist's speaking turn. The client could see the therapist's facial expressions that were relevant to the cognitive-behavioural or affective explorations. For instance, when the client during an affective exploration said that he feels excited about his future, the therapist responded with a big smile. Mirroring the client's behaviour and feelings via nonverbal cues is a signal of empathy and is commonly employed in therapy sessions and medical consultations (Prochazkova & Kret, 2017; Stern, 2018). There were no similar reports in teletherapeutic settings, but this study shows that stuttering teletherapy settings can be similar to face-to-face settings in terms of conveying empathy through mimicking the emotion of the client.

While the therapist quietly listened, the client could still observe empathetic cues that encouraged him to carry on with his explorations. The therapist's behaviours in response to the client created another co-constructive communication pattern. As said earlier in this chapter, co-construction of communication allows the client to be more engaged in the therapeutic process (Gergen & Ness, 2016). So, it will be beneficial for therapists to consider the importance of their responses to clients' cognitive-behavioural and affective exploration since it can potentially lead clients to attribute a positive meaning to what might had been a sensitive or not positive topic. For example, in this study I observed that the therapist had a collaborative communication with the client, when he had a cognitive-behavioural exploration regarding unsuccessful attempts to answer phone calls. This collaboration then allowed both participants to construct a positive meaning from this topic and consider it as a future challenge and not as a negative experience.

The pattern that started from an open-ended question and led to cognitive-behavioural or affective exploration then continued with a closed question, paraphrase, or an interpretation made by the therapist. These behaviours helped the therapist avoid misunderstanding the client's explorations. These communicative behaviours are commonly used by therapists to make sure that their understanding is similar to the client's (Grover, 2005).

This study also found that during this pattern, the therapist used close-ended questions to help navigate the process of thoughts during the client's cognitive-behavioural explorations. For example when the client was reflecting on effective components on his improvement in therapy the therapist asked: *"Do you think that (brief pause) the (brief pause/looks away) there's an element of mind-set around stuttering that's coming into it as well?"* A closed question was used to encourage the client to consider the element of the mind-set during his cognitive-behavioural exploration. After completion of the cognitive-behavioural/ affective exploration sometimes the client was able to draw a conclusion which would elicit a response to the initial open-ended question as his insight. The diagram in Figure 6.3 shows a complete communication pattern when the client achieves an answer:
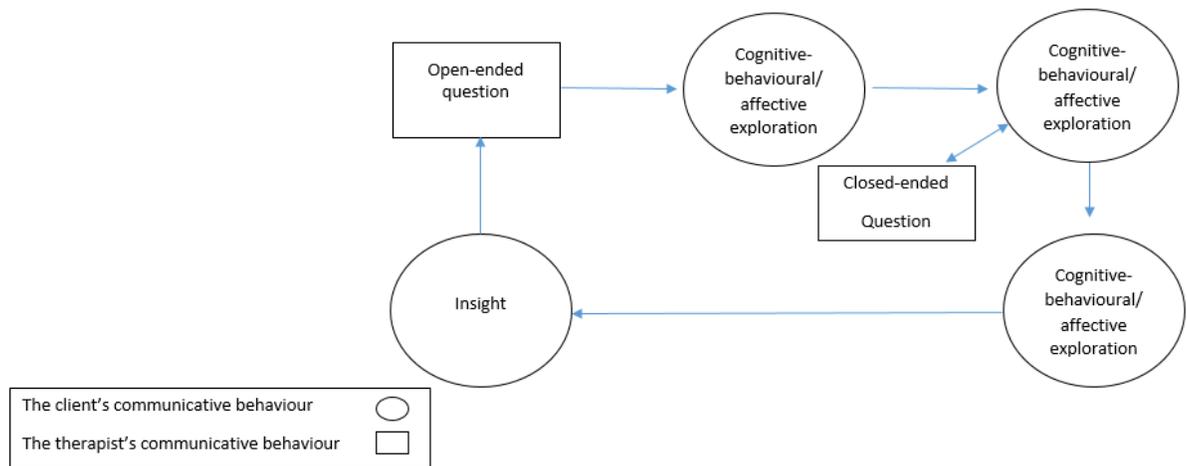
Figure 6.3: Open-ended questions and cognitive-behavioural or affective exploration

