

**Becoming ‘mental health-related climate-literate professionals’:
counsellors’ meaning-making in relation to (therapeutic
experiences of) client distress about climate change and
chemtrails.**

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Abstract

This qualitative study examines the concept of counsellors' being (or becoming) a 'mental health-related climate-literate professional' by exploring counsellors' notions of this concept through their encounters and experiences of clients concerned or distressed about climate change and chemtrails. Prompted by Cornforth's (2008) question (*Do Counsellors Have a Part to Play in Averting a Potential Catastrophe?*) this research has gathered the views, perceptions and experiences of a small selection of practicing counsellors. The purpose of the research has not been to substantiate or validate any particular theory about the existence of climate change or chemtrails (there are many protagonists and deniers of each of these), but rather to gather and document narrative accounts of counsellors' 'lived experiences' from their interactions with clients concerned about these phenomena. A process of re-storying and a dialogic narrative analysis methodology is utilised with an emphasis on reflexive meaning-making in order to present a range of perspectives on the *meaning* of being (or becoming) a mental health-related climate-literate counsellor.

All of the participants conveyed concerns about chemtrails, and about the impact of climate change on the environment and people's mental health. The natural environment and a relationship with nature for therapeutic benefit featured prominently within each participant's meaning-making about being (or becoming) a climate-literate counsellor. All participants expressed agreement that counsellors should have some level of climate-literacy, and an appreciation of how nature and the natural environment can assist clients therapeutically. Other findings referenced by this report include: Eco-therapy; the 'life-force' of nature; taking a pluralistic approach to engaging with conspiracy narratives in a counselling context; and the ethical obligation for counselling professional organisations to include climate-literacy in counsellor training and accreditation programmes.

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My thanks also to Elana Freeland who has been investigating and publishing on the subjects of geoengineering, climate change and weather manipulation, and the chemtrail phenomenon for at least the last decade. New Zealand environmental researchers and activists that have in-directly contributed by sharing valuable information from time to time include Clare, Paula, Nigel, Si, Marian, Zane, John, Donna, and Tony – thank you all for your contributions, this thesis could not have been written without the collective volume of material each of you contributed over the years of this research.

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Table of Contents

Abstract	i
Acknowledgments	ii
Table of contents	iii
List of Appendices & List of Figures	v
List of Tables	vi
Preface	vii
Chapter 1 – Introduction	1
1.1 How I came to be researching climate change and chemtrails	1
1.2 Situating the context of this research	6
1.3 Research questions	7
Chapter 2 - Literature Review	9
2.1 Counselling, climate change and the global chemtrail phenomenon	9
2.2 Discursive interpretations about climate change	11
2.3 Public anxiety about climate change	13
2.4 Ecotherapy and the ‘greening’ of psychology	17
2.5 Atmospheric geoengineering and the global chemtrail phenomenon	19
2.6 Media Bias and attempts to debunk the chemtrail narrative	21
2.7 Analysis of alleged chemtrail ‘fallout’	24
2.8 The chemtrail phenomenon in New Zealand	25
2.9 Climate change adaptation and mitigation, and counselling	27
2.10 Disturbing or distressing beliefs about climate change or chemtrails	31
2.11 Narratives and ‘restorying’ in counselling practice and research	33
2.12 Counselling and ‘conspiracy’ beliefs	34
2.13 Summary	38

Chapter 3 - Methodology & Methods	39
3.1 Narrative Methodology	39
3.2 Method	41
3.3 Participants	44
3.4 Data collection	46
3.5 Data Analysis – coding of data and a dialogic narrative analysis	46
3.6 Dialogic Narrative Analysis	49
3.7 Reflexivity as a feature of Dialogic Narrative Analysis	51
3.8 Ethics, validity and trustworthiness	52
Chapter 4 - Presentation of narratives – with Dialogic Analysis	54
4.1 Clare’s narrative (re-storyed)	56
4.2 Miriam’s narrative (re-storyed)	67
4.3 Jame’s narrative (re-storyed)	79
Chapter 5 - Presentation of Findings	88
5.1 Reacquainting with my research participants	88
5.2 Feelings that connect you to your heart	93
5.3 Redemption and the life-force of nature	95
5.4 Being, or becoming, a mental health-related climate-literate professional	98
5.5 A formative model for mental health-related climate-literate professionals	101
5.6 Finding more of myself through my research	103
Chapter 6 - Discussion	105
6.1 Findings that link to established literature	105
6.2 Meaning-making through re-storying	108
6.3 Implications for counsellor education about climate change	110

6.4	Conspiracy in the counselling room, chemtrails and contested truths	114
6.5	Consideration for further research about the chemtrail phenomenon	115
	Chapter 7 – Conclusions	117
	References	120
	Appendices	130 - 146

Appendix A – Comparison of survey results of public awareness of chemtrails 2010 to 2016.

Appendix B – A Decade of Alleged Atmospheric Geoengineering in New Zealand: 2009-2019.

Appendix C – Research Questions.

Appendix D – Human Ethics Committee Approval.

Appendix E – Participant Research Information and E-mail.

Appendix F – Participant Consent Form.

Appendix G – Emerging data extracts from interviewee transcripts.

Appendix H – Identification of themes from coded data extracts.

Appendix I – Dunne, C. (2017). My month with chemtrail conspiracy theorists.

List of Figures

Figure 1: Two identical aircraft (both Airbus A320), emitting very different types of trails.

Page 4

Figure 2: Intersection of climate change and chemtrail narratives in a counselling setting.

Page 6

Figure 3: Taranaki Daily News: Struck by a fit of the vapour trails – reader survey 23 July 2012.

Page 27

Figure 4: Alleged New Zealand government surveillance of chemtrail social media sites.

Page 32

Figure 5: Four dimensional model for a mental health-related climate-literate professional.

Page 102

List of Tables

Table 1: Initial (self-generated) Research Questions.	Page 7
Table 2: Data extracts coded for ‘the natural environment and nature’.	Page 47
Table 3: Refinement of themes and sub-themes.	Page 49
Table 4: Comparison of participant responses to the question about counsellor climate change literacy.	Page 99

Preface

On 20 August 2017 while campaigning for election to be New Zealand's next Prime Minister Jacinda Ardern stated in one of her campaign speeches: "climate change is the challenge that defines my generation..." As this thesis will attest, climate change is likely to increasingly become a defining factor in the lives of every person on Earth in this century in some way or another and the counselling profession has an ethical responsibility to be informed and prepared for this.

However, researching and reporting on the chemtrail phenomenon, which features as much as climate change in this thesis, is far less straightforward. Labelled as a 'conspiracy theory' it immediately becomes subject to individual and collective scepticism, which was purportedly how the term originally came into use in the 1960's as a means to deliberately discredit critics of the Warren Commission's findings on the Assassination of President Kennedy. Since the Warren report, which has been disputed by investigative reports, numerous books and even in movies, it is probably fair to say that the next most globally significant and widely disputed authoritative report since the 1960s would be the conspiracy surrounding the findings of the 9/11 Commission, referred to in this thesis. What, you may ask, does the 9/11 conspiracy narrative have to do with this counselling research?

Since 9/11 conspiracy narratives have increasingly become a common feature of everyday life for many people particularly given the ease of access to alternative and social media, citizen journalism, and independent investigative reports accessible via the internet. Both the events of 9/11 and the global chemtrail phenomenon share a two uniquely distinguishing commonalities. Firstly, the complete closure of United States airspace to all commercial flights following the 9/11 attacks allowed only military aircraft to continue to operate as scheduled and chemtrails were reportedly witnessed in various parts of the U.S. over this

period (business as usual for the armed forces, and evidence of alleged military involvement with aerial aerosol spraying operations). The second defining commonality of both these conspiracy narratives is the notion of '*hidden in full view*'.

Evidence of a secret conspiracy entirely contrary to official explanations of the 9/11 building collapses, and the mysteriously persisting trails from aircraft witnessed by millions have been visible to the public in person or via the internet on a daily basis since the early 2000s. This has effectively enabled investigative journalists, expert researchers, and members of the general public to view, re-view and scrutinise evidential details of each of these phenomenon as much and as often as wanted. In the case of the global chemtrail phenomenon, *in full view* and discussed on-line by thousands researchers, with numerous on-line and print publications disputing official explanations of aircraft trails, public authorities and government officials continue to assert that chemtrails do not exist and that the chemtrail narrative is a conspiracy theory. Several New Zealand government agency officials in routine correspondence with the public have referred to chemtrails as an 'urban myth'.

What then, can be considered as truth?

Public and expert authorities that deny evidence *carte blanche*, or actively discredit contrary sources that are accessible and widely available to the general public erode public confidence and feed mistrust. This can also create doubt and confusion, which is sometimes a deliberate strategy. However, people as individuals have an innate capacity to discern and to know what is *true*.

And here is where counsellors have a role, in supporting and enabling their clients to know, and feel, and value for themselves, what is true.

Chapter 1 – Introduction

I'm writing this introduction in the first person from my own 'lived experience' as a practicing counsellor, and student of counselling working toward completing this thesis. I began counselling in the 1990's with a social service agency having completed a bachelors' degree in education and counselling theory. My learning and style of practice at that time was most significantly influenced by the work of Carl Rogers, which is widely recognised and commonly referred to as person-centred counselling (MacDougall, 2002). In the early 2000's I trained in Life Coaching and was member of the International Coach Federation and in 2003 I attended the first year of the Gestalt Institute training programme and effectively integrated the skills and theoretical basis of these modalities into my work as a coach, counsellor, and social services supervisor. From 2006-2009 I trained with the New Zealand Association of Intuitive & Pascha Therapists and during this period my practice was deeply influenced by the intuitive therapy modality. In 2013 I began study and practice in Solution Focused Counselling, also referred to as Solution Focused Brief Therapy – SFBT (De Jong & Berg, 2008), which I found was largely a refining and extension of the life coaching skills I'd already acquired, and I discovered parallels with Motivational Interviewing. In terms of my own practice and personal theoretical framework I would say that since 2013 I have become more eclectic in my approach, encompassing all of these modalities in some form within my overall counselling style.

1.1 How I came to be researching climate change and chemtrails

I have lived all my adult life in an era of heightened public awareness about the environment and, since the 1980's, publicised reports about changes to the global climate systems – 'global warming' and widespread desertification. I'd always felt disillusioned by the rampant consumerism of modern life which, to my way of thinking, was largely to blame for wasteful

and environmentally damaging industries, deforestation, oil spills, and eco-system collapse. The collective global narrative about climate change, with a new ever more disturbing chapter every decade, had become part of my own life story with markers visible to me in my own life. Glaciers I had visited as a child having 'retreated', observable coastal erosion, and the noticeable paling of the sky (I remember the sky being a much deeper blue as a child). I have always been environmentally conscious and so had become increasingly interested and engaged with reports about climate change.

