What are the theories, methods and techniques underpinning vocal psychotherapy?

An interpretive hermeneutic literature review.

Rebecca Wright

A dissertation submitted to Auckland University of Technology in partial fulfillment of the requirements for the degree of Master of Psychotherapy

Discipline of Psychotherapy Auckland University of Technology

Supervisor:
Brigitte Puls

2016

Abstract

This dissertation seeks to examine, through an interpretive, hermeneutic literature review, the theories, methods and techniques of vocal psychotherapy. The core techniques of toning, vocal holding and free associative singing will be explored and critiqued. This exploration seeks to gain deeper understanding of how researchers, and practitioners understand these vocal techniques and the ways in which they foster healing within a psychotherapeutic framework. This dissertation will add further knowledge to an emerging field by drawing on research through published writing in the areas of neuroscience, developmental theory and theories of the self.

This study is limited to exploring the topic within the dyadic therapeutic relationship between therapist and client.

Contents

Abstract..... 2

Attestation of Authorship..... 7

Chapter One: Introduction..... 9

Situating the researcher..... 9

Situating vocal psychotherapy..... 11

Why singing?..... 12

Foundational literature on singing..... 12

Religious/ spiritual underpinning of voice or sound healing..... 13

Rhythm..... 15

The breath..... 16

Overview of chapters..... 17

Chapter Two: Methodology and method..... 18

Methodology..... 18

Epistemology..... 18

Hermeneutics..... 19

Qualitative research..... 21

1. Requires Inductive as well as deductive logic..... 21

2. Appreciates subjectivity and reflexivity..... 22

3. Accepts multiple perspectives..... 22

Literature review..... 23

Method..... 23

1. First stage data collection..... 24

2. Inclusion and exclusion criteria..... 24

3. Pre-understandings..... 25

3. The writing..... 25

Alternative methodology..... 26

Ethical Issues..... 26

Chapter Three: What is vocal psychotherapy?..... 27

The voice..... 27

Singing and the body..... 28

Connection and authenticity..... 29

The therapeutic alliance..... 30

Transference and counter-transference..... 31

Vocal psychotherapy and the unconscious..... 32

Chapter Four: What are the techniques of vocal psychotherapy?..... 33

Vocal exercises..... 33

The breath in vocal psychotherapy..... 34

What is vocal toning?..... 35

Vocal toning in a vocal psychotherapy session..... 35

Case study example of vocal toning..... 36

Toning and the present moment..... 37

What is vocal holding?..... 37

Vocal holding and play..... 38

Case study example of vocal holding..... 38

Vocal holding stages..... 39

1. Initial vocal holding phase..... 39

2. Second phase..... 40

What is free associative singing?..... 41

Repetition and the double..... 42

Resourcing..... 42

Mother tongue..... 43

Song..... 44

Chapter Five: How do neurosciences, developmental theories and theories of the self contribute to vocal psychotherapy?..... 45

Neurosciences contribution to vocal psychotherapy.... 45

Neuroscience and safety..... 46

Neuroscience and rhythm..... 46

Neuroscience and the unconscious world of the emotions 47

Music and mood..... 47

Singing and mood 48

Developmental theories and vocal psychotherapy..... 49

Infants and the voice..... 49

Mother and child..... 50

The lost voice..... 51

Theories of self and vocal psychotherapy..... 52

Rhythm and theories of self 53

Core sense of self and vocal psychotherapy..... 53

Subjective sense of self and vocal psychotherapy..... 54

Verbal sense of self and vocal psychotherapy..... 54

Chapter Six: Conclusion and further potential for research..... 56

Limitation of perspective 56

The effectiveness of vocal psychotherapeutic techniques within client populations..... 57

References..... 60

Attestation of Authorship

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

Signed_____Date_____

Rebecca Wright May 2nd 2016

“When we sing our voices and our bodies are the instruments. We are intimately connected to the source of the sound and the vibrations. We make the music, we are immersed in the music and we are the music” (Austin, 2008, p. 20).

Chapter One: Introduction

Ask any singer and they will innately understand and describe the intimate connection that exists between the body and the voice. The two cannot be separated and must work in tandem for the best possible effect, whether that is vocal perfection or emotional storytelling. This bodily connection has always been a part of my professional singing experience and my own therapeutic journey. I have innately understood this connection to be a major factor in my own healing experience. However, I had little theoretical knowledge to draw on, to really understand how singing can assist in healing, if indeed it could. Can the voice be used as a potential psychotherapeutic tool? Can vocal sounds be used as a bridge or pathway to the inner world of an individual and can freeing the voice assist in the individual's healing within the psychotherapeutic relationship (Thiermann, 2011)? The connection between the mind, body and the emotional and spiritual worlds of a person, have been well researched in psychotherapy, and singing is a way in which these different facets of the person can be brought together in the present moment (Austin, 2008). Austin (2008) suggests that vocal psychotherapy is a valid, and perhaps underutilised approach and an area worth further exploration.

This dissertation seeks to research and examine, through an interpretive, hermeneutic literature review, how and why using the voice can be a powerful therapeutic experience. Core theories, methods, and techniques will be discussed and critiqued. This dissertation will further knowledge in an emerging field that is now being validated through neuroscience (Levitin, 2006; Zatorre, 2005), developmental theories (Thiermann, 2011; Winnicott, 1965) and theories of the self (Stern, 1985). As this research is conducted through a hermeneutic lens (see chapter two), I will begin by situating myself in this study.

Situating the researcher

As stated, this research emanates from my own personal experiences of singing and the healing effect that singing has had throughout my life. For me, singing is "synchronous with our beingness" (Summers, 2014, p.1). My personal experiences with the art and practice of singing are fundamental to my interest in vocal psychotherapy and singing as a potential healing tool. Finding my own voice, or voice of the psyche, has been synonymous with finding myself as a singer, becoming a trainee psychotherapist and a more fully present, whole, human being. It is my belief that finding one's voice is important to every human being, as the voice is an embodied instrument available to each of us since birth.

Learning to accept and express the voice is essential for self-expression, interpersonal communication and identity and the ability to sing and/or vocalize, "is our birthright and constitutes a very personalized form of human self-expression" (Summers, 2014, p. 2). Singing has provided me with an outlet for emotional expression, a way in which to connect with myself and to those around me on a deeper lever. It has helped me to connect intimately with those I sing with and to teachers who have contributed greatly to my development as a singer. I have experienced first hand how using the voice through singing can help facilitate wellbeing and these experiences have been the catalyst for this study. My experience of singing has led to my belief that the embodied experience of singing has healing potential different to that of talk therapy. This has led me to question the limitations of language, and traditional psychotherapy.

McDougall (1989) suggests "psychoanalysis, following Freud, has privileged the role of language in the structuring of the psyche and in psychoanalytic treatment. *But not all communications use language*" (p. 11). Can the primal sounds used in vocal psychotherapy, and in singing be of therapeutic value? According to Gioia (2006) there has historically been a "pervasive tendency to view works of music as merely artistic products, their value determined by considerations of their aesthetic or entertainment value" (p. xi). Therapeutic claims on behalf of anything as intangible as music have been met with much suspicion (Gioia, 2006). This dissertation seeks to evaluate and make transparent the merits and limitations of vocal psychotherapy techniques to foster healing in the context of a psychotherapeutic relationship.

Through its hermeneutic stance this work also seeks to make transparent my own personal bias toward singing as a healing tool. To deeply explore and critique vocal psychotherapy, I have reflexively moved back and forth between my pre-understandings and biases (see chapter two), and the literature. In this process "initial ideas and preunderstandings are questioned, refined and extended in the light of what is being learned" (Boell & Cecez-Kecmanovic, 2014, p. 262).

Just as I have situated myself in this study, the follow section will now situate vocal psychotherapy itself. I will discuss how vocal psychotherapy is a specialised form of psychotherapy, linking the similarities and differences between the two.

Situating vocal psychotherapy

Vocal psychotherapy can be seen as a specialised form of psychotherapy for the following reasons:

1. It draws upon transference and counter-transference as a way in which the therapist can help understand and guide a client into their own unconscious world for further exploration and discovery (see chapter three).
2. Like traditional psychotherapy, the therapeutic alliance is a major factor in vocal psychotherapeutic work (see chapter three), emphasising safety and trust.
3. Developmental theories and theories of the self (see chapter five) are drawn upon within the therapeutic space, seeking to offer reparative relational experiences to help heal any developmental injuries that may have occurred.

Expressing one's self through the voice underpins the foundations of traditional psychotherapy and vocal psychotherapy. Freud found that if clients were able to connect to, and express, early trauma with the same emotional intensity of the initial experience, a decrease in symptoms caused by the experience would occur (Newham, 1999). Just as expression through speech can be healing, singing and sounding are also empowering forms of communication (Austin, 2004). Through the primal sounds of screaming, crying, howling or moaning, emotions from early trauma can also be released (Thiermann, 2011). The importance of vocal prosody in the communication of meaning has "invited psychotherapists to review the manner in which they hear a client and the dimensions to which they actively listen" (Newham, 1998, p. 222-223). The importance of the non-verbal aspects of communication are understood yet, according to Newham (1998) little "has changed the technical practice of psychotherapy, which remains predicated on verbal discourse" (1998, p. 222). It is here that the major difference between vocal psychotherapy and traditional psychotherapy can be seen, as vocal psychotherapy focuses on the non-verbal through the use of pitch, harmony and rhythm, to further connect to the unconscious. This is also where vocal psychotherapy has its links with music therapy.

Music therapy, as it is used today, was significantly developed after The First and Second World Wars with musicians donating their time to soldiers in hospitals, to help improve health and boost morale (Bunt & Stige, 2014). However, the medical profession was not convinced about its healing potential, so to provide evidence-based information music therapy training institutions began (Bunt & Stige, 2014). Like music therapy, vocal psychotherapy uses music to connect to another on a more intimate level.

While music therapy uses many different approaches and instruments to facilitate this, vocal psychotherapy is focused primarily on the voice and singing.

Why singing?

The voice is the primary musical instrument and is created through the human body (Gioia, 2006). According to Austin "when emotions are blocked or inhibited by the intellect, the voice reflects this blockage" (Austin, 2008, p. 23). A person's being can be revealed through the sound and characteristics of their voice, and the process of finding one's unique voice or sound could be seen as "a metaphor for finding one's self" (Austin, 2008, p. 21).

Singing works dualistically as our voice resonates both inwards and outwards. The inward focus of the vibration and resonance helps us to connect to our own bodies and express our emotional world but at the same time the voice is outwardly expressed helping us connect to those around us (Austin, 2008). The use of song and singing can provide people with a way to express the seemingly inexpressible, giving voice to a whole range of feelings that may have no other means for escape or no symbolic language attached to them (Austin, 2008). It is the quality, the sound and tone, of our voice that reflects back the "image of who we are in sound" (Newham, 1999, p. 91).

The core techniques of vocal psychotherapy, vocal toning, vocal holding and free associative singing (see chapter four), according to Austin (2004) help facilitate vocal and emotional expression and at the same time help connect the person to their bodies and the present moment. This connection provides both physical and emotional benefits. This is evidenced through research on choirs, which will be briefly discussed in the following section.

Foundational literature on singing

Foundational research material on singing and the resulting physical and emotional benefits are available, particularly through work with choirs. Although the focus of this dissertation is on the therapeutic relationship rather than choirs, I will briefly state some of the findings, as very little scientific data has been collected for vocal work in the therapist/client dyad.

Studies have found that choir members report increased social, emotional, psychological and spiritual health benefits (Clift & Hancox, 2001; Summers, 2014). In Clift and Hancox (2001), choir members reported that singing was an emotionally arousing experience giving them the opportunity to express feelings they may not have been able to express in other ways (Summers, 2014). This, however, could also suggest that other types of

creative expression could also be beneficial, indicating that it is not the singing itself but the creative process that is of most importance.

Other studies have found singing to be emotionally rewarding and supporting of self- awareness (Summers, 2014). Kreutz, et al. (2003) found in a German study that participation in singing groups correlated with “significant and positive increase in secretory immunoglobin A, an important hormone in healthy immune function” (cited in Summers, 2014, p. 36). Both increases in positive affect alongside decreases in negative affect were observed after singing (Kreutz et al., 2003, cited in Summers, 2014). However, it is possible in this study that merely being, and participating, in a group could also produce positive effects on mood, rather than the act of singing itself. However, another study in Australia, by Unwin et al. (2002), points to the benefits of the act of singing as it “found statistical significance that singing songs could alter mood” (p. 180 cited in Summers, 2014, p. 36). This foundational research suggests there is correlation between the act of singing and positive emotional and psychological benefits.

Research “focusing on people with medical or psychological challenges, such as pain and/or anxiety, reported improved physiological effects of singing alone or in a group, and included relaxation, improved breathing, stress reduction, and improved posture” (Deak, 1990; Grape, Sandgren, Hansson, Ericson, & Theorell, 2003; Kenny & Fraunce, 2004 cited in Summers, 2014, p. 35). However, the medical and psychological challenges of the participants were not specified in these studies. Specific data needs to be collected to ensure a more in depth understanding of the possibilities and limitations of healing through singing.

It is not only recent research that points to the benefits of singing, ancient religious and spiritual traditions have also utilised song and singing in their teachings. The next section will explore this further.

Religious/spiritual underpinnings of voice or sound healing

According to Rattner (2012) nearly every spiritual tradition employs the use of song “for its ability to possess us and lead us toward both the *majestas* and *mysterium*, perhaps pointing toward the inherent numinosity of singing” (p. 11). In every legend or myth about the origins of the universe “one finds voice, sound, and music as a vital cord connecting God and the beings of the earth” (Thiermann, 2011, p. 25). The spiritual foundation of Hinduism began with the sound Om “the first vibration that birthed the universe” (Thiermann, 2011, p. 25) or Aum in Sanskrit, the letters signifying “creation, conservation, and transformation” (Thiermann, 2011, p. 45). Aum represented all the sounds that

the human voice was able to express, therefore that sound is associated with creation and creative acts (Keyes, 2008).

