EXPLORING EMPOWERMENT IN CONVERSATION: DELIVERING VIDEO INTERACTION GUIDANCE TO FAMILIES OF CHILDREN WHO ARE DEAF OR HARD OF HEARING.

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ABSTRACT

Introduction: This work explored the concept of 'empowerment' in health care. A concept map of 'empowerment' was generated based on theories of linguistic analysis to locate aspects of empowerment in conversational data. The process of empowerment was understood within the theory of transformative learning as 'perspective change'. A ten phase model of the transformative learning process was used to provide evidence of perspective transformation. The empowerment process was explored through the delivery of the intervention Video Interaction Guidance to 16 hearing families of pre-lingual deaf children.

Methods: The parents of the deaf children and the intervention guide engaged in conversations reviewing video clips of the parent and child in interaction. These conversations were processed through a corpus analysis software programme to discern key extracts of the participants' conversational data. These extracts were to subject to discourse analysis to find evidence of transformative learning.

Analysis: Transformative learning was observed in 10 families. Transcript extracts representing the model of transformative learning were variable. Principles of conversation analysis were applied to explore the learning process in interaction. Participant speech was tagged to assess their level of engagement.

Outcomes: The corpus analysis-driven tagging process offers an original approach to representing the key content of large sets of interview data but in this work, was limited in showing how the interaction created opportunities for learning. Transformative learning processes were variable and the ten phase model could not be characterised in terms of discourse features alone. The intervention encouraged critical reflection but warrants directed focus to achieve learning. The participants were effective in acting as co-collaborators in the intervention process.

Discussion and concluding remarks: Models of empowerment must focus on the process, of the ways in which the guide and the participant create learning opportunities and evidence of this must be multimodal. Patient-centred interventions should be supported by an open, communicative relationship with the health service provider.

ACKNOWLEDGEMENTS

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LIST OF ABBREVIATIONS

ASR   Automatic Speech Recognition
BNC   British National Corpus
CA   Conversation analysis
CADS   Corpus-assisted discourse studies
CDA   Critical discourse analysis
CHC   Centre for Health Communication
CI   Cochlear implant
CL   Corpus linguistics
CLAWS   Constituent Likelihood Automatic Word-tagging System
CNE   Certified Nurse Educator
dB   Decibels
ENT   Ear, Nose and Throat services
ERIC   Education Resources Information Center
FAC   Video review Facilitator
FES   The Family Empowerment Scale
HA   Hearing aid
I.C.U.   Intensive care unit
IG   Interaction Guidance
LL   Log-likelihood
MRC   Medical Research Council
NICE   The National Institute for Health and Clinical Excellence
NIHR   National Institute for Health Research
NHBRU   Nottingham Hearing Biomedical Research Unit
NuM   Nursing Manager
POS   Part-of-speech tagging
PSI   Parenting Stress Index
RN   Registered Nurse
UCREL   University centre for Computer corpus Research on
            Language
UNHS   Universal neonatal hearing screening program
USAS   UCREL Semantic Analysis System
UTS   University of Technology, Sydney
VIG   Video Interaction Guidance
VIPP   Video Feedback Intervention to promote Positive
            Parenting
WHO   World Health Organization

OVERVIEW

Chapter 1: Empowerment in healthcare

This work looked to explore the endorsement of 'empowerment'

initiatives in the delivery of health care put forward by the World Health

Organization (Wallerstein, 2006). In the first chapter, I look at the ways

in which concepts of empowerment have entered health care

discussions, in parallel with a patient-centred model of care. Through a

brief account of how 'empowerment' has become a health care directive

I identify three questions which have directed the focus of this work:

- What do we mean by 'empowerment'?

- How do we recognise and evidence empowerment?

- How can we foster empowerment as part of the delivery of health
  services?

Chapter 2: Empowerment – a working definition

In chapter 2 I provide an account of the ways in which researchers have

defined 'empowerment' in the field of healthcare and introduce the

concepts derived from the field of linguistics which constitute my own

concept map of empowerment. I distinguish between an external

domain, which is related to social structures and resources; and an

internal domain, which is concerned with the perception of power, as

managed by the individual. I argue that the externalisation of

'perspective' as articulated in conversation can provide a site of

evidence for the ways in which perspective is subject to change and

which can be indicative of empowerment. I refer to the linguistic

principles of stance, epistemic authority, voice, knowledge and

evidentiality, agency, locus of control and face to construct my concept

map of empowerment.

Emphasising 'empowerment' as a process as well as an outcome, I

introduce the theory of transformative learning through which to

understand perspective change. I explore how the principles of

transformative learning contribute to an empowerment process and

introduce the ten phase model as a potential framework for providing

evidence of transformative learning. I also introduce the concept of self-

efficacy as a closely-aligned theory concerned with the individual's

sense of self-belief.

Chapter 3: Applied linguistics and evidencing empowerment

In chapter 3 I describe how methods of analysis derived from the field

of linguistics can offer insights into the way in which we understand

experiences of health care. I reiterate how the concepts introduced in

chapter 2 as part of the empowerment model can be associated with

specific features of language, providing a clear relationship between the

aspects of participant's conversation and their internalised perspective.

I refer to work using applied linguistics in the field of health care and

discuss how combined linguistics approaches can create a robust

methodology for analysing talk in interaction. I then detail the methods

of my analytical approach, outlining aspects of discourse analysis (and

differentiating it from critical discourse analysis); corpus linguistics and principles of conversation analysis.

Chapter 4: Assessing interventions for families of hearing impaired children

In chapter 4 I locate the work within the context of research into hearing impairment, establishing the prevalence of hearing loss in the U.K. and exploring the complex conceptions of 'deafness'. I describe the current routine services offered to families of deaf children, as well as emphasising a drive towards family-centred interventions and an understanding of the importance of the family dynamic for the child's development.

I describe in detail a literature review process exploring the ways in which the parental experience of childhood deafness has been elicited by researchers in the field. 'Empowerment' has not often been used as a conceptual model for providing evidence of the impact of family interventions in the context of hearing loss and so the evidence represents a more general account of the parental experience of, for example, the diagnosis and subsequent support services for the hearing impaired child. The evidence collected through the literature review is organised into those which use primarily quantitative methods of analysis, which is largely in the way of questionnaires; qualitative methods, which generally involve semi-structured interviews and thematic analysis; and mixed methods approaches, which are designed

to use quantitative and qualitative methods in a complementary way. Quantitative scales are shown to be designed to capture particular elements of the experience, characterised in terms of 'stress', 'support', 'satisfaction' or to profile the participant demographics.

Following this, I give an account of the types of intervention which were found to be delivered to families of deaf children in the literature review. These included Early Childhood Home Instruction, Auditory Verbal Therapy and the Webster-Stratton program. From these examples, I explore the ways in which video has been used as an intervention tool that promotes reflexivity.

This leads me to introduce the intervention which was delivered through the project under which this work was conducted, an intervention known as Video Interaction Guidance (VIG). I outline the underlying principles of VIG, which is based on 'scaffolding' and emphasising the attuned behaviours of parents in interaction with their children. This evidencing of attuned behaviour as 'successful' communication provides a model of behaviour for the parents to recognise and build on the strengths already existent in their family dynamic. I provide the contact principles which underpin this identification of 'successful' communication and explain the training program a VIG guide undergoes in order to prepare for delivering the intervention. I also consider the specific aspects of the VIG intervention when compared to other video-based interventions.

The delivery of the intervention was part of a larger project conducted by the Child and Family team at the NIHR Nottingham Hearing Biomedical Research Unit. I outline the study design and research aims of this project, indicating how this work and my own research aims contributed to the wider project. I then provide profiles of the participants who took part in the study.

Chapter 5: Methods

In chapter 5 I detail the outcome measures which were applied in assessing the impact of the intervention. I also detail how the intervention was delivered, identifying the challenges both to the provision of this unique form of health service, and to the data collection. I describe my transcription protocol, which generated the data that was subject to linguistics analysis. The first step in the methodology following transcription was corpus analysis and as such, I introduce the WMatrix3 corpus analysis software programme which I used to process the data. I describe the tagging processes that are built into this software programme, which produce both grammatical and semantic tagging outputs. I describe the generation of a normative corpus, based on data files extracted from the British National Corpus (BNC), and consider the impact of the reference corpus on the data outputs. I introduce the statistical measure of log-likelihood to explain how the key aspects of the research data were systematically determined.

Building on this statistical output, I then describe a method which considers the interaction of the semantic categories which are determined to be representative of the data. This novel approach – which I termed 'cluster tagging' – discerns where key ideas come together in the text, to identify key extracts in the data. I describe how these extracts were then subject to discourse analysis at the level of tense, mood and aspect and in relation to the ten phase model of transformative learning to look for evidence of perspective change. At this point, I theorise what discourse aspects might characterise each phase and made predictions about those specific elements that might help researchers identify a transformative learning process.

Finally, I describe a pragmatic-based tagging process which was applied to the participant data to gauge a level of 'engagement'. This was applied with the aim of determining how the participants' involvement in the session would affect their potential for learning. I explain how the process tags the conversation data as either: descriptive; explorative; evaluative or confirmative to assess how the intervention encourages inquiry and critical reflexivity. I then briefly provide a profile of the data collected through the study.

Chapter 6: Outcomes

In chapter 6 I explore the outcomes of the data, beginning with an account of the nature of the self-directed goals of the intervention as identified by the participants. I broadly describe the key themes in the

data, as identified by the corpus analysis tool, as well as evaluating the accuracy of the tagging programs. I then examine the cluster tagging process, in terms of its functionality and its success in determining 'key' extracts in the data.

Following this, I examine the evidence of transformative learning. I begin by describing the prevalence of the ten phase model as observed in the data, as well as the rate at which participants appeared to progress through the phases. I then provide a full case study of one of the transformative learning processes, with the corresponding transcript data. This is assessed in relation to the predictions I had made about the characteristic features of each phase. I describe the nature of the learning trajectories experienced by the participants in the intervention, before providing a broader evaluation of my predictions when taking each transformative learning process into account.

Finding that the predictions did not provide a useful indication of the transformative learning process, I then examine how the process was initiated in the context of the interaction. Analysis of the moments where the initial phase is observed demonstrates the various ways in which the video element, the intervention guide and the goal-setting contribute to the learning process. I also consider the limitations of a purely linguistic analysis.

I explore those cases in which transformative learning was not observed, concluding that one aspect which inhibited the learning process was a lack of a directed focus. I examine the pragmatic tagging process to assess how the participant's involvement in the sessions at the level of critical discourse impacted on the potential for transformative learning. The intervention is shown to generally encourage inquiry and critical reflection, but it was shown that continuity between inquiry and evidence that provides learning was more effective than simply generating more inquiries.

I refer to a study which I was involved in based at the Centre for Health Communication at the University of Technology, Sydney. This was a study based in the intensive care unit of a large hospital in which the researchers offered video-based review sessions similar to the VIG intervention, to the faculty of the ward. I explore the conversations of the group generated when observing the video through a taxonomy of intersubjective stance. I demonstrate that the changes that were made in ward practices as a result of the video work were explored in the conversation. Furthermore, I show that these outcomes were realised because the group was able to engage in inquiry, to consider alternatives and make propositions, but that crucially, these inquiries were followed through and concluded to provide new learning. This is related to the directed focus of the VIG intervention.

Chapter 7: Discussion and concluding remarks

In concluding this work I discuss the implications for empowerment models, which I advise should be focused on the *process* of learning and empowerment and how it emerges in interaction. I introduce the rhizome model to conceptualise the trajectory on which the families came to us through the intervention. I reiterate the fundamental importance of the patient voice in self-management and the patient-centred model.

I describe the effectiveness of the cluster tagging methodology in representing the patient voice as well as considering the limitations of the method in exploring the processes of the interaction. I assess the impact of the intervention in offering a unique perspective, promoting intersubjectivity, foregrounding the voice of the health service user, developing the service provider/participant relationship and creating opportunities for perspective transformation. I challenge the traditional emphasis on evidence, considering its effect on researchers in imposing boundaries on the complex experience of families and of health service users. Finally, I consider the implications for practice, reiterating that empowerment must be seen as a process, that participants must be given the space to make their own initiatives and offer their own voice, and that long-term health provision relies on an open health service user/provider relationship.

CHAPTER 1: EMPOWERMENT IN HEALTHCARE

In 2006, the World Health Organization (WHO) Europe published a report stating that "there is evidence based on multi-level research designs that empowering initiatives can lead to health outcomes and that empowerment is a viable public health strategy" (Wallerstein, 2006: 4). Furthermore, "Patient and family empowerment strategies have increased patients' abilities to manage their disease, adopt healthier behaviours, and use health services more effectively, as well as increasing care-giver coping skills and efficacy" (Wallerstein, 2006: 4). In the digital age, the democratisation of information has caused the relationship between health service users and health services providers to shift. Patients are no longer seen as 'receivers of information' but as active agents in the management of their own healthcare. This also has ramifications for the identity of the health service provider and the distribution of services as individuals become 'better users' who are "less dependent on health care providers" (Falk-Rafael, 2001: 10). Empowerment initiatives are positioned within a broader scheme of 'patient-centred' care, which the Institute of Medicine defines as:

> Care that informs and involves patients in medical decision-making and self-management; coordinates and integrates medical care; provides physical comfort and emotional support; understands the patients' concept of illness and applies

principles of disease prevention and behavioural change

appropriate to diverse populations (Maizes *et al.*, 2009: 278).

The use of the term 'empowerment' likens the patient to a member of a

social group overcoming marginalisation and discrimination, but can

also be understood to be a matter of putting the patient first and

enabling them to contribute to the management of their own health care.

The first reference to 'empowerment' principles in the field of healthcare

is thought to have come from the proceedings of the International

Conference on Primary Health Care (World Health Organization,

1978), which emphasised "individual self-reliance and participation in

the planning, organization, operation and control of primary health care".

This was followed up in the Ottawa Charter for Health Promotion

(Canadian Public Health Association, 1986) which foregrounded "the

empowerment of communities, their ownership and control of their own

endeavours and destinies". It was at this point that empowerment

became a concept that was seen to be relevant to healthcare and a

conceptual underpinning of health research (Funnell *et al.*, 1991;

Sherwin, 1992; Bhopal and White, 1993). In fact, Funnell *et al.* (1991:

41) described 'empowerment' as a "buzzword for the 1990s".

In the U.K., empowerment principles have continually shaped the

directives of governmental health mandates, particularly in relation to

long-term illness and the provision of health care for children, as seen

in the *National Plan for Safeguarding Children from Commercial*

Exploitation (Department of Health, 2001); *Shifting the Balance of Power: The Next Steps* (Department of Health, 2002); *Every Child Matters* (HM Treasury, 2003) and *Working Together to Safeguard Children: A guide to inter-agency working to safeguard and promote the welfare of children* (HM Government, 2006). 'Empowerment' remains a key concept in government health directives and in a recent mandate to the NHS Commissioning Board (Department of Health, 2012), the U.K. government iterated its desire to "empower and support the increasing number of people living with long-term conditions"(p.9), "empower service users so that they are better equipped to manage their own care, as far as they want and are able to" (p.11), "empower patients to demand improvements where care is not as good as it could be" (p.17), as well as empowering patients and their carers to "manage and make decisions about their own care and treatment" (p.9), and "empowering individuals and organisations at the front line of the NHS" (p.22). These ideas echo directives put forward over 30 years ago at the International Conference on Primary Health Care (World Health Organization, 1978) and researchers share this drive for empowerment directives, particularly in relation to chronic illness (Wagner, 1998; Funnell, 2000; Bodenheimer *et al.*, 2002; Mola *et al.*, 2008).

'Empowerment' has become something of an axiom in healthcare strategies but despite a number of concept analyses aimed at bringing the variable definitions together (Gibson, 1991; Hawks, 1992; Skelton, 1994; Rodwell, 1996; Ellis-Stoll and Popkess-Vawter, 1998; Ryles,

1999; Hage and Lorensen, 2005; Tims *et al.*, 2007; Dowling *et al.*, 2011; Hermansson and Mårtensson, 2011), there remains to be a workable definition by which we can determine how such strategies are designed to create empowerment. Furthermore, it is unclear in what ways empowerment strategies are being implemented in terms of the specific actions, resources and practitioner skills. Finally, there is a lack of reported outcome measures which can be understood as indicative of empowerment. This work aimed to better understand 'empowerment' as a process and an outcome in the delivery of health services by addressing the following questions:

- What do we mean by 'empowerment'?
- How do we recognise and evidence empowerment?
- How can we foster empowerment as part of the delivery of health services?

These questions were explored through the delivery of a video-based intervention to families of deaf children, which aims to increase awareness of successful communicative actions within the family dynamic. Through this work, I also developed an original methodological approach to extracting key themes from large collections of conversational data with the aim of facilitating the exploration of more complex concepts such as 'empowerment'.

CHAPTER 2: 'EMPOWERMENT' – A WORKING DEFINITION

'Empowerment' is a term that has become pervasive in social theory (Zimmerman and Rappaport, 1988), business models (Potterfield, 1999) and feminist literature (Deveaux, 1994). Given its origin and association with marginalized groups (Freire, 1970), it has been suggested that empowerment is more identifiable in its absence, that it "begins with an awareness of something tangible, usually a deficit, and then proceeds to a point at which the actors feel this has been corrected" (Swift and Levin, 1987 cited in Ryles, 1999: 602). Furthermore, it arguably does not have an end point; considering empowerment as operating on a continuum, it is not a case of 'empowered'/'disempowered' but 'more empowered' /'less empowered'. This also reiterates that empowerment is a process, as well as an outcome; that there is a necessary change in state that characterises empowerment. As Kabeer (1999: 2) observes:

> Empowerment entails a process of change. People who exercise a great deal of choice in their lives may be very *powerful*, but they are not *empowered* in this sense, because they were never disempowered in the first place (italics in original).

However, empowerment is not a zero-sum process; it should not be seen as a relinquishing of power on the part of the care provider, rather it is founded on a concept of 'relational power' (Lappé and DuBois, 1994). This states that power is shared and occurs in relationships:

'power with' rather than 'power over'. Research on empowerment has consistently argued for establishing "mutual trust and respect, participation and commitment, education and support" (Rodwell, 1996: 310), "within a caring, nurturing environment…that [develops from] honesty, openness and genuineness" (Hawks, 1992: 611). The relationship between care providers and care users exists not only in dialogue but also as a mutual process of empowerment. Falk-Rafael (2001: 6) found that:

> Nurses themselves were empowered through their clients' empowerment in a reciprocal effect. Furthermore, they reported an iterative effect; that is, further empowerment was one of the outcomes for clients.

However, it is generally agreed that one cannot grant power to another, "they [can] only facilitate, not create, empowerment in others" (Falk-Rafael, 2001: 4). It would be c*ontradictio in terminis* for 'power' to be given in any way and the challenge for the service provider is to make available the resources for empowerment for when the patient is in a position to capitalise on them. This refers not only to material resources and support, but also to encourage a positive self-identity in the patient so that when they are in a position to perceive themselves as 'empowered', this is supported by the actions of the caregiver. As Rappaport (1987: 121) states, empowerment "conveys both a psychological sense of personal control or influence" as well as "a concern with actual social influence, political power and legal rights".

The World Health Organization's (WHO) endorsement for empowerment strategies (Wallerstein, 2006: 18) is based on a definition of 'power' which differentiates between 'control over resources' (material, human, financial) and 'control over ideology' (values, attitudes, beliefs). As such, "Empowerment can be seen as a dynamic interplay between gaining greater internal control or capacity and overcoming external structural barriers to accessing resources" (Speer and Hughey, 1995 cited in Wallerstein, 2006: 18). This distinction has also been termed 'real powerlessness' and 'surplus powerlessness', where the latter "is an internalized belief that change cannot occur, a belief which results in apathy and an unwillingness of the person to struggle for more control and influence" (Lord and Hutchison, 1993: 2). Similarly, Sadan (1997: 144) asserts that empowerment can manifest "in an improvement in the perceived ability to control, as well as in an improvement in the actual ability to control".

In this conception of 'empowerment', there is both an external aspect, which is governed by social conventions, access to resources and institutional systems; but also the internalised perception of one's own capabilities. In implementing empowerment strategies service providers can strive to provide resources, amend institutional policy to make it more patient-centred and work with the community to promote social inclusion. However, there are many challenges to this kind of approach, which are steeped in legislation, policy and social attitudes.

Simultaneously though, service providers can address empowerment in its internal aspect, "to challenge internalized oppression and to develop new representations of reality" (Wallerstein, 2006: 18). Empowerment processes can originate within the internalised sense of 'power' as individuals are no longer inhibited by the belief that they are powerless and begin to actively realise their own power. As Sadan (1997: 144) states:

> Since the sources of powerlessness are rooted in social processes that disempower entire populations, the empowerment process aims to influence the oppressed human agency and the social structure within the limitations and possibilities in which this human agency exists and reacts.

It is the nature of human agency that the way in which power manifests is both subjective and integrated into social processes. As such, we may be able to speculate about the obstacles and disempowering processes that are common throughout society and – more specifically – the provision of healthcare services, but the origins of power are somewhat less predictable. As Kabeer (1999: 462) notes:

> There is an implicit assumption underlying many attempts to measure 'empowerment' that we can somehow predict the nature and direction that change is going to assume. In actual fact, human agency is indeterminate and hence unpredictable in a way that is antithetical to requirements of measure.

Due to the subjective experience of the healthcare encounter and the individual stance of the service user, in order to understand empowerment we rely on a praxis which

> acknowledges rather than erases the prepersonal dimensions of the […] relationship, allowing unpredictability and messiness into the research process, and affording indeterminate outcomes rather than theoretically and methodologically predetermined ones (Iedema and Carroll, 2010: 81).

Though we strive for a unified definition of 'empowerment', Zimmerman (1984, cited in Page and Czuba, 1999) has stated that "asserting a single definition of empowerment may make attempts to make it formulaic or prescription-like, contradicting the very concept of empowerment". Nevertheless, a sense of structure in our search for empowerment is necessary to manage the multivariate ways in which it may manifest.

This work was concerned with the internalised component of the empowerment model which is manifest in individuals' perspectives. The resource for the participant perspective is conversation; we must rely on what service users tell us about their perspective in relation to their experiences with healthcare systems. This work applied discourse analysis to conversational data in order to understand this perspective and how it might have changed over time. The process of perspective change was understood within the theory of transformative learning

(Mezirow, 1991) which is explored below. 'Perspective' is understood through the linguistic concept of 'stance'.

2.1 STANCE

'Stance', or the act of 'stance-taking', is central to communication in that it positions a speaker's utterance and the speaker themselves in relation to the world and discourse around them. Biber and Finegan (1989: 92) define 'stance' as "the lexical and grammatical expression of attitudes, feelings, judgements, or commitment concerning the propositional content of a message". 'Stance' is communicated both in terms of feelings (affective) as well as knowledge (epistemic) and can be found:

> not only in the lexicon, but the following: grammatical and
> syntactic structures such as choice of pronouns, determiners,
> verb voice, tense /aspect, sentential adverbs, hedges, cleft
> constructions, diminutives, augmentatives, quantifiers, and word
> order; phonological features such as intonation, voice quality,
> sound repetition, and sound symbolism; and discourse structures
> such as code-switching as instantiated by taboo words, dialect,
> couplets, and repetition of own/other's utterances (Kärkkäinen,
> 2007: 184).

'Stance' therefore, is established within the context of the dialogue and is a relational aspect of a co-constructed discourse: 'stance-taking' is intersubjective. At the centre of this dialogic construction of intersubjectivity is what DuBois (2007) calls the 'shared stance object'.

This 'shared stance object' could be a physical object, but frequently in conversation it is an utterance, an initial act of 'stance-taking' such as:

Speaker#1: I don't like those.

This becomes a 'shared stance object' when a second speaker marks their own position in relation to this statement, which could be:

Speaker#2: I don't like those either.

In this example, the second speaker expresses an equivalent 'stance', but indexes the intersubjective function of their utterance with 'either', which acknowledges the preceding utterance by the first speaker. In this way, we can see that within the context of a conversation there might be a number of features that respond to previous utterances and that 'stance-taking' is an intersubjective action. 'Stance-taking' is the means by which individuals indicate how their utterances are to be interpreted, incorporating the opinions and identities with which they would want to be associated as well as their commitment to those identities.

Jaffe (2009) explores how we can observe stance over time, distinguishing a 'metastance': "the choice to adapt a consistent speaker stance across a range of different contexts in which people might reasonably expect some variation" (p.19). Thus, when we examine the speech utterances of an individual over time, we would differentiate between those enduring '(meta)stance' markers which are associated with a more stable identity and changes in stance from one conversation to the next, which would be more indicative of a change in

perspective. Much like the definitions of 'power' given above, 'stance' is subjective, intersubjective and part of a broader social discourse, or in Bakhtin's (1981) terms, the *heteroglossia*. Individual agency resides within language hierarchies and ideologies, and individual 'stance-taking' is both inhibited by but understood through more generic language structures. We can extend the notion of 'power' to this idea of 'stance' to say that the empowered individual has the linguistic resources and capability to express themselves and be understood. Falk-Rafael (2001) referred to a process of patients 'finding their voice' as fundamental to the empowerment process, but more than being able to communicate *to* health service providers, this idea of intersubjectivity emphasises the need to be able to communicate *with* them. Habermas' (1984) theory of communicative action emphasises the need for 'agreement' and mutual understanding between actors in dialogue, where all participants have equal opportunity to contribute. Furthermore, it is a requirement that each participant recognises the other as equal, but also that oneself is both sensible and fallible. In this way, the contributions of the patient are just as important as those of the clinician.

2.2 EPISTEMIC AUTHORITY

The idea of a patient 'voice' is fundamental to empowerment as it is defined in the literature. Taylor *et al.* (1992) distinguish between 'exit' and 'voice' patient strategies, whereby the latter fosters empowerment in health service users by giving them the capacity to voice their views about the quality of care they are receiving and the decisions made in

relation to their health care. This is similar to the concept of 'advocacy', which is also integrated into definitions of empowerment (Falk-Rafael, 1995; Rodwell, 1996).

In order for a patient to have a voice in the processes of their own health care, that individual's 'voice' must be validated in the dialogue itself. In this work, I relied on what was communicated through language, but we must also be aware of alternative ways in which participants might come to express themselves, how they might find their voice. We must also be sensitive to the ways in which the voice is inhibited; for example, as a matter of language comprehension, a physical condition that inhibits the production of speech, or a psychological condition that limits the individual's ability to communicate. When in interaction with participants who are in some way or another 'dis-empowered', health service providers must be able to accommodate the multivariate ways in which a participant might find their 'voice', which may not be exclusively verbal. Affleck *et al.* (2013) explored various photograph-based approaches in an attempt to overcome the reported problem of a lack of reported emotions from men in the qualitative interview. In addition, music therapy has been shown to complement the behavioural assessment of disorders in consciousness (O'Kelly and Magee, 2013). This work explored the patient voice in conversation and privileges an understanding of 'meaning' at the semantic level. This study involved participants who displayed no physical or psychological conditions that compromised

their ability to engage in conversation and as such, the opportunity to 'find their voice' was offered in conversation.

In order to be able to provide the health service user with the appropriate information and maximise the participants' learning we must have a sense of their pre-existing knowledge. Not only will this inform the service providers as to what the participant does and does not know, which is a fundamental principle of the 'health literate care model' paradigm (Roehr, 2013); but also, in allowing the individual to establish their knowledge and ideas it should become apparent what is relevant and meaningful to them. Frankel (2001) emphasises the importance of 'self-diagnosis' in getting to the heart of patients' concerns and understanding of their health complaint. It is beneficial, then, to give the individual the opportunity to define in their own terms what is significant to them with regard to the provision of health services. It is also important to acknowledge that patients have knowledge of their own condition, as well as their needs and the support networks around them. This introduces the idea of 'epistemic authority' which, as defined by Heritage and Raymond (2005), permits the individual to define the terms of concepts discussed in conversation with the service provider.

When engaging in discussion with a health service provider, a patient might expect the clinician to assume 'epistemic priority' given their professional training and knowledge of health. Though the patient can

make their own claim in the dialogue for epistemic priority based on their own knowledge of their lifestyle and condition, the 'disempowered' individual is unlikely to instinctively establish their own epistemic authority. Thus, the clinician can structure their talk in such a way that encourages the health service user to contribute their own knowledge or insights to their health care management. In any dialogue, the first conversational turn provides an opportunity to offer an assessment, establishing the topic of conversation and providing a counterpoint for subsequent assessments. In this way, epistemic priority naturally lies with the first speaker. Considering any typical heath care encounter, it is ordinarily the service provider who assumes the first turn, either because their work demands dictate that they would approach the patient as and when they were available; or because the context of such discussions would ordinarily be a centre of care provision (hospital, clinic, GPs office). Subsequently, epistemic priority is the health service provider's to defer, which is most easily done by asking a question, or by not taking the turn. However, it might be seen as peculiar for the service provider not to take their turn, since the act of commencing the discussion would generally lie with them (for the reasons given above). Furthermore, questions themselves comprise of terms which in some way establish a position or manner in which the discussion will proceed.

To give a broad comparison, the use of tag questions at the end of statements, such as "So you're feeling better are you?" not only establishes what the clinician presumes to be true or expects (that the

patient feels better) but invites the patient to agree. To challenge this presumption would naturally introduce a disagreement and for a 'disempowered' individual, it might be undesirable to create such a tension. It is understood through Grice's (1975) cooperative principle that effective conversation is borne out of the assumption that each speaker's contributions are relevant, truthful, and expressed in a clear and precise way. Furthermore, Brown and Levinson's (1987) politeness theory – which builds on Goffman's (1955) concept of 'face' (explored below) – emphasises the individual's desire both for approval (positive face) and not to be impeded by others (negative face), which are thought to underlie such interactions. The second speaker can of course reject the terms of the first turn, by ignoring the yes/no format of a question; challenging a specific terminology used in the question; or simply introducing a new topic; but again, this is a non-cooperative approach to conversation likely to result in tension and not consistent with Habermas' (1984) communicative action. Conversely, open questions such as "How are you feeling?" create a greater opportunity for the patient to establish the topic of conversation and introduce what is of importance to them, either in relation to their health complaint or even beyond. The cooperative principle does not dictate that each speaker has to agree, but rather that even if they disagree, they both manage their speech utterances to be meaningful and strive to be understood.

2.3 KNOWLEDGE AND EVIDENTIALITY

Quite often 'epistemic authority' is validated by a claim to knowledge or evidence. Evidentiality has been closely associated with epistemic modality (de Haan, 1997), but we can distinguish between referring to the source of information or assertion (evidential) and the degree of confidence with which a statement is delivered (epistemic modality). An index of 'evidentials' was generated by Willett (1988), who categorised the various types of evidential into:

- 'direct' (i.e. evidence informed by sensory input such as 'seen' or 'heard') and

- 'indirect' which can come from inference (i.e. reasoning) or report, such as being told second-hand.

These are subdivided into categories based on the way in which the speaker came by the evidence, as shown in Fig. 1.

Figure 1 The semantic domains of evidentiality (Willett, 1988: 57).
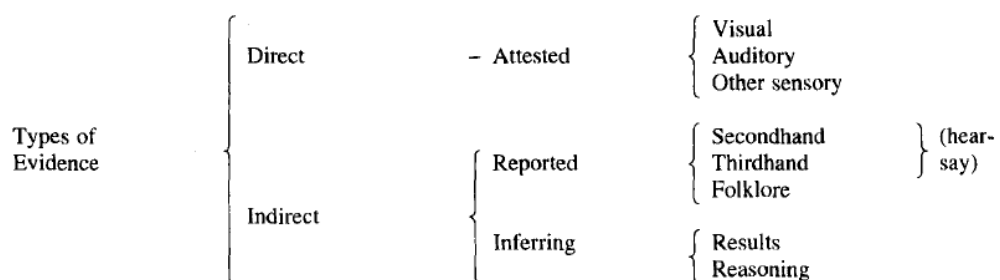
Evidentiality is present in most languages and often indicated by grammatical elements. In English, evidentials are largely verbs and categorised semantically, allowing us to distinguish between different kinds of sensory (heard, saw, felt) and cognitive (deduced, calculated, presumed) processes, for example. Both the use of and choice of

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evidential can indicate the degree to which an individual is invested in their assessment, which suggests to what extent it is an expression of stance. As an indication of relational power, the use of evidentials can both substantiate a claim, but also suggest that the speaker does not feel that their word alone would be valued and that they are required to justify their claims. For health service providers the process of reasoning can help the listener understand their point of view and create a sense of balance by sharing the resource of knowledge, as well as providing the opportunity for participants to critically reflect on the 'evidence' and offer their own interpretation.

The 'epistemic authority' of the health service provider lies in their knowledge and experience with health and disease; their advice for patients is informed by this. Thus the shift towards a patient-centred model of care has caused some concern for the level of responsibility for decision making that is given to the patient in relation to their level of knowledge. Schultz and Nakamoto (2013) stress the importance of 'health literacy' in tandem with empowerment. They are particularly concerned with 'bad literacy' (Schulz and Nakamoto, 2011), given the variability of information made available through the internet. As patients begin to take more responsibility for decisions regarding their own health care, it is crucial that they are able to access the necessary information in order to make those decisions and empowerment is undermined by ill-informed choices. This work considers 'health literacy' as an integrated concept of 'empowerment', rather than a parallel

strategy. It is important that both health service users and providers can disclose the source of their information so that we can be reflexive about how it contributes to decision making. The use of evidentials can encourage this process and help foster an openly communicative relationship between patient and clinician. Furthermore, it can help us to identify how participants construct their point of view, how they rely on certain kinds of evidential and what kinds of evidence can help create empowerment by enabling health service users to make informed choices.

2.4 AGENCY

Many of the concepts surrounding definitions of 'empowerment' in the literature can be broadly understood within the concept of 'agency'. One example is the notion of 'choice', which is pervasive in definitions of 'empowerment' (Feste and Anderson, 1995; Alsop and Heinsohn, 2005; Holmström and Röing, 2010). But as Kabeer (1999: 457) notes, "empowerment cannot be conceptualized simply in terms of choice, but must incorporate an assessment of the values embedded in agency and choice, values which reflect the wider context". 'Agency' is defined not only as the "actor's ability to make meaningful choices" (Alsop, and Heinsohn, 2005: 6) but also the "ability to define one's goals and act upon them" (Kabeer, 1999: 438). Furthermore, it "encompasses the meaning, motivation and purpose which individuals bring to their activity […] their 'power within'" (Kabeer, 1999: 438), which has correlations with the concept of self-efficacy (see below). The individual's agency is

somewhat inhibited by the wider context, so not only is an internal desire to act but a question of the capability to act within society (Giddens, 1984). Nevertheless, it is the will of that individual, seen in relation to the alternative actions they or someone else might have pursued.

In linguistics, 'agency' not only refers to the active participant in a grammatical construction, but also the self-creating subject, the narrator of the narrative. This incorporates a level of will, of intention to not only act but also for those actions to have some impact on the wider context. There is an emphasis on the individual, but this 'agency' is both reactive to external influences as well as active in creating initiatives. In its earliest conception 'empowerment' referred to a process concerning the 'disempowered', in response to a socially-governed course of events. Thus 'agency' was manifest in dissatisfaction with the social order, what has been referred to as a 'righteous anger' (Rogers *et al.*, 1997). Referring back to the distinction made by Taylor *et al.* (1992) between 'voice' and 'exit' strategies, the latter describes the process in which patients opt out of service provision as a result of dissatisfaction. Ultimately, "The empowered person recognizes use of anger as a motivating force to instigate social change and is optimistic about the ability to exert control over his or her life" (Rogers *et al.*, 1997: 1046). Others have remarked upon anger, frustration and dissatisfaction being factors which can initiate a process of empowerment (Lord and Hutchison, 1993; Sadan, 1997) but such strong emotive responses

must be channelled towards directing change to meet one's own needs. 'Agency' not only describes the self-directed will of the individual, but also the potential for that will to be realised.

2.5 LOCUS OF CONTROL

The limits to individual agency in relation to the wider context lie not only in the tangible barriers to one's ability to influence the world around them, but also in the belief that one can enact change. The link between change and expectancies is theorised in the concept of internal versus external control of reinforcement, or 'locus of control' (Rotter, 1966). 'Locus of control' (or Locus of Control of Reinforcement) was best theorised by Rotter (1966), who distinguished between 'external locus of control': whereby individuals attribute actions and change to forces of others, fate, luck or chance for example; and 'internal locus of control' whereby: "the person perceives that the event is contingent upon his own behaviour or his own relatively permanent characteristics" (Rotter, 1966: 1). This is not a typology, but rather a continuum that accommodates varying degrees of internal/external control to indicate to what extent an individual perceives reinforcements as contingent upon their actions. In relation to the ideas of 'agency' discussed above, the empowered individual will believe that their actions can bring about change in the world around them. An individual can convey their 'locus of control' in response to change by expressing whether they felt that change came about because of actions they carried out or because of some external force such as fate or luck. But

Aujoulat *et al.* (2008) also emphasise the importance of relinquishing control, and the willingness to 'let go', which can provide relief. Thus it is the individual's expectations of the limits and extent of their 'locus of control', as well as their conscious choice to relinquish power that will determine their feelings of efficacy.

More implicitly, an individual's belief in their 'agency' can manifest in their discourse and we can explore the ways in which individuals posit themselves as Subject or Object in their utterances, the types of verb-relationship between themselves and others for example, to extract information regarding their perception of their contingent behaviours in interaction with others. We can also refer to the linguistic concepts of transitivity and ergativity to analyse the relationship between the individual (as subject/object) and their impact on the world around them – and *vice versa* – at a grammatical level.

2.6 FACE

Within 'agency' we can incorporate the concept of 'face'. As part of Goffman's sociological concept around interactional ritual, 'face' can be understood in terms of positive face: the 'self-image' or the desire to be approved of and appreciated; and negative face: the desire to act freely and not be impeded in one's actions (Goffman, 1967). Expressions associated with 'face' reveal to us how the individual chooses to present themselves, either as a product of their perception of themselves or how they wish to be perceived by others. Furthermore,

'face' is governed by and established within the context of the interaction. It is contingent upon the relationship between those engaged in dialogue and there are certain pre-existing factors to consider when thinking about health communication. Returning to the idea of 'epistemic authority', the patient will enter into a discussion with the clinician with the presupposition that the health service provider has 'epistemic primacy' in the context of the discussion (consultation) and the matter to be discussed, but will also be very eager to have their concerns, opinions and needs met. Their concern for having their opinions appreciated relates to their positive face, while the desire to be able to voice their feelings in the first instance relates to their negative face.

Health service users experience many challenging and highly emotional events which, in the patient-centred model of care, they will be increasingly called upon to disclose. In such moments of openness there is the potential for "face-threatening acts" (Brown and Levinson, 1987) as individuals feel vulnerable and are asked to critically reflect on their support needs. In this way, it can be seen that honesty and open communication between patients and health service providers – which we acknowledge as crucial to the empowerment process – can initially be a source of 'disempowerment'. As such, it is especially important that clinicians are sensitive to the patients' 'face' and are receptive to such disclosures, so that the benefits associated with patients 'finding their voice' can be realised. As clinicians and patients build a rapport,

the potential for face-threatening acts will be reduced. This is the type of 'open communication' which is routinely cited as a part of the process of empowerment (Hawks, 1992; Rissel, 1994; Rodwell, 1996; Ryles, 1999; Tims *et al.*, 2007; Dowling *et al.*, 2011).

2.7 PERSPECTIVE CHANGE AS TRANSFORMATIVE LEARNING

This work was concerned not with 'empowering' the 'disempowered', but with the ways in which any health service user might become 'more empowered'. I have stated that with an understanding that there is both an internal and external dimension to 'empowerment', this work focused on the internal aspect, which looked at how individuals' perspectives might change and how we might understand this as 'empowerment'. Researchers have reported how "empowered clients were able to reframe situations in a positive way" (Falk-Rafael, 2001: 10) and sufferers of chronic illness were able to actively develop new perspectives by "reframing and reinterpreting their illness" (Mok, 2001: 69). Perspective change is fundamental to the theory of transformative learning (Mezirow, 1991), which leads to changes in the individual's belief system (meaning perspective) and behaviour. As a learning model, Mezirow's transformative learning theory developed from Kuhn's (1962) conception of paradigms and states that transformative learning occurs in interaction with others, as ideas and perspectives are negotiated through open dialogue. In this respect, it is the disparity between contesting paradigms that can be seen to be analogous to the individual perspectives within the dialogue. Within this disparity there is

a common question or problem (concerning the individual's well-being) to which the client and the caregiver have their own interest (meaning scheme) and which is negotiated through the course of that dialogue to determine a common view (requiring some level of perspective transformation). The 'conscientization' of this process, as theorised by Freire (1970), is in perceiving those disparities. This rejects the 'depositing' of information by the professional, rather encouraging a critical awareness that does not simply take information as given. In this way the individual is encouraged to develop their own understanding and make their own decisions by critically considering such information before accepting it as fact.

This concept of learning was informed by Habermas (1971), who proposed three domains of learning: the technical; the practical; and the emancipatory. Mezirow (1990) referred to them as 'transmissional', 'transactional' and 'transformative' respectively. Put simply, the technical (transmissional) aspect of learning is the absorption of information, specific to task and highly structured. The practical (transactional) aspect of learning describes the attunement to a social norm through experience. Emancipatory (transformative) learning involves self-reflection, becoming aware of the construction of our own perspective and being able to restructure it. This is the underlying process that determines empowerment and through open dialogue, the service provider can encourage the individual to reflect on their own experience, eliciting an account not only of their interactions with the

health services but also the factors which determine how those interactions are perceived.

Mezirow (1990: 6) labels the effort to facilitate transformative learning as 'emancipatory education', which strives to help the learner "challenge presuppositions, explore alternative perspectives, transform old ways of understanding, and act on new perspectives". More specifically, Neuman (1996, cited in Taylor, 1998: 59) identified the following factors for promoting reflection in transformative learning:

- The need for the facilitator to be both willing to learn and change themselves while encouraging others to learn.

- The crucial importance of "building a strong relationship based on trust and confidentiality".

- The need to encourage risk-taking through unfamiliar reflective techniques within a learning context that is philosophically consistent.

- The crucial importance of "incorporating facilitative strategies that acknowledged, supported and encouraged affective processing".

- Promoting critical self-reflection to identify, interpret and get rid of negative feelings.

These ideas echo some of the fundamental principles of empowerment models, such as the importance of the trusting relationship and the potential for the facilitator themselves to learn. But these ideas must also be considered in the teaching strategy, and written into the delivery

of interventions (as was the case with this study). Taylor (1998) emphasises the role of the learner in the transformative learning process and states that both the participant and the teacher "collaboratively assume responsibility of creating conditions that best suit […] the practice for fostering transformative learning" (p.59). This again fits with the empowerment model, which maintains that health service providers can only foster empowerment and that it remains with the patient to realise empowerment within themselves.

From the learner's standpoint, Mezirow (1991) identified three pre-requisites for transformative learning to occur:

- The context must be appropriate. By 'context', Mezirow refers not only to the environment in which the learner finds themselves, but also to their frame of mind, their receptiveness to a learning process and willingness to consider alternatives.
- The participant must engage in self-reflection.
- The learner must engage in critical discourse. Here, 'discourse' is defined as "dialogue involving the assessment of beliefs, feelings and values" (Mezirow, 2003: 59).

Self-reflection is central to many theories of learning and reflective practice is incorporated into many professional and training models. Largely concerned with integrating theory and practice, reflective theory has produced a number of models (such as Kolb and Fry, 1975; Argyris and Schön, 1978; Johns, 1995; Rolfe *et al.*, 2001) which conceptualise the process of gaining experiential information, which becomes

integrated knowledge as the individual reflects and evaluates on the circumstances and actions which brought about that experience. Reflective practice models have been applied in education (Larrivee, 2000) and healthcare (Mann *et al.*, 2009) settings, and may offer comparable analysis to the work explored here. The theory of transformative learning is also based on practices of reflection and since it more directly addresses the process of perspective transformation, broader and alternative concepts of reflective practice will not be explored here.

Many of the principles of transformative learning can be associated with the components of the empowerment model discussed so far, such as: the need for accurate and complete information (health literacy); to be free from coercion and distorted self-perception (agency); to be able to weigh arguments and assess arguments objectively (knowledge and evidentiality); and to have equal opportunity to participate (voice). In addition, Mezirow (1991: 78) emphasises the condition of being open to alternative perspectives; being able to reflect critically on presuppositions and their consequences; and being able to accept an informed, objective consensus as valid.

The theory of transformative learning has been criticised for its focus on rationality and researchers have emphasised the role of 'extrarational knowing' 'intuition', 'affect learning' as well as memory (Boyd, 1991; Taylor, 1997; Lupton, 1998; Imel, 2003; Dirkx, 2006; Kucukaydin and

Cranton, 2012). For Mezirow (1995), the examination of the nature, consequence and origin of our 'meaning perspectives' is what leads to perspective transformation. The relationship between emotions and rationality remains unclear, but Grabove (1997: 95) asserts that

> the value of the imagination and the power of emotion exist within the rational notion of transformation, and learners rely on analysis to make sense of their feelings, images, and intuitive descriptions.

Mezirow himself acknowledged the role of emotion in the process in his later work, stating that "effective participation in discourse and in transformative learning requires emotional maturity, awareness, empathy and control", as well as "knowing and managing one's emotions, motivating oneself, recognizing emotions in others and handling relationships" (Mezirow, 2000: 11). Taylor (1998) found that unresolved emotions were often a barrier to the learning process. Neurological research has emphasised the interrelation between emotion and reason, suggesting that the more (emotionally) engaged a learner is, the more likely they are to learn (Weiss, 2000). While there is still much to learn about this relationship, researchers have found that emotions have a significant part to play in the transformative learning process (Taylor, 2001).

2.7.1 THE TEN PHASES OF TRANSFORMATIVE LEARNING

Many of the ideas that have remained fundamental to the theory of transformative learning were formulated in Mezirow's (1978) qualitative

study of the progress of women in the U.S. who were re-entering study or the workplace following an extended time away. This study was initially based on the experiences of 83 women re-entering college programs at 12 different colleges across four states, but subsequently expanded to included telephone surveys of 24 college programs across 11 states as well as a mail enquiry, which received responses from 846 colleges. On the basis of the information gathered from this extensive study, Mezirow formulated a ten phase model for the personal transformations, which provided an account of the stages a learner might experience as part of this 'transformation' (Mezirow, 1978). These ten phases were as follows:

1. A disorienting dilemma
2. A self-examination with feelings of guilt or shame
3. A critical assessment of epistemic, sociocultural or psychic assumptions
4. Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change
5. Exploration of options for new roles, relationships and actions
6. Planning a course of action
7. Acquisition of knowledge and skills for implementing one's plans
8. Provisional trying of new roles
9. Building of competence and self-confidence in new roles and relationships

10. A reintegration into one's life on the basis of conditions dictated by one's perspective.

As the theory has developed over 30 years of research and discussion, the ten phases have largely endured, though in 1991 Mezirow identified what was potentially a new stage between phases eight and nine that described altering present relationships and forging new relationships (Kitchenham, 2008). References to and appropriation of the model tend to be in its original ten phase form. These phases were of course based on the data collected by Mezirow in his own study, but researchers have been able to observe it in their own work (Hunter, 1980; Egan, 1985; Williams, 1985; Lytle, 1989; Dewane, 1993; Taylor, 1998; Erickson, 2007; Brock, 2010). Furthermore, the ten phase model has been the foundation for survey instruments and questionnaires that look to evidence and measure 'transformative learning' (King, 2004; Kitchenham, 2006; Stansberry and Kymes, 2007). Work that refers to the model however, is largely qualitative in its analysis and we are more likely to observe a representation of the ten phases with a corresponding spoken or written extract as evidence of 'transformative learning' having occurred (Erickson, 2007; Stansberry and Kymes, 2007; Brock, 2010).

Although presented as a linear process, research has found that transformative learning is "more individualistic, fluid, and recursive than originally thought" (Taylor, 2000: 292). For example, Dewane (1993) found that the transformative learning phases were often non-

sequential and that the completion of each step was not contingent upon the completion of previous steps. Mezirow himself (1991) was not prescriptive about the sequential order of the process, nor was there ever a claim that all ten phases would be present. This work aimed to understand how the ten phase model could help us to understand the learning process and – given that completion of all ten phases is not essential – identify which phases could be said to be indicative of 'transformative learning'.

The initial and closing phases are of particular interest; the 'disorienting dilemma' is seen as the 'catalyst' of the process since it creates an experience which challenges the learners current level of knowledge, or rather their perspective of the world which has been formulated from their previous experience. Thus, the learner is forced to question the validity of their own perspective in light of this new 'disorienting' encounter. I have discussed above the role of self-reflection and the importance of considering alternatives. As the learner experiences the latter phases, they receive some kind of reinforcement or validation that supports this new alternative, to the point where the original 'disorienting dilemma' is understood and integrated into the learner's 'meaning perspective'.

Kitchenham (2008: 112) describes two different ways in which perspective transformation is said to occur:

On one hand, it can occur painlessly through an accumulation or concatenation of transformations in set meaning schemes (Mezirow, 1985) […] For example, teachers can examine how they learned to use keyboard shortcuts in Microsoft Word and realise that those same techniques are useful in related Microsoft products. On the other hand, perspective transformation may also be an "epochal . . . [and] . . .painful" (Mezirow, 1985, p. 24) transformation of meaning perspectives, or sets of meaning schemes, as this dimension involves a comprehensive and critical re-evaluation of oneself. For example, teachers can critically examine their philosophy of technology and its role in primary school classrooms and come to the realisation that what they believed previously no longer holds true for them.

Others have described 'opportunity dilemmas' and 'touchstone dilemmas' (Erickson, 2007) where the latter describes a process in which the learner continually revisits and reflects upon an enduring challenge to their understanding of the world. This describes a learning process which needs to be understood longitudinally, yet 'disorientation' can also occur quite acutely. This is just one of the varieties associated with learning processes which has led Cheney (2010: 5) to consider that "it may be impossible to develop a single, generic scale to capture every aspect. Rather, a more useful approach would be to use instruments that are specific to the type of change sought". However, any attempt to characterise 'change' in one dimension or another

restricts our understanding of the multitude of ways in which 'change' can manifest. This work was concerned with reporting change in whatever dimension it occurred, in order to better understand the complex picture of perspective transformation and to consider the effects of change associated with perspective on the actions and processes within the family dynamic.

Evidence of transformative learning

In a review of the literature around evidence of 'transformative learning', Snyder (2008: 159) found the following:

> [A] lack of robust results on reporting transformation in highly structured transformational contexts, need for longitudinal design, difficulty in capturing and analysing participant self-reports, and need for multiple data pathways to verify transformation.

Snyder (2008) reports on two studies which strived to capture transformative learning in effect: firstly, Kember *et al.* (1999) "created a replicable model for measuring reflection in student journal writing" (Snyder, 2008: 175), however this was limited in that they did not report on the context or experience of the process. Secondly, Cranton and Carusetta (2004) position the reflective individual at the centre of a model which incorporates the more relational and contextual aspects of the process, reflecting on the relationships and environment of the learning process. Ultimately, Snyder (2008: 175) asserts that

> By considering the work of both articles together, one begins to create a comprehensive picture […] of how transformative

learning can be identified and measured through the use of
participant narrative and dialogue.

The importance of dialogue goes back to Mezirow's (1991) notion that
to validate meaning perspectives they must be discussed with another
and then reconsidered by the learner. It is through dialogue that the
service provider can contribute to the learning process by encouraging
reflexivity, providing the appropriate information and collaboratively
generating 'meaning'. By analysing the dialogue we can observe not
only the means by which this process is mapped in speech, but also
how individuals' perspectives were transformed, how they 'learn', and
how 'meaning' was generated in the discussion. Thus, is it was in the
dialogue that I focused my inquiry, given that the intervention would
generate discussion that related both to the participants' perspectives
and their desire to learn more about their family dynamic.

2.8 SELF-EFFICACY

Closely related to ideas of empowerment is the concept of self-efficacy
(Bandura, 1977). 'Self-efficacy' was referred to in a number of concept
analyses of 'empowerment' (Gibson, 1991; Hawks, 1992; Ryles, 1999;
Hage and Lorensen, 2005; Dowling *et al.*, 2011; Hermansson and
Mårtensson, 2011) and pertains to the individual's belief in their own
power. As has been discussed above, the belief in one's power is a
determinant of the individual realising that power. Subsequently, 'self-
efficacy' affects our decision making, motivation and the way in which
we attribute cause to the events around us. It also determines our

approach to dealing with challenges in our lives and whether we perceive those challenges as static or dynamic. As a social learning theory our 'self-efficacy' is informed by observation, of the world and others around us to determine what is within our power. This is one of four dimensions through which our 'self-efficacy' is generated (Bandura, 1977). The four sources of 'efficacy information' are:

- Performance accomplishments, i.e. successful completion of a course of action will encourage the individual's feeling of being able to replicate that course of action, also known as a 'mastery experience'.

- Vicarious experience – the observation of another successfully completing a task determining that task to be attainable to the individual.

- Verbal persuasion – the individual is convinced that they can successfully complete a course of action.

- Emotional arousal – the level of anxiety, stress etc. that can inhibit one's sense of successfully completing a course of action (Bandura, 1977: c.f. 195-9).

There is an emphasis on functionality, on the individual's ability to carry out their desired actions which can be cultivated through observational learning, rationalising, practice, but also in the face of potentially debilitating emotions.

Researchers have used Bandura's theory of self-efficacy and reported health benefits in cases of smoking addiction (DiClemente *et al.*, 1985);

alcohol and drug abuse (Seeman and Anderson, 1983; Newcomb and Harlow, 1986); and eating disorders (Rohrer *et al.*, 2007), with a similar consideration for 'mastery' and locus of control (Rotter, 1966) applied in relation to increasing pain tolerance (Neufeld and Thomas, 1977). This has been reported through the use of self-efficacy scales, which are often constructed to capture the individuals' feelings of 'self-efficacy' in relation to a specific domain of their life, as suggested by Bandura (2006). Bandura (2006) himself provides examples of self-efficacy scales: self-efficacy to regulate exercise; self-efficacy to regulate eating habits; driving self-efficacy; problem solving efficacy; pain management self-efficacy; children's self-efficacy scale; teacher self-efficacy scale; teacher self-efficacy to promote reading; parental self-efficacy; perceived collective family efficacy; all of which ask the participant to indicate on a degree scale of zero to 100 how confident they in relation to a condition such as "get(ting) your children to see school as valuable". Given the complexity of the family dynamic and the multivariate ways in which empowerment has been seen to manifest, this work did not utilise such scales in trying to capture the participant's 'self-efficacy'. Rather, I incorporated the fundamental principles of 'self-efficacy', including the four domains of efficacy information, into a broader concept map of 'empowerment'.

2.9 A CONCEPT MAP OF EMPOWERMENT

As is shown in the literature, it is a challenge to provide a universal definition of 'empowerment' which captures the breadth of conceptual

thinking that is associated with the term and which defines both a process through which it is achieved and a measure by which it is observed. Though we strive for a unified definition of 'empowerment', Zimmerman (1984, cited in Page and Czuba, 1999) has stated that "asserting a single definition of empowerment may make attempts to make it formulaic or prescription-like, contradicting the very concept of empowerment". Nevertheless, a sense of structure in our search for empowerment is necessary to manage the multivariate ways in which it may manifest. In an attempt to synthesise current working definitions of 'empowerment' in terms which can be directly linked to evidence in conversational data I generated a concept map of empowerment which used concepts founded in linguistic analysis (see Fig. 2).

What is important is that we have a structure to organize and understand indicators of empowerment, but one that is flexible to the unpredictable ways in which empowerment can manifest. With established theories of 'self-efficacy', knowledge of the ways in which 'stance' is expressed in language and a model of the process of transformative learning we can begin to locate key aspects of discourse that can be indicative of subjective viewpoint, of perspective transformation and of a more 'empowered' individual. This will potentially allow us to evidence and begin to measure processes of empowerment as expressed through dialogue.

With respect to the delivery of health care, the management of a

Figure 2 A concept map of empowerment
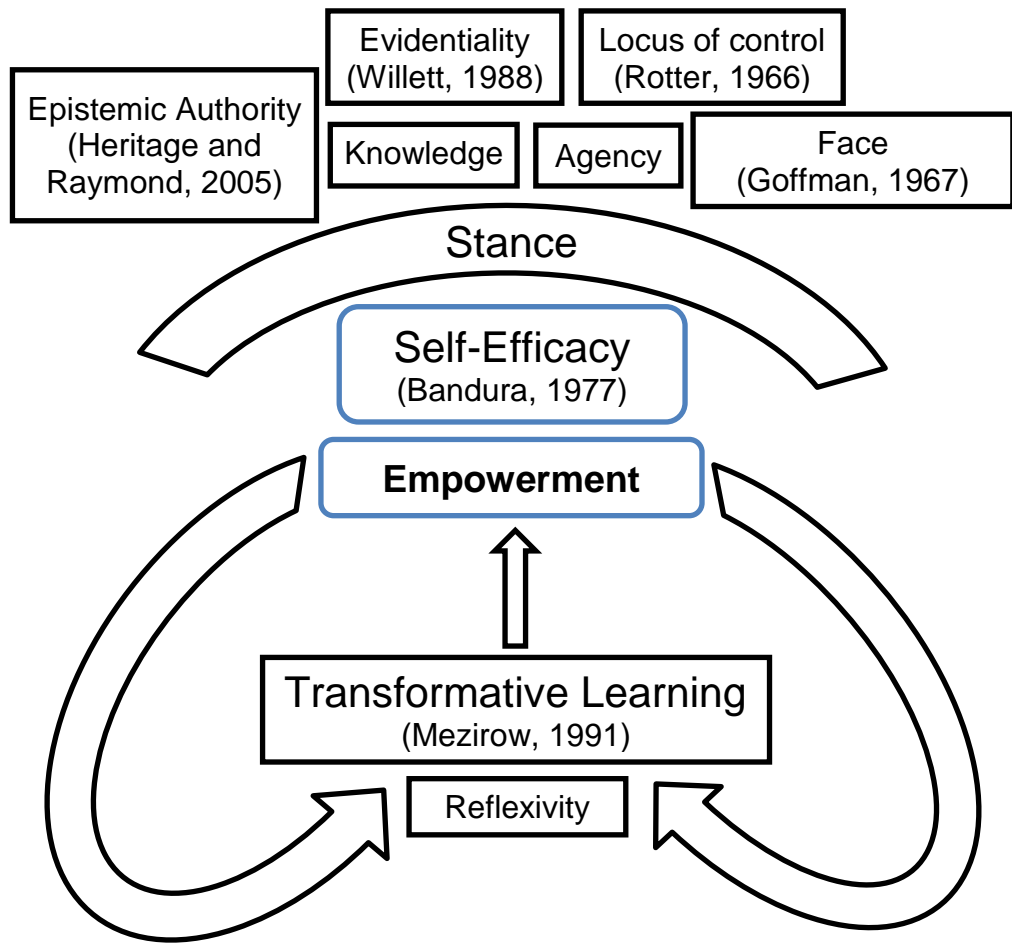
chronic condition necessitates a support system that enables the family to withstand new challenges, so the process must prepare the individual and the family to negotiate those challenges. Rappaport (1981: 17) states that

> Empowerment lends itself to the possibility of a variety of locally rather than centrally controlled solutions, which in turn foster solutions based on different assumptions in different places, settings and neighbourhoods.