I first encountered the issue of 'chemtrails' in my counselling practice in 2013, and looking back at that time I couldn't have imagined that I might actually write a thesis on this subject. I began by thinking about ways that I could report on my own and other counsellor's experiences of the climate change and chemtrail phenomena, but it was not until I read Kim Etherington's book about becoming a reflexive researcher (Etherington, 2004) that I found that I could legitimately include my own experiences with my research. Etherington, a counsellor and counselling researcher, disclosed about herself:

I wanted to explore how practitioners become researchers and what happens to them in that process. But as my thinking developed I realised that I was not interested in just *any* kind of researcher but those, like me, who have risked using themselves transparently in their research and in their writing. By allowing ourselves to be known and seen by others, we open up the possibility of learning more about our topic and ourselves, and in greater depth (p.25).

How a practitioner becomes a researcher is, I suppose, intimate and unique to each of us so I can only really share my own experience of this. For me this began in 2012 when I was working part-time at a counselling centre in Christchurch, and was contacted by May (female, not her actual name) for a counselling appointment. At the time May was being treated for depression and other health concerns by her family doctor, but these were not her main concerns for counselling. Her main concern at the time was about her adult son Brian

(not his actual name) who was living with May. Brian had an extensive history of drug use and it soon became clear that Brian's behaviour was a contributing factor to May's depression. May attended frequent counselling sessions with me from November 2012 to March 2013. According to May, Brian's behaviour would often be erratic and he would spend a lot of time in his room on the internet. It was clear that a lot of what Brian was viewing on-line was distressing to him, and he would want to talk about this with May. In mid-February 2013 May reported that Brian was becoming increasingly withdrawn, paranoid and agitated. She said he was frightened about chemtrails, and that he believed there was a secret plot to poison the population by spraying chemicals from aircraft into the atmosphere. I'd heard about chemtrails before, but until I was confronted with the impact of how this phenomenon could affect someone through my work with May I'd not given this any close attention. Curious about this I did a quick on-line search that revealed hundreds of websites and blogger web-pages about chemtrails, and it became apparent to me that Brian's worry about chemtrails was shared by people in countries all around the world. This began my interest in the subject, and having spoken to several other counsellors that had encountered this with some of their clients, I decided to investigate further. I discovered that chemtrails are a jargon term used to describe alleged 'aerosol' trails from aircraft. Unlike ordinary 'contrails', jet engine exhaust and water vapour that evaporates in seconds, chemtrails are large voluminous trails (allegedly containing harmful chemicals) that can linger for hours (Figure 1.). Sometimes these trails are seen to spread out to form into a persistent 'chemcloud' (another jargon term). I found that the term chemtrails is used synonymous with atmospheric aerosol geoengineering – the science of spraying aerosol chemicals into the atmosphere supposedly to reduce incoming solar radiation by creating an artificial cloud cover, sometimes called 'global dimming'. For me to understand what could have been so

frightening for May’s son Brian, and how I could best support her and other clients concerned about this through counselling, I felt I needed to begin learning more about chemtrails.

Figure 1. Alleged chemical aerosol emissions from aircraft – ‘chemtrails’



Two identical aircraft (both Airbus A320), emitting very different types of trails.

Contrail: Centre aircraft emitting a short trail that evaporates within seconds considered to be a typical exhaust emission contrail.

Alleged chemical aerosol ‘**Chemtrail**’: Other aircraft emitting a voluminous trail over a distance of hundreds of kilometres that persists for an extended duration.

Photo: Courtesy of a member of the public. Canterbury, N.Z., July 2016.



Alleged aerosol trail: Note serrated edge indicating uneven dispersal (not exhaust vapour) and particulate spreading with no evident evaporation.



Alleged aerosol trail with another aircraft in view (centre) indicating the voluminous size and trail spread.

Photos: Courtesy of a member of the public. Canterbury, N.Z., 2016.

What I discovered both shocked me to begin with, but also helped me to appreciate Brian’s fear of chemtrails and his beliefs about ‘a secret plot to poison the population’. In preparing to write this thesis I looked back over my counselling notes from February 2013 and transcribed a short section of these notes partly to refresh my own memory from that time, and also to practice presenting my notes in a form that I will be using for the analysis section of this thesis. I found this personally helpful for ‘re-storying’ my own memory of events from

those counselling sessions, but decided that for client confidentiality (and for ethical reasons) I could not include the transcription of my client notes within this thesis.

Re-storying my session notes from more than six years after the experience helped be to recognise why and how that particular counselling session had such a significant impact on me both personally and professionally. Clearly the psychological and emotional impact on Brian from what he was witnessing was extreme, and it was this that in many ways became the key motivating factor that lead me to begin to piece together the relationship between chemtrails, geoengineering and climate change, and the more I read about these three distinct phenomenon I began to understand how they are closely linked. The popularised *discourse* for climate change, the *science* of geoengineering, and the public *narrative* about chemtrails. I had to ask myself “What does any of this have to do with me as a counsellor?” The answer that came to me was “What if there are other people like Brian, and what if they were my clients?” And in talking with some other counsellors I knew it turned out there were others like Brian, perhaps not as seriously distressed as Brian, that counsellors had encountered in *their* practice. Once I’d began to learn about chemtrails, and the science of aerosol geoengineering, it didn’t take me very long to make a connection about this for myself:

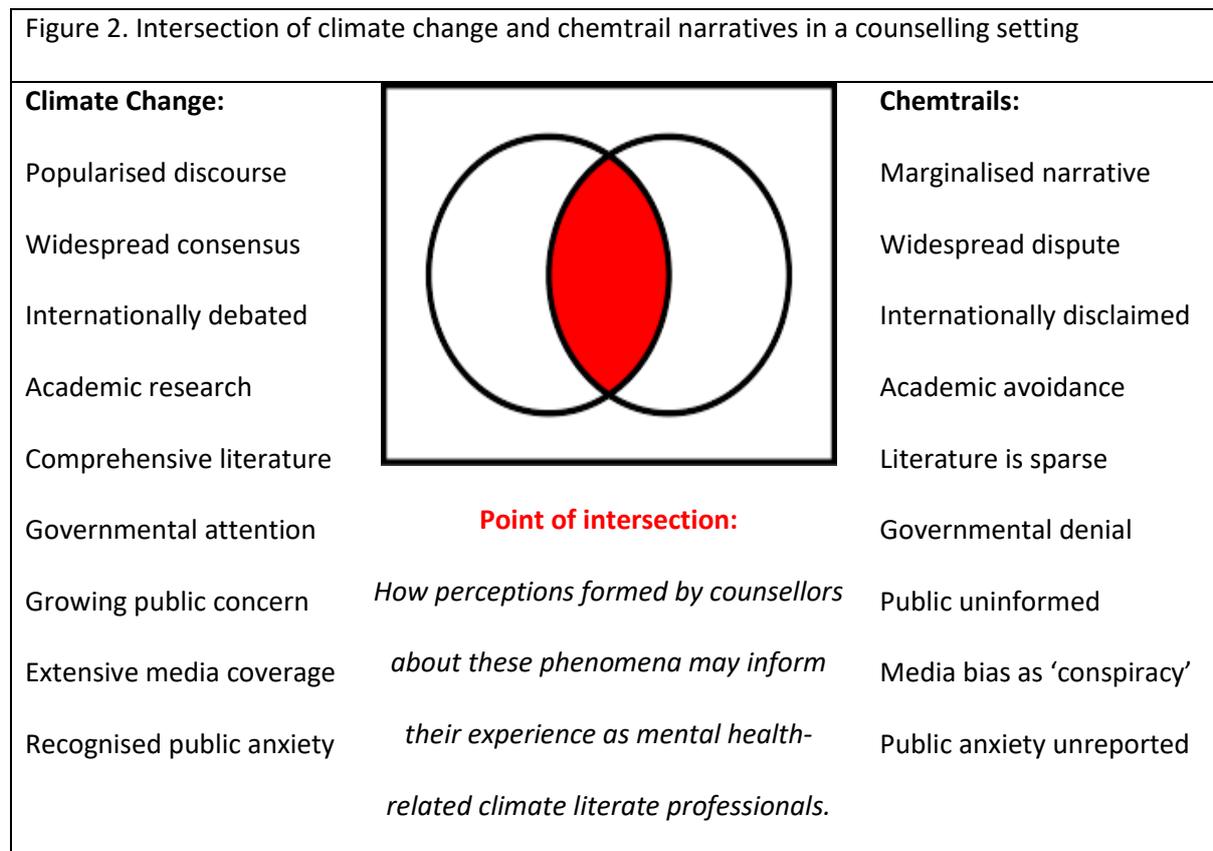
Chemtrails = aerosol spraying = paling of the sky = toxic aerosol fallout = threat to people, animals, plants, and the entire Earth.

When I think about it, I imagine my client’s son Brian may have made a similar connection. In the beginning stages of planning my research one of my thesis supervisors sent me an article by Sue Cornforth of Victoria University of Wellington: *Life Span, Global Warming and Ethics: Do Counsellors Have a Part to Play in Averting a Potential Catastrophe?* The question posed by Cornforth in the title of her article kept resonating deeply within me, for I felt certain that the combined phenomena of climate change, global warming, and the global

chemtrail phenomenon foretold environmental and social catastrophe for humanity. This prompted a further question for me, which of course has led to this thesis: What can I, as a counsellor, do about this?

1.2 Situating the context of this research

Cornforth’s article situated for me the global climate change crisis within a counselling perspective and gave me a starting point for my research, but I needed to co-situate the global chemtrail phenomenon with this. There appears to be an intersecting ‘nexus’ (illustrated by Figure 2.) where the popularised discourse of climate change and the marginalised narrative of chemtrails converge that has been notionally referred to by chemtrail researchers (Freeland, 2014, 2018; Herndon, 2015,2016; Wiggington, 2015; see Literature Review), but has received only passing reference in the peer reviewed academic literature.



There are firm associations to public distress about climate change reported by mainstream media and in the peer reviewed literature, but only sparse reference to public distress about chemtrails. In on-line social media groups in many countries people that witness chemtrails frequently report feelings of anxiety, fear, or outrage which appears to go unreported by mainstream media and seemingly ignored by public health or social science researchers. This will be discussed in detail in the literature review chapter.

1.3 Research Questions

I wanted to find out more about other counsellors' experiences of working with clients concerned, or distressed, about climate change and the chemtrail phenomena, so I started by generating some questions I could ask or discuss with counsellors or therapists I would interview (Table 1.). I was able to come up with these questions myself, although the question about being a 'climate-literate professional' (Q. 6.) was referenced from a report by the American Psychological Association (see Literate Review section).

Table 1. Initial (self-generated) Research Questions

1. In what ways are their clients concerned (or distressed) about climate change and chemtrails?
2. How do counsellors support clients with these concerns?
3. What ethical or practice concerns emerged for the counsellor?
4. What exposure to these phenomena had the counsellor had to these (if any) prior to working with clients?
5. What did the counsellor learn about these phenomena through working with a client(s)?
6. How have these experiences informed their notion of themselves as a mental health-related climate-literate professional?
7. How does the designation of 'professional' change or influence what they think or say about themselves?
8. What further learning have they identified as a result of this, or as a result of participating in this research?

In discussing these questions with my thesis supervisors I was able to come up with my primary question that would be the overall guide for my research. The actual wording of the

question went through several iterations until I settled on the final wording that I used in my participant interviews:

Based on your experiences of working with client(s) concerned or distressed about climate change and chemtrails, what meaning does being ‘a mental health-related climate-literate professional’ have to you?