When the client was not able to achieve a conclusion, this pattern (see figure 6.3) merged into the therapist's providing information and the client's agreement pattern. The merging point happened when the therapist took a longer turn to provide information instead of giving approvals. The client then responded with short acknowledgements. When the therapist's information gave an answer to the initial question, the client agreed with the therapist and the participants talked about another topic afterwards. The client and the therapist achieved answers to the initial open-ended question together. The diagram below shows an overall map of communication patterns in such instances:
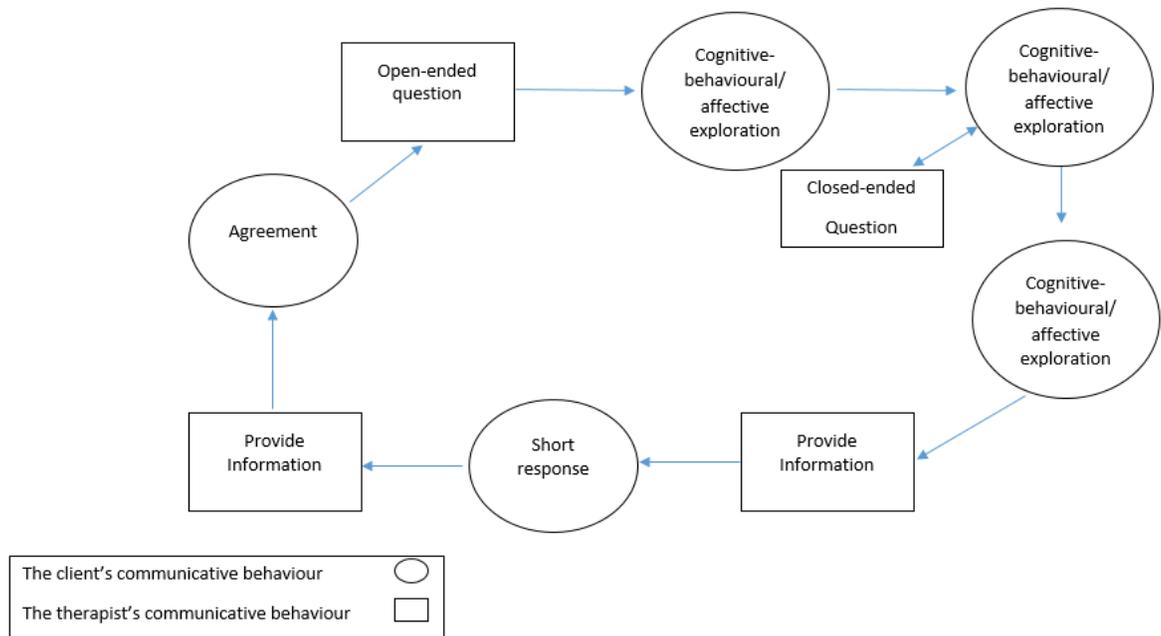
Figure 6.4: Open-ended questions and cognitive-behavioural or affective exploration leading to co-constructed answer

In both figure 6.3 and 6.4 cognitive-behavioural or affective exploration was provoked by an open-ended question and the communication pattern continued until both of the participants believed the initial question had been answered. Interestingly, the diagram in figure 6.4 shows that the therapist answers the question asked by herself. That is aligned with the argument of effective conversation in therapy. In an effective conversation, the therapist will not always occupy the role of an expert but will allow the client to feel that the answer to a question is unknown to both of them. "In not knowing the therapist adopts an interpretive stance that relies on the continuing analysis of experience as it is occurring in context" (Anderson & Goolishian, 1992, p. 29). The aforementioned position of the therapist as a listener who is genuinely interested in being informed by a client helps a client feel more in control and builds a stronger engagement in the therapeutic setting. This aligns with findings from previous studies which showed a positive correlation between the therapist's attentiveness and the patient's collaboration in the therapy (Audet & Everall, 2010; Bachelor, Laverdière, Gamache, & Bordeleau, 2007).

6.3 How communicative patterns helped to address factors related to speech, anxiety and attitude

As I noted in the Introduction chapter, stuttering behaviours can be provoked by three main factors. These include physical factors for example the client's breathing which are categorised as the client's speech, psychological factors for example the client's avoidance of talk over the phone which are categorised as anxiety and the client's framed thoughts and behaviours about how his or her environment will response to stuttering which is categorised as attitude. As mentioned in the literature review in chapter two, therapists follow three main types of therapy including fluency shaping, stuttering modification and the combination of these two when focusing on each category of stuttering provoking factor (McGroarty & McCartan, 2018).

I found that the therapist and the client used cognitive-behavioural exploration-approval and direct guidance-agreement communicative patterns when focusing on the speech factor. They employed cognitive-behavioural exploration-approval and provide information-agreement communicative patterns when addressing the factor of anxiety. Lastly, I observed that the attitude factor was address through cognitive-behavioural exploration-approval and direct guidance-agreement patterns. This section will expand the discussion about my findings on how these communicative patterns allowed the therapist and the client to address mentioned three factors in the course of four sessions of stuttering teletherapy.