In Western Europe the ancient Greek philosopher Pythagoras “is known to have discovered the healing impact of song” (Thiermann, 2011, p. 25). He believed that “sound was a creative force and that music held therapeutic benefits to the body” (Keyes, 2008, p. 32). These teachings “associated rhythm with the body and melody with the emotions; harmony lifted consciousness to spiritual awareness” (Keyes, 2008, p. 32). In other words, rhythm connected us to our bodies, melody or tone to our emotions, and harmony to our spirit.

Ancient Chinese healers used thin, flat plates of jade called “singing stones” (Keyes, 2008, p. 32) and when struck, produced musical sounds. “The Tibetans considered the notes A, F sharp and G to be powerful sacred sounds” (Keyes, 2008, p. 32). Two things seem to be common in ancient healing rituals, that of sound or chanting alongside rhythmic movements, either through dance or stomping (Keyes, 2008).

The Christian teachings start with “In the beginning was the word” (John 1:1) also pointing to the notion that “sound vibrations appeared to be associated with creation” (Keyes, 2008, p. 32). The use of the word ‘word’ however could also suggest the split between sound and the word or symbol, a split often seen in Western culture.

These spiritual teachings, and others, are centered on the struggle of the divine spirit or soul of the human being “to free itself from animality and return to its rightful heritage: the effort to bring the thinking and feeling qualities into accord with the harmonic pattern in which the human was created, ‘in the image of God’” (Keyes, 2008, p. 33). The way in which all aspects of the self can be brought back into harmony, according to many of these traditions, is through sound (Keyes, 2008). Chanting, prayer and mantra have always held a prominent place in achieving this harmony or union as they follow “the natural pattern of creation and exercised will” (Keyes, 2008, p. 35).

Rhythm is another important component underpinning vocal psychotherapy, which is introduced below and will be expanded upon throughout this dissertation.

Rhythm

Rhythm is a core notion of vocal psychotherapy due to being in constant use throughout its practice. Healing through rhythm is underpinned by the notion of 'entrainment', a term founded by Dutch scientist Christian Huygens in 1666. He found that "the pendulum frequencies of two clocks mounted on the same wall or board became synchronized to each other" (Thaut, 2013, p. 31). It was initially believed that the vibrations of air molecules would transfer small quantities of "energy from one pendulum to the other and synchronize them to a common frequency. However, when set on different surfaces, the synchronisation effect disappeared. As it turned out, the transmitting medium was actually the vibrating board or wall" (Thaut, 2013, p.31). Entrainment then, is the phenomenon that rhythmical vibrations will entrain, or match up, to another; "the stronger rhythmic vibration will pull another weaker vibration into its resonant field" (Thiermann, 2011, p. 44 – 45). According to Wayne Perry (2007) in *Sound Medicine*, the human body, like the clock, also "has a natural ability to entrain and heal itself when it is supported and allowed to do so" (p. 209, cited in Thiermann, 2011, p. 45). It is through the sound vibrations of the body that entrainment can occur with another human being, and this is a powerful core idea that can be utilised in vocal psychotherapy. The vocal psychotherapist can use rhythm as a way in which to mirror the client or to offer an alternative experience, perhaps enabling the client to feel a different rhythm, so to speak, helping to either sooth or energise depending on their needs in that particular moment.

The relatively new discipline of chronotherapy is now validating this concept in response to the medical professions growing understanding about the human body and its cyclical nature. What has been found, through the advance in our comprehension of cycles and body rhythms, is "that there is an ideal time during the day to take a pill, have a workout, eat a meal, or pursue a myriad of other tasks" (Gioia, 2006, p. 2-3). Chronotherapy illustrates the importance of rhythm and entrainment, which further points to its use in psychotherapeutic healing and vocal psychotherapy in particular. Vocal psychotherapy (and traditional psychotherapy) always happens in rhythm, which will be further discussed in the following chapters.

Alongside sound and rhythm, and perhaps the most fundamental to vocal psychotherapy, and to health, is the breath.

The breath

According to Austin (2008) recovering or connecting to one's own voice "requires re- inhabiting the body" (p. 20) and connecting to the breath is, perhaps, the first, most efficient, step. The word 'psyche' illustrates the connection between mind, body and soul as it means both "the soul" and "to breathe" (Austin, 2008, p. 20). Breath as a form of healing is common to most, if not all, "meditative and prayer traditions" (Austin, 2008, p. 25). The ability, or inability, to inhale and exhale deeply can be a reflection of particular personalities and can reveal psychological traits and issues (Austin, 2008). It is not merely "a mechanical reflex for oxygen exchange; it is the basis for all of our cellular functions, our energetic wellbeing, even our emotional health" (Gaynor, 1999). Alongside tone, resonance, pitch and range, the way a person engages or disengages the breath can indicate hyper arousal, vigilance, and/or anxiety (Austin, 2008). Vocal psychotherapy requires relaxed and sustained engagement with the breath that is not so much present in verbal psychotherapy. It is through the physiological experience of vocalizing in a sustained manner that the primary breathing muscles are activated.

In order to breathe we need to engage both inhalatory and exhalatory muscles. The primary muscles of inhalation are the diaphragm and external intercostal muscles. The simple release of contraction in the diaphragm and external intercostal muscles is sufficient to increase air pressure and create the outward flow of breath. Flow will continue until a *Resting Expiratory Level (REL)* (Estill, 1996) is reached, a physiological balance point where pressure in the lungs equals the pressure in the atmosphere. At this resting expiratory level, neither inhalatory or exhalatory forces are at play, the muscles are relaxed. If exhalation is to continue, different muscles must be engaged. The primary muscles of this further exhalation are the internal intercostal muscles and the muscles of the abdomen. These muscles tend to be passive when lung volumes are still above *REL* and active when lung volumes are below *REL*. This physiological understanding is important in the work of vocal psychotherapy, as the therapist must be able to understand the different ways in which a client breathes, where tension is held, and how to release and/or engage muscles to most effectively improve a clients breathing ability and therefore, breathing health.

Both core principles of breathing and rhythm will be further explored throughout this dissertation. The section below provides an overview of the coming chapters.

Overview of chapters

The introduction to this dissertation laid the foundation for the chapters that follow.

Chapter Two describes and critiques the methodology and method employed for this research. It will also demonstrate how the chosen methodology fits well with this topic.

Chapter Three is an in-depth enquiry into what vocal psychotherapy is and the foundational concepts that underpin it.

Toning, vocal holding and free associative singing, are considered core techniques of vocal psychotherapy and *Chapter Four* will describe and critique them. This chapter seeks to understand whether these tools are of therapeutic value and if so, why.

Chapter Five examines and critiques the ways in which neurosciences (Levitin, 2006; Zatorre, 2005); developmental theories (Thiermann, 2011; Winnicott, 1965) and theories of self (Stern, 1985) inform and influence the methods and techniques of vocal psychotherapy.

Finally the conclusion, in *Chapter Six,* will discuss and critique the findings. This chapter will consider areas of future research through the questions that have emerged from this dissertation

Chapter Two: Methodology and method

This dissertation is an interpretive, hermeneutic literature review. In this chapter I will outline the reasons why this methodology was chosen and how it fits with this particular research. I will also outline the method, and the ways in which the research was conducted.

Methodology

According to Hammond and Wellington (2012) methodology provides the framework for the intended research and the methods outline the ways in which data is collected. Methodology takes "place in the middle of a hierarchy of considerations" (p. 109). Firstly epistemological assumptions about social research must be considered; how and why questions are formed and posed.

Our belief of "what knowledge is and how we acquire it defines the nature of the questions we might ask" (Hammond & Wellington, 2012). It is for this reason that I clearly situated myself in this research (see chapter one: introduction).

According to Hammond and Wellington methodology generally refers to the rationale for the application of particular research methods. At the bottom of the methodology hierarchy lie the research methods and the tools that are used to gather the data and in the middle lies the methodology itself. At the top of this hierarchy lies epistemology.

Epistemology

In any discussion of methodology, epistemology must be examined to position the reader to the researcher's philosophical stance (Hammond & Wellington, 2012), in this case, my own philosophical position. Epistemology is defined as "what we believe about how we come to know and understand the world" (Hammond & Wellington, 2012, p. 57). In other words, how do our beliefs shape our understanding of the world and of our own experiences? As discussed in the introductory chapter my personal experience of singing has greatly influenced my innate understanding of how the voice can be used as a healing tool, however I have, until now, lacked any theoretical understanding and this research emanates from this deficit and desire to know more.

Interpretivism underpins the epistemology of this dissertation. This viewpoint sees "social research as having a special concern for uncovering the meaning associated with social activity" (Hammond & Wellington, 2012, p. 57). This philosophical underpinning is appropriate to this research as vocal

psychotherapy and singing in general are socially connecting activities. The goal of the interpretivist approach is “to understand the meaning that cultural and institutional practices have for those taking part” (Hammond & Wellington, 2012, p. 88). This mirrors the goal of this research, which is to understand how and why vocal psychotherapy is effective within the therapeutic relationship.

Hermeneutics

As stated, this dissertation is an interpretive, hermeneutic, literature review. The techniques used in vocal psychotherapy to promote health are through lived experience of the mind, body and soul, taking into account ‘the whole person’ (Austin, 2008; Summers, 2014; Thiermann, 2012). It is this lived and embodied experience that aligns well to the methodology of hermeneutics, which is focused primarily on the meaning making of the qualitative data (Strenger, 2001) to aid in human understanding.

The act of singing, and the techniques used in vocal psychotherapy are embodied; the experience is always manifested bodily. Understanding always begins first with the experience, specifically the bodily experience, or *felt sense* (Stern, 1985). Hermeneutics derives that “understanding comes from the experience of being-there, which is then gathered together as events, feelings, and memories, into language” (Fleck, Smythe & Hitchen, 2011, p. 15). Hermeneutics is described as the art of understanding, however Gadamer (1975) makes it clear that it is not the understanding that is of most importance, but the attempt to “clarify the conditions in which understanding takes place” (p. 263). These conditions refer to pre-understandings and prejudices within the mind and experiences of the researcher, alongside the understandings available in the text.

Through the philosophical lens of hermeneutics, the goal of interpretation is “to produce a reading of the text that fits all important details into a consistent, coherent message, one that fits coherently into context” (Diesing, 1991, p. 110). The meaning of the text, according to Gadamer (1975), is found not in the subjective feelings of the interpreter, nor in the intentions of the author, but rather, meaning is derived through the critical engagement of both the reader and the text. These intersubjective principles parallel the theories and techniques underpinning vocal psychotherapy. In these techniques, both therapist and client subjectivities are used and considered for deeper understanding and healing of the client (Austin, 2008) (see chapter two: transference and counter-transference). In this research intersubjectivity specifically relates to the interface between my own personal experiences of singing and the positive healing effects singing has had on my life, and to my personal reading and understandings of the literature.

I began this research with a personal bias that vocal psychotherapy would, indeed, be effective because of my own healing experiences through singing. However, I kept this bias, or personal subjectivity, in mind and have critically examined the literature available. According to Bentz and Shapiro (1998) “hermeneutics is founded in the belief that researchers are embedded in a context of explanation that intrudes into the context of the data. You cannot get away from being involved” (p. 112). I am both a training psychotherapist and a professional singer. I have been brought up with music and music has been one of the main healing tools in my life. I cannot escape my own bias and belief that singing is therapeutic. It is however, crucial “never to forget that the text represents its own meanings” (Schuster, 2013, p. 198) and, as the researcher, I must strive to remain open to different possible meanings of the literature and at the same time remain open to my own experience (Schuster, 2013). My biases will be reflexively examined and critiqued as different literature is encountered and further understood. Bearing in mind my bias and

personal subjectivity, this dissertation will discuss the theories, methods and techniques of vocal psychotherapy through a critique of the available research.

According to Schuster (2013) “a hermeneutic way of being in the world is about making meaning of our lives. It is about trying to understand one’s self and others in a common world” (p. 197). This aligns well to music, and music makers who often have similar aims. In order to understand human beings, one must also understand cultural expression in whatever form (Strenger, 2001). The parts must be understood alongside the whole. This is both important in the reviewing of literature but also specifically for vocal psychotherapy. When singing, a person must manipulate, small, isolated parts of the body, particularly within the larynx. However, it is only when these manipulations work as a whole within the entire body, mind and spirit that optimal sound is created and optimal connection to others is generated. In other words, a singer must be able to connect to their bodies physically – to manipulate the larynx and vocal folds, and at the same time connect to their emotional and spiritual world to tell their story and fully express themselves.

The act of reviewing literature is in itself a similar process that moves from the whole body of identified, relevant literature to particular texts and back again. For this research, that means, exploring the origins and ancient traditions that advocate the use of the voice for healing as a whole (see chapter one: introduction), alongside the developmental theories and neuro-scientific evidence to support this use (see chapter five). In each small technique the ‘whole’ can be seen and experienced, in other words it is only through understanding the theories and philosophies in their entirety that the techniques described in chapter four can be more fully understood and applied.

Alongside the epistemology of interpretivism and hermeneutics, this dissertation will seek to qualitatively examine evidence using qualitative data. This qualitative material includes informal or subjective material providing an overview of vocal psychotherapy (Petticrew & Roberts, 2006). The next section will further illustrate this qualitative stance.