This question does not propose to describe or define what ‘a mental health-related climate-literate professional’ is or is not (or could be), it is a question about *meaning-making*. In my experience both personally and professionally as a counsellor, counselling is for me all about meaning-making one way or another, as Etherington has succinctly put:

I do believe that the world exists out there independently of our being conscious of its existence. I also believe that ‘it becomes a world of meaning only when meaning-making beings make sense of it’. (Etherington, 2004, p.71 [citing Crotty, 1998]).

This thesis is about my own ‘meaning-making’ as much as it is about reporting on other counsellors’ experiences and meaning-making. It will also act as an account of my own efforts to find my response to Cornforth’s question. And finally, it will invite the reader to reflect on their own meaning-making about climate change and chemtrails within a counselling context, and perhaps also stimulate them to reflect or ‘make meaning’ about Cornforth’s question for themselves.

Chapter 2 – Literature Review

This section will provide a review of literature covering a range of perspectives related to the phenomena of climate change and chemtrails, and ways that these connect to a counselling context. Sources are drawn from peer-reviewed publications, reports by expert authorities, published works by independent researchers, journalistic publications including self-published citizen journalism, media reports, and blog-site references. The starting point for this review is a brief introduction to discursive interpretations about climate change, of which there are many. Next, contextualised to the main subject and with counselling and therapy professions in mind, a selection of academic (and some journalistic) literature concerning public anxiety and related mental health concerns about climate change, and public health authorities and researchers responses to this. Next, a brief commentary on eco-therapy that to some extent offers an antidote of sorts to the ‘doom and gloom’ narrative of climate change. This is followed by an introduction to atmospheric geoengineering and its association to the chemtrail phenomenon (and as a possible explanation for the chemtrail phenomenon), with attempts by some writers to debunk chemtrails also discussed. Chemtrail research and chemtrail ‘fallout’ analysis is discussed and then a section specific to the phenomenon of chemtrails in New Zealand. Climate change adaptation and mitigation initiatives connected to counselling will be discussed, then a short section on disturbing or distressing beliefs and the use of narrative therapy and ‘restorying’ in counselling will also be covered. Finally, a short summary of selected material relating to conspiracy narratives relevant to counselling in some contexts that may inform or further contextualise the practical implications for counsellors encountering the chemtrail narrative in their practice.

2.1 Counselling, climate change and the global chemtrail phenomenon

In the last decade climate change has become almost universally recognised as a global crisis and in 2018 the United Nations Intergovernmental Panel on Climate Change (IPCC) issued a

report that, according to Locke (2019) “gave us 12 years to implement radical change to limit global warming to 1.5 degrees.” In May 2019 Greenpeace called on the New Zealand Government to declare a ‘climate and environmental emergency’ following recent climate protests in the United Kingdom (Greenpeace, 2019). Soon after resolutions supporting the call by Greenpeace were passed by Environment Canterbury, the Nelson City Council, the Christchurch City Council, and numerous other municipal councils around New Zealand and more than 900 other local governments in 18 countries (Locke, 2019). Since the mid-2000’s psychosocial and public health impacts of climate change have emerged as a significant concern for public health authorities (including mental health) with a substantive and growing body of published research, and a wide range of journalistic commentary relevant to the counselling and therapy professions. By contrast, academic attention to the global chemtrail phenomenon is sparse and appears to be biased toward labelling the phenomenon as a ‘conspiracy narrative’ without any substantive or in-depth research (Cairns, 2016).

Chemtrail researcher Elana Freeland (2014, 2018) asserts that climatic features of climate change such as ‘global warming’ and ‘extreme weather events’ have a causative link to the science and application of atmospheric aerosol geoengineering (commonly referred to as ‘chemtrails’). The published reports by public health authorities concerning the risks and threats of climate change to public health are silent on the subject of chemtrails, yet atmospheric aerosol geoengineering researchers report on numerous risks and threats to public health and safety (Effiong & Neitzel, 2016; Herndon, 2015; 2016; Whiteside & Herndon, 2018). The intersection of the reporting about climate change, chemtrails, and public or mental health is extremely sparse and limited to a few journalistic articles and short references in several books (Dunne, 2017; Freeland, 2014; 2018).

There is no established definition that describes a ‘mental health-related climate-literate counsellor’, however Cornforth (2008) presents some notions of what a ‘climate-literate’

counselling profession might be like, but also notes “the dominant therapeutic discourse resists any extension of the concept of relationship to include the natural world” (p.150). Cornforth suggests revising professional ethical codes to make statements about environmental values and responsibilities; writing the natural environment into counsellor training and professional development programmes; and challenging the contemporary weightings given to Eurowestern and indigenous therapeutic approaches, acknowledging the role of ‘kaitiakitanga’ (guardianship).

Counsellors can and do learn from their clients, Hatcher et al. (2012) note that their study “makes it abundantly clear that therapists are simultaneously affected both professionally and personally by their work with clients” (p.15), so perhaps clients distressed by climate change and/or chemtrails may have a significant contribution to make on these subjects to counsellor education. In this way counsellors, and the counselling profession, may be in a unique position to contribute to the challenges of climate change by adding their (and their clients’) collective voices to Cornforth’s question: “How might we best work together with other professionals in order to address, in a variety of ways, the problems of global warming and accompanying climate change?” (Cornforth, 2008).

2.2 Discursive interpretations about Climate Change

There is no single defining ‘discourse’ of climate change, rather there are a multiplicity of “ways of constituting knowledge” about climate change. In this study I’ve selected a Foucauldian interpretation of discourse that can be succinctly described as:

“[W]ays of constituting knowledge, together with the social practices, forms of subjectivity and power relations which inhere in such knowledges and relations between them. Discourses are more than ways of thinking and producing meaning. They constitute the ‘nature’ of the body, unconscious and conscious mind and emotional life of the subjects they seek to govern.” (Weedon, 1987, p. 108).

There are, for example, a range of scientific, economic, social, political and geo-political discourse about climate change each with their own nuanced “ways of constituting knowledge”. Broadly speaking there are both protagonists and dissenters (too numerous to list) to each, or all, of these narratives that have emerged since the 1980’s beginning with “dire warnings about a ‘little ice-age,’ ‘greenhouse gases,’ ‘desertification,’ then ‘extreme weather,’ ‘global warming,’ and ‘climate change’ due to carbons” (Freeland, 2018, p.26). Climate scientist Alan Robock asserts the commonly held scientific notion (part of the scientific ‘discourse’ about climate change) that rising global carbon dioxide levels are ‘dangerous’ to life on Earth and should not be allowed to exceed 450ppm [parts per million] (Robock, 2008). Corner & Pidgeon (2010) note “feedback loops in the climate system [above 450ppm] become increasingly likely – and the threat of relatively rapid and catastrophic changes becomes significantly greater” (p.25). Whereas other researchers assert “Atmospheric CO₂ concentrations at 400ppm are still dangerously low for life on Earth” (Gosselin, 2013), and that “Deserts [are] ‘greening’ from rising CO₂” (Commonwealth Scientific and Industrial Research Organisation, 2013). There are numerous media and political commentators who dispute certain International Panel on Climate Change (IPCC) assertions about climate change, whose views are labelled as those of climate change deniers. For example, Marc Morano a former US Republican insider goes as far as discussing an alleged United Nations political agenda for removal of civil rights and global depopulation under the auspices of a global climate emergency (Morano, 2019). Freeland (2018) proposes that the widely disseminated IPCC scientific narrative about CO₂ being a ‘greenhouse gas’ and contributing to climate change has been sensationalised by media reporting and leveraged for political and commercial gain:

“Carbon taxes and emissions trading are quite the con, given that CO₂ is not far above the minimum to sustain plant life and nations should be increasing CO₂ instead of penalised for the CO₂ they do have (p.28).”

According to Morano (2019) scientists that disagree with IPCC assertions are reluctant to be outspoken for fear of having their reputations attacked and their careers destroyed, while Freeland (2018) asserts that “embedded media [have] ramped up weather confusion in the public mind, blaming cars and industrial pollutants while assiduously ignoring the greatest polluters and propagandists of all: the over-inflated American military and military-industrial-intelligence complex that runs it.”¹ Clearly differing discursive perspectives by various actors, whether they be academic, scientific, political, or journalistic, create their own narratives, sometimes contradictory, connected to climate change phenomena.

2.3 Public anxiety about climate change

Since the 2000’s a growing body of research articles (Albrecht et al., 2007; Higginbotham, Connor, Albrecht, Freeman, & Agho, 2007; Hulme, 2008), professional institute and research agency reports (Clayton, Manning, Krygsman, & Speise, 2017; Royal Society of New Zealand, 2017; Psychologists for Social Responsibility, n.d.; American Psychological Association, n.d.), and numerous journalistic and media publications (Preston, 2017; Smith, Colabrese, & Mark, 2017; Angeloni, 2019; The Guardian, 2019; The Washington Post, 2016, to name just a few) have brought attention to a range of social and psychological impacts and the prevalence of associated public anxiety about climate change.

“Global warming is the climate ogre” a headline circulated on syndicated media networks with the opening lines, “From record breaking heatwaves to catastrophic floods, extreme weather these days tends to quickly inspire the same question: is climate change the culprit?” (Washington Post, 2016). Hardly a day goes by without a climate change headline depicting or predicting drought, hurricanes, rising sea levels and other catastrophes as every day

¹ The military-industrial [intelligence] complex, was originally referred to by United States president Dwight D. Eisenhower in his Farewell Address on January 17, 1961. Eisenhower warned that the United States must “guard against the acquisition of unwarranted influence...by the military-industrial complex” (Encyclopaedia Britannica, n.d.).

incidents in a world that is reportedly gripped by irreversible anthropogenic global warming now known as the epoch of the Anthropocene (Anthropocene Info, n.d.). The dominant media discourse is one of fear of global warming which itself creates a “climate of fear about our future climate” and frequently includes words such as ‘catastrophe’, ‘terror’, ‘danger’, ‘extinction’ and ‘collapse’ (Hulme, 2008, p.5). According to the Psychologists for Social Responsibility climate change extreme events (storms, droughts, etc.) have “been shown to increase citizens’ rates of anxiety, depression, and traumatisation” (Psychologists for Social Responsibility [PsySR], n.d.). Smith, Colabrese, & Mark (2017) documented CBC Radio show *The Current* with guest host Piya Chattopadhyay’s interview with New York resident Liz Galst talking about her worries about climate change and that she “hands out cards to idling motorists explaining the benefits of turning their engines off.” Kim Keenan, a clinical social worker also interviewed by Chattopadhyay (Smith et al., 2017), refers to herself as an ‘eco-therapist’ and said she's seen a steady increase in people looking for help with their concerns about climate change:

"They're starting to think of their future in a way. What can I do to impact that future, and if I can't do something on my little micro level then my sense of hopelessness just goes up."