The current study showed that the therapist and the client could address all three factors through teletherapy.

6.3.1 Speech

The speech factor is mainly about the client's physical aspect when stuttering. Although this does not mean that this factor is isolated from other provoking factors. For example, a client's anxiety can represent itself in his or her speech. According to previous findings, therapists choose fluency shaping methods to help adult clients work on speech factors (Blomgren, 2013; Guitar, 2013; McGroarty & McCartan, 2018). To do that, therapists can follow multiple approaches including asking clients to prolong their speech in order to reduce the speech rate and ease the articulation or to listen to recordings of fluent speech and repeat what they heard (Ingham & Andrews, 1973; Prins & Ingham, 2005; Ryan, 2001).

This study found that the therapist helped the client with speech by first encouraging the client to identify what was the speech area that required attention (cognitive-behavioural exploration-approval). Then the therapist and the client would agree on tasks necessary to do after their therapy session (direct guidance-agreement). This is different to the traditional approaches following fluency shaping and is similar to what is defined as "self-management" for adult clients who stutter. Self-management is defined as a series of behaviours that allows clients to be in control of their stuttering: "through self-observation, self-judgment, and self-reaction, people learn to exercise and maintain control over their behaviour."(Prins & Ingham, 2009, p. 259). The therapist and the client co-constructed their approach towards speech factors by combining two different communicative patterns over teletherapeutic sessions which resulted in obtaining a self-management approach. This approach is stated to be have a positive impact on long-term outcomes of the stuttering therapy.

The patterns that addressed speech factors were less frequently occurring than patterns that addressed anxiety throughout stuttering teletherapy sessions. This can be because the client had face-to-face stuttering therapy sessions prior to teletherapy which focused on speech factors. During the semi-structed interview, the client stated that the therapist and the client would practice techniques to help him with fluent talking during face-to-face sessions.

6.3.2 Anxiety

In Chapter One, I mentioned that young adults who stutter can have higher rates of anxiety attached to stuttering. Anxiety can be both the provoking factor and consequence of stuttering (Blumgart, Tran, & Craig, 2010; Craig & Tran, 2014; McAllister, Kelman, & Millard, 2015). The current study the client mentioned that stuttering when answering a call gave him anxiety, so his anxiety was a consequence of previous experiences of stuttering. I observed higher intensity of stuttering when the client was recalling his experiences of anxiety when answering the phone. This is when the stuttering was provoked by anxiety factors. The communicative pattern between cognitive-behavioural exploration and approval showed a collaborative method that allowed the client to achieve an understanding of his thoughts associated with stuttering that led him to experience anxiety.

Previous findings in teletherapeutic settings suggested that using software programme such as CBTpsych can be a potential alternative to a therapist in the cognitive-behavioural stuttering therapy to help the client focus on anxiety factors (Helgadóttir, Menzies, Onslow,

Packman, & O'Brian, 2014). CBTpsych is an online programme that does helps adults with their anxiety associated with stuttering. Helgadóttir et al. (2014) measured the anxiety level in adult clients who stutter before and after using CBTpsych for seven sessions and found that their anxiety level had decreased. I found contrasting results that suggested the anxiety factor could not be successfully addressed without a collaboration between the client and the therapist. Hence, it raises questions about the possibility of filling the therapist's role by a software programme since the communication between a computer and a client will be different and it can omit the collaborative nature of communication in therapeutic settings.

The communicative pattern of providing information-agreement showed how the therapist and the client co-constructed new thoughts about stuttering. Co-construction of new thoughts leads to changes in client's older thoughts. This is what is defined as an effective stuttering modification approach when helping an adult who stutters (Jaksic & Onslow, 2012). The finding of the current study show that the therapist and the client addressed anxiety factors through using two communicative patterns in teletherapy settings. The effectiveness of their communication collaboration on the outcome of the therapy cannot be determined since it requires further follow-up studies.