In relation to this study, empowerment – by encouraging critical consciousness and reflexivity – is an ideal model with which to

approach the management of hearing impairment as it is concerned with continually expanding the subject's feelings of power: by definition there is no remission. By incorporating each of these principles into a single model they remain interrelated yet individually acknowledged, with the potential for current research and new concepts to be assimilated into the 'parental perspective'. The use of the term 'empowerment' will hereafter refer to the concept map provided above.

CHAPTER 3: APPLIED LINGUISTICS AND EVIDENCING EMPOWERMENT

In my concept map of empowerment I combined a number of concepts derived from linguistic analysis and drew from this multifaceted field of research to inform the methodological approach to the conversational data that was obtained from the study. In the wider field of healthcare there have been a number of research interests into the way that language use and discourse shape encounters between service users and service providers (see Harvey and Koteyko, 2013). Applied linguistics refers to "the theoretical and empirical investigation of real-world problems in which language is a central issue" (Brumfit 1995: 27) and quite often begins with the real life problem, around which theory is developed. The healthcare domain is complex and can by no means be reduced to language analysis alone, however it is fundamentally interactional and the ways in which health service users and providers interact can tell us much about the habits and presuppositions present in the dynamic. This work posited communication at the centre of the empowerment process and looked to develop some of the findings of applied linguistics methods in the field of health communication within the specific context of hearing impairment.

Explorations into health discourse have commonly looked at the consultation, the interactions between General Practitioners and

patients who go to them with a health complaint. Unsurprisingly, the exploration is primarily concerned with the power inequalities of this relationship (Gwyn, 2002), examining the linguistics resources through which this relationships is managed. In this scenario, there a number of facets which contribute to this inequality, such as: the institutional context in which they take place; the patients' need for information or an insight more medically informed than their own; or the time restraints governed by the doctors' availability. This format introduces certain pressures on the part of the GP to obtain relevant information, on the part of the patient to convey the level of distress and can lead to a systematically interrogative structure (Byrne and Long, 1976). Researchers have used Conversation Analysis (CA), a field of applied linguistics founded in the 1970s on the writings of Harvey Sacks, Emmanuel Schegloff and Gail Jefferson (Sacks *et al.*, 1974), to understand how such interactions create and perpetuate power inequalities in the doctor-patient relationship (see ten Have, 1989). This inequality is often founded on a medical model of doctor-patient interactions, where the solution lies in the organic body (Fisher, 1991). However, this approach does not take into account what is referred to as the 'lifeworld' (Mischler, 1984), the social context of the patient's life and the more practical ramifications of their illness.

Constructing their talk in the discourse of the lifeworld, patients translate their physical ailments into problems in their day-to-day life activities, conveying how their illness inhibits the satisfactory completion

of their routine. In this way, an appreciation for the lifeworld brings the service provider into the world of the patient and how this illness uniquely affects them. Though the aim is still of course to cure the ailment, the service provider can share in the patient's aim to first overcome the obstacles that have materialised from their ailment, providing tangible outcomes for the patient. Barry *et al.* (2001) refer to the 'mutual lifeworld', where the emphasis is on establishing and maintaining interpersonal relationships rather than eliciting medical information, discussing the problem in terms the patient can more immediately relate to, and encouraging the patient to bring their own level of expertise to the conversation. This is consistent with the patient-centred model and fosters empowerment in the patient, who carries epistemic authority and is able to negotiate their own treatment in a 'mutual lifeworld'.

This 'mutual lifeworld' is constructed within the context through dialogue, building on the theory of communicative action developed by Habermas (1984) which emphasises the intersubjective rationale. The conversational exchange therefore, becomes the site of exploration for how the perspectives of the service user and service provider become aligned in the 'mutual lifeworld'. Based on the model of empowerment outlined above, we can identify specific discursive and thematic language components that indicate stance and feelings of self-efficacy. There was a concern, however, that in approaching the data with a predefined model I was in danger of ascribing meaning in order to meet

my own expectations. It was imperative that I remained conscientious of a 'bottom-up' approach that allowed the data – and the parents – to 'speak for themselves' and that any inferences from the data could be objectively anchored in the words of the text. The development of corpus analysis and various forms of applied linguistics – such as stylistics – is in pursuit of this less subjective, replicable means of analysis that relies on universal rules of grammar rather than subjective interpretation. This supports an accurate representation of the utterances produced by the participants by understanding the rules by which they are formed; a faithful extraction of meaning by the researcher by the same principle; and translatable meaning for other families, who are bound by the same rules of language. An adherence to this principle of grounded theory (Glaser and Strauss, 1967) can refine and systematise this rigorous methodology and ensure accurate, meaningful outcomes.

3.1 (CRITICAL) DISCOURSE ANALYSIS

Understanding that an individual's utterances are located within a broader social discourse brings us to the fundamental philosophy of Critical Discourse Analysis (CDA) (van Dijk, 1993; Fairclough, 1995), which understands 'discourse' as a product of language but also social 'practice' (Foucault, 1969). There are three underlying principles which are held to define Critical Discourse Analysis:

1. Discourse is a social action (or 'social practice')

2. Social action constructs social reality (objects, situations, identities, social relations…)

3. Discourse is the use of language. (cf. Fairclough and Wodak, 1997: 258-284).

Given that discourse is 'language in use' and that language is produced, received and therefore interpreted cognitively by individuals, the implication is that since discourse (as 'social action') constructs reality, then the construction of objects, situations etc. is located in the cognitive domain, but realised through language in use. Thus our participants' 'realities' are constructed in their cognitive processing of language as it is received and interpreted from the world around them, but made real as they then generate that reality through language offered back as discourse (van Dijk, 1980).

Critical Discourse Analysis (CDA) extends from critical social theory, which foregrounds the dialectic between individual agency and structural determinism (Habermas, 1971). Subsequently, researchers have explored broad dimensions of discourse-based communication such as discourses of risk (Zinn, 2010), trust (Candlin and Crichton, 2012) and deficit (Candlin and Crichton, 2011), with the understanding that everything that we come to know of such concepts is socio-politically 'situated' and that there are dominant and elite groups who largely determine the 'modes' of discourse (van Dijk, 1993). Gee (1996) differentiated between 'discourse' in the sense of what is said, and 'Discourse' which includes 'discourse', but also refers to ways of

representing, utilising and valuing 'discourse'. 'Discourse' incorporates identity and reflects patterns of social interactions. Furthermore, Gee (1996) states that Discourses affect the hierarchical structure in society in that they are related to the distribution of social power. In the same way that there are dominant groups in society, there are dominant Discourses. 'Power' is fundamental to the philosophy of critical discourse analysis and as such, it is an approach which aims to make known the multifaceted ways in which power is exercised. Gee (2011: c.f. 30-31) provides the following example to demonstrate how clause structure relates to function and meaning:

1. Though they were both narrowly confined to the privileged classes, the Whig and Tory parties represented different factions.

Here, the organisation of the dependent clause ("Though they were both confined to the privileged classes") preceding the independent (or main) clause ("the Whig and Tory parties represented different factions") thematizes (Halliday, 1994) the information in that the main clause is to be read in respect to this fronted dependent clause. The main clause is treated as a claim or assertion, whilst the dependent clause is presented as an assumed or taken-for-granted piece of information. As such, one piece of information is given precedence in the sequential reading and presented as 'fact' in order to make an assertion, when it is feasible that the two clauses might have been reversed and the impetus of 'factual' information located elsewhere. The choices behind such formation indicate to the reader how they are encouraged to receive the information.

Such representations of 'facts' has always been a consideration of discourse analysis, which is said to have been borne out of the sociology of scientific knowledge (SSK). This field emerged when two researchers, Gilbert and Mulkay, wanted to explore the underlying social processes through which scientists were making knowledge claims (Wooffitt, 2005). With the aim of settling a scientific dispute, they collected interviews and correspondence from scientists discussing the problem and found variability in the accounts of the theoretical developments of the matter at hand. Thus, the problem was not which account was right or wrong based on the facts, but rather what the 'facts' actually were. From this, Gilbert and Mulkay (cf. Wooffitt, 2005: 16) established four steps to help the researcher deal with variability in versions of events:

1. Obtain statements by interview or by observation in a natural setting.

2. Look for broad similarities between the statements.

3. If there are similarities which occur frequently, take these statements at face value, that is, as accurate accounts of what is really going on.

4. Construct a generalised version of participants' accounts of what is going on, and present this as one's own analytic conclusions.

Researchers have always been resistant to defining discourse analysis, perhaps in an attempt to be inclusive of the many ways in which 'meaning' is created in language; but if we take the following definition,

we can see how the principles established by Gilbert and Mulkay have evolved:

> The attempt to find patterns in communicative products as well as their correlation with the circumstances in which they occur, which are explicable beyond the grammatical level. (Carter, 1993: 23).

In discourse analysis the context is foregrounded; that is, 'meaning' can be generated within the confines of the discussion, between the interlocutors involved as well as any universal meaning attributed to the components of the discourse. This relates to the principle of 'language in use', the predilection for 'natural language', and an emphasis on the 'real' use of language. Similarly, the field of pragmatics privileges the contextual use of language over universal semantic meaning, or – in what is a crude definition – is concerned with 'utterance meaning' as opposed to 'sentence meaning' (Levinson, 1983: 18).

Gee (2011: 21) emphasises the distinction between 'utterance-type meaning' and 'utterance token meaning' (or 'situated meaning') whereby the former refers to the generalizable meanings of a piece of language, either semantically ('cat' as an animal), or syntactic ('subject' is generally the topic of the sentence) and not to the situation-specific meaning. 'Utterance-token meaning' however, is much more specific and the specificity is indicated by the context. Thus, 'cat', when discussing with your friend the ornaments on their mantelpiece, would refer specifically to the cat statuette. It is such meaning that is the

concern of the discourse analyst. The critical discourse analyst, according to Gee (2011: 32) performs a third task and that is to study the ways in which language, through both the 'utterance-type meaning' and the 'utterance-token meaning' are associated with social practices. Discourse analysts may reflect upon their own social position in relation to the text, but do not extend this to broader social groups and identities, as the critical discourse analyst would.

This work maintained that distinction and considered its approach to the closer scrutiny of patterns in language use to constitute discourse analysis. In the empowerment model the right to define one's own identity lies with the participant and it was their perceived reality which I was aiming to capture. As such, it was not seen to be appropriate to categorise the participant in terms of their social group, the ways in which they did or did not represent themselves and the associated Discourses they could be situated in. Furthermore, the aim was to explore the more localised interactions which could help foster empowerment, which operate at an intersubjective level between health service provider (in this study, the intervention guide) and the parent of the child with hearing loss. This specificity demanded a session-by-session analysis to observe individual change over time and it was felt that this inquiry would not benefit from the insights afforded by critical explorations at the level of social domain. Though this work explored the concept of empowerment, the concept itself was fairly loosely defined so that what could be seen to be indicative of empowerment

could be discovered in the data. This again would generate a level of specificity that inhibited us from making more general interpretations about social Discourse.

3.2 CORPUS LINGUISTICS

Corpus linguistics allows us to conduct large scale analysis and as such, its strengths lie in its representativeness of language, which is particularly useful when applied, for example, in lexicography and language learning (Frankenberg-Garcia *et al.*, 2011). It is an approach founded – much like many other branches of linguistics – on revealing patterns in language, but is able to do so systematically with much larger datasets by measuring frequencies. Traditionally, this would be conducted using some kind of software program and simply requires one to upload their data in a computer-readable format and within seconds the software is able to produce quantitative outputs in the way of frequency tables. The alternative way to establish patterns in the data is based on the researcher's intuition, performed manually simply by reading the data. Adolphs (2006: 7) summarises the advantages of electronic text analysis as follows:

- The reliance on intuition in language research inevitably introduces a high degree of bias into the analysis/description. Using electronic text analysis to study naturally occurring discourse, on the other hand, is a more replicable process and any analysis can be verified by other researchers.

- In addition, electronic text analysis allows us to extract information about language that does not tend to be open to intuitive inspection. This includes information about word frequency and co-concurrence of particular words.

- Electronic text analysis allows us to manipulate language data in various ways to suit a particular research purpose. The use of software tools in this process leads to more accurate and consistent results in a very short amount of time.

- Once the data has been sorted in an accessible way, such as in a concordance output for example, we can carry out further analysis on the data. This analysis helps to identify patterns that we might not be able to describe purely on an intuitive basis. This includes the analysis of whether a word carries negative or positive connotations, and the semantic concepts that surround individual words. It also means we can identify phrases and clusters of particular types of words.

- Electronic text analysis can be used at different stages in the analytical process, as required by the researcher. Frequency lists, for example, can give us a good initial overview of our data and further analyses can be carried out on the basis of the derived frequency information. At the same time, we can use electronic text analysis as a hypothesis testing device, where the starting point might be our intuition, which is followed by an analysis of a suitable corpus.

- Related to the last point is the division between qualitative and quantitative approaches and the direction of progression between the two. Electronic text analysis can be used in a quantitative way, such as through the use of frequency lists, and lead to a subsequent qualitative exploration. Or, it can be used as a secondary method that follows an initial qualitative exploration.

The 'concordance output' described above is a common feature of corpus analysis software tools and allows the user to observe a select keyword or combination of keywords as a series of concordance lines. This allows the researcher to look at the distribution of the word and the associated words that are commonly used in relation to the keyword. For example, we can observe the use of 'God' in oral history interviews collected as part of the British National Corpus (BNC) (see Fig. 3). This shows that 'God' is often used in phrasal constructions such as 'by the grace of God', 'honest to God' and in addition to 'grace', collocates include 'kingdom' and 'truth'. But we also see that 'God' is often used as a single interjection, to express surprise. Such methods are useful for lexicographers and the like to understand how language is used and to represent the variety of meanings attributed to words in use.

In their analysis of university spoken interaction, Walsh *et al.* (2011) demonstrated how a combined Corpus Linguistics (CL) and Conversation Analysis (CA) methodology (CLCA) can be used to identify contextual patterns, which can then be explored in more depth. This is described as an iterative process, moving back and forth

Figure 3 Concordance lines of 'God' in the oral history subset of the BNC

	31 occurrences.			Extend context
but for the grace of	God	, you know I I would n	1	More | Full
n underneath it , erm	God	helps them that helps	2	More | Full
said , And we 'll go	God	's going to help you d	3	More | Full
as like , I thought ,	God	, never again . No way	4	More | Full
Know that the Lord is	God	, it is he that made u	5	More | Full
about the kingdom of	God	. And of course if we	6	More | Full
we ca n't interpret ,	God	's kingdom , the Chris	7	More | Full
. Yes . Sin . Faith .	God	. So you know , what '	8	More | Full
wonderful world that	God	's created . Right . A	9	More | Full
ow , You talk about a	God	of nature . In actual	10	More | Full
more the person that	God	wants us to be . As we	11	More | Full
. Erm and I a work of	God	's grace a in us to ma	12	More | Full
nt is to do with with	God	's free grace being av	13	More | Full
rapnel in his arm . .	God	fo when he when he die	14	More | Full
me , Well , I said ,	God	it 's cold , I said ,	15	More | Full
his , and this is the	God	's truth as well again	16	More | Full
to eternal union with	God	. So that is er , oh s	17	More | Full
orship is remembering	God	, that 's all . Er , s	18	More | Full
t 's just remembering	God	. So we erm So there a	19	More | Full
gs , takes us near to	God	, so eventually it hel	20	More | Full
ousand plus this year	God	. I was n't expecting	21	More | Full
unit . And I wish to	God	that would just come b	22	More | Full
, yes , oh . Oh yes .	God	I you could never tell	23	More | Full
ut no Aha , honest to	God	. Mhm . No nicknames .	24	More | Full
me you 're thinking ,	God	that 's better than tw	25	More | Full
n in Newmarket . Ah ,	God	yes . Was that this ce	26	More | Full
lst . Yes . astronomy	God	then Sandy ? Oh well i	27	More | Full
if I smeared a copy ,	God	help cos then there 'd	28	More | Full
I 'm telling you the	God	's truth , I watched h	29	More | Full
miserable child that	God	every created she was	30	More | Full
up , this is true on	God	's , I 'm in this chai	31	More | Full

between the methods as opposed to a linear progression from one to the other. Walsh and O'Keeffe (2010) have also described the differences between 'descriptive corpus research', where the analysis that identifies patterns is an end in itself; and 'applied corpus research', where the corpus is a methodological tool and analysis goes beyond its outputs to look more closely at a hypothesis or research aim by combining it with another theoretical framework or methodology.

Through this combined methodological approach, the authors reported

their analysis of the data at a linguistic, interactional and pedagogic

level having been able to observe broader speech exchange systems

but also having the finer quantitative data to support their claims.

Thus researchers have recognised the benefits of drawing on the

respective strengths of corpus analysis and other forms of language

analysis (such as discourse analysis) in a combined methodology

(Wilson, 1993; Partington, 2004; Baker *et al.*, 2008; Walsh *et al.* 2011).

In this way, the analytical approach is iterative and inductive, but also

sequential and deductive (Dörnyei, 2007). Though I approached the

data with an empowerment model, it remained for the data to indicate

what evidence for empowerment there was. Similarly, Mezirow's theory

of transformative learning (1991) provided something of a hypothesis

about the process of learning, but it remained to be seen whether this

was the process evident in the data. Combining corpus analysis with

closer discourse analysis was devised to discern what was at the heart

of the data and how the models of empowerment and transformative

learning could be applied to understand the data.

3.3 CONVERSATION ANALYSIS

The 'evidence' for empowerment would be manifest in the speech

utterances of the participants, as they externalised their internal

perspective of themselves and their family dynamic. But in order to

understand the processes by which they were empowered I had to look

at the conversational interaction. If I were to argue that the intervention

and its composite parts – the video, the intervention guide, the patient-centred model (see below) – were able to foster empowerment I would have to look at the ways in which the evidence was brought out in the interaction. Studies of face-to-face interaction have been significantly modelled by the work of Harvey Sacks, Emanuel Schegloff and Gail Jefferson through what became known as Conversation Analysis (CA) (Sacks *et al.*, 1974; Jefferson, 1978). Following on from Goffman's work in the 1960s on what would become known as the 'interaction order' (Goffman, 1983), Sacks *et al.* (1974) exposed the interactional systems that are present in face-to-face conversation, the structures and organization which interlocutors adhere to when engaged in dialogue. From Sacks' work we understand 'turn-taking' (Sacks *et al.*, 1974), by which our utterances are seen to be reactive to the preceding speech as well as initiating our own thoughts; that these are distributed systematically within the dialogue; and that these may be visual (gestural) as well as verbal – such as a smile or eye contact – or even a deliberate silence. We know of 'adjacency pairs', which refer back to Grice's 'conversational maxims' (1975) in that an utterance demands a particular type of response. Furthermore, there are 'core' passages in conversation, such as openings and closings, even 'pre-closings' (Sacks, 1987 [1973]). In understanding the processes of conversation we examine the intersubjectivity of dialogue and the ways in which identity, power and relationships are managed between interlocutors. This was a means by which the role of the intervention guide and the unique characteristics of the participant could be understood in terms of

fostering empowerment. Although this work does not utilise a formal conversation analytic approach (ten Have, 2007) I will be drawing on the principles and theoretical underpinnings of conversation analysis to explore the interactive aspects of the dialogue.

This work looked to draw on the approaches to language analysis explored above as a way to examine conversational data for evidence of empowerment. The participant's speech utterances provided the core data for evidence of empowerment, in that empowerment must be realised within the individual's perspective. For empowerment to have occurred the individual must recognise it with themselves, though I was still limited in the fact that they might choose not to verbalise this. I was not interested in what the participants did not say (based on some normative comparison) as I felt that the conclusions drawn from the omission of some anticipated aspect of speech could only offer limited insight and the idea was not consistent with the empowerment principle of allowing the participant to define the terms of the interaction. In this way, and in that the participants' utterances are held to be nothing more than personal and specific to the context of the intervention, the work should not be seen as a critical discourse analysis.

Yet by understanding the facets of language that can be attributed to the various aspects of the empowerment model, discourse analysis can provide a model for understanding the language behaviours of an empowered individual, as well as tracking the process by which one is

empowered. Despite the disparities in each individual's choice of words and use of language constructions – to which we may or may not become familiar – the work of discourse analysis is founded on an understanding of universal grammatical and semantic rules, as well as those features that exist beyond the sentence such as gesture and intonation. 'Meaning' may be subjective, but our observations were based on recognising change over separate points of the intervention and so could be ascertained rather simply through close observation of the individual's language use. It is in the aspects of language in which we observe change that we can find universal indicators of an intervention effect, which can be understood through the empowerment model.

The participants' utterances were subject to corpus analysis to extricate representative samples of their speech data, which were then analysed for evidence of concepts within the empowerment model. The guide's utterances were not subject to the same analysis, however when we consider the process of empowerment we must observe how those evidential extracts of speech data emerged in the dialogue and in this respect the contributions of the guide are inadmissible. To this effect, the principles of conversation analysis were applied to better understand empowerment as a process of interaction.

CHAPTER 4: ASSESSING INTERVENTIONS FOR FAMILIES OF HEARING IMPAIRED CHILDREN

Empowerment is a concept which has been applied in the study of chronic illness as a health strategy and as an outcome measure of long-term service provision (Hulme, 1999; Paterson, 2001; Aujoulat *et al.*, 2008; Dowling *at al.*, 2011; Nygårdh *et al.,* 2012). This is not surprising given that in the case of chronic illness, patients are likely to accumulate knowledge on their condition and ways in which their needs are challenged; patients develop more long-term relationships with service providers; and patients are more likely to develop self-management approaches to their illness. As Nygårdh *et al.* (2012: 289) assert, "In the 21st century, healthcare staff members are expected to empower persons with disease by offering person-centred care in accordance with the sick person's priorities". This is a concern that we can apply to those with hearing loss, which although has many different perceptions as a 'disease', 'impairment' or 'language deficit', is a lifelong condition which requires self-management.

There are more than 10 million people in the U.K. with some form of hearing loss, of which there are more than 45 000 deaf children (http://www.actiononhearingloss.org.uk/your-hearing/about-deafness-and-hearing-loss/statistics.aspx, 7th March 2013). Universal Neonatal Hearing Screening (UNHS) identifies 1 in every 1000 new born babies

as having permanent hearing loss, which is categorised as either mild (hearing threshold is between 25 and 40dB), moderate (40 and 70dB), severe (70 and 95dB) or profound (95+dB) (http://www.nsd.scot.nhs.uk/services/screening/unhearingscreening/index.html). Researchers have emphasised the importance of early intervention and the detrimental effects of auditory deprivation in what they call a 'sensitive period' for language acquisition in the first few months of life (Ruben, 1997; Blamey, 2003; Eisenberg, 2007; Moeller *et al.*, 2007; Holzinger *et al.*, 2011; Pimperton and Kennedy, 2012). There are further detrimental effects in terms of neural plasticity and the neural pathways that support language structure which in cases of profound hearing loss can be helped by the electrical stimulation provided by a cochlear implant (Kral, 2001; Shepherd and Hardie, 2001; Sharma *et al.*, 2005).

In 2009 the National Institute for Health and Clinical Excellence (NICE) published guidelines on the provision of bilateral cochlear implants for children with severe hearing loss who were not receiving adequate benefit from hearing aids. The process by which a candidate is fitted with an implant involves an audiological assessment, imaging, a trial of hearing aids, as well as consultations with a speech and language therapist and a teacher of the deaf. Parents are informed of the risks of the surgical procedure, which include infection, meningitis, altered taste, facial nerve injury and device failure, and which also means that the child will not be able to undergo Magnetic Resonance Imaging (MRI) scans. Cochlear implants have been shown to produce hearing

outcomes that have allowed researchers to realistically compare the hearing abilities of the implantees in relation to their hearing peers, rather than to those with alternative interventions such as hearing aids (Eisenberg *et al.*, 2006). However, there remains great variability in the performance of children fitted with cochlear implants (Calmels *et al.*, 2004; Artières *et al.*, 2009) and little is known about the long-term effects (Peixoto *et al.*, 2013).

'Deafness' is a chronic situation which is seen by some as a 'disability'; others as an 'impairment'; but also as a cultural and linguistic minority. Generally, we distinguish between 'deaf' as a descriptor of a hearing impairment, and 'Deaf' as a member of a social group. As such, 'deafness' is both a pathological condition and a cultural identifier and incorporates aspects of identity, language, culture and power. Hintermair (2006: 494) describes how movements within the Deaf community "took the needs of deaf people out of the disability framework and reframed these as a civil rights issue" (citing Andrews *et al.*, 2004: 204). Munoz-Baell and Ruiz (2000) emphasise the diversity of those affected by deafness, which must be acknowledged given the complexities in terms of what implications there may be for the patient. They assert that empowering strategies "should primarily focus on the removal of communication barriers" (Munoz-Baell and Ruiz, 2000: 40) and that this is also the responsibility of the hearing population. Both the hearing and D/deaf communities encounter communication difficulties when interacting with one another and "The differences then

lie in how this obstacle determines their lives and how they perceive of it" (Munoz-Baell and Ruiz, 2000: 41).

Barak and Sadovsky (2008) explored how deaf people engage in online communication as a way in which those communicative differences can be levelled. They report that:

> As a result of using a communication tool that is mainly based on textuality, invisibility, and anonymity (in addition to other unique features), deaf people experience equality and lack of (or much decreased) inferiority in comparison to non-deaf under these circumstances (Barak and Sadovsky, 2008:1812).

They argue that the features that characterise this 'cyberspace', namely "invisibility, anonymity, continuous and constant availability, easy access to massive amounts of information, and broad attainability of individual and group support" foster a personal empowerment process (Barak and Sadovsky, 2008:1812). However in my own conceptual map of empowerment I would be cautious of endorsing 'invisibility' and 'anonymity' as contradictory to the concept of 'voice'; that is, unless the individual's desire was to benefit from the online resource without being detected. Van Uden-Kraan *et al.* (2008) were able to report comparable empowerment outcomes between 'lurkers' and 'posters' from online support groups, suggesting that 'anonymous' and 'invisible' use of such resources can be empowering. Nevertheless, the "easy access to massive amounts of information" presents a potential danger to empowerment, through 'bad literacy' (Schultz and Nakamoto, 2011).

Family-centred intervention

Taylor (1999) uses a philosophical model of social action as an approach to explore isolation in deaf minority groups and defines the approach as "one that seeks to empower residents and service users to define their own needs". Furthermore, "it builds upon participants' (providers', potential service users' and users') own experience and understanding. It offers concepts with which people can engage and apply to their own circumstances" (Taylor and Vig, 1997 cited in Taylor, 1999: 372). Researchers have emphasised the importance of patient-centredness and the family dynamic in relation to hearing loss too, asserting that "the empowerment of deaf and hard of hearing adults begins with the empowerment of the families they are born into and in which they grow up" (Hintermair, 2006: 494). Furthermore, that "children are best understood in the context of their unique family constellations" (Wu and Brown, 2004). The empowerment model promotes a process which "turns away from a 'deficit-only' perspective and acknowledges the capabilities of the families of deaf and hard of hearing children" (Hintermair, 2006: 494), acknowledging and building upon strengths already present in the family dynamic. For parents, hearing the news of a diagnosis of their child's deafness is associated with strong feelings of grief as this is often contrary to their antenatal expectations of their child, generating a sense of loss (Kurtzer-White and Luterman, 2003). This effect on the parents' emotional well-being has consequences for the child's socio-emotional and language development (MacTurk *et al.*, 1993; Bodner-Johnson and Sass-Lehrer,

1996; Leigh and Anthony, 1999) and therefore should be factored into the design of interventions for children with hearing loss (Meadow-Orlans, 1995; Yoshinaga-Itano and de Uzcategui, 2001). Because of the variability in the outcomes of (technological) interventions and the diversity of the population affected by hearing loss, there is no 'catch all' intervention for hearing loss in children. As such, the support network of the family and service providers is especially important to the child's development. Munoz-Baell and Ruiz (2000: 43) recommend "developing programmes that are responsive to families' needs as empowerment of the family has numerous benefits for the deaf child". Interventions therefore, must be sensitive to the unique family strengths and needs. They must also provide the means by which the family can recognise their own strengths and identify the resources through which to meet their needs.

But in addition to the more constant characteristics of the family dynamic, the health service provider must also be conscientious of the period of time in which they interact with the family in relation to the family's history (the experiences they have already had) and in relation to the family's future (the experiences they will come to have). In my own conception of this work, I became very aware of the idea of 'trajectory', of the kinds of momentum and processes that were existent for families as they entered and left the intervention. In terms of empowerment, it seemed that some families could already refer back to experiences they saw to be 'empowering', which contributed to their

feelings of self-efficacy and their expectations of the intervention. For some families, there was a forthcoming event – such as the child beginning school, or the family moving home – that was perceived to be a potential challenge for the family dynamic and through which there might have been a greater need for a supportive intervention. Thus in trying to understand the family dynamic, we must be aware that the family that we become acquainted with is a representation of the family in constant transition, that our services might be introduced as the family experiences a 'disempowering' trajectory in the face of a new challenge, or even an 'empowering' trajectory as the family settles in a new home, for example. In this respect, it is particularly important that the family is able to characterise their own experience, as it is when they call upon the services, in order to understand the particular kinds of support they might need. For researchers, this concept of the family 'trajectory' has implications for the way in which we perceive of 'outcomes', since we must recognise that the 'end point' of an intervention is just an arbitrary checkpoint in the trajectory of the family. Likewise, there is no 'origin' for the family when they begin the intervention, and we must be inclusive of the processes already in operation which they family introduces to the discussion to characterise their own 'trajectory'.

4.1 UNDERSTANDING THE PARENTAL EXPERIENCE OF CHILDHOOD DEAFNESS: A LITERATURE REVIEW

Measuring empowerment

The WHO report on the evidence for empowerment (Wallerstein, 2006: 16) included recommendations for future actions, one of which was a need to "foster the refinement of measurement tools of empowerment domains and levels". However, it stated that universal instruments "may be insufficient and will require indicators based on local culture, language and context, in addition to qualitative methods to assess facilitators and barriers to change" (Wallerstein, 2006: 16). This recognizes the complexity of empowerment as both a process and as an outcome and favours linguistic analysis as a means to account for that complexity.

Empowerment scales

Koren *et al.* (1992) developed the Family Empowerment Scale (FES) which offers a list of 34 items expressed as statements such as 'I feel confident in my ability to help my child grow and develop', to which the respondent is given five 'rating' options: Not true at all, Mostly not true, Somewhat true, Mostly true, Very true. In their own words, "Item content was based on a conceptual framework consisting of two key dimensions: the level of empowerment and the way it is expressed", highlighting the parent's own perceptions and expression of their own empowerment (Koren *et al.*, 1992: 306). These statements had been devised to evenly represent the participants Attitudes, Knowledge and Behaviours across Family, Service Systems and Community/Political

scales. Koren *et al.* (1992: 318) did however identify a disparity in 'motivating factors' associated with family empowerment:

> some parents have told us that a particularly good relationship with a service provider has been instrumental in their becoming more empowered. However, other parents have reported that poor services have also had a similar effect by serving as an impetus to actively search for better resources.

This reiterates the importance of understanding the individuality of the family, determining what is important to them, what motivates them and how they respond to various 'stressors'. Spreitzer (1995) developed a collated scale based on Thomas and Velthouse's (1990) definition of empowerment which is divided into four cognitions: meaning, competence, self-determination and impact. This was a highly individual-focused assessment of empowerment and Spreitzer (1995) recommended expanding the concept to incorporate organizational constructs and processes of empowerment. Although she was able to incorporate elements of social structure into the scale (Spreitzer, 1996) the model does not allow us to draw any conclusions about causality between social structure and empowerment.

Both Koren *et al.* (1992) and DesJardin (2003) describe the FES and the Scale of Parental Involvement and Self-Efficacy (SPISE) respectively as scales that provide a 'snapshot' of their separate outcome measures and Spreitzer (1995; 1996; 1999) has acknowledged the limitation of the 'cross-sectional' nature of her model.

The concern here is that though these scales can indicate to us what a family's level of empowerment is seen to be in a given moment, they are less suited to monitoring change. Perhaps because of this design limitation, such scales are rarely used in longitudinal studies. In a mass longitudinal test of the FES:

> results indicated significant increases in the knowledge subscale of the FES and the Child and Adolescent Functional Assessment Scale. There was a moderate increase in the advocacy subscale of the FES and the Client Satisfaction Questionnaire as well

but

> there were no increases among the competency and self-efficacy subscales of the FES (Resendez *et al.*, 2000: 458-9).

This demonstrates that the scale was not able to associate an increase in knowledge with an increase in 'competency' or 'self-efficacy' and similarly, there remain questions of causality with regard to Spreitzer's scale. This researcher is not aware of any implementation of the scales in the study of hearing loss.

This research looked at empowerment within a population of parents of pre-lingual children with hearing loss, where we can extend our model of 'patient-centred' care to 'family-centred' care, since "children are best understood in the context of their unique family constellations" (Wu and Brown, 2004: 5). This researcher was unable to identify any studies in the field of the hearing loss in which the concept of empowerment had been specifically identified as a concept utilised to shape the delivery of

family interventions for deaf children or as a measure of the outcomes of such interventions. Even Hintermair (2006), in referring to concepts of empowerment and resource orientation to understand parental experience and the socioemotional development of the child can only report on measures of 'stress' and recommend 'empowering' strategies without really detailing what that might involve. This example is indicative of the current literature, which has explored the parental experience of childhood deafness through measures which we can assimilate into our understanding of empowerment, but which would not constitute a view or process of empowerment as defined above.

The literature review

As such, a literature review was conducted through three digital libraries: Education Resources Information Center (ERIC), PubMed and ScienceDirect. Based on the search terms 'parental attitudes' and 'child deafness' 85 papers were identified through ERIC. With the search terms 'parental perspective' and 'child deafness' 128 papers were identified through PubMed and 52 papers through ScienceDirect. Of the 85 papers identified through ERIC, a number offered a theoretical exploration of the parental experience and decision-making around hearing impairment, but with little input from parental feedback. Similarly, I also found many research papers which reported from the viewpoint of the professional interacting with the parents and family through early intervention. Based on the abstracts of the outcomes of this search, four papers were deemed relevant to the exploration of the parental experience (Yoshinaga-Itano, 2001; Freeman *et al.*, 2002;

Garcia and Turk, 2007; Young and Tattershall, 2007). Through the abstracts of the 127 papers that were located through PubMed, again, a number were excluded because they were based on the views of professionals, rather than parents. Similarly, a number were excluded since they reported how measures introduced by the service provider affected outcomes. Others were more concerned with outcomes for the child, such as language development, and so were not deemed entirely pertinent to the inquiry into parental experience. Of this search, eleven papers remained as part of the literature review (Meadow-Orlans *et al.*, 1997; Calderon *et al.*, 1998; Dromi and Ingber, 1999; Nikolopoulos *et al.*, 2001; DesGeorges, 2003; Wu and Brown, 2004; Hintermair, 2006; McCracken *et al.*, 2008; Hardonk *et al.*, 2010; Jackson *et al.*, 2010; Uus *et al.*, 2012). Finally, of the 52 papers identified through ScienceDirect, five (Minchom *et al.*, 2003; Park *et al.*, 2006; Yucel *et al.*, 2008; Gilbey, 2010; Sparreboom *et al.*, 2012) were deemed relevant to the inquiry, for similar reasons as already detailed.

Twenty papers (ERIC: 4; PubMed: 11; Science Direct: 5) represented the core literature that explored parental feedback on the experience of the process of diagnosis and/or intervention of childhood deafness: seven based in the U.S., six from the U.K., two from Israel and one each from Australia, Belgium, Germany, the Netherlands and Turkey. Nine papers were based around the impact of Universal Hearing Screening and diagnosis, and eleven papers looked at the impact of early intervention or therapy, ultimately detailing the experience of

parents of newborn children who were diagnosed with hearing loss. However it also worth considering the comparable experiences of, for example, families of children diagnosed with autism spectrum disorder (Keen *et al.*, 2010), and the ways in which parental report has contributed to family interventions that address other 'family' diagnoses. By understanding the broad relevance of family-based interventions and the diverse parental experiences we can ascertain a better picture of the variable aspects that can affect parental self-efficacy.

4.1.1 QUANTITATIVE SCALES

Nikolopoulos *et al.*, (2001) generated a parent questionnaire that was designed specifically to capture the parental experience through the process of the child's cochlear implantation. The questionnaire was primarily structured as a number of statements such as 'Are you concerned about the development of: listening to speech without lip-reading?' with a 5-point Likert-type response profile (Certainly yes; mostly yes; mostly no; certainly no; unable to answer). This was administered at one, two and three years after the implantation and elicited information on the parents' perceptions of the child's speech and language development, as well as their concerns regarding the child's development. The study reported that the outcomes perceived by the parents were consistent with their expectations and as such, the parents were generally satisfied with the outcomes. These results, however, are limited in the fact that although 43 parents completed the survey, the researchers were not able to assertively comment on the

longitudinal aspect as few parents completed the questionnaire at all three intervals. Sparreboom *et al.* (2012) used the same questionnaire and administered it to parents of 30 deaf children to elicit their experience of their child receiving a second implant. The questionnaire was administered before the surgery, and again at 12 and 24 month intervals following the surgery. This study found that outcomes from the second implant surpassed the expectations of the parents. However, it was reported that low expectations could be attributed to the outcomes associated with the first cochlear implant, which also affected the compliance of new implantees wearing and using their second implant. As such, the importance of providing realistic information on outcomes of the first implant is emphasised in order to encourage cooperation and compliance at the second implant stage.

I was unable to find any other such questionnaires that were designed specifically to elicit the parental experience in relation to their child's hearing loss. Outcomes for the hard of hearing child are measured in terms of, for example, language acquisition, social-emotional development, or academic performance (Calderon and Low, 1998). The literature shows that outcomes for families are generally understood through concepts such as 'coping' and 'resiliency' (defined as incorporating family stress, adjustment, adaptation in Jackson *et al.*, 2010), 'adaptability' and 'cohesion' (Turnbull and Turnbull, 2001). Traditionally, this population has been associated with responses of denial, stress, guilt, and grief (Meadow-Orlans *et al.*, 1997; Dromi and

Ingber, 1999; Kurtzer-White and Luterman, 2003; Anagnostou *et al.*, 2007; Kelly, 2011) in response to a diagnosis of deafness. These responses are elicited through measures of: stress; 'quality of life' (feelings of well-being, positive social involvement, opportunities to achieve personal potential) (Jackson *et al.*, 2010); parental involvement; perceived benefit; or support resources (Dunst *et al.*,1984; Meadow-Orlans *et al.*, 1997; Dromi and Ingber, 1999; Yoshinaga-Itano, 2001; Hintermair, 2006). However, research has found disparity in the comparable stress levels of those 'normal hearing' families and families where there is a deaf child based on, for example, discrepancies in mode of assessment, hearing level, or sample size. Subsequently, some studies found that parents of deaf children show higher levels of stress than parents of hearing children, whilst other studies show no difference between the two (Hintermair, 2006). This prevents us from talking generally about the relationship between having a deaf child and family stress.

'Stress'

In the literature the most popular measure of parental perspective is 'stress', which eight of the papers directly referred to as an outcome measure and which was a prevalent concept related to the diagnosis of childhood deafness (Meadow-Orlans *et al.*, 1997; Calderon and Low, 1998; Dromi and Ingber, 1999; Yoshinaga-Itano, 2001; Minchom *et al.*, 2003; Hintermair, 2006; Garcia and Turk, 2007; Jackson *et al.*, 2010). There is no real definition but the most popular instrument for measuring stress is the Parenting Stress Index Short Form (Abidin,

1995), which comprises three scales: Parental Distress, Difficult Child Characteristics, and Dysfunctional Parent-Child Interaction. It is based on parent-report and used to predict children's future psychosocial adjustment. Abidin (1995) asserts that the Parenting Stress Index can be used as a screening tool, as a pre-/post- intervention measure and subsequently, to make predictions about the trajectory of individuals' Stress Index. There is, however, both a full and short version of the form (120-item and 36-item respectively), emphasising the variation in the level of detail afforded by such a scale. Lederberg and Goldbach (2002) use the PSI (Version 6) as a substitute to the Questionnaire on Resources and Stress Short Form part-way through their study and the interchangeable use of the scales complicates the authors' interpretations of their findings, emphasising the difficulty in assimilating the research founded on different measurement scales. There is a concern here for consistency with the measure of outcomes, particularly with longitudinal intervention studies.

Alternatively, we might see 'stress' as something which is unpredictable, inconsistent, but ultimately as one component of a family's ability to function. In Lederberg and Goldbach's (2002) longitudinal study of mothers of deaf children they found that, contrary to their hypothesis, perceptions of stressors "did not change developmentally during the preschool years" (Lederberg and Goldbach, 2002: 344). They interpret this to mean that "parent stress is frequently not a result of acute crisis but rather a long-term part of some parents' lives" (Lederberg and

Goldbach, 2002: 343). However we are also made aware that "because researchers have used instruments that measure general parenting stress, we do not know if the concerns specific to parenting deaf children are experienced as very stressful by parents" (Lederberg and Goldback, 2002: 344). In this respect, 'stress' will come and go and our focus should be on functionality, which we can relate to 'self-efficacy' (Bandura, 1977). Self-efficacy "is not strongly linked to perception of a stressor and the ability to avoid or diminish the stress, but is rather linked to the ability to experience positive experiences and outcomes, in spite of the stressor" (Harty *et al.*, 2006: 152). Furthermore, Monin *et al.* (2012: 903), in their study of caregivers of chronically ill family members, found that "there are likely to be individual differences in the extent to which caregiving spouses effectively regulate their emotions in the face of their partners' suffering", emphasising the importance of how an individual reacts to or regulates their 'stress'. 'Stress' then, does not tell us about the family's communicative dynamic or how its perception of 'stress' impacts on the family's day-to-day interactions.

Hintermair (2006) triangulates parental stress with child outcomes and with parental 'resources', which is another facet of the parental experience frequently explored in the literature (Dromi and Ingber, 1999; Jackson *et al.*, 2010). Equally, Jackson *et al.* (2010) understand resources in relation to 'stressors' in their model of 'resiliency', and Dromi and Ingber (1999) elicit information on resources using the

Questionnaire on Resources and Stress (QRS-R). 'Resources' in the broad sense are treated as the counteracting aspect to 'stress'.

'Support'

'Support' is an aspect that relies heavily on self-report, which is complicated by its vagueness. The Scale of Perceived Social Support (Krause and Markides, 1990) was used in a longitudinal study (at four points over a ten-year period) to measure stability and change in the perceived social support of Taiwanese Adults, finding significant improvement in their results (Cornman *et al.*, 2004). The authors, however, are cautious of the specificity of the view of just two types of 'support' afforded by the terms of the scale, which themselves are variable across the measures. Furthermore, we are not privy to the influential factors behind these perceptions, making it difficult to determine how we might work to improve those perceptions. Dromi and Ingber (1999) refer to the various kinds of support – professional support, social/peer support, emotional support, psychological support – which are by no means exclusive. They ascertain that 66% of their interviewees specifically identified a desire for health professionals to be 'supportive' but even their quantifiable measure – the SNF: Social Contacts and Social Support questionnaire – broadens the definition of 'support'. As a questionnaire it is designed to elicit mothers' perceptions of the extent of support they have in terms of social contacts, emotional support, support in parenting, practical support with household, practical support with children, ability to cope with life situations, and

satisfaction from support in emotional, parenting and practical domains (Dromi and Ingber, 1999).

Hintermair (2006) employs the short form of the Social Support Questionnaire, another form of self-report that indicates a level of 'general social support'. He did, though, ascertain that "it is the specific support adapted to the family's situation that seems to be important" (Hintermair, 2006: 505), demonstrating that it is not the vagueness of the term that is problematic but rather the knowledge of what kinds of support each family needs that can maximise the level of support offered by the health services. This again is seen in relation to alleviating stress. Meadow-Orlans *et al.* (1997), Yoshinaga-Itano (2001) and Yucel *et al.* (2008) each use the Family Support Scale (Dunst *et al.*, 1984). Meadow-Orlans *et al.* (1997) use it in tandem with various other scales to compute a Support Index as a comparable measure of the efficacy of early intervention. The scale provides an opportunity to highlight specific support needs, to do with opportunities to meet with other parents, communication, finance, education, babysitting etc. with the general conclusion being that there is greater need for psychosocial support. In order to actively address these needs however, we must consider each family individually.

'Satisfaction'

In three papers the outcome of satisfying those needs is viewed as a measure of 'satisfaction', elicited using the (adapted) Project Dakota Parent Satisfaction Survey (Meadow-Orlans *et al.*, 1997); the Beach

Center Family Quality of Life Scale (Jackson *et al.*, 2010); and the MRC 'Deaf or hearing-impaired children and their families: services provided and quality of life' questionnaire (Minchom *et al.*, 2003). Jackson *et al.* (2010: 202) identify that "Satisfaction may be difficult to interpret, as the relative meaning of being satisfied is an individual perception", however if 'satisfaction' is the overall aim of the intervention, allowing the participants to determine their own level of satisfaction and whether they are, in their own terms, 'satisfied' is not problematic. The difficulty comes in producing a replicable instrument for an objective measure of 'satisfaction' that would apply to the universal family, allowing service providers to pre-empt those needs and prepare the appropriate support means. Satisfaction, again, must be seen in tandem with expectations and since there is no standard measure of 'expectation', they cannot determine a standard of satisfaction. We must explore not only if parents are satisfied with the services they receive, but how, and why.

Demographics

There is a tendency in the literature to dissect the parental experience by way of demographics. This formed part of the assessment battery for seven of the papers (Calderon *et al.*, 1998; Dromi and Ingber, 1999; Yoshinaga-Itano, 2001; Hintermair, 2006; Young and Tattershall, 2007; McCracken *et al.*, 2008; Jackson *et al.*, 2010) and was of secondary concern for a further four (Meadow-Orlans *et al.*, 1997; Freeman *et al.*, 2002; Gilbey, 2010; Hardonk *et al.*, 2011). Although standardised measures are occasionally used – such as the Background Information Questionnaire (KBIQ) (Dromi and Ingber, 1999) – the gathering of

demographic information is not standardised and since many of the studies relied on voluntary response, it is often non-representative. The desire to understand the parental experience and perspective by demographic is understandable, as it would offer some degree of anticipation on the part of the service provider, of the expectation of the families. The individualities within each family, however, challenge this emphasis, reiterating the benefits of individually-tailored care.

Summary of the use of quantitative scales

The advantage of such quantative measures lies in the ability to represent larger populations in a uniform and universal way. Those studies that used strictly quantitative measures ranged in sample size, from 20 parent responses to Auditory-Verbal therapy in Australia (Wu and Brown, 2004); 65 parents involved in parent-child counselling at the Hacettape University Auditory-Verbal therapy and counselling program (Turkey) (Yucel *et al.*, 2008); 108 families associated with the Primary Children's Medical Center in Utah (Park *et al.*, 2006); 184 mothers reporting on parental stress (Yoshinaga-Itano, 2001); 213 parent 'pairs' of deaf or hard of hearing children enrolled in Bavarian schools (Hintermair, 2006); to the Gallaudet national survey (n=404, U.S.) (Meadow-Orlans *et al.*, 1997). These samples are non-representative but offer significant numbers of individual perspectives that are understood in universal terms of 'stress', 'support' and 'needs', for example. Despite such numbers, the multiplicity of supposedly uniform measures that have been shown to be somewhat interchangeable emphasises the absence of standard measures for such aspects.

Despite the range of instruments used to elicit some aspect of the parental experience, the general format for these scales is fairly uniform. Participants are often given a questionnaire, of those listed above the range is between 12 and 36 items (the QSR-R Questionnaire on Resources and Stress is the exception and has 285 items) which are generally expressed as statements that describe a feeling or behaviour. For example, the Parenting Daily Hassles Scale describes: 'Having to change your plans because of unprecedented child needs', to which the respondent is first asked to indicate how often it happens on a 4-point scale (Rarely; Sometimes; A lot; Constantly) and then the degree of hassle this incurs (1-5, low to high). More typical is perhaps the Scale of Perceived Social Support which offers a statement, 'I can count on my friends when things go wrong', inviting the participant to agree on a scale of five items, from 1: 'strongly disagree' to 5: 'strongly agree'. Such surveys are often organised into smaller scales whereby particular items are collated to produce a score of, as in the Parental Stress Index, Difficult Child Characteristics, for example. Having raw scores enables cross-case comparison and the statistical analysis of associate data in search of correlations, such as the relationship between Parental Resources, Parental Stress and Child Outcomes (MacTurk *et al.*, 1993).

Given the multifaceted nature of both 'perspective' and 'experience', the individual characteristics of each family and of each family member, it is

natural for researchers to attempt to elicit multiple aspects of the parent report by using a number of scales. There is a concern, however, that in order to elicit a comprehensive understanding of the parental perspective and the tendency for scales to address one solitary aspect of that perspective, researchers must employ a multiple number of instruments, requiring the participants to spend significant amounts of time completing them and requiring mass statistical analysis to determine correlations, rather than causality. Even then there is no certainty that further aspects are not remiss. One study has attempted to collate the statistical findings of eight separate studies encompassing 24 different scales under their Family Systems Intervention Model (Trivette *et al.*, 2010). The results are effective in demonstrating empirically the link between help-giving and family-systems practices on the one hand, and parent-child interactions and child development on the other. Their data support the use of family-systems interventions and promote the involvement of parents and other caregivers in implementing those interventions, but does little to inform how we might adapt our service approach to each individual family. In order to do this, one would have to compute the beliefs and well-being of the parents with levels of stress, resources, demands, and employ a measure of development and interaction between the parent and child. Trivette *et al.* (2010) developed a Family Systems Intervention Model using 24 separate scales (Help-Giving Practices Scale; Family-Centred Practices Scale; Family Resource Scale; Support Functions Scale; Protocol of Resources and Supports; Family Support Scale; Inventory of Social

Support; Personal Assessment of Social Support Index; Family Hardiness Index; Family Environment Scale; Personal Assessment of Control Scale; Parental Locus of Control Scale; Center for Epidemiological Studies Depression Scale; Psychological Well-being Scale; Personal Well-Being Index; Questionnaire on Resources and Stress; Family Inventory for Resources and Management; Maternal Behaviour Rating Scale; Parent-Child Play Scale; Bayley Scales of Infant Development; Mental Development Index; Griffiths Mental Measurement Scales; General Development Quotient; Wisconsin Behaviour Rating Scale) but this is an impractical and inefficient means of eliciting what is not even the 'whole picture', prior to the introduction of any kind of intervention.

The use of quantifiable scales of, for example, 'satisfaction' is complicated by the relative meaning and perception of the term, which is therefore not subject to normalisation and cannot provide a universally comparable measure. I have already iterated the importance of using a measure which allows the population to indicate in their own terms what is of importance in understanding the dynamic of each family and maintaining a patient-centred model of care. For the purposes of this study and the empowerment model, the limitations of the questionnaires used in the available literature are manifest in the uniform format of the Likert-type scale, as well as the use of multiple scales (*ad absurdum*) in an attempt to get a broader account of the parental experience (Trivette *et al.*, 2010). By presenting the outcomes

as predetermined expressions of hassle, stress, satisfaction etc., defined by the researchers who develop the instruments, we are denying the opportunity for parents to establish 'epistemic authority', to define concepts in their own terms and state for themselves what is relevant or important. As studies have shown, the patient 'finding their voice' and talking openly and honestly with their service providers is a significant contributory factor to their process of empowerment (Ryles, 1999; Falk-Rafael, 2001). Researchers have long understood the multifaceted nature of the concepts through which the parental experience is understood, with the general view being that 'resiliency' is increased by reducing 'stress', improving 'social support' and encouraging 'parental involvement'. But such outcome measures must be understood in relation to expectations. Thus while measures of 'stress' and 'resilience' reflect the effects of the family's circumstances, the more indicative factors of such measures are perhaps found in those aspects that induce stress, or reveal to us what the family is so resilient throughout. Individual circumstance and individual reaction (both inter- and intra-familial) will always inhibit our aim as researchers to talk expansively about the 'family experience' so it is necessary for a measure of the effect of interventions to withstand, if not capitalise on the disparity (see Wallerstein, 2006).

4.1.2 QUALITATIVE STUDIES

Those studies looking to capture the complexity of such life experiences tend to conduct semi-structured interviews. Young and Tattershall

(2007), for example, construct their interview around the parental experience of hearing screening, referral, diagnostic assessment, early intervention and support, as well as their advice to other parents and professionals. The idea here being that rather than "respond to a set of predefined questions in which to fit their experience", parents

> are given the scope to make decisions themselves about what is
> meaningful and important in their experiences, and to set the
> criteria by which they would want their experiences to be
> understood and evaluated (Young and Tattershall, 2007: 136).

Seven papers relied on solely qualitative means of eliciting parental perspective (Freeman *et al.*, 2002; DesGeorges, 2003; Young and Tattershall, 2007; McCracken *et al.*, 2008; Gilbey, 2010; Hardonk *et al.*, 2011; Uus *et al.*, 2012). This is conducted through interviews however the tendency is not to introduce a series of questions to be answered, but rather more vague questions that invite explorative responses in a semi-structured way. For example, Uus *et al.* (2012: 187) describe their interview process:

> Parents were invited to tell their own stories, in their own words
> within the broad framework covering the experiences of the
> pregnancy, labour, early perinatal period through to hearing
> screening and identification with ANSD [auditory neuropathy
> spectrum disorder]; the experience of early intervention and
> professional support; their advice to other parents and
> professionals engaged in the same process.

Others relied on open questions such as 'Who told you that your child has a hearing problem? What were your feelings at the time?' (Gilbey, 2010). One study (Hardonk *et al.*, 2011) introduced a 'life-grid' to the interview, a tool allowing an additional researcher in the interview to make notes on chronological events in relation to specific interests such as 'child's education', or 'the family at home'.

Thematic analysis

The tendency with interview data is to perform some kind of thematic analysis or open coding, which can range from being a summation of the prevalent themes across data, or a more systematic approach (Braun and Clarke, 2009). The method itself privileges the patient voice in that the data is not managed in response to a hypothesis but rather more inductive. Iedema *et al.*, (2006: 1115) refer to this process as 'abduction', which

> is a process of interpretation that develops explanations based on observation. This method is not about 'proving' assertions as being true, but rather involves promoting a perspective and arguing what might be the case.

The creation of 'codes', 'themes' or even 'patient profiles' is indicative of an attempt to make the findings of each interview generalizable, to somehow understand the nature of the individual in relation to the broader population, which is analogous with the concept of patient-centred care. However, the process of thematic analysis, even at its most systematic, is subject to criticism of 'selectivity' and a product of the individual researcher's idea of what is of interest in the data.

Furthermore, the process is very labour intensive, particularly when incorporating new findings, as even a 'grounded theory' approach (Glaser, 1992) requires continual reworking each time new information is added. A systematic thematic analysis requires full immersion in the data, a decision as to whether the themes are data-driven or theory-driven, and a frequent reviewing process of the emergent themes by two or more researchers. By extracting the key themes from what is typically vast and rich data, researchers can begin to associate themes across cases and develop recurring concepts into an applicable measure.

Summary of qualitative measures

Reports of qualitative data however can often be largely descriptive or anecdotal (Freeman *et al.*, 2002; DesGeorges, 2003), offering little insight into the ramifications for other families in their experience of the services if not managed correctly. The sample size is also reduced, given the intensive nature of the analysis. The studies identified here represented two publications of the same 27 interviews on the importance of early diagnosis (Young and Tattershall, 2007; McCracken *et al.*, 2008); another rather descriptive account of interviews with nine parents, two grandparents and six staff regarding their experiences being involved with a hard of hearing child (Freeman *et al.*, 2002); the perceptions of 14 families reporting on their experience of receiving the diagnosis (Gilbey, 2010); 17 families reflecting on their hearing screening process in Belgium (Hardonk *et al.*, 2011); and 21 families reflecting on their experience of hearing screening in the U.K. (Uus *et*

al., 2012). The remaining study (DesGeorges, 2003) was largely anecdotal, reporting the feedback of a non-specified sample, which was not collected in any systematic way and though offered 'real' reports of the parental experience, offered no real applicable insight into the provision of services for deaf children. What this data lacks in scope it resolves in its depth, offering a fuller, inclusive representation of the 'parental experience'.

Yet of those studies which used purely qualitative measures, three specifically insisted upon 'additional qualitative enquiries' (Freeman *et al.*, 2002; Young and Tattershall, 2007; McCracken *et al.*, 2008;), expressing an awareness of the greater potential in their data for a more in-depth understanding of the perspectives of their participants. Young and Tattershall (2007: 218), for instance,

> cannot escape noticing the casual expressions of illness and treatment that permeate many parents' comments cited. Deafness is "caught early" as if an illness or disease. It is a problem that can be transformed.

They begin to scrutinise the use of particular words that express an association of 'deafness' with 'disease', which is discourse analysis in practice and reveals not only the 'casual' perspective of the parents but also the potential that it can be 'transformed'. This informs our understanding of the parents' expectations and suggests that deafness is not seen as a categorical constant, but rather can be seen and understood in a new light, can be 'transformed'. Yoshinaga-Itano (2001:

225) also describes the way in which her participants construct their responses, as a means to infer their individual process of dealing with grief:

> Families who are angrily preoccupied express active and thematic anger and enlist endorsement of this anger from the professional […] They may express unbalanced perceptions regarding the benefits versus cons of the experience either idealizing the experience or painting a picture of no hope. Families may express confusion or incoherence through indications of contradiction in content of their presentation of the story about their experiences.

These descriptions of 'unbalanced perceptions', 'idealizing', 'confusion', 'incoherence' and 'contradiction' can all be supplemented by semantic and grammatical analysis, enriching those interpretations with replicable, objective measures which are evidenced in the raw data. Discourse analysis is not only concerned with what is said but also how it is said and for the purposes of this work – given our understanding of stance (Kärkkäinen, 2006) – how it relates to various aspects of empowerment. The importance of developing a rigorous and replicable method of 'perspective' analysis is fundamental in utilising the subjective case-study reports to inform our understanding and approach to providing services to other families with a deaf or hard of hearing child. As Young and Tattershall (2007: 216) state

> In discussing what we can learn from these very early thoughts, it is important to see them in the context of an evolving

landscape for parents, while at the same time treating their

narratives as of-the-moment evidence.

There will always be disparity in the experiences of these families, as

there will be variation in the support, resources and information

available. What will remain is the potential for families to 'tell their own

story' and we must have reliable qualitative means in order to capitalise

on their reports. In the approach to interview data there is value in real

in-depth exploration of the content and construct of the participant's

utterances, especially when determining the individual perspective. As

has been described, feelings of self-efficacy and empowerment can be

understood through expressions of stance, which are anchored in the

core grammatical components of the language in which such

expressions are delivered.