According to the interview by Chattopadhyay "Eco-anxiety" has become a short-hand description for symptoms that psychologists are starting to see, and a report by the American Psychological Association (APA) suggests worrying about climate change is having a serious impact on our mental health (Clayton, Manning, Krygsman, & Speise, 2017):

“The health, economic, political and environmental implications of climate change affect all of us. The tolls on our mental health are far reaching. They induce stress, depression, and anxiety; strain social and community relationships; and have been linked to increases in aggression, violence, and crime.” (Clayton et al., 2017, p.4).

Ashlee Cunsolo (a contributor to the APA climate report) reported that it's not just extreme weather events that are causing distress, longer-term climate changes are also having an impact, she writes: "Whether it's in the Canadian north, or in Australia or in other regions of the world, we're starting to work with people and talk to them about their lived experiences and what they're seeing" (Smith et al., 2017). Cunsolo claimed climate anxiety is the downside to people's increased awareness and concern about global issues, "We're living in a time where there's this huge global narrative about climate change. It's called the doom and gloom narrative." According to a report by researchers at the University of Western Australia the authors claim their survey data of young people aged 7 – 25 years links climate change to young people feeling anxious, depressed and disempowered: "Feelings of disempowerment were significant, with more than 70% of the participants concerned that people do not, or will not take their opinions on climate change seriously" (Chiw & Ling, 2019, p.1).

In a New Zealand media article titled 'Kiwis suffering depression, anxiety and hopelessness because of climate change' (Angeloni, 2019), Auckland mother Sally Millar said she had been feeling the effects of climate change on her mental health and that (reported by Angeloni) "she finds comfort in having climate conversations with her adult children who hold similar views, but was surprised to find they were considering not having children because they 'don't want to bring them into this world'". Angeloni (2019) also reported in a separate article titled 'New Zealand couples concerned for planet choose childless futures', that "New Zealand couples choosing not to have children because they don't want to contribute to the rapid decline of the planet say they are making a sacrifice for society." According to Angeloni this is a trend that is being recognised globally as 'birth striking' and reported in 2019 by The Guardian headlining with 'BirthStrikers: meet the women who refuse to have children until climate change ends' (The Guardian, 2019). Distress about climate change can partly be contributed to media exposure and The Guardian (2019) article

specifically referred an address by U.S. congresswoman Alexandria Ocasio-Cortez who reportedly claimed “It does lead young people to have a legitimate question: is it OK still to have children?” The effects of media exposure was specifically referred to in a 2017 report by the Royal Society of New Zealand (RSNZ):

“Routine exposure to images, headlines, and risk messages about the threat of current and projected climate change provide a powerful and on-going stress-inducing aspect of an individual’s everyday environment.” (RSNZ, 2017, p.9).

According to the American Psychological Association psychological factors, a political divide, uncertainty, helplessness, and denial influence the way people comprehend information and form their beliefs on climate change. The authors note major chronic mental health impacts including “an increased sense of helplessness, hopelessness, or fatalism, and intense feelings of loss” (Clayton et al., 2017). Their recommendations for mental health and other professionals are:

1. Become a mental health-related climate-literate professional.
2. Engage fellow public and mental health professionals.
3. Be vocal, model leaders within your community.
4. Support national and international climate-mental health solutions.

(Clayton et al., 2017, p.8)

Research by Higginbotham and colleagues (Higginbotham, Connor, Albrecht, Freeman, & Agho, 2007) assessed the validity of an Environmental Distress Scale (EDS) in communities impacted by obvious environmental degradation (in this case caused by open-cut mining) in the Upper Hunter Valley of New South Wales, Australia. One aspect of the EDS was to assess individuals’ level of perceived threat and health impacts of environmental hazards by

individuals, and the results indicated a marked increase in level of perceived threat by individuals in communities exposed to higher levels of observable environmental degradation. Would people distressed about climate change perceive this as a threat in a similar way to the residents of the Upper Hunter Valley? Glenn Albrecht, a co-author of the EDS research (Albrecht et al., 2007), believed that they might:

“Climate change for one, might, unfortunately, be a globally significant source of psychoterratic distress expressed as nostalgia and solastalgia.” (Albrecht et al., 2007).

Introduced in 2003 by Albrecht, the concept of *Solastalgia* can be succinctly described as “the pain of distress caused by the loss of, or inability to derive, solace connected to the negatively perceived state of one’s home environment” (Albrecht, 2005, p.41). Research conducted in New South Wales (NSW) since 2001 by Albrecht et al. (2007) found that serious drought affected 93.2% of NSW with significant financial, social, and emotional effects on individuals, families and communities, and concluded that long-term drought “is best considered as a form of chronic natural disaster with the kinds of psychiatric sequelae observed following the more typical abrupt-onset but short-term natural disaster”. More recently media reporting has begun referring to ‘climate grief’ describing “Extreme weather and dire climate reports are intensifying the mental health effects of global warming: depression and resignation about the future” (Scher, 2018).

2.4 Ecotherapy and the ‘greening’ of psychotherapy

In some respects the rise of eco-therapy offers a counterpoint to what appears to be a growing despondency to a future of climate change. Preston (2017) reported on the Salt Lake City ‘Good Grief’ group, a therapy group whose goal “is to help people cope with what’s been called ‘climate grief’ — anxiety, sadness, depression, and other emotions provoked by awareness of the planet’s march toward a hotter, less biologically diverse, and potentially

unsustainable future.” According to the group’s coordinator about a dozen people attend regular group sessions and that “feelings of sadness and anxiety, and even literal nightmares, were common.” A spokesperson for the Climate Psychology Alliance, an association of concerned psychotherapists, stated in an interview that “Eco anxiety isn’t pathological: it’s a legitimate reaction to the climate crisis” and that “there are hundreds of people contacting us, looking for support” (Beddington, 2019).

In reflecting on her experience of eco-psychology, Owton (2013) in her review of Buzzell & Chalquist’s (2009) book ‘Ecotherapy: Healing with nature in mind’ notes a common theme among ecotherapists that “therapists should listen with the ‘earth in mind’ and that this approach has assisted many clients with their healing”. Ecotherapy, also known as ‘green therapy’ and ‘earth-centred therapy’ offers an alternative or compliment to mainstream psychotherapy that “fails to address deeper, existential concerns” and instead drives for an organic model where compassionate attention to a person’s entire being activates the healing process (Owton, 2013). The role of nature and the promise of ecotherapy “lies in the possibility that such work can initiate healing rooted in our affinity with the natural world and can sponsor sanity in a world gone mad” (Buzzell & Chalquist, 2009, p.15). Summers & Vivian (2018) examine ecotherapy from an ecosystems services perspective, the notion that natural ecosystems provide important services upon which humans depend and the ability of interaction with nature to enhance healing and growth. They note that “people tend to believe that these ecosystem services are provided for free; therefore, the services are of little or no economic value” (p. 1). They describe ecotherapy as one of the ecosystem services that nature provides based on the theories of ecopsychology:

Broadly speaking it is an area of psychology that embraces ecology and aims to be holistic in theory and practice. This means that from an ecotherapy perspective, health (physical and mental) of a human being is viewed in the context of the health of the Earth and its natural ecosystems.” (Summers & Vivian, 2018, p.2.).

Research from the 1980's by Roger Ulrich, that pre-dates the term ecotherapy, indicated that simply being able to view a natural scene through a window could have therapeutic benefit because, according to Ulrich (1984), “most natural views apparently elicit positive feelings, reduce fear in stressed subjects, hold interest, and may block or reduce stressful thoughts, they might also foster restoration from anxiety or stress” (p.421). For these reasons, and because of generalised anxiety about climate change and distress about the environmental degradation and Solastalgia, the development of Ecotherapy may be highly relevant to informing the counselling and therapy professions in the context of being (or becoming) ‘a mental health-related climate-literate professional’.

2.5 Atmospheric geoengineering and the global chemtrail phenomenon

In the last decade a growing body of geoengineering research literature has outlined the use of atmospheric aerosols as mitigation technologies to reduce the impact of reported ‘global warming’ (Brewer, 2007; Carlin, 2007; Robock, 2008; Heckendorn et al., 2009; Corner & Pidgeon, 2010; Pierce et al., 2010; Goes et al., 2011; Pidgeon et al., 2013), including discussion about ways geoengineering technologies could be governed or regulated (Parson & Keith, 2013; Rayner et al., 2013). The United States atmospheric chemical aerosol spraying programme (Belfort Group, 2010) often referred to as ‘chemtrails’ is alleged to have been carried out in secret at full-scale since the 1990's (Thomas, 2004) under the pretext of national security as ‘classified aerial operations’ code named *Project Cloverleaf* (Freeland, 2018, p.42). Reference about geoengineering by agencies of the military-industrial-intelligence establishment are immediately associated to the chemtrail narrative by various on-line commentators. One example circulated on social media was the June 2016 address by the Director of the United States Central Intelligence Agency (CIA) John O. Brennan

about geoengineering to the Council on Foreign Relations.² Brennan’s public disclosure about SAI (Stratospheric Aerosol Injection) very quickly fuelled speculation by chemtrail researchers and on 15 August 2016 Geoengineering Watch, a public advocacy group in the United States opposed to atmospheric geoengineering, reported on an article titled “A Government Cover-Up of Epic Proportions” (Norris, 2016)³. Freeland (2018) asserts that deliberately geo-engineered extreme weather events attributed to United States military geoengineering operations are in line with the United States strategic military objectives of global weather control – “Weather as a Force Multiplier: Owning the Weather in 2025”, a Pentagon report from 1996 (Freeland, 2018, p.41).

The narrative of chemtrails, which Cairns (2016) describes as “the belief that the persistent contrails left by aeroplanes provide evidence that a secret programme of large scale weather and climate modification is on-going” and the term ‘chemtrails’, are used interchangeably with atmospheric geoengineering as a “marginal discourse postulating the existence of a climate control conspiracy” (Cairns, 2016, p.71). Cairns examines the chemtrail narrative as a discourse rather than any kind of psychological or sociologic pathology, and notes that certain elements (such as moral outrage at the notion of ‘elites’ controlling the climate) highlights relevant concerns for the geoengineering debate as a whole. Cairns (2016) notes several examples of mainstream publications that refer to the chemtrail narrative as “an unfounded conspiracy theory”. Cairns points out that the “emerging politics of geoengineering... requires an understanding of the whole discursive landscape around ideas

² Brennan mentioned a range of topical subjects including an “array of technologies—often referred to collectively as geoengineering—that potentially could help reverse the warming effects of global climate change.” One of the technologies Mr Brennan noted that had gained his “personal attention” was stratospheric aerosol injection, or SAI, a method of seeding the stratosphere with particles that can, theoretically, help reflect the sun’s heat in much the same way that volcanic eruptions do. According to Mr Brennan a SAI programme “could limit global temperature increases, reducing some risks associated with higher temperatures and providing the world economy additional time to transition from fossil fuels.”(Brennan, 2016).