6.3.3 Attitude

As mentioned in the introduction chapter, attitude is a set of beliefs and behaviours in an adult who stutters about the potential responses of his or her surroundings to stuttering. It is stated that to address the attitude factor then it is necessary to first discuss the existing thoughts and behaviours in a client's cognitive system, then encourage positive attitude and acceptance of stuttering and then provoke a changed behaviour in clients (Blomgren, Roy, Callister, & Merrill, 2005; Davidson Thompson, Mcallister, Adams, & Horton, 2009; Maxwell, 1982). This requires following a therapy approach that combines stuttering modification and fluency shaping. The communication patterns that addressed attitude factor were in the following order: first the client and the therapist co-constructed a mutual understanding about the existing behaviours and thoughts of the client towards stuttering, then they co-constructed new behaviours to have in same conditions to help support different attitudes. For example, after discussing the client's existing behaviours and thoughts about stuttering on a phone call, the therapist suggested desensitisation in her direct guidance. The therapist then went on to explain why desensitisation is beneficial and is effective to change

the client's attitude towards answering phone calls. Desensitisation is a process during which clients "gradually experience feared situations in a supportive environment following a systematic, controlled hierarchy" (Murphy, Yaruss, & Quesal, 2007, p. 125). A study in face-to-face stuttering therapy settings found that direct guidance is the most frequently occurring communicative behaviour that a therapist used direct guidance during the process of desensitisation (Blood, Blood, McCarthy, et al., 2001b). The findings of that study however, did not look at the communicative behaviours of the client or the communicative patterns that were co-constructed with the therapist's direct guidance. In the current study, the desensitisation process included the therapist's direct guidance and the client's agreement. My observations show that the therapist and the client successfully addressed the attitude factor and identified behaviour change strategies through their communication in teletherapeutic settings. The outcome of addressing the attitude factor can only be determined depending on later results of the client's attitude change measurements.

6.4 Limitations of the methodology and the study

This study followed a deductive approach when applying Qualitative Content Analysis. Therefore, the coding of the data followed predetermined category systems that were already employed in other communication studies in health and therapeutic context. This could limit the emergence of findings to fit in the available category and new communicative behaviours could be omitted from analysis. An inductive approach would allow the categories to be generated from the data and possibly change throughout the completion of the analysis process (Downe-Wamboldt, 1992). This study was my first attempt of analysing and coding data therefore I preferred to follow a systematic approach with pre-identified categories, that increased my chance of obtaining reliability and staying close to actual data and avoid modifying what I observed (Bengtsson, 2016; Catanzaro, 1988).

Some of the limitations of the study were related to the scope and time constraints associated with undertaking a master's study. The findings from the current study are based on a small sample: four recorded teletherapy sessions between a client and a therapist who already had an existing relationship. Thus, there was no evidence of the therapist and the client trying to build a relationship. Instead, there was evidence of therapist and client building on an existing relationship and the therapist inquiring as to how things were progressing. My observations

also showed that the therapist was familiar with the client's work conditions, his values and his goals. Their therapeutic relationship was not a key focus of this study, but it allowed the informality of it was reflected in their communicative behaviours and the communicative patterns.

The findings about the client's perspective were based on just one interview session, while the therapist's perspectives were explored in four interviews. More interviews might have highlighted further insights from the client, however this was not possible due to the participant's schedule. The purpose of this study was to identify communication patterns and was a linguistic study. This means the findings are not intended to immediately influence clinical practice; however this is work that could be continued in the future. At last, it should be noted that I do not have an academic background as a clinician, my lack of clinical experience may have impacted elements of my study.

6.5 Recommendations for future research

Future research can focus on the relationship between stuttering phenomena and the communication patterns that occur in therapy sessions. It is particularly insightful to observe stuttering therapeutic dyad who are practicing fluency techniques. It is interesting to compare the collaborative communication in face-to-face practices with teletherapy training when the therapist and the client have not known each other for long and have not shaped a therapeutic relationship yet. This allows us to understand which communication patterns influence building a therapeutic relationship in stuttering teletherapy settings. Future studies can also compare and contrast telepractice and face-to-face to better understand the nature of how teletherapy may influence communicative behaviours. Another recommendation for future research is to study stuttering teletherapy settings with multicultural participants. It is important to find out the impact of cultural difference on communication patterns that occur during teletherapy sessions.

6.6 Concluding remarks

This small study on communication in teletherapeutic settings, aimed to explore communicative patterns in teletherapy sessions for stuttering therapy in New Zealand. The client and therapist participant already had an existing relationship and my findings showed that there was commonly occurring pattern between the therapist's communicative behaviour

of providing information and the client's communicative behaviour of agreement. I also found that the therapist's communicative behaviour of approval formed a pattern with client's affective and cognitive-behavioural exploration. The findings also showed a frequent pattern in the therapist's open-ended questions that encouraged the client to carry on with the process of affective or cognitive-behavioural exploration.

The current study showed that the communication in stuttering teletherapy requires more attention. My participants had positive experiences about their communication during teletherapy sessions for stuttering. Positive experiences can encourage clients who stutter in remote areas of New Zealand to participate in stuttering teletherapy. Stuttering therapy may be more convenient to clients who work, as to they do not have to travel to the speech-therapy setting for therapy. My study explored the communicative patterns which reflected a positive therapeutic relationship and showed that teletherapy worked well.