4.1.3 MIXED METHODS

It is becoming increasingly common for researchers to adopt a mixed

methods approach (Tashakkori and Teddlie, 2003; Dörnyei, 2007;

Johnson *et al.*, 2007; Denscombe, 2008), which is defined as

> the type of research in which a researcher or team of
>
> researchers combines elements of qualitative and quantitative
>
> research approaches (e.g., use of qualitative and quantitative
>
> viewpoints, data collection, analysis, inference techniques) for
>
> the broad purposes of breadth and depth of understanding and
>
> corroboration (Johnson *et al.*, 2007: 123).

This is fundamentally different from using a combination of qualitative and quantitative measures in parallel in that the coming together of such techniques will be complementary and supportive of new insights. This is not always easy to recognise. Five papers from the literature search used both qualitative and quantitative measures, often manifesting as a combination of closed and open-ended questions in a single survey (Calderon *et al.*, 1998; Dromi and Ingber, 1999; Minchom *et al.*, 2003; Garcia and Turk, 2007; Jackson *et al.*, 2010). There was a considerable range in the sample sizes of these papers, from a single case-study of a family who experienced the adapted Webster-Stratton program through the National Deaf Services Children and Young Persons Clinic (Garcia and Turk, 2007); to 28 parents of children who had completed the Early Childhood Home Instruction program (Calderon *et al.*, 1998); 35 families in North Wales with a child born after 1989 and with a hearing loss of 40dB or greater, identified through the UNHS (Minchom *et al.*, 2003); 50 Israeli mothers of children enrolled in early intervention programs (Dromi and Ingber, 1999); to 207 families across 42 states contacted through the national hearing services (Jackson *et al.*, 2010). In the majority of the studies the qualitative measures were not explored in the same depth as in those studies which used qualitative measures only, being largely descriptive (Calderon *et al.*, 1998; Minchom *et al.*, 2003; Garcia and Turk, 2007; Jackson *et al.*, 2010). Rather than using 'mixed methods' the simultaneous employment of quantitative and qualitative measures was not managed in a complimentary way; there seemed to be a privileging

of either quantative or qualitative methods in these papers, which is reflected in the sample size. As such, the findings of this research were ultimately subject to the same limitations as the purely quantitative or qualitative research projects.

Dromi and Ingber (1999), however, were able to construct four participant 'profiles' as representative of their sample (n=50) using mixed methods, in an attempt to predict the behaviour, expectations and needs of other mothers according to their 'type' (Dromi and Ingber, 1999). This study combined semi-structured interviews with a number of formal questionnaires to determine the range of expectations Israeli mothers held of an early intervention program for deaf children. A brief questionnaire asked 'As a mother of a deaf child, what do you expect from your meetings with the professionals at the preschool?' and 'What do you suggest to include in early intervention programs with parents of deaf children?' followed by a 40-minute interview to expand on those (written) responses. The survey instruments were employed to elicit: background demographic information, family cohesiveness and adjustment, mothers' perceptions of coping resources and stress, personality traits, sense of coherence, perceptions of social contacts and support, and the mothers' evaluation of the communicative development of their child. Through combined thematic content analysis and questionnaire responses the researchers were able to determine the categories and distribution of the key themes expressed in the interviews, which through cluster analysis were classified into four

profiles: A: Independent Decision Makers; B: Well-Socialized; C: Minimalist, Relinquishing Responsibility; and D: Full Collaborators. The authors were then able to detail each groups primary concerns in response to the common categories about Programs (Information, Guidance, emotional support, organization etc.) and Professionals (interpersonal skills, style of communication, expertise etc.). This method demonstrates the potential for using individual reports to better understand the variation in a larger population by recognising tendencies associated with personality 'types'. In a fairly sizeable population of Israeli mothers, the study suggests that based on basic information about an individual's expectations or needs, researchers can make informed predictions about that individual's response and value of particular aspects of the provision of services and of the people who deliver them. This would maximise the efficacy of the services, as adapted to the needs of the individual.

In the same way that themes derived from expectations and needs can determine participant profiles, the use of language – as an equally variable system – can lend itself to a system of participant 'types', based on, for example, those who readily express anger, or those who have a strong external locus of control. Discourse analysis can identify the aspects to which those traits can be attributed by analysing expressions of stance. Thus a parent's language use can potentially indicate to us to what extent they communicate as an empowered individual, as well as identifying their service needs, concerns and

expectations. Such profiles are by no means exhaustive, or conclusive; we must continually be renewing our expectations that are borne from such models as more information becomes available. But in the development of useable models we can provide an informed knowledge base for providers of service to better understand their patients. Dromi and Ingber (1999) have demonstrated one way in which the elicitation of parental views has been used to inform the providers of services about the kinds of people they provide for, how data has been utilised in a developmental way to inform transferable research.

4.2 MEASURING EMPOWERMENT

In search of a means of measuring empowerment I have outlined the ways in which a small number of quantitative scales have been developed and the ways in which researchers have strived to characterise the parental experience of childhood deafness. The methods of analysis explored have been found to consist either of questionnaire surveys or of semi-structured interviews and rarely are qualitative and quantitative measures used in a complementary way. This researcher views the use of questionnaires as contradictory to the model of empowerment, in that it places a number of restrictions on the way in which the participant can shape and represent their own experience through the use of Likert-type scales and in presupposing definitions of 'support', 'resiliency', 'satisfaction' etc. Though such terms are useful in providing a universal theoretical understanding of such processes and outcomes, in order to foster empowerment within the

participant we must permit them to introduce, define and use terms in ways in which they understand and that such definitions can be negotiated with the researcher in dialogue. In the empowerment model we have a theoretical foundation for finding evidence for concepts such as 'face' and 'stance' in specific language features and as such, we are able to generalise the disparate ways in which expressions of stance might manifest under the conceptual framework of 'stance'. By allowing such concepts to emerge in the data, rather than introduce them to the participant, there is a greater freedom for the participant to introduce their expectations, responses, opinions around such concepts and subsequently a greater potential to discover the ways in which aspects such as 'support' relate to the broader family dynamic.

Questionnaires have also been shown to be limited in representing the parental experience longitudinally, or lacking the sensitivity to represent change at different intervals. This work posited 'change' at the centre of our inquiry into empowerment and as such, required a method of analysis which could track change over a number of intervals. This change is also in relation to the participant's perspective and so was predominantly found in the participant's verbalisations. As such, the data was elicited in conversation in order to allow the participant the opportunity to freely and honestly express themselves. Across a number of sessions at different intervals I tracked change in the participant's perspective through their conversational utterances. If we are to understand empowerment as a process we must be conscious of

the 'trajectory' of the family, of the journey they have already experienced and which has determined not only their level of empowerment but also their perception of it. We must be able to compare outcomes uniformly at various stages throughout that journey. We must, therefore, develop a model that can determine the levels of support already in operation and the work that has already gone on within that family in order to come to terms with the diagnosis of hearing impairment if we are to accurately monitor real improvement. Thus we rely on the participants to tell us about such things but they must also be free to determine how to express them in order to understand their preoccupations, as opposed to foregrounding our preconceived idea of the 'parental experience'.

The research has shown how researchers have analysed semi-structured interviews through thematic analysis. By extracting the key themes from what is typically vast and rich data, researchers can begin to associate themes across cases and develop recurring concepts into an applicable measure. Thematic analysis can be used to represent a 'conversation' by classifying the discourse into codes, which can then be displayed visually if appropriate. Using principles of conversation and discourse analysis we can make informed interpretations of an individual's sense of agency, locus of control and overall stance using specific language components.

Slade *et al.* (2008: 290-1) demonstrate what can be understood from the use of language in their exploration of 'emergency communication', the discourse collected in the emergency department of a teaching hospital in Sydney:

> Our further analysis of process types collocated with either 'I' (patient referring to self), or 'you' (doctor referring to patient), indicates that the patients construed their illnesses using predominantly mental process, suggesting they were concerned with how they were thinking and feeling whereas clinicians used predominantly material processes and were thus concerned primarily with external goings on in the world. Thus, if the patient was concerned with internal goings on in relation to his or her medical condition and the doctor responded using material processes, then there was a potential mismatch of meanings.

With a concept map of empowerment founded on theories of discourse analysis I approached the conversational data knowing that within the service users' contributions to the dialogue there was potential for evidence of the levels of agency and sense of self-efficacy. By mapping changes in conversational utterances over time I aimed to determine to what extent any transformation could be seen as indicative of 'empowerment'. To ascertain this, data of the patient's encounters with the healthcare services must be collected longitudinally, over the course of a treatment of care or, in this instance, through the delivery of an intervention over time. In this way, we can find not only how service users become empowered but also determine if the delivery of the

intervention in itself is successful in fostering empowerment. To develop

the practice of coding and thematic analysis we can incorporate

methods of corpus analysis, introducing a systematic level of rigour as

the level of selectivity on the part of the researcher is removed and

instead, a computational system uses frequency and log-likelihood

calculations to draw out the key themes in the data. This work used

such a process, which is explored further below.

The pursuit of 'measurement' and 'evidence' encourages us to impose

limits and boundaries on the participant experience, to view the

completion of the intervention as an 'endpoint' which we can contrast to

the beginning and attempt to localise the effect of the intervention to

this period of time. In truth, the ways in which the intervention impacts

upon the family might not be fully realised in this time, and it is a

limitation of the empirical paradigm to base our understanding of the

process and impact of any health service intervention on the

observable change manifest in this period of time. This researcher does

not suggest that we no longer search for evidence in this way, but

rather that we recognise that such insights afforded by the observation

of change in a limited number of dimensions and in a fixed period of

time will only be able to tell us so much. Furthermore, this research has

privileged the spoken utterances of the participants as a site of

evidence that is understood to provide the greatest insights into the

personal and intersubjective experiences of the intervention. The

impact of the intervention itself is something which has eluded measure

but captured attention (see below). In my own observations of the delivery of the intervention, I would testify to the tangible effect the video work has on the family dynamic, yet the relationship between the video and the parents' levels of confidence remains unclear.

4.3 INTERVENTIONS FOR FAMILIES OF DEAF CHILDREN

The literature review was conducted with the purpose of analysing the ways in which researchers have sought to measure the impact of various interventions on the parental experience of childhood deafness. Through the review, we can also observe what interventions are offered for families of deaf children. I have already described how in the U.K., following UNHS and diagnosis the family of a hearing impaired child is supported by an audiological team, speech and language therapist, a teacher of the deaf and is offered technological interventions in the way of hearing aids and – if suitable – cochlear implants. The provision of UNHS has meant earlier identification of hearing loss, earlier entry into intervention programs and subsequently, longer duration of such services. Other developments in the delivery of interventions can be characterised by a more family-oriented intervention strategy and an emphasis on parent-child communication (Calderon *et al.*, 1998: 348).

An 'intervention' can be as straightforward as supplying knowledge and supporting communication (Minchom *et al.*, 2003: 104) and can be inclusive of the wider family group. More often however, interventions are more complex and are built around a communicative principle which

is realised in support groups or behaviour instruction. For example, the Early Childhood Home Instruction (ECHI) early intervention program (Thompson, 1994):

> emphasizes the child's language and communication development using auditory and speech training and manual communication within a family, home-based intervention model. ECHI utilizes a total communication approach with Signing Exact English as the manual mode of communication. The intervention program also makes available a parent support group and a center-based play group to promote language development in a play environment and interaction among the deaf toddlers. (Calderon *et al.*, 1998: 349).

Auditory Verbal Therapy (AVT) is a programme which aims at achieving age-appropriate spoken language ability and full social participation. It is:

> an individualized intervention program in which the parent is trained in specific techniques to help the child develop language primarily through maximal use of residual hearing. The teacher and parent work closely alongside each other for short intensive sessions with the expectation that the parent will implement the program in the home environment. In using this intensive approach, therapists and teachers of the deaf attempt to establish positive attitudes and high expectations in parents (Wu and Brown, 2004: 6).

In both of these cases, the directive is about adjusting behaviours in order to improve communication, which is advised by the health professionals. Similarly, the Webster-Stratton programme

> is based on well-established principles that describe how behaviours are learnt and how they may be changed. It consists of 12 sessions, each of 2 hours duration, and is designed to strengthen parenting skills and to give parents peer support. The aim is to enable parents to enjoy their children and to develop a more positive and confident parenting style. The programme uses the analogy of a pyramid, in which the foundations (play, reward, praise) require establishing and consolidating before the higher task levels and approaches can be worked on. The programme uses videotapes including clips of parents and their children interacting, psychoeducational handouts and role-plays (Garcia and Turk, 2007:127).

The Webster-Stratton programme carries a focus on decreasing behavioural problems and has been applied in the context of hearing impaired children who also present with autism and other emotional and behavioural problems (Garcia and Turk, 2007).

It is another intervention programme where researchers offer guidance on behaviours intended to improve communication. However, in the empowerment model the emphasis is not on giving advice and prescribing behaviours. If we are to recognise that each family has its own strengths we can use the intervention to uncover those strengths

and use them as a foundation from which the family can build. The Webster-Stratton programme uses video recordings to enable the family to look at themselves and examine their own behaviours in relation to the principles of the intervention. Video is a powerful tool in which families are afforded the opportunity to gain a perspective on their unique family dynamic, to learn about how it operates and what strengths are already existent. Video is a tool which promotes reflexivity, for families and for practitioners.

4.4 VIDEO WORK AND CRITICAL REFLEXIVITY

Video technology has been utilised by researchers who have strived to capture the 'reality' of complex situations and environments such as hospital wards in order to objectively observe dynamic interactions. Video ethnography is an approach which includes extensive observation, encourages critical reflection from the participants, promotes practitioner-led change and contributes to an on-going critical appraisal of practice. The Centre for Health Communication (CHC) at the University of Technology, Sydney (UTS) used a video-ethnographic approach to look into the quality of safe care practices, reporting on two case studies from a spinal clinic and an intensive care unit (Iedema and Carroll, 2010). Clinicians were given the opportunity to review video footage of the day-to-day operations of their unit. Reflecting on the video element, the authors report: "Engaging with ourselves through moving vision therefore harbours the possibility of transformation; an effect that we will describe as the emergence of 'a new structure of

attention'" (Iedema and Carroll, 2010: 70; Thrift, 2004). For clinicians, this meant "acknowledging that there are patient safety risks that may not be visible to them when they are 'in the thick of things', caught up in the 'hurly-burly' of everyday practice" (Iedema and Carroll, 2010: 76). This shows that there is new knowledge to be gained not only from being able to observe actions that are not accessible to the participants in the moment but also to externally see ourselves in a way more akin to the ways in which others see us.

As Carroll *et al.* (2008: 383) assert, "It is recognized that video-based feedback can assist clinicians in tapping into visual and auditory patient cues that are not available through text-based learning." This process also redefined the 'meaning' of these encounters, which would change with every (re-)viewing in a "continuous process of interpretation and reinvention" (Carroll *et al.,* 2008: 388). 'Meaning' was founded on how the clinician related the video data to their current situation but also how the researcher and clinician/parent negotiated meaning in the review of the video. The importance of this relationship is explored below.

As part of their video-ethnographic approach Iedema and Carroll refer to a 'trustful entanglement' (Iedema and Carroll, 2010) between researchers and clinicians as researchers engage with the complex situations of the health care environment. As researchers, we rely on the contextual knowledge of the clinician/parent to create meaning not only of the occurrences of the video data but also of the outcomes in

terms of what we strive to achieve through the process. Of course there are often others involved in the dynamic and between them, clinicians and family members alike can reflect on each other's actions. To explore the current practices of the clinical setting

> video-ethnographic research enables clinicians to work in productive partnerships providing them with a basis for articulating and thereby rendering negotiable knowledge and practices that clinicians might otherwise take as given (Carroll *et al.*, 2008: 386).

We are asked to think about our habits, our 'taken as given' behaviours and our core assumptions for doing so in order to explain our interactions and expose potential for change. This of course is a crucial step in the transformative learning process so the video review process has the potential to offer significant learning for those involved and in this way can be empowering. As both researcher and participant enter in to the video review discussion with their own ideas and level of expertise there is knowledge to be gained by both in the collaborative re-negotiation of meaning.

In order to understand the reality of health care practices we must embrace the *in situ* complexities, rather than "than reduce it to abstracted models or simplified case studies" (Carroll *et al.*, 2008: 381). The ability to play and replay, view and review the video data allows us to be reflexive practitioners of health care and research, and provides tangible evidence for our assertions, which can be made with greater

confidence having 'real life' examples to draw on. If we are looking to understand or change existing behaviours we must begin with what is already occurring and for the participants to enact change relies on them "being confronted with video footage that does not edit out the complexity" inherent in their lives (Carroll *et al.*, 2008: 387).

The format of video-recording and reviewing facilitates a reflexive-iterative approach where although the video is taken following the exploration of a goal for change or the implementation of a directive, what emerges from the video is unforeseen and our understanding of it is subject to the interpretations offered and negotiated in the conversation. In other words, the video offers a 'site of engagement' "where researcher and research participant partake in the co-construction of discourse as a dynamically emerging practical reality" (Iedema and Carroll, 2010: 73). Video paradoxically allows a 'depersonalization' for learners who are able to observe themselves externally in a social environment, while at the same time 'personalization' in that they can relate to the context and the actions they see in front of them. In this sense they have the freedom to assume a critical persona, but one that is privy to a greater insight into the events of the video as both an actor and an agent within it.

4.5 VIDEO INTERACTION GUIDANCE (VIG)

This work was conducted to explore the delivery of a video-based intervention known as Video Interaction Guidance (VIG). A description

of the intervention is given by Rusconi-Serpa *et al.* (2009: 738), who explain that:

> The intervention uses video feedback of caregiver-children interactions to increase caregiver sensitivity and appropriate responsiveness to the child's signals, to increase their ability to reflect their own and the child's behaviours, thoughts, and feelings regarding attachment-caregiving interactions, and to reflect on experiences in their own histories that affect their current caregiving patterns.

The intervention is characterised by the use of video, which is analysed at a micro-level with the aim of raising awareness of the behaviours and actions that contribute to successful communication. This work was built around the understanding that parental sensitivity underpins the quality of parent-child interactions and has a significant impact on the child's development (Crittenden and Bonvillian, 1984). However, previous research has reported only on child or parent outcomes separately. Trevarthen (1979) studied the subtle ways in which the infant follows and responds to the parent in a 'communicative dance', distinguishing between primary intersubjectivity – such as a face-to-face interaction between parent and child – and secondary intersubjectivity, which is based on a joint focus. It is this secondary subjectivity which allows for 'scaffolding' (Wood *et al.*, 1976), whereby the parents' knowledge of the world is mediated to the child by recognising their 'zone of proximal development' (Vygotsky, 1962[1934]), or rather, in responding in ways in which the child can understand. Similarly, as a

104

process of the intervention, the guide's 'better' knowledge of attunement is mediated to the participant and this must be made relatable to the participant's experience. In the parent-child dyad the parent gives meaning to the child's contribution to the interaction by offering an attuned response, validating the child's role in the 'conversation'. This is much like the turn-taking structure acknowledged in conversation analysis. Video Interaction Guidance is designed to promote scaffolding and encourage this attuned response pattern. This however, is seen as a particular challenge where there are communicative difficulties, as with pre-lingual children but also in the presence of autism, or in the case of this study, hearing impairment.

'Contact principles'

All parents must be attuned to non-verbal communicative cues and in order to help the participants consider what constitutes attuned behaviour in interaction, a series of 'contact principles' are provided (see Table 1). It is these principles which instruct the guide in selecting video clips through which to demonstrate to the parents how their interactions are 'successful' and to show the strengths that are already in place in the interactions between the parent and child. But it is also worth pointing out at this point how the communicative principles that are outlined here relate to fostering empowerment in the clinical encounter. 'Attunement' emphasises 'collaboration', giving the other the opportunity to use their voice, using the other's words/phrases and investigating the intentions behind words (epistemic authority), suggesting that such principles can be transferred to other kinds of

Table 1 'Contact principles' of attuned interaction (Kennedy *et al.*, 2011)

Being attentive	- Looking interested with friendly posture - Giving time and space for the other - Wondering about what the other is doing, thinking, or feeling - Enjoying watching the other
Encouraging initiatives	- Waiting - Listening actively - Showing emotional warmth through intonation - Naming positively what you see, think or feel - Using friendly and/or playful intonation as appropriate - Saying what you are doing - Looking for initiatives
Receiving initiatives	- Showing you have heard, noticed the other's initiative - Receiving with body language - Being friendly and/or playful as appropriate - Returning eye contact, smiling, nodding in response - Receiving what the other is saying or doing with words - Repeating/using the other's words or phrases
Developing attuned interactions	- Receiving and then responding - Checking the other is understanding you - Waiting attentively for your turn - Having fun - Giving a second (and further) turn on the same topic - Giving and taking short turns - Contributing to interaction/activity equally - Cooperating – helping each other
Guiding	- Scaffolding - Extending, building on the other's response - Judging the amount of support required and adjusting - Giving information when needed - Providing help when needed - Offering choices that the other can understand - Making suggestions that the other can follow
Deepening discussion	- Supporting goal-setting - Sharing viewpoints - Collaborative discussion and problem-solving - Naming difference of opinion - Investigating the intentions behind words - Naming contradictions/conflicts (real or potential) - Reaching new shared understandings

		- Managing conflict (back to being attentive and receiving initiatives with the aim of restoring attuned interactions)

health service encounters which look to foster empowerment.

With this emphasis on intersubjectivity and attunement we can refer to the comparable theory of 'interactional competence' (Kramsch, 1986). In the context of the classroom and for second language learners, Walsh (2011) has emphasised the importance of evaluating an individual's communicative competence in the interactional domain, beyond ideas of fluency and accuracy to contextual and interpersonal cues. In this way, communication is viewed not only in terms of individual meaning but as shared understanding. Interactional competence relies upon more than verbal cues and an understanding of the signifiers upon which we shape our responses can offer insights into the ways in which individual agencies are mediated in interaction with one another. In this way, the principles of interactional competence are comparable to the contact principles of the intervention. In the delivery of the intervention it is shown how an awareness for such features of communication can better inform those who face communicative challenges – be it the parent of a hearing impaired child or a second language learner – of the aspects of their own communicative behaviours which generate successful interaction.

Applications of Video Interaction Guidance

The intervention itself is concerned with raising awareness of the principles of communication that contribute to successful interactions and has been applied in contexts of social care where there are communicative or attachment difficulties (for a meta-analysis see Fukkink, 2008). It has been associated with measures of maternal sensitivity (Doughty, 2007; see Rusconi-Serpa *et al.*, 2009) as well as perspective transformation, but without real evidence of its effect in terms of outcome measures. The project within which this work was conducted was in part designed to generate an evidence base for the effect of VIG on the parent-child dyad, predicting that maternal sensitivity and contingent behaviours in the mother would have an impact on the vocal development of the child.

As an intervention, VIG originates from the Video Home Training (VHT) model developed in the Netherlands (Biemans, 1990) and the evidence base for the intervention comes primarily from meta-analyses (Fukkink, 2008) and randomized control trials (Juffer *et al.*, 1997). In the U.K. VIG has been applied in the contexts of schools and in health and social care in small scale evaluations (such as Robertson and Kennedy, 2009. See Kennedy *et al.*, 2011). Fukkink and Tavecchio (2010: 1652), for example, found that:

> The teachers who had received Video Interaction Guidance were
> more sensitive and more verbally stimulating than teachers from

the control group. The training results were still apparent three months after training.

What these studies demonstrate is increasing evidence for the effectiveness of VIG in enhancing maternal sensitivity, reducing parental stress and improving the child's behaviour and cognitive functioning in the context of parent-child relationships. This however, is generally conducted as a pre-/post-test model and as such is limited in what it can tell us about the causal effects of the intervention. Nevertheless, VIG was specifically identified amongst the NICE guidelines (October 2012) as an intervention to support social and emotional wellbeing in young children and their families.

Video-based interventions

Similar interventions have been applied to explore the parent-child interaction and supported through video, such as Video Feedback Intervention to promote Positive Parenting (VIPP: see Juffer *et al.*, 2008); Interaction Guidance (IG) (McDonough, 2000; 2004); and the Marte Meo Approach (Vik and Braten, 2009). McDonough (2000) is described as taking a

> nonauthoritative therapeutic stance, using treatment goals identified by parents, emphasizing already-existing strengths, increasing parents' satisfaction and enjoyment from interaction with their infants, and suggesting alternative interpretations of the infants' behaviour (Vik and Braten, 2009: 290)

and Interaction Guidance is said to be "quite similar" to the Marte Meo approach. McDonough (2004: 95) observes that

By emphasizing family strengths and empowerment as overarching constructs and employing video feedback to facilitate development-promoting relationships, IG has proven to be a valuable adjunct to the treatment of early relationship problems.

In the Marte Meo approach, the emphasis is on considering the infant's agency and point of view. Vik and Braten (2009) explore its application in the context of postpartum depressed mothers. They describe the five aspects deemed pertinent to the overall effect on the mother's inwardly-focused depressed state: inviting transcendence of her self-centred state; causing an increased degree of sensitivity to her baby's state; raising her self-esteem and confidence in her further interactions with her baby; (re)activating her capacity for protoconversation with her baby; and contributing to alterations in her bodily ways of relating to and holding her baby (Vik and Braten, 2009: 291). Each of these approaches uses video and a strength-based model to raise awareness of interactional behaviours in the communicative dyad. What distinguishes VIPP from VIG is that the review sessions are more structured. In VIG, the focus of the review sessions is parent-led, beginning in the first instance with the parent identifying the 'goal for change'. Conversely, IG was shown to be too problem focused and less effective for developing transferrable interaction skills and improving general child behaviour (Benoit *et al.*, 2001).

Video Interaction Guidance training

In the U.K. VIG intervention guides undergo a number of phases of training in order to become professionally recognised. An initial two-day training course is followed by three phases of training which consist of 25 hours of individual supervision over the course of 18 months, plus 3 accreditation days. The training is founded on the same principles internal to the delivery of the intervention, emphasising intersubjectivity and critical reflection. Given the fundamental principle of intersubjectivity, no two training experiences are the same and it is difficult to outline specifically what is involved. Kennedy *et al.* (2011: 48) describe the training as including:

- Forming effective (therapeutic) relationships.

- Understanding (and actively using) the principles of attuned interaction.

- Training in the 'positive' eye, i.e. looking at things that work (well enough) instead of focusing on dysfunctions and problems.

- Analysing videotapes (at a micro-level of interaction).

- Developing the skills of editing video and selecting meaningful clips (as well as using the camera in a helpful way, e.g. focusing on positive moments of interaction).

- Having effective conversations including the use of video clips and providing positive feedback.

- Dealing with boundaries and ethical issues as well as with the supervisee's own feelings, for example, fear and inadequacy.

In many ways, the supervisory relationship of the training process serves as a model for the relationship-building of the delivery of the intervention. The trainee is encouraged to become a collaborative explorer into the 'reality' of the video clips, negotiating with the participant what meaning the video has in the world of the parent. The intervention guide must be continually reflexive of their own practice, particularly given the emphasis on intersubjectivity and the patient-centred model.

4.6 THE CONTEXT OF THIS WORK: AN EXPLORATORY STUDY OF THE RELATIONSHIP BETWEEN DEAF CHILDREN AND THEIR PARENTS

This work was conducted at the National Institute for Health Research (NIHR) Nottingham Hearing Biomedical Research Unit (NHBRU). The NHBRU is a partnership between the University of Nottingham, Nottingham University Hospitals NHS Trust and the Medical Research Council Institute of Hearing Research (MRC IHR). It also has close links with Audiology and ENT services and with national charities supporting people with hearing-related problems and tinnitus. It was established to pursue research through multidisciplinary collaboration, with a particular emphasis on translating research outcomes into practical benefits to improve the quality of patients' lives. With a focus on patient benefit, researchers at the NHBRU are motivated to provide understanding and evidence of the effect of technological and procedural innovations that can be delivered within the National Health Services. Work conducted

at the unit must take into consideration not only what scientific

discoveries can be implemented into routine services for the hearing

impaired, but also the health-economic consequences of those findings,

in providing the most efficient and effective services. In this way,

interventions must be assessed in relation to the existing routine

services, not only in terms of what would offer the best support for

those with hearing loss, but also what can be implemented within the

current system in order to provide the most benefit.

The Child and Family team constituted one of the core research teams

at the NHBRU and conducted research under the principle of 'building

relationships to enable the child to flourish'. This research aim was built

around an 'equity of care' model, striving to make available the services

that are required by all members of society to meet their healthcare

needs. As has been described above, for young infants diagnosed with

hearing loss the benefits afforded by technological interventions in the

way of hearing aids and cochlear implants is variable. Accepting this

variability and with the impetus of identifying the aspects of the delivery

of care for families of children with hearing loss which were amenable

to change, the Child and Family team directed the focus of their work

back towards the family unit itself. The most critical stage of care for

families of deaf children was perceived to be that 'sensitive period'

following diagnosis where the child's language development is shown

to benefit from early intervention (Ruben, 1997; Blamey, 2003;

Eisenberg, 2007; Moeller *et al.*, 2007; Holzinger *et al.*, 2011; Pimperton

and Kennedy, 2012). This period was also believed to be of great importance to parents, who might be 'disempowered' by the 'waiting time' for an intervention such as a cochlear implant. The Child and Family project was designed to better understand the effects of the parents' interaction with their children in supporting early speech development. It was built on the basic proposition that parental sensitivity to the child's behaviour is critical for the child's speech development. The researchers tested the patterned responses from the parents to the child's earliest speech-like behaviour and explored the impact of the parental contingency on the child's early speech skills. The empirical test of 'parental contingency' was located in the interaction and analysed using computerised methods of pattern extraction to look at the relationship of behaviours between parent and child.

Hypotheses

The project was driven by the following hypotheses:

- Maternal sensitivity and the associated contingent behaviour in the mother will have an impact on the vocal development of the child.

- Maternal sensitivity and the associated contingent behaviour in the mother will have an impact on the sociocognitive development of the child.

- The intervention Video Interaction Guidance will enhance maternal sensitivity and self-esteem in the parents.

- Video Interaction Guidance enhances maternal self-esteem in parents because it actively engages parents in the intervention.

This was an opportunity to test the impact of the intervention using published measures (see below), behavioural coding and the language-based analysis outlined here. The Child and Family project focused on the early oral/vocal development of the (deaf) children; the children's vocal contributions (described in terms of duration, pitch, syllabic elements and intra-syllabic elements); the parents' response to those vocal contributions (imitation of duration, pitch, syllable structure and segments) and the impact of the parents' response to the subsequent vocalisations of the child. It would test the proposition that parental responsiveness is causally related to the early development of oral/vocal imitation in children who are deaf/Deaf/hard-of-hearing.

Study design

This was an exploratory study which used a mixed methods randomised controlled design to investigate the impact of maternal sensitivity on early vocal development in infants who have a significant hearing loss. The study was longitudinal in nature with single case analyses. The VIG intervention was considered to be a tool to test the proposition that maternal sensitivity is a critical determinant of early vocal behaviour and development of the child. In order to look at development in adaptive systems such as the family unit and the mother/child dyad, the researchers wanted to be able to place the family and mother/child dyad in a situation where they were allowed – and indeed supported – to change and adapt in a positive way. The

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study examined the child/family's adaptation to the parent/child intervention and tested the child's development on cognition, emotion and behaviour and early speech skills in single cases in a pre-post intervention design along with investigating between group differences.

The time course of the study and its related follow-up assessments inevitably meant that the study would run alongside a number of transitions related to the child's hearing impairment (assessment and service provision, for example cochlear implantation service). The researchers acknowledged that they could not attempt to control for these changes within the family. The degree of variability in the timing of the VIG intervention alongside the timing of other interventions (such as implantation, change of early years' service provision, onset of speech and language therapy) could not be avoided. The two defining variables therefore were: 1) all the children in the study had significant hearing impairment; and 2) all the children in the study were at a pre-linguistic stage of language development. 'Pre-linguistic' was defined as having fewer than 20 words in their expressive vocabulary (speech and/or sign). The factors that varied between families were used as factors that provided maximal variation for this study design.

The strengths of the methodology were: a) scientific hypothesis underpinned the design of the assessment battery and the experimental measures; b) the within subject condition provided a robust aspect to the single case methodology; c) diversity between

cases simulated the 'real world' conditions in public healthcare service provision which meant that the study provided a good basis for future clinical trials.

Participants

Participants volunteered for the intervention based on information about the study that had been disseminated through speech and language therapists and publicly advertised. The intention was that the intervention would serve to supplement existing routine services for families of children with hearing loss. A short film outlining the process of the intervention and the research aims was made available as a DVD. Families were recruited from Specialist Speech and Language Therapy (Primary Care) for children with hearing impairment on a first come, first recruit basis. The principles of maximum inclusion and maximal variation were applied. A 'primary' parent (usually the mother) was identified as the individual who would be present throughout the intervention, with the attendance of another parent or any other family member being voluntary. This was also due to the parents' availability. All of the parents recruited were hearing with congenitally deaf pre-lingual children. Participants were asked to contact the Child and Family team at the NIHR Nottingham Hearing Biomedical Research Unit to register their interest. Informed, signed consent was obtained from the parent prior to starting the study. The study was reviewed and approved by the Derbyshire Research Ethics Committee and Nottingham University Hospitals NHS Trust Research and Development department. In total, 16 families received the full intervention between

June 2010 and March 2012. A breakdown of the child and parent

information is presented in Table 2.

Table 2 Participant profiles

Case	'Lead' parent	Sex (child)	Age (1st visit)	Hearing Loss	English 1st Language	Aid status
A10102	Mother	Female	1.11	Profound	Yes	Bilateral CI
A10103	Mother	Male	6.10	Profound	Yes	Unilateral (R) CI
A10104	Mother	Female	0.06	R:Mild/Mod L: Severe	Yes	Bilateral HA
A10105	Mother	Male	3.10	Profound	Yes	Bilateral CI
A10106	Mother	Male	0.09	Profound	Yes	Bilateral HA
A10107	Mother	Male	0.06	Profound	Yes	Bilateral HA
A10108	Mother	Male	1.08	Profound	Yes	Bilateral HA
A10109	Mother	Male	1.04	Profound	Yes	Bilateral CI
A10110	Father	Male	1.05	Moderate	Yes	Bilateral HA
A10111	Mother	Male	2.08	Profound	Yes	Bilateral CI
A10112	Mother	Female	2.11	Profound	Yes	Bilateral CI
A10113	Mother	Female	2.01	Profound	Yes	Bilateral HA
A10114	Mother	Male	3.01	Profound	No (Latvian)	Unilateral (R) CI
A10115	Mother	Male	6.02	Profound	Yes	Bilateral HA
A10116	Mother	Male	4.06	Profound	Yes	Bilateral CI
A10117	Mother	Female	4.07	Profound	Yes	Bilateral CI

The age of the children involved was quite variable, ranging from six

months (A10104, A10107) to six years and ten months old (A10103).

This range in terms of age and language acquisition can largely be

explained by the presence of additional needs. It is estimated that 40%

of children with hearing loss have some extra health, social or educational need (National Deaf Children's Society, 2012). In six cases the families involved in the study reported additional needs for their child which included: learning difficulties (A10103); motor delays, visual impairment, global development delay (GDD) (A10105); congenital cytomegalovirus (CMV) infection, severe developmental delay and vision problems (A10108); no peripheral vision (A10113); autism spectrum disorder (A10115); and hyperactivity with suspected Usher syndrome (A10116). In four of the cases the 'lead' parent was a single parent. In 12 cases a sibling or additional parent was involved in the video review process and in three cases an additional family member was involved. In four cases a school teacher or speech language therapist was involved in a video review session. These facts alone conveyed the heterogeneity of the 'family dynamic' and support network present in each case, as well as the individual competencies and needs of the child. This reiterated the need for a case-study approach as well as the necessity of a conceptual model that was inclusive of the unique aspects of the family dynamic. Furthermore, this validates a methodology which aims to provide outcomes in relation to the individual strengths and needs of each family, not despite them.

CHAPTER 5: METHODS

5.1 ASSESSING THE IMPACT OF THE VIG INTERVENTION

In addition to the standardised format of the VIG intervention, participants were asked to attend assessment sessions at the NHBRU site in Ropewalk House. There were up to four 'assessment sessions': two before the intervention, one shortly after the intervention period, and one further assessment sessions 6 months later. Each assessment session lasted no longer than two hours. During the assessment sessions the parents gave short narrative interviews on their family and family experiences, and played with their baby/toddler. This informal play was used by the research team to assess aspects of child development (cognition, vocal behaviour and social emotional development) and maternal sensitivity. The 'intervention period' spanned over 8-10 weeks and comprised of the initial goal-setting session, the video recording and shared review sessions. All assessment, treatment and feedback sessions were videotaped for later analysis.

While the 'assessment sessions' took place at the Nottingham Hearing Biomedical Research Unit the 'intervention sessions' generally took place in the family's home. It was often difficult for families with young children to come to the lab for the full number of sessions and therefore

offering the option of home visits might be necessary for the delivery of the intervention.

Outcome measures for the Child and Family study: children

Assessment of the child's cognitive, socio-emotional and vocal development was done using the Mullen Scales of Early Learning (Mullen, 1995), the Vineland social emotional early childhood scales (Sparrow, 1998), video and speech acoustic analysis and qualitative analysis. The Mullen Scales of Early Learning (Mullen, 1995) are a standardised and reliable measure of overall development. They can be administered on children between the ages of 0-68 months and takes about 15-30 minutes to complete. It consists of five scales which provide a complete picture of cognitive and motor ability: Gross Motor, Visual Reception, Fine Motor, Expressive Language, and Receptive Language. Vineland social emotional early childhood scales (Sparrow, 1998) is a three scale standardised and reliable measure of social emotional development for children. The three scales are Interpersonal Relationships, Play and Leisure Time and Coping Skills. It gives the Social Emotional Composite in children from birth to 5:11 years. It pinpoints strengths and developments needed for the child and can be used to monitor progress. Data is collected through an interview with the parent or caregiver. Administration time is 15-25 minutes. Vineland can be used alone or in conjunction with the Mullen Scales of Early Learning for a more complete assessment of a young child's development.

The child's vocal development was recorded with audio-visual recording equipment and assessed using a pre-existing framework for the analysis of early vocal development (Oller, 2000). This framework for analysis has been used with children with hearing impairment and the analysis from this framework is sensitive to change, associated with the child's subsequent speech and language development (Walker and Bass-Ringdahl, 2008). In order to assess the child's cues to maternal contingency the researchers prepared a coding system for the cues from the child that included eye-gaze (shift of eye-gaze towards the mother's face, duration of eye-gaze) imitation of oral/vocal/body movement and vocalisation. A framework of pre-verbal communication developed by Tait and her colleagues for use in children with cochlear implants (Tait *et al.*, 2007) was used to provide a benchmark for describing the child's pre-verbal communicative behaviour. This is a sensitive measure which has been shown to be associated with later development of speech in children with cochlear implants. The assessment analyses behaviours in four broad categories: turn taking, autonomy, eye contact and auditory awareness and processing.

Outcome measures for the Child and Family study: parents

Assessment measures for parents were: the Rosenberg Self-Esteem Scale; Emotional Availability scales; contingency analysis based on micro-analysis of video data; a qualitative inquiry conducted through semi-structured interviews; and a user evaluation of the intervention. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) is a validated and reliable self-report measure of global self-esteem. It consists of 10

statements related to overall feelings of self-worth or self-acceptance. The items are answered on a four-point scale which ranges from 'strongly agree to strongly disagree'. In a review of the impact of parenting interventions on maternal psychosocial health (Barlow *et al.,* 2009) the Rosenberg Self-Esteem Scale was found to be a measure that was sensitive to change following intervention. This was administered at the pre-intervention assessment and at the 6 month post-intervention assessment and offers a comparable measure to the empowerment model. Emotional availability of the parent was measured using the Emotional Availability Scales (Biringen *et al.*, 1993), which assesses the quality of behavioural relationship between parent and child and is used in the hearing loss context. The assessment used a 30 minute taped interaction between the mother and child which was rated at a later stage according to the constructs of emotional availability of the mother and the responsiveness of the child. The 30 minute recording used for the Emotional Availability Scales were also used for the analysis of contingent behaviour. The main tool utilised for this analysis is a software programme called 'Interact' (2008). Interact has pattern extraction software to identify frequency of sequences of behaviour between interactants. The software identifies significantly occurring sequences of behaviour. This provides robust statistical analysis of the presence of contingent data (Quera, Bakeman and Gnisci, 2007). Behavioural coding parameters were based on body movements, eye gaze, vocalisations and gestures.

In addition to the standard intervention sessions, pre- and post-interviews were conducted. These semi-structured interviews were designed to allow parents to describe their experience in relation to three aspects: the family; changes in the family; and their experiences with the health services. In the post-interview an additional question was added that asked parents to reflect on their experience of the intervention. These interviews were subject to thematic analysis but findings are not reported here.

The work reported here was integrated into the broader study described above and the analysis of the parental experience – structured within an empowerment model – was one of the outcome measures associated with the study. This generated a mixed methods assessment of the intervention and the specific benefits it offered a population of families of deaf children. The outcome measures were selected in order to provide an indication of the importance of the relational aspects of early communication on the child's speech and language development, as well as the effect of a raised awareness of attuned behaviours on generating more 'successful' patterns of behaviour. But it was anticipated that a greater awareness for the subtle behaviours that would generate good communication in the family would also instil in the parents a level of confidence in their own capacity to aid their child's development. It was this dimension which was conceptualised as an 'empowering' aspect of the intervention and which prompted the work outlined here. The effect of the intervention

on the parents and subsequently, on the wider family dynamic, was an aspect to which there was no evidence base, nor a real understanding of the ways in which the fundamental principles of the intervention around communication and relationships resonated with the family dynamic. The work reported here was conducted with the aim of exploring the effect of the intervention on the parents' perceptions of themselves and of the family dynamic, with the proposition that this change in perception could be seen to be 'empowering'. Though the project integrated measures of 'self-esteem' to be captured using a quantitative scale, it was always the intention that this empowerment dimension would be elicited using a language-based analysis and qualitative techniques. Given what little was known about this effect on the parents, it was felt that the analytical approach needed to be explorative and that the dimensions through which it might be measured had to be inclusive and flexible to what was generated in the data.

This researcher was not involved in the delivering the intervention, the semi-structured interviews or the methods of analysis beyond those detailed below in relation to the parents' experiences of the intervention. I did not meet the families in person, nor was I familiar with the hearing and educational levels of the children. My exposure to the participants was limited only to the video recorded review sessions and goal setting sessions, which constituted the 'intervention'. This was important to the methodology in which I had set out to provide a robust, replicable

method of analysis. In maintaining a personal distance to the participants, I privileged the data – in the form of the video – as the unit of analysis. I was interested only in what information and 'meaning' could be gained from the video data, operating on the understanding that the interviewer/intervention guide represented a privileged perspective in relation to the family, the participant and the context of the shared review session. The work was conducted with the fundamental aim of understanding what we could determine from video recordings of interactions and through analysis of the conversation, about empowerment.

5.2 DELIVERING THE VIG INTERVENTION

The VIG intervention process in this study began with the family identifying their own goal, once the communicative focus of the intervention was explained by the guide. The identification of the goal was parent-led but the guide also had to be aware of what was realistic and achievable within the confines of the intervention. To this end, the intervention guide encouraged the participants to be quite specific about their goals in relation to the day-to-day aspects of the family dynamic. They might ask which aspects of their day-to-day interaction they have most difficulty with, such as feeding times, or putting the child to bed. Allowing the parent to determine the goal for change ensured that the intervention would have real, applied outcomes for the family and that it would address their concerns. In identifying the goal for change the participant is asked to consider the limit of their

knowledge/meaning, to what Berger (2004) refers to as the 'growing edge' in a transformative learning framework. This can manifest as a specific discord or gap in the parents' knowledge, or as a curiosity into an aspect of the child's behaviour which may have developed over time. In each case, the goal for change and the subsequent focus of the video work represents the potential for a 'disorienting dilemma' and subsequently, a transformative learning process as it posits the participant at the 'growing edge'.

Once the parent had identified a specific goal for change associated with their communication with their child, this became the focus of a filmed play session, lasting 10-20 minutes. From this play session the interaction guide edited 3 clips of less than 20 seconds which exhibited 'successful' communication according to the contact principles formulated with the intervention. The clips can only be short in duration given the level of detail at which the participant and guide analyse the clips in order to expose the subtle behaviours which determine interaction. These clips were the basis of the subsequent 'shared review' session where the guide and parent reviewed and explored the content of the clips and collaboratively elicited meaning in relation to future interactions between the parent and child. There were two further filming and review sessions, amounting to 6 one hour visits over a period of over 8 weeks. The intervention was generally delivered in the home environment but also took place in external locations, such as (play)school or leisure environments. This work explored the

conversational data generated from the interactions between the parent and the guide from the goal-setting session through the three video review sessions.

In order for the parent to engage with the process and reject any didactic construct in which they are no more than 'receivers of information', the participant must be made to feel comfortable and confident enough that they can negotiate meaning with the researcher. The guide in this study had the opportunity to reflect on their own practices through the video recordings of the sessions, but also in the analysis that was being conducted as part of this work. The early findings and responses to the shared review sessions could be discussed by the guide and this researcher, with the view to building on practices which were shown to be effective in engaging the participant. In this way, the guide was continually reflecting on their own behaviour and its effect in delivering the aims of the intervention.

The intervention guide can begin to establish a collaborative approach through dialogue but the video allows the participants to view their own strengths. There is still, however, the possibility that the participant's negative perception of themselves will be reinforced by the video and furthermore, many people are made to feel uncomfortable in viewing themselves on video. Bilzsta *et al.* (2012: 255) observe that:

> while video feedback is effective in prompting women to evaluate
> and appreciate their relationship with the infant due to the unique

opportunity to observe their interactions, the intervention can actually reduce confidence in parenting skills initially and either introduce or reinforce existing perceptions that they are not good mothers.

Furthermore, "Papoušek observes that parents are often able to recognize the mechanisms of negative reciprocity, or the signs of over- or understimulation in their own responses" (Papoušek (1994) cited in Rusconi-Serpa *et al.*, 2009: 744). Work on the effectiveness of VIG describes a 'confrontation' relating to the concept of cognitive dissonance (Festinger, 1957) in which there is a discrepancy between the evidence of the video and the negative perception the individual holds of themselves. This relates to the 'disorienting dilemma' described in the transformative learning framework and requires that the learner resolve this discrepancy by critically reflecting on their assumptions. In cognitive dissonance theory, the resolution involves changing one's behaviour to achieve congruence between what is observed and what is perceived, which in a deficit model can be harmful as individuals striving for internal congruence forfeit positive behaviours. This reiterates the importance of the strength-based model but also the 'objective' representation of the video and presenting 'successful' communication in accordance with clearly defined contact principles. The guide must be able to select video clips which clearly demonstrate the principles outlined in the intervention in order for the participant to recognise the 'success', but must also recognise that this

process can be confrontational or disorienting and must not lose the participant to this uncomfortable mental state.

Beebe (2003) emphasises the therapist's role in the Marte Meo intervention model, stating that they must be sensitive to the parent by following their lead, taking a collaborative rather than a didactic approach, being aware of mental distress and sensitive to how long to watch the clips. This is a fundamental aspect in enabling the participant to feel that they are competent, that they are not being challenged by the researcher and that they can expand on this success with their contextual knowledge about the family dynamic. In this way, the participant has a 'mastery experience' and the video provides a model for future behaviour. It is a fundamental belief of the empowerment model that all individuals have existing strengths and the capacity to increase their self-efficacy, and that an emphasis on strengths rather than weaknesses will maximise the potential for empowerment (Dunst and Trivette, 1996).

The participants were involved in three video review sessions and were encouraged to invite additional family members, school teachers and health care providers to take part in the discussion around the video as they saw fit. Furthermore, the standard format for the delivery of the intervention was three review sessions, however given that the priority for the work is that the parents' goal for change is met, the possibility of

an additional (or fewer) review sessions was subject to discussion to be agreed between the family and the intervention guide.

5.3 ANALYSING THE INTERVENTION DATA

The model of empowerment was informed by a number of concepts derived from linguistics, such as stance, evidentiality, face and epistemic authority. As such the methods through which the data were explored also came from the field of language analysis. This is based on the idea that empowerment can be evidenced using linguistic approaches to the description of talk in interaction. In its broadest terms, applied linguistics is defined as, "The theoretical and empirical investigation of real-world problems in which language is a central issue" (Brumfit, 1995: 27). In this way, concepts of language use formed the principles by which I modelled the data, structured the methodology and found evidence in relation to the 'real-world' problems I looked to address. Having asserted that empowerment must be viewed as both a process and an outcome I have stipulated that I was interested in the observable change in the language behaviours of those who use the services and whether it was indicative of empowerment. In order to do this, we collected data longitudinally from individual families as they experienced each stage of the intervention, giving them the opportunity to voice their thoughts on those experiences.

In the shared review sessions the guide and participant(s) observed the clipped video data and co-constructed 'meaning' from the clips based

on what was observed and how it related more generally to the family

dynamic. This discussion is fundamental to the intervention process, as

it provides the parents with a site of evidence of the strengths which

already exist within their family dynamic. It also provides an opportunity

for both the participants and the guide to assimilate this information into

their wider understanding of the family dynamic through discussion. The

format of the intervention provided three shared review sessions and

this created a longitudinal basis through which, using discourse

analysis, I analysed their language behaviours at three separate points

in time. Discourse analysis is founded on the recognition of patterns in

the use of language and how these contribute to meaning. The task is

to discern which patterns can be seen to be idiolectal – that is, the

individual's own variety of language – or contextual, from those we can

attribute to the influence of the intervention. This will be explored further

below, with examples given from the data.

5.3.1 TRANSCRIPTION

The shared review sessions were video recorded and transcribed. The

practice of transcription varies with regard to the level of meaning one

wants to capture in the orthographical representation of the speech

data. This can range from a basic lexical representation of the words

spoken to a full representation of the phonological and intonational

features. Cheng and Lam (2012: 283) argue the importance of

> the intonational decisions that speakers have to make in real
>
> time interactions on a moment-to-moment basis, which reflect

the rich layers of pragmatic and situated meaning expressed in speech.

They also assert that rather than being associated with particular lexico-grammatical items, "the use of intonation is context sensitive and very much responsive to the communicative situation" (Cheng and Lam, 2012: 283). For the purposes of this work the 'meaning' derived from the data was largely at the level of the words themselves. However, I was also interested in the intonational features, where individual words or syllables were emphasised in volume, duration or pitch to provide some form of rhetoric or foregrounding. For example, I wanted to capture the difference between

i.   <u>He</u> wanted to see me   and

ii.   He wanted to see <u>me.</u>

In order to capture this in the transcription I opted to use a system derived from Jefferson (2004) which incorporated the notation listed in Table 3. This method of notation is also able to provide some representation of the interactional elements between speakers as turns are taken, be it without pausing where turns are 'latched'

Speaker#1   Then he said to me

Speaker#2   Yeah

Speaker#1   =that he wanted me to..

or if there is a period of silence in between:

Speaker#1   ..which I knew.

Speaker#2   Hmm.

(3.0)

Table 3 Transcription notation adapted from Jefferson (2004)

[ ]	Square brackets mark the start and end of overlapping speech.
↑↓	Vertical arrows mark a change in pitch of speech; ↓indicating a lower pitch, ↑ a higher pitch.
Underlining	Signals a vocal emphasis upon specific words.
CAPS	Indicate a distinct rise in volume of speech.
°Quiet °	Circular 'degree' symbols surround speech which is noticeably quieter.
(1.5)	Numbers in round brackets measures pauses in seconds, in this case: one and a half seconds.
(.)	A micro pause, discernible but too short to measure.
Dela::yed	Colons show degrees of elongation of the prior sound; the more colons, the more elongation. Measured by one per syllable length.
>>Fast<<	'Greater than' signals enclose speeded up talk. Double arrows can be used to signal rapid increase in speed.
<<Slow>>	'Lesser than' signals enclose slowed talk.
=continuous	Equal signs mark the immediate 'latching' of changed successive talk with no interval.
He – But then	Hyphen is used within a sentence marking the connection of successive talk with an interval (usually used when successive talk changes in structure and meaning but is also used when meaning stays the same).
Heh Ha ha	Voiced laughter is lexicalised.
S(h)o f(h)unny	Laughter within speech signalled by 'h's in brackets.
(?)	Unintelligible speech is indicated with a question mark in closed brackets.
hh.	Indicates inspiration.
.hh	Indicates expiration.
((cough))	Double parentheses contain transcriber's descriptions.

Speaker#1   But then I..

which is important in understanding the role of the guide in the session

in both allowing the participant to use their own voice, but also in co-

constructing meaning with them by offering their own thoughts.

It is the nature however, of spoken language that it is multimodal, that

spoken lexical items are often coupled with gestures and facial

expressions. Furthermore, in the context of hearing impairment we can

expect to see clearly defined sign language. For the purposes of

multimodal transcription there are software packages available, such as

the Digital Replay System (DRS) created by the Digital Record for e-

Social Science (DReSS) Project at the University of Nottingham (Knight

et al., 2010; Adolphs and Carter, 2013). Such concordance tools permit

the analyst to input transcript data alongside the video file and also

have a coding track indicating notable gestures and physical or facial

indicators synchronised with the data. Having completed the

transcription of such sessions myself, I found it sufficient to manually

transcribe the sessions using a word processor and that instances

where the overall 'meaning' of the lexical item is confounded by a

physical or facial gesture were minimal. Ultimately, the notation of the

data using the transcription symbols indicated above seemed sufficient

in capturing the meaning of the discourse from the shared review

sessions for the purposes of this research and the additional time spent

aligning the transcription and video data offered nothing more to the

analysis. As such, I elected not to employ a multimodal transcript concordance tool any further in the analysis or data management.

In the interest of time efficiency it is worth considering using a computer assisted speech transcription system when processing spoken data. Automatic Speech Recognition (ASR) systems are reported to achieve high accuracy (Revuelta-Martínez *et al.*, 2012) yet they still require some level of user feedback to achieve maximum accuracy. Based on my experience with early data from the study, the decision to manually transcribe the video data was based on the value of becoming immersed in the data, coupled with applying the chosen transcription orthography against the need to manually correct and standardise an automatic system. It is hoped that for the purposes of future research, ASR systems are sufficiently user-friendly and reliable for researchers to automatically store and process their interview data.

Transcription of any kind introduces a level of translation of the spoken data, in the first instance to a written form. As well as intonation and prosody, the spoken word carries features of accent and dialect, which can also transpire at the lexical level. In order to retain as much of the meaning behind the data as possible, the transcription was intended to be representative, however it became necessary to introduce a level of standardisation. This was not only for consistency but when using a corpus analysis tool, the software must be able to recognise the input. Informed by the transcription of the early shared review data, I

generated a glossary of common standardised notations, which can be found in Table 4.

Table 4 Glossary of standardised transcript notation

'cos	Standard form of clipped 'because'.
'em	The standard for the clipped version of 'them', esp. following a verb e.g. 'ask 'em'.
An'	Clipped version of 'and' e.g. 'read an' write'.
Tryin'a/Gonna	Verbs followed by prepositions are often spoken 'as one' and can be written as so.
O'	Clipped version of 'of' as in 'lots o''.
Dunno	Standard for amalgamated 'don't know'.
Y'know	Standard for amalgamated 'you know'.
You	All forms of 'you', whether sounded as 'ye', 'ya', 'yu', are written in full.
Sommot	Standard for contracted 'something' esp. 'sommot else'.
Owt/Nowt	Regionalised pronoun, 'anything/nothing'.
Erm/Erh	Standardised speech tokens denoting thought or speculation.
Mmm/ Uh huh/Mhm	Standardised speech tokens denoting agreement.
Ooh/Oh/Ah	Standardised speech tokens denoting surprise or wonder.
Eh?	Standardised interrogative speech token.
Okay	Standardised version written in full, not 'ok', ''kay'.
Ain't/Innit	Clipped version of 'Isn't it'.

The transcripts were generated and stored as Microsoft Word documents, including full transcript notation, line numbers and initialised speaker identification, e.g. GUIDE#. Before they were uploaded to the corpus analysis tool however, all of these notations were removed, each conversation was separated by speaker and uploaded as an individual file. Thus, I created separate files for each speaker in each session in order to process the specific contributions of each participant and to track the changes relating to each speaker across the three sessions.

5.3.2 CORPUS ANALYSIS SOFTWARE

From each case study there were transcribed conversational data from three shared review sessions of 30-60 minutes each, ranging from at least two interlocutors to as many as was preferred by the parent. This means that each parent who experienced the full intervention will have data from three shared review points. What this data essentially constituted was a 'corpus' (a body) of conversational data obtained from a specific context of families involved in the delivery of an intervention. Given the inevitable size of the data I elected to use one of a number of corpus analysis software programmes designed to systematically analyse large sets of language data.

The corpus analysis tool I elected to use is called WMatrix3 (http://ucrel.lancs.ac.uk/wmatrix3.html) and was developed at the University Centre for Computer Corpus Research on Language

(UCREL) by Dr Paul Rayson as part of the Reverse Engineering of Requirements to support business process change (REVERE) project (Rayson *et al.*, 2000). A common feature of the corpus software available is the process of 'Part-of-speech (POS) tagging' of the transcript data; that is, assigning each word a grammatical label. The POS-Tagging system built in to WMatrix3 is the Constituent Likelihood Automatic Word-tagging System (CLAWS) and has been continuously developed since the early 1980s (Garside *et al.*, 1987). This system contains a lexicon of words and multi-word units (e.g. *such as*, *given that*) as well as a list of suffixes to help identify unknown words. In the event that a word form can represent multiple grammatical forms, such as both a verb and a noun, CLAWS uses a probability matrix informed by a large body of tagged and manually corrected texts to determine which form is present. It is also possible to manually correct the tags, though the system has a reported 96-97% success rate on written texts, with only a minor reduction in success rate for spoken texts.

Following the POS-tagging, the WMatrix3 software also conducts semantic annotation, with its unique built-in UCREL Semantic Analysis System (USAS). This is a tagging system originally based on Tom McArthur's Longman Lexicon of Contemporary English (McArthur, 1981) which allocates each word into one of the 21 major discursive fields as shown in Table 5. Within these 21 fields however, there are a total of 453 subcategories, which can be found in Appendix A.