³ Geoengineering Watch: “SAI is a ginormous federal geo-engineering cover-up that is now being exposed... the February 2015 NAS (National Academy of Sciences) report, on which the feds base their entire toxic rain operation warned explicitly that albedo modification shouldn’t be deployed now because the risks and benefits were far too uncertain” (Norris, 2016).

of global climate control” that would include the chemtrail narrative (p.71). Despite media coverage of the phenomenon as a conspiracy theory (for example Borkhataria, 2017), public awareness about chemtrails appears to have grown markedly since 2010. In 2011 Mercer, Keith, & Sharp, (2011) reported the results of their 2010 survey of 3015 individuals from the United States, Canada, and the United Kingdom that found 16.6% of the public indicated some degree of belief in the existence of chemtrails (i.e. a secret government chemical spraying programme). Cairns (2016) reported that a Google search of the term ‘chemtrails’ returned over 2.6 million hits, and Kamarampi (2016) noted that “In April 2016, the Google searches for ‘chemtrails’ reached a higher point than we’ve ever seen...” supporting the idea that either more people are researching chemtrails, or that people are seeing them or hearing about them more frequently and wanting to find about them. In 2010 belief in the chemtrail narrative was confined to a sizable minority of the population (16%) according to Mercer et al. (2011). However, by 2016 that figure had nearly doubled to about 30% of the population of the United States according to survey results by Tingley & Wagner (2017) that repeated the main survey question used by Mercer et al. (2011), (Appendix A). The Mercer et al. (2011) report found only 2.6% of respondents selected ‘completely true’ when asked “Do you believe it is true that the government has a secret program that uses airplanes to put harmful chemicals into the air?” In 2016 Tingley & Wagner (2017) found 9% of respondents believed in the chemtrail phenomenon as ‘completely true’ and if accurate this would be representative of more than 29 million Americans.

2.6 Media bias and attempts to debunk the chemtrail narrative

Media reports by ‘mainstream’ syndicated media outlets (as opposed to the ‘new’ media of on-line citizen journalism) tend to report on the chemtrail phenomenon from published academic articles or from the media releases of government organisations such as the Environmental Protection Authority (EPA), aviation industry regulators (e.g. Federal

Aviation Authority), or other agencies concerned with aerospace or the environment. There is a pervasive bias toward presenting the chemtrail phenomenon as a conspiracy narrative, as it is very rare for media coverage of alleged chemtrail activity to include commentary from chemtrail researchers or chemtrail activists unless *they* are also portrayed as ‘conspiracy theorists’. One example would be a 2017 story by journalist Carey Dunne titled: “My month with chemtrail conspiracy theorists” (Dunne, 2017). Dunne did provide a somewhat balanced narrative interviewing several people who claim to witness chemtrails on a regular basis and included some of their accounts.

He also declared his own bias to the subject:

“[W]hen Tammi suggests the clouds look suspicious, I mention articles I’d read that convinced me, as a former fact-checker, that “covert geoengineering” is an unfounded conspiracy theory.”

Dunne’s coverage of the chemtrail phenomenon of providing both protagonist and dissenter narratives is rare in the mainstream media coverage about chemtrails. For example, Tingley & Wagner’s 2017 research findings were reported by the Daily Mail with the headline: “Study finds 10% of Americans think the conspiracy theory is true” but with a sub-heading stating: “However, none of this is true - scientists and investigative journalist [Dunne, 2017] say so” (Borkhataria, 2017).

One meaningfully in-depth peer-reviewed article questioning the existence of chemtrails is an article by Shearer, West, Caldeira, & Davis (2016): Quantifying expert consensus against the existence of a Secret, Large-scale Atmospheric spraying Program [SLAP]. This article received widespread international media coverage in late 2016. However, there were several reputational and methodological shortcomings to this article particularly (which appeared to

be overlooked or ignored) in their assessment and presentation of aircraft trails as possible evidence of aerosol spraying.⁴

Their findings neither substantiated nor invalidated ‘SLAP’ yet despite the weaknesses of the article it was circulated in a multitude of media with headlines such as: “Chemtrails conspiracy theory gets put to the ultimate test” (*New Scientist*, August 2016), where bias by the author was obvious: “So when I say I haven’t bothered debunking chemtrails because they’re too goofy even for me, you can glean how I really feel about them” (Plait, 2016). And in New Zealand the leading headline from the Radio New Zealand website: “Science slaps down chemtrail myth” (RNZ, August 2016), followed with the opening commentary:

“A group of US environmental and atmospheric scientists has joined together to bust a persistent conspiracy theory about chemtrails.”

These kinds of headlines and commentary are typical of mainstream media reporting and has the effect of discrediting, or at least marginalising, the narrative about chemtrails without any objective scrutiny of source material or presentation of a balanced journalistic representation by both protagonists and dissenters.

⁴ Shearer et al. (2016) Reputational shortcomings:

The author’s assertion of being “the first” to publish a scientific evaluation of ‘SLAP’ in the peer-reviewed literature was not correct as they had overlooked, or ignored, numerous scientific peer-reviewed publications by geophysicist J. Marvin Herndon (2015, 2016). The authors claimed there are “multiple websites dedicated to exposing the existence of SLAP” and named two websites specifically, but omitted to mention the Carnicom Institute’s research into atmospheric aerosol spraying operations (for inclusion of their ‘evidence’). The Carnicom Institute is well known in the United States and frequently referred to by numerous U.S. military and scientific agencies (as many as 127 federal and other organisations, Freeland 2014). One of the authors had a close association with the website ‘Metabunk’, a blogger website posting a plethora of speculative and unverifiable material claiming to debunk the existence of chemtrails.

Methodological shortcomings:

Expert participants selected by the authors that identified as ‘contrail experts’ (n=49) were supplied with “four pictures taken from SLAP websites that have been cited as evidence of SLAP.” However, the authors did not indicate whether the pictures were supplied with any explanatory notes, such as date, time, or location. Aircraft type and altitude, as well as air temperature and level of humidity, would be crucial factors for determining the likelihood of contrail formation, but these details were either absent or withheld by the ‘SLAP’ authors. The methodology was not a ‘scientific evaluation’ as they claimed, rather it was a summary of opinion by contrail ‘experts’ that was purely speculative.

2.7 Analysis of alleged chemtrail ‘fallout’

Published research by Herndon (2015, 2016)⁵ and by the Carnicom Institute since 2000 identified strontium, barium, and aluminium as commonly reported contaminants of chemical spraying. Since 2000 research by Carnicom (2000, 2004) using diffraction grating spectrometer analysis revealed “that radical atmospheric changes induced by aircraft aerosol operations included the presence of signature high-intensity spectral lines matching barium salt compounds. Barium was being introduced into the atmosphere on a massive scale” (Freeland, 2014, p.144). Aluminium and barium ‘nanodust’ fallout in California is alleged to have fuelled wild fires sweeping areas in the Mt Shasta region in the summer of 2018 (Mills, 2018) where water and soil samples taken prior to 2010 (Murphy, 2010; Wiggington, n.d.) found elevated levels of aluminium and other contaminants linked to geoengineering aerosols. Carnicom also published analysis of alleged ‘aerosol fallout’ revealing desiccated blood cells, and Fillmore (2016) reported on correspondence from an alleged ‘whistle-blower’ concerning the use of Lithium in aerosols from aircraft. The chemicals reported or alleged to be used in geoengineering aerosols are toxic to humans (Effiong & Neitzel, 2016; Whiteside & Herndon, 2018), and information about this reported (or alleged) evidence of toxic atmospheric contamination is shared, discussed and speculated about by tens of thousands of people via social media groups, including research linking aerosol fallout to Morgellons disease (Freeland, 2014; 2018). Morgellons sufferers commonly describe their symptoms as ‘the sensation of insects crawling on and biting or stinging their skin’ and according to Albarelli & Martell (2010), “more than 100,000 people in the United States and in Europe have complained about a strange and devastating skin disease known as

⁵ Geophysicist J. Marvin Herndon (2015, 2016) reported tanker-jets over San Diego, California in 2014 and observed that at times “spraying was occasionally so intense as to make the otherwise cloudless blue sky overcast, some areas of the sky turning brownish” (Herndon, 2015). He applied expert analysis of the chemical composition of rainwater and dust collected in California and comparison to corresponding element ratios in laboratory prepared samples and reported correlating levels of Boron, Magnesium, Aluminium, Sulfur, Calcium, Iron, Strontium and Barium. Herndon concluded that the principle aerosol component analysed consisted of coal-fly-ash a toxic bi-product from the combustion of coal.

Morgellons”. Carnicom (2013) reported on the on-going analysis of an airborne filament sample from Serbia of a type similar to those reported to have been collected from samples in the U.S. and Canada (Thomas, 2004). Some of these alleged chemtrail samples Freeland (2014, 2018) identifies as polymers and polyethylene-silicon-carbon nanofibers and nanowires that can house and/or piggyback combinations of pathogens, blood cells, sedatives, and Nano-particulates. About these ‘Morgellons self-assembling, self-replicating proteins’ Freeland says:

“This self-assembly process is called *Teslaphoresis* and sounds disturbingly like the descriptions by Morgellions suffers of the self-assembling fiber networks building grids throughout their bodies and at times erupting from their sclaps, gums, and skin” (Freeland, 2018, p.110).

People reading about alleged aerosol contaminants and fallout are understandably disturbed by this (see Dunne, 2017).

2.8 The Chemtrail Phenomenon in New Zealand

The chemtrail phenomenon was first observed in New Zealand in the early 2000’s and reported by Anderson & Anderson (2005) in their interview with Betty Rowe a resident in the Marlborough Sounds, “Betty had told us that she had first seen Chemtrails in the year 2000”. The Andersons reported that Betty had collected samples of ‘ground-borne’ material that she believed originated from or carried particles dispersed by aerosol spraying. Betty had her samples analysed by Agriquality New Zealand and they were found to contain ‘high’ levels of Aluminium, Barium and traces of other elements. With the exception of the Anderson & Anderson (2005) article, and the occasional newspaper story (Otago Daily Times, 2010; Taranaki Daily News, 2012; Opotiki News, 2013; Otago Daily Times, 2016) the majority of information about chemtrails in New Zealand is material posted to social media groups or various blogger websites (e.g. Chemtrails North NZ). However, there is also an extensive and

growing body of correspondence by members of the public to and from various governmental agencies. From 2000 to 2009 there were intermittent reports of alleged aerosol spraying operations⁶ and these appear to have been isolated incidents. However from late 2009 ‘reports’ of spraying operations escalated significantly and since 2010 public reporting and enquiries to governmental agencies have increased markedly with more than a 1000% increase (from 2005-2009), in frequency of public enquiries or reporting to the Civil Aviation Authority (CAA).⁷ Other agencies contacted by the public about ‘chemtrail activity’ include the Environmental Protection Agency (EPA), the National Institute for Water and Atmospheric Research (NIWA), the New Zealand Defence Force (NZDF), and the Ministry for the Environment (Appendix B). Since 2010 public awareness of the chemtrail phenomenon in New Zealand has increased significantly with a notable increase in rainwater samples tested by Hill Laboratories⁸ (a New Zealand laboratory) indicating various concentrations of Aluminium, Barium, Strontium, and in some cases also Lithium, another chemical allegedly used in aerosols and detected in samples taken in the USA, and used by NASA in its aerosol spraying operations (Didymus, 2016).