I would like to finish this thesis with the words of the client who participated in my research. When reflecting on his communication in stuttering teletherapy – as opposed to face-to-face therapy- he said:

> *"…it might have been the opposite, we're able to have better conversations, have more laughs, oversight, than maybe we did face to face."*

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Appendices

Appendix A: Auckland University of Technology Ethics Committee approval

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
D-88, Private Bag 92006, Auckland 1142, NZ
T: +64 9 921 9999 ext. 8316
E: ethics@aut.ac.nz
www.aut.ac.nz/researchethics

9 October 2018

Ineke Crezee
Faculty of Culture and Society

Dear Ineke

Re Ethics Application: **18/363 Exploring communicative practices in stuttering therapy: Comparing teletherapy and face to face sessions**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 8 October 2021.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through http://www.aut.ac.nz/research/researchethics.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through http://www.aut.ac.nz/research/researchethics.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: http://www.aut.ac.nz/research/researchethics.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation, then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact ethics@aut.ac.nz

Yours sincerely,

Kate O'Connor
Executive Manager
Auckland University of Technology Ethics Committee

Cc: pary.vaghefi@gmail.com; felicity.bright@aut.ac.nz

Appendix B: Participant Information Sheets

Participant Information Sheet

For the participant who is a therapist.

Date Information Sheet Produced:

04 September 2018

Project Title

Project title: Exploring communicative practices in stuttering therapy: Comparing teletherapy and face-to-face sessions

An Invitation

My name is Pary Vaghefi, I have designed a study which focuses on communicative patterns in speech and language therapy sessions (particularly stuttering therapy) and is towards completion of the Master degree in Applied Language Studies from Auckland University of Technology. I would like to ask you to contribute in mentioned study since you are performing as a therapist in stuttering therapy area who use telehealth and face-to-face settings as treatment facilitation. The findings of my research will contribute to communicative and clinical knowledge in speech and language therapy using telehealth facilities. Thank you for your interest in this research.

What is the purpose of this research?

The aim of research is to describe the communicative patterns between a client and a therapist through speech and language therapy sessions when following in-person and telehealth therapies. As said earlier the study is designed as a desertation in orded of completion of the master of Applied Linguistic Studies at Auckland University of Technology.

How was I identified and why am I being invited to participate in this research?

You were identified through your professional experience at START (Stuttering Therapy and Research Trust) as a therapist with minimum three years of professional background. You also have been involved in both face-to-face and telehealth therapies which is another recruitment condition. You are receiving this invitation due to expressing your interest by contacting me after noticing the written advertisement.

How do I agree to participate in this research?

To participate in the study, you need to sign a consent form which will be sent to you by me after receiving your expression of interest. Please note that your participation in the study is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

What will happen in this research?

This project involves audio-visual recordings and observations of the therapy sessions. During the therapy I will be sitting in appropriate distance, and the camera will be situated in a location not to interfere with your therapy process. You can pause the recording if you do not feel comfortable with being recorded at any time. You also will be asked to take part in one interview session after completion of recorded therapy sessions. The interview session will last up to thirty minutes. Please note that the timing and location of the interview will be discussed with and confirmed by you beforehand. You can choose not to answer a particular question if you feel uncomfortable. The data which is collected from recordings will be only employed for research and educational purposes.

Participant Information Sheet

For the participant who is a client involved in speech and language therapies.

Date Information Sheet Produced:

04 September 2018

Project Title

Exploring communicative practices in stuttering therapy: Comparing teletherapy and face to face sessions

Kia Ora,

My name is Pary Vaghefi and I am a student completing my master's degree in Applied Language Studies at AUT. You are invited to take part in my study which will focus on how clients and their therapists communicate and interact during tele-therapy and face-to-face sessions. You can participate in the research by allowing three of your therapy sessions to be observed and recorded to later be analysed in relation to communication practices. I would also like to invite you to have a brief 15-minutes interview with me and share your valuable insights about the method of the therapy. This session takes place after completion of the recordings and you can freely chose to participate in it over phone, Skype or in-person at your preferred location. This information will really help me understand what type of communicative patterns are helpful in this type of therapy.

Please be ensured that your therapy session will not be disturbed in any way and there will be no distractions to you or your therapist to impact the service you expect to receive. Your participation in this study is fully voluntary and you can withdraw from the process at any stage of data collection without any consequences. You are free to ask your therapist to pause or terminate the recording if you feel any discomfort or pressure. The recordings will be fully confidential and will not be accessed by anyone other than me and your therapist. Whether you take part in the research or not, your therapy will remain the same quality and will not be affected in any way.