Qualitative research

The focus of qualitative research is on the understanding of people's behaviour, beliefs, attitudes and interactions (Pathak, Jena, & Kalra, 2013). Qualitative research "works at delving into social complexities in order to truly explore and understand the interactions, processes, lived experiences, and belief systems that are part of individuals, institutions, cultural groups" lives (O'Leary, 2010, p. 113). A qualitative literature review is, therefore, an appropriate method for examining this topic, as vocal psychotherapy research requires this same holistic approach, seeking to understand and explore

individual interactions, processes and lived experiences within the therapeutic relationship.

According to McLeod (2011) ''the techniques and skills used in qualitative research are similar to those used in therapy" (p.ix), where sensitive listening, reading or observing, is required to elicite people's stories. The information or knowledge generated from this form of research is "holistic, nuanced, personal, contextualized, incomplete" (p. ix). Qualitative research can help "describe and explain local rather than general conditions" (Hammond & Wellington, 2013, p. 107), and its primary aim is to help "develop an understanding of how the social world is constructed.'' (McLeod, 2011, p. 3).

O'Leary (2010) further describes the characteristics of qualitative research in the following three ways:

1. Requires inductive as well as deductive logic

Induction is described as the "process by which we draw a general conclusion from individual instances or observations" (Hammond & Wellington, 2012, p. 87). This approach is concerned with noticing and identifying different patterns within the data, "for exploring, explaining, uncovering phenomena and for generating new theoretical insights" (Hammond & Wellington, 2012, p. 107). In this research, individual examples are used and help contribute to the overall data found. The deductive method however, which seeks to draw conclusions from initial premises, the "if – then" approach can also be applied in qualitative study (Hammond & Wellington, 2012, p. 40).

For example, one initial premise, or deductive method, used in this research is - if we release, or free the voice, then the body will also release and free itself from tension. This will then result in further emotional freedom within the client.

Both inductive and deductive logic will be used in this research.

2. Appreciates subjectivity and reflexivity

Qualitative research appreciates and reflects on one's own subjectivity reflexively.

Subjectivity refers to the notion that a person's judgment is shaped and developed by personal opinions rather than purely outside influences. Reflexivity "refers to the examination of one's own beliefs, judgments and practices during the research process and how these may have influenced the research" (Hammond & Wellington, 2012, p. 5129). It is for this reason that the pro-noun 'I' has been used in this dissertation making explicit my own subjectivity from the beginning and throughout.

The subjective or hermeneutic approach calls "for the researcher to be mindful of the prejudices (Gadamer, 1975) they bring to the research process" (Fleck et al., 2011, p. 18). One example of my own bias or prejudice, as already discussed, is the idea that singing is healing. I have held this belief from my own experience of singing. Subjectivity is an important part of this research because of the biases, like this, that have already been brought into the research process. Through the use of the first person, my views have been made explicit and have been reflected upon throughout, making this subjectivity a strength of the research that has motivated my own learning.

Along with my own personal perspectives, qualitative research must take into account multiple points of view.

3. Accepts multiple perspectives

According to Fleck et al. (2011) "There is no one "saying" that can capture all that is understood" (p. 16). Words can limit and/ or distort complex meaning so multiple perspectives are important to consider. Where possible this has been kept in mind throughout the research process, however a limitation to this study is the small amount of published material on this topic, alongside a limited number of different cultural perspectives. Further research is required to gain insights into different, contrasting perspectives.

Literature review

According to Aveyard (2014) “a literature review is the comprehensive study and interpretation of literature that relates to a particular topic” (p.2). It is through a thorough search and analysis of the available literature that new insights can be found when reviewed together. Each part is considered alongside the whole in context. A literature review is comprehensive, critical and contextualised, providing the reader with a theory base and a critical analysis of the relevant research data, an overview of what has come before (Petticrew & Roberts, 2006). In other words, “it covers what has been said, who has said it, and sets out prevailing theories and methodologies” (Hammond & Wellington, 2012, p. 99). Literature reviews aim to “make sense of a body of research and present an analysis of the available literature so that the reader does not have to access each individual research report included in the review” (Aveyard, 2014, p. 4). For this reason, the rationale for a literature review is an obvious one as “it saves the researcher from time-consuming pursuit of both conceptual and empirical evidence that is already available” (Hammond & Wellington, 2012, p. 100).

This is a hermeneutic, interpretivist literature review, which differs significantly from a systematic review that “lists and ‘weighs up’ the evidence from the literature” (Hammond & Wellington, 2012, p. 100). Systematic reviews have the benefit of transparency as “the evidence seems fairly put together and conclusions explicitly set out” (Hammond & Wellington, 2012, p.100). One of the critiques of systematic reviews, however revolve around the inflexibility of the approach along with a lack of concern for context and a “privileging of quantitative studies” (Hammond & Wellington, 2012, p. 100). A more flexible approach, such as this literature review, “can be more discriminating but is always subject to the charge that literature has been marshaled to support a predetermined point of view.” (Hammond & Wellington, 2012, p. 100). It is, therefore, once again important to make transparent my own predetermined views and biases.

I will seek to explain, “how and why selections from the literature have been made” (Hammond & Wellington, 2012, p. 100) in the following method section.

Method

This literature review process began with the research question ‘*what are the theories, methods and techniques underpinning vocal psychotherapy?*’ which was then “set in context within an introductory chapter, including a discussion of background literature” (Aveyard, 2014, p.42) The goal of this research is to understand how this specific form of psychotherapy (see chapter three) works and whether or not it is effective.

In the following section I will outline the first stage data collection, the inclusion and exclusion criteria plus my own pre-understandings and writing process.

1) First stage data collection

The first stage of data collection began with a search of published books and electronic databases using Summons on the AUT library website. Database searches consisted of the key words "*vocal psychotherapy", "vocal therapy", "voice and psychotherapy" and "singing and healing". "Vocal psychotherapy*" produced very few "hits", however resulted in Diane Austin's (2008) founding work *The Theory and Practice of Vocal Psychotherapy*. "*Vocal therapy*" resulted mostly in physical vocal therapy for damaged vocal folds. However, through this search another foundational book also appeared, *Foundations of expressive arts therapy: theoretical and clinical perspectives* (Levine, 1999). "*Singing and Healing*" brought up references to traditional voice healing material.

As a relatively small amount of research existed on this topic, a more inclusive search strategy was required. Ad hoc searches in the library also took place and the reference lists of each article and/or book were reviewed in detail in order to access additional, relevant material, particularly the reference lists of the aforementioned foundational work.

2) Inclusion and exclusion criteria

This dissertation focused on dyadic work only, i.e. work between one client and one therapist. This limited the search to focus on theories, methods, and techniques, that could be utilised in the psychotherapeutic framework, intentionally leaving out work with choirs and groups, as well as therapeutic singing lessons. However, relevant information from choir research was stated in the introductory chapter. This focus was intended to keep the research within the scope of a 60-point dissertation and to gain greater depth of understanding in a smaller area of knowledge. Further exploration is advised for bigger research projects in the future.

Any material that was not written in English was also excluded. Both academic and professional literature was used in this study. According to Hammond and Wellington (2012) academic literature is defined as "peer-reviewed journal articles and books written for academic audiences, while professional literature is written for the profession" (Hammond & Wellington, 2012, p. 99). This dissertation draws on PhD's, Masters Theses,

journal articles and published books. Many of these academic works have been published relatively recently so more traditional material was also sought to give context and background to the literature.

3) Pre-understandings

Pre-understandings refer to the researchers "insights into a specific problem and social environment before they start" (Gummeson, 2000, p. 67). They exist on two levels, which includes both explicit and tacit knowledge. First-hand pre-understanding is acquired through personal experience and is "distinct from second-hand, which is collected through the pre- understanding of other people" (Ryan, 2011, p. 220) such as lectures, literature and various other media or people. According to Ryan (2011) "self-development is enhanced when reflection is involved" (Ryan, 2011, p. 226). My own experience of singing and its healing potential represents first-hand understandings. Estill Voice training has contributed to my second-hand understandings, which include the physiology and anatomy of the voice and the ways in which the physical anatomy and the actual setup of the voice may effect, or bring to the surface, emotions that have been suppressed.

Vocal psychotherapy, then, seems a natural fit for my research and my future psychotherapy practice.

4) The writing

According to Fleck et al. (2011), it is the process of writing that allows for reflection or rethinking. It "separates us from what we know and yet it unites us more closely with what we know" (Van Manen, 2006, p. 127 cited in Fleck et al., 2011, p.21). The gathering of the ideas illuminates the threads or themes present in the literature. These are then further explored and critiqued. It is also through the writing of the literature review that the researcher can locate the study in terms of what has come before and research that is to come. This "helps the new researcher to see where he or she 'fits in'" (Hammond & Wellington, 2012, p. 101), viewing each segment of literature as a part of a puzzle. It is then possible to "see how a review of the literature is like the whole completed jigsaw" (p. 2). It is for these reasons that a literature review can be so useful.

Alternative methodology

A qualitative, heuristic approach to this research was also considered however, the focus of embodiment and lived experience of hermeneutics meant that this was a better fit for this particular topic.

Ethical issues

Ethical considerations have been kept in mind by the researcher. The literature discussed in this dissertation is published work that is currently in the public domain. This means ethical issues have not been breached. I have sought to find literature to defend any biases I have brought into the research and have not used any experiences through my work with others as a singing teacher. Further ethical consent may be needed for future research.

Chapter Three: What is vocal psychotherapy?

"Music expresses that which cannot be said, and on which it is impossible to be silent" (Victor Hugo)

Vocal psychotherapy is defined as the use of the voice to promote intrapsychic and interpersonal change. This change is facilitated through improvisation, song and dialogue within an analytic or psychotherapeutic space (Austin, 2008). A space in which to express what needs to be expressed but may be difficult to say. This chapter explores the foundational theories that underpin vocal psychotherapeutic methods and techniques. From a hermeneutic perspective it is important to move back and forth between the smaller parts and the whole (Schuster, 2013), therefore the next section will focus on the voice itself, as it is a foundational part of vocal psychotherapy and of the whole experience of being human.

The voice

The voice has been active since birth and stored within it are memories and experiences (Summers, 2014). The voices of the inner world speak to us in a language that is most similar to art, "it is below words, above silence, and close to poetry. It is God singing and dancing. It is our soul listening" (Halprin, 2000, p.159). According to Cooke (1952), "the human voice is the only musical instrument with a heart, mind and soul" (p. 15 cited in Summers 2014, p. 51), emblematic of the Psyche. It is common to all human beings, from every walk of life, and listening to the voice is fundamental to vocal psychotherapy.

The human voice is possibly the most versatile of all instruments. Subtle adjustments of the anatomy can change the resonance and sound quality of the voice, specifically the isolation of different parts of the vocal structure, the jaw, mouth, lips and tongue (Estill, 1996). The movements of the larynx, velum, thyroid and cricoid cartilage can also change the tonal quality (Obert & Chicurel, 2005). This is important to vocal psychotherapy, as a solid structural understanding of the voice is vital to fully utilise the techniques available (see chapter four).

Therapists become aware of information that the client reveals through the sound of their voice tone, inflections, tempo and dynamics (Austin, 2008). A vocal psychotherapist, trained singer, or vocal technician, is able to recognise many signs of tension, both muscular and vocal tension. Vocal tension can be heard through hard glottal attacks, the contraction of the false vocal folds and

through certain types of register breaks (Rattner, 2012). The position of the larynx may, or may not, suggest certain forms of tension and therapists should keep in mind other cues indicating strain, tension in the muscles of the face, neck, jaw and tongue (Rattner, 2012). It is firstly through recognising tension that a client can then have the opportunity to release it, as tension release is important for physical and emotional health (Austin, 2008).

According to Summers (2014) singing engages our personal resonating chambers and this unique, personalised, vibration is created inside our bodies emanating outwards. Our own natural vibration of sound energy is healing for both our bodies and our spirit (Summers, 2014) as all unresolved energy that is not discharged remains "trapped in the nervous system" (Austin, 2008, p.20). Singing is a way in which to release this energy Singing can eloquently and subtly "reveal emotional nuance without even naming emotion" (Rattner, 2012, p.14), sharing human experience that is both unique to the individual and universal (Rattner, 2012). It is through the act of vocalizing that we can bring our whole self into the space "to be witnessed in all our humanness" (Thiermann, 2011, p. 35). Part of our maturation process, according to McWilliams (2011), is the "mastering of language to describe experiences that are originally felt as inchoate bodily arousal" (p. 118). Music and singing can help externalise experiences and emotions, to be shared in the presence of another (Summers, 2014). This expression can feel cathartic, acting as a physical and emotional release (Summers, 2014).

The connection between the physical and emotional worlds is discussed in the following section.

Singing and the body

This dissertation is founded on the philosophy that "the voice and the body are inseparable and can only be effectively worked on in tandem" (Overland, 2005, p. 27). My own experience has led me to understand singing as an intense somatic experience. It can bring forth emotions and symptomatic behaviours, revealing and/or allowing access to latent trauma (Rattner, 2012). It can also allow the experience of feeling emotions that have, perhaps, been repressed or shut down for whatever reason. This embodied connection is the philosophy that also underpins the interpretive, hermeneutic approach (chapter two).

As a singing teacher, Rattner (2012) found that "on a number of occasions, after a trusting rapport was established with a student, they would begin to complain about physical symptoms. This would soon unfold into a discussion of the accompanying emotional suffering" (p. 9). In other words, the

physical sensation of singing helped bring to the fore, repressed emotional material (Austin, 2008). Summers (2014) suggests that “having vocal instruction requires a person to be connected to, and in their body, be present, centered, and grounded and to allow deep breathing, thereby letting down their defenses” (p. 39). The very process of learning how to sing can “pose a direct threat to the individual’s defenses” (Tyson, 1982, p. 11 cited in Summers, 2014, p. 39) as this repressed material begins to rise to the surface to be felt and released. The physical experience of singing helps the client connect to their own bodily experience, their emotional and spiritual world. This connection aids in developing a sense of wholeness and authenticity.