In the same way as the CLAWS, the USAS uses a lexicon of word data and a probability matrix to assign each word a semantic tag. The software is able to recognise phrasal units as well as individual words, so an idiomatic phrase such as 'kick the bucket' will be treated as a single unit or 'n-gram' and allocated in the semantic domain of 'Life and Living things', i.e. to die. In addition to the assigned letter corresponding

Table 5 USAS Major discursive fields

A General and abstract terms	B The body and the individual	C Arts and crafts	E Emotion
F Food and Farming	G Government and Public	H Architecture, housing and the home	I Money and Commerce in industry
K Entertainment, sports and games	L Life and living things	M Movement, location, travel and transport	N Numbers and measurement
O Substances, materials, objects and equipment	P Education	Q Language and communication	S Social actions, states and processes
T Time	W World and environment	X Psychological states and processes	Y Science and technology
Z Names and grammar			

to the semantic category, the tag will also consist of a digit to denote a sub-field, an optional decimal point and number of a further subdivision of the field and optionally a 'plus' or 'minus' to indicate the positive or negative position on a semantic scale. For example, the word 'excited' is given the semantic tag X5.2+, indicating that it belongs to the major

classification Psychological states and processes (X), the subdivision 'Attention' (X5), the further subdivision 'Interest/boredom/ excited/energetic' (X5.2) with the positive assignation, as opposed to, for example, a negative counterpart, 'apathetic' (X5.2-). The dataset is subject to both grammatical and semantic tagging, as is shown in Table 6 which is provided by the WMatrix3 webpage ([http://ucrel.lancs.ac. uk/ annotation.html#POS](http://ucrel.lancs.ac.uk/annotation.html#POS)):

Table 6 CLAWS and USAS tagging

Grammatical Tag (CLAWS)				Semantic Tag (USAS)
1st person sing. subjective personal pronoun (I)	PPIS1	I	Z8	Pronouns
base form of lexical verb (e.g. give, work)	VV0	like	E2+	Like
singular article (e.g. a, an, every)	AT1	a	Z5	Grammatical Bin
General adjective	JJ	particular	A4.2+	Detailed
singular common noun (e.g. book, girl)	NN1	shade	O4.3	Colour and Colour Patterns
of (as preposition)	IO	of	Z5	Grammatical Bin
singular common noun (e.g. book, girl)	NN1	lipstick	B4	Cleaning and Personal Care

Wilson (1993: 3) remarks upon the limitation of a word-based frequency count in that "people also tend to repeat the same concept within a discourse in somewhat different words through the use of virtual synonyms or the negation of a positive attribute". Thus, if a speaker wanted to testify to the size of something they might use a combination of 'large', 'big' and 'massive', the quantitative effect of which would be lost in a single n-gram frequency table. But in the semantic category

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analysis, each of these words would come under the same category, N3.2+ Size: Big, conveying more accurately a preoccupation with size. Baker (2004) too explores the difficulty of sense-making through keywords and examines the advantages of grouping. Nonetheless, we must always return to observe keywords in context. If, for example, the speaker was contrasting the size of one thing to another and qualitatively polarising the subjects through the use of 'large', 'big', 'massive' *versus* 'little', 'small', 'tiny', we would recognise the independent use of these categories through semantic tagging, but would not understand the interactional contrast without referring back to the transcript data.

The advantages of using this tagging process to identify key concepts are that the software inhibits the level of subjective interpretation of 'meaning' as well as the labour-intensiveness, as it is complete in a number of seconds. Though both CLAWS and USAS have high reported figures for accuracy (96-97% and 92% respectively) (Wilson, 1993; Rayson *et al.*, 2004), in the interest of being comprehensive I checked the allocations and manually corrected them if an n-gram was misconstrued by the data. The nature of the corrections found in the data is explored below. The purpose of this was not to dispute the meaning of a word, but rather to correct a clear misinterpretation, for example the use of 'cool' as an informal term of approval, rather than as an indicator of a reduced temperature. If the distinct meaning of a word was unclear or if the possibility for multiple meanings existed, there was

no manual correction. To some degree this process reintroduced the labour-intensiveness that the tagging system looked to overcome, however it was carried out with the intention of verifying and improving the software's accuracy, as well as retaining the 'true' meaning of the data. The number of corrections was minimal (see below), but reallocating misplaced n-grams had consequences for the subsequent tagging process. It is for the individual researcher to determine what the satisfactory level of accuracy is for the purposes of their research. If the small percentage of corrections found in this data were determined to be inconsequential to the next phase, then the automatic tagging system is sufficient and the data were made available in a matter of seconds. This, of course, is the aim for future research as a way in which to make this process of analysis more time efficient.

This work was concerned only with the semantic domain of what the participants of the intervention contribute in the shared review sessions. Each session was analysed through the frequency outputs of the allocated semantic domains. But I was not interested in the raw outputs indicating which domains were referred to most frequently, given that there was an inevitable accumulation in, for example, the grammatical domains, prepositions and pronouns since they are used with such frequency in the natural make-up of language. Rather, what the WMatrix3 tool allows us to do is to compare our own data with that of a reference corpus, a representation of the 'normal' distribution of

language, to determine which semantic domains were referred to in our data more than is 'normal'.

5.3.3 REFERENCE CORPORA

WMatrix3 has data from the British National Corpus (BNC) built into it, from both its written and spoken categories. The BNC comprises of 100 million words – 10% of which is spoken data – and is designed to broadly represent contemporary British English. The spoken demographic (or conversational) component of the BNC was designed to be balanced in terms of sociolinguistic variables, rather than discourse contexts, and represents a random sample in terms of location (see Aston & Burnard, 1998). The default spoken reference corpus is the BNC Sampler spoken corpus, which consists of 982 712 words and is a scaled-down representation of the disparate interactional contexts and interlocutor demographics found in the larger version. The user also has the option to refer only to the 'Business', 'Educational', 'Leisure' or 'Institutional' sub-categories. It is asserted that a reference corpus would be much larger than the target corpus if the researcher is looking to identify the representative characteristics or 'keyness' (Baker, 2004) of their data, but if the research aim is to draw comparisons between one text and another the size of the corpora should be more evenly matched (Adolphs, 2006). Though in theory the larger a reference corpus is, the better representation of information we have the software tools still have their limitations in terms of information processing. As such, the operators of WMatrix3 advise that the user

limit their uploads to fewer than 100 000 words (http://ucrel.lancs.ac.uk/wmatrix3.html). The BNC Sampler, at just fewer than 1 million words, is of an appropriate size for a reference corpus (Adolphs, 2006). The reference corpus provided a baseline representation of 'normal' speech data with which to compare our own. The reference corpus was tagged in the same way, through the CLAWS and USAS and the outputs generated from the target corpus were compared.

The output of the USAS tagging comparison is expressed as a value of Log-likelihood, a value which indicates a degree of 'sameness' to the reference corpora. Though there are a number of statistical tests which can and have been applied in corpus frequency analysis – such as Pearson/McNemar chi-squared, Fisher's Exact and Mann-Whitney tests – it is shown that Log-Likelihood is better suited to the computational processes and data size associated with these tasks (for an in-depth comparison, see Rayson, 2002). Log-likelihood is calculated through a contingency table, which takes into account the frequency of the tag (Observed value), the frequency of other tags in the dataset and the total number of tags (N values) for both the target and reference corpora in order to calculate the expected (E) value as follows:

Table 7 Log-likelihood contingency table

	Corpus 1	Corpus 2	Total
Frequency of tag	a	b	a+b
Frequency of other tags	c-a	d-b	c+d-a-b
Total	c	d	c+d

$$E_i = \frac{N_i \sum_i O_i}{\sum_i N_i}$$

where N1=c and N2=d. In this instance, the expected value for the tag in the target data (E1) =c*(a+b)/(c+d) and in the reference data (E2) = d*(a+b)/(c+d), taking into account the size of each corpus and therefore removing the need to normalise the figures. The log-likelihood value is calculated using the formula:

$$-2\ln \lambda = 2\sum_i O_i \ln\left(\frac{O_i}{E_i}\right)$$

or written as Log-likelihood = 2*((a*ln(a/E1)) + (b*ln(b/E2))). This produces a number, the value of which indicates its 'likeness' to the reference corpora in that a value of zero indicates a perfect match. A negative value indicates that the tag is under-represented in the target corpus and a positive value that the tag occurs more often than 'normal' in the target corpus. Furthermore, the higher the value the more significant the difference, with the following critical values:

- A log-likelihood value of 3.84 represents a p-value of <0.05.

- A log-likelihood value of 6.63 represents a p-value of <0.01.

- A log-likelihood value of 10.83 represents a p-value of <0.001.

- A log-likelihood value of 15.13 represents a p-value of <0.0001.

WMatrix3 provides the user with a frequency table of semantic categories, sorted in order of log-likelihood to identify which categories are referred to more than 'normal' and to a greater or lesser degree. The order of this list is interesting in itself; however for the purposes of

this work the frequency table represented the 'keyness' of the data from one conversation and it was the comparisons between conversations that I was interested in as indicative of change. Thus, for each participant there were three log-likelihood frequency tables, products of each of their three shared review sessions. Across these three sessions the challenge was to discern between what was idiolectal, what categories might have changed due to the change in context or conversation topic, and those changes which could be attributed to the intervention.

I have described above that even within WMatrix3 there are options as to which dataset is set as the reference corpus, depending on the local context of the origin of the conversational data. Further still, there are a number of substantial spoken data corpora available for reference, such as:

- the Limerick-Belfast Corpus of Academic Spoken English (LIBEL) of 1 million (500 000 transcribed) words

- the Cambridge and Nottingham Corpus of Discourse in English (CANCODE) comprising of 5 million words of casual conversations, designed to reflect spoken genres (McCarthy, 1998)

- the Limerick Corpus of Spoken English (LCIE), 1 million words of casual conversations

- the Michigan corpus of Academic Spoken English, 1.8 million words of classroom discussions, seminar lab work and advising sessions.

Inevitably, the outputs of our comparison will be influenced by the content of the reference corpora. Given that the log-likelihood function provides a baseline reference point and that the reference corpus remains the same throughout, the choice of reference corpus would tell us little about the level of change over the three sessions. Nevertheless, the reference corpus would have a significant influence upon what was determined to be the 'keyness' of our own data, in that it is our reference for 'normal' data.

The BNC Sampler Spoken corpus is representative of each of the conversational contexts collected for the larger corpus, including business meetings, classroom interactions, interviews and consultations. Though the data came from quite a specific context – that of an intervention guide and a parent of a deaf child engaged in conversation around video data – it was felt that the manner of conversation was more akin to that referred to as 'casual conversation' in the BNC. Other categories in the BNC come from comparatively more structured contexts of, say, a consultation or an interview. As such, I decided to create a bespoke reference corpus from the BNC spoken data that included only those files labelled as 'casual conversation'. There are 175 files under this label within the BNC, amounting to 3.6 million words. Given the data restrictions of the

WMatrix3 software and the disparity in size between what would become the target corpus I decided to filter these down to a more manageable subset. Of the 175 files in the BNC Spoken subset, there is great variety amongst the number of interlocutors in each conversation, the duration of each conversation and the number of conversations within a file. I separated those files which were most closely matched to the target data for an approximation of number of interlocutors (which would generally be 2-3 in the target data) and the balance of words spoken per interlocutor, which meant excluding those files of fewer than 500 words per speaker. What remained was 46 files (see Appendix B), representing 972 891 words (970 534 n-grams).

This provided a more manageable dataset and quite closely matched to the size of the BNC Sampler Spoken corpus (982 712 words). In order to determine what effect this would have on the log-likelihood outputs, a small number of conversation files were processed through the software with both the BNC Sampler Spoken corpus and the bespoke BNC Conversation Subset as reference corpora.

Below is a table showing the frequency lists for the semantic domains that had a log-likelihood of higher than 3.84 ($p<0.05$) from the same shared review data when compared to the two different reference corpora (Table 8). Perhaps the first observation is that the log-likelihood values went well above and beyond 15.13, which was the highest critical value we had with associated p-values ($p < 0.0001$) and as such,

Table 8 Comparison of semantic categories with highest log-likelihood (LL) from two reference corpora

BNC Spoken Sampler		BNC Conversations Subset	
Sematic Domain	**LL**	**Sematic Domain**	**LL**
Z4 Discourse Bin	72.19	Z4 Discourse Bin	61.36
Z8 Pronouns	67.41	X2.2+ Knowledgeable	39.70
X2.2+ Knowledgeable	60.01	Z99 Unmatched	28.35
Z99 Unmatched	48.60	N6 Frequency	25.45
Q1.1 Linguistic Actions, States and Processes; Communication	36.51	K6 Children's Games and Toys	22.09
N6 Frequency	34.60	A5.4- Evaluation: Unauthentic	19.90
K6 Children's Games and Toys	27.07	E1 Emotional Actions, States and Processes General	16.08
K1 Entertainment Generally	22.83	Z8 Pronouns	14.10
Z6 Negative	20.11	K1 Entertainment Generally	10.81
S1.2 Personality Traits	15.79	T1.1.1 Time: Past	9.17
E1 Emotional Actions States and Processes	14.62	A14 Exclusivisers/Particularisers	8.90
A5.4- Evaluation: Unauthentic	12.65	N5++ Quantities: Many/Much	5.99
W2 Light	11.33	X2.5+ Understanding	5.85
T1.1.1 Time: Past	10.97	E4.1- Sad	5.37
A14 Exclusivisers/Particularisers	10.61	S5- Not part of a group	4.92
E2+ Like	9.54	A5.1+++ Evaluation: Good	4.44
A13.2 Degree: Maximizers	6.26	X5.1+ Attentive	4.04
X2.5+ Understanding	5.83	E4.2- Discontent	3.89
E4.1- Sad	5.54		
A5.1+++ Evaluation: Good	5.06		
M3 Vehicles and transport on land	4.71		
H2 Parts of buildings	4.28		
M8 Stationary	4.23		
S5- Not part of a group	4.09		
E4.2- Discontent	4.09		

the occurrence of words associated with each category was shown to be significantly different to their occurrence in both references for 'normal' conversational data. Another observation was that a number of the categories in each list were the same, validating to some degree

the 'keyness' of the target data. In fact the categories "Discourse Bin", "Pronouns", "Knowledgeable", "Unmatched", "Frequency", "Children's Games and Toys", "Entertainment Generally", "Negative", "Emotional Actions, States and Processes", "Evaluation: Unauthentic", "Time: Past", "Exclusivisers/Particularisers", "Understanding", "Sad", "Evaluation: Good", "Not part of a group" and "Discontent" all appeared as significant in both outputs. We can say with some certainty that these categories represented the 'keyness' of the data.

One general effect of having the Conversations Subset as the reference corpus was that the log-likelihood scores were somewhat more conservative. In particular, grammatical words in the 'Z' categories had a lower log-likelihood and given the ubiquity of the words, which includes all prepositions, pronouns, proper nouns but also any unrecognised words (generally speech tokens, 'mmm', 'erh' etc.) we can infer that the target data and the Conversations Subset were more similar in their representation of core grammar and as such, were a better match for indicating the 'keyness' of the target data. This was also suggested by the fact that there were fewer categories scoring a log-likelihood above 3.84 in the Conversations Subset than there were in the BNC Spoken Sampler, again indicating a closer match. Such differences can be understood by the fact that the BNC Spoken Sampler still comprised of data from contexts such as lectures and chat-show dial-ins, where we would expect that the use of grammar and, in particular, pronouns would differ given the level of dialogue.

The software produced a full table with the log-likelihood values which indicated the number of occurrences for each category and the relative frequency for either corpus. The BNC Spoken Sample had a number of categories in which there were little or no instances present in the data, which was another aspect that suggested that the Conversational Subset was a more appropriate reference corpus. This is because the occurrence of just one single word in a category in the target data produces a high significance value when the occurrence is zero in the reference corpus. For example, the category 'Light' which has a log-likelihood value of 11.33 when the Spoken Sampler was used a reference corpus shows that there were no instances in the corpus itself. In this kind of analysis a single instance of a word is rarely seen to be significant and certainly not a 'key' word in the context of the conversation. The category 'Light' did not appear on the frequency output when the Conversation Subset was used and when we referred back to the data in context, the utterance was quite unremarkable. The statistical method is vulnerable to comparisons where the instances in the reference corpus are zero and we would always refer back to the transcript in order to assess the 'true' significance of *hapax legemenon* in context. But nevertheless, in the Conversation Subset there were far fewer instances where a category was not represented but which appeared in the target data, which altogether inhibited the influence of this condition. I decided therefore, to use the Conversations Subset as the reference corpus for this work.

What the frequency table provided was an initial indication of the 'keyness' of the data but this of course was just a preliminary step. In order to fully understand the inferences of the semantic categories we must observe the data in context. What I will go on to describe now is a process by which I identified those instances of the words that make up the highest-scoring semantic categories and began to analyse their occurrence in the original data. What this entailed is an observation of where the key categories of the data interacted with one another in what I have termed 'cluster moments'.

5.3.4 'CLUSTER MOMENTS'

The method for identifying key passages in a transcript of the conversational data from the feedback sessions of the intervention is based on the rationale that the Log-Likelihood statistics will characterise the distinct features of each conversation and of each speaker within that conversation. As we can see from the example above, there was a variety of categories which can be seen to be grammatical features of language, context-driven words such as 'Children's Games and Toys' and 'Vehicles and transport on land' as well as cognitive and emotional categories such as 'Knowledgeable', 'Understanding' and 'Emotional Actions, States and Processes'. Given this work's interest in perspective change and the role of stance in the empowerment model, we would expect words that refer to emotions, knowledge and understanding to be fundamental to signifying our

participants' perspective. But perhaps more indicative of their experiences of childhood deafness is the interaction between those 'stance' categories and the more context-based categories as the participants relate their feelings to the world around them. If we are to assert that change is realised in the everyday behaviours and operations of the family dynamic it must have a place in the 'real' world. Perspective change may occur in a cognitive and affective domain but it is realised in the way that the participants' world around them relates to their behaviours, be it the people, the toys, the home or school environment. I argue therefore, that the 'keyness' of the data in relation to our aim to bring about empowerment through perspective change would be founded in those moments in the data where key categories identified through the statistical method of corpus analysis interact with one another, where the participant looks to extend any development at the cognitive level into the physical world, and *vice versa*. I use the term 'cluster' here to refer to such passages of semantic group interaction and not in the way it has been used as part of the WordSmith (Scott, 2012) software tools, which is more akin to 'lexical bundles' as described by Biber and Conrad (1999).

The aim of 'cluster tagging' was to identify passages in the transcript data which were of interest because they comprised of words that had been statistically identified as significant and demonstrated more than one category in interaction. Working through the categories in ascending order, I manually highlighted each word as it appeared in

context. Only semantic categories that had a log-likelihood value equal to or greater than 3.84 were considered for cluster tagging. This incorporated what I have termed the four 'tiers' of significance identified by the critical values given above, i.e. the first tier comprised of categories with a log-likelihood value of 15.13 and above (p<0.0001); the second tier 10.83 and above (p<0.001); the third tier 6.63 and above (p<0.01); and the fourth tier 3.84 and above (p<0.05). What was not clear at this stage is whether it was always necessary to include all four tiers, given that the number of categories within each tier varied greatly. It was anticipated that there would be a level of 'saturation', that in working through the categories in an ascending order there would come a point when the identification of the words from the key categories would begin to simply refer to the same sections of the data that had already been identified though other tags. Until I applied the method to the data, it was unclear at what level 'saturation' would be achieved. This will be explored below.

Figure 4 Concordance lines for the word 'heard' from an intervention session

From the frequency table that is outputted by the WMatrix3 system the user is able to click on a link next to each category to see which words have been included in that category and, from there, go to each

occurrence of that word in the context of the data, presented as a series of concordance lines (see Fig. 4). At this point, I had already verified that each word had been correctly allocated and each instance was highlighted using a colour-code for each category. I applied the colour codes using a word processor, however there are corpus software tools – such as the Dispersion plot graph in WordSmith – which allow you to see a timeline track of the data and which flag instances where a particular n-gram is used. This does not allow you to see the word in context but enables you to see the distribution as a series of lines, which makes it very clear to see where instances converge. Given that the WMatrix3 program is able to visually highlight each instance of an n-gram in the full body of the text data, I would assert that it is technically feasible to generate the manual tagging process I employ as a feature of the software program, mitigating another of the manual tasks of this process.

I decided to forego tagging the 'Z' categories 'Z99 Unmatched', 'Z4 and 'Z8 Pronouns' at this stage of analysis. The 'Discourse Bin' category was typified by speech tokens such as 'Yeah', 'Yep', 'Hmm', 'Erm' and the like. The category 'Unmatched' comprised mostly of cut-off or incomplete words as participants used post-corrections, such is the nature of spoken language. Based on the relative frequency and semantic value of the constituent words, I decided that the insights afforded by the task did not warrant the demands of tagging each occurrence of what often amounted to 200-300 words. Furthermore, I

assert that this conflated the distinction of truly key passages since such discourse components were pervasive throughout. When it came to closer discourse analysis of the passages however, the impact of pronoun use and post-corrections was taken into account.

Once each of the key categories had been highlighted in the transcript data there was a visual indication of where key categories converged. The idea of the 'cluster moment' is that it will indicate where key ideas are coming together and so it must incorporate more than one of the key semantic categories identified by the software. The depth of perspective conveyed through a number of n-grams belonging to the same semantic group occurring in succession is somewhat limited, yet this was quite common. Such instances did not constitute a 'cluster moment' as I had defined it, but were not discarded entirely at the level of discourse analysis. To be considered a 'cluster moment', occurrences had to occur within the same 'train of thought' or passage of conversation. It did not constitute an interaction of ideas if two key categories occurred in proximity, but between which there was an interruption: for example, if the video clip had been played or if the nature or topic of the conversation had changed.

As a preliminary step I asked two researchers familiar with the context of the data, in addition to myself, to read through a small number of transcripts and manually identify which, if any, passages they considered to be representative of the speaker's conversation as a

whole in the context of that session. As a small group we then discussed which passages we had each identified, with a consistently high level of consensus. I then conducted the cluster tagging process on the same transcripts to see which passages emerged as key. What was observed was high agreement between those passages identified manually by the researchers and those identified by the tagging process. Though the boundaries of the passages did not always match in terms of where a key passage began and ended, the core or 'kernel' of the passage was incorporated in both instances. It was based on these passages that a preliminary density ratio was calculated, to distinguish between a more-than-sparse occurrence of tags and what were determined to be key moments. Based on those key moments which had been identified both manually and by the initial tagging process, it was calculated that a threshold ratio of one-tag-per-seven-n-grams accounted for each of those passages of transcript. This calculation ignored those n-grams belonging to 'Z' categories, since they had been excluded from the earlier tagging process. This ratio was to provide a guideline for identifying 'clusters' in the rest of the data and would be adjusted if necessary.

In instances where a passage had been identified by the researchers but not by the tagging method, this generally referred to passages that reiterated or repeated ideas that had been raised elsewhere. The statistical-based process identified additional passages to the manual method, highlighting extracts which were not identified as key by the

researchers. Again, in some instances this was a case of repetition of ideas identified elsewhere but also passages offering new considerations. In this way it is felt that such a method can inhibit the selectivity of the subjective analyst and offer new aspects to consider which have been founded on a robust method.

5.3.5 USING DISCOURSE ANALYSIS TO EXPLORE PERSPECTIVE CHANGE

The cluster moments were identified in order to provide a synopsis of the data for each of the shared review sessions. Through this process the amount of data is reduced significantly, but more than just a reduction in the dataset the process refines it down to its core ideas. The aim is not only to make the dataset more manageable but also to pick out the significant passages which have been statistically identified as referring to concepts which are at the forefront of the participants' minds. Furthermore, these are passages which are likely to be high in stance items and representative of the way in which the participants assess and respond to the world around them. With much smaller datasets, I was able to apply more in-depth discourse analysis in order to observe perspective change and potential empowerment.

The nature of this discourse analysis was based on the research aim of reporting changes in the patterns of the conversational data and looking to understand these changes in relation to the work of the intervention. Following on from the cluster tagging process I was looking at one side

of a conversation and although the data is contingent upon the responses of the intervention guide and those of anyone else involved in the shared review session, this work was concerned not only with how the participant's verbal utterances *were* understood but the potential ways in which they *could* be understood. As such, the basic premise of reporting change relies only on what is present in the data, but nevertheless a familiarity with the participant based on observations across the three sessions may offer further insight into their perspective, as represented in their vocalisations. I have referred to the work of Kärkkäinen (2006) in relation to analysing stance, who reports that 'stance' can be indicated through a variety of discourse items, such as pronouns, determiners, verb voice, tense/aspect, sentential adverbs, hedges, quantifiers etc., which could also be said for self-efficacy, locus of control and relational power. Epistemic authority is relationally indicated in the dialogue, such as in alternative phrasing or repetition and certain kinds of interrogative. Evidentiality can be found in sensory verbs, such as 'saw' and 'heard', as well as speech acts, 'reported', 'confirmed'. Altogether, the variety of resources for 'meaning' in discourse makes it difficult to approach the data with a clearly defined protocol for inferring perspective. The empowerment model described above was generated from a premise that was inclusive, that aimed to allow for aspects and discursive elements that we are perhaps not able to predict but nonetheless contribute to meaning. However, despite the need for an iterative approach I established some guidelines for the level of meaning I was looking to observe in the data.

In discussing the advantages of electronic text analysis above the role of 'intuition' was introduced (Adolphs, 2006). Our response to the data from simply hearing or reading it will generate certain 'meanings' and, conventionally, the process that follows is to look for those features of the discourse from which that understanding of the meaning has been generated. This idea is very similar to the way in which the intervention teaches participants to look at the video data, exploring one's response to what is observed and then going back to look for the smaller components of the interaction that have prompted that response. Given that this work was concerned with change, each participant became their own baseline, or reference data. Comparisons were made between each of the three sessions and those discrepancies which were understood through the concepts of the empowerment model were considered for establishing perspective.

But given that empowerment is also understood as a process as well as an outcome, the model of transformative learning aided me in tracking those changes as part of a clearly defined process. The ten phase transformative learning process as described above (Mezirow, 1978) provided a guide for the kind of change I was looking to find in the data. Researchers have successfully applied the ten phases to narratives and reflective writings (Nagata, 2006; Elbaz-Luwisch and Lerner, 2011) and have reiterated the importance of the initial phase, the 'disorienting dilemma'. Conventionally, the identification of each phase is achieved

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from a straightforward reading of the data and not verified through any systematic process. As well as identifying the phases of the model in the transcript data, this work also examined each phase across the data in order to explore the discursive features and determine if each phase can be categorised by its semantic and grammatical components. The aim was to produce a reliable protocol for identifying the ten phases in spoken or self-report data through verifiable language conventions. Given the reflexive nature of the process, we would anticipate changes in the illocutionary force across the phases, as the learner becomes more or less certain of their perspective and this can be indicated by modal verbs, 'can', 'might', 'shall' *etc.* Furthermore, we would expect some features of evidentiality, expressions of affect, and a progression through temporal indicators from a retrospective to a more prospective outlook. Thus we can refer to core grammatical features of tense, mood and aspect to determine if we could characterise each phase though language and provide a robust way of identifying the process in both written and spoken data.

Such characteristics would discern between, for example: past, present and future tense ('he did'/'he does'/'he will do'); perfective and imperfective aspect ('I helped him'/'I help him'); and the indicative, the conditional and the subjunctive mood ('he eats'/'he would eat if..'/'I suggested that he eat'). Based on early data, I made predictions about what might characterise each phase.

5.3.5.1 Predictions on the discourse features of each phase of the transformative learning framework

Phase 1: Disorienting dilemma

The 'disorienting' experience can manifest in many ways, but is understood to be one that exhibits doubt, perhaps a lack of cohesion and agency. Subsequently, we might expect a concentration of speech fillers, 'Erm', 'Mmm', a limited fluency of language indicated by a disjointed clause structure and frequent pauses. Intonation and (nervous) laughter might be of particular significance here as compensatory for inhibited discourse. Conversely, we might also find quite straightforward expressions that remark upon the 'strangeness' or 'irregularity' of such an experience.

Phase 2: Self-examination with feelings of guilt or shame

This is a rather explorative episode where the participant might recall a previous behaviour, reporting their actions in the past tense and beginning to consider the reasoning behind them. The descriptive element of the anecdote will be marked by temporal signifiers, 'then', 'at that time', and actions posited in the past tense. The actions may be seen to have causality for some disagreeable outcome, so a description in the past tense might be followed by a conjunction, 'so', 'which', and a subordinate clause that incorporates some negative behaviour or feeling.

We might expect a degree of quantification/maximizing here to demonstrate the extremity of the circumstance or the consequential feeling itself: 'very', 'much', 'really'.

Phase 3: A critical assessment of assumptions

Perhaps intertwined with the previous stage, this critical assessment of an experience is retrospective and reported in the past tense, but is assessed in the present tense. Causal relationships between behaviours, feelings and/or beliefs are established with conjunctions, 'because', 'which', 'that'.

The critical element is marked by some degree component, expressions of 'too much' or 'not enough'. There is a temporal distancing between the critique of 'then' and the realisation of 'now'.

Phase 4: Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change

Here there is scope for comparative elements, either to another's experience, a prior expectation or previous behaviour. These comparative elements can include degree categories, 'as'; superlatives, 'more_', 'better'; or contrasting of similarity, 'like'.

We should now be placed in the present tense as the participant considers their current perspective in relation to others. The experience

of others may be expressed in the past tense however the participant's viewpoint should be brought to be in the present. This may occur in a past-progressive/present-progressive tense.

We would expect here a sense of individual agency, where the 'I' has a counterpoint: either another subject or the 'I' in a previous manifestation, i.e. the 'I' then compared the 'I' now.

The 'change' aspect could be expressed comparatively through the components described above, or exist semantically and must be inferred from the context of the dialogue. For example, a participant may have described a disagreeable behaviour in the previous stages but is now condoning an alternative action. This would incorporate some kind of positive assessment: 'good', 'positive', even 'benefit'.

Phase 5: Exploration of options for new roles, relationships and actions

This exploration incorporates speculation and the hypothetical, which is marked by modal verbs such as 'may/might', 'can/could', 'shall/should'. This might also include a request for confirmation through tag questions, 'isn't it?', but ultimately is not expressed as firm certainty. This could mean a use of 'I think', 'I don't know', though the participant is expressing some degree of thought and knowledge.

The 'new' options might be seen as a preferred alternative to the previous action, which could be expressed through positive assessments, 'better', 'good', or by an assumed commendation through the use of 'should', for example. Here we expect that the participant rarely uses the past tense but is more inclined to use the present-progressive or future tense.

The 'new' actions should consider the participant in relation to their focus object and we would expect a strong consideration of, for example, the participant and the child expressed in a direct grammatical relationship, i.e. the participant as the subject and the child as the direct object, or vice versa. We might begin to see more transitive verbs as the participant begins to think about the contingent relationship established through their interaction, which would generally be the foundation for a preferred course of action.

Phase 6: Planning a course of action

In phase 6 the learner is still expressing the hypothetical, so a continuation of the use of modal verbs is likely, as is the use of present-progressive/future tense. This may develop in terms of certainty, for example a move from 'may/might' to 'will/would'. The participant might also consider the consequences of this course of actions, again incorporating conjunctions that create causality, in constructions such as 'which would then'.

I anticipate a tendency for degree categories, the establishment of polar actions through the use of 'just', and maximizers/minimizers 'very, really, much/only, little' as the proposed course of action is compared to the previous alternative. The participant may also be thinking about 'impact', 'benefit', 'effect'.

Phase 7: Acquisition of knowledge and skills for implementing one's plan

The participant here considers their own level of knowledge or belief which could manifest as recognition of what is not known, but also of what is already known. The participant is likely to express their level of knowledge with some degree of certainty and may rely on evidentials to verify this. Expressions of stance are expected: 'I know', 'I think', 'I feel' in the present tense. This reflexivity could also encourage the use of reflexive pronouns, 'myself', but also of others, 'himself', 'herself'.

At this point we might expect that empathic transference emerges, as the participant expresses assumed knowledge of the child's (or others') cognitive or emotive aspects, i.e. what they think and feel – even what they *would* think or feel. A collocation of third person pronouns and cognitive/emotive verbs is anticipated. This is substantiated by a continuation of a close grammatical relationship between the subject-participant and the object-child.

Phase 8: Provisionally trying out new roles

This stage remains in speculation, as the participant considers the outcome of a new course of action and their role in it. Expressions are likely to exist in the future tense. A degree of informed doubt is expected, namely the realm of possibility, 'If', 'maybe', 'might', but an expression of ignorance is not expected to be self-critical.

The participant is expected to consider the maximal benefits of this role, which means not only semantic categories of positive assessment, categories of 'effect' and even 'success', but also the extreme degree categories, 'even'/ 'just'/'only'.

Again, we would expect a high level of individual agency, 'I', but also maintaining that empathic transference, talking on behalf of the third person. As a category of 'trying' it is very likely that the participant will talk about 'trying', or even the success/failure of trying.

Phase 9: Building of competence and self-confidence in new roles and relationships

As the participant considers the advantages of this new role they would begin to express their level of knowledge and ability, so we would expect strong 'I know' statements, or even frank statements based in actuality, using 'actually', 'really'. This would also incorporate the modal verb 'can'. Modal verbs will generally become more definite, as the participant expresses themselves with confidence: 'will', 'are going to'.

Tag questions can also be used to elicit confirmation/verification: 'Isn't it?'.

The participant's competence will be informed by evidentials, often based on sensory input, what one can 'see'/'hear'/'sense', which is connected in clause construction to one's belief or knowledge, through conjunctions, 'which', 'how', and translates to an action, 'you can..'. Agency is strong in the use of 'I' but the participant is also likely to equate their own experience with a broader identity, likely to use the non-specific 'you' as in 'one'.

There is an emphasis on relationships, which would mean strong links between the individual and their subject, but possibly broader inclusion of other subjects, i.e. the child, but also other (possibly unnamed) people. We might expect a higher likelihood of transitive verbs and direct impact.

The confidence building would be seen in the high use of degree items; positive assessments: 'good', 'great'; maximizers: 'really', 'very'; quantifiers: 'quite', 'some'. This would also exist in emotive categories, 'excitement', 'happy', 'calm', broader 'feeling', as well as cognitive capabilities, 'understanding', 'focus'.

Phase 10: A reintegration into one's life on the basis of conditions dictated by one's perspective.

The participant continues to talk with a degree of certainty and confidence, which would mean a tendency for modal items 'can' and 'will'. I anticipate a low likelihood for possibly ('might') and references invoking an external locus of control: 'should', 'ought' in relation to the individual. With that certainty, the individual is more likely to use the adverbs, 'actually', 'really'.

Expressions would largely be expressed firmly in the present tense as the participant establishes their current viewpoint in the context of 'now'. Their individual stance is canvassed across the non-specific 'you', but retains that impetus on the individual as 'one', i.e. 'One can..'. Agency is expressed with 'I' though when it comes to belief and knowledge, 'I think'/'I feel'/ 'I know'.

Expressions are expected to be more cohesive, to reflect a new level of clarity, but we might also anticipate the 'accumulative' effect as we are privy to the individual's thought process. This is achieved through a paratactic style, 'And..and..and' or long sequence of relative/ subordinate clauses as we follow the participant's 'jumps' from one train of thought to another through frequent conjunctions: 'which', 'then', 'that', 'because', 'and', 'but'. Nevertheless, the participant's expressions are free-flowing and sequential.

A transformative learning process can only be identified if the participant exhibits a progression from the initial to the closing stages, though it is not essential for the participant to exhibit every phase (Mezirow, 1991). Nevertheless, if we were able to identify and characterise each phase we could also describe the participants' learning trajectory and where there might be an interruption. If the process was interrupted at a phase where the participant was still challenging their assumptions, or still uncertain of a new plan of action then we could not say that any learning has occurred. If we could understand the typical features of each phase, we could better understand the ways in which to progress from each phase, or at least identify how an interruption was made.

As with the model of empowerment, I argue that the intervention guide and any service provider can only facilitate, not impart this learning. The participant must realise this process for themselves and so we still rely on the participants' own motivations and contributions to the process. As Mezirow (1991) stipulated, the pre-requisites for transformative learning include the participant's willingness or openness to the learning process and that they must engage in critical discourse. With this in mind, the final methodological approach to the data was a pragmatics-based tagging system which inferred a level of 'engagement' based on the participants' degree of inquiry in the conversational exchange.

5.3.6 PRAGMATICS TAGGING AND 'ENGAGEMENT'

Pragmatics is a field of linguistics concerned with the ways in which context shapes meaning beyond the more constant semantic and grammatical meanings of words. Thus, an utterance has meaning not only in its production but also in its reception. Austin (1962) describes the locutionary act, the illocutionary act and the perlocutionary act, which can be understood as the syntactic and semantic meaning of an utterance; the intention behind the 'performance'; and the overall impact on the reader, respectively. To give an example, if someone were to say "You haven't seen the new Bond film?", as a locutionary act they are aiming to clarify whether or not the recipient has seen the film. As an illocutionary act they convey surprise that the listener has not seen it yet and insinuate a recommendation to do so. The perlocutionary act lies with the listener, who may feel some level of shame and the urgency to go and see the film.

Following on from Austin's work, Searle (1976: c.f. 10-13) created a classification of illocutionary speech acts as follows:

- **Representatives:** commit the speaker to something's being the case, to the truth of the expressed proposition.
- **Directives:** attempts by the speaker to get the hearer to do something.
- **Commissives:** commit the speaker to some future course of action.

- **Expressives:** express the psychological state specified in the sincerity condition about a state of affairs specified in the propositional content, such as 'congratulate', 'thanks', 'apologise', 'welcome'.

- **Declarations:** utterances which are brought to correspond to the real world in their very performance, such as 'declaring', 'appointing', 'marrying', 'nominating'.

More recently however, pragmatics has become less concerned with taxonomies of speech acts and more concerned with societal issues of 'real language use' in relation to power, identity or ideology (Archer *et al.*, 2012). This has led to an interdisciplinary blurring and generated distinctions such as sociopragmatics (Leech, 1983; Rose and Kasper, 2001) and pragmalinguistics (Kasper, 2001; Cenzo, 2007). What this work drew from the field of pragmatics was its exploration of the interpersonal meaning of language, as one interlocutor talking to another but also as a participant talking to a researcher. More specifically, I was interested in the ways in which participants actively or passively engaged with the procedure. In order to assess their involvement in the intervention, I developed a rudimentary classification of the participants' conversational utterances.

The participants were asked to respond to the video data in front of them and in quite a fundamental way they might simply describe what it is that they see. Though we could learn something about their perspective by way of the particular details which they chose to

comment upon, this did not require them to engage critically with the video or the intervention process. If they were to learn anything from the material then they had to be willing to engage with that which is unknown or uncertain. Learning and reflexivity are manifest in recognising that one way of being exists amongst a number of possibilities and alternatives, thus the participant must consider those alternatives in order to recognise the true value of one state of being over another. As Dewey (1910: 74) noted, "the essence of critical thinking is suspended judgement; and the essence of this suspense is inquiry". In this work, they were asked to reflect on their perspective. In engaging with that task, I would expect the participants to speculate, explore and question both what they were seeing and their perspective at the time. It was theorised that participants would find meaning in what they observe and consolidate learning by making interpretations, by resolving their inquiries in some level of explanation or clarification. Thus I classified the transcript data into the following three categories:

- **Descriptive:** participants provided an account of the video or of their family dynamic but with no level of analysis or evaluation.

- **Explorative:** participants made an inquiry or speculation.

- **Evaluative:** participants explained or interpreted the events on the video or within the family dynamic.

But there was also a category of utterances which were largely receptive to the other speakers' contributions, or which served to clarify what had been said. I labelled this category '**Confirmative**' and this category represented the most passive of conversational utterances. If

we were to see a high degree of engagement with the intervention process we would anticipate a high occurrence of utterances in the 'explorative' and 'evaluative' categories, with a more passive involvement largely characterised by 'descriptive' and 'confirmative' utterances. This was quantified by tagging each part of the conversation as one code or another to monitor change across the intervention.

The purpose of this analysis was not to be representative; I was not looking to establish patterns of language use or the multi-modal combinations of speech and gesture. This work assumed a case-study approach and the patterns of language behaviours were understood to be individually established. Nor is this a universal measure of 'engagement' in conversation, it is quite specific to the aim of the interaction. As a measure, the analytical process worked in the same way as the corpus analysis in that the participants operated as their own baseline and it is simply change that I was looking for. The quantification was a crude relative frequency calculation, simply taking the accumulated number of words per category in relation to the number of words of that session. Since I was only interested in how this might change over the course of the three sessions, the fact that certain categories inherently demand a larger number of words was not significant since this was true throughout. I was not looking to do an inter-category comparison, rather an exploration of each category at each point (i.e. session) of the intervention.

The classification for the participants' speech was as follows:

- Participant describes (self; child; video; others)

- Participant explores (self; child; video; others; intervention)

- Participant evaluates/interprets (self; child; video; others; intervention)

- Participant acknowledges.

Speech utterances were tagged as 'Describe' if they constituted an observation on or experiential knowledge of the subcategories 'self', 'child', 'video' or 'other', the last of which was often seen to be in reference to other family members. The category 'explores' was characterised by inquiry and questioning, or making a proposition but ultimately expressed in the domain of possibility. Such utterances could be framed by 'I suppose' and were often characterised by the modal verbs 'could' and 'might'. Based on the early data, the 'other' category under this heading often comprised of speculations about the outcomes of the intervention work. The category of 'explains/interprets' differed from 'describes' in that the participant offered some form of judgement, meaning or value to their observations. This tag was ascribed when the participant spoke of that which was beyond what they could actually see and began to describe their response or reasoning of an empirical observation. These utterances may be preceded by a 'description' tag followed by 'because'.

Initially, utterances made about family members were allocated in the 'other' categories, however in the event that the number of references to family became suitably comparable to the size of the 'child' and 'self' categories it would warrant its own classification. This would also be the case for any other referent in the 'other' category, if a specific individual such as a teacher of the deaf was frequently referred to, an inanimate object such as a hearing aid, or even a group of referents such as 'technology'. This was not expected to be the case and so until the data suggested otherwise, such referents were allocated into the 'other' category.

Finally, the category 'Participant Acknowledges' contained all of the minimal response tokens such as 'Yeah', 'Hmm', 'Okay', as well as repetitions, agreements, clarifications or non-minimal assessments of what has just been said to the participant, such as 'That's right'. This category was characterised by the reception of a turn, rather than the production initiated by the participant. Laughter was included in this category as it generally serves a phatic function but was informally treated as a sub-category.

5.4 BRINGING THE METHODS TOGETHER: A TRANSFERRABLE METHODOLOGY

The model established above is informed by concepts from the field of linguistics which naturally led to methods of analysis derived from linguistics. Researchers have utilised different domains of applied

linguistics – particularly corpus linguistics – to draw on the various strengths, such as in corpus-assisted discourse studies (CADS) (Partington, 2006) and more synergic combinations of, for example, corpus and systemic-functional analysis (Flowerdew, 2012); critical discourse analysis and corpus linguistics (Hardt-Mautner, 1995; Orpin, 2005; Baker *et al.*, 2008). The tendency is to utilise corpus analysis tools such as WordSmith (Scott, 2012) or WordCruncher for frequency tables (Orpin, 2005), concordance lines or keyword analysis (Hardt-Mautner, 1995; Orpin, 2005; Baker *et al.*, 2008; Flowerdew, 2012). This is seen as a 'point of entry' to especially large datasets and a way of statistically validating what is of prominence in the data before conducting a more penetrative analysis of the resulting subset data. This can be a deductive process, exploring concepts of 'sleaze' (Orpin, 2005), or 'asylum seekers' (Baker *et al.*, 2008) which picks out particular words and analyses concordance lines. This can also be more explorative, looking into pronoun usage for example (Hardt-Mautner, 1995). But if we are to establish a synergic methodology of corpus linguistics and discourse analysis it must be used for more than 'downsizing' the data. If we are faced with a number of concordance lines, we should see it as a full representation of the occurrence of a term, rather than as a glossary of specimens from which to choose the appropriate example.

In this work I took an inductive approach, allowing the software to identify what was 'key' to the data with the aim of overcoming what is

often a criticism of applied linguistics approaches, that data is analysed and presented in a way that validates the researcher's preconceptions (Widdowson, 1995). As Hardt-Mautner (1995: 22) states, "Drawing on corpus evidence fundamentally redefines the nature of 'interpretation', turning it from an introspective undertaking into an empirical one". The first stage of this analysis, combined with my conceptualisation of 'clusters' allowed me to explore those parts of the text which had been statistically validated as 'key' to the data. This is an approach which I assert would be of great benefit particularly to those who conduct interviews and warrant an objective synoptic of an interview session. I cannot, however, say that this process is free of subjectivity. As such, I have disclosed each of decisions that I have made as a researcher in processing the data, such as the transcription protocol and the exclusion of 'Z' categories of speech data in the tagging process. Conversely, the nature of the systematic corpus analysis, which is based on semantic recognition and frequency profiling, will not be able to capture all that is perceived by the interviewer. I have described how such a process might inhibit the subjective interpretation of the semantic aspect of the participant's contributions but it is important to acknowledge the intersubjective understanding the interviewer themselves will have from being in the room and conducting the interview, drawing on sensory inputs beyond the verbal utterances. In this work my inquiry is conducted at the level of semantics and is concerned with capturing the content of the patient voice. Other researchers might consider the other dimensions of the participant's

contributions in the sessions in search of additional insights into their experience and meaning-making. Furthermore, the interviewer themself will offer a unique insight into what is presented on a transcript page and how it relates to the way in which it transpired in the session. This is a perspective which does not represent the objective analyst and is not replicable, but one which provides additional points of inquiry into how an individual's responses to an interaction are governed by the *in situ* dynamic.

The use of corpus analysis does not constitute a complete analysis but is just the first step in approaching an understanding of language, which must always be analysed in context. Though the process of corpus analysis helps us to isolate particular features of the data, their meaning resonates in the surrounding text. This is what necessitated the 'cluster tagging' process, which inevitably offered a greater insight to the statistical findings when located back in the context of the discourse. Finally, when dealing in quantitative terms there is a tendency to generalise, so I must reiterate that the data here was obtained from a rather specific population of families of children with hearing loss who have volunteered to take part in an intervention. The challenge of this work was in maintaining a case-study perspective of the data whilst considering the broader application of the process for a larger population. As researchers, we must be very careful about what can be said to be true in this instance and what can be said to be generally true. Thus, I argue that the wider implications of this work

might not be in the findings related to our participants, but more so in the manner in which they were generated.

5.4.1 A SUMMARY OF THE METHODS APPLIED

In this chapter I have explored the various approaches I have drawn on to shape my linguistic analysis of the conversational data. Below is a table which summarises each stage of the analysis as it was applied:

Table 9 Summary of the linguistic analysis

Data collection	The shared review sessions, in which the intervention and the guide discuss video extracts of the family interaction, are video recorded.
Transcription	The video recordings are orthographically transcribed with some standardisation to streamline the electronic tagging. Some prosodic features are indicated on the transcript but these are removed before electronic analysis.
Corpus analysis	Using the software programme WMatrix3 the data is subject to POS and semantic tagging. A table of key semantic categories in order of descending log-likelihood (<3.84) is outputted for each participant from each session as representative of the focus participant's speech.
'Cluster tagging'	The n-grams within each key semantic category are highlighted on the original transcript and convergences of these tags are manually identified

	as 'cluster moments' at a ratio of one tag per seven n-grams. This is conducted to demonstrate where key themes of the participant's speech interact with one another.
Ten phases of transformative learning	These 'cluster moments' are explored for evidence of the ten phases of the transformative learning framework.
Discursive features: tense, mood and aspect	The extracts associated with each phase are analysed to discern features of tense, mood and aspect which characterise each phase and can aid researchers in identifying each phase of the transformative learning process.
Pragmatic tagging	The participants' full conversational contributions from each session are subject to tagging as either: Descriptive; Explorative; Evaluative; or Confirmative. This is applied to elicit a basic indication of the level of critical reflection and engagement with the session.

5.5 DATA

In order to reliably testify to the impact of the intervention, the aim was to deliver the standardised format of the intervention as described above. However, much like the outcomes and the focus of the video clips, the delivery of the intervention was flexible to the strengths and needs of the individual families. Thus there was some variability in the

duration – and even number – of the video review sessions, which was the responsibility of the intervention guide to manage. The average duration of a video review session was 40.0 minutes, but with a standard deviation of 834.60 this varied greatly. As a guideline, the intervention guide tried to limit video review sessions to one hour and 75.5% of the video review sessions lasted between 30-60 minutes. On average, the goal-setting sessions were 26.76 minutes long (s.d. 821.34). Twelve of the 16 cases received the standardised three shared review sessions. In one case, the mother declined a third review session having felt that her objectives had been met in two sessions. In three cases, a fourth shared review session was conducted; in two of those instances, it was in order to allow another individual to participate in the intervention. In one instance, a fourth shared review was conducted based on an agreement between the participant and the intervention guide that the outcomes based on the 'goal for change' had not yet been met.

One of the complications with the study was the transfer of data. The majority of the intervention sessions took place in the homes of the families involved and were recorded using a handheld video camera. The continuous transportation and transfer of the video data posed a challenge in capturing all of the sessions. As such, three of the 64 recorded sessions were lost in transfer. In addition, another challenge of portable recording technology is that it requires a power source. In a small number of instances, the video recordings were cut short by a

loss in power. Finally, given the nature and context of the sessions themselves, quite often the video review was interrupted by the coming and goings of people in the household, largely the demands for attention by the children. This made it very difficult to standardise the delivery of the intervention but once again demonstrated the complexity of the lives of the participants. A successful intervention must be able to operate in relation to these challenges. An overview of the data generated from the study is provided in Table 10.

Table 10 Overview of intervention sessions

Case	GS	1st SR	2nd SR	3rd SR	4th SR
A10102	✓	✓	✓	✓	
A10103	✓	✓	✓	✓	
A10104	✓	✓	✓	✓	
A10105	✓	✓	✓		
A10106	✓	✓	✓	✓	
A10107	✓	✓	✓	✓	
A10108	✓	✓	✓	✓	
A10109	✓	✓	✓	✓	✓
A10110	✓	✓	✓	✓	
A10111	✓	✓	✓	✓	✓
A10112	Data lost	✓	Data lost	✓	✓
A10113	✓	✓	✓	✓	
A10114	✓	✓	✓	✓	
A10115	✓	✓	✓	✓	
A10116	Data lost	✓	✓	✓	
A10117	✓	✓	✓	✓	

If we include the semi-structured interview data, the project as a whole generated 511 465 words of transcribed conversational data (researchers: 216 174 words (42.3%); participants: 295 291 words (57.7%)). The intervention sessions outlined in Table 10 generated 328 815 words of data. The intervention guide contributed 164 867 words (50.1%), leaving 163 948 words of data representing participants'

contributions to discussions from the goal-setting and video review sessions. From 61 sessions involving 1-2 (occasionally, 3) interlocutors individual files were uploaded for each speaker in each session. A total of 99 files were created. The number of n-grams for each speaker in each session varied somewhat (s.d. 1296.35) with a mean of 1656 n-grams (median: 1264 n-grams). This variability was partly symptomatic of the fact that in a number of sessions an additional family member or professional involved in the child's care was invited to observe, but was not the subject of or lead in the discussion. The 99 files provided the data to which the methods described above were applied in order to explore the concept of transformative learning as part of the empowerment process. The participants' data was treated as the site in which evidence of empowerment would be found, but in order to explore the process through which empowerment might have been created, I returned to the interactional exchanges between the participant and the guide.

CHAPTER 6: OUTCOMES

6.1 'GOALS FOR CHANGE'

A fundamental part of the intervention process was that the participants would identify their own 'goal for change', which directed the focus of the video recordings and constituted the outcome which would determine if the intervention had been successful. In the terms of the empowerment model, this gave the family epistemic authority and ensured that the intervention was relevant in addressing the challenges of their unique family dynamic.

As such, the nature of the goals identified by the families is indicative not only of the kinds of challenges faced by families dealing with hearing loss, but also the self-awareness of the challenges in one's own life. The families were informed that the focus of the intervention would be on communication within the family dynamic but in every case the parent was able to specify a goal and an area of their interactions with their child in which they perceived a need for change (see Table 11).

From these goals it was clear that the participants were aware: of the relational aspects of communication; that they are active agents in the interaction; and that what they do has an impact on the dynamic. There were specific inquiries, such as case A10109 as to whether the child

Table 11 Summary of 'goals for change'

Case	'Goal for change' paraphrased by intervention guide
A10102	When I'm following the speech and language advice from the speech and language therapist I want to use the film to find out whether it has an impact.
A10103	For [the child] to say 'Mum' when trying to get my attention. To use the video to get a better chance at a diagnosis, or to find other families with similar circumstances.
A10104	To make sure that when I'm communicating with [the child] that she's getting everything out of it that she can. To make sure she's confident and understands what we're saying. To build confidence in knowing how [the child] responds in communication to enable her to get the most out of our interactions.
A10105	Help with [the child]'s eye contact and mirroring each other. Developing the frequency of eye contact but also exploring the depth of that communication.
A10106	For other family members to feel more confident when they communicate with [the child] using their voice, signs, their whole body and facial expressions.
A10107	Seeing yourself give more space for [the child] to do things himself and communicate, to take the initiative in communication.
A10108	To get an objective view of what leads up to good communication. To find out what engages [the child] (sound, sign, play). To explore what motivates [the child] to move.
A10109	To explore [the child]'s response to sounds to determine when he's ignoring a sound rather than just not hearing it. To develop [the child]'s speech.
A10110	To turn a mirror on what you're doing and have a look at yourself and to make sure that we're doing the right behaviours. To be able to talk about the impact of our behaviour on [the child]'s communication, towards his speech development. To develop speech within the range of normal hearing children.
A10111	To stand back and give [the child] more opportunity to develop his communication.
A10112	To develop [the child]'s speech.
A10113	To see that she's picking up from me by copying signs. To transfer the strengths in communication at home to when we go out. To get other family members to use sign more.
A10114	To decrease the level of screaming and biting and to improve cooperation between [the child] and mother.

A10115	To use the film to look at the relationship at home and be able to show them at school how we work at home. To evaluate what I'm doing and see what it is that I'm doing to encourage him to be calm.
A10116	To look at managing [the child]'s behaviour and get more cooperation.
A10117	To get more cooperation and set boundaries, especially around bed time.

was choosing to ignore the mother's initiatives or simply didn't hear them; explorative inquiries such as in A101110, to 'turn a mirror' on the interaction and see what was happening; and more general aims to help the child's speech development. What we can also see from these goals is that parents were conscious of the wider support network, as in case A10106 where the mother was not so much concerned with her own interactions with the child but rather the role of other family members; and equally, A10115 where the mother was more interested in what happens at school. In 12 cases either an additional member of the family and/or a service provider was involved in the shared review sessions, which meant that through the intervention our participants were able to communicate their own wants to others in the child's support network. The video filming was directed to respond to this goal for change, which meant that after initial inquiries were addressed, the nature of the focus would evolve over the course of the intervention and the direction of this change was participant-led, but negotiated with the guide through discussion. The 'goals' for subsequent video sessions were less clearly defined than the original 'goal for change', which may have inhibited the potential for additional learning.

One thing to consider in relation to these goals is the role of the hearing loss and how it affected the ways in which the participants saw their child's development. We can find specific references to 'speech and language advice' (A10102), 'responses to sound' (A10109) and 'signing' (A10106; A10108; A10113) as well as comparisons to 'normal hearing children' (A10110). But underlying these inquiries were more general concerns about the relationships in the family dynamic. Parents may be concerned about implementing guidance from a speech and language therapist, but following advice is not unique to hearing loss, nor is the tendency to compare your child's development to the 'norm'. Ultimately, the parents were looking for more information about the ways in which their child behaves either with them, with other family members or with a teacher. We find references to 'cooperation' (A10114; A10116; A10117); 'confidence' (A10104; A10106); 'initiative' (A10107), 'impact' (A10102; A10110) and 'motivation' (A10108). The parent in A10103 was looking for examples of other families similar to their own so that she might learn from them. The nature of their concerns does not seem to be specific to hearing loss and so that 'unique stress' associated with this population in the literature (Meadow-Orlans, 1995) is perhaps indicative of the degree of stress rather than the type. In some ways the desired outcomes for these families were quite generalizable, as was articulated by the mother in case A10104: "the ultimate goal is to know that ev- ev- you know, that ten out of ten times [she's] – she's going to get what she needs from me". However, the means by which we come to realise those outcomes lies in the specific context of the family. The

challenge was to determine which details that emerged in conversation with the participants were of importance and to this end the cluster tagging method was applied.

6.2 'KEYNESS' OF THE DATA

Each session was processed through the WMatrix3 analysis tool as described above and compared with the BNC Conversations Subset. For each interlocutor of each session a log-likelihood table was outputted, listing the semantic categories in order of descending log-likelihood at and above the critical value of 3.84. In total, there were 99 tables from 63 review sessions, ranging from 1 to 4 interlocutors (including the intervention guide). To give an example, I have collated the outputs from each session to identify how frequently a semantic category appeared above this critical value, as a category that was representative of the sessions' 'keyness'. Table 12 shows those semantic categories that appeared most frequently across the 99 log-likelihood output tables.

The semantic categories 'Z4 Discourse Bin' and 'Z99 Unmatched' consistently came out at high log-likelihood. The category 'Z4 Discourse Bin' typically included minimal speech tokens and non-lexical utterances such as: ha, yeah, erm, mmm. The 'Unmatched' (Z99) category incorporated any words not found in the program template, but largely consisted of parts of words which were cut off or interrupted in

Table 12 Occurrences of semantic categories significantly overrepresented

SemTag	Category Description	Examples	Occurrences
Z4	Discourse Bin	yeah, ha, erm	80
Z99	Unmatched	i-, we-, th-	66
X8+	Trying hard	try/ing, tried	39
X3.4	Sensory: Sight	see, eye_contact, look_at	36
A14	Exclusivizers/Particularizers	just, only	35
X5.1+	Attentive	attention, attentive, focus	34
A1.1.1	General actions / making	do/ing, make, activities	29
X3.2	Sensory: Sound	hear/ing, listen, sound	29
A7+++	Likely	definitely	28
N6	Frequency	sometimes, n't_ever, once	27
E4.1+	Happy	happy, laugh, smiles	26
S1.1.2+	Reciprocal	interaction, respond	26
X2.5+	Understanding	understand/ing	26
X3.2--	Sound: Quiet	deaf/ness, quiet	26
N5++	Quantities: many/much	as_well, more, also	25
A5.4-	Evaluation: Unauthentic	copy/ing, copies	24
A6.2+	Comparing: Usual	usually, normal/ly, tend	23
K6	Children's games and toys	toy/s, doll	23
A13.3	Degree: Boosters	really, very, more	21
K1	Entertainment generally	play/ing	21
A10+	Open; Finding; Showing	find/ing, show/ing	20
X5.2+	Interested/excited/energetic	interest/ing/ed, excited	20
X2.2+	Knowledgeable	know/ledge, remember	20

the natural delivery of speech. Both categories reflect the nature of spoken discourse in its more fragmented syntax and use of back-channelling. Given that it is not explored any further in this work we might consider omitting it from the transcript protocol. However, the very fact that in 80% of cases such discourse features appeared as overused with a log-likelihood of greater than 3.84 justifies the very inclusion. As the normative corpus in this instance incorporated similar

discourse features and its notation was similar to our own, it seems appropriate in the comparison to represent speech tokens and non-lexical utterances in this way. Furthermore, for the dual purposes of representativeness and recognition, I have found it suitable to mark prosodic features on the transcript file using punctuation, such as 'O:::h' as these are removed prior to the corpus analysis which will recognise 'Oh' and can standardise these forms beyond the intonational features we may wish to see on a hard-copy transcript.