Thank you for your interest in this research.

What is the purpose of this research?

The aim of research is to gain more insight about the communicative facets of practicing stuttering therapy particularly teletherapy while comparing it to face-to-face therapies while taking therapists' and clients' experiences into account. Such understanding will then lead me to describe communicative patterns practiced during teletherapy. My findings will be included in a thesis which will be submitted to AUT in partial fullfilment of the degree of Master of Applied Language Studies.

How was I identified and why am I being invited to participate in this research?

You were initially identified as your therapist has indicated you as a client who might be interested in this research. You were identified because you have expressed your interest in the advertisement and participant information sheet you received from your therapist. You are qualified to be invited to take part in this study because you are an adult client who is a native English speaker. I am interested in your experiences as a client, mainly focusing on aspects of communication during therapy sessions. Please note that whether you take part in this study or not, it will not impact your relationship with your therapist.

How do I agree to participate in this research?

You can email me or inform your therapist. My contacts are listed below. By signing the consent sheet, you allow your therapy session to be recorded, observed and to participate in one session of interview which will last thirty minutes. You are welcome to have a talk with me if you need further information prior to study.

What will happen in this research?

Up to three of your therapy session will be recorded and I will look at the communicative practices. Also, you will be able to pause or ask your therapist to stop the recording at any stage of the session. I may also ask you about your feelings and experiences of communicative patterns during therapy sessions in an interview. I may also ask what you would like to achieve through these therapy sessions. I will ask if you can recall anything the therapist has done that you felt was effective for your interaction. The interview will be recorded and transcribed, however, all information will be anonymised, so nobody aside from the therapist and me will know who the speaker was. You can refuse to answer a particular question if you feel uncomfortable answering. The recording will be stored on hard drive which will be collected by me. It will be transcribed and any cues which can cause your privacy to be at risk will be omitted by a professional transcriber who will sign a confidentiality agreement before accessing the data. The interview can take up to 30 minutes of your time. Participants can inform the researcher about their time availability and can choose to do the interview over the phone, by video-chat, or in-person. Participants will be informed that the location of in-person interviews will be at START. I will be offering interview transcripts for reviewing so that you may redact items that you do not wish to be made public. The researcher and the camera will be present in the room with the therapist and will not interrupt the therapy session in any way. Also, I would like you to know that the video is **only** for analysis purposes, it will only be viewed by my supervisors and myself, and will not be exhibited in any forum.

What are the discomforts and risks?

No risks are anticipated**.**

How will these discomforts and risks be alleviated?

You can consult your therapist to make sure that the sessions will not be impacted due to the recording. You can also withdraw from the process anytime you feel uncomfortable with the data collection process. You will be guaranteed confidentiality and protection of the integrity of your therapeutic relationship with your therapist. You can also contact my supervisors who are both experienced researchers with health professional backgrounds.

What are the benefits?

I hope that my research will add to the knowledge of people who provide stuttering therapy, by providing more insight into the communicative patterns during teletherapy. It is hoped that the findings will therefore also benefit those who receive stuttering therapy. This study is conducted for the completion of my studies as a post-graduate student in the MA ALS (Master of Applied Language Studies).

What compensation is available for injury or negligence?

It is unlikely that you will be injured since you will be in the same place as the one where you normally have your therapy session.

How will my privacy be protected?

Video recordings will be stored on an encrypted memory stick or a hard drive which will be kept securely with the primary research supervisor throughout the study and which will be destroyed after submission of the research. The data will be solely used for the stated purposes. The interview open-ended questions will only relate to communication and will not ask you for other details. Your name or any details that may lead to you being identified will not be included in the findings. The transcriptions of the recordings will be prepared by an independent transcriber who will sign an agreement of confidentiality. The record of your therapy sessions, my

observations and interview data will be stored on an encrypted hard drive and will be stored at my supervisor's office in a locked cabinet.

Please note that the confidentiality is limited in this study since the therapists will know you as a study participant, and that even though the interviews will be held privately, any comments or direct quotes used in the thesis may be attributable to you, but only by you and the therapist – who is bound by confidentiality.

What are the costs of participating in this research?

You may have to dedicate up to thirty minutes of your time to participate in the interview, to thank you for giving your, you will be offered a small koha.

What opportunity do I have to consider this invitation?

You may take some time to consider the invitation and let your therapist know within two weeks of the date you receive this invitation.

Will I receive feedback on the results of this research?