A July 2012 survey by the Taranaki Daily News (Figure 3.) received 1035 responses and reported that 62% of respondents indicated their awareness of a chemical spraying operation, and an on-line petition (change.org) prepared for presentation to the New Zealand parliament calling for a ban on geoengineering and weather modification attracted more than 4,914 signatures by its date of closure in October 2018 (O’Neil, 2018).

⁶ For the period 2005-2009 the Civil Aviation Authority (CAA) disclosed one report only by a member of the public that alleged high-altitude aerosol spraying (CAA data released under the Official Information Act).

⁷ CAA data released under the Official Information Act in 2016.

⁸ E-mail advice to the author from Hill Laboratories, 2016.

Figure 3. Taranaki Daily News: Struck by a fit of the vapour trails – reader survey 23 July 2012.



The ‘official’ position of the New Zealand government is that: “*New Zealand is not involved in any programme of atmospheric geoengineering*” (D. Parker, Minister for the Environment, 2018; see Appendix B). This effectively exacerbates possible distress to chemtrail witnesses who may already be distressed or anxious about alleged chemtrail fallout and the threat this may pose to the environment and people, and also because what they believe they are witnessing (and may also be reporting) may not be believed by others. This point in particular would be of significance to counsellors working with clients concerned or distressed about chemtrails.

2.9 Climate change adaptation and mitigation, and counselling

Cornforth (2008, p.145) notes a “developing body of literature that connects mental wellbeing to our interrelationship with the natural environment”, but conventionally this has not tended to be a feature of counsellor training or everyday practice. In New Zealand record-breaking summer temperatures and long-term repeated droughts in recent years have prompted the counselling profession to respond to mental health distress in rural communities

(New Zealand Association of Counsellors [NZAC], 2013). In a report for the New Zealand Accident Compensation Corporation (ACC), Goffin (2014) noted that elevated rates of suicide in rural communities were an international concern citing USA, UK, France and Australia, and that in South Australia data indicated that the rate of farmer suicide was up to 67 % higher than for urban dwellers. While the ACC report focuses specifically on mental health issues it identifies seven influencing factors across a continuum in which climate, environmental factors, or weather feature in five of the seven identified domains and highlights individual and community ‘adaptation’ as a key responsive solution. The European Commission policy on Adaptation to Climate Change states that adaption is “anticipating the adverse effects of climate change and taking appropriate action to prevent or minimise the damage they can cause...” (European Commission, n.d.). Since 2013 public health authorities in New Zealand have been working with local organisations in drought-afflicted rural communities to organise special mental health workshops to “help farming families battling the after effects of [last summer’s] drought... [and to] teach people to recognise the mental health issues and how to respond” (NZAC, 2013). Certainly the counselling profession has a vital role to play in responding to growing levels of personal and community distress as a result of climate change, as Portier et al. (2010) have outlined in their report, *A Human Health Perspective On Climate Change*:

“Psychological impacts of climate change, ranging from mild stress responses to chronic stress or other mental health disorders, are generally indirect and have only recently been considered among the collection of health impacts of climate change” (Portier et al., 2010, p.37).

They recommend a comprehensive list of research needed to better understand the mental health implications of climate change including a better “understanding of how psychological stress acts synergistically with other forms of environmental exposures to cause adverse

mental health effects” (Portier et al., 2010, p.39). In a 2017 report by the Royal Society of New Zealand (RSNZ) on the human health impacts of climate change eight discrete domains are identified where climate change will have a direct impact: Community, Well-being (mental health), Water, Food, Air, Temperature, Shelter, and Disease. On mental health the RSNZ note:

“[I]ncreasing temperatures, extreme weather events, and displacement of people from homes and communities will have significant mental health and well-being consequences. These range from minimal stress and distress symptoms to clinical disorders such as anxiety, depression, post-traumatic stress and suicidal thoughts” (RSNZ, 2017, p.9).

The National Oceanic & Atmospheric Administration (NOAA) announced that 2015 was the hottest year on record with the “globally-averaged temperatures in 2015 shattered the previous mark set in 2014 by 0.23 degrees Fahrenheit (0.13 Celsius)” (NOAA, 2016).” Then the following year The World Meteorological Organisation (WMO) confirmed 2016 to have beaten the 2015 record (WMO, 2017). In New Zealand, The Press reported February 2016 was the hottest February in Christchurch since records began in 1863 (Cairns, L., 2016), and in 2020 RNZ reported that WMO analysis for 2019 found an average global temperature surpassing 2015 (the second hottest year to 2016) and the hottest, driest year on record for Australia (RNZ, 2020). On New Year’s Day 2020 much of New Zealand was blanketed in smoke laden cloud cover from South Australian bushfires, “massive bushfires which were so devastating to people and property, wildlife, ecosystems and the environment” (ibid.). For counsellors coming to terms with the continuing environmental impacts of climate change on vulnerable populations, there is also the rather complex and scientific discourse of climate change mitigation. At a national and international policy level there are, broadly speaking, two distinct approaches to mitigate the warming effects of climate change:

1. Reduce carbon dioxide emission levels at an acceptable rate to ensure the global carbon dioxide level does not exceed 450ppm; this can include carbon sequestration through managed carbon abatement (e.g. planting forests, etc.) to off-set emissions level.
2. Geoengineering the climate to either remove carbon dioxide from the environment (Carbon Dioxide Removal, CDR); and/or artificially reduce the level of solar radiation reaching the earth's surface (Solar Radiation Management, SRM).

The first approach (emissions reduction) is commonly reported in the media and readily recognised by the public, whereas the second approach (geoengineering) is not readily recognised or understood by the public (Wright, Teagle, & Feetham 2014). The Royal Society (2009) define geoengineering as “the deliberate large-scale manipulation of the planetary environment to counteract anthropogenic climate change”, and Corner & Pidgeon (2010) refer to atmospheric geoengineering as the “intentional manipulation of the earth's climate to counteract anthropogenic climate change or its warming effects”. Wright et al. (2014) used techniques from marketing research for measuring public engagement and evaluation of concepts. They reported on the results of large-scale quantitative work that examined and compared public reaction to six climate engineering techniques. Research they referred to indicates a low level of public awareness of climate engineering, but a preference for CDR over SRM, as CDR can mitigate increasing atmospheric CO₂ commonly claimed (Robock, 2008; Corner & Pidgeon, 2010) to be the root cause of anthropogenic climate change. They note that “as SRM techniques become more widely known they are more likely to elicit negative reactions” (p.106). There are many serious environmental and geopolitical problems with SRM technologies, and according to climate scientist Alan Robock at least “20 reasons why geoengineering may be a bad idea” (Robock, 2008, p.14). However, Clifford Carnicom (Carnicom Institute) asserts that the aerosol geoengineering technologies allegedly

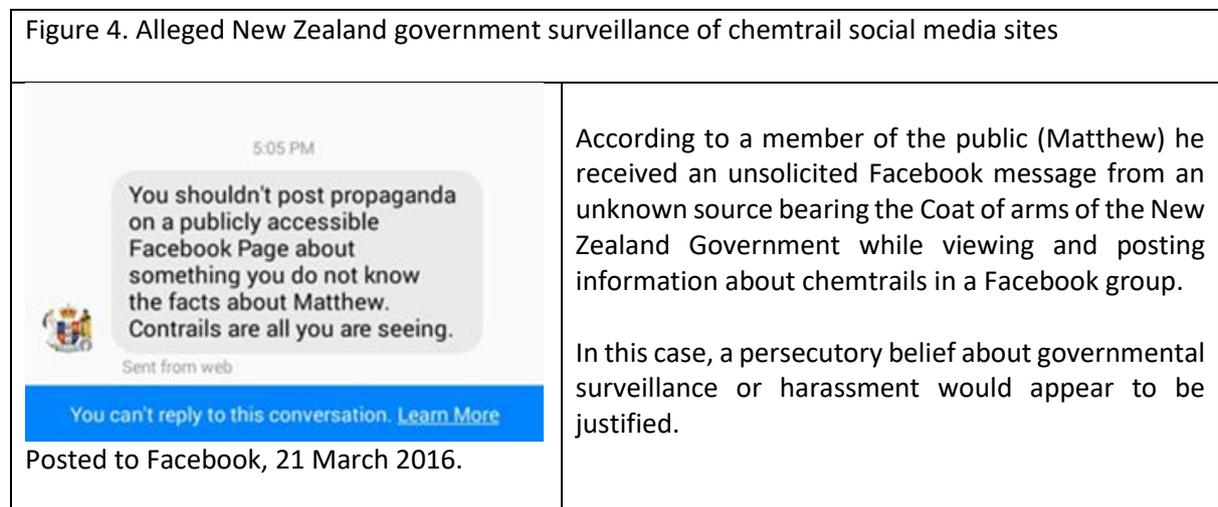
already in current use (i.e. aerosol spraying from aircraft), are not for the purposes of SRM because the ‘thin clouds’ that originate from an introduced aerosol base “do not cool the planet; they heat it up” (Carnicom, 2016):

What is known, therefore, is that geoengineering (and bioengineering) operations AS THEY ARE NOW PRACTICED IN THE LOWER ATMOSPHERE, i.e., the troposphere, are not directed and motivated primarily toward climate control, including the purported mitigation of “global warming” [author’s emphasis].

2.10 Disturbing or distressing beliefs about climate change or chemtrails

The academic and psychiatric literature is inconclusive about what actually constitutes a ‘disturbing belief’, much of the literature focuses on ‘delusional beliefs’ which is extensively documented. According to the American Psychiatric Association DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, 5th edition, 2013) delusions are “fixed beliefs that are not amenable to change in light of conflicting evidence” (p. 87). Lakeman (2003) discusses disturbing beliefs and uses an example of someone at home alone mistaking the “tapping of a branch on a window, or a shadow as an intruder”. He describes this as a common experience for someone in a state of vulnerability and that most people are prone to jumping quickly to conclusions at some time or another, which is clearly not delusional. There are two aspects to disturbing or distressing beliefs that can be informed by the DSM-5 definition, these are: ‘Persecutory beliefs’ (belief that one is going to be harmed or harassed by an individual, organization, or other group); and ‘Nihilistic beliefs’ (belief or conviction that a major catastrophe will occur). Persecutory and nihilistic notions appear to be common aspects of the chemtrail narrative frequently posted and discussed on social media, with the global chemtrail phenomenon being described by Dane Wigington (Director of Geoengineering Watch) as a dire threat to humanity often compared second only to nuclear holocaust (Wigington, n.d.). There have been numerous documented accounts by chemtrail witnesses

claiming to have been persecuted or harassed by government authorities in the U.S. (Thomas, 2004), and in New Zealand a report of alleged surveillance of social media sites (Figure 4.).



Nihilistic beliefs also appear to be a common feature among people experiencing heightened anxiety about climate change (Preston, 2017; Angeloni, 2019). This connects to how counsellors might work with clients that have disturbing beliefs about climate change and chemtrails, but whether such beliefs or associated distress can be considered of a clinical nature is beyond the scope of this research. In searching the literature I've not found any specific references to counselling clients with disturbing beliefs about climate change *and* chemtrails. However, Dunne (2017) does provide a brief extract from an interview with a chemtrail witness:

“Lisa described how she first heard about chemtrails through neighbours and social media, and in 2013 noticed planes flying over her house, ‘whiting out the sky’. Afterward she claimed her health began to deteriorate: “My hair started falling out, my asthma was terrible, I had sinus issues and headaches.... I stayed inside for all of 2013. I didn’t go outside without wearing a mask” (Dunne, 2017).