Of those recurring semantic categories, there were those which were indicative of the context and the population, such as 'X3.2 Sensory: Sound' and 'X3.2-- Sound: Quiet' which consisted largely of references to the deaf children's levels of hearing; and both 'K6 Children's Games and Toys' and 'K1 Entertainment generally' which were made of references to 'toys' and 'play/ing'. But we also see a number of cognitive and emotive processes, 'E4.1+ Happy', 'X5.1+ Understanding', 'X5.2+ Interested/excited/energetic', 'X2.2+ Knowledgeable' along with relational concepts such as 'X5.1+ Attentive' and 'S1.1.2+ Reciprocal'. I would also include the category 'A5.4- Evaluation: Unauthentic' in this relational concept as it was almost exclusively made up of references to the children 'copying' signs. Similarly, the category 'X3.4 Sensory: Sight' largely comprised of references to 'eye_contact' between the parent and child and discerning where the child was focusing their attention on the video, but also the participants reflecting on themselves as they 'look'-ed at the video. This collated table is a broad representation of

the recurring concepts that emerged from the conversational data and suitably demonstrates a combination of contextual signifiers, cognitive and emotive responses, evaluations (in the 'degree' categories) and interactional processes. As I stated above, it is in the interactions between the participants' considerations of their own feelings, the interactions with their child and the application in the physical world where we will find real insight into the families' experiences and this will be explored further below when I explore the 'cluster moments'.

6.2.1 USAS CORRECTIONS

The USAS tagging system incorporated into WMatrix3 uses a template which is unique to this software tool and although it has been validated in previous research (Rayson *et al.*, 2004) part of this methodology was to evaluate the automated tagging process. The USAS has a reported accuracy of 91-92% but is continually being updated as more information is added to the template profile. After the data for each interlocutor from each interview session had been processed through the automated USAS I manually checked each allocation and made the appropriate corrections. From 99 processes I can report an average accuracy level of 98.86% (standard deviation: 0.56). Though this is a highly agreeable level of accuracy, for the purposes of improving the software I will briefly describe some of the recurring corrections:

- 'i-/m-/s-': as shown above, there were a number of instances in the data where words were not fully articulated or post-correction occurred. It was quite common for the software to try and make

sense of these inputs as abbreviations, numerals or informal terms however in reality they did not carry any of the semantic value and were re-allocated to the 'Z99 Unmatched' category.

- Personal names: Conversely, a number of personal names which either did not appear in the reference template or expressed as nicknames in an informal way were not recognised by the system and had to be taken out of the 'Unmatched' category and allocated in the 'Z1 Personal Names' category.

- 'cool': This was a word that was almost exclusively used as an informal response token to show approval, however was often mistaken to mean 'cold' (O4.6-). This was re-allocated to 'A5.1+ Evaluation: Good'.

- 'hard': Largely used to refer to a level of difficulty, 'hard' was often taken to refer to an object's physical properties (O4.1). This was re-allocated to 'A12- Difficult'.

- 'dead': In its informal sense 'dead' was used to express degree, as in 'dead good', rather than its literal meaning of being 'dead'. This was re-allocated to 'A13.2 Degree: Maximizers'.

- (the)_'play': There was tendency from parents in the study to refer to 'the play', using the gerund form in reference to how their child's play which posited the verb as a noun and as such, 'play' in the recreational sense was often mistaken to mean a theatrical work. This meant re-allocating the n-gram from 'K4 Drama, the theatre and showbusiness' to 'K1 Entertainment generally'.

- 'that_way': This was most frequently used to specify a direction, of someone's gaze or movement but as a compound was tagged for its euphemistic sexual inference. This was re-allocated to 'M6 Location and direction'.

- 'make_it': Similarly, rather than its basic meaning of making and doing, 'make_it' was tagged for its figurative implication of 'success'. This was re-allocated to 'A1.1.1 General actions/making'.

- 'You_know': This construct posed some difficulties in discerning what was a regular discourse marker that operates independently of the clause and the actual inference of knowledge on the part of the recipient. Quite often this was ambiguous and so left unchanged.

- Finally I offer two examples for consideration which raise a question of literal and figurative meaning. Firstly, the phrasal verb 'got_it' was often used to mean that something was understood and acknowledged. This would ordinarily be allocated in the category denoting possession (A9+). Although this does not carry any of the cognitive implications of understanding, it is difficult to argue against the simple premise of 'having'. Similarly, the phrasal verb 'pick_(it)_up' was most frequently used to refer to something being noticed and acknowledged, in the same way as the prepositional verb 'pick_up_on'. This would however, be allocated to the category containing words to do with pulling, pushing and transporting

(M2). Once again, it is difficult to argue against the more literal process describing the transition. Though we can delight in the multiplicity and subtle distinctions of our own language, this does not make it any easier to program automatic tagging systems. In both cases, the item was corrected based on the knowledge that concepts of attention and understanding were already prevalent in the data and I did not want to exclude these examples. In this way, the reported accuracy was conservative since it could be argued that these did not warrant correction. Given that a number of figurative expressions in English are borne of more literal and physical forms, and that it is feasible that such phrases are used to convey both meanings, if we want to be able to draw semantic distinctions in this way we must be aware of such complications.

In most cases, the tagging system is able to make subtle distinctions based on POS-tagging information, however with spoken language quite often the syntax is interrupted. Subsequently, though the system would have no difficulty discerning 'mine' the possessive pronoun from the type of excavation in the earth for precious minerals, there are instances in the data where, given the interrupted sentence construction, such confusion arises. With this in mind, the challenges associated with conversational data suggest that there will continue to be a small margin of error with automatic tagging systems. Furthermore, our creativity with language – in neologisms, exotic personal names,

slang terms – will always prevent us from having an exhaustive template for language processing. Nevertheless, by continuing to integrate language data into the software templates we can maintain this level of accuracy for automatic text processing and it is something to consider when transcribing the spoken data. For the purposes of this study, the differences generated from my efforts in manually correcting the tags has been justified, since there has been some movement in the 'key' categories that lead on to the next stage of analysis. This remains a point for the researcher to consider when implementing automated tag systems to large datasets, balancing the work involved in manually correcting the data against a 2% inaccuracy and will remain so since, given the reasons above, we will never be able to rely on such tools being 100% accurate.

6.2.2 CLUSTER TAGGING

Manual corrections were accounted for in the output tables listing the semantic categories indicated as having a log-likelihood higher than 3.84. From these tables I had the list of semantic categories which would be used for cluster tagging. The n-grams within each category were tagged and the categories applied in 'tiers' according to the critical values, i.e. tier 1 included all categories with a log-likelihood value of 15.13 and above. Tier 2 included categories of value 10.83 and above, tier 3 included categories of 6.63 and above and tier 4 included categories of value 3.84 and above.

After each tier was applied, the original transcript was analysed for cluster moments. Cluster moments were identified at a provisional ratio of one tag per seven n-grams. This ratio was derived from early cluster tagging which was completed alongside manual identification of key passages in the transcript. A ratio of one tag per seven n-grams ensured that all passages identified manually were accounted for. This proved to be a suitable threshold throughout.

Cluster moments were collected after each tier of semantic categories was applied. There was significant variation between the number of categories within each tier for each session and for each speaker. For example, in Table 13 we see 5 cases of comparable n-gram length and the number of categories within each tier.

Table 13 Number of semantic categories from each tier of significance

Case	n-gram count	Tier1	Tier2	Tier3	Tier4	Total >3.84
A10106_1stSR	1420	7	7	12	19	45
A10116_1stSR	1427	5	2	5	5	17
A10102_1stSR	1429	3	3	3	10	19
A10109_3rdSR	1433	4	7	9	22	42
A10107_1stSR	1439	3	4	8	15	30

But given that the number of semantic categories could be said to be representative of the variety of topics within one interlocutor's utterances from one conversation, there is no rationale for consistency regarding the number of topics covered within a number of n-grams. Furthermore, the number of n-grams within each category is highly

variable. Subsequently, it is very difficult to predict what level of significance is required to account for the 'keyness' of the data to the point where no additional moments are identified. We cannot say that x number of tiers is required given the variability of categories within each tear. Equally, we cannot say x number of categories is required given the same variability within each category.

For each of the 99 session profiles the application of tags to the critical value of 3.84 was sufficient in identifying all 'key' moments, as would be identified through a manual process. However, there were a number of cases in which I did not tag the fourth tier of significance in the transcript data as it had become apparent that either the fourth tier tags would identify no additional cluster moments to those identified by the first three tiers; or that applying the fourth tier would capture what was essentially the whole dataset and would therefore not discern 'key' moments. In cases of 'saturation', the tagging process was completed at tier 3. In 26 of 99 cases, 'saturation' was seen at tier 3; in two of these, it was met at tier 2; and in 3 of the 26 cases the cluster moments were identified from tier 1 alone. I could not find any correlation between the size of the data (i.e. number of n-grams), the number of categories at each tier, the number of n-grams within each category and the point of saturation. Although it might be desirable to advise a researcher as to what level of significance is sufficient for a dataset of a certain size, this lack of correlation is unsurprising since 'keyness' is affected by the variability of the data, not the size. The question of

when to stop tagging remains and since our only guideline is the critical values of log-likelihood, I continued to apply the tags in tiers consistent with these critical values.

The process of cluster tagging was very effective in identifying passages which would have been highlighted by manual selection. Furthermore, in most cases there were additional passages that were identified through this process that perhaps would not have been identified by the subjective researcher. This in itself is an effective way of processing large datasets and particularly interview data. This reiterates that the manual approach to discourse analysis, which relies on 'intuition' (Adolphs, 2006), is founded on a subconscious recognition of particular features of language. A researcher might identify a passage of text as being of interest and that interest is validated by closer examination and in revealing the particular aspects of language that generated that effect. This cluster tagging process is one automated way in which those instinctive selections are validated by a systematic approach. Furthermore, we could see this as a parallel of the VIG approach, which microanalyses moments of success to identify the subtle behaviours that determine good interaction.

Potentially, each of these analytic processes could be automated so that researchers or practitioners conducting interviews would be able to quickly access the core moments of their interview sessions through a robust method. The most demanding aspects of the method are in the

transcription and manual correction of the data. With the development

of Automatic Speech Recognition (ASR) systems however,

conversations can potentially be transcribed automatically and with a

high degree of accuracy (Revuelta-Martínez *et al.*, 2012).

6.2.3 'CLUSTER MOMENTS'

The fact that we were reaching 'saturation' verified that this process

was effective at discerning key moments in the text in that as I worked

through each tier, I often found that I was identifying the same

passages of the transcript as had been identified in the previous tier. To

explain this process, I will refer to the first shared review session from

case A10109. In this session, the first tier of significant semantic

categories was as follows:

Table 14 Semantic categories in the first tier A10109_1stSR

Semantic Category	LL	n-grams
Z4 Discourse Bin	370.04	Yeah [253], ha [169], no [22]…
X3.2+ Sound: Loud	32.37	Noisy [4], louder [2], pipped
N6 Frequency	24.26	Sometimes [7], n't_ever [2], at_times
X3.2 Sensory: Sound	21.75	Hear [6], sound [5], noise [2], click, hear, overhear, noises
K1 Entertainment generally	17.48	Play [5], playing [3], dance [3], dancing, played
X9.1+ Able/intelligent	17.22	Able [7], skill

A coloured tag was assigned to each category and each n-gram was

identified as such on the transcript page. As explained above, I did not

tag the category 'Z4 Discourse Bin' as the frequency and semantic

value of its n-grams would conflate the data. Once these tags were

applied, I then looked through the transcript for cluster moments such as this:

```
SJ# 'Cos sometimes I worry whether I am actually
interacting enough (.) if I let him (.) play
PJ# But you have to give him some space
SJ# I do give him some space but sometimes I feel am
I in there too much or am I not
GUIDE# Right
SJ# =It's that balance that you've got to try and
weigh up
PJ# Yeah
SJ# really
GUIDE# Okay
PJ# Hmm
SJ# 'Cos at times he is quite happy to play by
himself
```

Here, the passages "sometimes I worry whether I am actually interacting enough if I let him play" and "'Cos at times he is quite happy to play by himself" are identified as cluster moments. They contain n-grams which have been shown to be of significance in the data and appear within the same thought process at a ratio of at least one tag per seven n-grams. This is also a good example of the kinds of utterances that would be manually identified by our researchers as 'key' to the session. The second tier of tags was then applied and the transcript re-analysed for cluster moments. No additional tags were found in the example above. The third tier included the following categories:

Table 15 Semantic categories in the third tier A10109_1stSR

Semantic Category	LL	n-grams
X3.2- Sound: Quiet	10.61	Quiet [2], silent, deaf
S1.1.2+ Reciprocal	10.39	Interacting, respond, interacts, responded
N5++ Quantities: many/much	9.63	As_well [12], more [2]
N5.2+ Exceed; waste	7.74	Too_much [6], too
A5.4+ Evaluation: Authentic	7.59	Actually [8], really [2]
E4.1+ Happy	7.13	Happy [4], funny [4], smile

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When this was applied, the example given above incorporated additional tags:

```
SJ# 'Cos sometimes I worry whether I am actually
interacting enough (.) if I let him (.) play
PJ# But you have to give him some space
SJ# I do give him some space but sometimes I feel am
I in there too much or am I not
GUIDE# Right
SJ# =It's that balance that you've got to try and
weigh up
PJ# Yeah
SJ# really
GUIDE# Okay
PJ# Hmm
SJ# 'Cos at times he is quite happy to play by
himself
```

The presence of tags at a ratio greater than one-tag-per-seven-n-grams meant that the whole passage could be treated as one cohesive 'cluster moment' and the tag-to-n-gram ratio was much higher than the basic threshold. This example demonstrates how quite often, the additional tags from the lower tiers simply validated passages of the transcript which were in part identified earlier. There can be little doubt then that such passages are of significance in the context of the session. Of course, the application of tags from the secondary and tertiary tiers also identified additional passages, but once identified there was no distinction between say 'primary' and 'secondary' cluster moments. All cluster moments were taken forward to the next stage of analysis, which was to look for evidence of transformative learning.

6.3 TRANSFORMATIVE LEARNING

6.3.1 EVIDENCE OF TRANSFORMATIVE LEARNING

The cluster moments from each session constituted the transcript data that would be explored for evidence of the ten phases of the transformative learning process. If a phase was not identified, I returned to the original transcript to determine if such an example had been omitted by the cluster tagging process and could be found. In four instances one additional phase was found through manual checking, but a sufficient number of phases were observed in each case to suggest a transformative learning process had occurred. In one case however, the additional phase found was the 'disorienting dilemma' itself (A10103). This was a case in which the transformative learning process observed was not related to the initial goals set out by the parent and was somewhat unexpected. Nevertheless, a satisfactory number of the subsequent phases, which were based on the same semantic categories, *were* identified by the cluster tagging process. In the four instances where additional phases could be found in the transcript, it was the case that in continuing the cluster tagging process to the required critical value would have negated the entire exercise as the vast majority of the transcript data would have been incorporated.

Transformative learning was observed in 10 out of 16 families, with two processes observed in case A10110. Mezirow (1978) offered the ten phases as a guideline, so we might not expect to see all ten phases and not necessarily in the order they are given. Furthermore, since we

are relying on what the participants tell us it may be the case that the experience of a phase was simply not articulated. As such, it was not the case that all ten phases were observed. The observation of the ten phases in each case is shown in Table 16. As was explained above, although presented as a linear process, research has found that transformative learning is "more individualistic, fluid, and recursive than originally thought" (Taylor, 2000: 292). The occurrence of these phases was seldom linear and often, phases would be 'revisited' at various points in the progression of the learning process.

Table 16 Observations of the ten phases of transformative learning

Phase	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
A10102	🟩	🟩	🟩	⬜	⬜	⬜	🟩	🟩	🟩	🟩
A10103	🟩	🟩	🟩	🟩	⬜	⬜	🟩	🟩	🟩	🟩
A10104	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩
A10106	🟩	🟩	🟩	🟩	⬜	⬜	⬜	🟩	🟩	🟩
A10107	🟩	🟩	🟩	⬜	🟩	⬜	🟩	⬜	🟩	🟩
A10109	🟩	🟩	🟩	⬜	🟩	🟩	🟩	⬜	🟩	🟩
A10110 (Father)	🟩	🟩	🟩	⬜	🟩	🟩	🟩	🟩	🟩	🟩
A10110 (Mother)	🟩	⬜	🟩	🟩	🟩	🟩	🟩	🟩	🟩	🟩
A10111	🟩	🟩	🟩	⬜	🟩	⬜	🟩	🟩	🟩	🟩
A10113	🟩	🟩	🟩	🟩	🟩	⬜	🟩	🟩	🟩	🟩
A10117	🟩	🟩	🟩	⬜	🟩	🟩	⬜	🟩	🟩	🟩

We would consider the initial phase, the 'disorienting dilemma' and the final phases of 'reintegration' to be crucial to initiating and resolving this process. The phases that were not observed tended to be phase 4, 'Recognition that one's discontent and process of transformation are shared and that others have negotiated a similar change' and phase 6, 'Planning a course of action'. As participants in the intervention, the inference is that 'planning a course of action' was the video work itself

and quite often this was articulated by the guide. Subsequently, we could infer that their very involvement in the intervention indicated that the participants recognise the potential for the intervention to bring about change if not for others, then at least in relation to their anxieties or concerns about their own family dynamic. I would argue that it is of greater importance that the parents can see potential for change in themselves than to have observed it in others.

An example of transformative learning

An example of one of the transformative learning processes observed in the data is provided in Table 17 with the corresponding transcript extracts. This example demonstrates that our observations of each phase were distributed across sessions, were likely to be revisited and did not appear in the conventional numerical order. But it is important to remember that the articulation attributed to a phase did not necessarily constitute the first cognitive experience of a phase, merely the first instance in which it was verbalised.

Table 17 Transformative learning and associated text extracts from A10104

1. **Disorienting dilemma**	**GS: Lines 252-253** PARTICIPANT# it is very hard I mean I'm I'm thirty six and never really been involved with kids
2. **Self-examination with feelings of guilt or shame**	**2ndSR: Lines 210-211** PARTICIPANT# I've said before it's you know first time mum you – you worry a lot
3. **A critical assessment of assumptions**	**GS: Lines 255-261** PARTICIPANT# and an' that's another thing I'm fighting is I don't kn- know what to do I'm it's a huge I mean for any new mum…but it's a huge learning curve for me

		so I just want to make sure that I'm not missing things that I should be doing because I don't have the experience
4.	**Recognition that one's discontent and process of transformation are shared and that others have negotiated a similar change**	**GS: Lines 279-282** PARTICIPANT# that's when I saw the video an' an' stuff you know and the CD that you gave and I thought yeah I- d- that excites me to be able to you know learn something for myself and then maybe help others as well through the the research that you are [doing so]
5.	**Exploration of options for new roles, relationships and actions**	**GS: Lines 537-549** PARTICIPANT# oh yeah an' it er a lot of it the the more emotional side to make sure that she gets from me what she needs [which is] …that knowledge that I'm interested…[that I want to play that I love her that you know]…I want her to have all of that and to be confident that you know that she wants me or she needs me, she she can kind of I can tell when she needs [that you know attention]…so it's not just the kind of functional [side]
6.	**Planning a course of action**	**GS: Lines 629-634** PARTICIPANT# yeah so that in three months' time I can say I've I can see that she's grown in these areas but I understand that when she does this this is what she's after or when she does that or you know so – or that we learn <together> erm new ways of communicating so that if you know she does need something together we work out that oh well you know if you want this [then I'll do that an' yeah that kind of thing]
7.	**Acquisition of knowledge and skills for implementing one's plans**	**GS: Lines 326-338** PARTICIPANT# erm again er it's basically like you say she she she looks at me she smiles she she taps my hand [she]…she wants to make sure that I'm taking notice [an']…an' she she's, she just yeah she just beamed at me and she'll just keep looking in to make sure that I'm watching what she's doing an' that you know and then she will just keep smiling at me [so it's]…and that's that's how et at the moment I kind of know that she's happy with what she's she's doing with me…and how it's working [so]

		GS: Lines 743-749 PARTICIPANT# you know erm an' an' confident in how I'm handling her an' how she's reacting to me ah er I want to be able to to go look at the videos and go wow yeah you can see a difference between me being a bit hesitant and not [quite]…confident there [to yeah I'm totally understand what she wants yeah that's that's what I want to see]
8. Provisionally trying out new roles		**2ndSR: Lines 545-546** PARTICIPANT# Yeah so it's like (.) really comm:unicating on all levels with her to try and you know so that she gets the (.) the full range really
9. Building of competence and self-confidence in new roles and relationships		**2ndSR: Lines 730-748** PARTICIPANT# [Yeah it is lovely to see 'cos y- like i- you know we've said i- you don't see it day-to-day…Because you doing it day-to-day…And sometimes like this it's really good to take a step back and be able to see you know (.) that yes…Yeah that – that you know that things are – that we are communicating well =And that she's happy you know with a– with how…You know we're treating her and you know **2ndSR: Lines 894-896** PARTICIPANT# Oh she did amuse me I thi- I think that's nice 'cos you (.) it is it's funny 'cos – although it's not happening the feed it is quite pleasurable and quite joyful **2ndSR: Line 954** PARTICIPANT# [˚I must say I got some pleasure out of that˚
10. A reintegration into one's life on the basis of conditions dictated by one's new perspective.		**2ndSR: Lines 663-666** PARTICIPANT# You could – you could actually be just sat in silence but you could still communicate quite…A lot **2ndSR: Lines 1056-1070** PARTICIPANT# it's you know (.) i- it has (.) given me that bit more confidence that I'm doing right…That she's getting everything she needs that the communication's there

	that the emotional support is there…That (.) you know that that that the levels that I was worried about you know…That she's getting it…You know…You know and the stimulation from her toys and from me and from what's happening around her

Nevertheless, what can be seen is a drastic change in the participant's perspective from their initial uncertainty – which they attribute to being a first time parent – to an expression of confidence that their child is 'getting everything she needs'. Yet even here, the participant stops herself from saying 'I'm doing right', perhaps in deference to her partner or perhaps in modesty. This outcome was directly related to the parent's goal for change, which paraphrased was:

- To make sure that when I'm communicating with her that she's getting everything out of it that she can.

- To make sure she's confident and understands what we're saying.

- To build confidence in knowing how [the child] responds in communication to enable her to get the most out of our interactions.

In accordance with the aims of the intervention, the parent expressed a heightened awareness of and even pleasure from the interactions they were having with their child, remarking that even though they were not always 'on task', there was still something to be gained from the interaction. In the early phases, the parent was concerned with the level of knowledge and experience she had with children and how this might have affected the 'quality' of her caregiving, beyond the 'functional' side

and in addressing her child's emotional needs. The mother emphasised 'learning together' and 'new ways of communicating', she was able to assume the perspective of the child in phase 7 and relate her child's responses to the manner of interaction. The mother expressed a lot of enjoyment, not only in relation to the interactions that were captured on film, but also in being able to view and critically reflect upon them. This brief summary demonstrates that the underlying principles of the intervention were transmitted; the parent was able to re-assess her own role in the interaction and gained self-confidence from seeing what she was capable of contributing and receiving from the interactions with her child. She commented on the non-verbal aspects of communication and how even in silence, 'you could still communicate quite a lot'. The parent was constantly aware of the relational aspects of the interaction and how she and her child were 'learning together'. The parent emphasised the importance of the video in enabling them to 'take a step back' to critically reflect upon their behaviour. Finally, the parent underlined their new perspective, concluding that "the communication's there, the emotional support is there".

In relation to the discursive features associated with each phase, this example supports some of the predictions made. In the disorienting dilemma (phase 1), the participant spoke quite cohesively but remarked upon the irregularity of their experience, having 'never really been involved with kids'. In the second phase, the mother explained that as a first time mother, 'you worry a lot', with the degree maximizer 'a lot'

suggesting a critical element, blurring the lines between phase 2 and phase 3 where the 'problem' was seen to be accumulative with other aspects, as 'another thing I'm fighting'. The participant's admission, 'I don't know what to do' was combined with an emphasis on the enormity of the task, 'it's a huge...a huge learning curve'. Again, there was an element of the next phase already present as the participant considered that 'for any new mum' there is a learning curve. Here, the participant introduced an external impetus in relation to what she 'should be doing' as a critical reflection on what she saw as the central issue to her own behaviour: 'missing things...because I don't have the experience'.

At phase 4 there was already a sense that the participant could envisage the empowering effects of the latter stages, referring to how seeing the DVD and the potential of the intervention 'excites me' and that the participant's sense of personal empowerment was already extending to a more communal empowerment as she began to think about 'help[ing] others as well'. We can observe a transition from reflecting on a past experience to considering its effect in the present, with a sense of individual agency, 'I thought yeah, that excites me to be able to you know learn something for myself' and where the 'benefit' was a self-oriented learning experience.

In phase 5 the participant was very clear about the prospective outcomes they envisaged from the intervention, in terms of the 'new roles, relationships and actions' that characterise this phase. The

participant described this new relationship in terms of maximal benefit, 'to have all of that', 'not just the functional side' and emphasised the direct relationship between her and her child: 'she gets from me what she needs', 'she wants me or she needs me, she can kind of – I can tell when she needs..'. This continued into phase 6 where the participant spoke about 'learn[ing] together', 'together we work out..'. The participant began to express their thoughts in the prospective future tense here, 'so that in three months' time I can say', introducing the causal effect of whatever new knowledge is gained from the intervention.

Phase 7 showed that the participant already had some awareness of the ways in which the child's non-verbal communication was an effective means of interaction and that 'that's how at the moment I kind of know that she's happy with what she's doing with me'. It is important to point out that at this stage in the intervention the participant had not seen any video footage. This claim to knowledge seemed contradictory to the parent's initial concern that they were 'inexperienced' and as such, were not attuned to the communicative behaviours of a non-verbal child. However, given the opportunity to critically reflect on their interactions, the parent was able to demonstrate knowledge of such behaviours and even assume the point of view of the child: 'she wants to make sure that I'm taking notice', 'she'll just keep looking in to make sure that I'm watching'. This was expressed with some certainty, 'she'll just keep looking', 'she will just keep smiling at me' which enabled the

participant to state their level of knowledge, 'I kind of know that she's happy with what she's doing with me'. Nevertheless, the participant was still interested in seeing 'a difference between…being a bit hesitant' and 'totally understand[ing] what she wants'. In this phase, the participant – relying on memory alone – was able to express a level of knowledge in relation to her child's non-verbal communicative behaviours, which provided some evidence to address her goal for change, but there was something about seeing it on video that the participant felt would perhaps be more conclusive. This suggests that participants can, to some degree, experience perspective transformation based on cognitive processes i.e. memory alone, but since this remains in the subjective domain, perhaps the 'objective' video provides a more effective learning stimulus.

This participant was quite clear about the outcomes they expected from the intervention and as such, phase 8 exhibited none of the more speculative features outlined in the predictions but simply reiterated the 'maximal benefit' the participant had expressed in the earlier phase. Here, the participant talked about 'really communicating on all levels' so that she gets 'the full range'. But the participant also referred to 'trying', indicating that this was something for her and the family to work towards.

Phase 9 is characterised by self-confidence and in the predictions I described a prevalence of utterances concerned with 'ability',

expressed through modal verbs and claims to knowledge. In this example however, the most prevalent aspect was the use of emotive and positive evaluative descriptors, that it was 'lovely to see', 'it's really good', 'she's happy', 'it did amuse me', 'I think that's nice', 'it's funny', 'quite pleasurable and quite joyful', to the point where the participant felt compelled to express their positive response: 'I must say I got some pleasure out of that'. This is testament not only to the enjoyment of the video clips but also of the intervention process, through which there is frequent laughter and smiling. Furthermore, the participant's reflection upon the process, which allowed them to 'take a step back and be able to see…that we are communicating well' emphasised the critical reflective process and the evidential of the video. The new perspective afforded by the video is contrasted to the 'day-to-day' first-hand perspective the parents are otherwise limited to.

Finally, phase 10 demonstrated that the participant felt a new confidence in her awareness of the non-verbal aspects of communication, having stated in a matter-of-fact way, 'you could actually be just sat in silence but you could still communicate…quite a lot'. This integrated stance was emphasised by the use of 'actually', conveying an awareness of the distinction between the 'actual' and the perceived. The ability to communicate non-verbally is underlined by the modal verb 'could' and the degree maximizer 'a lot'. The generalizable 'you' is used as opposed to 'I', suggesting that the participant is aware that this is a universal phenomenon. The participant reported that the

process has 'given me that bit more confidence' and was able to state quite plainly that 'I'm doing right…that she's getting everything she needs that the communication's there that the emotional support is there that (.) you know, that that that the levels I was worried about you know that she's getting it', with the listing emphasising the accumulative effect and extent of this positive view of the family dynamic. The participant referred to the levels that she 'was' worried about, firmly locating such concerns in the past.

This example has shown that there are many features of the discourse detailed in the predictions associated with each phase that can be found in the data. There were some instances where phases appeared to cross over and this may make it difficult to firmly establish particular discourse features as indicative of a distinct phase or conversely, it may be the very tool for making that distinction. However, we must be aware of introducing an interpretive fallacy here, i.e. we may come to associate particular discourse features with a certain phase of learning, but subsequently identify that phase through those same aspects of discourse. In order to determine if each phase could be reliably evidenced in such a way the predictions needed to be tested against the larger dataset and this is explored below. It is the intention of this work to provide a more reliable account of how transformative learning is observed in dialogue and to scrutinise the process by which each individual phase is identified. If this is not shown to be in features associated with tense, mood, aspect or some other semantic-oriented

process, we must consider other linguistic and pragmatic aspects by which our 'intuition' tells us that we have observed a particular phase of learning. This too is explored below.

Progress through the ten phases

One remarkable aspect of the transformative learning processes observed throughout this work was the pace with which the participants progressed through the phases. In the above example, we can observe that the mother exhibited seven different phases in the first goal-setting session and the progression through the phases often occurred over a small number of lines. It is not determined in any of the theoretical literature by Mezirow or in any subsequent application of the transformative learning theory what we should expect in terms of progression through the phases. In a number of instances participants exhibited the first 6 phases of the framework in the goal-setting session before any video work had been completed. This is perhaps unsurprising given that the session asked the participants to critically reflect on their family dynamic and identify an area where they wanted to see improvement. As such the participants thought critically about the reasoning behind their concerns and saw the video as the means to begin exploring an alternative perspective or behaviour.

More common, however, was that the video itself would provide an insight into the dynamic which challenged the participants' current beliefs, providing that 'disorienting dilemma' that prompted new learning. Still, the participant would progress through a number of the initial

phases within one session. Progression through the process is complicated somewhat by the fact that it is often non-linear and that some phases are not present, however in mapping the first occurrence of each phase we can see how quickly the process can occur (Fig. 5):

Figure 5 Progression through the phases of transformative learning

Phase	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
A10102_CP_D	Goal-setting						1st SR			3rd SR
A10103_KA_L	3rd SR									
A10104_TD_A	Goal-setting							2nd SR		
A10106_JP_P	2nd SR									
A10107_CT_G	Goal-setting						1st SR			
A10109_GJ_S	1st SR					3rd SR				
A10110_MB_C	1st SR					2nd SR	3rd SR			
A10110_MB_A	1st SR						3rd SR			
A10111_CS_D	Goal-setting	1st SR			4th SR					
A10113_KB_N	1st SR									
A10117_AH_K	1st SR									

Legend: ■ Goal-setting ■ 1st SR ■ 2nd SR ■ 3rd SR ■ 4th SR
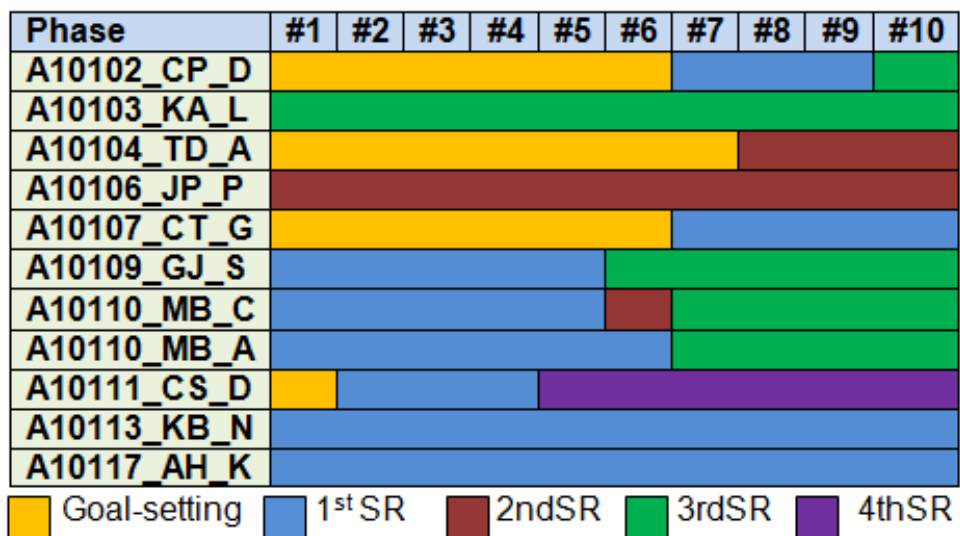
The topic of transformative learning

The nature of each transformative process can be summarised as follows:

A10102

The mother came to recognise the strength of her relationship with her daughter and that her behaviours were having an impact on the child's communication because "she's communicating very well". The mother's conclusive statement was indicative of her empowerment: "Now we know that we're doing it right we can do it our way".

A10103

The mother had a transformative learning moment around her self image. This was not specified in her 'goal for change' but was identified through the cluster moments. From being involved in the video work, the mother joined a weight-loss programme and the critical reflection of her self-image also prompted her to think about her own needs in the family dynamic. The mother commented on having 'more energy' and how this ultimately would improve the family dynamic.

A10104

The mother's confidence was improved with regard to 'doing the right things' when interacting with the child. She also acknowledged that there was more going on during their interactions than she had originally envisaged, that they could enjoy each other's company even if the child was not 'on task' (feeding).

A10106

The mother's 'goal for change' related to other family members and the child's grandmother came to appreciate her own normalcy and naturalness with the child as 'one of her grandchildren'.

A10107

The mother came to appreciate giving the child space to take the initiative and how this could help his development. This was directly related to her 'goal for change'.

A10109

The mother's awareness of the child's interactional skills was improved and her transformative learning came through recognising the child's attentiveness to sound and his (non-verbal) responses to it.

A10110

The father's goal was related to the child's speech development and when watching the video clips, the father became aware that he himself was not using speech as often as he would like. His transformative learning process revolved around: adjusting the complexity of the speech he and his wife were using; acknowledging the initiatives the child was making; and recognising the level of intonation in the speech.

The mother's transformative learning process was based on her confidence in 'doing things right' and an awareness of the interactional elements present in the family dynamic. The mother questioned the complexity of the speech she used with the child, but was reassured by the level of feedback she could see that they were getting back from the child.

A10111

The mother described having some difficulty getting the child to wear his cochlear implants. In the video work, she was able to see how through continued exposure and practice wearing them, the child seemed to be more comfortable with them. Furthermore, the mother

became less concerned about the use of the cochlears when she could see how much the child was communicating on the video clips.

A10113

The mother's transformative learning process was instigated by a clip in which the child was given time and space to make her own initiative through sign, which demonstrated to the mother how competent the child was in communicating. The mother also saw potential for the video to help other family members recognise the child's interactive skills, in particular the child's older brother.

A10117

The mother realised in the first shared review session how much the child was picking up from observing the mother's behaviour. This resonated with the mother, who understood that she could change her own behaviour to improve the child's cooperation. The mother understood the child's imitation to be a gesture of relational communication.

In most cases, there was learning observed in relation to the goals set at the beginning of the intervention, demonstrating that the intervention can be delivered to answer the specific concerns and questions of the family. However, we have also seen how the sessions created other potentially empowering learning opportunities as was the case in A10103. Because the video offers an objective view on the family

dynamic, it allows the participants to follow their own inquiries and look for answers themselves. Thus if the parents do have concerns which they do not articulate to the intervention guide – or if new inquiries emerge through the session – the video allows for multiple inquiries, increasing the potential for significant learning to occur. What is important is that we are able to recognise learning that was not anticipated or part of the initial focus of the goal for change. This work demonstrates that the corpus analysis and subsequent tagging process was able to identify this learning process through its statistical prominence in that particular conversation.

6.3.2 DISCOURSE OF TRANSFORMATIVE LEARNING: TESTING THE PREDICTIONS

In this work I had made predictions about the ways in which we could characterise each phase through features of tense, mood and aspect. This was based on early data from the study in which the ten phases were identified, but also in anticipating what each phase would encapsulate. For example, we would expect that utterances that were identified as representing phase 5, "Explorations of new roles, relationships and actions" would be characterised by the future tense, low modality and the subjunctive mood, given that the participant would be speaking in terms of uncertain possibility. Based on the 11 cases of transformative learning processes observed in the data, I was able to assess these predictions and consider what discursive features could be said to be representative of each phase.

6.3.2.1 Phase 1: Disorienting dilemma

What emerged most strikingly from the passages identified as phase 1 were exclamations that expressed some kind of epiphany, as in A10113, "all of a sudden the penny dropped"; A10117, "this bit's just hit home", or new realisation, "he's never done that with them before" (A10112); "if she's done it before, I've never noticed that she's done that" (A10113). These moments of clarity or 'lightbulb moments' were distinguishable from the more inquisitive utterances found in A10102, "isn't it normal?"; admissions of unknowing, "I didn't really know what to do with him" (A10107), the unfamiliar, "it felt a bit weird" (A10107); and self-criticism, "I'm obviously doing something wrong" (A10109). Again, testifying to the often instantaneous nature of this learning process, those more clarified utterances demonstrated how a new perspective was readily acknowledged and how the progression through the remaining phases served merely to reiterate and entrench this new learning. Conversely, we have examples of the more disorienting instances of new learning, which, along with the levels of confusion described above were often coupled with strong expressions of emotions: "'Cos I hated it", "thinking Oh my god" (A10103); "It is very hard" (A10104); "I'm pleased! (A10106); "'cos sometimes I worry" (A10109). In such examples, we were observing a transition into Phase 2 and it was difficult to draw strict boundaries around each phase, but this does show that the participants naturally tried to make sense of this disorientation or epiphany by reflecting on their own thoughts and feelings.

In terms of the predictions made earlier, it was correct to anticipate that expressions at phase 1 could be both cohesive and disjointed, representing both the clarity of a 'lightbulb moment' and the process of 'thinking out loud' as sense-making. This however, does not offer any insight into identifying the phase from within a transcript. One notable discourse feature of this phase was the use of the evaluative adverbs, "actually" and "really", a distinction of authenticity perhaps prompted by the video and the parents' recognition that their perception and the reality of their interactions might be two different things. However, rather than the declarative statements I had predicted that such use of adverbs might occur in phase 10, here they operated within a variety of utterances: in reference to events on the video when they 'actually' happened (A10107); speculations about what was 'actually' happening in the interactions (A10109); or, as the participant began to critically reflect on what they 'really' should expect (A10104). Given the unpredictability of how the 'disorienting dilemma' itself might manifest the subsequent utterances of the learner were equally difficult to anticipate. The data does not show any consistency in the use of tense, mood or aspect but we might consider non-lexical aspects to better understand those 'lightbulb moments'. This is explored below.

6.3.2.2 Phase 2: Self-examination with feelings of guilt or shame

In criticism of the transformative learning process it has been challenged for under-reporting the role of affect in the learning process

(Boyd, 1991; Taylor, 1997; Lupton, 1998; Imel, 2003; Dirkx, 2006; Kucukaydin and Cranton, 2012). It is in phase 2 where we might expect to find strong reactions expressed as feelings in response to the disorienting dilemma and which mark the beginning of reflexivity. The most cited feeling was 'worry' (A10104; A10109; A10112), along with 'fears' (A10109), having 'an attitude' (A10117) and the acknowledgement that one's expectations are 'ridiculous' (A10107).

There was a tendency for the discourse to be constructed in the present tense, which was contrary to the prediction that most self-examination would take place in the past tense. Parents either gave an indication of their current state of mind in light of a disorienting dilemma, or their habitual behaviour, but in both cases this was located in the 'now'. Despite the fact that events on the video became located in the past, they were perceived to be representative of a current reality and the participants' examination was of that current 'self', perhaps as an acknowledgement of their reasons for participating in the study and the need for change. The present tense, therefore, could be indicative of a more enduring state, of what the individual perceives to be more permanent characteristics.

Once again, it was difficult to discern these utterances from those we would consider to represent the next phase of critical reflection. As such, one participant's discourse in which they expressed their feelings around a new proposition also exhibited external modalities as they

became critical of what they 'shouldn't do', what they 'should' know and what they 'need' to be doing (A10107). This was not an aspect which was common to the learning processes of others, but another indication of the fluid progression through phases of the transformative learning framework.

The data for this phase did not match the prediction in tense or aspect in any general way. Although in some cases participants reported what 'had been' (A10102; A10103), I also observed those considering 'what would be' (A10107), which is more representative of the 'planning' phases. The use of modal verbs here was more indicative of the individual's locus of control rather than their state of learning, which is an aspect of their perspective which is susceptible to change but not relative to a particular phase in the learning process.

6.3.2.3 Phase 3: A critical assessment of assumptions

Passages identified at this phase were almost exclusively located in the present tense, often as present continuous descriptions of habitual behaviour, "I'm just being emotional" (A10107), "I'm making it too easy for her" (A10113). In these examples, that element of critical evaluation manifested in one participant suggesting that her input is not to be treated as a rational contribution but 'just...emotional', and the other was critical of the lack of challenges in her daughter's life because of her own actions, which was seen to inhibit her development. I also found participants describing their own behaviour as 'wrong' (A10102),

being 'too focused' on a peripheral aspect (A10113) and 'putting pressure on' (A10109GJ), suggesting a view that previous intentions and efforts had been misdirected. Degree modifiers were used, such as 'too focused', 'doing it enough', 'it's quite difficult', but not with a level of frequency that could be said to characterise this phase.

One of the predictions for this phase was that there would be a high use of causal conjunctions as participants considered the cause and effect of behaviours founded on their current assumptions. This was evident to some extent through the use of 'because' and 'so that', however the participants' critique was more often a matter of comparison, either to other families and children, or to an alternative pattern of behaviour. The data showed comparisons to "any new mum" (A10104); "other friends" (A10110); "friends with kids her age" (A10102); "other babies" (A10107), a 'hearing child' (A10110; A10113), the generalisation that "he's only a baby" (A10106) as a way of critically understanding their family dynamic in relation to what they know of others. But the parents also used 'contextualisers' such as "because I don't have the experience" (A10104), "Because we haven't got a hearing child to compare him to", "if we'd have had him as a second child it would be easier" (A10110); "if it was a hearing child" (A10113) which combined a feeling of inexperience with an attempt to normalise their experience with what they would anticipate from having a hearing child. At the root of this was perhaps the origin of the disorienting dilemma, which was becoming the parent of a child with hearing loss.

The parents in these examples tried to refer to what their intuition would tell them if their child was a hearing child and transfer that level of intuition to an experience which they perhaps had not anticipated. As such, the mother in case A10104 could appreciate that that feeling of uncertainty with having a child for the first time would be true 'for any mum'. The mother in case A10113 was critical of the level of detail she saw herself going into when explaining things to her child and suggested that she wouldn't be so particular "if it was a hearing child" and began to take a more relaxed view towards explaining to her child what she is doing.

Thus, contrary to the prediction that parents' critical reflection would be based on cause and effect, the data showed that parents used comparisons to some degree of 'normalcy' when evaluating their own behaviours. This meant that there was no temporal progression from the 'then' to the 'now', but more consistently a synchronic consideration of the alternatives in the 'now'. What was more apparent was an exploration into the hypothetical, the consideration 'if' and subsequent behaviour, 'then..'. This would be considered to be indicative of later phases in the framework, where participants consider new roles and alternative behaviours, once again demonstrating the fluid interactions between the phases and the difficulty in discerning one phase from another.

6.3.2.4 Phase 4: Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change

As shown above, this was the phase which was the least represented in the data and found in only five cases. But even in those five cases, I expanded the definition of this phase to not only incorporate utterances where participants acknowledged that others had experienced change but also instances where the participants themselves saw an opportunity for change that was missed. If we are to understand that the effect of this phase is to provide some kind of vicarious 'mastery experience' and demonstrate to the participant that such a process can and has occurred, I would argue that in referring to their own previous experiences participants can negotiate this phase. If the effect of this phase is that the participant does not feel alone in their disorientation, then we have already observed how the participants have used comparisons to normalise their experience. Thus from the data, I found that participants reported on the successes of others in the family dynamic (A10106) or at nursery (A10113) as a model for their own potential success, but also recollections of their own 'empowering' experiences: "I weighed up all the odds and when I saw that video it just made me think definitely, I'm definitely gonna go ahead with it" (A10102). The decision making in this previous experience though, was helped by seeing that "a lot of families have been through it". In her own transformative learning process, the mother in case A10103 seemed to galvanise her own views by contrasting herself to someone in whom

she saw a shortcoming, demonstrating that these frequent comparisons do not only serve to find comfort in the 'like' but also establish distance from the 'other'.

Though I predicted the use of comparisons, they did not appear in any consistent construct in the data. I observed an anecdotal style, both located in the past and drawing from previous experiences, as well as the present and what occurs with others in the dynamic. Even within the mere five cases observed here, I found variation between the use of 'matter-of-fact' statements and speculative 'if' statements, demonstrating both the degree of certainty and curiosity that can manifest in making such comparisons. Given the narrative style of report within which we find these utterances there is little use of comparative constructs such as 'as', 'like', 'more than' as I had predicted, rather the citation of such incidents seemed to serve the purposes of a comparison in itself and the relevance to the current discussion was implicit. Put simply, a participant would refer to a previous experience through which they came to make a significant decision that altered their family dynamic and within that narrative detail, identify the kinds of factors which aided or hindered that decision-making process, from which we would infer what was of importance to them. This generated a great variability, even at such a small incidence, which would suggest that it is unlikely that we would be able to predict what discourse features would characterise and be indicative of this phase of the process.

6.3.2.5 Phase 5: Exploration of options for new roles, relationships and actions

Phase 5 could be said to represent a notable shift in momentum within the learning process as the participants began to look for solutions to the challenge presented before them. In the predictions, I stated that I would anticipate frequent use of modal verbs within utterances identified as phase 5, which is characterised by speculation and exploring alternatives. More frequent, however, was the use of the conjunction 'whether' (A10102; A10109), used as a means of inquiry: "I just wonder whether" (A10110), "I sometimes wonder whether we should be" (A10110), "I do wonder sometimes whether we ought to" (A10110); "we wonder whether we should be trying to" (A10110). The exploration of alternatives was also expressed, as "is it better just to" (A10110), 'it could be' (A10110); 'I'd rather' (A10113); 'instead of' (A10117); "where I think in the past" (A10109), 'rather than' (A10110) as well as the speculative 'if' (A10107; A10110; A10117). For the majority, alternatives were seen as comparisons, rather than the free alternatives I had predicted through the use of modal verbs. Thus, 'better to', 'rather', 'instead of', 'whereas in the past', posited one idea against another. The agency of such speculations ranged from those external obligations, 'ought to' (A10110), 'you need to' (A10109); 'I should be' (A10110), to individual reasoning 'I suppose' (A10107; A10109) and even individual desire 'I want' (A10104). These examples suggested that degrees of empowerment might be observable throughout the transformative learning process. In other words, the

lines of inquiry can be driven by individual agency and one's one wants, needs and speculations, but also from an external force, be it society, health care professionals, or the observation of other families. The manner in which perspective change is directed can in itself offer greater/lesser empowerment, but nevertheless, this is a trajectory in process and will only be realised if the line if inquiry is assimilated into the participant's meaning perspective, i.e. if it is carried through to phase 10.

6.3.2.6 Phase 6: Planning a course of action

Phase 6 was quite often absent in the transformative learning processes observed in the data. I have argued that in a number of instances the plan of action was simply to proceed with the video intervention and as such, 'goes without saying'. Nevertheless, we have also seen how one participant expressed their intentions "so that in three months' time I can.." (A10104). I have observed a small number of instances that carry some causal relationship: 'if..then' (A10104); "you should..(in order) to" (A10110); "to try to" (A10110) as participant's made plans with particular consequences in mind. Though expressive of their expectations, the data also showed instances of vague language, 'that kind of thing' (A10104); 'or something like that' (A10110), in anticipation of the unforeseen, with verbal acknowledgment of the speculative nature of this stage, 'perhaps' (A10110); '(and then) maybe' (A10110). Another aspect which remained through this phase was the influence of external agents, as participants continued to consider: 'I

should/n't' (A10110); "I've heard that you should" (A10110), "I've just got to" (A10117). This is contrary to the predictions made in relation to this phase and perhaps is another instance where comments which might be indicative of another phase are intertwined.

6.3.2.7 Phase 7: Acquisition of knowledge and skills for implementing one's plan

Phase 7 is associated with knowledge and as has been seen in the above example gave parents a chance to demonstrate both how well they know their child's behaviours and what might have constituted satisfactory evidence to assuage their concerns. As such, as well as the instance explored above in which the parent was able to assert that "she wants to make sure that I'm taking notice" and "that's how at the moment I know that she's happy with what she's doing with me" (A10104) I observed the following examples of an empathic transference to the perspective of the child: "he knows it's sort of his turn to watch", "he's more interested in the world that we're creating around him" (A10110); "for a split second he is actually looking, feeling and then he just got bored and let go" (A10111). I also observed an instance of a parent explaining how they had tested for evidence in a video filming session in order to infer the child's motivations: "I thought if I pick that up and show him then I'm actually gonna know if he actually does want the lion" (A10107). Parents had tried to relate to the motivations of the child in order to understand their behaviour:

"because if she wasn't she wouldn't have been helping me" (A10102), as well as seeing the video as a source of evidence:

"I want to be able to go look at the videos and go wow", "that's what I want to see" (A10104); "It's nice to have this to be able to see What's going on" (A10113). In one instance, the absence of an expected action caused the parents to critically reflect upon their expectations: "Maybe it's not – this is not a time for him to be copying. He doesn't – There's no reason to copy" (A10110).

In relation to the predictions, we can say that this phase is associated with levels of knowledge and evidence of that knowledge; it is also a stage where the parents were likely to assume the point of view of the child in order to understand their motivations and subsequent actions. Such considerations were phrased in the conditional perfect, 'she wouldn't have been', which is the speculative aspect as anticipated. However it was more common for parents to phrase their utterances in the present tense as they commented on the events of the video in front of them. In this respect, such utterances were no more distinguishable from any other phase. I did not observe any prevalent sense of self-reflection through the use of reflexive pronouns, nor a particular tendency to use 'I know' or 'I think'.

6.3.2.8 Phase 8: Provisionally trying out new roles

Phase 8 was directed at capturing the characteristic action or perspective of a new role, which in the predictions was represented by

high individual agency, low modality but consideration of the effects or benefit of the new role, and an acknowledgement of 'trying' or concerted effort to achieve one's goals. This was not apparent in the data, though parents did tend to summarise their new perspective:
"so it's planning your days out" (A10103); "I've just gone like that Not thinking, I've just done that" (A10113); "So it's like really communicating on all levels with her to try and you know so that she gets the full range really" (A10104) with a reference to trying and the outcomes of this new role, 'so that..'. In two of these instances the exophoric subject of the pronoun 'it' is in vague reference to the role or actions of the parent, either as a the means to achieve your outcomes, as in 'it's planning your days out'; or as in the ends to the behaviour itself, 'it's like really communicating on all levels'. There was a sense that parents would begin to think more about the future effects, "hope that she'll clasp the concept" (A10102), however this was not a prevalent feature of text extracts associated with the phase.

6.3.2.9 Phase 9: Building of competence and self-confidence in new roles and relationships

My understanding of this phase was that the learner was subject to some level of reinforcement from trying out a new perspective or role, that they were validated either by evidence or a resultant feedback in the way of the 'mastery experience'; or that they received some emotional or cognitive enrichment from assuming the new role. As such, I predicted that the parents would be eager to demonstrate their

knowledge with explicit statements of 'I know', but also that they would offer reasoning or evidence for their claims. The data showed that parents began to offer some explanation of their claims: "it seems to be working 'cos she's communicating very well" (A10102); "that's definitely what she's done because when she saw me do this she did that instantly" (A10113). In both instances, the reciprocal action was seen to be indicative of a level of understanding or confirmed interpretation of the child's frame of mind. Here, the stance of the parents is indicated through maximizers ('very well'), evaluations of the certainty ('definitely'), success ('working') and speed ('instantly') of those reciprocal actions. In one instance, this phase was exhibited as a transference to the child's point of view, "I think she's just trying to give me what she thinks will make me happy" (A10117) with the rewarding conclusion that the child was being cooperative and trying to foster that relationship by making the parent 'happy'.

Parents' evaluative comments were not always supplemented with reasoning or evidence:

- "that just acknowledges that she understands certain things as well" (A10102)
- "we've noticed that while we're communicating it's actually working and it's actually taking effect" (A10102)
- "obviously giving him the space to tell me what he wants" (A10107)

- "He hears everything what goes on you know and he's taking it all in and he will respond to certain sounds", "But you can really realise he does learn a lot of what goes on" (A10109)
- "we are communicating well and that she's happy you know with how we're treating her" (A10104)
- "we are working together so it's interactive, we're both being interactive with him" (A10110)
- "It's really showing now that I can do these signs and I can copy most of what you do And it's just about giving her this space" (A10113).

There was a recurring use of 'really' and 'actually', as well as 'obviously' as predicted. This was indicative of the participants' investment in a new reality that had been made 'obvious' by the video data. Associated with this new actuality were many concepts to do with communication and reciprocity: 'acknowledges', 'communicating', 'space', 'tell', 'hears', 'taking it all in', 'respond', 'learn', 'interactive', 'signs' and 'copying'. There was tendency at this stage for the parents to talk in terms of 'we'; I had predicted a strong sense of individual agency but the data demonstrated a greater consciousness for the parental/family unit. The extracts showed a stronger agency on behalf of the child too, as parents more confidently spoke about their perspective of the child's point of view. Furthermore, parents were more likely to structure their utterances with a much more direct grammatical relationship between themselves (I/we) and the child, thinking more precisely about the intersubjectivity.

In a small number of instances, the evaluative comments observed at this stage were expressed in relation to the previous assumption which had prompted the learning process:

- "So he's picking it up isn't he? He's developing" (A10106)

- "I don't need eye contact to actually be able to communicate with him" (A10107)

- "maybe I'm saying more than I thought I was" (A10110)

- "I think he's rewarding us more than perhaps sometimes you realise" (A10110).

In these instances, the parents were aware of the change in perspective, having acknowledged that a previous assumption, i.e. that the child wasn't picking up on speech and communicative cues; that one need's eye contact to communicate with the child; that the parent wasn't saying much to the child in interactions; that the child wasn't providing reciprocal actions in interaction; was in some way amiss.

Finally, parents remarked upon the emotive enrichment the process offered: "although it's not happening the feed it is quite pleasurable and quite joyful", "I must say I got some pleasure out of that" (A10104); "It's nice to see you sort of communicating" (A10107); "it's good to see that we're getting positive feedback from him" (A10110); "I love watching them, it's really nice" (A10113). It is important to acknowledge the level of enjoyment and happiness of this learning/intervention process, particularly in relation to the anxiety, concern and doubt

attributed to parents of deaf children in the literature and in the feelings that direct the parents' goal for change at the beginning of the intervention. Furthermore, this is an affective domain of the learning process and one which must be incorporated into our understanding of learning processes, as positive reinforcement, as motivation for further learning as an outcome for families.

6.3.2.10 Phase 10: A reintegration into one's life on the basis of conditions dictated by one's perspective.

Phase 10 punctuates the transformative learning process and must demonstrate that the learner has assumed a new perspective. In the predictions I stated that this phase would be characterised by utterances denoting ability, that the participants' confidence not only in the knowledge of their role in the communicative dyad but also of their potential would be expressed through the use of modal verbs 'can', 'could' and 'will'. The data provided the following examples: "Now we know that we're doing it right we can do it our way" (A10102) "You could actually be just sat in silence but you could still communicate quite a lot" (A10104). Here, there was also a reference to 'doing it right' and 'our way', which were shown to be one and the same thing. Others referred to 'doing it right' (A10104), perpetuating this concept of 'right' and 'wrong' but rather than some assessment of what are the 'right' and 'wrong' behaviours, the participants seemed to be validated in knowing that their behaviours were having the 'right' (i.e. intended) effect. Other participants aligned what was effective and what was 'natural', "it's

perfectly natural, you know?" (A10106); "there's little things that I think that we do – do naturally" (A10110), emphasising that the parents had the capacity to make their own decision based on their intuitions and believing that these decisions would benefit the family dynamic.

Many of the conclusive comments were more specific to the nature of the interactions, but integrated into the parents' point-of-view:

- "I think you learn just by being supportive and giving him the time and space really" (A10109)

- "And I think that's the best way to be, to follow his lead rather than to put too much in that you want really. 'Cos it's about him" (A10109)

- "So it's getting that balance isn't it? Between stepping back too much and then stepping forward too far as well" (A10110).

In these examples, the distinction was no longer between a sense of 'right' or 'wrong', but rather there being 'too much' or 'too far'. This also emphasised the reciprocal nature of the interaction, 'being supportive', 'giving him time and space', 'follow[ing] his lead'. In relation to the interactions, parents commented upon their new learning or 'realisation': "I think we do a lot of that with him And we don't necessarily realise we're doing it" (A10110); "I didn't realise how much was actually going in and what I was getting back" (A10113). This demonstrates the fundamental principle of the intervention, which is to raise awareness of the communicative behaviours that shape good communication. This also reiterates that the intervention is not engineered to drastically alter

behaviour and nor does it need to; rather a heightened awareness or change in perspective is preferred in order to build parents' confidence by showing them what it is that they already do.

In relation to the predictions, parents were confident enough to say what they thought ('I think') but also what they had not been aware of ('I didn't realise'). I have shown how parents continued to think on their behaviour in terms of 'right', 'natural' and also 'the best way', acknowledging that there are alternatives but being validated in the way that they interact with their family. The participants' speech was predominantly expressed in the present tense in this phase, as the 'meaning' from their learning was expressed in relation to their unique family dynamic as a current state of affairs.