You will receive a summary of the findings of this research unless you indicate on the Consent Form that you are not interested in receiving such a summary. Please let me know by checking the correct box on the Consent From, and by indicating which postal and email address you would like me to send the findings to.

What do I do if I have concerns about this research?

If you have any concerns about this research you can contact my primary research supervisor, Associate Professor Ineke Crezee , ineke.crezee@aut.ac.nz , 9219999 ext 6825.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, ethics@aut.ac.nz , 921 9999 ext 6038.

Whom do I contact for further information about this research?

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

Researcher Contact Details:

Pary Vaghefi Rezayi , rkm5833@aut.ac.nz

Project Supervisors Contact Details:

Associate Professor Ineke Crezee , ineke.crezee@aut.ac.nz , 9219999 x 6825.

Dr Felicity Bright , felicity.bright@aut.ac.nz, +64 9 921 9999 x 7097.

Approved by the Auckland University of Technology Ethics Committee on *9 October 2018*, AUTEC Reference number 18/363.

Appendix C: Interview Guide

Interview Guide

Data collection- Semi-structured interviews will be conducted with total of up to six participants. Each interview session will last about thirty minutes and will discuss the participant's experiences of communication practices during their recorded therapies. The interview will be conducted shortly after completion recording sessions allowing interviewees to have a fresh memory of communication practices. The location and method of interview will be upon participants' preferences to choose between phone, Skype or in-person conversation. There are two separate lists of indicative questions each designed for one group of participants. Both lists are attached to be reviewed by AUTEC.

Data transcription- Interviews will be audio-taped and stored on an encrypted hard drive which will be handed to a professional transcriber who will sign a confidentiality agreement beforehand. The verbal data will be transcribed verbatim. Written data will be stored at my supervisor's office at AUT North Campus.

Data analysis- Data will be analysed by qualitative content analysis method(Graneheim & Lundman, 2004). It will be coded and categorized to be compared using NVivo qualitative analysis software (QSR International Pty Ltd, 2006) to be compared for describing any themes and patterns.

Indicative question exemplar for therapist participants

1- What is your main goal in conducting therapy sessions?

2- How do you tailor your communication based on this goal?

3- How do you tailor your communication based on this client?

4- What aspects of communication do you find helpful during these sessions?

5- Can you please explain why you find those aspects helpful?

6-What aspects of communication do you feel could be improved?

7-How do you think these aspects of communication could be improved?

8- Why do you think these aspects of communication can be improved?

Indicative question exemplar for client participants

1- What is your main goal of attending therapy sessions?

2- Why have you chosen to either attend sessions face-to-face or by Skype?

3- What aspects of communication do you find helpful during these sessions?

4- Can you please explain why you find those aspects helpful?

5-What aspects of communication do you feel could be improved?

6-How do you think these aspects of communication could be improved?

7- Why do you think these aspects of communication can be improved?

Appendix D: Indicative questions for the client

Indicative questions for client group

1- What is your main goal of attending therapy sessions?

2- Why have you chosen to either attend sessions face-to-face or by Skype?

3- What aspects of communication do you find helpful during these sessions?

4- Can you please explain why you find those aspects helpful?

5-What aspects of communication do you feel could be improved?

6-How do you think these aspects of communication could be improved?

7- Why do you think these aspects of communication can be improved?

Appendix E: Indicative questions for the therapist

Indicative questions for therapist group

1- What is your main goal in conducting therapy sessions?

2- How do you tailor your communication based on this goal?

3- How do you tailor your communication based on this client?

4- What aspects of communication do you find helpful during these sessions?

5- Can you please explain why you find those aspects helpful?

6- What aspects of communication do you feel could be improved?

7- How do you think these aspects of communication could be improved?

8- Why do you think these aspects of communication can be improved?

Appendix F: Consent forms

Consent Form

Project title: Exploring communicative practices in stuttering therapy: Comparing teletherapy and face-to-face sessions

Project Supervisors: **Ineke Crezee and Felicity Bright**

Researcher: **Pary Vaghefi**

○   I have read and understood the information provided about this research project in the Information Sheet dated 12 September 2018.

○   I have had an opportunity to ask questions and to have them answered.

○   I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

○   I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

○   I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

○   I agree to take part in this research.

○   I wish to receive a summary of the research findings (please tick one): Yes○   No○

Participant's signature: ....…………………………………………………………

Participant's name: ....…………………………………………………………

Participant's Contact Details (if appropriate):

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…………………………………………………………………………………………..

Date:

Approved by the Auckland University of Technology Ethics Committee on 9 October 2018 AUTEC Reference number 18/363

Note: The Participant should retain a copy of this form.