Connection and authenticity

One purpose of vocal psychotherapy is to help people connect with their own authentic being; “the heart of the work is about connection and integration and the ways in which voice work, within a reparative relationship, facilitates this process” (Austin, 2008, p. 131). It has been found through research on one-to-one singing lessons that student-teacher relationships can facilitate this connection; “there is some empirical evidence of teachers and students characterising one-to-one tuition as like a counselling relationship” (Purser, 2005, cited in Collens, 2015, p. 18). These relationships generated intimacy and trust, which was valued by the students (Collens, 2015). Other similarities to counselling include the “longevity, frequency of meeting, privacy of relationship, financial investment, interpersonal intensity and commitment” (Collens, 2015, p.18). There is also a focus on the “exploration and communication of emotion, working towards a synthesis of emotional, cognitive and embodied forms of knowing and supporting the development of the individual’s authentic voice” (Collens, 2015, p. 18). In other words, this research adds weight to the notion that using your voice, through singing, in a trusting relationship, can generate intimacy and exploration of suppressed emotions. However, vocalizing can also provoke self-consciousness and/ or inauthenticity particularly if the vocalizing or singing “is understood as performative” (Rattner, 2012, p. 4). It is thus, important for the therapist to help provide a place of trust and non-judgment; a place where creativity and play is the primary objective rather than perfection in the vocal performance. This is of particular importance when working with singers or musicians who may have internalised the need to perform, or create pretty sounds, and who may be reluctant to let primal or “ugly” sounds emerge.

In order for people to feel comfortable enough to create these less culturally acceptable sounds, a strong therapeutic alliance must be generated. This will be discussed in the following section along with transference and counter-transference.

The therapeutic alliance

The therapeutic alliance, as in traditional psychotherapy, is a vital part of vocal psychotherapy practice. According to Greenberg (1989), “if the analyst cannot be experienced as a new object analysis never gets under way; if he cannot be experienced as an old one, it never ends” (p. 98 cited in Gurman & Messer, 2005, p. 82). This requires a great deal of trust and rapport between client and therapist particularly as “the unconscious contents of both client and therapist are easily accessed through music” (Austin, 2008, p. 92). Austin further suggests that singing together is particularly challenging because of the embodied experience of singing. When you sing with someone else there is less emotional and physical distance between the therapeutic dyad, as “you are not only sharing sounds but also vibrations” (Austin, 2008, p. 92).

The therapists own boundaries and the boundaries within the therapeutic space need to be strong and clear. The therapist must be “resilient enough to feel intense emotions without being flooded by them” (Austin, 2008, p. 95). This is particularly important if therapeutic regression is desirable, as the therapists capacity of merging and separating become of vital importance (Maroda, 2010). This symbiosis type joining “can provide clients with a reparative experience so that they can renegotiate separation-individuation and continue on their journey to selfhood” (Austin, 2008, p. 94-95). However, many different ways of being with, or joining the client may be needed. It may be necessary to use traditional psychotherapy techniques if the client feels uncomfortable and/ or too exposed, particularly in the initial stages of the therapeutic relationship.

According to Austin (2004), the role of the therapist can frequently shift depending on the needs of the client. Being able to assume different roles when joining clients in the music, whilst they enter the unconscious realm can enhance the therapeutic process. When clients regress into a more child-like state they may need to “be met by another ‘child’ or ‘adolescent’ that can play with them and share in their grief or anger” (Austin, 2004, p. 95) or they may require a more maternal and nurturing presence. On the other hand a client “in an adult state may need an adult travelling partner, a parental figure or the quiet presence of a witness” (p. 96). There may also be times when clients “need to be actively guided through resistance and into unconscious feelings and unfamiliar territory” (p. 96). Being able to assume these different roles within the therapeutic relationship require a great deal of trust and safety for the client.

Safety is of primary importance in the therapeutic relationship and the therapist can create this in part by knowing what she brings to the process

(Austin, 2008). Time spent exploring the therapist's own inner workings provides greater tools in which to discern and separate personal issues from their client's. Therapists are then more able to use their own countertransferential material to help their clients (Austin, 2008).

Countertransference, in vocal psychotherapy, is used as a "primary instrument to gain understanding, information and knowledge of the client as well as to increase empathy and strengthen the therapeutic partnership" (Austin, 2008, p. 88). This is further discussed below.

Transference and counter-transference

Counter-transference, according to Austin (2004) "includes all the feelings, sensations, images, thoughts, in short everything that arises in the therapist as a psychological response to the client" (p. 80). It is both the therapist and the client that co-create the therapeutic relationship so it is important that the responsibility for the therapist's countertransference is not placed entirely on the client for inducing these feelings (Austin, 2004). Through music and singing, defenses can be more easily bypassed and spontaneity evoked by the direct access to sensory feeling (Austin, 2004). This is because the "client and therapist can deeply affect each other on a level that goes beyond words" (Austin, 2004, p. 88).

Self-knowledge, as mentioned above, and the continual 'fine tuning' of the human instrument through personal therapy and supervision, can help achieve the self-awareness "necessary to recognize and work effectively with transference, countertransference and other unconscious dynamics that emerge in a therapeutic relationship" (Austin, 2008, p. 91). Trust in ones own self can result in confidence to use and trust countertransferential reactions "taking the work to deeper levels" (Austin, 2008, p. 91).

The hermeneutic philosophy that underpins this dissertation also requires the researcher to take into account this same personal subjectivity, and self-knowledge. This mirrors Austin's (2008) claim that "neutrality is a questionable concept when client and therapist are singing or making music together" (p. 103) as vocal psychotherapists "cannot avoid consciously or unconsciously drawing on their personal relationship to music if they are present and participating in the creative process" (p. 103).

The next section will discuss the ways in which the unconscious is used in vocal psychotherapy.

Vocal psychotherapy and the unconscious

According to Thiermann (2011) if “we have not been heard in our life, we hide our voice away and judge it as inadequate. Being heard can be scary for people, but ultimately incredibly healing” (p. 34). It is not only through words and the symbolic meanings of those words that clients can express thoughts and feelings, but also through the musical elements heard in speech and singing. These nuances can be “a major source of information about unconscious communication and action between client and therapist and can greatly influence the therapeutic process” (Austin, 2008, p. 34). Other non-verbal cues can hold unconscious messages and it is these messages that “body-oriented therapists might attend to as they seek to understand their clients” (Hartley, 2004, p. 83). The unknown is made known within the therapeutic space, and relationship (Summers, 2014). This is important to vocal psychotherapy techniques that draw on non-verbal sounds to communicate feeling or emotion and is illustrated through a case study from Austin (2008), below:

‘Terry’ often complained about a part of herself that always felt judged and criticised. During a vocal improvisation session Terry was asked if she would like to sing as this critical part of herself. “At one climactic point, Terry sang a high, sharp, piercing, tone. ‘It’s my mother’ she said, ‘it’s my mother’s voice” (p. 44). This was then discussed throughout the session, through both music and traditional psychotherapy. Here the vocal improvisation led to an unconscious belief that could then be unpacked and integrated. The unconscious within vocal psychotherapy will be further discussed throughout this dissertation.

The next chapter will seek to explore the methods and techniques utilised in vocal psychotherapy.

Chapter Four: What are the techniques of vocal psychotherapy?

The following chapter will discuss and critique the techniques of vocal psychotherapy, particularly drawing on Diane Austin's (2008) work, as this work lays the foundation for vocal psychotherapy practice.

Austin (2008) maintains that the voice itself is an instrument and can be seen as a symbol of the Psyche. As the voice changes and develops so too does the psyche simultaneously shift (Rattner, 2012). Rattner further suggests that in order to use the techniques that follow, therapists need "some pedagogical awareness of vocal anatomy, breath, onset, resonance, registration, and range" (p. 28). This deep understanding of the human instrument allows the therapist to monitor the dynamism and range of expression available to any given client. The therapist must also have at their disposal "the broadest possible vocal palette for professional, artistic and personal use" (Newham, 1998, p. 74). In order for the therapist to help encourage and facilitate this in others, they must themselves, be able to utilise their own voices with such flexibility (Newham, 1998). Alongside this awareness and vocal plasticity, an effective therapist must hold the capacity for aesthetic appreciation, nuance, and imagination as this "method requires both attitudes" (Rattner, 2012, p. 28).

The next section will explore different vocal exercises that are often employed at the start of each vocal psychotherapy session. These exercises are used to help reconnect the client to their body and warm up the voice to encourage a sense of play. Following this will be a discussion of the core techniques – toning, vocal holding and free associative singing.

Vocal exercises

Thiermann (2011) suggests the following techniques: motor lips, vocal slides or sirens, and melodic mirroring. These warm up both the voice and the muscles that help create the sound. They can also help to relax the client and bring them into contact with their own body. These exercises allow the client to make silly noises, to help them feel more at ease with creating "imperfect" sounds. Whilst making these noises it can be almost impossible to be serious, "often laughter bubbles out from hidden corners of the body" (Thiermann, 2011, p. 39). However, the client must feel safe enough to make these sounds and must have the choice to say no if they are feeling at all self-conscious.

The exercises used in the vocal warm up include ‘motor lips’, where a person creates sounds similar to a motor by “blowing a strong gust of air and sound through closed lips” (Thiermann, 2011, p. 39). ‘Vocal slides’ or ‘sirens’ are utilised and are basically vocal slides up and down the scale to a closed ‘ng’ sound. This helps both the client and the therapist hear where vocal breaks occur and how the client gets around those breaks. It is important that the client does not feel that there is any wrong or right way to make these noises, and any breaks that occur are just information about the voice in any given moment. This is of particular importance to anyone who has had prior vocal training and has been taught to “perfect” the sound. ‘Melodic mirroring’ is also used in this warm up section as a form of vocal play. This involves “making improvised sounds and asking an individual to repeat and mirror the sounds. This is like throwing a sound ball back and forth” (Thiermann, 2011, p. 39). This type of repetition is used in vocal psychotherapy to help deepen affect, “it is as if each time the word is sung, it works its way from the head or throat down deeper into the body and the feeling realm” (Austin, 2008, p. 187).

One of the most important aspects of all vocal psychotherapy techniques is the conscious use of the breath. This is discussed below.

The breath in vocal psychotherapy

It is interesting to note that the word *hal* means “wholeness” and the Greek word psyche, meaning soul, also shares “the same root as psychein, which translates as “to breathe” (Newham, 1998). According to Gioia (2006) most people tend to take shallow breaths in short, sharp inhales rather than in deep slow strokes. “They absorb sufficient oxygen for survival, but rarely partake of the strengthening, and calming power of prana” (Gioia, 2006, p. 4). *Prana* is commonly understood to mean “breath” but also signifies “life force” or energy (Gioia, 2006).

Low-oxygen environments are, according to Gioia (2006), a breeding ground for viruses and bacteria and “deep breathing counters their harmful effects” (p. 4).

Diaphragmatic breathing is an integral part of singing instruction, and vocal psychotherapy, and according to Rattner (2012) it is also “our only means of tapping into the otherwise uncontrollable processes of the sympathetic nervous system such as sweating and pupil dilation” (p. 34). By consciously accessing and slowing down the breath, one can reduce agitation “by engaging the parasympathetic nervous system (PNS) or relaxation response” (p. 34). This slow, deep breathing can assist in reducing the reactions associated with the fight/flight response, reducing “symptoms of hyperventilation that may cause or aggravate a panic attack” (Bourne, 1990, p. 110). Not only does breathing help relax our nervous system, it can also open

us up to the present moment settling us into the experience of being in the here and now (Thiermann, 2011).

Once the client is connected to their breath, and as a result their body, vocal toning can be used.

What is vocal toning?

Toning is the conscious use of sustained vowel sounds to help restore the balance of the body (Austin, 2008; Campbell, 1989; Thiermann, 2011). Toning is easier to do than explain. It generally consists of non-verbal sounds where vowels are elongated and the voice is used through singing, sighing, moaning and humming. It can also be heard in chanting (Austin, 2008). According to Keyes (2008) toning helps to release tension and stimulate circulation and energy into the body and the benefits lie in "recognizing and going with the natural flow of energy in our bodies" (Austin, 2008, p. 30). To use our voice in singing we must engage the body and when pain is felt in the body it is often the result of tension. According to Keyes (2008) toning or more specifically groaning is a natural pain relief, "one does not *think* a groan" (Keyes, 2008, p. 26). There are different beliefs and expectations about what toning can actually achieve, but all toning involves non-verbal sound to facilitate increased flow of breath, release emotion and restore harmony within the body (Gaynor, 1999, p. 98). Toning on the sustained vowel, for the purpose of restoring the body's balance, create vibrations to help "free blocked energy and resonate with specific areas of the body to relieve emotional and physical stress and tension" (Austin, 2008, p. 29). This brings equilibrium back to the body, which is of particular benefit to clients who have traumatic experiences trapped or frozen within (Austin, 2008). In other words, when we sing we produce vibrations that help sooth and nurture the body by massaging our insides (Keyes, 1973). This suggests that the act of toning can improve physical and emotional health.

The following section will outline how vocal toning can be used within a vocal psychotherapy session.