Summary of predictions

This work approached the shared review data with a discourse analytic approach based on principles of tense, mood and aspect in order to better understand the observation of the ten phases of transformative learning in conversational data. The predictions for each phase were based on a conceptual understanding of what each phase represented, as well as some early transcript data. However, distinguishing one phase from another was shown to be problematic, and utterances that could be attributed to one phase were often found intertwined in the dialogue with those of other phases. The predictions did not offer any reliable indicators for how each phase came to be recognised in the conversational data, suggesting that this researcher extracted meaning

from those conversational extracts in some other form beyond basic grammar in order to identify each phase. This in itself created a discord akin to the disorienting dilemma, as the assumptions I had made about how I – and others – would come to identify the phases was not supported by the evidence afforded through discourse analysis. Naturally, the next step is to critically reflect upon those assumptions and consider that there are alternative aspects on which the very identification of those phases was based. In order to uncover that 'instinct' which led me to make such distinctions, we must consider other semantic and pragmatic properties that can be found in those transcript extracts. This will not only allow us to better understand the process of transformative learning as it emerges in conversation, but also provide a reliable systematic process for claiming evidence of transformative learning in conversational data. Snyder (2008: 159) recommends that "the focus of transformative learning research move from assessing whether transformation has occurred and toward analysing the transformative process for how it can inform curricular decision making and instruction". I have shown that following the initiation of phase 1 – the disorienting dilemma – progression through the subsequent phases can be quite rapid. The disorienting dilemma is not only seen to be the 'catalyst' for the transformative learning process but also the pedagogical entry point (Berger, 2004), the edge of the learner's meaning and the threshold at which new learning can be introduced. I return to the conversational data to look at how the disorienting dilemma emerged in conversation. This will scrutinise the

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contributions of the intervention guide, as well as considering the non-verbal aspects of communication that shaped these interactions.

6.3.3 INITIATING THE TRANSFORMATIVE LEARNING PROCESS

This work was preceded by a pilot study in which a student speech and language therapist was involved in a video feedback session as part of her supervision and reported a significant moment of illumination that changed her trajectory form failing her clinical placement to passing it (James *et al.* 2012). In this work, discourse analysis was combined with a prosodic analysis of the student's speech during the learning moment to explore the learning process in relation to Mezirow's ten phases of transformative learning. James *et al.* (2012) showed that in addition to the selection of footage, the way in which the video was discussed helped to support the student's critical reflection. The student seemed to respond to a binary construct whereby the guide challenged an assumption in relation to the contents of the video and the student inferred an alternative behaviour, which allowed her to realise an effective solution to her clinical encounters. Furthermore, the authors describe the intervention guide's vocal behaviour at one point in the session as being characterised by "hesitation, pausing, groping for words, incomplete phrases and by her naming of the fact that she was thinking" (James *et al.*, 2012:12). In establishing this pattern of (vocal) behaviour, it is believed that the guide encouraged the learner to stop and think, which created the opportunity for the learner to explore her

own thoughts through a passage characterised by an absence of expressive emotion. This prosodic 'flatness' is contrasted to a subsequent passage in which the learner experiences a deeper exploration of the impact of this learning and which is characterised by the "musical changes in pitch that is indicative of expressed emotion" (James *et al.*, 2012:12). This emphasises the attuned interaction of the guide and the learner in responding to this behaviour of 'stopping and thinking', but also of the non-lexical ways in which we can characterise a moment of learning.

Similarly, Collins and James (in press) explored a VIG intervention session involving a teacher of the deaf who had expressed concerns over her efficacy in her job role. She had reported that this particular intervention session had had a significant impact on her self-confidence, which the researchers explored as a process of transformative learning. The learning process was initiated by the intervention guide's claim that the video data demonstrated a 'successful moment', which was contrary to the participant's perspective of the video. This created a disorienting dilemma which led the participant to critically reflect on their assumptions. Even though the transformative learning process had been initiated, it required strategic interactional work on the part of the guide to direct the participant's trajectory towards a new perspective. The guide remarked that the participant was reflecting upon what they "should have done" and began to reiterate that the aim of the intervention was to focus on strengths. In fact, the intervention guide

hadn't even finished making this point before the participant

acknowledged and reiterated to themselves that the focus was on

strengths and was subsequently able to progress through the phases of

the transformative learning process. This is shown to be a crucial

interjection from the guide, who recognized that the participant

appeared to be constrained by a negative outlook on their practice. By

inverting this negative approach to the positive approach that is

fundamental to the intervention, the guide realigned the participant's

progression through the transformative learning process.

Returning to the data collected in this study, I examined the point at

which the disorienting dilemma emerged in the conversation in order to

better understand how the transformative learning process is initiated in

interaction.

The 'goal for change' triggers critical reflection

In two instances (A10104; A10111) the disorienting dilemma follows the

guide's initial inquiry into the participant's aim for the intervention, the

'goal for change'. When establishing the goal for change, the

participants are aware of the communicative focus of the intervention

and are asked to consider the limit of their understanding of their

interactions with their child. They are encouraged to identify a context

or behaviour about which they would like to know more, or to identify a

'problem' area in their interactions, the likelihood being that their

understanding of this aspect is limited. This 'growing edge' (Berger,

2004) has already been shown to be a lucrative site for the disorienting

dilemma as it is the threshold of the unknown for the parent. The

following extract is taken from the goal-setting session for case

A101014 (Lines 210-284):


```
210 GUIDE#  so mmm I was just thinking if you you I think
211  you probably know quite a bit about the intervention
212  that we're doing but mmm based on what you know so
213  far {NAME} is there any kind of way that you've
214  thought this could help me do this or understand
215  this better or
216 PARTICIPANT# erm I think it's just over all because
217  erm with it there being no real deaf children in the
218  family but my main main concern is to make sure that
219  when I'm communicating with her that she's getting
220  everything out of it that she can. An' an' that I'm
221  doing it in the best possible way and that that's
222  what interests me about this erm video intervention
223  is that you can pinpoint when I'm getting through to
224  her
225 GUIDE# right
226 PARTICIPANT# the best
227 GUIDE# yep
228 PARTICIPANT# an' er an' an' say right okay if you do
229 this ah er expand on this [you]
230 GUIDE#                   [yeh]
231 PARTICIPANT# =know you're going to to be able to give
232  her what she needs an' and that is my biggest
233  priority [you know]
234 GUIDE#     [right]
235 PARTICIPANT# anything else that comes out of it is
236  obviously a a bonus so er you know just make sure
237  that she's getting uu- you know out of her toys and
238  stuff just make sure that she's getting as much out
239  of those as possible .hh you know just just that
240  whole package generally [just]
241 GUIDE#                   [yep]
242 PARTICIPANT# =to make sure she's confident she's
243  she's can understands communication she understands
244  you  know as she's getting older w- what we're
245  saying how how how it all works with the .hh not
246  just with obviously speech but you know gestures
247           [an']
248 GUIDE#     [yeh]
249 PARTICIPANT# you know er eh er and everything and so
250  that that that's what I want at the moment [that is
251  why  I'm here at the moment]
252 GUIDE#                                    [yeh Mmm
253  Mmm Mmm, Mmm Mmm Mmm]
254 PARTICIPANT# ha, noisy.
255 GUIDE# that s- a that sounds like we'll be able to
256  definitely work towards that 'cos that that's really
257  what the programme's all about.
```

```
258 PARTICIPANT# yeah
259 GUIDE# you you, av- I really like what you've said
260  there about get- getting the most out of what you're
261  naturally doing [yeh]
262 PARTICIPANT#       [yes] exactly and that's what I
263  want is [you]
264 GUIDE#     [yes]
265 PARTICIPANT# =know there's a you know you say oh well
266  you know this ah this point, th- this worked really
267  well and if you can do this .hh this will hopefully
268  expand on what you know and that that's what I want
269  you know, 'cos it is very hard I mean I'm I'm thirty
270  six and never really been involved with kids
271 GUIDE# right
272 PARTICIPANT# and an' that's another thing I'm
273  fighting is I don't kn- know what to do I'm it's a
274  huge I mean for any new mum
275 GUIDE# yeah
276 PARTICIPANT# but it's a huge learning curve for me so
277  I just want to make sure that I'm not missing things
278  that I should be doing because I don't have the
279  experience
280 GUIDE# Mmm
281 PARTICIPANT# so
282 GUIDE# Mmm
283 PARTICIPANT# yeah
284 GUIDE# Mmm lovely
```

This extract shows that in response to the question about the focus of the intervention, the participant already had quite a clearly defined idea about what they expected from the intervention and was able to elaborate and explore on that idea through the dialogue, over a number of lines. The guide was not called upon to offer much more than minimal response tokens and a brief validation of the participant's intentions, in accordance with the aims of the intervention (Lines 255-261). In fact, in many instances, the participant continued uninterrupted through the guide's 'back-channelling', as indicated by the 'latched' turns (marked with '='). At one point when the mother was distracted by the child (Line 254) the guide acknowledged what the parent had said and validated it not only through positive evaluation, 'I really like what

you've said there' but also in a broad paraphrasing of what the mother said to reaffirm her voice. This also served as a 'check-point', punctuating what the mother had already said but also giving her the opportunity to 'pick up where she left off' and continue with what she was saying.

In this dialogue, the participant exhibited a number of phases of the transformative learning framework, as was shown above. What has been identified as the disorienting dilemma came towards the end of this extract, following critical reflection and consideration for the 'new role' the parent was aiming for. This may appear to be an inversion of the expected order of the transformative learning process and there was nothing remarkable in the way of grammar or semantics about the extract that constituted the disorienting dilemma. Rather, it would appear that the mother had already conceived of the latter phases – planning a course of action and considering new roles – in response to what she knew of the intervention, to address what we must assume was a long-standing concern about her level of experience with children and her subsequent 'expertise' when interacting with her child. This suggests more of a 'touchstone dilemma' (Erickson, 2007), a concern which had existed for a time and which the participant had revisited on occasion, perhaps gradually progressing through the phases as a means for accessing the 'new role' emerged. It seemed that the participant was able to rationalise the process of perspective transformation and with the intervention, recognised a way in which she

could access the necessary resources, as evidence, to establish that new perspective.

The video triggers a disorienting dilemma

In contrast, a number of transformative learning processes were instigated by the content of the video data (A10103; A10106; A10107; A10109; A10110; A10113; A10117). Below is an extract from the first shared review session for case A10107 (Lines 318-353). In this session, both the mother and father were present, with the mother the 'lead' parent and the subject of the video clips with the child. This was the first clip shown of the first review session. In this extract, the intervention guide was identifying on the video the aspects of the child's and the mother's behaviours that led her to view it as 'successful' communication and select it for viewing in the review session.

```
318  (clip is played)
319 GUIDE# Do you hear that?
320 MOTHER# He ta- Yeah.
321 GUIDE# It's really quiet
322 MOTHER# Mmm
323 GUIDE# I think he's taking turns
324 MOTHER# Right yeah.
325 GUIDE# you're making a turn for him
326 MOTHER# Mhm
327 GUIDE# Okay? So this might feel like it's not very
328   communicative
329 MOTHER# [Mmm
330 GUIDE# =[but I think when we start delving in
331 MOTHER# Yeah
332 FATHER# Right yeah
333 MOTHER# I feel like I need eye contact with him
334 GUIDE# Yeah
335 MOTHER# A lot of the time
336 GUIDE# Yeah. And you're looking for it aren't you?
337 MOTHER# Mmm
338 GUIDE# You're really really right down on his level
339 MOTHER# Yeah ha ha
```

```
340 GUIDE# On this - on this particular clip it's about
341  you being attentive to him
342 MOTHER# Mhm
343 GUIDE# You giving him the space, you enabling him to
344   explore more and more
345 MOTHER# Mhm
346 GUIDE# and for me that little vocal turn that he
347  takes after you sign I can't help but feel there's -
348   you're learning and teaching himself something very
349  important about turns in [conversation
350 MOTHER#                        [Mhm
351 GUIDE# Okay?
352 MOTHER# Mhm
353 (clips is played) [(5.0)]
```

The guide's talk was rife with communicative concepts: taking turns, attentive, giving him space, on his level, giving him space. For the most part, both parents were very receptive to what the guide had to say, taking their conversational turns using minimal speech tokens to acknowledge what was being said. The nature of the intervention is such that it may be quite an unfamiliar manner of interaction for some parents, who are more familiar with clinical encounters and assessments in which they are 'information receivers'. In this intervention, the guide continually encouraged the participants to make their own contributions and offer their own insights, but it seemed that for many, there was a 'breaking in' period as they became accustomed to both using their voice and being critically reflexive of the video data in which they were the subject. Nevertheless, in Line 333 the mother made a statement which constituted the beginning of their learning process, the disorienting dilemma: 'I feel like I need eye contact with him'. The guide acknowledged this statement and related it back to the video, but perhaps did not direct the focus to the potential assumption

behind this statement at this point in the conversation. The passage

reached a natural pause, in which the guide briefly returned to the video

data before continuing as follows (Lines 354-386):

```
354 GUIDE# What I'm gonna do is give you the – the bit
355   that happens after this. I didn't want to start with
356   it today 'cos for me this clip here was such a
357   strong clip that showed you giving him space
358 MOTHER# Mhm
359 GUIDE# You're not talking (.) too much you know
360   you're not in his face. You're right beside him,
361   you're really attentive. You then scaffold his
362   learning, giving him that two word sign combination
363   (.) and he takes that little vocal turn
364 MOTHER# Mhm
365 GUIDE# =there's so much going on, I felt there was
366   enough in there
367 MOTHER# Right
368 GUIDE# I can appreciate for your first clip it might
369   feel a little bit strange (.) maybe, like micro
370   analysing a very tiny
371 MOTHER# Yeah it felt a bit weird when I was actually
372   doing it with him because (.) I don't know (.) 'cos
373   he can't hear me I feel like to communicate with him
374   I need to (2.0) have eye contact with him
375 GUIDE# Yeah
376 MOTHER# I suppose
377 GUIDE# Okay so you'd like to see a clip with more eye
378   contact?
379 MOTHER# No not really it's nice to see that.
380 GUIDE# Right
381 MOTHER# Er:m (.)
382 FATHER# It's –
383 MOTHER# That I don't need the eye contact to actually
384   be able [to communicate with him
385 FATHER#    [Yeah
386 GUIDE# Okay↑
```

The guide continued to reiterate the strength of the clip, referring to the

terms of the contact principles but also addressing some concerns

articulated by the mother, 'You're not talking too much you know, you're

not in his face'. The guide then changed the focus to acknowledge the

strangeness of the process, of the level of scrutiny of the video. The mother then took the turn to express her own response that it 'felt a bit weird' and after a couple of pauses returned to her earlier thought that she felt she 'need[ed] to have eye contact with him', this time preceding this concern with the explanation that ''cos he can't hear me'. It is important to recognise that when the participant had paused, the conversational turn was not taken up by the guide (or the father, for that matter) and that the mother was given the time and space to thin through her conversational turn, allowing her to go back to her initial concern. Since the idea was already introduced at line 333, the mother's clause construction here foregrounded an explanation, perhaps to develop this idea which was not picked up earlier in the exchange. This time, the guide acknowledged the idea then permitted the mother another conversational turn and the opportunity to elaborate. When the mother did not develop the idea any further in line 376, the guide offered what they understood to be the perlocutionary effect or outcome of the statement, 'Okay, so you'd like to see a clip with more eye contact?'. This prompted the mother to clarify her statement by explaining her thoughts about it, culminating in the articulation of her disorienting dilemma, 'I don't need the eye contact to be able to communicate with him'. Knowing this, we are able to read the mother's earlier statements 'I feel like I need eye contact with him' as critical of a previous assumption and recognise the early phases of the transformative learning process. What this extract demonstrates is that such statements, if given the space and encouragement to be

elaborated, can uncover a participant's reflections upon their own perspective. The statement 'I feel like I need eye contact with him' introduces a complex stance-taking 'I feel I need', physically distancing the subject with their compulsion ('I need') by introducing an intermediary perspective ('feel'). By raising awareness of such stance-taking in conversation, we might better recognise the ways in which participants introduce statements which are indicative of their critical reflections. Once such statements are recognised, the intervention guide can work with the participant to direct the focus of the conversation towards this reflexivity and develop what is the beginning of a learning process.

The guide introduces a disorienting dilemma

The previous example demonstrated how the video can create a disorienting dilemma by showing the participant evidence of a 'reality' which is in contradiction with their perception. In other words, the video showed the mother that she didn't necessarily need eye contact with her child in order to communicate with him, which was shown to be contrary to a belief she held at the time. The data also provided an instance where the guide themself made an assessment on the mother-child dyad which had a similar effect. Very early on in the goal-setting session for case A10102 (Lines 45-74) the guide remarked upon a brief interaction that had occurred within the session:

```
45 PARTICIPANT# yeah, {CHILD} no put it in the bin. {CHILD},
46    bin. Come on, good girl. Sorry she just dropped it on the
47    floor so ha ha ha ha.
48 GUIDE# that's a great example there of how you are able to
49                [communicate with her]
```

```
50 PARTICIPANT#   [ha ha ha, yeah] ah ha ha ha I can get her to
51    tidy up I can yeah she's really [helpful as well]
52 GUIDE#                                [Yeah yeah]
53 PARTICIPANT# so (.)
54 GUIDE# you've got a really strong communicative
55 relationship [h(h)ave(h)t you?]
56 PARTICIPANT# [ha ha yeah]. I d- I thought it was just normal
57    but ah ha ha isn't it normal?
58 GUIDE# I I'm just seeing I'm just enjoying watching her
59    communicating with you and erm y- there you've got her to
60    do something which probably she wasn't that willing to do
61    herself    [but what she was enjoying in the (.) in the
62        bin yeah]
63 PARTICIPANT# [no she was about to eat it ah ha ha, yeah ah
64    ha ha ha ha]
65 GUIDE# but you we're able to get her to cooperate with what
66    you wanted her to do
67 PARTICIPANT# yeah ah ha ha [thank you]
68 GUIDE#                       [so that's a] ha no
69 PARTICIPANT# I don't see no think much of it before
70        [so that's it]
71 GUIDE# [oh right okay]
72 PARTICIPANT# yeah, I just you a ha I just it's just the
73    usual thing for [me]
74 GUIDE#               [yeah] yeah.
```

This example emphasises the relative terms of 'strong' and 'normal' which affect our perspective. Understandably, the mother perceived of her relationship with her child as 'normal', which we could say is her 'normal' experience. At this point the mother distanced a 'strong communicative relationship' from a 'normal' one, yet equated her own relationship with a 'normal one'. The inference was that she did not perceive of her own relationship as 'strong', rather 'just normal'. The guide's assertion that the participant and the child had a really strong communicative relationship was followed by the tag question, 'haven't you?', to which the participant offered the natural, 'ha, yeah' before offering her challenge to that assessment. The mother then offered her own tag question, 'Isn't it normal?' and the guide – who was not inclined

to assess the relationship in such terms as 'normal' – began to validate her claim. The participant then said that she hadn't '[thought] much of it before', suggesting that she had now begun to critically reflect upon the relationship. Her statement that 'it's just the usual thing for me', tells us that her perception of 'normal' is more akin to 'usual', rather than any objective or social normalcy. By validating her claims with an explanation which referred to a shared source of evidence – i.e. the interaction that had just occurred in front of them – the guide was able to convince the mother to begin to think about her relationship as 'strong'. This generated the 'disorientation' from the mother's own more modest assessments of her relationship and initiated the transformative learning process. This has also shown how the guide used evidence that was accessible to both the participant and themselves to verbally persuade the participant to acknowledge their own self-efficacy.

The 'unforeseen' disorienting dilemma

There was one instance where the transformative learning moment was not related to the initial goal for change. In case A10103, the participant had disclosed to the intervention guide that in addition to the interactive work that was the focus of the intervention, watching the video clips had prompted the mother to join a weight loss program. At the same time as being involved in the intervention, the mother had taken measures to adjust her diet and lifestyle with the aim of losing weight. Being aware of this, the guide provided a video clip in the final video review session in which the participant was able to see themselves and the difference

in their appearance, due to this self-directed process of losing weight
(A10103_3rdSR_Lines 528-586):

```
528 GUIDE# And the final footage I've got this is a bit
529   cheeky of me really {NAME} but I wanted to just get
530   one where you were in the shot (.) because I know
531   that throughout this whole time of working together
532   you've been on your own personal journey around you
533   know your weight loss and everything and I've
534   thought (.) I really want {NAME} to just look at
535   herself on the video just so you can see yourself
536 PARTICIPANT# Yea(h)h
537 GUIDE# =as you are that's what I l(h)ook l(h)ike
538   n(h)ow. So I chose this shot for you really and just
539   it's a lovely shot where you're – you look up at me
540   at the camera just really enjoying watching erm
541   {SIBLING} and {CHILD} playing together. So I
542   included this one for you
543 PARTICIPANT# Heh heh heh heh heh
544 (clip is played)
545 PARTICIPANT# Heh heh
546 GUIDE# (h) (h) it's really short heh
547 PARTICIPANT# Yeah. Yeah it's nice though.
548 GUIDE# Quite a change there isn't there? It was – I
549   mean what do you think [when you see yourself there?
550 PARTICIPANT#              [Ye::ah I see anyway from that
551   first one
552 GUIDE# Yeah. Yeah yeah. Big change
553 PARTICIPANT# Definitely. 'Cos you can't believe it
554   can you?
555 GUIDE# Can't believe it.
556 PARTICIPANT# H(h):(h)mm
557 GUIDE# How well you've done (3.0) and the impact I
558   mean the impact of it there (.) how you look and how
559   you seem watching yourself back [as well
560 PARTICIPANT#                       [I've got more
561   confidence
562 GUIDE#         [Yeah.
563 PARTICIPANT# =[than I have on the first one
564 GUIDE# Yeah.
565 PARTICIPANT# 'Cos I hated it 'cos I felt [fat the
566   videoing thing put me
567 GUIDE#                                  [Yeah. Yeah.
568 PARTICIPANT# =thinking oh my god
569 GUIDE#         [Yeah
570 PARTICIPANT# =[do you know what I mean? But you do it
571   for {CHILD} do you know what I mean?
572 GUIDE# Yeah Yeah you did it for {CHILD} yeah. (3.0) And
573   now you've done something for you
574 PARTICIPANT# M:mm. That's what I mean my life's been
```

```
575   wrapped around these two appointments and all the
576   you know the- these implants and things
577 GUIDE# Yeah yeah
578 PARTICIPANT# And with {CHILD} (.) it's like this
579   appointment that appointment
580 GUIDE#        [Yeah
581 PARTICIPANT# [You do forget about your[self
582 GUIDE#                               [Yourself yeah
583 PARTICIPANT# You let yourself go because 'cos your
584   life's wrapped around {CHILD}
585 GUIDE# Yeah  [yeah
586 PARTICIPANT# [Do you know what I mean?
587 GUIDE# Yeah.
588 PARTICIPANT# Erm.
```

Following the viewing of the clip, the guide directed the focus towards a notion of 'change', prompting the participant first with the tag question 'isn't there' then followed up with the more developed question, 'what do you think when you see yourself there?' (Line 549). The participant acknowledged this, with minimal agreement (Line 550) but the guide's subsequent turns promptly directed the turn back to the participant, through minimal speech tokens and reiteration, 'Yeah. Yeah Yeah. Big change', then through direct repetition of the participant's utterance, 'Can't believe it'. The participant, however, still did not assume 'epistemic primacy' and take a substantial vocal turn. The guide redirected the focus from the video itself to the effect of the video as it appeared with the participant, 'how you seem watching yourself back'. This is what prompted the participant to remark upon their 'confidence', which was seen in relation to the beginning of the intervention process 'than I have on the first one'. The participant then began to elaborate on the motivations that she had to change, reflecting on the thoughts and circumstances that created the situation in which the participant 'let

[them]self go'. This participant's learning process was related to the level of focus they directed towards the child's needs, neglecting their own and the new perspective was built on recognising the family's needs, which was inclusive of her own. In this example, the guide had to be quite persistent in exploring an aspect of the family dynamic which she recognised as important to the participant, but which had featured little in the intervention process. The fact that the guide had recognised the importance of the participant's weight loss, introduced it to the intervention as a video clip and encouraged the participant to discuss it in the session brought about the transformative learning process. This emphasises the need for health service users to consider all aspects of the family experience for overall well-being and be open to receive and respond to directives for learning which may not have been anticipated or initially feature in the intervention.

Summary: triggering the disorienting dilemma

What has been shown by looking at the emergence of the disorienting dilemma within the interaction is that the fundamental principles outlined for the transformative learner proposed by Mezirow (1991) affect the potential for learning. Mezirow (1991) stated that the learner must be receptive to the learning process, must engage in self-reflection and must engage in critical discourse. We have seen how when the participant is given the opportunity to discuss and explore the disorienting dilemma in conversation they begin to critically reflect on their family dynamic and progress through the phases of the transformative learning framework. But we have also seen how the

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guide plays a significant role in managing that progression, in giving space in the conversation for the participant to elaborate and explore their own disorienting dilemma; in encouraging critical discourse by offering the conversational turn; and by orienting the participant on a strength-based trajectory.

Furthermore, to initiate that learning process we have seen how the intervention creates opportunities for the disorienting dilemma to emerge: the video provides a different perspective and a site for evidence of a 'reality' which may be contradictory to the perceived reality of the learner; the guide can offer assessments of the family dynamic based on observational evidence that are contrary to those of the participant; the question of what can be gained from the intervention can prompt participants to think about their 'growing edge' and critically reflect upon their family dynamic. This would suggest that there is a greater potential for understanding and evidencing the transformative learning process by looking at how it emerges through the conversational interaction, rather than anchoring each phase to particular discursive features. This process-oriented approach also foregrounds the context of the interaction and the intersubjective meaning founded not only in the relationship between the interlocutors and the context of the conversation but also the non-verbal aspects of communication which contribute to 'meaning'. In this respect, a multi-modal analysis of the interactional process may offer insight into a model of how transformative learning occurs in conversation. In this

work, I decided not to code the conversational data using a multi-modal tool because the initial interactions I observed did not exhibit any significant or recurring features of gesture, eye gaze, body position etc. to contribute to the meaning derived from the conversation. However, this was based on observations of the conversations as they happened, from the initial opening. Perhaps a more directed observation towards moments where the disorienting dilemma emerged would offer more insight into the interactional behaviours of a pivotal moment.

6.3.4 ABSENCE OF TRANSFORMATIVE LEARNING

In developing some understanding of the ways in which the intervention, including the guide, is directed towards encouraging reflexivity and how transformative learning opportunities might fostered as part of an overall empowerment process, the data provided six cases in which no transformative learning process was observed. These can be summarised as follows:

A10105

In case A10105 the mother became more aware of the potential learning opportunities that arose through interaction. She was able to recognise that there are multiple opportunities for communication, in effect taking some of the pressure off of one particular interaction:

- 'It's not all about grabbing every moment' (1stSR)

- 'you can just see where you thought there might only be a couple of opportunities to get that learning thing…it's just all the time, even when I'm not there'.

The mother's awareness of the child's contributions to the dyad were heightened:

- 'He (the child) is a bit more vocal than we give him credit for'

The mother was able to consider adapting her behaviour to increase the potential for good communication:

- 'I also noticed as well when I respond to him I tend to sort of, I say like a sentence so maybe if I just say it, if I say a word or something you might get a bit more'

as well as the iterative process brought about by recognising the aspects of good communication and of self-modelling:

- 'I think I'm more aware of these things now which sort of, you sort of pick up on more and because you pick up on it more you can then adapt to it more and just make more out of it'.

Each of these extracts was identified as part of the cluster tagging process to discern the core concepts of the participant's speech. What the mother has articulated is consistent with the aims of the intervention. There was no recognised transformative learning process but the cluster moments expressed a new awareness which also related to her 'goal for change'. Though 'empowerment' was not evidenced in the measures prescribed above, the mother was 'empowered' enough to decline her third shared review session on the basis that she felt that her aims for the intervention had been met. This suggests that we

should consider additional measures for evidence of empowerment. It was never intended that transformative learning as a measure would be sufficient to account for the multivariate ways in which empowerment would manifest. Nevertheless, the absence of a recognised transformative learning process should serve only for us to consider alternative measures, rather than conclude that empowerment has not occurred.

A10108

In the goal-setting session for case A10108 the mother described her aims for the intervention as follows (Lines 19-56):

```
Erm (2.0) I mean we're just (3.0) I suppose just
trying to get an objective opinion on on what seems
to be going in what doesn't sometimes I think we
communicate quite well with him…=and I feel like he
knows (.) what he's - what he wants and he knows
what we're trying to say to him (.) erm (.) and yet
there are times when he's he he seems quite
disengaged…E:rm (.) and (.) he just doesn't seem to
pay attention or he just seems to block out noise as
well some – sometimes he responds to noise and
sometimes he just seems to block it out… Perhaps
there's just too much going on or there's too many
things to – competing for his attention…Erm (.) So
yeah I'm just (.) interested to try and understand
what (.) what he:: is (.) taking in what he isn't
and what motivates him and what doesn't…To try and
use that to try and help him to – to get on really…
You know we've got lots of things going on that
we're trying to do we're trying desperately to to
motivate him to get mo:ving at the moment…[And to
want to (.) there's nothing stopping him moving he
can stand and he can maintain the crawling position
but he he's not moving at all…We don't really know
why…He's just (.) not bothered…Erm so (.) anything I
can do to kind of get through to him…I think will
help…So (.) that's…[probably my overall goal really
```

Although the guide's contributions have been removed, this was in effect a monologue, the guide offering only backchannels to affirm the

continuation of the conversational turn. The participant demonstrated that they understand the principles of the intervention and how our understanding of others' behaviour relies on recognising patterns and is based on a presumption that that person will behave in a particular way, in a particular circumstance. The participant considered the variables in the environment that might have led to the variability in the child's behaviour, as well as explaining that they were trying a number of approaches to aid the child's development. The participant also began a kind of empathic transference, considering from the point of view of the child what motivated them and what they were receptive to, all of which has been shown in other cases to contribute to the process of perspective transformation. The participant however, gave the impression that they were struggling with effective alternatives to their current behaviour, calling for 'anything I can do to kind of get through to him'. The participant had quite specific ideas about the areas in which she wanted to see improvement but was less specific about the ways in which she thought those outcomes would be achieved and saw the video work as an entry point to discovering how best to help her child's development.

When it came to the first video review session, both the mother and father were present and the intervention guide began by recapping what the mother had described in the goal-setting session that shaped the goal for change and which ultimately directed the focus of the video recording. Following this, the guide sought a brief confirmation that this

was still the family's aim for the intervention which generated the

following interaction (A10108_1stSR_Lines 26-54).

```
26 MOTHER# I think it has changed a bit
27 FATHER# [M:mm has changed yeah
28 GUIDE#  [Ye:ah
29 MOTHER# =he's come on - I mean we used to say that
30    quite a bit didn't me? You know what - what is it
31    that [will motivate him
32 FATHER# [Reaches him or
33 MOTHER# Yeah  [make him want to do things
34 FATHER#       [Yeah yeah yeah yeah
35 MOTHER# =and he's (.) definitely in the last few
36    months become more (.) interested in the world
37 GUIDE# Yeah
38 MOTHER# Erm (.) and become more involved [hasn't he?
39 FATHER#                                   [Definitely
40 GUIDE# Yeah
41 FATHER# Definitely has done
42 MOTHER# Ye:ah
43 GUIDE# Ye:ah
44 MOTHER# But still - still it's relevant
45 GUIDE# Yeah okay
46 MOTHER# Still (.)
47 GUIDE# Okay
48 MOTHER# Yeah definitely still relevant
49 FATHER# Okay
50 GUIDE# Okay
51 MOTHER# =to understand what it is that's (.) spurring
52    him on really
53 GUIDE# Okay lovely.
54 MOTHER# What's changed yeah.
```

Although both parents agreed that their perception of their child had

changed in relation to the concerns expressed in the goal-setting

session, they also agreed that those concepts were still relevant to

better understanding their child. The mother made specific reference to

the child's 'involvement', and considers his 'interest' in the world but the

question of what was 'spurring him on' remained. This interaction

suggested that the focus of the intervention still matched the parents'

line of inquiry, however over the three shared review sessions, the parents continually referred to how the child had changed and whether the events of the video were an accurate representation of the child's abilities. They continued to rely on anecdotal evidence, rather than the video evidence that was presented to them, perpetuating a tension between what they perceived of their child and what was seen on the video.

Focus

The question of the relevance of the goal for change is important in two regards: firstly, it was inevitable that the children involved would develop naturally and their communicative and social skills were likely to improve, emphasising the need to continually reflect on the importance of the focus of the intervention in relation to the family dynamic. Secondly, it was important for the intervention to have a clear focus; the intervention guide would negotiate the goal for change with the participants in order to generate a clearly defined goal which would drive the video review and without a clear focus, there was a great potential for the complexity of the interactions to redirect the focus of the intervention in multiple ways without pursuing any single aspect to the point of critical reflection. In this case, the question of the importance of the goal for change meant that the review sessions lacked the focus of some of the other cases. Furthermore, the mother acted as the 'lead' parent but in the review sessions, was frequently distracted by the events around her, being pulled away by demands for attention from the children or distracted by their presence. It was

aspects such as this which prompted me to consider the level of engagement on the part of the participant and its effect on their learning potential. This was explored using the pragmatic tagging process and is discussed below.

No transformative learning was observed in this case. The mother referred to her son as 'almost a different child' on more than one occasion which challenged the relevance of the goal for change and misdirected the focus of the intervention. The sessions subsequently became more explorative and less focused on a goal. This represents a continuous challenge which the intervention guide must overcome if they are to engage participants in a transformative learning process. The guide must be conscientious of what can be achieved within the processes of the intervention and must be able to negotiate with the participants what is a suitable goal to ensure that it is both relevant and achievable.

Interestingly, the guide themselves was very critical of the way in which they conducted this session. This reiterates the difficulty in delivering the intervention at a consistent level, that is attuned to the personality and needs of the family, but which conveys the fundamental principles of the intervention with regard to communication. The guide was reflexive about their practice, recognising that they were more attuned in other sessions and were able to respond better to the inquiries, initiatives and contributions from the family. This does, however,

reiterate the importance of a good communicative relationship in realising the aims of the session; that both participant and guide need to engage with one another in order to provide the maximum benefit for those involved.

A10112

Case A10112 represented another case in which the question of engagement was raised. The mother agreed to take part in video review sessions both with the family and with her daughter's teachers however her involvement was predominantly as an observer. The mother seemed receptive to the guide's exploration of the video clips, identifying which aspects she had understood through the contact principles to represent good communication. However the mother did not fully engage in critical discourse and articulated little in the way of self-reflection. Given the importance of these two aspects to the transformative learning process we would not anticipate such a process to have occurred. This lack of engagement was explored through the pragmatic tagging process and is discussed below.

A10114

Case A10114 involved a family whose first language was Latvian and the intervention sessions were conducted with a translator. This posed a significant methodological challenge when the focus was on language, however offered an interesting insight into the effect of the video element. Perhaps the analysis of translated speech presented too large

a challenge; firstly, the conversation of the review session was not free-flowing since everything that was said was processed through a translator, introducing a level of inhibition on a more natural and instinctive conversational style. Secondly, the data relied entirely upon the translation itself and did not truly represent the language or the perspective of the mother involved. The mother was able to report at the conclusion of the intervention that her son seemed to be copying more sounds, but no formal learning process was observed. This is a context in which the multimodal analysis of the interaction might offer significant insight into the way in which non-verbal cues are used to establish a collaborative relationship. As with any other case, the sessions were generally characterised as enjoyable with much laughter and positive reflection. There is potential for the cross-linguistic delivery of the intervention, but less so for the methodology and analysis outlined here.

A10115

In case A10115 the mother was less concerned with the communicative dynamic at home and more interested in exploring and developing the interactions her son would be having with a new teacher. The mother exhibited a high level of confidence in her knowledge of how to get the best out of her son at home but wanted to use the video to provide an insight into those interactions that could be appropriated by the teacher. Thus, the mother did not see the intervention so much as an opportunity to learn but as a tool that could – in the terms of this work –

provide a shared stance object in the way of the interactions with her child to develop intersubjectivity between herself and the teachers. In the first instance, the video would provide the teacher with a better idea of what to expect from the child and how best to communicate with him. However in addition, the mother described how the video could better match up the communicative and learning interactions that occurred at home and at school. Prior to the intervention the mother demonstrated competence in finding causal relationships between the actions of her interactions with her son and how these brought about 'success'. The mother was satisfied that the teacher had understood what was important to the family dynamic and how to use what she had learned in her own interactions. The teacher articulated that she had learnt a lot about how the family interactions supported the child's development, which we could report as 'transmissional' or 'transactional' learning, but no transformative learning process was observed.

A10116

Finally, in case A10116 the mother spoke positively about the communication between her and her son and through the process, began to consider the child's point of view: 'that's probably why he gets so frustrated and angry and – he doesn't understand' (A10116_1stSR_Lines 882-883). The analysis of this case was impeded somewhat by the fact that the goal-setting session data was lost and that the second shared review session was significantly interrupted. Nevertheless, in the two remaining full shared review

sessions the mother said very little and was largely descriptive. Perhaps because of a lack of speech data or because the participant did not engage in critical discourse, no transformative learning process was observed.

In these instances where transformative learning was not observed, it seemed that this could be explained by a basic lack of speech data or a failure to engage in critical discourse. This could be a matter of personality, of the participants' willingness to engage with the processes of the intervention which might be thought of as strange in relation to their other encounters with health services. The parents might feel vulnerable being the subject of scrutiny through the video clips, which is one of the reasons why the intervention focuses exclusively on strengths. Or the participant might simply not be articulating their cognitive processes within the session. Because I relied on the recorded shared review sessions and the transcribed conversational data, I explored a measure of 'engagement' through the pragmatic tagging process.

6.3.5 PRAGMATIC TAGGING

The pragmatic tagging system described above was applied to all of the data from the shared review sessions. All of the speech data belonged to one of the categories 'descriptive', 'explorative', 'evaluative' and 'confirmative', within which the data could generally be subdivided into references to the events on the video; to the child; to the speaker

themselves; to other members of the support network such as other family members; or to the procedures of the intervention. The occurrence of utterances belonging to each category was assessed over the sessions of the intervention to monitor change. There appeared to be no patterns in the distribution of the sub-category level, i.e. in relation to the child, events on the video, to other family members etc. and as such, all comparisons were made at the level of the overall pragmatic-type category.

Data for those cases in which transformative learning was not observed is presented in Fig. 7. Here the raw frequencies for words attributed to each of the broader categories (Descriptive; Explorative; Evaluative; Confirmative) are presented over the course of the intervention sessions. As is shown, in half of these cases the data does not represent the standard format for the intervention which was a goal-setting session followed by three video review sessions. Nevertheless, in supporting critical reflection we would anticipate that the intervention fosters a more 'evaluative' kind of thinking. A general shift towards the more 'evaluative' utterances can be seen in cases A10105 (in which the mother felt the outcomes had been achieved after the second review session), A10108 and A10114. In fact in case A10108, the participant showed a promising increase in the 'explorative' and 'evaluative' categories yet still did not exhibit a transformative learning process, indicating that these numbers alone cannot account for learning potential.

Figure 6 Pragmatic tagging data without transformative learning
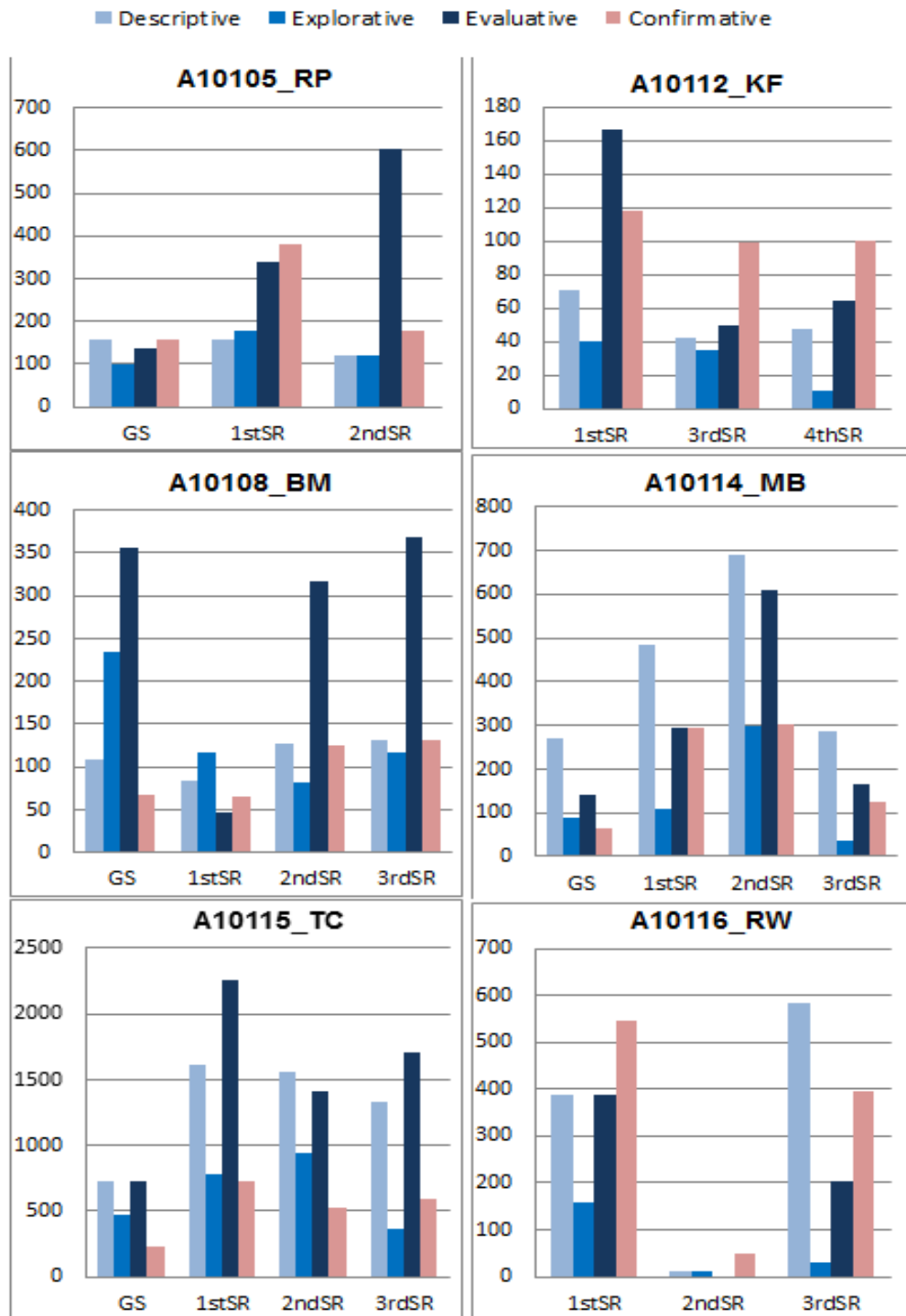
In case A10115 the first shared review sessions focused on the mother at home and the subsequent review sessions were directed towards the school environment and the teacher. Following this change in focus, we

could say that the participant began a new trajectory towards more interpretative comments. In the remaining cases A10112 and A10116 there was high occurrence of 'evaluative' comments in the first session, but very little afterwards. These latter two cases were mostly characterised by 'confirmative' and 'descriptive' utterances, suggesting that the participants' involvement was somewhat passive and of the conventional 'receiver of information' model. In case A10114 the utterances were largely descriptive, which suggested that that the participant did not engage at the level of critical discourse.

Pragmatic tagging data indicative of critical thinking

In cases where there was no observed transformative learning there was still some degree of 'exploration' and 'evaluation'. In order to understand how this crude analysis of engagement might relate to transformative learning potential I also explored the instances where transformative learning was observed. Again, no consistent pattern was observed in all cases but using an example from case A10109 (Fig. 8) we can observe what would be an exemplary progression through the intervention sessions, based on the principles of increasing reflexivity and engaging in critical discourse.

Firstly, this case demonstrates an overall increase in contributions in all four categories. This translates as a general increase in words spoken during the session, which could be down to the variable length of the sessions but nevertheless indicates a greater contribution to the discussion. The number of words in the 'confirmative' category remains

Figure 7 Pragmatic tagging data from A10109
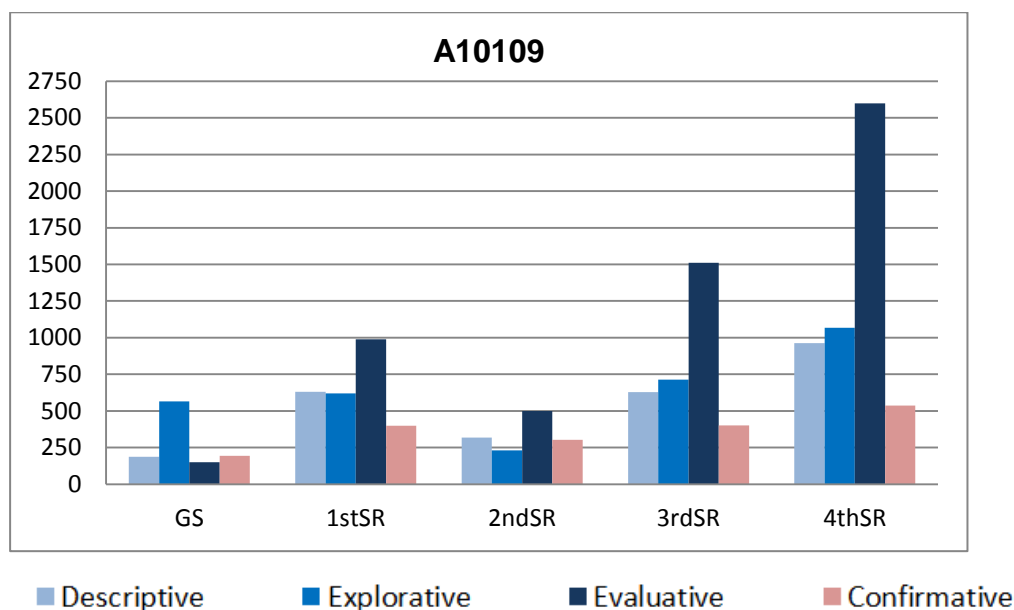
fairly consistent throughout; however, if we consider that in the third and

fourth sessions there is a dramatic increase in words overall, the

proportional value of words in the 'confirmative' category becomes less.

I have stated above that the process of learning is instigated by inquiry,

by asking questions and speculating about the unknown. As such, it is

encouraging to see an increase in 'explorative' statements. Learning

however, is only achieved when those questions are answered and this

is where evaluative and interpretive comments can create new insights.

Thus an increase in both 'explorative' and 'evaluative' utterances would

suggest a greater potential for learning. This is not a pattern which is

observed throughout. The example below, taken from case A10104

(Fig. 9), shows an overall steady decline in the utterances made by the

mother, who exhibited a full transformative learning process. But we

must also acknowledge that much of the learning process for the

mother took place in the goal-setting and first shared review sessions,

and phase 10 was observed in the second review session.

**Figure 8 Pragmatic tagging data from A10104**
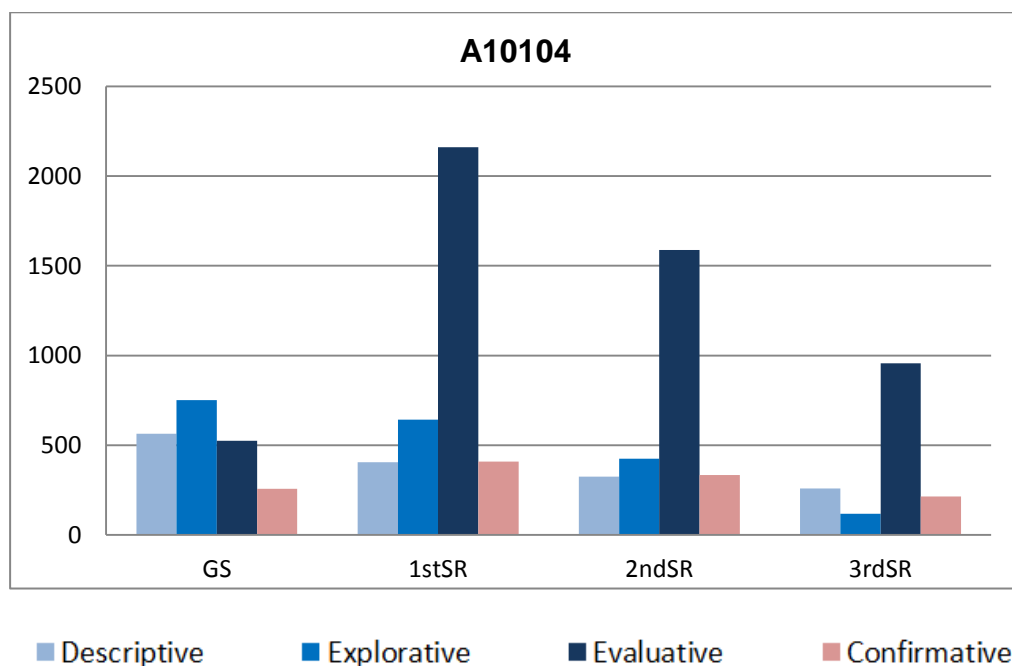
Subsequently, the father's role in the dynamic became the focus of the video recording. This suggests that the mother's level of critical reflection might have eased off, as was the case with her overall verbalcontributions, since she was no longer the focus of the intervention.

This was also the case in A10113 (Fig. 10) where the mother exhibited a transformative learning process which reached phase 10 by the end of the first video review session. In this case, there was a significant increase in the 'evaluative' category in the first video review session, in which we find the utterances that constituted the full series of phases observed as part of the transformative learning framework. There is a question then, about the focus of the subsequent video sessions. The transcript data showed that the participant's comments served to reiterate the learning which had been achieved in the first session

('transactional learning'). The data from the pragmatic tagging suggested that although the participant was still making 'evaluative' utterances, they were less 'explorative', reducing the potential for any additional (transformative) learning.

Figure 9 Pragmatic tagging data from A10113
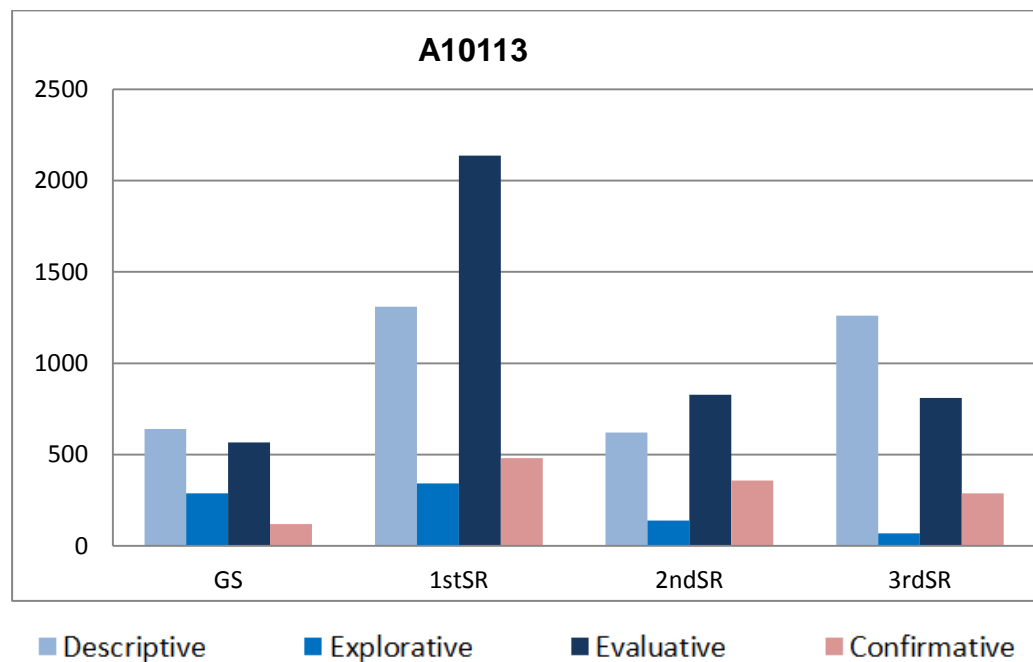
Pragmatic tagging links inquiry with learning

The contributions of the participants therefore, must be seen in relation to their learning experiences. The four cases presented in Fig. 11 demonstrated that the participants' largest 'explorative' contributions were made in the same session that they reached the final phase of the transformative learning process (A10103: 3rdSR; A10110 both mother and father: 3rdSR; A10111: 4thSR). In all of these cases, this was the final video review session and it could be said that had this learning process not been completed the family might not have felt that their goals were met and negotiated another session. Nevertheless, the

Figure 10 Pragmatic tagging data from four cases
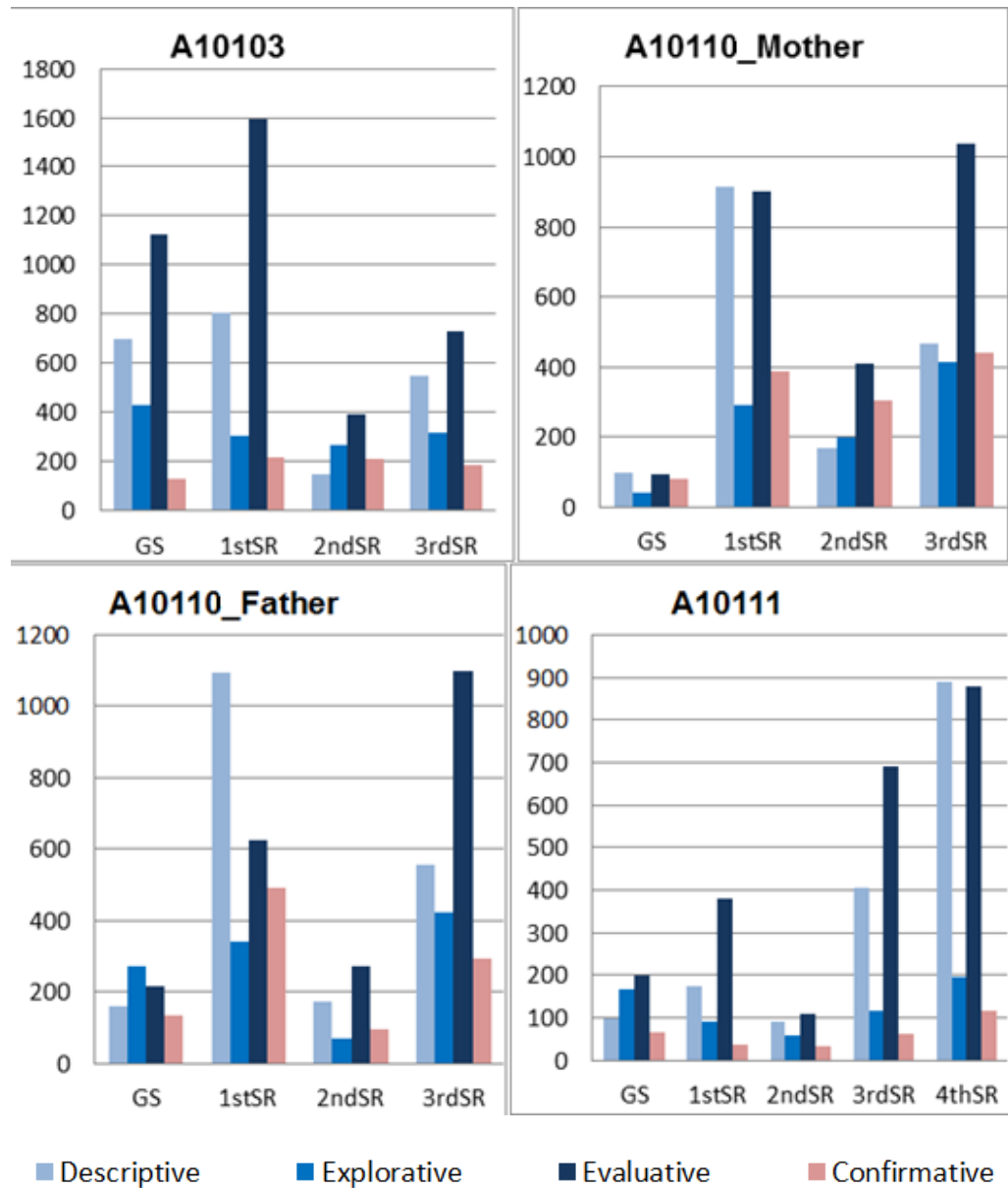
relationship between 'exploring' in this way and learning opportunities warrants further investigation.

Summary

This process of analysis was a very rudimentary way of representing the participant's 'presence' in the discussion and was engineered to account for those participants who did not meet the criteria set by

Mezirow (1991) for potential transformative learners; that is: being receptive to the learning process, engaging in self-reflection and engaging in critical discourse. A general increase in utterances can be indicative of a greater contribution and 'presence' in the discussion, and I have suggested that more 'evaluative' comments can imply a more critical level of thinking. However, in case A10108 I observed an increase in 'evaluative' and 'explorative' categories but no transformative learning process. It would seem that though 'explorative' utterances might increase the possibilities for learning, such inquiries must be directed towards evaluation, generating new insight in order for learning to occur. This is supported by the evidence that in most cases, the progression through the transformative learning process was quite rapid and achieved in a condensed series of utterances. In case A10103 the participant's transformative learning experience emerged only in the final review sessions and was not related to the goal for change. Nevertheless, prompted by a video clip, a single moment of self-reflection enabled the participant to experience perspective change. Similarly, in case A10106, it was the grandmother – who was only involved in one review session – that experienced perspective change. The emphasis then, is on continuity: between the inquiries made by the participants during the sessions and the conclusions they are able to draw. This must also be seen in relation to the goal for change, although – as has been shown – there is still potential for other learning trajectories to emerge. Furthermore, this raises a question about the focus of the intervention following an instance of perspective change,

as the level of critical reflexivity seemed to diminish once the initial aims had been addressed. Is it possible for the guide to recognise within the sessions that perspective change has occurred and that a new learning trajectory could be pursued? To some degree this is what occurred, as the focus of the video was redirected to other family members or to address other concerns. This researcher was able to explore this question of focus and the ways in which the discourse was directed towards recognisable conclusions through a group-work study conducted at the Centre for Health Communication at the University of Technology, Sydney.

6.4 GROUP IDENTITIES AND LEARNING: EXAMPLES FROM AN I.C.U.

The Centre for Health Communication (CHC) is an interdisciplinary research centre based at the University of Technology, Sydney (UTS). Its researchers engage with frontline staff to explore their communication processes, particularly in relation to concepts of safety and open disclosure. Using video ethnography the CHC has generated research which has been used by the Australian Commission on Safety and Quality in Health Care to standardise hospital procedures and inform training resources. During the course of this doctoral study I had the opportunity to work with the centre under the supervision of Prof Rick Iedema on an Australian Research Council funded project which used video feedback sessions to generate self-reflexivity within a team of an intensive care unit (I.C.U.). The project, entitled 'Examining

organisational complexity and clinical risk to improve hospital patients' safety', presented a representative video compilation to the faculty members of the I.C.U. ward, encouraging them to consider how the physical space impacted upon their day-to-day behaviour and their ability to perform tasks whilst maintaining a level of safety.

For the members of the I.C.U. team there is a shared concern for the well-being of the patients. Each member performs certain roles which contribute to the functionality of the ward. These roles are founded on a pre-existing pattern of behaviour, informed by the observed events of the individuals, staff, patients, visitors: 'agents' of the I.C.U. ward. What is apparent to all 'agents' however, is that the complex nature of the I.C.U. generates unpredictable events, in relation to patients' health and the ability of the staff members to follow protocol. In this regard, there are 'unknown' aspects to the operations of the I.C.U. which challenge its staff members' capacity to perform their role. The 'group' is faced with the challenge of adapting their behaviour in response to those 'unknown' aspects, which requires perpetual reflexivity and adaptation of behaviour. In order for the group to function, this adaptation must be mutually acknowledged and observed, as a change in one part inevitably affects another. Responses to unforeseen events must be negotiated within the group if all members are to optimise their role.