Lisa’s particular situation may pose a significant challenge to many counsellors as her brief disclosure includes behavioural and physical health features that would be very likely to also

affect her mental and emotional health. Witness accounts concerning personal health and psychological distress have also been documented by Thomas (2004).

2.11 Narratives and ‘restorying’ in counselling practice and research

Dunne (2017) reported on Lisa’s ‘story’ as a chemtrail witness. In a counselling setting clients may face challenges in “telling their personal story for fear of sharing their personal thoughts, feelings, and experiences with their counsellor” (Ricks, Kitchens, Goodrich, & Hancock, 2014, p.99). When clients are able to disclose their personal experiences to their counsellor, using a narrative therapy technique provides the opportunity for clients to tell and retell their story, and to reauthor or reframe their story (Ricks et al, 2014). Phipps & Vorster (as cited in Ricks et al, 2014) note that in narrative therapy “clients are able to take an event and situate the event in a new context, where the meaning simultaneously changes” (Phipps & Vorster, 2009). Further, White and Epston (also cited in Ricks et al, 2014) assert that:

“[N]arrative therapy works to separate the problem from clients; and after this is accomplished, clients can work on their relationship with the problem. By externalising the presenting concern in this manner, clients can use their resources to change their relationship with the problem” (White & Epston, 1999).

Using a narrative therapy technique “a counsellor assists clients in separating from their problem-saturated stories to find the *hidden story* of the way people wish to live their lives”[emphasis added] (Ricks et al, 2014, p.100). Sometimes referred to as ‘restorying’ in narrative therapy White and Epston (1990) outline four distinct components to the narrative approach, 1) deconstruction of the dominant story; 2) externalising the problem; 3) identifying unique outcomes; 4) re-construction, with the purpose of “replacing the problem-saturated story with one that allows the individual to be successful despite the constraining factors in their lives” (Morgan, Brosi, & Brosi, 2011).

Narrative researchers, as opposed to narrative therapists, might also reveal a ‘hidden story’ through the process of re-storying the recorded narratives of their research participants in order to tell, or re-tell the ‘stories’ from individuals about their lived and told experiences (Creswell, 2013; Creswell, 2017; Frank, 2005; Frank 2012; Riessman, 2008; Whooley, 2006). The purposes and process of re-storying in narrative research will be discussed further in the Methodology and Methods section.

2.12 Counselling and ‘conspiracy’ beliefs

There is a growing body of research about the public’s “belief in climate change” (Milfont, Wilson, & Sibley, 2017) which is partly influenced by media coverage of climate change or extreme weather events. But ‘belief in climate change’ is not associated with ‘conspiracy’ in the way that ‘belief in chemtrials’ are. There is an expanding body of research about public adherence to conspiracy narratives and some reference to conspiracy beliefs being a barrier to certain public health initiatives (e.g. HIV testing). Since a number of academic articles refer to the chemtrail phenomenon as ‘conspiracy’ (Brewer, 2007; Cairns, 2016; Tingley & Wagner, 2017), and numerous mainstream media reports, it is worthwhile considering the broader milieu of conspiracy narratives within a counselling context.

The chemtrail narrative potentially poses some significant challenges to the counselling profession given the wide-spread proliferation of chemtrail information on the internet, and the possibility of counsellors encountering clients that report seeing chemtrails, or being affected by them. Brewer (2007) claimed chemtrails were a conspiracy theory for ‘the gullible’. Brewer’s comment typifies mainstream views about conspiracy narratives which are often made by people who have done little or no research into the subject themselves. Conspiracy beliefs can be viewed as delusional by the public, a view that is reinforced by the media: “You don’t have to be mad to create conspiracy theories, but it certainly helps”

(Stewart, 2014). Delusions are usually defined as “a false, unshakeable belief, held with strong conviction despite the best evidence to the contrary” (Tin, Leong, Tan & Tan, 2015). Tan et al. advise counsellors “not to challenge or confront a client’s delusions. It is best to use the strategy of probing, where the counsellor tries to uncover the extent of the delusional ideas and the reason for them”. There is an aphorism that has circulated widely in counselling and psychotherapeutic circles about how to respond to clients’ expression of ideas that might not be believable to the counsellor: “Don’t argue but don’t reinforce” (Lakeman, 2003). Lakeman makes the point that techniques such as diversion, switching topics or worst of all, ignoring the expression runs the risk of invalidating the person’s experience and leaving them feeling misunderstood or unheard.

Conspiracy theories are not by definition false, real conspiracies have come to light and have been substantiated, and the notable rise in conspiracy narratives may be spurred in part by the growth of new media according to Wood, Douglas & Sutton (2012). By implying that conspiracy theories have no plausible basis they are relegated to the “implausible visions of a lunatic fringe” (Melley, 2000). However, it appears that the events of 9/11 may have precipitated a ‘tipping point’ that has transformed public perceptions of conspiracy narratives to a mainstream response to the most disturbing events (Shrira, 2008). Sunstein & Vermeule (2009) claim that “conspiracy theories typically stem not from irrationality or mental illness of any kind [rejecting Melley’s ‘lunatic fringe’ notion] but from a ‘crippled epistemology’ in the form of a sharply limited number of informational sources”(p.204). This is an important distinction for the counselling profession to note, but it becomes an even more critical distinction to understand when official ‘authorised’ narratives are themselves based on a crippled epistemology, as alluded to by Jones, Korol, Szamboti, & Walter (2016) in their analysis of the 9/11 World Trade Centre (WTC) building collapses who concluded “the evidence points overwhelmingly to the conclusion that all three buildings were destroyed by

controlled demolition”. Sunstein & Vermeule (2009) cite a Scripps-Howard poll in 2006 that found 36% of respondents assented to the claim that federal officials either participated in the WTC attacks, or took no action to stop them. Imagine a counsellor working with a WTC survivor traumatised by the events, and also deeply distrusting of the government or even blaming government officials for complicity or a cover-up. Which version of events would the counsellor side with? And would that influence or affect the therapeutic value or effectiveness of their practice?

Gabor and Ing (1991) advocating for a Cognitive-behavioural therapy (CBT) approach claim that one of the differences of CBT from other approaches where the counsellor might accept and reflect the client’s perspective, CBT is “far from providing such validation, cognitive-behavioural counsellors take issue with those attitudes, opinions, and feelings that they see as illogical, and urge their clients to abandon them.” How would a CBT approach work with a client like Betty Rowe (or Lisa [Dunne, 2017]), disturbed by a belief that the counsellor might view as “illogical”? Gabor and Ing’s (1991) description of CBT is clearly influenced by their own attitudinal biases.

Engaging with a client’s narrative about their beliefs about chemtrails is necessary in order to assess the extent to which their beliefs may be disturbing or distress invoking to them, and the most straight forward approach would be simply to ask. The challenge for the counselling profession does not concern the substantiation of the existence of chemtrails per se, but rather an open-minded willingness of counsellors to engage in the chemtrail narrative with their clients for therapeutic benefit, and with their peers and the profession as a whole for informed and ethical practice. In the 1990’s and early 2000’s beliefs about a genocidal HIV conspiracy were identified as a barrier to HIV testing in South Africa (Bogart, Kalichman, & Simbayi, 2008), fuelled in part by the 1999 Pretoria High Court proceedings against Dr Wouter Basson who was charged with sixty-seven counts of murder, conspiracy to murder, drug offenses,

and fraud. There were revelations of state sanctioned research into a race-specific bacterial weapon; a project to find ways to sterilize the country's black population; discussion of deliberate spreading of cholera through the water supply; large-scale production of dangerous drugs; the fatal poisoning of anti-apartheid leaders, captured guerrillas, and suspected security risks (Finnigan, 2001). Part of Basson's alleged state condoned genocidal legacy became an enduring belief among some black Africans that HIV was a manufactured disease by whites to reduce or control the black African population. Prior to 2010 over 20% of South Africans aged 15-49 years were infected with HIV, and that "prevention behaviour that may be influenced by genocidal beliefs is HIV testing. National probability survey estimates suggest that less than a fifth of South Africans older than 14 years have been tested and are aware of their serostatus" (Bogart et al., 2008)). Given South Africa's alleged genocidal history under apartheid the HIV conspiracy narrative is easily understandable, but not limited to South Africa alone. In the United States conspiracy beliefs about the origin of HIV and the role of the government in the AIDS epidemic are prevalent, particularly in the African American community (Ross, Essien & Torres, 2006). Klonoff and Landrine (1999) surveyed 520 adult African Americans in California and found that 27% of African Americans "endorsed the belief that 'HIV/AIDS is a man-made virus that the federal government made to kill and wipe out black people', and a further 23% were unsure." Bogart and Thorburn (2005) also surveyed African Americans and found that over 30% of men and 24% of women agreed that "AIDS was produced in a government laboratory".

The prevalence of these kinds of conspiracy narratives present a unique challenge to counsellors working in public health HIV/AIDS prevention programmes where any attempt to dissuade prospective clients about their beliefs may be construed as complicity and further distance or alienate clients. For counsellors to keep an 'open mind' and engage with their clients McLeod and Cooper (2012) advocate for a 'pluralistic' counselling approach where:

“[A]ny substantial problem admits to a multiplicity of reasonable and plausible answers. A pluralistic stance implies that a person is willing to accept the validity of other answers to a question, even while adopting a specific position”(p.339).

This concept of pluralism is an important distinction for counsellors working with clients whose beliefs or experiences challenge the counsellor’s own held notions of reality.

Counsellors need to be able to engage with their client’s narrative allowing this to emerge without imposing unnecessary limitations, judgements or ‘closed mindedness’ about what they may think to be ‘true’ or not. This was made particularly evident in the HIV genocidal conspiracy narrative, but could apply equally to counsellors assisting 9/11 WTC victims suspicious of a government cover-up, or a client distressed by chemtrails and worried about climate change.

2.13 Summary

In this chapter I have provided a range of literature from a variety of sources to inform the reader about the psychosocial impacts of climate change, and the emergence of Ecotherapy, which can have direct implications for counselling practitioners. I’ve provided a broad introduction to the global chemtrail phenomenon and the science and technology of aerosol geoengineering as one explanation of chemtrails that relates directly to climate change mitigation. I’ve contextualised the chemtrail phenomenon within a counselling perspective by contrasting the popularised narratives of *conspiracy theory* with references to chemtrail research and brief accounts of chemtrail witnesses, with approaches that can be taken by counsellors encountering disturbing or distressing beliefs. A brief section on narrative therapy and ‘restorying’ was included as a precursor to the Methodology and Methods chapter. As a literature review this chapter has provided the basis for informing, in broad terms, what might be termed or considered notions of *literacy* about climate change cognisant to the global chemtrail phenomenon which will be examined further in later chapters.