Vocal toning in a vocal psychotherapy session

Austin (2008) suggests that toning is particularly helpful at the start of the therapy session, before singing or vocally improvising. Here clients are asked to inhale and exhale several times, and on the last few exhales to allow a sound or tone to emerge. The sounding out, or vocalizing, of the exhale, generally increases in duration, grounding the client more solidly in the moment (Austin, 2008). The therapist may, at this point join with the client helping to reduce any self-consciousness they may be experiencing. However, often

“clients are surprised to find they enjoy making free, playful sounds that emerge – intuitive and instinctual sounds that have been long repressed because there was no appropriate social setting in which to make them” (Austin, 2008, p. 133). When one is able to surrender to the process of vocalizing spontaneously, an experience of relief and wholeness may follow (Austin, 2008).

Using our own voices in these natural forms of expression often facilitates joy and wellbeing within the body (Thiermann, 2011). Rarely just talking about feelings using the mind’s concepts and symbols results in changing them, as “joyous feeling is so necessary for permanent correction” (Keyes, 2008, p. 42). Toning is a way in which to connect straight to the body and its subjective experience and vitality.

The music created through toning can act like a container to help create boundaries and structure to the experience, which can feel comforting and reassuring (Summers, 2014). These sounds can also soothe and nurture a client as backed by developmental theories (see chapter five). Toning can also “offer a therapeutic experience for someone through engaging the limbic system and the autonomic nervous system, which could result in pain reduction” (Summers, 2010, p, 43) (see chapter five).

It is also possible that toning, and other kinds of repetitive chanting or chant-like singing, can induce an altered state of consciousness, which can “mediate contents from the personal and collective unconscious to the conscious mind” (Austin, 1996 cited in Austin, 2008, p. 31). This content can then be discussed within the traditional psychotherapeutic framework. This is illustrated below through a specific case study.

Case study example of vocal toning

The following passage is a note written by one of Austin’s students about her experience of toning. She describes her experience as a way in which to connect to a more grounded place physically: “It allowed me to feel my body more, as I felt connected to my breathing and I could feel grief. It allowed me to express the grief that I have always hidden somewhere inside me” (2008, p. 134). Here the client was able to connect to feelings that were previously repressed or unconscious, feel those feelings and then release them.

Part of the appeal of toning is that is can be done without words. Words are often dominated by the intellect, by cognition and are only expressed as the mind dictates (Keyes, 2008). By allowing the natural sounds to emerge without thinking or evaluating them, full expression can be felt in the body, as beneath the words we speak are the “vibrations of the tone upon which they

travel. Tone is the underlying force operating in our lives" (p.24) and "the meeting place of the 'abstract and manifested idea' is though sound" (p. 24). It is important to note that this meeting place always takes place in the present moment, which is another principle underlying vocal psychotherapy. This is further discussed below.

Toning and the present moment

There are many benefits of toning within the therapeutic space particularly in the immediacy of the encounter. It is in the 'here and now space' (Austin, 2008) that the client can be directly involved with their own physic, emotional and spiritual being and using our voice in this way brings us in to the present moment (Summers, 2014). The connection between toning and the body also helps the client to connect to the present moment where the music can shift immediately when, or as needed. These constant shifts allow the therapist and the client to intimately attune to each other on a sensory and feeling level providing a "form of intimacy in the therapeutic space where the exchange of energy and vibrations can feel similar to being physically touched" (Austin, 2008, p. 30). The intimacy that can be generated also requires a lot of skill, on behalf of the therapist, to maintain safe boundaries and trust (as previously discussed).

Although these techniques do not need to follow a particular order, Austin (2008) suggests that beginning with vocal toning and then moving on to vocal holding parallels with developmental stages (see chapter five). The next section will discuss and critique the merits of vocal holding.

What is vocal holding?

Vocal holding is the term coined by Diane Austin (2004), which refers to the intentional use of a two-chord structure that underlies vocal improvisation in a clinical setting. This structured two –chord technique, along with the therapists' voice, provide a predictable, secure musical and psychological container, which is important for any therapeutic relationship and particularly for client's who are afraid of, or not used to, improvising (Austin, 2008). This container also enables clients "to relinquish some of the mind's control, sink down into their bodies and allow their spontaneous selves to emerge" (Austin, 2008, p. 147).

Initially vocal holding requires the client to use single syllable sounds, not words. It is through the simplicity of the two chords, rocking back and forth in gentle motion, alongside the vocal sounds, that a trance-like state can be felt allowing "easy access to the world of the unconscious" (Austin, 2008, p. 147). It is not only through vocalizations but also the matching of the client's physicality

in movement, the gentle rocking back and forth, that an atmosphere of intimacy can be created (Austin, 2008). This mirrors Stern's (1985) idea of cross modal processing between the senses to effectively attune to the client (see chapter five).

The repetitive structure of the music can also free the client from worrying about not getting it right (Austin, 2008). This is especially important for clients who are skilled singers, or have a strong background in music and improvisation, as this simplicity ensures they do not hide behind their abilities, but instead connect more deeply to their emotional state (Austin, 2008).

The two-chord structure also means a vocal psychotherapist must be accomplished on a harmonic instrument. They must understand and be able to produce different chord structures throughout the octave, in the different keys available to them, rather than just relying on their own voice. This is because it is important to be able to match the sounds a client is using if this is required, or to use dissonance for a more contrasting and/ or separating approach. These different responses encourage variety and playfulness, merging and separating. It is important then, that the musical ability of the vocal psychotherapist must be able to match and mirror the playfulness and creativeness of the client.

Vocal holding and play

Vocal holding is particularly helpful with clients who find it difficult to play or to be playful. Creating sound is a playful act and clients can learn to feel the physical pleasure of just making different sounds. They can explore new ways of being creative, experiencing the freedom of unrestrained sound and the pleasure of creative self-expression. From this play, feelings and images can spontaneously occur without judgment (Austin, 2008). Feelings and images that may emanate from the unconscious can then be discussed and further understood by the client and therapist together. By creating a safe environment and a strong therapeutic alliance, vocal holding facilitates connection to the self and other promoting therapeutic regression where "unconscious feelings, sensations, memories and associations can be accessed, processed and integrated" (Austin, 2008, p. 146). This can be seen in the case study example below.

Case study example of vocal holding

Austin (2008) describes Vicky, a professional cellist, who had what Vicky herself believed to be a psychosomatic illness that affected her right hand, so she was unable to play music to her full potential. Austin believed that vocal holding would be a good way in which to begin work with Vicky "because

she was not identified with her voice, there was no performance pressure associated with singing and her hands would not be involved" (p. 154). During their first vocal holding session Vicky described her experience as feeling a chill, "like a ghost came into me…I've always been two people, one is independent and rational, the other is all energy and emotion…it's like they came together for a minute" (p. 154-155). Vocal holding in the present moment brought different parts of Vicky's experience together, creating wholeness that could then be discussed within that particular session.

Not only can vocal holding help to reconnect a client with his or her playful energy and unconscious feelings and thoughts, this method is also useful in "working through developmental injuries and arrests due to traumatic ruptures in the mother-child relationship or empathic failures at crucial developmental junctures" (Austin, 2001 cited in Austin 2008, p. 147) (see chapter five).

Vocal holding stages

According to Austin (2008) vocal holding techniques complement the developmental stages. However, these techniques are not meant to be used in a restrictive manner, and do not necessarily follow the order that I will describe here. It is also important to note that giving choices and working collaboratively encourages a safe therapeutic environment and helps to empower the client (Austin, 2008) so flexibility must be kept in mind.

1. Initial vocal holding phase

During this initial vocal holding phase the client and therapist sing together in unison. By singing together on the same note, a "symbiosis-like transference and countertransference" (Austin, 2008, p. 149) can emerge. The sounds at this time can often sound like the babbling noises of a three- to six-month-old (Gardner, 1994). This phase is particularly important for clients who did not receive a "good enough mother" (Winnicott, 1953) experience as it offers the experience of merging with an attuned, and emotionally present, mother or father. In other words, singing together facilitates in the replication of early mother-child interaction and relatedness (see chapter five). Vocal holding can help clients to "internalize a stable sense of self and then gradually renegotiate the stages of separation and individuation " (Austin, 2008, p. 149). This individuation process is reflected in the practice of vocal holding, beginning with this state of union, or merging together, on one sound. According to Austin (2008), a client remarked after a vocal holding session, that singing in unison was her favourite part; "I felt so much support, so much freer to sing and take chances" (Austin, 2008, p. 150).

Vocal holding in unison has a soothing and supportive quality that can provide comfort and a feeling of safety as clients can “draw on the therapist’s voice for support” (Austin, 2008, p. 150).

The client may wish to move on in a session from singing or toning together in unison, to singing in harmony as a way in which to separate from the therapist. This next stage is discussed below.

2. The second phase

The second phase involves the client and therapist singing together in harmony, creating “the opportunity for the client to experience a sense of being separate yet in relationship” (Austin, 2008, p. 149). The techniques of mirroring and grounding are employed in this phase. As discussed, mirroring is when a client sings an improvised melody line and the therapist repeats the same melody in response (Austin, 2008). This form of repetition can help bring the client closer to her feeling state.

Grounding involves the therapist singing the root note of the chord providing a base for clients to move around and come back to when needed. This musical intervention is “reminiscent of a typical pattern of interaction between the child and the maternal figure that occurs when the child begins to move away from the mother to explore the environment” (Austin, 2008, p. 150). Ideally, in development, the mother is able to stay in contact as the child explores his or her freedom. If the mother is unable to support and encourage the child’s increased efforts to individuate, “the stages of separation-individuation become associated with object loss” (Austin, 2008, p. 151). During this vocal holding phase, it is important that the client has the space to explore the sounds they wish to create individually, but that they are also able to return to the holding container of unison when needed. Again, imitating the developmental stage of separation and individuation.

However, the client’s musical background and musical ability may impact the use and effectiveness of vocal holding. A performative or perfectionist nature may curtail the ability to connect to the unconscious or to enjoy the freedom of play and creativity as clients may feel self-conscious and/or unwilling to create music that they believe is lacking in skill and beauty, or they are simply uncomfortable with the noises they are able to produce. These techniques in vocal psychotherapy then must be gradually introduced according to the needs of the client. This is particularly true for the next technique – free associative singing, discussed below.

What is free associative singing?

Free associative singing is a technique coined by Austin (2008) that is implemented when words, or verbal communication, enter into the vocal holding process. It is similar to Freud's (1937) technique, "free association", with the added musical element of singing rather than speaking. This technique is also different as it involves the therapist singing. In its simplest form the client is encouraged to sing a word or phrase, which is then mirrored or repeated back to them by the therapist (Austin, 2008). Clients are encouraged, to "verbalize whatever comes into their head with the expectation that, by doing so, they will come into contact with unconscious images, memories and associated feelings" (Austin, 2008, p. 158). According to Sokolov (1987) "the healing and learning of therapy takes place within the vocal improvisation itself" (p. 356) In other words, learning and understanding takes place within the embodied experience of being the music or sound.

The two-chord accompaniment, or holding pattern, continues throughout the process of free-associative singing. This accompaniment alongside the therapists singing, continue to contain and hold the client, but there is a shift in emphasis from "holding" the client's emerging self (see chapter five) to also creating momentum and change. The music and lyrics help propel the therapeutic process forward (Austin, 2008). It is through the "variations in dynamics, tempo, voicings, arpeggiation, rhythm, accents, rests, alternate chord substitutes and chord extensions (adding 7ths, 9ths, 11ths, 13ths)" (Austin, 2008, p. 158) that help the therapist to reflect and support the clients feelings and processes.

The therapist can use her voice, lyrics and the musical accompaniment to "deepen the vocal improvisation and the therapeutic process" (Austin, 2008, p. 159). Through the transformative influence of vocal improvisation, breath and connection with another, clients are often "drawn to find that place of re-connection (or reunion) with who they really are" (Summers, 2014, p.48).

Just as toning and vocal holding can be ineffective if the client feels unsafe or insecure, the same can be said for the technique free associative singing. To sing words can be frightening for both non-musicians and musicians alike. Once again the needs of the client must be at the forefront of any vocal psychotherapy session and techniques picked accordingly.

Further techniques used in vocal psychotherapy are discussed below. These are used in conjunction with the core techniques - vocal toning, vocal holding and free-associative singing.

Repetition and the double

Repetition is important in the work of vocal psychotherapy, particularly in free associative singing. The client and therapist repeat the same word or phrase and in each repetition “the affect contained in the word is intensified” (Austin, 2008, p. 160). This helps the client to feel the depth of the emotional content “ as if the word and the meaning attributed to it has time to sink deeper down into the body-self where it can be fully experienced” (Austin, 2008, p. 160).

The “double” (Moreno, 1994), similar to repetition, is another essential tool in free associative singing (cited in Austin, 2008). It is here that the therapist sings in the first person using ‘I’, whereas repetition may use the pronouns ‘you’, ‘she’. The therapist can draw on “induced countertransference, empathy and intuition, as well as knowledge of the clients history” (Austin, 2008, p. 160) to vocalize these feelings and thoughts that the client may be experiencing. These may be thoughts and feelings the client themselves are unable to articulate perhaps because they are unconscious, uncomfortable or it may be simply that the client has no words for them yet (Austin, 2008). When the therapist is not accurate with the words used in doubling, the client is able to correct or adjust what is being sung. However, if the client has a more compliant temperament the therapist must be able to recognise and help the client understand what it is they are actually feeling, and what they want to say. When the words do resonate with the client, doubling helps the client to feel seen and understood (Austin, 2008).

This technique or intervention is particularly useful for clients who are working to integrate their thinking and feeling states or their mind-body split (Austin, 2008). Other principles underlie the techniques of vocal psychotherapy and these include resourcing, facilitating the client to use their mother tongue as well as the use of song. These are discussed below.