Staff members of an I.C.U. ward were presented with video data which was collected by a CHC researcher and compiled to represent the day-

to-day processes of the ward, as well as brief interviews with staff identifying problem areas or obstacles to the fulfilment of job roles. As with VIG, the video represented an entry point for discussion about how the ward members were able to negotiate obstacles and carry out their roles, as well as considering ways in which this could be improved. Four sessions were organised in which the ward staff could view and discuss the events of the video, which were recorded and transcribed according to the transcript conventions outlined above. When observing the conversations that were generated from watching the video feedback I was faced with a number of voices, representing the multiple perspectives which constituted the 'group'. For us to consider 'group efficacy' there must be some sense of 'group identity'. But we must recognise that a group is made up of constituent parts, that there are a number of 'voices' within the group. The assimilation of those constituent voices can occur as the product of group learning, as a 'new voice' emerges, but must be negotiated by and representative of each member. This negotiation occurs in the reflexive dialogue facilitated by the video review sessions.

The 'negotiation' of meaning and action are evident in the reflexive sessions as individual perspectives are introduced, challenged, pursued and combined to offer real 'group' thinking and ultimately, group learning. The pre-existing dynamic of the group however, determines that certain agents will have a more central role in the moderation of this negotiation. This is apparent in the first group

reflexive session which was attended by seven Registered Nurses (RNs), a Research Co-ordinator, a Certified Nurse Educator (CNE), a Physiotherapist, a Nursing Manager (NuM) and the session facilitator to lead the session. The staff hierarchy ordains that there was a pre-established level of seniority going into this reflexive session and which was recognised by all constituent members. However, for successful self-reflection and open critical discourse there must be a sense of equivalence, that each member can present their 'voice' in the dialogue (Edmondson, 1999).

White's (2003) taxonomy of intersubjective stance

It is the nature of dialogue that utterances are 'intersubjective', that individuals recognise that their utterances will be 'received' by their co-interlocutors and that they are responding to an already operational discourse. By taking a position – that is, by indicating one's own stance towards one idea over another – individuals demonstrate to some degree their openness to be challenged or to receive alternative 'stances' by the strength with which they deliver their assertions. White (2003) has generated a taxonomy of the various ways in which individuals adopt an intersubjective position and the degree to which they are 'dialogically expansive', or 'dialogically contractive'. This sits within the model of the 'heteroglossic', a principle which acknowledges that there are multiple perspectives and multiple 'voices'. There are utterances which engage with dialogic alternatives (heteroglossic engagement) and those which do not (heteroglossic disengagement). White (2003) states that utterances delivered as 'matter-of-fact', the

'bare assertion' are indicative of the 'monoglossic' in that they do not acknowledge alternative voices and are therefore not conducive to learning.

In the domain of the 'heterolglossic', there are resources shown to be 'dialogically contractive' and function in the following ways:

- Disclaim:
    - to Deny, "New or tougher legislation is *not* going to solve the problem" or
    - to Counter, "*But we already* possess laws against threatening behaviour"
- Proclaim:
    - to Concur, "The Premier, *of course*, wants us to think.."
    - Pronounce, "*I would contend that* this enviable level of tolerance.." or
    - Endorse, "As Hastie *so compellingly argued*..".

Here we can see how the individual has positioned themselves to a particular stance and how the opportunities for alternative voices are 'closed off' to some degree or another. Conversely, we also find a series of discursive resources which acknowledge alternative voices, which are said to be 'dialogically expansive' and operate in the following ways:

- Entertain: "*If* we are really witnessing an increase in racial intolerance, *perhaps* it is time.."
- Attribute:

- to Acknowledge, "the Premier *has stated that* tougher anti-racial hatred laws.." or

- Distance, "the Commissioner and her comrades *claim that..*".

From these examples we can see how the individual recognises that their stance is one of multiple voices, they appear less 'fixed' to one position and to some degree indicate the potential for new alternatives to emerge.

Finally, there is one other aspect through which utterances are seen to be 'dialogically expansive', which White (2003) labels 'Justification' or 'modal consequentiality'. The resources for Justification embody the argument or rhetoric behind an assertion, which look to validate or explain a stance position. In taking an 'argumentative position' the Justification resource contraindicates an alternative or contradictory position such that the addressee needs to be 'won over' or persuaded (White, 2003: c.f. 272-4).

Whether a statement is 'monoglossic' or 'heteroglossic', 'dialogically contractive' or 'dialogically expansive' and to which category it belongs is largely determined by stance indicators, including modal verbs 'can/could', 'may/might/must', 'shall/should' and 'will/would'. We can see how the more uncertain terms, 'may', 'could', 'might' more effectively encourage the consideration of alternatives than the assertive 'will', 'shall', 'should'. The use of modal verbs in this way not

only indicates the individual's attachment to a particular stance and the potential to ally themselves to new alternatives, but also welcomes alternative voices or propositions from other interlocutors.

Reported changes to ward practice

Following the reflexive sessions with the I.C.U. team there were two significant reported changes in the everyday operations of the team, which were prompted by what was shown in the video clips. The first of these emerged from a clip showing an encounter between two RNs managing the inventory of the drug cupboard and another member of staff in the unit trying to administer drugs to a patient. The RNs were seen to deviate from protocol in relation to the inventory as they tried to accommodate the ward member's request for drugs. It was agreed that this was a fairly typical occurrence in the I.C.U. but also that the fundamental reason for this lapse from protocol was prompted by the interruption and the attempt to facilitate the request which hindered the completion of the first task. There was also discussion around the role of the environment and the computer system in enabling the staff to follow drug protocol. It was decided, based on the conversations generated around the clip in the video feedback session, that the drug cupboard would be treated as a 'protected space', to avoid interruptions when such checks were being conducted. Additionally, the computer system would be altered to necessitate that two staff members sign off on drug administration. The Nursing Manager (NuM) described these changes to the facilitator (FAC) – a researcher based at CHC – as part of the discussion during the reflexive session, with the following effect:

284

```
NuM# That has resulted in - we've been able to make
that change and so (.) some of those - yeah I think
yeah we've really cut down the erm (.) interruptions
at the drug cupboard. (1.0) 'Cos now two people go,
they're not allowed to be interrupted, go to the
bedspace and then everyone else can do it. It's been
really good. It's made a big difference.
```

The second change was in relation to the ward rounds which are

conducted as part of the routine of the working operations of the I.C.U.

over shift changes, as new staff members begin their working day.

Similarly, this was seen to be hindered by the frequency of interruptions,

in that ward rounds were conducted in the I.C.U. space where other

members of staff would be inclined to approach the doctors during the

ward rounds to present queries regarding patients or the miscellaneous

operations of the unit. It was not appropriate however, for the doctors to

leave the unit to conduct the ward round in case of emergency, when

they would need to be available to aid other staff members. What was

proposed was that they use a closed space that was available within

the unit in order to conduct their ward rounds. This particular space was

equipped to deliver the ward rounds, was closed off to deter interruption

but was still located within the unit and accessible for other staff

members in the case of emergency.

What emerged were two practical outcomes to what were seen as

recurring challenges to staff members fulfilling their role. Both outcomes

related to events on the video clips which were discussed in the

reflexive sessions. Using the first outcome as an example, this research

explored why it was that these particular topics of exploration led to

identifiable outcomes in the way of a change in behaviour, where other sites of inquiry did not. I explored the way in which the video clips were discussed, how 'meaning' was negotiated and how a solution was met. Using White's (2003) taxonomy of intersubjective stance it will be shown that an outcome was formulated in the reflexive sessions through the 'expansion' of the conversation and the exploration of new ideas. Furthermore, it will be shown that the negotiation was brought to a 'close' and that the agreed outcome was an action to be followed up beyond the session.

6.4.1 GENERATING OUTCOMES: MAKING THE DRUG CUPBOARD A PROTECTED SPACE

In the first of four reflexive sessions involving various staff members of the I.C.U., the session began with a viewing of the video clips prepared by the facilitator. In the first instance, the group were asked to offer their perspective of what occurred in the video clip, but the discussion soon became more explorative. In Line 396 the Nursing Manager (NuM) initiated an inquiry:

```
396 NuM# And did they get interrupted because (.) of
     the space?
```

This set a precedent for this kind of 'expansive' discourse, as this was the first instance where the NuM had offered a speculative inquiry. Shortly after, this was supplemented with a hypothetical consideration:

```
402 NuM# If it was in Green [I.C.U.] you might not
     necessarily have..
```

```
403 ..perhaps they would have approached the Access

    Nurse.
```

It was in this passage of dialogue that the idea of standing off from staff

members at the drug cupboard was first introduced, by one of the RNs:

```
427 RN3# It would be nice if when you walk in and

    see two people you just you just give them their

    space…You just sit back just wait a minute, let them

    get their stuff and then off you go.
```

This was acknowledged by the NuM, "Yeah, yeah", who then diverted

the inquiry:

```
435 NuM# That's the advantages of having a computer

    there..
```

and 'contracted' the dialogue with this 'matter-of-fact' explanation about

the computer set up.

Subsequently, it would seem that this idea of 'giving them their space'

was forgotten about as the discussion moved to the formal process of

signing out drugs. In this passage of dialogue, both the CNE and the

NuM took a supervisory stance in reiterating the importance of

procedure and structured their discourse in a way that limited

alternative stances. In response to the facilitator's question about the

procedure the CNE firmly stated that, "Yes it is, it is a problem". He then

explained that although "There's a clearly defined way that we are

supposed to double-check and counter-sign the medications", this was

not always observed in the I.C.U. A nurse then directed the

conversation towards a solution:

```
471 RN3# How can we change that though?
```

which was met with a level of Counter/Denial from both the CNE and

the NuM:

```
473 CNE# We already have the procedure in place to
   do it but nobody follows at the co-signing procedure.
```

[…]

```
477 CNE# That is what we're required to do.
478 NuM# You've got to do it.
479 CNE# You've got to do it, you've just got to do
   it.
```

This did not encourage the exploration of other options and was firmly

stated with repetition and the modal phrasal verb 'have got to'. Any

attempt to 'expand' the conversation was denied, through the

contradictory 'but' and the modal verb 'should' denoting obligation:

```
484 RN5# if you're at a bedspace..
487 CNE# But both should be looking at the order and
   so..
```

We also saw an example of Distancing when the CNE refers to an

unspecified other's 'perception':

```
491 RN3# Do you think we don't do that as a whole
   because of time or because we're lazy or because we
   don't remember how?
493 RN5# It does take a long time
494 CNE# It is perceived to be a time issue but I
   think..
```

It was the NuM who drew the passage of dialogue towards a close,

explaining what had been done to enable compliance and then offering

the following summation:

```
511 NuM# there were a number of breakdowns there but

(.)  where (.) patient safety is vulnerable. But

based on I think (.) because they were being

interrupted.
```

The NuM then reiterated this point:

```
595 NuM# I can't change people getting interrupted

(.) at you know they were doing  everything right

until they got interrupted

600 NuM# So they were doing really well until they

got interrupted
```

but also acknowledged that there was a personal element:

```
660 NuM# any of those nurses could have said {NAME},

I'll get it for you and I'll be back in ten minutes…

And they didn't. Is that because they were junior?

And new? And didn't want to? Is that because they

didn't feel it was the culture?

667 NuM# a lot of it is (.) the person

670 NuM# A lot of it is experience

672 NuM# It's respecting that there's a cupboard

here and there's rules in place

675 ResCo# But it's time management as well though

676 NuM# There's a lot involved
```

The utterances here became 'dialogically expansive' in that they

introduced questions but also a number of possible explanations. The

multiplicity of those options also established that there may be more than one answer, that there's 'a lot involved' and was accommodating to more possibilities: 'But it's time management as well'. Here the NuM had also begun to bring the discussion back to the events on the clip and the problem that arose around the drug cupboard. Furthermore, she entertained ('might') the possibility that

```
678 NuM# they might not have been interrupted…in a
     smaller unit
```

repositioning the dialogue around the problem in relation to space, which was the focus introduced by the facilitator at the beginning. This indicated that the NuM – though seen to be 'dialogically contractive' at times – had managed to steer the conversation back to the original research question whilst also looking to address the problem introduced by the video clip.

In the instance where the NuM herself was seen to talk in a 'dialogically expansive' way we can observe a reciprocal effect from other members of the group. This was the case following on from the NuM entertaining the possibility that "they might not have been interrupted in a smaller unit". What followed was a number of 'explorations' (expressed as 'if' statements and questions) in quick succession as the group tried to solve the problem of signing out drugs:

```
735 ResCo# Is there time to call the Access Nurse?
746 RN4# I find it interesting what {NAME} said…if
you   pester someone…
760 RN4# ..if you don't get two people to sign it…
```

770 RN4# Well what's in it for them?

        787 FAC# Is that because you're the only one that's

        focusing on that?

        791 ResCo# The other thing is..

culminating in the suggestion that:

        804 RN3# It'd be brilliant if you didn't take off

        your blood folder until it had two signatures on it.

which was readily acknowledged:

        Line 807 ResCo# Yeah

        Line 808 RN3# That'd be fantastic.

        Line 809 ResCo# We could look at that.

Over the course of 44 lines (810-854) involving nine different

interlocutors, the possibility of enforcing the co-signing procedure

through the computer system was considered, challenged, justified and

concluded as an action to be followed up:

        814 RN4# wouldn't it be brilliant though if we set

        up a way where you have things that have to be

        double signed where...and then everyone's forced to

        do it…You don't have to worry about Oh I'm gonna

        upset someone asking because (.) it has to be done..

        826 RN5# Sometimes I think that having paper would

        be better because if..

        828 RN1# Yeah but then..

        829 RN6# But then that's just some other itinerary

        832 ResCo# But then maybe it's the same as

        electronic

```
      842 FAC# That's something to think about I guess.843
NuM# Well yeah we'll think about - It's been an  on-going
issue for years. And we certainly haven't  perfected it.
      845 ResCo# So maybe we should go back to see if (2.0)
      I.C.I.P. can change the process?
      846 NM# Hmm
      847 ResCo# Will that be helpful?
      848 CNE# Yes.
```

The group members had a chance to voice their concerns and test the proposition in more detail, the feeling being that in Lines 845-848 we had consensus and there were no further objections.

The NuM's earlier inquiry at Line 396 was a contribution which almost advocated the 'dialogic expansion' and it was in the exploration that a solution was found. It was necessary for the group to explore possible solutions in order to come to a new understanding, but equally important was the way in which the idea was verified and became a clear action that impacted upon the operations of the unit beyond the session.

Summary

If we understand that learning is made possible through the appropriation of new ideas then the conversation must afford this 'dialogic expansion' in order to accommodate those new ideas. A 'monogloss', or even a 'dialogically contractive' interaction inhibits the exploration of new ideas and as such, limits the potential for learning. The firm taking of a stance by one individual also inhibits the potential

for a group 'voice' or group identity. The data provided instances where the potential 'expansion' of the dialogue was supported or restricted by members of the discussion. However, what we also found is that in order for learning to become tangible, the exploration of new ideas and new perspective must be re-grounded in certainty. That is, the exploration of new ideas is articulated through possibility and consideration, but in order for the consideration to become a firm outcome, the group must recognise it as a firm assertion to punctuate this learning. In this way, the conversation is 'expanded' to accommodate new possibilities but brought to a 'close' to affirm this learning and to formulate outcomes as a change in behaviour. This may offer an explanation as to why in the study with the families of deaf children, though some parents were conducting a number of inquiries I did not observe any significant learning. This again emphasises the need to explore the process of learning as a development of inquiry through to explanation and conclusion. Learning potential therefore can be enhanced by encouraging participant's to reflect upon the limits of their understanding, their 'growing edge' and using the video to provide insights into those aspects. Parents might feel vulnerable in scrutinising aspects of their family dynamic in which they feel they lack knowledge, but the guide can encourage this process by presenting the sessions as a collaborative inquiry and by providing relevant video data as evidence in response to the parents' goal for change.

CHAPTER 7: DISCUSSION AND CONCLUDING REMARKS

7.1 RECOGNISING AND EVIDENCING EMPOWERMENT

7.1.1 DEFINING EMPOWERMENT

This work was directed towards defining and finding evidence of 'empowerment' in the context of a population who have been characterised in the literature as individuals who are vulnerable to the 'disempowering' effects of the diagnosis of a lifelong condition for their young children. I began this work by describing the prevalence of empowerment initiatives in healthcare directives and how such initiatives have been promoted for a number of decades. My aim for this work was not to determine if 'empowerment' was happening in health care but rather if it was, how we would know? In conceptualising empowerment I chose to focus on the internalised aspect of empowerment, which is concerned with perspective. My reasons for doing this were that I was interested in exploring a cognitive phenomenon that was subject to intersubjective influence and which would be realised in language. But it is worth pointing out that we must also work towards improving that external dimension of empowerment which is concerned with providing resources, removing social barriers and addressing those organizational constructs which affect the individual's 'power' in relation to healthcare. Inevitably, it is much more difficult to bring about change in those aspects which constitute the external domain of empowerment and we, as researchers, might feel it

is beyond us. Yet if we are to better understand empowerment we must realise it in our own experience, examining those constructs which deny us that opportunity to bring about change and exposing those who would deny us 'power'.

Theoretically, the internal domain of empowerment is much more susceptible to adaptation and for those experiencing 'disempowerment' we might feel more able to provide solutions in this domain. In establishing a definition of empowerment I tried to remain sensitive to the attempts of those before me to combine sound theoretical thinking in relation to 'power' but link those conceptualisations to something tangible, or at least, something which could be empirically observed. In language, we have a resource which is rife with indicators that we rely upon in interaction to infer a state of mind, a mood or perspective – all of which are filtered through an identity. Subsequently, these are subject to change with the subject's state of mind. It seemed, therefore, that I could appropriate the knowledge of language analysis to make claims about an individual's ever-changing sense of 'power'. What is provided here is an attempt to acknowledge the multifaceted ways in which we can infer a sense of power in the conversational utterances of another. What is shown, however, is that in recognising agency, face, stance etc. we are dealing with a multitude of features of not only discourse, but also non-verbal communication. For the greater part of this work I have been referring to perspective change or transformative learning as the outcome of the intervention work, which although

closely aligned with the internal domain of empowerment is not synonymous with the concept. Thus the data has largely been assessed as an indicator of transformative learning or of perspective change, which – if shown to occur as a positive shift – we might identify as empowerment. But what is of fundamental importance is the recognition that as a process, we must be able to make some distinction between a 'before' and 'after' state. 'Empowerment' implies change and I would maintain that 'change' is the entry point to claims of 'empowerment'.

7.1.2 'CHANGE' AS A CONTINUOUS PROCESS: THE 'RHIZOME' MODEL

Deleuze and Guattari (2004 [1980]) introduced the model of the 'rhizome' to conceptualise the multiple, non-hierarchical entry points to interpreting and representing data. As a biological model it is characterised by a central bulb that projects multiple shoots in a number of directions, some of which evolve and emerge as the next generation plant life. Deleuze and Guattari (2004 [1980]: 7) explain that "a rhizome ceaselessly establishes connections between semiotic chains, organizations of power, and circumstances relative to the arts, sciences and social struggle". This emphasises the multiplicity of structures such as language and foregrounds the conclusion or 'fruition' over the origin. The 'rhizome' model dictates that there is no beginning or end but that we observe a perpetual 'middle', an object in the process of transforming and becoming something else. If we take this

model more literally, we can conceptualise the multiple lines of inquiry that emerge in the reflexive discussions around the video (both in VIG and in the work conducted by the CHC) as shoots, which come to 'fruition' as new learning, new insights and outcomes. This emphasises the need to follow the progress of a 'shoot' through to its 'fruition', i.e. pursue a line of inquiry until it bears a conclusion in real terms, as was seen in the reflexive sessions of the I.C.U. ward. Similarly, the participants' perception of themselves is ever-changing and we would be better served to follow the process by which that perception is ameliorated, rather than trace back to the origin of some 'disempowerment'. Finally, the families themselves have their own histories and trajectories but rather than try to trace back to an arbitrary 'origin' to understand their dynamic we can look at the outcomes of the intervention and the new perspective which has emerged from the intervention process.

In conceiving of the family as a dynamic unit, as always in transition, we are better prepared to understand the processes of self-management in relation to chronic conditions. This is a model which foregrounds potential, is forward-thinking and geared towards solutions. But we must also maintain a patient-centred approach that recognises the individual family unit. This, however, is what poses methodological challenges in terms of assessing and reporting the outcomes of patient-centred interventions. I have explored how the intervention is designed to accommodate the unique strengths and needs of the family but also

proposed a methodology which can account for the variability in the experience of the intervention. That variability can broadly be understood as the unique patient 'voice'.

7.1.3 THE PATIENT 'VOICE'

In the patient-centred model of care we have acknowledged that each family has its own unique strengths, its own challenges and that when we interact with a family, we meet them at a particular point on a much larger trajectory. As is purported in the methods derived from linguistic analysis, we must always be aware of the context of the interaction, in terms of the interlocutors involved and the time and place in which it occurs. But rather than pursuing a full understanding of the contextual factors through survey instruments we should allow them to be determined within the interaction. The guide who delivered the intervention in this study asserted that it was preferable to enter into a discussion with the parents with as little factual information about them as possible. They would consciously limit their exposure to information about the family prior to the session, with the intention that what was important to and about the family would emerge in the discussion. This was a process which inhibited the preconceptions the guide could formulate in working with the family and allowed the parents to characterise themselves and their families in their own way. This was not a practice governed by the principles of the intervention training, but rather a personal choice that the guide felt aided them in receiving the patient voice. This is an important consideration in contrast to the

medical model, which is predicated on eliciting all knowledge of an illness in order to make the best-informed prognosis. This too, is manifest of the medical, positivist paradigm in which the objective assessment of symptoms and observation of biological reactions allows us to make decisions based on scientific outcomes. In this way, medical knowledge locates 'power' with the professional. When we are managing people's perceptions, we cannot operate on the same paradigms of observation and causality. Rather, we must endorse intersubjectivity and accept that the internalised patient perspective can only be ameliorated when it is externalised in conversation and becomes interactive. Furthermore, the process through which that perspective becomes empowered must be negotiated in that interaction, the particulars of which are determined by the context, i.e. the intersubjective relationship of the health service provider and the participant.

The patient voice is fundamental to the empowerment model, as it is to the patient-centred model of care and to the VIG intervention. The methods of analysis applied here rely on the patient voice being articulated in speech as the site of evidence for perspective change. The participant voice – when taken to be an externalisation of the participant perspective – is also determined by the context, and we can differentiate between a 'voice' that is representative of a more constant individual identity (agency), and that which is a more localised expression of a state of mind. Thus, when I had made observations on

the changes in 'perspective', it might be better to consider that I had

been reporting on a change in 'voice'. In this way, we can better

comment on the intersubjective linguistic processes that have an impact

on that voice and how it develops over the course of a conversation.

Following the rhizome model, we can track the 'negotiations' which

occur in conversation between interlocutors to observe how the patient

voice evolves. This has been seen to some extent with the initiation of

the disorienting dilemma, in that there are conversational processes

which have been shown to enable the participant to verbally engage

with the learning process.

7.2 ASSESSING THE METHODOLGY

7.2.1 REPORTING THE PATIENT 'VOICE'

A literature review determined that researchers had been inhibited by

the use of quantitative scales (which were not inclusive of the patient

voice) and qualitative interviews (which were not representative of the

patient voice). Though I have argued for the importance of the

interaction between speakers in enabling learning processes to emerge,

I began the work with the intention of providing a synoptic of the

participant voice as identified through a systematic and robust statistical

methodology. By drawing on the distinct features of a systematic corpus

analysis, a more in-depth discourse analysis and a broader pragmatic

analysis I hoped to ascertain a relationship between the fundamental

principles of the intervention, the level of engagement from the

participant and the potential learning in the way of perspective change

that could be achieved, as part of an empowerment process. This combination of methods was chosen because it offered a robust process of data selection; the ability to measure change to one degree or another; and a methodology which could be replicated with minimal training. I attempted to substitute much of the subjective analytical approach with systematic methods, governed by a clear protocol. The corpus analysis software promptly produced a synoptic of the conversational data, reducing an hour-long session to a few key extracts constituting its most representative data. This process was very successful in discerning what was 'key' in the context of the session, but also extracts which proved to be the site of learning in the data. The extracts were identified through a systematic coding process and the fact that it was in these extracts where the learning process was observed testifies to the relevance of the learning outcomes as well as the way in which the discourse was directed towards learning outcomes. This process is still vulnerable to misinterpretation through automatic tagging; however, as reported above, this level of correction is minimal and it is down to the researcher to determine if it is significant. I have also considered how computer-assisted transcription can reduce some of the labour intensiveness, which means that the entire tagging process can potentially be automated. This would be of distinct advantage to health professionals who conduct interviews and do not have the time or resources to manually transcribe and process their interview data.

7.2.2 LIMITATIONS

The 'cluster tagging' process discerned what was of statistical significance in the data as determined by the semantic content of what was spoken. This is both its strength and its limitation in that the process is able to objectively report what was said, but is not sensitive to the non-lexical aspects of the interaction that might shape meaning. The pursuit of an objective methodology also had ramifications on the way in which the data was analysed; it was a process which was engineered to inhibit the subjective interpretation of the interactions. It is important to acknowledge the insights that can be afforded by – for example – the intervention guide based on what they observed within the interaction. The intervention encourages an open relationship between the health service provider and the participant, for the guide to come to know the intimate aspects of the family dynamic. In this way, they are better informed to understand the family's support needs, but are also more effective communicators with the family. For the purposes of the intervention, such a privileged subjective perspective might be of benefit to meeting the family's needs. To give an example from the data, in case A10103 the guide was aware enough of the mother's personal struggle with her body image – which is something that had been referred to in a discussion outside of the parameters of the shared review session – that they made it a part of the shared review and this resulted in a transformative learning process. This suggests that the 'cluster tagging' process may be an effective method for extracting a representative synoptic of the participant's 'voice', but is

limited in terms of providing that depth of knowledge of the family

dynamic if there are aspects which are not freely articulated by the

parent. In introducing the features of electronic text analysis I referred

to the researcher 'instinct': the subjective response to a text which can

be validated by systematically finding linguistic evidence for that

perceived effect. Thus, perhaps rather than strive to remove the

subjectivity of data analysis, we should continue to pursue the features

of language that shape our subjective responses: to validate rather than

constrain the subjective interpretation.

Another aspect of the interactions which I struggled to capture through

this methodology was the level of enjoyment which was obvious and

pervasive throughout. The frequency of verbalised laughter is certainly

apparent in the corpus analysis, but I was unable to integrate that

aspect into the semantic framework. This is symptomatic of a broader

underrepresentation of the role of affect in the methodology. In the first

instance, I decided to forego a multimodal transcription and analysis of

the interactions, based on the privileging of the semantic meaning of

what was being reported. I argued that in my early observations, the

'meaning' derived from the interactions was not significantly affected by

aspects of intonation, prosody or non-verbal aspects such as gesture.

Though this remains true in terms of what was said, this significantly

inhibited any sense of what was felt in the interaction. The

transformative learning framework itself has been challenged in its

consideration of affect and the methodology was driven to inhibit

subjectivity. As such, the only dimension in which affect was reported – or could be reported – was if the participants articulated their feelings in their speech. I came to the conclusion that in exploring the initiation of the learning process, the onset of the disorienting dilemma, there would be more to learn from a multimodal analysis and began to consider the role of space; pausing in order to allow the participant to stop and think. But I would argue that an examination of facial expressions, eye gaze and prosodic features of voice would also give an impression of the changing affective states through this learning process. This too can be explored through the rhizome model, tracking the affective processes through a learning moment in order to better understand the interactions between the cognitive and affective domains. This would also begin to account for the level of enjoyment which is both visible (and audible) in the sessions, but also reported by the participants themselves. Furthermore, we must consider the phatic role of laughter in developing that intersubjective relationship and the overall effect of joy in the empowerment process.

7.3 REFLECTIONS ON THE INTERVENTION

In addition to an exploration into the concept of empowerment, this was also a study in which an intervention was tested in a context in which it had not previously been tested. The impact of this intervention is something which researchers have struggled to fully capture, but to which those who have worked with it would fervently testify. As such, it

is important to acknowledge what the participants involved in this study had to say about the process of the intervention itself.

7.3.1 THE INTERVENTION OFFERED SOMETHING UNIQUE

The design of the intervention is appropriately suited to a patient-centred model of care in that it focuses on the unique family dynamic. It uses self-modelling for 'good' communication and ensures that outcomes are relevant to the family: firstly, by asking them to set the goal for change and secondly, by positing them as co-inquirers into the video data. This encourages the patient 'voice' and is different to the interactions which would generally occur within the context of the routine services that parents of young deaf children receive. In the early stages of the intervention, the guide would often have to reiterate the more central role of the parent in the intervention process. This was also true of the strength-oriented approach to the video, in that parents were naturally critical when observing their own behaviours. Finally, many parents initially found it strange observing themselves on video, but this was shown to have only a short-term effect and it did not take long for the parents to become more familiar with this point of view. In fact, the participants were particularly appreciative of the unique perspective afforded by the video, which not only permitted the parents to 'see themselves' but also to really scrutinise the subtle behaviours they were subconsciously acting out. This was also true in observing the child's behaviour, bringing to light communicative competencies the parents were not previously aware of. A frequent remark was that the

video allowed one to 'look at yourself' – both literally and reflexively – since you are unable to see what you are doing 'when you're doing it day-to-day'. The 'snapshot' element of the video also provided a reference point to compare how much the child had developed over the course of the intervention. Many parents were also glad to have a piece of evidence which they could share with teachers and professionals when it came to assessing the child's communicative competencies.

It was shown to be especially important that the video data was of the family in question – as opposed to a generic model of 'good communication' – not only for relevance, but in providing that 'mastery experience' which would help build the parents' feelings of self-efficacy. As well as the evidence of the video, parents also remarked upon the way in which the guide was able to make specific reference to communicative behaviours based on the contact principles that contributed to successful communication. This was a transferrable skill picked up by many parents who felt that they were equipped to continue to use video in the same way for themselves: another empowering outcome. The reported outcomes were consistent with the aims of the intervention, relating to a heightened awareness of the ways in which good communication is managed between the parent and the child, as well as the goals for change.

7.3.2 THE INTERVENTION PROMOTES INTERSUBJECTIVITY

In terms of a form of health service, many of our assumptions about the intervention were shown to be valid and I would argue that each element of the intervention process was significant in generating the outcomes observed here, whether or not we determine them to be indicative of 'empowerment'. What had become particularly poignant in the process of analysing the outcomes of the intervention were the parallels that extended from the intervention itself to the manner in which we came to analyse it. In the first instance the video element is a distinguishing aspect of this kind of work. But furthermore, the video element – as an evidential reference - emphasises the (secondary) intersubjective (Trevarthen, 1979) focus of the intervention process and parallels the dialogic aspect of stance-taking. If we consider Du Bois' (2007) concept of the stance triangle, we find a model for the interactions within the intervention and for our analysis of them. To begin with, the participant and child are recorded in interaction where there is a 'shared stance object' (Du Bois 2007: 159), which can be a material item such as a toy, or an abstract aspect such as a task or manner of play. In the video review session the 'shared stance object' is the video itself as the guide and participant align themselves with respect to this component and to each other. In the conversation that is generated around the video, the 'shared stance item' is a new way of thinking, where the participant is confident in their communicative behaviours. This shared stance item provides the counterpoint for the intersubjective behaviours of those involved (guide/parent/child) and

the negotiation of meaning throughout the session (play/video review/talk).

The intervention guide faces the challenge of responding to the family's needs within the confines of the intervention. Their resource is largely the video itself, however they must be attuned to the family to recognise the existing strengths that will provide the foundation for enabling them to negotiate the obstacles and challenges they face in getting their needs met. This work has shown how important it is to maintain a focus in order to achieve the learning outcomes and how the guide must continually (re-)direct the parents' focus towards strengths when their instincts might be to be self-critical. However, much like the interactions captured on video the success of the guide's interactions with the parents can be understood as a practice in attuned responses. Referring to a pilot study I reported how a trainee teacher of the deaf was seemingly stuck on a negative trajectory and the guide made an appropriate interjection to direct the participant towards a positive perspective transformation. Similarly, it has been shown how affording the participant the conversational (temporal/physical) space for self-reflection can encourage them to develop their own critical thinking and initiate a learning process. This parallels what was often a learning outcome of the parent-child interactions where space was the answer to allowing the child to make their own initiatives and shape their own development. It is the role of the guide (and in the family dynamic, the parent) to offer attuned responses to support these initiatives.

7.3.3 PARENT-LED INTERVENTION

This concept of providing the parent with the space (the opportunity, perhaps) to make their own initiatives is also supported by the setting of a goal for change. It was shown that when asked what their intentions for the intervention were, most parents promptly identified a specific area in which they wanted to see more development. Furthermore, although the guide would often press the participant for clarification or specificity, the level of negotiation of these goals to make them feasible in the context of the intervention was minimal. The goals established by the parents at the beginning of their intervention proves showed that they had understood the principles of the intervention and that they were more than capable of setting an 'agenda' for the provision of services in relation to them, their hearing impaired child and their respective families. Ultimately, the participants had a 'voice' and needed only the invitation to use it. In addition, the principles of these goals were not specific to hearing loss in that they were directed towards a better understanding of their child's 'agency', or managing their child's behaviour. The presence of a hearing impairment was incidental. This is important in acknowledging that the concerns of parents of hearing children are not necessarily characterised by the hearing loss and are more related to being a parent, rather than being the parent of a deaf child. Parry (2004) reported on the detrimental effect of not being able to identify a clearly-defined goal in the context of physiotherapeutic rehabilitation. Our data has shown that there was a tendency for goals to either be specific to a particular facet of the

child's behaviour, or a more explorative inquiry of what else could potentially be known. The degree of specificity of the goals suggested by participants did not inhibit the potential for perspective change. Rather, this reiterated that in the empowerment model, the participant has the ability to determine their own level of responsibility in terms of decision-making and it is something which they can work <u>with</u> the health professional to determine.

I have stated that the nature of the goals for change were directed more towards the relational aspects of the family dynamic, rather than a specific hearing related concern. We must be aware however, that this might by symptomatic of the focus of the intervention. The fact that VIG focuses on communication in relationships was made known to the participants prior to their involvement in the study. It is perhaps no surprise that the participants responded to this directed focus and we must consider to what extent this was dictated by the study design. Nevertheless, the idea of relationships was a construct within which all of the participants were able to frame their inquiries and could be seen to be a universal principle underlying the variability and heterogeneity of this population.

7.3.4 THE GUIDE-PARTICIPANT RELATIONSHIP

The level of involvement in the intervention process stretched across various family members, to teachers of the deaf, speech and language therapists, to school teachers. Since the focus of the intervention was

set by the video data, the incorporation of multiple perspectives to uncover 'meaning' from the video was managed by the intervention guide. I would suggest that there is some threshold to the level of focus that can be maintained as the number of people involved in the session increases, which is shown to affect the learning potential. However, the participants themselves also seemed to understand that in a micro-analytic approach to video, focus is important and would recognise the benefits of having a smaller number of people involved in the session. This is also seen in relation to the collaborative relationship established between the participant and the intervention guide. Taylor (2007: 179) asserts that "It is through trustful relationships that allow individuals to have questioning discussions, share information openly and achieve mutual and consensual understanding". Given the importance of engaging in critical discourse to the process of transformative learning, the participant must feel comfortable in revealing the limits of their knowledge to the health professional in order to create learning opportunities. They must also be ready to recognise their strengths, scrutinise their behaviour and acknowledge alternative points of view. They must be prepared to find and use their 'voice' in order to have their needs met.

7.3.5 THE INTERVENTION CREATES OPPORTUNITIES FOR TRANSFORMATIVE LEARNING

I have explored above the ways in which the principles of the intervention support the potential for transformative learning.

Transformative learning has been associated with the process of bereavement (Sands and Tennant, 2010; Moon, 2011), where the passing of a loved one provides that very disorienting dilemma that triggers a process of critical reflection and perspective change. Similarly, we could say that receiving the diagnosis that your child is hearing impaired – which has also been likened to a grieving process (Kurtzer-White and Luterman, 2003) – can have the same effect. In some instances, the diagnosis of deafness was in itself a 'touchstone' disorienting dilemma, seen to have generated an 'accumulation' of transformations over time. Dirkx (2000) critiques a necessity for extraordinary events in transformative learning and argues that transformative learning can be the product of everyday experiences. Certainly, the video data was focused on everyday interactions and was able to prompt a transformative learning process for many of the parents. The guide too was responsible for introducing a disorienting dilemma, by asking the participants to engage in self-reflection but also as an individual with their own perspective. The guide was also responsible for directing the participant on the trajectory of transformative learning in order for the learning to be assimilated into their meaning perspective. This included an instance where the transformative learning subject was not foreseen in the goal for change and was an aspect of the family dynamic external to the focus of the intervention which the guide introduced to the final session (A10103). But the potential for transformative learning is also contingent upon the participant fulfilling their role as 'learner' as dictated by Mezirow (1991).

Thus, those participants who were passive, receptive and did not engage in critical discourse were not subject to a transformative learning experience. This learning trajectory can also be understood within the rhizome model, where the contingent aspects around the participant's receptiveness, the guidance of the health service provider and the available (video) evidence must all be considered in the learning process.

7.4 IMPLICATIONS FOR PRACTICE

7.4.1 EMPOWERMENT MODELS

'Empowerment' is in itself a commendable health strategy and is consistent with the patient-centred model of care. It is also symptomatic of the digital age and part of a broader social transition. But it is not new; it is a long-standing, fluctuating process of the shifting domains of power. Conceptions of empowerment would benefit from the insights afforded by the rhizome model, which rejects the idea of an origin and is concerned with the continuity between one observable stage and the next; it emphasises process. From the beginning of this work, I have reiterated the importance of viewing empowerment as a process and as such, when we strive to evidence it we serve only to capture a 'checkpoint' of an effect in transition.

If researchers and practitioners are to report evidence of empowerment, a single 'snapshot' observation will tell us very little. This work has reported on a brief longitudinal study of the changing patient 'voice'

across three-to-four moments in time. From what was reported at those instances, we could infer both what might have happened previously and what might have been happening in the near future, as constructed within the patient voice. For clinicians interested in the perception of illness and in patient self-management, there is much to be learnt from allowing the patient to present their own trajectory, in their own terms and with their own focus. This will help researchers and clinicians alike to understand not only the journey the patient has already been on, but also to collaboratively approach the events and obstacles of the future *with* the patient.

The concepts map provides a series of entry points into the data through which to understand the constructs of the patient perspective and locate them in linguistic phenomena. I believe I have accounted for many of the overlapping concepts which have been integrated within conceptualisations of 'empowerment' around agency, advocacy, righteous anger etc. to give a foundation for locating the patient 'voice' as indicative of 'power' in conversational data. The ways in which the participants' utterances convey 'power', stance and perspective have been shown to be variable and this study has demonstrated the importance of intersubjectivity. Thus, if researchers are to understand how the patient stance is indicative of empowerment this must be understood within the context of the interaction and the researcher must be aware of the interactional elements. I have also stated that a verbal analysis alone is unlikely to fully depict the intersubjective

processes which give the participants' contributions 'meaning'.
Practitioners can draw upon the insights generated by research into the
para-linguistic and non-verbal aspects of communication which
contribute to the power relations in interaction (Isbister and Nass, 2000;
Puccinelli *et al.*, 2013; Rees *et al.*, 2013). I have also suggested how
such multimodal analyses can begin to capture the more affective
domains in prosody and in facial expression for example, which is an
aspect of the interaction that this work was not able to fully explore.

7.4.2 REPRESENTING THE PATIENT VOICE

As a way of presenting the patient voice, I believe the 'cluster tagging'
process is an original and effective approach to interview data and one
which – with some minor technological developments in the way of
transcription and integrated coding – could be made available to
anyone who is interested in conducting interviews with patients. It
extends beyond conventional 'keyword' approaches and thematic
analyses to provide a computational breakdown of the key semantic
categories of the data, which – when located back in the context of the
dialogue – highlights representational extracts of the conversation for
closer discourse analysis. The implications of the methodology are in
that it favours a single interlocutor representation and a semantic
representation of 'meaning'. It is designed to be representative and
would aid the practitioner in providing a synoptic of the key ideas
discussed by the patient, but does not suitably represent the
interactional elements of the discussion.

If researchers are to continue to use the ten phase model as a way of evidencing transformative learning, this too must take into account non-verbal interactional behaviours, as there was little indication that each phase could be reliably identified on grammatical or even semantic features alone. I was able to report how such aspects contributed to the meaning which allowed me to discern one phase form another, but these features were not characteristic of or exclusive to any one phase. This process was complicated further by the fact that the phases were often intertwined and revisited. It would seem that we cannot be prescriptive about the way learning will manifest and as with the larger empowerment model we must develop analytical frameworks that can accommodate the variability in the learning process.

It was shown through the pragmatic tagging process that the intervention principles understood to promote self-reflection generally encouraged participants to think more critically, pursue inquiries, consider the limits of their knowledge and evaluate rather than describe what they observed. Though this approach offered some insight into the level of engagement and critical thinking it was not related to learning outcomes. Though we might argue that an increase in self-examination, exploration and critical thinking might create more learning opportunities, it was show that focusing on one line of inquiry was more beneficial. Although a greater number of learning opportunities

increases the probability of learning, this work found that a more directed focus was required to develop an inquiry into new learning.

7.4.3 PROVIDING EVIDENCE

It has been shown that patients can act effectively as collaborators in managing their own health care, which includes defining outcomes and generating learning opportunities. What I have described resonates in many ways with concepts of empowerment as defined in the literature. But in order to assess the impact of interventions and systems of care directed at fostering empowerment we must be able to provide evidence of it in the data. If we are to assess the effect of an intervention we can only report on what has changed from point A to point B (to point C etc.) then analyse that change accounting for natural processes and developments which can be explained by external factors. The challenge in discerning what is incidental, contextual or pathetic change is based on our familiarity with the participant's use of language. Some aspects – such as an increase in 'explorative' statements – are not contingent upon reasoning and we might be less interested in explaining why this might have changed, merely celebrating that it has. However, in other instances – such as a newly-discovered semantic preoccupation with 'change' – it would offer great insight to understand what initiated this change. Referring back to the rhizome model, this work emphasises the fallacy in conceiving of a static state of being; rather when we consider any measure of an intervention, we must be aware of the participants' trajectory. We can

take the induction into the intervention as a starting point, but we must recognise that this is not an 'origin', nor should we strive to find one. Likewise, the learning processes I have observed in the data do not originate in the processes of the intervention but are preceded by all manner of factors, including the participant's receptiveness to learning and level of knowledge. Nevertheless, this does not mean that we should not try to uncover how that learning potential is cultivated by the intervention.

7.4.4 THE HEALTH SERVICE PROVIDER AND THE COLLABORATIVE RELATIONSHIP

The intervention and the subsequent analysis have foreground intersubjectivity and it is useful to consider the intersubjective processes which generate empowerment. I stated in the conceptualisation of 'empowerment' that power cannot be given to an individual. Nevertheless, if an intervention guide (or health service user) is attuned to the ways in which a participant's learning (and empowerment) potential are introduced into the interaction they can support its development. This study has provided examples where space, encouragement and interjection have all served to direct a participant onto a learning trajectory. The health service provider is challenged with knowing when to step back, when to support and when to challenge the health service user to realise their own empowerment. This emphasises the importance of the collaborative relationship between health service providers and health service users. Furthermore,

a heightened awareness of the interactive behaviours that support this collaborative relationship can inform the health service provider of the ways in which their behaviour can be better attuned to the participant and develop this collaborative relationship.

APPENDIX A: FULL USAS TAGSET

A GENERAL & ABSTRACT TERMS
A1 General
A1.1.1 General actions, making etc.
A1.1.2 Damaging and destroying
A1.2 Suitability
A1.3 Caution
A1.4 Chance, luck
A1.5 Use
A1.5.1 Using
A1.5.2 Usefulness
A1.6 Physical/mental
A1.7 Constraint
A1.8 Inclusion/Exclusion
A1.9 Avoiding
A2 Affect
A2.1 Affect: Modify, change
A2.2 Affect: Cause/Connected
A3 Being
A4 Classification
A4.1 Generally kinds, groups, examples
A4.2 Particular/general; detail
A5 Evaluation
A5.1 Evaluation: Good/bad
A5.2 Evaluation: True/false
A5.3 Evaluation: Accuracy
A5.4 Evaluation: Authenticity
A6 Comparing
A6.1 Comparing: Similar/different
A6.2 Comparing: Usual/unusual
A6.3 Comparing: Variety
A7 Definite (+ modals)
A8 Seem
A9 Getting and giving; possession
A10 Open/closed; Hiding/ Hidden; Finding; Showing
A11 Importance
A11.1 Importance: Important
A11.2 Importance: Noticeability
A12 Easy/difficult
A13 Degree
A13.1 Degree: Non-specific
A13.2 Degree: Maximizers
A13.3 Degree: Boosters
A13.4 Degree: Approximators
A13.5 Degree: Compromisers
A13.6 Degree: Diminishers
A13.7 Degree: Minimizers
A14 Exclusivizers /particularizers
A15 Safety/Danger
B THE BODY & THE INDIVIDUAL
B1 Anatomy and physiology
B2 Health and disease
B3 Medicines and medical treatment
B4 Cleaning and personal care
B5 Clothes and personal belongings
C ARTS & CRAFTS
C1 Arts and crafts
E EMOTIONAL ACTIONS, STATES & PROCESSES
E1 General
E2 Liking

I MONEY & COMMERCE
I1 Money generally
I1.1 Money: Affluence
I1.2 Money: Debts
I1.3 Money: Price
I2 Business
I2.1 Business: Generally
I2.2 Business: Selling
I3 Work and employment
I3.1 Work and employment: Generally
I3.2 Work and employment: Professionalism
I4 Industry
K ENTERTAINMENT, SPORTS & GAMES
K1 Entertainment generally
K2 Music and related activities
K3 Recorded sound etc.
K4 Drama, the theatre & show business
K5 Sports and games generally
K5.1 Sports
K5.2 Games
K6 Children's games and toys
L LIFE & LIVING THINGS
L1 Life and living things
L2 Living creatures generally
L3 Plants
M MOVEMENT, LOCATION TRAVEL & TRANSPORT
M1 Moving, coming and going
M2 Putting, taking, pulling, pushing, Transporting.
M3 Movement/transportation: land
M4 Movement/transportation: water
M5 Movement/transportation: air
M6 Location and direction
M7 Places
M8 Remaining/stationary
N NUMBERS & MEASUREMENT
N1 Numbers
N2 Mathematics
N3 Measurement
N3.1 Measurement: General
N3.2 Measurement: Size
N3.3 Measurement: Distance
N3.4 Measurement: Volume
N3.5 Measurement: Weight
N3.6 Measurement: Area
N3.7 Measurement: Length & height
N3.8 Measurement: Speed
N4 Linear order
N5 Quantities
N5.1 Entirety; maximum
N5.2 Exceeding; waste
N6 Frequency etc.
O SUBSTANCES, MATERIALS, OBJECTS & EQUIPMENT
O1 Substances and materials generally
O1.1 Substances and materials generally: Solid
O1.2 Substances and materials generally: Liquid
O1.3 Substances and materials generally: Gas
O2 Objects generally
O3 Electricity and electrical equipment
O4 Physical attributes
O4.1 General appearance and

S SOCIAL ACTIONS, STATES & PROCESSES
S1 Social actions, states & processes
S1.1 Social actions, states & processes
S1.1.1 General
S1.1.2 Reciprocity
S1.1.3 Participation
S1.1.4 Deserve etc.
S1.2 Personality traits
S1.2.1 Approachability and Friendliness
S1.2.2 Avarice
S1.2.3 Egoism
S1.2.4 Politeness
S1.2.5 Toughness; strong/weak
S1.2.6 Sensible
S2 People
S2.1 People: Female
S2.2 People: Male
S3 Relationship
S3.1 Relationship: General
S3.2 Relationship: Intimate/sexual
S4 Kin
S5 Groups and affiliation
S6 Obligation and necessity
S7 Power relationship
S7.1 Power, organizing
S7.2 Respect
S7.3 Competition
S7.4 Permission
S8 Helping/hindering
S9 Religion and the supernatural
T TIME
T1 Time
T1.1 Time: General
T1.1.1 Time: General: Past
T1.1.2 Time: General: Present; simultaneous
T1.1.3 Time: General: Future
T1.2 Time: Momentary
T1.3 Time: Period
T2 Time: Beginning and ending
T3 Time: Old, new and young; age
T4 Time: Early/late
W THE WORLD & OUR ENVIRONMENT
W1 The universe
W2 Light
W3 Geographical terms
W4 Weather
W5 Green issues
X PSYCHOLOGICAL ACTIONS, STATES & PROCESSES
X1 General
X2 Mental actions and processes
X2.1 Thought, belief
X2.2 Knowledge
X2.3 Learn
X2.4 Investigate, examine, test, search
X2.5 Understand
X2.6 Expect
X3 Sensory
X3.1 Sensory: Taste
X3.2 Sensory: Sound
X3.3 Sensory: Touch
X3.4 Sensory: Sight
X3.5 Sensory: Smell
X4 Mental object
X4.1 Mental object: Conceptual object
X4.2 Mental object: Means, method

E3 Calm/Violent/Angry
E4 Happy/sad
E4.1 Happy/sad: Happy
E4.2 Happy/sad: Contentment
E5 Fear/bravery/shock
E6 Worry, concern, confident
F FOOD & FARMING
F1 Food
F2 Drinks
F3 Cigarettes and drugs
F4 Farming & Horticulture
G GOVT. & THE PUBLIC DOMAIN
G1 Government, Politics & elections
G1.1 Government etc.
G1.2 Politics
G2 Crime, law and order
G2.1 Crime, law and order: Law & order
G2.2 General ethics
G3 Warfare, defence and the army; Weapons
H ARCHITECTURE, BUILDINGS, HOUSES & THE HOME
H1 Architecture, kinds of houses & buildings
H2 Parts of buildings
H3 Areas around or near houses
H4 Residence
H5 Furniture and household fittings

physical properties
O4.2 Judgement of appearance (pretty etc.)
O4.3 Colour and colour patterns
O4.4 Shape
O4.5 Texture
O4.6 Temperature
P EDUCATION
P1 Education in general
Q LINGUISTIC ACTIONS, STATES & PROCESSES
Q1 Communication
Q1.1 Communication in general
Q1.2 Paper documents and writing
Q1.3 Telecommunications
Q2 Speech acts
Q2.1 Speech etc: Communicative
Q2.2 Speech acts
Q3 Language, speech and grammar
Q4 The Media
Q4.1 The Media: Books
Q4.2 The Media: Newspapers etc.
Q4.3 The Media: TV, Radio & Cinema

X5 Attention
X5.1 Attention
X5.2 Interest/boredom/excited/ energetic
X6 Deciding
X7 Wanting; planning; choosing
X8 Trying
X9 Ability
X9.1 Ability: Ability, intelligence
X9.2 Ability: Success and failure
Y SCIENCE & TECHNOLOGY
Y1 Science and technology in general
Y2 Information technology and computing
Z NAMES & GRAMMATICAL WORDS
Z0 Unmatched proper noun
Z1 Personal names
Z2 Geographical names
Z3 Other proper names
Z4 Discourse Bin
Z5 Grammatical bin
Z6 Negative
Z7 If
Z8 Pronouns etc.
Z9 Trash can
Z99 Unmatched

APPENDIX B: BNC FILE LISTING

BNC Code	Description
KB0	19 conversations recorded by `Margaret' (PS002) between 13 and 16 March 1992 with 9 interlocutors, totalling 3901 s-units, 42462 words, and 6 hours 28 minutes 0 seconds of recordings.
KB1	17 conversations recorded by `Albert' (PS01A) between 1 and 6 February 1992 with 9 interlocutors, totalling 5856 s-units, 39285 words, and over 3 hours 6 minutes 40 seconds of recordings.
KB3	8 conversations recorded by `Alison' (PS147) between 30 January and 4 February 1992 with 4 interlocutors, totalling 1966 s-units, 10492 words, and 2 hours 20 minutes 32 seconds of recordings.
KB6	8 conversations recorded by `Angela' (PS029) between 2 and 6 December 1991 with 7 interlocutors, totalling 2360 s-units, 12953 words, and 1 hour 22 minutes 59 seconds of recordings.
KB8	34 conversations recorded by `Ann2' (PS14B) on 3 April 1992 with 37 interlocutors, totalling 12018 s-units, 78798 words, and over 8 hours 19 minutes 57 seconds of recordings.
KBC	14 conversations recorded by `Audrey' (PS1A9) between 2 and 9 April 1992 with 9 interlocutors, totalling 6341 s-units, 31337 words, and 3 hours 38 minutes 41 seconds of recordings.
KBG	10 conversations recorded by `Carl' (PS051) between 21 and 27 February 1992 with 9 interlocutors, totalling 4559 s-units, 28812 words, and 3 hours 30 minutes 23 seconds of recordings.
KBM	13 conversations recorded by `Chris2' (PS1BL) on 2 April 1992 with 7 interlocutors, totalling 2837 s-units, 19723 words, and 2 hours 22 minutes 47 seconds of recordings.
KBX	11 conversations recorded by `Donald2' (PS1DW) between 17 and 10 January 1992 with 6 interlocutors, totalling 1967 s-units, 28273 words (duration not recorded).
KC0	14 conversations recorded by `Enid' (PS08Y) between 21 and 27 February 1992 with 10 interlocutors, totalling 8028 s-units, 45900 words, and 4 hours 0 minutes 12 seconds of recordings.
KC3	15 conversations recorded by `Frederick' (PS0A8) between 10 and 15 January 1992 with 10 interlocutors, totalling 3930 s-units, 36931 words (duration not recorded).
KC5	16 conversations recorded by `Gail' (PS0AJ) between 2 and 4 December 1991 with 9 interlocutors, totalling 3620 s-units, 22248 words, and over 2 hours 2 minutes 3 seconds of recordings.
KC7	7 conversations recorded by `Gill' (PS0BK) on 15 January 1992 with 5 interlocutors, totalling 1640 s-units, 15279 words (duration not recorded).
KC8	11 conversations recorded by `Gillian' (PS0BY) between 29 November and 6 December 1991 with 6 interlocutors, totalling 1822 s-units, 18878 words, and 2 hours 42 minutes 29 seconds of recordings.
KCB	13 conversations recorded by `Graeme' (PS0DX) between 22 and 26 February 1992 with 7 interlocutors, totalling 2686 s-units, 15326 words (duration not recorded).
KCC	2 conversations recorded by `Hazel' (PS0F5) on 11 January 1992 with 2 interlocutors, totalling 563 s-units, 5311 words (duration not recorded).
KCG	20 conversations recorded by `Jane' (PS19L) between 2 and 9 April 1992 with 10 interlocutors, totalling 2998 s-units, 28227 words, and 3 hours 10 minutes 52 seconds of recordings.
KCK	12 conversations recorded by `Jean' (PS1AT) between 3 and 10 April 1992 with 8 interlocutors, totalling 1427 s-units, 9080 words, and 1 hour 23 minutes 11 seconds of recordings.
KCM	11 conversations recorded by `Jonathan' (PS0FE) between 15 and 17 January 1992 with 8 interlocutors, totalling 1089 s-units, 7154 words (duration not recorded).
KCS	15 conversations recorded by `John2' (PS1F1) between 30 January and 6 February 1992 with 8 interlocutors, totalling 2707 s-units, 23532 words, and 2 hours 21 minutes 44 seconds of recordings.
KCW	19 conversations recorded by `Kathleen' (PS0H8) between 15 and 17 January 1992 with 10 interlocutors, totalling 4977 s-units, 23839 words (duration not recorded).
KCY	11 conversations recorded by `Keith' (PS0H9) between 10 and 15 January 1992 with 10 interlocutors, totalling 2501 s-units, 24051 words (duration not recorded).

KD4	7 conversations recorded by `Margaret' (PS0JW) between 13 and 14 January 1992 with 5 interlocutors, totalling 887 s-units, 7068 words (duration not recorded).
KD9	17 conversations recorded by `Mark2' (PS1G2) between [date unknown] and ?? April 1992 with 13 interlocutors, totalling 2788 s-units, 12902 words (duration not recorded).
KDG	18 conversations recorded by `Patricia' (PS0MA) between 14 and 16 April 1992 with 10 interlocutors, totalling 2707 s-units, 12125 words (duration not recorded).
KDJ	6 conversations recorded by `Pauline' (PS0N3) between 21 and 24 February 1992 with 8 interlocutors, totalling 1668 s-units, 16234 words, and over 1 hour 49 minutes 24 seconds of recordings.
KDW	27 conversations recorded by `Sandra2' (PS1C1) between 9 and 16 January 1992 with 25 interlocutors, totalling 8669 s-units, 58393 words (duration not recorded).
KE0	17 conversations recorded by `Simmone' (PS0SW) between 20 and 27 February 1992 with 9 interlocutors, totalling 5150 s-units, 26574 words, and over 2 hours 15 minutes 23 seconds of recordings.
KE5	4 conversations recorded by `Wayne' (PS0X2) between 20 and 22 February 1992 with 6 interlocutors, totalling 575 s-units, 4800 words (duration not recorded).
KNV	12 conversations recorded by `717' (PS4Y3) [dates unknown] with 9 interlocutors, totalling 1244 s-units, 7356 words, and over 1 hour 49 minutes 18 seconds of recordings.
KP0	8 conversations recorded by `Alistair' (PS50D) [dates unknown] with 6 interlocutors, totalling 1081 s-units, 7387 words (duration not recorded).
KP2	11 conversations recorded by `Carla' (PS513) [dates unknown] with 8 interlocutors, totalling 1078 s-units, 8570 words, and 1 hour 23 minutes 38 seconds of recordings.
KP3	17 conversations recorded by `Caroline' (PS51F) on ?? ?? 1993 with 9 interlocutors, totalling 2901 s-units, 17457 words, and over 2 hours 22 minutes 47 seconds of recordings.
KP4	17 conversations recorded by `Cassie' (PS51S) between [date unknown] and ?? ?? 1993 with 9 interlocutors, totalling 4375 s-units, 32640 words, and over 4 hours 50 minutes 18 seconds of recordings.
KP6	10 conversations recorded by `Catriona' (PS52C) on ?? ?? 1993 with 9 interlocutors, totalling 3658 s-units, 33704 words, and over 1 hour 20 minutes 19 seconds of recordings.
KP8	7 conversations recorded by `Christopher' (PS52T) between 30 January and 8 February 1992 with 6 interlocutors, totalling 3884 s-units, 20442 words, and 2 hours 1 minute 42 seconds of recordings.
KPB	5 conversations recorded by `Eddie' (PS540) [dates unknown] with 3 interlocutors, totalling 620 s-units, 2738 words (duration not recorded).
KPL	4 conversations recorded by `Leon' (PS56D) [dates unknown] with 4 interlocutors, totalling 866 s-units, 5577 words (duration not recorded).
KPP	8 conversations recorded by `Matthew' (PS57A) [dates unknown] with 7 interlocutors, totalling 1319 s-units, 7616 words (duration not recorded).
KPR	5 conversations recorded by `Monica' (PS57L) on 19 October 1993 with 4 interlocutors, totalling 1980 s-units, 9604 words, and over 1 hour 26 minutes 56 seconds of recordings.
KPU	4 conversations recorded by `Rachel2' (PS582) on 9 October 1993 with 4 interlocutors, totalling 2955 s-units, 16953 words, and over 1 hour 30 minutes 58 seconds of recordings.
KPX	7 conversations recorded by `Robin' (PS58K) [dates unknown] with 6 interlocutors, totalling 1126 s-units, 5165 words (duration not recorded.
KR0	12 conversations recorded by `Sheila' (PS59B) between 31 January and 4 February 1992 with 9 interlocutors, totalling 2658 s-units, 18900 words, and over 1 hour 22 minutes 19 seconds of recordings.
KSS	16 conversations recorded by `June2' (PS6R8) between 2 and 8 April 1992 with 9 interlocutors, totalling 5147 s-units, 34975 words, and over 1 hour 19 minutes 18 seconds of recordings.
KST	12 conversations recorded by `Margaret2' (PS6RG) between 20 and 27 February 1992 with 7 interlocutors, totalling 5346 s-units, 31800 words, and 2 hours 47 minutes 0 seconds of recordings.
KSW	6 conversations recorded by `Richard4' (PS6SG) [dates unknown] with 5 interlocutors, totalling 1098 s-units, 6020 words (duration not recorded).