Consent and Release Form

Project title: Exploring communicative practices in stuttering therapy: Comparing teletherapy and face-to-face sessions

Project Supervisors: I**neke Crezee and Felicity Bright**

Researcher: **Pary Vaghefi**

○   I have read and understood the information provided about this research project in the Information Sheet dated 12 September 2018.

○   I have had an opportunity to ask questions and to have them answered.

○   I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

○   I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

○   I permit the researcher to use the photographs that are part of this project and/or any drawings from them and any other reproductions or adaptations from them, either complete or in part, alone or in conjunction with any wording and/or drawings solely and exclusively for (a) the researcher's; and (b) educational exhibition and examination purposes.

○   I understand that the photographs will be used for academic purposes only and will not be published in any form outside of this project without my written permission.

○   I understand that any copyright material created by the photographic sessions is deemed to be owned by the researcher and that I do not own copyright of any of the photographs.

○   I agree to take part in this research.

Participant's signature: ....………

Participant's name: ....………

Participant's Contact Details (if appropriate):

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Date:

Approved by the Auckland University of Technology Ethics Committee on 9 October 2018 AUTEC Reference number 18/363

Note: The Participant should retain a copy of this form.

Appendix G: Observation Protocol

Appendix 1-Observation Sheet

Observations of teletherapy and face-to-face sessions will include:

A. Non-verbal communication behaviours such as body posture and hand movements
B. Paralinguistic communication behaviours such as the pitch of the voice, tone,and gaze
C. Summary of observations which and notes of the moments of observations which were most engaging to the researcher.

Appendix H: Research Advertisements

Are you providing therapy for stuttering?
You may be able to help me with my research!

My name is Pary Vaghefi and I am a Master of Applied Language studies student at AUT.

I am interested in how communication occurs in stuttering therapy.

I would like to observe and record three of your therapy sessions. I would also like to ask you some questions after the third session.

If you are interested in participating, please email me.

Thank you,

Pary Vaghefi

Email: rkm5833@aut.ac.nz

Supervisors: Dr Ineke Crezee and Dr Felicity Bright

Are you having therapy for stuttering?
You may be able to help me with my research!

My name is Pary Vaghefi and I am a Master of Applied Language studies student at AUT.

I am interested in how communication occurs in stuttering therapy.

I would like to observe and record three of your therapy sessions. I would also like to ask you some questions after the third session.

If you are interested in participating, please tell your therapist or email me.

Thank you,

Pary Vaghefi

Email: rkm5833@aut.ac.nz

Supervisors: Dr Ineke Crezee and Dr Felicity Bright

Appendix I: Field note samples

recall

■: Using more hand gestures.   less looking down (even when writing)

■ recall → draws conclusion (reflection)

■ → relaxed legs + Sitting close to the monitor   ■ → recall or describe? 8:00"-25

■ → implies that he is not feeling confident   ■ → 8:40': Paraphrase / interpretation?

9:00 → Good ex. Anna giving information / directions ⇒ ■ → head nods / serious face

looks away when finding a good term → A   Giving info → a lot of hand gestures?
                                                ↑No other body movements ↓↓ ∫ ■

■ you kinda go? (just a facial / hand gesture) → ■ : Yeah! (They know the

content even though it's not said in words. 14:35'

16:00' → ■ or interrupts him but for a humouristic moment. → ■ ■ A laugh

He doesn't take that as an act too take a turn. He continues his   Son continues ↵
                                                                turn.

18:00 ■ → talking about technique

18:40 → "Great!" → Not a very high pitch

19:40 → ■ → Ask tough q ■ → leans back
              Humour + resistance → hand gestures + laugh   ✿

21:30' AWESOME + WOW + Wide eyes → A (No body posture cues)

22:25" → interruptions → cause Son is excited

woo
Sound clip → Clap + imitating ■ → ■ → for interpretation

1:31' → ■ attempts information giving → to talk about his feelings. (excited again)

2'34' → More excited (clappings)"very exciting!" (almost falls from her chair!)

→ ■ talks without stopping and does not notice any of these.

4:00 → Mutual laugh | 6:22" → ■ Reatudes his face/ resistance + laughs

5'48" → Human + laugh → ■ Smiling – laughing

Asking about tech → closed ended questions → But ■ gives in long answer.

■ → gives direction based on his answer.

Plays with her ring → thinking → looking away → 8'00" 8'16"

Checks # time by clicking on monitor. ■ won't notice (instead of looking at her wrist watch)

– Talking about his background → 9.30 → To acknowledge? → TG say she notices

Talking about her family and trips. ■ contributes.

© ■ → does a revision of instructions. Giving training for next session.

■ → bye with laugh.