Resourcing

Resourcing refers to “the process of helping clients connect to inner and outer sources of support and strength” (Austin, 2008, p. 165). Giving choice to clients is an important part of this, as it is empowering and affirming, encouraging autonomy. Resourcing is particularly important if a client has just experienced an intensely emotional session. Here non-verbal vocalisations may be used to provide “lullaby-like comfort and time to digest and begin to integrate what has occurred” (Austin, 2008, p. 161). Clients are also asked to think about, and express, what they are grateful for in their lives, a technique borrowed from the 12-step programme, and to sing those things over a two or three chord structure (Austin, 2008).

Resourcing also draws on the use of “Essence statements” (Austin, 2008), which are statements about the self, for example – I feel, I want, I need. These are “effective in deepening the therapeutic process because they are fundamental expressions of self-awareness and building blocks to identity” (Austin, 2008, p. 160). They help the client reconnect to what it is they actually want and need in the moment. A common therapeutic theme with clients, who have had issues during the phases of individuation, is around identity (Johnson, 1994). Who am I? What are my needs? Johnson (1994) suggests that, “where the primary psychic trauma occurs in the process of individuation (i.e. narcissistic and masochistic), the central objective of psychotherapy is the resurrection and development of the true self” (p. 149). According to Austin (2004)“being able to identify an aspect of the self is the first step in separating from it, separating out and peeling away the ‘not me’ so there is more room for the ‘me’” (p. 85). Essence statements can help facilitate a client in this process.

Alongside this uncovering of identity, or peeling away of the ‘*false self*’ (Winnicott, 1991), it may be important for a client to speak in their own language and/or dialect, to truly connect with their heritage. This is discussed below.

Mother tongue

Austin (2008) suggests that it is important for clients to have the opportunity to sing in their ‘mother tongue’ as a second language can create emotional distance. Much of the work in psychotherapy is about childhood experiences, which in some cases, are more easily explained and felt in the client’s native language. One’s native tongue has its own emotional and psychological language, as well as its own vocal sounds that may be unique to that particular language and culture. These sounds are important as they may hold emotional memory and/or suppressed material that may only arise as a result of feeling and releasing them. By rediscovering these sounds, older feelings from childhood may emerge.

Austin found that when she asked her clients to sing in their native language they could then not find “an equivalent translation and in doing so required thinking which could distancethem from or dilute the emotional experience” (2008, p. 161). When one of her clients sang in Japanese she wept for the first time – “it makes me feel closer, more raw” (p. 161). It is also for this reason that vocal psychotherapy techniques can be extremely healing, as music is a universal language and does not require symbols that may get ‘lost in translation’ but instead focuses directly on the felt experience.

This intimate connection is also seen through the use of song, particularly traditional songs, or songs from the particular culture of the client.

Song

Singing known, or pre-composed songs can be “a safer intervention than improvising music and lyrics” (Austin, 2008, p. 179). This is because there is often less anxiety about what might be revealed and more control over what emotions will be felt and expressed, as the lyrics are familiar (Austin, 2008). Songs can also “elicit projections and transference reactions from both client and therapist and can easily promote an exchange of unconscious contents between both parties” (Nolan, 1998, cited in Austin, 2008, p. 179). These unconscious processes have the ability to “reveal its contents through the music memory patterns which emerge from it at random” (Rolla, 1993, p. 11 cited in Austin, 2008, p. 185). These unconscious thoughts and feelings can then be further explored within the psychotherapeutic framework.

Songs can also be used as ‘transitional activities’. Transitional activities are similar to ‘transitional objects’ (Winnicott, 1953), objects that the infant uses, to sooth itself when separated from the mother (or primary caregiver) to help “counteract feelings of loss and abandonment” (Austin, 2008, p. 179). These objects help to “preserve the illusion of a loving, comforting and soothing mother” (Moore & Fine, 1990, p.207) even if she is not there. Allowing the client to sooth herself with a song of her choice, or chosen together, can be a great way to calm and reassure, particularly at the ends of sessions. Songs can also be something for the client to take away with them and sing when needed (Austin, 2008).

In this chapter the techniques of toning, vocal holding, free associative singing, as well as resourcing and the use of song, have been discussed. It has been shown how these techniques are implemented and how they can be can be used effectively within the therapeutic relationship through a vocal psychotherapy frame. Due to my lack of experience and expertise in the field of vocal psychotherapy, it has been difficult to fully critique these methods and techniques. In future research projects I hope to have had more experience and gained more skill in this area, so as to give a deeper critique and analysis of the benefits and limitations of the practice. However, the techniques, and the way in which they are effectively implemented, have been discussed and the following chapter will seek to further evidence their effectiveness through the lenses of neurosciences, developmental theories and theories of the self.

Chapter Five: How do neurosciences, developmental theories and theories of the self contribute to vocal psychotherapy?

The following chapter seeks to support the use of vocal psychotherapy through an exploration of the underpinning theories and research from neurosciences, developmental theories and theories of the self. These are important areas to explore and critique as each field offers a different lens to help understand how and why vocal psychotherapy is of therapeutic value. Neuroscience directs us to the physiological functions of the brain and the nervous system - the body's decision-making and communication centre. Developmental theories give further evidence to the importance of the voice and vocal interaction particularly through its research of the mother and child relationship. Lastly, theories of the self demonstrate the ways in which non-verbal sounds and information are of therapeutic importance in vocal psychotherapy.

These theories have been chosen as they each give an important overview of the growing body of evidence that support the use of vocal psychotherapy, both internally through the body and the brain, and externally, through relationship to others.

Neurosciences contribution to vocal psychotherapy

Research suggests that vocal psychotherapy is a valid approach to fostering intrapsychic and interpersonal development (Austin, 2008). The brain is more malleable than was once recognised and "we now know that if we challenge people with new experiences, their brain pathways change to accommodate the new activity" (Rea, 2013, p.65). The brain then, is an organ that is built and then rebuilt across the lifespan, by lived experiences (Rea, 2013). This is important for the practice of vocal psychotherapy as the techniques are designed to stimulate different emotional and physical experiences that can then be discussed within the psychotherapeutic framework.

Neuroscience adds further weight to Austin's claim (above) through the function of the mirror neuron system. According to this system, introduced by Italian neuroscientists Rizzolatti and Gallese (cited in Hemmingsen, 2013), when we observe the actions of another, our own neuron system fires, as though we are ourselves performing them. Although a person may be suppressing their emotions they cannot truly keep them private, "another person can experience them physically, via the mirror neuron system"

(Hemmingsen, 2013, p. 63). Stern (2007) suggests that these mirror neurons fire when witnessing “hand, mouth, face and foot actions, as well as for vocal sounds” (p. 37) further illustrating the techniques of vocal psychotherapy and the voice itself, as therapeutic.

Neuroscience research adds further evidence to the importance of therapeutic alliance (see chapter three) and safety discussed below.

Neuroscience and safety

Feelings of safety and stability, as previously discussed, are foundational to vocal psychotherapy and are corroborated by neuroscience. Research suggests that in order for “higher-order learning and integration to take place, the human system must experience a basic sense of safety” (Cozolino, 2002, cited in Pierce, 2014, p. 9). In order for healing to occur a strong trusting relationship must be established first. This mirrors the work of “early attachment, where clients gain the basic, implicit, and often non-verbal capacities for emotional bonding and self-regulation” (Pierce, 2014, p. 9). This is of particular importance to vocal psychotherapy because of the intimate nature of singing and direct bodily experiences that occur.

The importance of embodiment leads to the next section linking neuroscience and the importance of rhythm.

Neuroscience and rhythm

The cerebellum, or reptilian brain, is the oldest part of the brain containing 50 to 80 percent of the total number of neurons despite weighing only 10 percent (Levitin, 2006, p. 174). It appears to be the way in which we track rhythm or beat. According to Stern (2007) rhythm and beat are essential to relationship, to feeling and expressing sympathy and intersubjectivity. In order “to resonate with someone, the two of you may have to be in synch” (p. 37). A reliable beat is also an important factor in whether or not we are moved, both physically and emotionally, by music (Levitin, 2006, p. 170). As previously mentioned (see chapter one), entrainment is a principle that can be applied to vocal psychotherapy practice. A series of experiments, between 1991 and 1993 “demonstrated that auditory rhythm and music can entrain the human motor system and be used to improve functional control of movement in healthy subjects and subjects with stroke” (Thaut, p. 32). This entrainment illustrates the importance of rhythmical mirroring in a therapeutic setting for enhanced empathic connection. Vocal psychotherapy uses rhythm through repetition, mirroring and timing (see chapter four). It also uses the natural rhythm of the body through inhale and exhale of the breath whilst singing.

In conjunction with rhythm, music and singing can also help connect us to our unconscious, which is discussed in the following section.

Neuroscience and the unconscious world of the emotions

To add further evidence to the way in which singing can help us to connect with our own unconscious is Levitin's (2006) work. He suggests that, "music taps into primitive brain structures involved with motivation, reward, and emotion" (p. 191). Our response is largely "pre- or unconscious because it goes through the cerebellum rather than the frontal lobes" (2006, p.192). This gives weight to the already discussed idea, that music or vocal sound is an effective way to come into contact with suppressed or repressed emotional material.

Evidence has amassed that along with rhythm, the cerebellum is also involved in emotion, which is why it is activated when people listen to, and sing, music they like (Levitin, 2006). The cerebellum is connected to the emotional centres of the brain, "the amygdala, which is involved in remembering emotional events, and the frontal lobe, the part of the brain involved in planning and impulse control" (Levitin, 2006, p. 175). The use of song can reignite these emotional centers and help a client feel strong emotion when they listen to particular songs of their past or present. This suggests that music, and singing, can also alter mood (Levitin, 2006).

Music and mood

According to Levitin (2006), music can improve mood by activating the system that is "involved in arousal, pleasure, and the transmission of opioids and the production of dopamine" (Levitin, 2006, p. 191). The rewarding and reinforcing aspects of listening to music increase dopamine levels and contribute to the regulation of "emotions through its connections to the frontal lobe and the limbic system" (Levitin, 2006, p. 191). Levitin (2006) goes on to suggest that when it comes to music the brain is all about "connections" (p. 172). Music connects us to other music we have heard and can remind us of emotional experiences in our lives (Levitin, 2006).

The music needs to swell and contract, speed up and slow down, pause and then move, in order to reflect the "dynamics of our emotional lives, and our interpersonal interactions" (Levitin, 2006, p. 172) mirroring Stern's (1985) 'vitality affects' (discussed later in the chapter).

If music has been proven to enhance mood, does this translate into singing itself or are other melodic or rhythmic instruments required? The next section will demonstrate how the act of singing itself can enhance mood.

Singing and mood

The current literature on the influence of music, and singing, on the brain and its healing influence is plentiful (Keyes, 2008: Levitin, 2006; Thiermann, 2011). Singing, specifically, has been found to stimulate endorphin release (Levitin, 2006). It is also seen to relieve stress and boost the immune system (Austin, 2008; Keyes, 2008; Levitin, 2006). Clift and Hancox, (2001), found through a study at the university of Frankfurt, "after singing Mozart's Requiem for an hour, choir members' blood tests showed significantly increased concentrations of immunoglobin A (proteins in the immune system which function as antibodies) and hydrocortisone (an anti-stress hormone)" (cited in Austin, 2008, p. 21). One week later, scientists asked the same participants to listen to the recording of the same Mozart Requiem without actually singing. The blood results, this time, did not change significantly (Austin, 2008). This study proved that the physical act of singing helped in the increase of positive mood rather than just the social experience of connection in a group setting. It was also the singing itself rather than just listening to the music that had the most effective result.

According to Gottfried Schlaug, associate professor of neurology at Harvard University, singing can be felt as an enjoyable activity. As cited in Discover magazine (2010) "there's rarely any other activity that could really activate or engage this many regions of the brain that is experienced as being a joyous activity" (cited in Thiermann, 2011, p. 42). A person's own ear and brain tend to find their own "singing pleasurable even if others do not agree" (Weinberger, 1996, cited in Austin, 2008, p. 21). Singing can facilitate personal healing, change and transformation by reclaiming the "lost pleasure and freedom of sound-making they had as babies" (Thiermann, 2011, p.17).

The ability to perceive, or make sense of music is present from early in development (Zatorre, 2005). The infant is equipped with a brain structure that is prepared, and able, to figure out its musical world, to recognise different chords and scale structures, and show a preference for consonant over dissonant sounds (Zatorre, 2005). In other words, an infant's "nervous systems seem to be equipped with a capacity to sort out the different musical sounds reaching their ears in order to construct a grammar, or system of rules" (Zatorre, 2005, p. 314). It is important to note here, however, that this is culturally dependent and each culture has different sounds available to them. Babies, then, are able to develop the sounds of their own culture and disregard other sounds they do not need access to. Our brains, therefore, "are socially

programmed by older members of our community, so that we adapt to the particular family and social group we must live among" (Gerhardt, 2004, p. 38).

The neurosciences have added weight to the validity and potency of vocal psychotherapy through research on the importance of rhythm, the connection between music and the unconscious, as well as the ways in which singing can alter mood. Since the development of the brain and the ways in which we process music and sound begins in infancy or, most likely, before, it is important to understand the contribution of developmental theories. This is discussed below.

Developmental theories and vocal psychotherapy

The following section will explore the connections between infants and their own voice alongside the importance of the mother's voice and how her voice contributes to healthy development and connection. It is important to discuss infant development as, just as in traditional psychotherapy, vocal psychotherapy works through a reparative process correlating with early development.