REFERENCES

Abidin, R. R. (1995) *Parenting Stress Index.* Third edition. Odessa, FL: Psychological Assessment Resources.

Adolphs, S. (2006) *Introducing Electronic Text Analysis: A Practical Guide for Language and Literary Studies.* Oxon: Routledge.

Adolphs, S. and Carter, R. (2013) *Spoken Corpus Linguistics: From monomodal to multimodal.* London: Routledge.

Affleck, W., Glass, K. C. and Macdonald, M. E. (2013) "The limitations of language: Male participants, stoicism, and the qualitative research interview." *American Journal of Men's Health 7(2)* 155-162. 10.1177/1557988312464038.

Alsop, R. and Heihnson, N. (2005) "Measuring empowerment in practice: Structuring analysis and framing indicators." *World Bank Policy Research Working Paper 3510.*

Anagnostou, F., Graham, J. and Crocker, S. (2007) "A preliminary study looking at parental emotions following cochlear implantation." *Cochlear Implants International 8(2)* 68-86. 10.1002/cii.331.

Andrews, J. F., Leigh, I. W. and Weiner, M. T. (2004) *Deaf people. Evolving perspectives from psychology, education and sociology.* Boston, MD: Allyn and Bacon.

Archer, D., Aijmer, K. and Wichmann, A. (2012) *Pragmatics: An Advanced Resource Book for Students.* London: Routledge.

Argyris, C. and Schön, D. (1978) *Organization learning: A theory of Action perspective.* Reading, MA: Addison Wesley.

Artières, F., Vieu, A., Mondain, M., Uziel, A. and Venail, F. (2009) "Impact of early cochlear implantation on the linguistic development of the deaf child." *Otology and Neuro-otology 30(6)* 736-742. 10.1097/MAO.0b013e3181b2367b.

Aston, G. and Burnard, L. (1998) *The BNC Handbook: exploring the British National Corpus.* Edinburgh: Edinburgh University Press.

Aujoulat, I., Marcolongo, R., Bonadiman, L. and Deccache, A. (2008) "Reconsidering patient empowerment in chronic illness: A critique of

models of self-efficacy and bodily control." *Social Science & Medicine 66(5)* 1228-1239. 10.1016/j.socscimed.2007.11.034.

Austin, J. L. (1962) *How to Do Things With Words.* Oxford: Oxford University Press.

Baker, P. (2004) "Querying Keywords: Questions of difference, frequency, and sense in keyword analysis." *Journal of English Linguistics 32(4)* 346-359. 10.1177/0075424204269894.

Baker, P., Gabrielatoc, C., Khosravinik, M., Krzyzanowski, M., McEnery, T. and Wodak, R. (2008) "A useful methodological synergy? Combining critical discourse analysis and corpus linguistics to examine discourse of refugees and asylum seekers in the UK press." *Discourse and Society19(3)* 273-306. 10.1177/0957926508088962.

Bakhtin, M. M. (1981) *The Dialogic Imagination: Four Essays by M. M. Bakhtin.* Edited by M. Holquist. Austin, TX: University of Texas Press.

Bandura, A. (1977) "Self-efficacy: Toward a unifying theory of behavioural change." *Psychological Review 84(2)* 191-215.

Bandura, A. (2006) "Guide for constructing self-efficacy scales." In F. Pajares and T. Urdan (eds.) *Self-Efficacy Beliefs of Adolescents.* Information Age Publishing. pp. 307-337.

Barak, A. and Sadovsky, Y. (2008) "Internet use and personal empowerment of hearing impaired adolescents." *Computers in Human Behavior 24* 1802-1815. 10.1016/j.chb.2008.02.007.

Barry, C., Stevenson, F., Britten, N., Barber, N. and Bradley, C. (2001) "Giving voice to the lifeworld. More humane, more effective medical care? A qualitative study of doctor-patient communication in general practice." *Social Science and Medicine 53* 487-505.

Beebe, B. (2003) "Brief mother-infant treatment: Psychoanalytically informed video feedback." *Infant Mental Health Journal 24(1)* 24-52. 10.1002/imhj.10042.

Benoit, D., Madigan, S., Lecce, S., Shea, B. and Goldberg, S. (2001) "A typical maternal behaviour toward feeding-disordered infants before and after intervention." *Infant Medical Health Journal 22(6)* 611-626.

Bercow J. (2008) *Bercow Review of Services for Children and Young People (0-19) with Speech, Language and Communication Needs.* London: DCSF Publications, Crown Copyright.

Berger, J. G. (2004) "Dancing on the threshold of meaning: Recognizing and understanding the growing edge." *Journal of Transformative Education 2(2)* 336-351. 10.1177/1541344604267697.

Bhopal, R. S. and White, M. (1993) "Health promotion for ethnic minorities: past, present and future. In Ahmad, W. I. U. (ed.) *'Race' and health in contemporary Britain.* Buckingham: Open University Press. pp. 137-66.

Biber, D. and Conrad, S. (1999) "Lexical bundles in conversation and academic prose." In H. Hasselgård and S. Oksefjell (eds.) *Out of Corpora.* Amsterdam: Rodopi. pp.181-190.

Biber, D. and Finegan, E. (1989) "Styles of stance in English: Lexical and grammatical marking of evidentiality and affect". *Text 9* 93-124.

Biemans, H. (1990) "Video Home Training: Theory method and organisation of SPIN." In J. Kool (ed.) *International Seminar for Innovative Institutions.* Ryswijk: Ministry of Welfare, Health and Culture.

Bilszta, J. L. C., Buist, A. E., Wang, F. and Zulkefli, N. R. (2012) "Use of video feedback intervention in an inpatient perinatal psychiatric setting to improve maternal parenting." *Archives of Women's Mental Health 15* 249-257. 10.1007/s00737-012-0283-1.

Biringen, Z., Robinson, J. and Emde, R. N. (1993) *Emotional Availability Scales.* Second edition. Department of Human Development and Family Studies, Colorado State University, Fort Collins.

Blamey, P. J. (2003) "Development of spoken language by deaf children." In M. Marschark and P. E. Spencer (eds.) *Oxford Handbook of Deaf Studies, Language and Education.* New York: Oxford University Press. pp. 232-246.

Bodenheimer, T., Lorig, K., Holman, H. and Grumback, K. (2002) "Patient self management of chronic disease in primary care." *The Journal of the American Medical Association 288* 2469-2475.

Bodner-Johnson, B. and Sass-Leher, M. (1996) *Concepts and Premises in Family School Relationships, Pre College National Mission Programs.* Washington, DC: Gallaudet University.

Boyd, R. D. (1991) "Mary: A Case Study of Personal Transformation in a Small Group." In R. D. Boyd (ed.) *Personal Transformations in Small Groups: A Jungian Perspective.* London: Routledge. pp.179-202.

Braun, V. and Clarke, V. (2009) "Using thematic analysis in psychology." *Qualitative Research in Psychology 3(2)* 77-101.

Brock, S. E. (2010) "Measuring the importance of precursor steps to Transformative Learning." *Adult Education Quarterly 60(2)* 122-142.

Brown, P. and Levinson, S. C. (1987) *Politeness: Some universals in language use.* Cambridge: Cambridge University Press.

Brumfit, C. J. (1995) "Teacher professionalism and research." In G. Cook and B. Seidlhofer (eds.) *Principle and Practice in Applied Linguistics.* Oxford: Oxford University Press. pp. 27-42.

Byrne, P. and Long, B. (1976) *Doctors Talking to Patients.* London: DHSS.

Calderon, R. and Low, S. (1998) "Early social-emotional, language, and academic development in children with hearing loss: Families with and without fathers." *American Annals of the Deaf 143(3)* 225-234.

Calderon, R., Bargones, J. and Sidman, S. (1998) "Characteristics of hearing families and their young deaf and hard of hearing children: Early intervention follow-up." *American Annals of the Deaf 143(4)* 347-362.

Calmels, M. N., Saliba, I., Wanna, G., Cochard, N., Fillaux, J., Dequine, O. and Fraysse, B. (2004) "Speech perception and speech intelligibility in children after cochlear implantation." *International Journal of Pediatric Otorhinolaryngology 68(3)* 347-351.

Canadian Public Health Association. (1986) *Ottawa charter for health promotion.* Ottawa: Canada.

Candlin, C. and Crichton, J. (eds.) (2011) *Discourses of Deficit.* London: Palgrave Macmillan.

Candlin, C. and Crichton, J. (eds.) (2012) *Discourses of Trust.* London: Palgrave Macmillan.

Carroll, K., Iedema, R. and Kerridge, R. (2008) "Reshaping I.C.U. ward practices using video-reflexive ethnography." *Qualitative Health Research 18(3)* 380-390. 10.1177/1049732307313430.

Carter, R. (1993) *Introducing applied linguistics.* Harlow: Penguin.

Cenzo, J. (2007) "The acquisition of pragmatic competence and multilingualism in foreign language contexts." In E. Soler and M. Jorde

(eds.) *Intercultural Language Use and Language Learning.* Netherlands: Springer. pp.123-140.

Cheney, R. S. (2010) "Empirical measurement of perspective transformation, 1999-2009." *Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, 26th-28th September 2010.* Michigan State University.

Cheng, W. and Lam, P. (2012) "Prosody in discourse." In J. P. Gee and M. Handford (eds.) *The Routledge Handbook of Discourse Analysis.* London: Routledge. pp. 271-284.

Collins, L. C. and James, D. M. (in press) "Exploring transformative learning opportunities as part of the delivery of a video-based intervention." *Journal of Applied Linguistics and Professional Practice.*

Cornman, J. C., Lynch, S. M., Goldman, N., Weinstein, M. and Lin, H.-S. (2004) "Stability and change in the perceived social support of older Taiwanese adults." *Journal of Gerontology 59B(6)* S350-S357.

Cranton, P. and Carusetta, E. (2004) "Developing authenticity as a transformative process." *Journal of Transformative Education 2* 276-293.

Crittenden, P. M., and Bonvillian, J. D. (1984) "The effects of maternal risk status on maternal sensitivity to infant cues." *American Journal of Orthopsychiatry 54* 250-262.

de Haan, F. (1997) "Evidentiality and epistemic modality: Setting boundaries." Association for Linguistic Typology Conference, Eugene, Oregon.

Deleuze, G. and Guattari, F. (2004[1980]) *A Thousand Plateaus.* Translated by Brian Massumi. London: Continuum.

Denscombe, M. (2008) "Communities of practice." *Journal of Mixed Methods Research 2* 270-283.

Department of Health/Home Office. (2001). *National plan for safeguarding children from commercial exploitation.* London: Author.

Department of Health. (2002) *Shifting the balance of power: the next steps.* London: DOH. Available at www.dh.gov.uk/assetRoot/04/07/35/54/04073554.pdf. Accessed 7th March 2013.

Department of Health. (2012) *The mandate—a mandate from the government to the NHS Commissioning Board: April 2013 to March 2015.* https://www.wp.dh.gov.uk/publications/files/2012/11/mandate.pdf. Accessed 7th March 2013.

DesGeorges, J. (2003) "Family perceptions of early hearing, detection, and intervention systems: Listening to and learning from families." *Mental Retardation and Developmental Disabilities Research Reviews 9* 89-93.

DesJardin, J. L. (2003) "Assessing parental perceptions of self-efficacy and involvement in families of young children with hearing loss." *Volta Review 103(4)* 391-409.

Deveaux, M. (1994) "Feminism and empowerment: A critical reading of Foucault." *Feminist Studies 20* 223-247.

Dewane, C. M. (1993). *Self-help groups and adult learning.* Unpublished doctoral dissertation. The Pennsylvania State University, State College.

Dewey, J. (1910) *How we think.* Boston, MA: Heath.

DiClemente, C. C., Prochaska, J. O. and Gilbertini, M. (1985) "Self-efficacy and the stages of self-change of smoking." *Cognitive Therapy and Research 9(2)* 181-200.

Dirkx, J. M. (2000) "After the burning bush: Transformative learning as imaginative engagement with everyday experience." In C. A. Wiessner, S. Meyer and D. Fuller (eds.) *Challenges of practice: Transformative learning in action. Proceedings of the Third International Conference on Transformative Learning.* New York, NY: Teachers College, Columbia University. pp. 247-252.

Dirkx, J. M. (2006) "Engaging emotions in adult learning: A Jungian perspective on emotion and transformative learning." *New Directions for Adult and Continuing Education 109* 15-26. 10.1002/ace.204.

Dörnyei, Z. (2007) *Research Methods in Applied Linguistics: Quantitative, Qualitative, and Mixed Methodologies.* Oxford: Oxford University Press.

Doughty, C. J. (2007) "Effective strategies for promoting attachment between young children and their parents." *New Zealand History Teachers Association Technical Brief 6(2).*

Dowling, M., Murphy, K., Cooney, A. and Casey, D. (2011) "A concept analysis of empowerment in chronic illness from the perspective of the nurse and the client living with chronic obstructive pulmonary disease." *Journal of Nursing and Healthcare of Chronic Illness 3* 476-487. 10.1111/j.1752-9824.2011.01123.x.

Dromi, E. and Ingber, S. (1999) "Israeli mothers' expectations from early intervention with their preschool deaf children." *Journal of Deaf Studies and Deaf Education 4(1)* 50-68.

DuBois, J. W. (2007) "The stance triangle." In R. Englebretson (ed.) *Stancetaking in Discourse: Subjectivity, Evaluation, Interaction.* Amsterdam: John Benjamins Publishing Company. pp.139-182.

Dunst, C. J. and Trivette, C. M. (1996) "Empowerment, effective helpgiving practices and family-centred care." *Pediatric Nursing 22(4)* 334-337.

Dunst, C. J., Jenkins, V. and Trivette, C. M. (1984) "The Family Support Scale: Reliability and validity." *Journal of Individual, Family and Community Wellness 1* 45-52.

Edmondson, A. (1999) "Psychological safety and learning behaviour in work teams." *Administrative Science Quarterly 44* 350-383.

Egan, S. J. (1985). *Learning process in family therapy: An experiential perspective.* Unpublished doctoral dissertation. University of Toronto, Toronto.

Eisenberg, L. S. (2007) "Current state of knowledge: speech recognition and production in children with hearing impairment." *Ear and Hearing 28* 766-772.

Elbaz-Luwisch, F. and Lerner, A. (2011) "Changing perspectives in academia: Two narratives of transformative learning." *Paper presented at the ESREA Life history and biographical research network: Human Agency and biographical transformations. 3rd-6th March 2011.* Geneva, Switzerland.

Ellis-Stoll, C. and Popkess-Vawter, S. (1998) "A concept analysis on the process of empowerment." *Advances in Nursing Science 21 (2)* 62-68.

Erickson, D. M. (2007) "A developmental re-forming of the phases of meaning in Transformational Learning." *Adult Education Quarterly 58(1)* 61-80. 10.1177/0741713607305936.

Fairclough, N. (1995) *Critical discourse analysis.* London: Longman.

Fairclough, N. and Wodak, R. (1997) "Critical Discourse Analysis." In T. van Dijk (ed.) *Discourse Studies: A Multidisciplinary Introduction. Vol. 2.* London: Sage Publications. pp. 121-138.

Falk-Rafael, A. (1995) "Advocacy and empowerment: Dichotomous or synchronous concepts?" *Advances in Nursing Science 18(2)* 25-32.

Falk-Rafael, A. (2001) "Empowerment as a process of evolving consciousness: A model of empowered caring." *Advances in Nursing Science 24(1)* 1-16.

Feste, C. and Anderson, R. M. (1995) Empowerment: from philosophy to practice." *Patient Education and Counseling 26* 139-144.

Festinger, L. (1957) *A Theory of Cognitive Dissonance.* Stanford, CA; Stanford University Press.

Fisher, S. (1991) "A discourse of the social: medical talk/power talk/oppositional talk?" *Discourse and Society 2* 157-182.

Flowerdew, L. (2012) "A combined corpus and systemic-functional analysis of the problem-solution pattern in a student and professional corpus of technical writing." *TESOL Quarterly 37(3)* 489-511. 10.2307/3588401.

Foucault, M. (1969) *L'Archéologie du savoir.* Paris: Éditions Gallimard.

Frankel, R. M. (2001) "Clinical care and conversational contingencies: The role of patients' self-diagnosis in medical encounters." *Text 21* 83-112.

Frankenberg-Garcia, A., Flowerdew, L. and Aston, G. (eds.) (2011) *New Trends in Corpora and Language Learning.* London: Continuum International Publishing Group.

Freeman, B., Dietrich, C. A. and Rak, C. (2002) "The struggle for language: Perspectives and practices of urban parents with children who are Deaf or hard of hearing." *American Annals of the Deaf 147(5)* 37-44.

Freire, P. (1970) *Pedagogy of the Oppressed.* New York: The Seabury Press.

Fukkink, R. (2008) "Video feedback in widescreen: A meta-analysis of family programs." *Clinical Psychology Review 28* 904-916. 10.1016/j.cpr.2008.01.003.

Fukkink, R. and Tavecchio, L. W. C. (2010) "Effects of Video Interaction Guidance on early childhood teachers." *Teaching and Teacher Education 26* 1652-1659. 10.1016/j.tate.2010.06.016.

Funnell, M. M. (2000) "Helping patients take charge of their chronic illness." *Family Practice Management 7* 47-51.

Funnell, M. M., Anderson, R. M., Arnold, M. S., Barr, P. A., Donnelly, M., Johnson, P. D., Taylor-Moon, D. and White, N. H. (1991) "Empowerment: an idea whose time has come in diabetes education." *Diabetes Educator 17* 37-41.

Garcia, R. and Turk, J. (2007) "The applicability of Webster-Stratton Parenting Programmes to Deaf children with emotional and behavioural problems, and Autism, and their families: Annotation and case report of a child with Autism Spectrum Disorder." *Clinical Child Psychology and Psychiatry 12(1)* 125-136.

Garside, R., Leech, G. and Sampson, G. (eds.) (1987) *The Computational Analysis of English: a Corpus-based Approach.* London: Longman.

Gee, J. P. (1996) *Social linguistics and literacies: Ideology in discourses.* Second edition. London: Taylor and Francis.

Gee, J. P. (2011) "Discourse analysis: What makes it critical?" In R. Rogers (ed.) *An Introduction to Critical Discourse Analysis in Education.* London: Lawrence Erlbaum Associates. pp. 19-50.

Gibson, C. H. (1991) "A concept analysis of empowerment." *Journal of Advanced Nursing 16(3)* 354-361.

Giddens, A. (1984) *The Constitution of Society: Outline of the theory of structuration.* Berkeley: University of California Press.

Gilbey, P. (2010) "Qualitative analysis of parents' experience with receiving the news of the detection of their child's hearing loss." *International Journal of Pediatric Otorhinolaryngology 74* 265-270. 10.1016/j.ijporl.2009.11.017.

Glaser, B. (1992) *Basics of grounded theory analysis.* Mill Valley, CA: Sociology Press.

Glaser, B. G. and Strauss, A. L. (1967) *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine Publishing Company.

Goffman, E. (1967) *Interaction Ritual: essays in face-to-face behaviour.* Second edition. Random House.

Goffman, E. (1983) "Felicity's Condition." *The American Journal of Sociology 89(1)* 1-53.

Grabove, V. (1997). The many facets of transformative learning theory and practice. In P. Cranton (ed.), *Transformative learning in action.* New Directions for Adult and Continuing Education, No. 74. San Francisco: Jossey-Bass. pp. 89-96.

Grice, H. P. (1975) "Logic and conversation." In P. Cole and J. J. Morgan (eds.) *Syntax and Semantics, 3: Speech Acts.* New York: Academic Press. pp. 41-58.

Gwyn, R. (2002) *Communicating Health and Illness.* London: Sage Publications.

Habermas, J. (1984) *Theory of Communicative Action.* Boston: Beacon Press.

Habermas, J. (1971) *Knowledge of human interests.* Boston: Beacon Press.

Hage, A. M. and Lorensen, M. (2005) "A philosophical analysis of the concept empowerment; the fundament of an education-programme to the frail elderly." *Nursing Philosophy 6* 235-246.

Halliday, M. A. K. (1994) *An introduction to functional grammar.* Second Edition.London: Edward Arnold.

Hardonk, S., Desnerck, G., Loots, G., Van Hove, G., Van Kerschaver, E., Sigurjónsdóttir, H. B., Vanroelen, C. and Louckx, F. (2010) "Congenitally deaf children's care trajectories in the context of Universal Neonatal Hearing Screening: A qualitative study of parental experiences". *Journal of Deaf Studies and Deaf Education16.3* 305-324. 10.1093/deafed/enq055.

Hardt-Mautner, G. (1995) *Only Connect. Critical Discourse Analysis and Corpus Linguistics.* UCREL Technical Paper 6. Lancaster, UK: Lancaster University. Available

at: http://ucrel.lancs.ac.uk/papers/techpaper/vol6.pdf. Accessed 7th March 2013.

Harty, M., Alant, E. and Uys, C. J. E. (2006) "Maternal self-efficacy and maternal perception of child language competence in pre-school children with a communication disability." *Child: Care, Health and Development 33(2)* 144-154. 10.1111/j.1365-2214.2006.00661.x.

Harvey, K. and Koteyko, N. (2013) *Exploring Health Communication: Language in Action.* London: Routledge.

Hawks, J. H. (1992) "Empowerment in nursing education: concept analysis and application to philosophy, learning and instruction." *Journal of Advanced Nursing 17* 609-618.

Heritage, J. and Raymond, G. (2005) "The terms of agreement: Indexing epistemic authority and subordination in talk-in-interaction." *Social Psychology Quarterly 68(1)* 15-38.

Hermansson, E. and Mårtensson, L. (2011) "Empowerment in the midwifery context – a concept analysis." *Midwifery 27* 811-816. 10.1016/j.midw.2010.08.005.

Hintermair, M. (2006) "Parental resources, parental stress, and socioemotional development of Deaf and hard of hearing children." *Journal of Deaf Studies and Deaf Education 11(4)* 493-513.

HM Government (2006). *Working together to safeguard children: A guide to inter-agency working to safeguard and promote the welfare of children.* London: The Stationery Office.

HM Treasury (2003) *Every Child Matters.* Cm5860. London: The Stationery Office.

Holmström, I. and Röing, M. (2010) "The relation between patient-centredness and patient empowerment: A discussion on concepts." *Patient Education and Counseling 79* 167-172. 10.1016/j.pec.2009.08.008.

Holzinger, D., Fellinger, J. and Beitel, C. (2011) "Early onset of family centred intervention predicts language outcomes in children with hearing loss." *International Journal of Pediatric Otorhinolaryngology 75* 256-260. 10.1016/j.ijporl.2010.11.011.

Hulme, P. A. (1999) "Family empowerment: A nursing intervention with suggested outcomes for families of children with a chronic health condition." *Journal of Family Nursing 5(1)* 33-50.

Hunter, E. K. (1980). *Perspective transformation in health practices: A study in adult learning and fundamental life change.* Unpublished doctoral dissertation. University of California, Los Angeles.

Iedema, R. and Carroll, K. (2010) "Discourse research that intervenes in the quality and safety of care practices." *Discourse and Communication 4(1)* 68-86. 10.1177/1750481309351210.

Iedema, R. A. M., Jorm, C., Long, D., Braithwaite, J., Travaglia, J. and Westbrook, M. (2006) "Turning the medial gaze upon itself: Root cause analysis and the investigation of clinical error." *Social Science and Medicine 62* 1605-1615. 10.1016/j.socscimed.2005.08.049.

Imel, S. (2003) "Effect of emotions on learning in adult, career, and career-technical education." *ERIC Trends and Issues Alert 43.*

Interact (2008) Mangold International GmbH (ed.) Version V1.3.

Isbister, K. and Nass, C. (2000) "Consistency of personality in interactive characters: verbal cues, non-verbal cues, and user characteristics." *International Journal of Human-Computer Studies 53(2)* 251-267. 10.1006/ijhc.2000.0368.

Jackson, C. W., Wegner, J. R. and Turnbull, A. P. (2010) "Family quality of life following early identification of deafness." *Language, Speech and Hearing Services in Schools 41* 194-205.

Jaffe, A. (2009) *Stance: Sociolinguistic perspectives.* Oxford: Oxford University Press.

James, D., Telling, A., Lam-Cassettari, C., Kang, S., and Wadnerkar, M.B. (2012) "Thin slice sampling of video footage for mother/child interaction: Application to single cases." *Journal of Psychopathology and Behavioral Assessment 34* 351-360. 10.1007/s10862-012-9282-9.

James, D. M., Collins, L., C. and Samoylova, E. (2012) "A moment of transformative learning: Creating a disorienting dilemma for a health care student using video feedback." *Journal of Transformative Education 10(4)* 236-256. 10.1177/1541344613480562.

Jefferson, G. (1978) "Sequential Aspects of Storytelling in Conversation." New York. Academic Press.

Jefferson, G. (2004) "Glossary of transcript symbols with an introduction." In G. H. Lerner (ed.) *Conversation Analysis: Studies from the first generation* Philadelphia: John Benjamins Publishing Company.

Johns, C. (1995) "Framing learning through reflection within Carper's fundamental ways of knowing in nursing." *Journal of Advanced Nursing 22(2)* 226-34. 10.1046/j.1365-2648.1995.22020226.x.

Johnson, R. B., Onwuegbuzie, A. J. and Turner, L. A. (2007) "Toward a definition of mixed methods research." *Journal of Mixed Methods Research 1(2)* 112-133. 10.1177/1558689806298224.

Juffer, F., Hoksbergen, R. A. C., Riksen-Walraven, J. M. and Kohnstamm, G. A. (1997) "Early intervention in adoptive families: Supporting maternal sensitive responsiveness, infant-mother attachment, and infant competence." *Journal of Child Psychology and Psychiatry 38(8)* 1039-1050.

Juffer, F., Bakermans-Kranenburg, M. J. and van Ijzendoorn, M. H. (2005) "The importance of parenting in the development of disorganized attachment: evidence from a preventive intervention study in adoptive families." *Journal of Child Psychology and Psychiatry 46(3)* 263-274. 10.1111/j.1469-7610.2004.00353.x.

Juffer, F., Bakermans-Kranenburg, M. J. and van Ijzendoorn, M. H. (2008) *Promoting Positive Parenting: An attachment-based intervention.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Kabeer, N. (1999) "Resources, agency, achievements: Reflections on the measurement of women's empowerment." *Development and Change 30* 435-464.

Kasper, G. (2001) "Classroom research on interlanguage pragmatics." In K. R. Rose and G. Kasper (eds.) *Pragmatics in Language Teaching.* Cambridge: Cambridge University Press. pp. 33-60.

Kärkkäinen, E. (2006) "Stance taking in conversation: From subjectivity to intersubjectivity." *Text and Talk 26(6)* 699-731.

Kärkkäinen, E. (2007) "The role of *I guess* in conversational stancetaking." In R. Englebretson (ed.) *Stancetaking in Discourse: Subjectivity, Evaluation, Interaction.* Amsterdam: John Benjamins Publishing Company. pp.183-220.

Keen, D., Couzens, D., Muspratt, S. and Rodger, S. (2010) "The effects of a parent-focused intervention for children with a recent diagnosis of

autism spectrum disorder on parenting stress and competence." *Research in Autism Spectrum Disorders 4* 229-241. 10.1016/j.rasd.2009.09.009.

Kelly, S. (2011) "Grief in the context of Early Hearing Detection and Intervention programs: Parents' perceptions of grief processing and support." Dissertation *University of Manitoba.* Winnipeg, Manitoba.

Kennedy, H., Landor, M. and Todd, L. (eds.) (2011) *Video Interaction Guidance: A Relationship-Based Intervention to Promote Attunement, Empathy and Wellbeing.* London: Jessica Kingsley Publishers.

King, K. P. (2004) "Both sides now: Examining Transformative Learning and professional development of educators." *Innovative Higher Education 29(2)* 155-174.

Kitchenham, A. (2006) "Teachers and technology: A transformative journey." *Journal of Transformative Education 4(3)* 202-225. 10.1177/1541344606290947.

Kitchenham, A. (2008) "The evolution of John Mezirow's Transformative Learning theory." *Journal of Transformative Education 6(2)* 104-123. 10.1177/1541344608322678.

Knight, D., Tennet, P., Adolphs, S. and Carter, R. (2010) "Developing heterogeneous corpora using the Digital Replay System (DRS)." *Language Resources Evaluation Conference Workshop on Multimodal Corpora: Advances in Capturing, Coding and Analyzing Multimodality, 18th May 2010.* Malta.

Kolb, D. A. and Fry, R. (1975) "Toward an applied theory of experiential learning". In C. Cooper (ed.) *Theories of Group Process.* London: John Wiley. pp. 33-58.

Koren, P. E., DeChillo, N. and Friesen, B. J. (1992) "Measuring empowerment in families whose children have emotional disabilities: A brief questionnaire." *Rehabilitation Psychology 37(4)* 305-321.

Kral, A., Hartmann, R., Tillein, J., Heid, S. and Klinke, R. (2001) "Delayed maturation and sensitive periods in the auditory cortex." *Audiology and Neuro-otology 6* 346–362.

Kramsch, C. (1986) "From language proficiency to interactional competence." *The Modern Language Journal 70(4)* 366-372.

Krause, N. and Markides, K. S. (1990) "Measuring social support among older adults." *International Journal of Aging and Human Development 30* 37-53.

Kucukaydin, I. and Cranton, P. (2012) "Critically questioning the discourse of transformative learning theory." *Adult Education Quarterly 63(1)* 43-56. 10.1177/0741713612439090.

Kuhn, T. (1962) *The structure of scientific revolutions.* Chicago, Illinois: University of Chicago Press.

Kurtzer-White, E. and Luterman, D. (2003) "Families and children with hearing loss: Grief and coping." *Mental Retardation and Developmental Disabilities Research Reviews 9* 232-235. 10.1002/mrdd.10085.

Lappé, F. M. and DuBois, P. (1994) *The Quickening of America.* San Francisco: Jossey-Bass.

Larrivee, B. (2000) "Transforming teaching practice: Becoming the critically reflective teacher." *Reflective Practice 1(3)* 293-307. 10.1080/713693162.

Leech, G. (1983) *Principles of Pragmatics.* London: Longman.

Lederberg, A. R. and Golback, T. (2002) "Parenting stress and social support in hearing mothers of Deaf and hearing children: a longitudinal study." *Journal of Deaf Studies and Deaf Education 7(4)* 330-345.

Leigh, I. and Anthony, S. (1999) "Parent bonding in clinically depressed deaf and hard-of-hearing adults." *Journal of Deaf Studies and Deaf Education 4(1)* 28-36. 10.1093/deafed/4.1.28.

Levinson, S. C. (1983) *Pragmatics.* Cambridge: Cambridge University Press.

Lord, J. and Hutchinson, P. (1993) "The process of empowerment: Implications for theory and practice." *Canadian Journal of Community Mental Health 12(1)* 5-22.

Lupton, D. (1998) *The Emotional Self: A Sociocultural Explanation.* Thousand Oaks, California: Sage.

Lytle, J. E. (1989). *The process of perspective transformation experienced by the registered nurse returning for baccalaureate study.* Unpublished doctoral dissertation. Northren Illinois University, Dekalb.

MacTurk, R. H., Meadow-Orlans, K. P. and Koester, L. S. (1993) "Social support; motivation, language and interaction; a longitudinal study of mothers and deaf infants." *American Annals of the Deaf 138(3)* 19-25.

Maizes, V., Rakel, D. and Niemiec, C. (2009) "Integrative medicine and patient-centred care." *Commissioned for the IOM Summit on Integrative Medicine and the Health of the Public. February, 2009.*

Mann, K., Gordon, J. and MacLeod, A. (2009) "Reflection and reflective practice in health professions education: a systematic review." *Advances in Health Sciences Education 14* 595-621. 10.1007/s10459-007-9090-2.

McArthur, T. (1981) *Longman Lexicon of English.* Addison-Wesley.

McCarthy, M. J. (1998) *Spoken Language and Applied Linguistics.* Cambridge: Cambridge University Press.

McCracken, W., Young, A. and Tattershall, H. (2008) "Universal Newborn Hearing Screening: Parental reflections on very early audiological management." *Ear and Hearing 29(1)* 54-64.

McDonough, S. C. (2000) "Interaction Guidance: Understanding and treating early relationship." In C. H. Zeanah (ed.) *Handbook of Infant Mental Health.* New York, NY: The Guilford Press. pp.414-426.

McDonough, S. C. (2004) "Interaction Guidance: Promoting and nurturing the caregiver relationship." In A. J, Sameroff, S. C. McDonough and K. L. Rosenblum (eds.) *Treating Infant-Parent Relationship Problems: Strategies for Intervention.* New York: The Guilford Press. pp. 79-96.

Meadow-Orlans, K. P. (1995) "Sources of stress for mothers and fathers of deaf and hard of hearing infants." *American Annals of the Deaf 140* 352–357.

Meadow-Orlans, K. P., Mertens, D. M., Sass-Lehrer, M. and Scott-Olson, K. (1997) "Support services for parents and their children who are Deaf or hard of hearing: a national survey." *American Annals of the Deaf 142(4)* 278-288.

Mezirow, J. (1978) *Education for perspective transformation: Women's re-entry programs in community colleges.* New York: Teachers' College, Columbia University.

Mezirow, J. (1985) "A critical theory of self-directed learning." In S. Brookfield (ed.) *Self-directed learning: From theory to practice.* New Directions for Continuing Education 25. San Francisco: Jossey-Bass.

Mezirow, J. (1990) "How critical reflection triggers Transformative Learning." In J. Mezirow (ed.) *Fostering critical reflection in adulthood.* San Francisco: Jossey-Bass. pp. 1-18.

Mezirow, J. (1991) *Transformative dimensions of adult learning.* San Francisco: Jossey-Bass.

Mezirow, J. (1995) "Transformative theory of Adult learning." In M. Welton (ed.), *In Defense of the Lifeworld.* Albany, NY: State University of New York Press. pp. 39-70.

Mezirow, J. (2003) "Transformative Learning as discourse." *Journal of Transformative Education 1(1)* 58-63. 10.1177/1541344603252172.

Mezirow, J. (2000) "Learning to think like an adult: Core concepts of Transformation theory." In J. Mezirow (ed.) *Learning as Transformation: Critical Perspectives on a Theory in Progress.* San Francisco: Jossey-Bass.

Minchom, S., Shepherd, S., White, N., Hill, J. and Lund, P. (2003) "Service needs of hearing-impaired children and their families: Report of a survey of parental attitudes." *Deafness and Education International 5(2)* 93-107.

Mishler, E. (1984) *The Discourse of Medicine: Dialectics of Medical Interviews.* Norwood, NJ: Ablex.

Moeller, M. P., Tomblin, J. B., Yoshinaga-Itano, C., McDonald Connor, C. and Jerger, S. (2007) "Current state of knowledge: Language and literacy of children with hearing impairment." *Ear and Hearing 28* 740-753.

Mok, E. (2001) "Empowerment of cancer patients: from a Chinese perspective." *Nursing Ethics 8(1)* 69-76. 10.1177/096973300100800108.

Mola, E., De Bonis, J. A. and Giancane, R. (2008) "Integrating patient empowerment as an essential characteristic of the discipline of general practice/family medicine." *European Journal of General Practice 14* 89-94. 10.1080/13814780802423463.

Monin, J. K., Schulz, R., Lemay Jr., E. P. and Cook, T. B. (2012) "Linguistic markers of emotion regulation and cardiovascular reactivity among older caregiver spouses." *Psychology and Aging 27(4)* 903-911. 10.1037/a0027418.

Moon, P. J. (2011) "Bereaved elders: Transformative learning in later life." *Adult Education Quarterly 61(1)* 22-29.

Mullen, E. M. (1995) *Mullen Scales of Early Learning.* American Guidance Service Inc., Circle Pines, MN.

Munoz-Baell, I. M. and Ruiz, M. T. (2000) "Empowering the deaf. Let the deaf be deaf." *Journal of Epidemiology and Community Health 54* 40-44.

Nagata, A. L. (2006) "Transformative Learning in intercultural education." *Rikkyo Intercultural Communication Review 4* 39-60.

National Deaf Children's Society (2012) *Deaf children with additional needs. London:* NDCS. Available at http://www.ndcs.org.uk/document.rm?id=2613. Accessed 7th March 2013.

National Institute for Health and Clinical Excellence (NICE) (2009) *Cochlear implants for children and adults with severe to profound deafness.* Technology appraisal guidance no. 166. London, UK: National Institute for Health and Clinical Excellence (NICE). Available at http://guidance.nice.org.uk/TA166. Accessed 7th March 2013.

National Institute for Health and Clinical Excellence (NICE) (2012) *Social and emotional wellbeing: early years.* NICE public health guidance no. 40. London, UK: National Institute for Health and Clinical Excellence (NICE). Available at http://www.nice.org.uk/nicemedia/live/13941/61149/61149.pdf. Accessed 7th March 2013.

Neufeld, R. W. and Thomas, P. (1977) "Effects of perceived efficacy of a prophylactic controlling mechanism on self-control under pain simulation." *Canadian Journal of Behavioural Science 9(3)* 224-232.

Newcomb, M. D. and Harlow, L. L. (1986) "Life events and substance use among adolescents: medicating effects of perceived loss of control and meaninglessness in life." *Journal of Personality and Social Psychology 51(3)* 564-577. 10.1037/0022-3514.51.3.564.

Nikolopoulos, T. P., Lloyd, H., Archbold, S. and O'Donoghue, G. M. (2001) "Pediatric cochlear implantation: The parents' perspective". *Archives of Otolaryngology – Head and Neck Surgery 127* 363-367.

Nygårdh, A., Malm, D., Wikby, K. and Ahlström, G. (2012) "Empowerment intervention in outpatient care of persons with chronic kidney disease pre-dialysis." *Nephrology Nursing Journal 39(4)* 285-293.

O'Kelly, J. and Magee, W. L. (2013) "The complementary role of music therapy in the detection of awareness in disorders of consciousness: An audit of concurrent SMART and MATADOC assessments." *Neuropsychological Rehabilitation 23(2)* 287-298. 10.1080/09602011.2012.753395.

Oller, D. (2000) *The Emergence of the Speech Capacity.* Nahwah, NJ: Erlbaum Associates, Inc.

Orpin, D. (2005) "Corpus linguistics and critical discourse analysis." *International Journal of Corpus Linguistics 10(1)* 37-61.

Page, N. and Czuba, C. E. (1999) "Empowerment: What is it?" *Extension Journal 37(5).*

Papoušek, M. (1994) *Vom ersten Schrei zum ersten Wort. Anfaenge der Sprachentwicklung in der vorsprachlichen Kommunikation.* Bern: Huber.

Park, A. H., Warner, J., Sturgill, N. and Alder, S. C. (2006) "A survey of parental views regarding their child's hearing loss: A pilot study." *Otolaryngology - Head and Neck Surgery 134* 794-800.

Parry, R. (2004) "Communication during goal-setting in physiotherapy treatment settings." *Clinical Rehabilitation 18* 668-682. 10.1191/0269215504cr745oa.

Partington, A. (2004) "Corpora and discourse: a most congruous beast". In A. Partington, J. Morley and L. Haarman (eds.) *Corpora and Discourse.* Bern: Peter Lang. 11-20.

Partington, A. (2006) "Metaphors, motifs and similes across discourse types: Corpus-Assisted Discourse Studies (CADS) at work." In A. Stefanowitsch and S. Th. Gries (eds.) *Corpus-based Approaches to Metaphor and Metonymy.* Berlin: Mouton de Gruyter. 267-304.

Paterson, B. (2001) "Myth of empowerment in chronic illness." *Journal of Advanced Nursing 34(5)* 574-581.

Peixoto, M. C., Spratley, J., Oliveira, G., Martins, J., Bastos, J. and Ribeiro, C. (2013) "Effectiveness of cochlear implants in children: Long term results". *International Journal of Pediatric Otorhinolaryngology* 10.1016/j.ijporl.2012.12.005.

Pimperton, H. and Kennedy, C. R. (2012) "The impact of early identification of permanent childhood hearing impairment on speech and language outcomes." *Archives of Disease in Childhood 97* 648-653. 10.1136/archdischild-2011-301501.

Potterfield, T. A. (1999) The business of employee empowerment: Democracy and ideology in the workplace. Westport, CT: Quorum Books.

Puccinelli, N. M., Andrzejewski, S. A., Markos, E., Noga, T. and Motyka, S. (2013) "The value of knowing what customers really want: The impact of salesperson ability to read non-verbal cues of affect on service quality." *Journal of Marketing Management.* 10.1080/0267257X.2013.766631.

Quera V., Bakeman R., Gnisci A. (2007) "Observer agreement for event sequences: Methods and software for sequence alignment and reliability estimates." *Behavior Research Methods 39(1)* 39-49.

Rappaport, J. (1981) "In praise of paradox: A social policy of empowerment over prevention." American Journal of Community Psychology 9(1) 1-25.

Rappaport, J. (1987) "Terms of empowerment/examples of prevention: toward a theory for community psychology." *American Journal of Community Psychology 15(2)* 121-148.

Rayson, P. (2002) *Matrix: A statistical method and software tool for linguistic analysis through corpus comparison.* PhD Thesis submitted to Lancaster University.

Rayson, P., Emmet, L., Garside, R. and Sawyer, P. (2000) "The REVERE project: Experiments with the application of probabilistic NLP to systems engineering." *Proceedings of the 5th International Conference on Applications of Natural Language to Information Systems. 28th-30th June 2000.* Versailles, France.

Rayson, P., Archer, D., Paio, S. and McEnery, T. (2004) "The UCREL semantic analysis system." *Proceedings of the Workshop "Beyond Named Entity Recognition. Semantic Labelling for NLP Tasks" in association with the 4th International Conference on Language*

Resources and Evaluation (LREC). 26th-28th May 2004. Lisbon, Portugal. pp.7-12.

Rees, C., Ajjawi, R. and Monrouxe, L. V. (2013) "The construction of power in family medicine bedside teaching: a video observation study." *Medical Education 47(2)* 154-165. 10.1111/medu.12055.

Resendez, M. G., Quist, R. M. and Matshazi, D. G. M. (2000) "A longitudinal analysis of family empowerment and client outcomes." *Journal of Child and Family Studies 9(4)* 449-460.

Revuelta-Martínez, A., Rodríguez, L. and García-Varea, I. (2012) "A computer assisted speech transcription system." *Proceedings of the 13th Conference of the European Chapter of the Association for Computational Linguistics, 23rd-27th April 2012.* Avignon, France. pp. 41-45.

Rissel, C. (1994) "Empowerment: the holy grail of health promotion?" *Health Promotion International 9(1)* 39-47.

Robertson, M. and Kennedy, H. (2009) "Relationship-based intervention for high risk families and their babies: Video Interaction Guidance – an international perspective." *Seminar Association Infant Mental Health, Tavistock, London. 12th December 2009.* Available at: http://intranet.spinlink.eu/files/get/6513?hl&f=Robertson%2C+M+and+Kennedy%2C+H.+2009+VIG+Tavistock+pres..pdf.

Rodwell, C. M. (1996) "An analysis of the concept of empowerment." *Journal of Advanced Nursing 23* 305-313.

Roehr, B. (2013) "Potential benefits of "well engaged patients" are akin to those from a blockbuster drug, say experts." *British Medical Journal 346* f886. 10.1136/bmj.f886.

Rogers, E. S., Chamberlin, J., Ellison, M. L. and Crean, T. (1997) "A Consumer-Constructed Scale to Measure Empowerment Among Users of Mental Health Services." *Psychiatric Services 48(8)* 1042-1047.

Rohrer, J. E., Arif, A., Denison, A. Young, R. and Adamson, S. (2007) "Overall self-rated health as an outcome indicator in primary care." *Journal of Evaluation in Clinical Practice 13(6)* 882-888. 10.1111/j.1365-2753.2006.00766.x.

Rolfe, G., Freshwater, D. and Jasper, M. (eds.) (2001) *Critical Reflection for Nursing and the Helping Professions.* Basingstoke: Palgrave.

Rose, K. and Kasper, G. (2001) *Pragmatics in Language Teaching.* Cambridge: Cambridge University Press.

Rosenberg, M. (1965) *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.

Rotter, J. (1966) "Generalized expectancies for internal versus external control of reinforcements." *Psychological Monographs 80* Whole No. 609.

Ruben, R. J. (1997) "A time frame of critical/sensitive periods of language development." *Acta Oto-Laryngologica 117* 202-205.

Rusconi-Serpa, S., Rossignol, A. S. and McDonough, S. C. (2009) "Video feedback in parent-infant treatments." *Child and Adolescent Psychiatric Clinics of North America 18* 735-751. 10.1016/j.chc.2009.02.009.

Ryles, S. M. (1999) "A concept analysis of empowerment: its relationship to mental health nursing." *Journal of Advanced Nursing 29(3)* 600-607.

Sacks, H. (1987[1973]) "On the preferences for agreement and contiguity in sequences in conversation." In G. Button and J. R. Lee (eds.), *Talk and social organisation.* Clevedon, UK: Multilingual Matters. pp. 54-69.

Sacks, H., Schegloff, E. A. and Jefferson, G. (1974) "A simplest systematics for the organization of turn-taking for conversation." *Language 50(4).*

Sadan, E. (1997) *Empowerment and Community Planning: Theory and Practice of People-Focused Social Solutions.* Translated from Hebrew by Richard Flantz (2004). Available as eBook at http://www.mpow.org/elisheva_sadan_empowerment.pdf Accessed 7th March 2013.

Sands, D. and Tennant, M. (2010) "Transformative learning in the context of suicide bereavement." *Adult Education Quarterly 60(2)* 99-21.

Schulz, P. J. and Nakamoto, K. (2011) ""Bad" literacy, the internet, and the limits of patient empowerment." *AAAI Spring Symposium Series; Artificial Intelligence & Health Communication; 21st -23rd 2011.* Stanford, CA, USA. http://www.aaai.org/ocs/index.php/SSS/SSS11/paper/view/2430/2 853.

Schulz, P. J. and Nakamoto, K. (2013) "Health literacy and patient empowerment in health communication: The importance of separating conjoined twins." *Patient Education and Counseling 90* 4-11. 10.1016/j.pec.2012.09.006.

Scott, M. (2012) *WordSmith Toold version 6.* Liverpool: Lexical Analysis Software.

Searle, J. R. (1976), "A classification of illocutionary acts." *Language in Society 5(1)* 1-23.

Seeman, M. and Anderson, C. S. (1983) "Alienation and alcohol: the role of work, mastery, and community in drinking behaviour." *American Sociological Review 48(1)* 60-77.

Sharma, A., Dorman, M. F. and Kral, A. (2005) "The influence of a sensitive period on central auditory development in children with unilateral and bilateral cochlear implants." *Hearing Research 203* 134-143.

Shepherd, R. K. and Hardie, N. A. (2001) "Deafness-induced changes in the auditory pathway: implications for cochlear implants." *Audiology and Neuro-otology 6* 305-318.

Sherwin, S. (1992) *No longer patient: feminist ethics and health care.* Philadelphia: Temple University Press.

Skelton, R. (1994) "Nursing and empowerment: concepts and strategies." *Journal of Advanced Nursing 19* 415-423.

Slade, D., Scheeres, H., Manidis, M., Iedema, R, Dunston, R., Stein-Parbury, J., Matthiessen, C., Herke, M. and McGregor, J. (2008) "Emergency communication: the discursive challenges facing emergency clinicians and patients in hospital emergency departments." *Discourse and Communication 2(3)* 271-298. 10.1177/1750481308091910.

Snyder, C. (2008) "Grabbing hold of a moving target: Identifying and measuring the Transformative Learning process." *Journal of Transformative Education 6(3)* 159-181. 10.1177/1541344608327813.

Sparreboom, M., Leeuw, A. R., Snik, A. F. M and Mylanus, E. A. M. (2012) "Sequential bilateral cochlear implantation in children: Parent's perspective and device use". *International Journal of Pediatric Otorhinolaryngology 76* 339-344. 10.1016/j.ijporl.2011.12.004.

Sparrow, S. (1998) *Vineland SEEC social-emotional early childhood scales.* American Guidance Survey. Circle Pines, MN.

Speer, P. W. and Hughey, J. (1995) "Community organizing: an ecological route to empowerment and power." *American Journal of Community Psychology 23(5)* 729-748.

Spreitzer, G. (1995) "Psychological empowerment in the workplace: Dimensions, measurement and validation." *Academy of Management Journal 38(5)* 1442-1465.

Spreitzer, G. (1996) "Social structural characteristics of psychological empowerment." *Academy of Management Journal 39(2)* 483-504.

Spreitzer, G. M., De Janasz, S. C. and Quinn, R. E. (1999) "Empowered to lead: the role of psychological empowerment in leadership." *Journal of Organizational Behavior 20* 511-526.

Stansberry, S. L. and Kymes, A. D. (2007) "Transformative Learning Through "teaching with technology" electronic portfolios." *Journal of Adolescent and Adult Literacy 50(6)* 488-496.

Swift, C. and Levin, G. (1987) "Empowerment: an emerging mental health technology." *Journal of Primary Prevention 8(1-2)* 71-92.

Tait, M. E., Nikolopoulos, T. P. and Lutman, M. E. (2007) "Age at implantation and development of vocal and auditory preverbal skills in implanted deaf children." *International Journal of Pediatric Otorhinolaryngology 71* 603-610. 10.1016/j.ijporl.2006.12.010.

Tashakkori, A. and Teddlie, C. (eds.) (2003) *Handbook of mixed methods in social and behavioral research.* Thousand Oaks, CA: Sage.

Taylor, E. W. (1997) "Implicit memory and transformative learning theory: Unconscious cognition." In *Proceedings of the 38th Annual Adult Education Research Conference*, Stillwater, Oklahoma. Available at http://www.edst.educ.ubc.ca/aerc/1997/97taylor1.htm. Accessed 7th March 2013.

Taylor, E. W. (1998) "Transformative Learning: A critical Review." *ERIC Clearinghouse on Adult, Career, and Vocational Education. Information Series No.374.*

Taylor, E. (2000) "Analyzing research on transformative learning theory." In J. Mezirow and associates (eds.) *Learning as transformation: Critical perspectives on a theory in progress.* San Francisco: Jossey-Bass.

Taylor, E. W. (2001) "Transformative learning theory: a neurobiological perspective of the role of emotions and unconscious ways of knowing." *International Journal of Lifelong Education 20(3)* 218-236. 10.1080/02601370110036064.

Taylor, G. (1999) "Empowerment, Identity and participatory research: Using social action research to challenge isolation for deaf and hard of hearing people from minority ethnic communities." *Disability & Society 14(3)* 369-384. 10.1080/09687599926208.

Taylor, M., Hoyes, L., Lart, R. and Means, R. (1992) "User empowerment in community care: Unravelling the issues." *Studies in Decentralisation and Quasi-Markets 11.* University of Bristol: School for Advanced Urban Studies.

ten Have, P. (1989) "The consultation as a genre." In B. Torode (ed.) *Text and Talk as a Social Practice.* Dordrect, The Netherlands: Foris Publications.

ten Have, P. (2007) *Doing Conversation Analysis: A Practical Guide.* Second Edition. London: Sage Publications.

Thomas, K. W. and Velthouse, B. A. (1990) "Cognitive elements of empowerment." *Academy of Management Review 15* 666-681.

Thompson, M. (1994) "Early childhood home instruction." In J. Roush and N. D. Matkin (eds.) *Infants and toddlers with hearing loss.* Baltimore, MD: Grune & Stratton. pp.253-275.

Thrift, N. (2004) "Intensities of Feeling: Towards a Spatial Politics of Affect." *Geografiska Annaler 86 B(1)* 57-78.

Tims, S., King, L. and Bennett, P. N. (2007) "Empowerment for people with end stage renal disease: A literature review." *Renal Society of Australasia Journal 3(2)* 52-58.

Trevarthen, C. (1979). "Communication and cooperation in early infancy: a description of primary intersubjectivity." In M. Bullowa (ed.) *Before Speech: The Beginning of Interpersonal Communication.* Cambridge, MA: Cambridge University Press. pp. 321–347.

Trivette, C. M., Dunst, C. J. and Hamby, D. W. (2010) "Influences of family-systems intervention practices on parent-child interactions and child development." *Topics in Early Childhood Special Education 30(1)* 3-19. 10.1177/0271121410364250.

Turnbull, A. P. and Turnbull, H. R. (2001) *Families, professionals, and exceptionality: Collaborating for empowerment.* Fourth edition. Upper Saddle River, NJ: Merrill Prentice Hall.

Uus, K., Young, A. and Day, M. (2012) "Auditory neuropathy spectrum disorder in the wider health context: Experiences of parents whose infants have been identified through newborn hearing screening programme". *International Journal of Audiology 51* 186-193. 10.3109/14992027.2011.625986.

van Dijk, T. (1980) *Macrostructures: An Interdisciplinary Study of Global Structures in Discourse, Interaction, and Cognition.* Mahwah, NJ: Erlbaum.

van Dijk, T. (1993) "Principles of critical discourse analysis." *Discourse and Society 4* 249-283.

Vik, K. and Braten, S. (2009) "Video Interaction Guidance inviting transcendence of postpartum depressed mothers' self-centred state and holding behaviour." *Infant Mental Health Journal 30(3)* 287-300. 10.1002/imhj.20215.

Vygotsky, L. S. (1962 [1934]) *Thought and Language.* Cambridge, MA: MIT Press.

Wagner, E. H. (1998) "Chronic disease management: What will it take to improve care for chronic illness?" *Effective Clinical Practice 1* 2-4.

Walker E.A., Bass-Ringdahl S. (2008) "Babbling complexity and its relationship to speech and language outcomes in children with cochlear implants." *Otology & Neurotology 29(2)* 225-229. 10.1097/mao.0b013e31815f6673.

Wallerstein, N. (2006) "What is the evidence on effectiveness of empowerment to improve health?" *WHO Regional Office for Europe Health Evidence Network Report.* Copenhagen. Available at: http://www.euro.who.int/Document/E88086.pdf. Accessed 7th March 2013.

Walsh, S. (2011) *Exploring Classroom Discourse: Language in Action.* London: Routledge.

Walsh, S. and O'Keeffe, A. (2010) "Investigating higher education seminar talk." *NOVITAS-Research on Youth and Language 4(2)* 141-158.

Walsh, S., Morton, T. and O'Keeffe, A. (2011) "Analysing university spoken interaction." *International Journal of Corpus Linguistics 16(3)* 325-344. 10.1075/ijcl.16.3.03wal.

Weiss, R. P. (2000) "Emotion and learning." *Training & Development 54* (11) 44-48.

White, P. R. R. (2003) "Beyond modality and hedging: A dialogic view of the language of intersubjective stance." *Text 23(2)* 259-284.

Widdowson, H. G. (1995) "Discourse analysis: a critical view." *Language and Literature 4(3)* 157-172. 10.1177/096394709500400301.

Willett, T. (1988) "A cross-linguistic survey of the grammaticalization of evidentiality." *Studies in Language 12* 51-97.

Williams, G. H. (1985). *Perspective transformation as an adult learning theory to explain and facilitate change in male spouse abusers.* Unpublished doctoral dissertation. Northern Illinois University, Dekalb.

Wilson, A. (1993) "Towards an integration of content analysis and discourse analysis: The automatic linkage of key relations in text." *UCREL Technical Paper 3* Linguistics Department: Lancaster University.

Wood, D., Bruner, J. S. and Ross, G. (1976) "The role of tutoring in problem-solving." *Journal of Child Psychology and Psychiatry 17* 89-100.

Wooffitt, R. (2005) *Conversation Analysis and Discourse Analysis: A Comparative and Critical Introduction.* London: Sage Publications.

World Health Organization (1978) Declaration of Alma-Ata: International Conference on Primary Health Care, Alma-Ata, USSR, 6th–12th September 1978. Geneva. Available at http://www.who.int/hpr/NPH/docs/declaration almaata.pdf. Accessed 7th March 2013.

Wu, C.-J. D. and Brown, P. M. (2004) "Parents' and teachers' expectations of Auditory-Verbal Therapy." *The Volta Review 104(1)* 5-20.

Yoshinaga-Itano, C. (2001) "The social-emotional ramifications of Universal Newborn Hearing Screening: Early identification and intervention of children who are Deaf or hard of hearing." *Proceedings of the Second International Pediatric Audiology Amplification (Sound Foundations) Conference.* Chicago, Illinois. 221-231.

Yoshinaga-Itano C. and de Uzcategui, A. C. (2001) "Early identification and social emotional factors of children with hearing loss and children screened for hearing loss." In: E. Kurtzer-White and D. Luterman (eds.) *Early Childhood Deafness.* Timonium, Maryland: York Press.

Young, A. and Tattershall, H. (2007) "Universal Newborn Hearing Screening and early identification of deafness: Parents' responses to knowing early and their expectations of child communication development." *Journal of Deaf Studies and Deaf Education 12(2)* 209-220.

Yucel, E., Derim, D. and Celik, D. (2008) "The needs of hearing impaired children's parents who attend to auditory verbal therapy-counseling program." *International Journal of Pediatric Otorhinolaryngology 72* 1097-1111.

Zimmerman, M. A. and Rappaport, J. (1988) "Citizen participation, perceived control, and psychological empowerment." *American Journal of Community Psychology 16(5)* 725-750.

Zinn, J. O. (2010) "Risk as discourse: Interdisciplinary perspectives." *Critical Approaches to Discourse Analysis across Disciplines 4(2)* 106-124.