Infants and the voice

The cry of the baby at birth is "the first vocal expression announcing new life" (Thiermann, 2011, p.11) suggesting the voice and vocalizing as an integral part of infancy. Infants continue to create and use sound instinctively (Austin, 2008). As well as a way to communicate, these sounds are also made purely for pleasure through the sensations of the lips, teeth and the tongue. The freedom of the infant's sound "characterizes spontaneity and health" (Austin, 2008, p. 22) as healthy infants naturally display melodic structure, ascending and descending pitch, from the time of birth (Newham, 1998). At approximately six months of age babies begin to make la-la-la sounds purely for pleasure. They are not trying to communicate, instead are "simply enjoying the pleasurable sensation of repeating simple syllables" (Austin, 2008, p. 22).

Even before birth babies are subject to sound cues, "during gestation, the human fetus receives musical and other sound stimuli from vibrations transmitted through amniotic fluid" (Taylor, 1997, p.24 cited in Austin, 2008, p. 22). These sounds heard in the womb, including the mother's heartbeat, breathing and her voice, help to stimulate the brain by firing electrical currents into the cortex (Thiermann, 2011). Sound is an integral part of a baby's experience and a way in which to connect to mother.

Mother and child

The interaction vocally between mother and child, whether that be babbling, speech or song is “critical to the child’s developing sense of self” (Austin, 2008, p. 23). Tomatis (1991) was one of the first psychologists to write about the sonic connection between mother and baby. He found that baby birds still in the egg whose mothers did not sing to them, did not sing when hatched. According to Tomatis the voice of the mother “was like a vocal umbilical cord to the baby in the womb. And once the baby was born, the mother’s voice was as important to nurturing the baby as her milk” (Tomatis, 1991, p. 132 cited in Thiermann, 2011, p.9). This research suggests the importance of the voice and its connecting and bonding ability between mother and child, which underpins vocal psychotherapeutic practice. The voice both connects us, and is a nurturing and soothing tool as discussed below.

“The song of the mother is, in fact, our first healing song” (Gioia, 2006, p.7). Infants use their own voices to sing and to vocalize imitating their mothers to nurture themselves (Winnicott, 1991). Somewhere between the ages of three to four months the child begins to produce songs that resemble singing. This singing and/or babbling helps settle the child, providing feelings of self-sufficiency, preserving the “illusion of a comforting, soothing mother” (Winnicott, 1963, p.
22).

Gioia (2006) found through a study of six-month-old infants that after watching 10- minute videos of their mothers singing their own “body chemistry was altered” (p. 7). Measurable changes in the infants’ salivary cortisol were recorded, either lowering it if it was high, or raising it if it was low. Further research has shown that “newborns prefer a story that had been read aloud repeatedly during these final months in the womb to other, previously unheard tales” (Gioia, 2006, p.7). In other words, infants can recognise and be soothed by sound even before birth and continuing into infancy. Vocal psychotherapy draws on this premise using sound to sooth a client when needed (see chapter four).

During the first year of life a child engages in “a full exploration of our vocal freedom from babbling to cooing to spontaneous and uninhibited song” (Thiermann, 2011, p.12). They instinctively use sound to express themselves. This primitive vocal energy is wordless spontaneity bypassing the rational part of our brain, “their own language of toning” (Keyes, 2008,p. 27). However, when the baby learns to combine and associate mental images with the voice and with words, the natural spontaneous sounds can be diminished and “interference is imposed upon the body-voice” (Keyes, 2008, p. 27). These instinctual drives to vocalize, to sing, to drum, and to move can often find

almost no outlet in the modern world (Thiermann, 2011). This can begin to "close the door between the conscious and subconscious mind; between thinking and feeling communication" (Keyes, 2008, p.27). Vocal psychotherapy can reopen those connections using the voice both in non-verbal and verbal ways discussed below.

The lost voice

In its primal form, language was a system of emotive and intuitive sounds, sounds that can express the emotions of terror and rage, of love and joy. Through the development andacquisition of language, alongside messages from our peers and/or wounds in our childhood, early primal sounds can be squashed, silencing the voice and creating disconnection (Thiermann, 2011). This is, perhaps, part of the reason why people, particularly in adulthood, often feel that language cannot fully express their inner world (Newham, 1999; Thiermann, 2011). Vocal psychotherapy can help people get in touch with their more primal sounds that may have been locked away. It is, perhaps, only when a person becomes overly excited, angry or intoxicated, that vocal limitations are forgotten. Only then do "we forget our civilized range limitations and the primal cry can be heard again" (p. 41 cited in Thiermann, 2011, p.14). Vocal toning and vocal holding can directly access these primal sounds.

According to Moses (1994) the voice can act as a mirror to an individual's psychological conditions. As children grow and develop many learn to be afraid of their own natural powers, yet at the same time the child "yearns to speak or reach out into the world – if only we could be sure of being heard and understood" (Campbell, 1989, p. 32 cited in Thiermann, 2011, p.14). A person may then survive "by forfeiting his or her own voice" (Austin, 2008, p. 24) for fear of not ever being heard or known. Vocal psychotherapy can facilitate in releasing the voice and the emotions that may be trapped within it ideally offering the client a space to be heard and understood (see chapter four).

The next section will examine the theories of self, with specific reference to Daniel Stern's theories, and how they may contribute to our understanding of vocal psychotherapy. This will provide another interpretive lens from a highly regarded researcher, whose work has focused on the importance of non-verbal communication in development, and how non-verbal communication can be used in psychotherapeutic practice.

Theories of self and vocal psychotherapy

At the center of Stern's theory is the sensory-motor processing of the infant; the direct felt experience of the body, "its sensations and perceptions" (Hartley, 2004, p. 77). His research draws on "both analytic theory developed from clinical practice, and developmental theory derived from observation of infants and mothers" (Hartley, 2004, p. 76). This emphasis on felt experience fits well with the methodology of interpretive hermeneutics, and this research topic, as it seeks to understand human beings through embodiment, or lived experience. This section will examine Stern's emergent, core, subjective, and verbal sense of self and how these ideas contribute to the effectiveness of vocal psychotherapy. Stern's added narrative self (1998) has not been included in this work due to the size and scope of the research project alongside its focus on the importance of non-verbal communication.

According to Stern (1985) the way we experience life as adults is largely determined by our formative years in infancy and childhood and the relationships we experienced during these phases. He suggests that parents relate to their children instinctively as if they were more than just "physiological systems needing care and regulation, but also social beings with feelings, sensibilities, and an emerging sense of self" (Hartley, 2004, p. 77). In other words, the infant is viewed holistically as a human being with a mind and body. This philosophy also underpins vocal psychotherapy and the way in which a client is viewed and, hopefully, understood.

During the first two months the infant is actively forming what Stern calls an emergent sense of self. These infants experience the world through unrelated sensory stimuli (Stern, 1985), in other words experiences from all the senses. The baby's experience of its senses is what Stern describes as *'amodal'*, where the awareness of experience is not differentiated between the different senses but instead is more global (1985). In other words babies use, and glean information, from sight, sound, touch, etc. seeking out pleasurable experiences over non- pleasurable ones (Stern, 1985). Infants are then motivated to organise these experiences into the familiar and unfamiliar, preferring the familiar. As discussed the mothers voice is a familiar and pleasurable sound to the infant. Creating their own sounds through babbling and cooing is also a source of pleasure and comfort and it is the physical experiences through the body that are remembered, as the body remembers faster than the brain (Stern, 1985). The felt sense in the body is how the baby initially experiences the world, there is no vocal language attached.This is fundamental to vocal psychotherapy as non-verbal communication is felt and explored before any words are attached these experiences.

The embodied nature of Stern's (1985, 1998) theory underpins vocal psychotherapy practice and the techniques employed (see chapter four). If the physical experience and embodiment of these experiences are important to an infant's development, then rhythm and movement must also be of importance, as it is through rhythm and movement that we, as human beings, relate.

Rhythm and the theories of self

According to Stern (2003) "a great deal of social interaction goes on in the service of physiological regulation" (p. 43). Beat, rhythm and duration are important in this regulation as babies experience their caregiving through these qualities. The heart pulsates at roughly seventy-two beats per minute (Gioia, 2006), which is our own internal metronome. Slowing the rhythm down to less than this can help sooth us and speeding up can stimulate. This means that as the mother slows down the rhythm, or speeds it up, the baby's body follows. Babies need both stimulation and soothing. Vocal psychotherapy draws on this premise using rhythm as a way in which to sooth or stimulate, to speed up or slow down.

The use of 'vitality affects' (Stern, 1985) - "the explosions, crecendos, surges, and fadings that concern how a behaviour is performed" (Hartley, 2004, p. 82) within the psychotherapeutic space are easily accessed and mirrored through vocal psychotherapy techniques (see chapter four). For example, the therapist can mirror back the subtle nuances of the voice that harbor all these varying emotions as they are revealed in the voice, within a session.

Core sense of self and vocal psychotherapy

By the age of two to three months, infants are beginning to gain "some control over their actions, ownership of feelings, and a sense of others as being distinct individuals separate from them" (Hartley, 2004, p. 79). It is during this phase of development that the sense of a core-self emerges. This is an active, not a passive process and interpersonal experiences are required. It is also a process that directly involves the infant's own somatic activity (Stern, 1985). Developmental failures at the level of the core self can be unapproachable, according to Stern (1985), by traditional psychodynamic techniques. He suggests that "bodywork, somatic movement therapy, dance movement therapy, and body psychotherapy may access this domain of experience more directly, and can be significant in the healing of wounds at the next level of core relatedness" (Hartley, 2004, p. 85). Vocal psychotherapy could be added to this list as it directly accesses the body and the preverbal experience. It does not require symbolic language, especially in the early stages.

Following on from the core sense of self, is the subjective sense of self which focuses on the intersubjectivity of the infant, another principal foundational to vocal psychotherapy.

Subjective sense of self and vocal psychotherapy

From approximately 7 to 15 months infants begin to realise that they have their own minds and that these minds can also be shared with another. This intersubjective relatedness develops out of the process of core-relatedness (Stern, 1985). Stern suggests that this intersubjectivity is a primary psychological need and is achieved through “affect attunements”. This is where the mother responds to the infant conveying “a similar feeling state, rhythm, and temporal pattern, but performed through a different modality” (Hartley, 2004, p. 82). For example, a vocal sound made by the infant may be responded to by another sound, or movement, effectively mirroring the infant’s emotional, or affective state.

Just as the infant learns that his or her internal states are a part of the human experience and are shareable with other human beings, if certain feeling states are never attuned to the infant experiences them alone, “isolated from the interpersonal context of shareable experience” (Stern, 1985, p.151). If an infant has not been adequately mirrored, or attuned to, parts of their experience may be cut off or repressed. Vocal psychotherapy offers a place in which people can share their experiences even if they have no words for them, reminiscent of this period of infancy. The same way an “empathic, attuned mother comes to understand the essence of her child’s non-verbal language, an attuned therapist can often interpret aspects of the client’s musical expression and come to recognize the unique musical language specific to each client” (Austin, 2004, p. 199). This recognition occurs both through the notes a client may sing and sounds they make, alongside the emotional quality that accompanies those sounds.

As the infant begins to develop language, the possibilities for expression both open up and, perhaps also, create a split in the feeling and intellectual world. This will be discussed below.

Verbal sense of self and vocal psychotherapy

The infant begins to develop language, or a verbal sense of self, during the second year of life (Stern, 1985). This, of course, opens up new possibilities for sharing experience but it can also “drive a wedge between two simultaneous forms of interpersonal experience: as it is lived and as it is verbally represented” (Stern, 1985, p.162). This can make some “parts of our

experience less sharable with ourselves and with others" (p. 162). A split between mind and body is then formed. Inside this split there are two versions of life, life as the non-verbal felt experience and the verbal account of that same experience. This of course has implications for traditional psychotherapy where "the verbal account is the primary version available" (Hartley, 2004, p. 83) often missing out pieces of the original experience. As discussed in chapter one, however, a way in which all aspects of the self can be brought back into harmony is through sound (Keyes, 2008). It is here that vocal psychotherapy can utilise methods and techniques to help achieve this type of integration.

Neurosciences, developmental theories and theories of the self each contribute to the understanding of how vocal psychotherapy works, and can be effectively implemented. This chapter has demonstrated how the underpinning theories add weight to the value and effectiveness of vocal psychotherapy, through the use of rhythm, the unconscious, mother-child vocal interaction and the importance of the non-verbal.

The following chapter will conclude this research and offer areas of critique and potential for future research. It will tie together the findings, discussing the limitations of this small research project.

Chapter Six: Conclusion and further potential for research

Vocal psychotherapy is an emerging field of enquiry and the theories, methods and techniques that underpin this practice are coming more to the fore in their usefulness and effectiveness. This dissertation has focused on three theoretical perspectives that underpin vocal psychotherapy. These included neuroscience, developmental theories and theories of the self. Other lenses, such as Jungian theory, could be further utilised to add weight to this research and weight to the use and effectiveness of vocal psychotherapeutic methods and techniques.

Limitation of perspectives

One of the challenges of this particular research is the small (but growing) amount of literature available on this topic and the limited number of perspectives. Although a lot of the current research available draws on ancient spiritual traditions and teachings that are more expansive than just the Western World, the authors are predominantly speaking from a Western world-view. A more extensive study of differing perspectives is required for a more well rounded research.

The size and scope of this particular dissertation has also limited the amount, and diversity, of the literature gathered. Only material published in English has been included, which has contributed to the limitations of perspective. The training facilities for this specific form of psychotherapy are available through a small number of avenues, which, once again, limits the amount of perspectives and knowledge available.

The current literature, that includes case studies, is more readily available with clients who have musical experience, were, at the time, studying music therapy and/ or are singers. Further in depth studies, with larger client populations are needed in order to gain a deeper understanding of how vocal psychotherapy may be used across wider populations. This is particularly true for Aotearoa/ New Zealand as no case studies, or culturally specific vocal psychotherapy work, has been published in this country. The lack of client samples have limited the amount of knowledge available for understanding vocal psychotherapy's effectiveness in this country, and overseas, and have led to deductive reasoning, a top-down approach, that assumes vocal psychotherapy to be of value in Aotearoa/ New Zealand from conclusions found in other parts of the world. Further research is needed to provide and extend the evidence base that vocal psychotherapy could be effectively used with Maori and Pakeha clients, in the New Zealand setting.

My own subjectivity is also a limitation in this study as it is evident that this dissertation has a natural bias toward the belief that vocal psychotherapy is a useful psychotherapeutic tool. However, it is also through my own subjectivity and knowledge of the voice that a deeper understanding of how these vocal techniques can be utilised was discussed. This dissertation provided the basis of understanding about what vocal psychotherapy is and how the techniques are used within a psychotherapeutic setting. I have applied research and theory and these different fields of information have offered much to suggest that the voice can be used as a psychotherapeutic tool and that the voice is possibly under utilised in psychotherapeutic work (Austin, 2008). Vocal psychotherapy has also been shown to be a valid form of psychotherapy.

The literature available on this topic is limited in viewpoint, not only through lack of diversity within cultural experience, gender, ethnicity and client base, but also through lack of quantitative research. More varied, and in depth research is required for a broader perspective. The scope of this research is also limited. It was a small dissertation, by requirement, with a limited pool of material to draw from. Further research is required through both qualitative and quantitative study. Further study will help develop understanding about the effectiveness of vocal psychotherapeutic techniques within different client populations as discussed below.

The effectiveness of vocal psychotherapeutic techniques within client populations

The techniques of toning, vocal holding and free associative singing are utilised in the practice of vocal psychotherapy and this dissertation has outlined how these techniques work and the ways in which they are effectively implemented (see chapter four). As stated in chapter two, vocal psychotherapy is defined as the use of the voice to promote intrapsychic and interpersonal change. It offers a space in which to express what needs to be expressed but may be difficult to say. This expression leads to further exploration and eventual integration of suppressed or repressed emotional material. However, questions still remain over which techniques are the most effective, and which clients will benefit most from this type of work? In other words, can these techniques be used with equal effectiveness for different mental health complaints within the diverse cliental that vocal psychotherapists may work with? Or are specific techniques more beneficial for certain groups of people, for example, clients suffering from depression as opposed to those with eating disorders or addiction issues? More specific research is required.

Questions also remain about the optimal timing of the techniques and interventions. When is it most effective to use vocal toning, vocal holding and free associative singing? How does the therapist come to understand what is

most beneficial to the particular client, in a particular moment? Again, further research is required with larger sample groups from a wider demographic. More detailed research may also be of benefit to help determine which techniques should be used at any particular moment.

What has been demonstrated is that singing can lift mood and wellbeing within the therapeutic relationship, which generates a trusting and safe rapport. These ideas are backed by choir research (see chapter one), however more specific research is required, with the correlation between the act of singing rather than participation in a group, or engaging in creative acts, more clearly demonstrated as the significant healing factor. More specific research focusing on the client/ therapist dyad is also required.

What has been demonstrated is that using the voice can assist in accessing deeper levels of the unconscious. If vocal sounds then can lead us into the inner world of the unconscious, can releasing or freeing the voice assist in one's own healing? Developmental theories point to the notion that the voice is used instinctively as a connecting and soothing tool between mother and child (see chapter five). It is thus assumed that the same soothing elements can be brought into the therapeutic relationship to help heal developmental injury and soothe client's if/ when they become distressed or overwhelmed. This dissertation was focused solely on exploring and understanding whether or not vocal psychotherapy can be of therapeutic value. Further research is required to gain deeper understanding about how the voice can be further utilised in mainstream psychotherapy and how techniques from vocal psychotherapy may be used and adapted to fit more traditional psychotherapy practice. What is accepted in both traditional psychotherapy, and vocal psychotherapy, is the necessity of being heard, being listened to and accepted.

“For every person has within them their own undeniable voice waiting to be discovered, listened to and accepted. And once that voice is heard, its song can no longer be silenced” (Austin, 2008, p. 213).

References

Aveyard, H. (2014). *Doing a literature review in health and social Care: A practical guide*. Retrieved from http://www.eblib.com

Austin, D. (2001). In search of the self: The use of vocal holding techniques with adults traumatized as children. *Music Therapy Perspectives, 19*(1), 22-30. http://dx.doi.org/10.1093/mtp/19.1.22

Austin, D. (2004). *When words sing and music speaks: A qualitative study of in depth music psychotherapy with adults* (Doctoral thesis, New York University: NY).

Austin, D. (2008). *The theory and practice of vocal psychotherapy: songs of the self.* London, United Kingdom: Jessica Kingsley.

Bentz, V., & Shipiro, J. (1998). *Mindful enquiry in social research.* London, United Kingdom: Sage.

Boell, S., & Cecez-Kecmanovic, D. (2014). A Hermeneutic approach for conducting literature reviews and literature searches. *Communications of the Association for Information Systems. 34*(12), 257-286.

Bourne, E. (1990). *The anxiety and phobia workbook*. Oakland, CA: New Harbinger.
Bowlby, J. (1969). *Attachment and loss.* New York, NY: Basic Books.

Broom, B. (1997). *Somatic illness and the patients other story.* New York, NY: Free Association Books.

Broom, B. (2007). *Meaning-full disease*. London, United Kingdom: Karnack Books.

Bunt, L., & Stige, B. (2014). *Music therapy: An art beyond words (second edition).* New York, NY: Routledge.

Campbell, D. (1992). *Music and miracles.* Weaton, IL: Quest Books.

Campbell, D. (1998). *The roar of silence*. Weaton, IL: The Theosophical Publishing House.

Clements-Cortes, A. (2013). Vocal psychotherapy: Connecting to the self via the voice.*Canadian Journal of Education*, *55*(1), 39-41. Retrieved from http://www.csse.ca

Collens, P. (2015). *The relational dimension of one-to-one tuition: Conservatoire vocal studies* education. (Doctoral thesis, UCL Institute of Education, University College, London: United Kingdom).

Diesling, P. (1991). *How does social science work? Reflections on practice.* Pittsburgh, PA: University of Pittsburgh.

Estill, J. (1996). *Primer of compulsory figures.* Santa Rosa, CA: Estill Voice Training Systems.

Fleck, K., Smythe, A., & Hitchen, J. (2011). Hermeneutics of self as a research approach. *International Journal of Qualitative Methods*, *10*(1), 14-29.

Gadamer, H. (1975). *Truth and method.* London, United Kingdom: Sheen and Ward.

Gaynor, M. (1999). *Sounds of healing: A physician reveals the therapeutic power of sound, voice, and music*. New York, NY: Broadway Books.

Gerhardt, S. (2004). *Why love matters: How affection shapes a baby's brain.* London, United Kingdom: Routledge.

Goldman, J., & Goldman, A. (2011). *Chakra frequencies: Tantra of sound.* Rochester, VT: Destiny Books.

Groddeck, G. (1977). *The meaning of illness.* London, United Kingdom: Hogarth Press/ Institute of Psychoanalysis

Gummesson, E. (2000). *Qualitative methods in management research* (Second edition). London, United Kingdom: Sage.

Halprin, A. (2000). *Dance as a healing art.* Mendocino, CA: Life Rhythm.

Hammond, M., & Wellington, J. (2012). *Research methods: The key concepts.* London, United Kingdom: Routledge.

Hartley, L. (2004). *Somatic psychology: Body, mind and meaning.* London, United Kingdom: Whurr.

Holmes, J. (2001). *The search for the secure base*: *Attachment theory and psychotherapy*. Hove, United Kingdom: Brunner- Routledge.

Horowitz, S. (2013). The healing power of music and dance. *Alternative and Complementary Medicine, 19*(5). http://dx doi.org/10.1089/act.2013.19502

Jacobs, T. (1999). Countertransference past and present: Review of the concept. *International Journal of Psycho-Analysis*, *80(3),* 575-594. http://dx.doi.org/10.1516/0020757991598783

Johnson, S. (1994). *Character styles*. New York, NY: Norton.

Klage, M. (2012). Key terms in literary theory. *Choice Reviews Online, 50(*04), 50-1817-50-1817. http://dx.org/10.5860/choice.50-1817

Levitin, D. (2006). *This is your brain on music*. London, United Kingdom: Atlantic Books.

Loewy, J. (2004). Integrating music, language and the voice in music therapy. *Voices: A World Forum for Music Therapy*, *4*(1). http://dx.doi.org/10.15845/voices.v4il.140

Maroda, K. (2010). *Psychodynamic techniques: Working with emotion in the therapeutic relationship*. New York, NY: Guildford Press.

McDougall, J. (1989) *Theatres of the body*: *A psychoanalytical approach to psychosomatic illness*. New York, NY: Norton.

McLeod, J. (2011). *Qualitative research in counseling and psychotherapy* (Second edition). London, United Kingdom: Sage.

Miller, A. (1981). *The drama of the gifted child*. New York, NY: Basic Books.

Moore, B., & Fine, B. (1990). *Psychoanalytic terms and concepts*. New Haven, CT: Yale University Press.

Newham, P. (1998). *Therapeutic voicework: Principles and practice for the use of singing as therapy.* London, United Kingdom: Jessica Kinsely.

Negus, V. (1949). *The comparative anatomy and physiology of the larynx*. New York, NY: Hafner Press.

Obert, K., & Chicurel, S. (2005). *Geography of the voice.* Santa Rosa, CA: Estill Training Systems.

O'Leary, Z. (2010). *The essential guide to doing your research project*. London, United Kingdom: Sage.

Overland, G. (2005). Voice and Dna trauma*. Revision: A Journal of Consciousness and Transformation*, *27*(3),26-33. http://dx.doi.org/10.3200/revn.27.3.26-33.

Pathak, V., Jena, B., & Kalra, S. (2013). Qualitative research. *Perspectives in Clinical Research*, *4* (3),192. http://dx.doi.org/10.4103/2229-3485.115389

Petticrew, M. & Roberts, H. (2006) *Systematic reviews in the social sciences.* Oxford, United Kingdom: Blackwell Publishing.

Pierce, L. (2014). The integrative power of dance/movement therapy: Implications for the treatment of dissociation and developmental trauma. *The Arts in Psychotherapy,41* (1), 7-15. http://dx.doi.org/10.1016/j.aip.2013.10.002.

Rattner, J. (2012). *Compose: Singing as a depth modality in the treatment of trauma*. Carpinteria, CA: Pacifica Graduate Institute.

Rea, K. (2013). *The healing dance: The life and practice of an expressive arts therapist*. Springfield, ILL: Charles C. Thomas

Rogers, N. (1993). *The creative connection.* Palo Alton, CA: Science & Behavior Books.

Ryan, T. (2011). The teacher/researcher and the role of pre-understanding: A personal analysis.*The New Zealand Journal of Teacher's Work*. *8* (2), 220-228. New Zealand: Massey University.

Schore, A. (2009). Relational Trauma and the Developing Right Brain. *Annals of the New York Academy of Sciences, 1159*(1),189-203. http://dx.doi.org/10.111/j.1749-6632.2009.04474.x

Schuster, M. (2013). Hermeneutics as embodied existence. *International Journal of Qualitative Methods*,*12,* 195-206.

Sokolov, L. (1987). Vocal improvisation therapy. In K. Bruscia (Ed.), *Improvisational Models of Music Therapy* 353-359. Springfield, IL: Charles C. Thomas.

Stern, D. (1985). *The interpersonal world of the infant*. New York, NY: Basic Books.

Stern, D. (1998). *The interpersonal world of the infant.* New York, NY: Basic Books.

Stern, D. (2004). *The present moment in psychotherapy and everyday life.* New York, NY:W.W. Norton.

Stern, D. (2007). Applying developmental and neuroscience findings on other-centred participation to the process of change in psychotherapy. *On being moved: From mirror neurons to empathy*, *68*, (35).

Strenger, C. (2001). Psychotherapy and hermeneutics. *International Encyclopedia of The Social & Behavioral Sciences*, 12458-12460. http://dx.doi.org/10.1016/B0-08-043076-7/01328-0

Summers, S. (2014). *Portraits of vocal Psychotherapists: Singing as a healing influence for change and transformation* (Unpublished doctoral dissertation*)* Antioch University, Ohio, IL.

Thiermann, A. (2011). *Rising into song: Voicework in psychotherapy* (Unpublished master's thesis*).* Pacifica Graduate Institute, Carpinteria, CA.

Thaut, M. (2013). Entrainment and the motor system. *Music Therapy Perspectives, 31*(1), 31-34. http://dx.doi.org/10.1093/mtp/31.1.31

Wersal, L. (2006). Song and self-discovery: touching the pattern that connects. *Voices: A World Forum for Music Therapy, 6*(3). http://dx.doi.org/10.15845/voices.v6i3.281

Winnicott, D. (1953). Transitional objects and transitional phenomena, *International Journal of Psychoanalysis 34*, 89-97.

Winnicott, D. (1963). Dependence in infant care, in child care, and in the psycho-analytic setting. *International Journal of Psycho-Analysis, 44*(3), 339-344.

Winnicott, D. (1991). *Playing and Reality*. London, United Kingdom: Routledge.

Wong, L. (2012). *Scales to scalpels: Doctors who practice the healing arts of music and medicine*. New York, NY: Pegasus

Zatorre, R. & McGill, J. (2005). Music, the food of neuroscience?. *Nature, 434*(7031), 312-5. http://dx.doi.org/10.1038/434312a