Chapter 3 - Methodology and Methods

This chapter presents the methodology and methods used in this research project. In this qualitative research project a narrative methodology was utilised and for this methodology a semi-structured interview method was utilised for data collection. An outline of the method with a description of the study participants and method of recruitment follows an introduction to the narrative methodology. Included in the method section is a description of the participants and process of recruitment, followed by a description of data collection and method of analysis of data is outlined. The chapter concludes with a discussion about ethical considerations, including consideration of validity and trustworthiness.

3.1 Narrative Methodology

Bechsgaard (2018) in her counselling thesis described qualitative research as “an observation on the real world while trying to make sense of it and to interpret the experiences in the way it is understood by the people participating in it” (citing Brinkmann, 2012). It aims to make the world more visible, and as noted by Brinkmann “to perceive and clarify the participant’s way of understanding the world, and uncover potential patterns in this understanding and the context in which this is happening” (Bechsgaard, 2018, p.35). Broadly speaking “qualitative research is a naturalistic, interpretive approach concerned with understanding the meanings which people attach to phenomena (actions, decisions, beliefs, values etc.) within their social worlds” (Snape & Spencer, 2003, p.3).

Within the broader context of qualitative approaches, Creswell (2013) refers to five distinct qualitative methodologies, I chose a narrative methodology because the core of my research question concerned counsellor ‘meaning making’, that is, what does being or becoming a mental health-related climate-literate professional *mean* to the participants of my research. While the experiences of their clients (concerned or distressed about climate change and

chemtrails) might inform (or further inform) the counsellor about these phenomena, the focus of my research was on the experiences of the counsellor, not their clients, as told through their interview narrative.

According to Creswell (2013) narrative researchers collect ‘stories’ from individuals about individuals’ lived and told experiences that emerge from a story told to the researcher, and “situate individual stories within participants’ personal experiences (their jobs, their homes), their culture (racial or ethnic), and their historical context (time and place)” (Creswell, 2013, p.74). People “tell stories in order to revise their self-understanding” (Frank, 2012, p.37), and stories about themselves that shape a sense of self-identity are always unfinished in the same way that people themselves are ‘unfinalised’ (Frank, 2005, 2012). Since my intention was to explore and document storied experiences of counselling practitioners a qualitative methodology was chosen, keeping in mind the following cautionary about qualitative research: “*What can one person say about another?* Research is, in the simplest terms, one person’s representation of another” (Frank, 2005, p.966 [author’s emphasis]).

I felt a narrative approach would be the most suitable methodology, as narrative inquiry “begins with the experiences as expressed in lived and told stories of individuals” (Creswell, 2017, p.67). There can be a strong collaborative feature to narrative research as the participant’s ‘story’ emerges through the interaction or dialogue with the researcher.

As a counsellor myself with my own personal and counselling practice experiences of the climate change and chemtrail phenomena, and now as a researcher, a narrative inquiry approach provided me with a suitable methodology for recognising my own storied experiences and how, through dialogue, these were present in my collaborative interviews with the participant’s stories. My own experiences of climate change, and what I’d learned about the chemtrail phenomenon have, in recent years, increasingly influenced my sense of

self-identity as a practicing counsellor researching these subjects, and as a living breathing being interacting within a biosphere that I experience as becoming progressively uninhabitable. I have in my own subjective way become ‘climate-literate’, but not through any formalised learning, rather as a consequence of my experiences, research and reflexivity forming my own ‘narrative identity’.

I was interested in how ‘stories’ tell of individual experiences that “may shed light on the identities of individuals and how they see themselves” (Creswell, 2017, p.69). What the research participants had to say about themselves as ‘climate-literate professionals’ may provide some insight to the narrative ‘identity’ of participants, given the general consensus among narrative researchers that identity is ‘narratively constructed’ and that “identities and selves are shaped by the larger socio-cultural matrix of our being-in-the-world and, at the least, narrative implies a relational world” (Smith & Sparkes, 2008, p.6). However, stories themselves no matter how they may be documented or reported do not necessarily represent any direct ‘meaning’:

“the meaning of any present story depends on the stories it will generate. One story *calls forth* another, both from the storyteller him or herself, and from the listener/recipient of the story.... This principle of *perpetual generation* means that narrative analysis can never claim any last word about what a story means or represents” (Frank, 2005, p.967 [author’s emphasis]).

Central to my research question was the notion of ‘meaning-making’, and in my understanding and appreciation of narrative inquiry *for me* this would necessitate a re-storied dialogic approach.

3.2 Method

One of the features of narrative inquiry, and analysis of narratives, can be where the researcher reorganises stories into a type of framework called ‘*restorying*’: “The researcher

may take an active role and ‘restory’ the stories into a framework that makes sense.”

(Creswell, 2017, p.72).

To begin, prior to the process of restorying, I chose a thematic analysis approach (Braun & Clarke, 2006) for identification of key elements (themes), and then a process of narrative restorying in which I as researcher *and participant* situate the interviewee and my own narrative(s) within a dialogic analytical framework as my main analytical approach. Dialogic analysis “moves the analysis away from the completed *product* of the narrative toward the communicative act in which the narrative is *produced*” [emphasis from quotation] (Whooley, 2006). In this way my dual roles as researcher (interviewer) *and participant* was accommodated within my overall methodological framework. Riessman (2008) notes that dialogic analysis goes beyond thematic and structural analysis, but makes selective use of both elements (structural/thematic) to interrogate how talk among speakers is interactively (dialogically) produced:

“Simply put, if thematic and structural approaches interrogate ‘what’ is spoken and ‘how’, the dialogic/performance approach ask ‘who’ an utterance may be directed to, ‘when’ and ‘why’, that is, for what purposes?” (Riessman, 2008, p.105).

This distinct difference between thematic and dialogic analysis was fundamental to my overall method since I was utilising both approaches. I referred to Arthur Frank where he made this distinction clear about themes emerging within an ethnographic study that are dialogically produced, and determined that: “the themes situate the stories; they do not substitute for the stories” (Frank, 2005, p.969). This nuanced distinction, and how themes can inform or be further understood through dialogue formed the overall basis of my analysis. The re-storying process, drawing on my own reflexive experiences, field notes, and supervision sessions allowed me to situate this research within my own, and my research subjects’, lived experiences of the climate change and chemtrail phenomena both within a

therapeutic (counselling practice) context, and within a broader time, place, environmental and political context. Whooley (2006) refers to three different layers of context – the micro level of textual context (intertextuality), the local content (interaction between a speaker and a listener), and the historical context (time, place, political environment, etc.). According to Whooley narrative researchers have analysed intertextuality and local context successfully, but have paid less attention to the effects of the general historical context because “most analysis tends to take the historical context for granted” (Whooley, 2006, p.298). In the case of this research climate change and the chemtrail phenomenon are highly contextual to the current global environmental and geopolitical milieu. The re-storying process began with the writing of my own narrative (micro level), which provided a basis and context for the re-storying (local content) and the overall dialogic analysis of the participant interviews situated within the historical context (see discussion section). For this study a semi-structured interviewing format was chosen to enable participants’ stories to be co-constructed between the researcher and the participant as a collaborative feature of this research project so that “the story emerges through the interaction or dialogue of the researcher and the participant(s)” (Creswell, 2013, p.71). In semi-structured interviewing the researcher prepares a number of questions which are designed to guide, rather than dictate, how the interview proceeds. Riessman (2008, p.21) shares this observation: “[T]he researcher does not *find* narratives but instead participates in their creation” (from Neander & Skott, 2006, p.297), and also refers to Mishler’s (1986) seminal work and makes this observation:

“[T]he standardised protocol (where question order is invariant) gives way to conversation where interviewees can develop narrative accounts; speaker and listener/questioner render events and experiences meaningful – collaboratively. The model of a ‘facilitating’ interviewer who asks questions, and a vessel-like ‘respondent’ who gives answers, is replaced by two active participants who jointly construct narrative and meaning” Riessman (2008, p.23).

All participant interviews were conducted at the counsellor's place of work, their consulting room, as their preference (an office at the University of Canterbury was offered), and the interview recorded for later transcription and analysis. I had prepared ten interview questions, which were the actual research questions (Chapter 1.3) with the addition of an opening question to be asked at the start of each interview (Appendix C). These had been assessed and approved along with my research proposal by the University of Canterbury Human Ethic Committee (Appendix D). These were not ordered into any chronological sequence except for the opening question and closing question which was asked to all participants at the beginning and conclusion of the interview. The interview questions acted as prompts for stimulating conversation, and the interviews generally followed the flow of each participant's narrative. The formulation of the interview questions arose from my reading of the literature concerning climate change and the chemtrail phenomenon, Cornforth's (2008) article [Life Span, Global Warming and Ethics: Do Counsellors Have a Part to Play in Averting a Potential Catastrophe?], and my own experiences as a counsellor and my lived experiences of climate change and chemtrails. My selection of questions were chosen to cover a range of talking-points such as what the counsellor already knew about climate change and chemtrails, their experiences of working with a client distressed by the phenomena, and any notion they might have of themselves as 'a mental health-related climate-literate professional'.

3.3 Participants

An essential requirement for selection of participants was that they had experience of exposure to the phenomena of climate change and chemtrails through their therapeutic interaction with clients concerned or distressed by these phenomena. Therefore a *purposive sampling* approach was used (rather than any kind of random selection via a probability method) that enables the researcher to collect "data from persons who have experienced the phenomenon" (Creswell, 2013, p.76).

“The purposive sampling technique, also called judgment sampling, is the deliberate choice of a participant due to the qualities the participant possesses. It is a nonrandom technique that does not need underlying theories or a set number of participants. Simply put, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience” (Etikan, Musa, & Alkassim, 2016).

The initial proposal was to select four to five participants, a small sample size since narrative research is best for capturing the stories or life experiences of a single individual or that of a small number of individuals (Creswell, 2013). Four participants were recruited and interviewed, but only three interviews were transcribed for analysis since one of the participants was subsequently disqualified as it became evident in the interview that although they had lived experience of the climate change and chemtrail phenomena they did not have actual therapeutic experience in their practice with clients. In purposive sampling participants can be contacted via referral or through researcher personal contacts, but I chose to use advertisement to the counsellor and therapy professional associations.

An e-mail invitation outlining my proposed research was forwarded to counsellors (Appendix E) via the Canterbury branch of the New Zealand Association of Counsellors (NZAC), and to practicing members of the New Zealand Association of Intuitive and Pascha Therapists (NZAIPT), and a notice placed in the Canterbury branch of the New Zealand Association of Psychotherapists (NZAP) monthly newsletter. While it is possible that some prospective participants could have been members of more than one of these associations, I estimate that approximately 400 counsellors or therapists would have received e-mail or newsletter notification about my research project. I received four e-mail replies, three from practicing counsellors willing to participate, and one enquiring about my research, but not wanting to participate. I was subsequently referred to a fourth participant by one of the three participating counsellors.

3.4 Data collection

I contacted each prospective participant by phone to arrange an interview, and answer any questions about my research. Once an interview date was booked no further communication took place (other than confirming the time and location). All participants were provided with, and signed, a research information and consent form (Appendix F). Each participant was interviewed once, and participants chose to be interviewed at their own consulting room, except for one who chose to be interviewed at a colleagues rooms as this was more convenient at the time. The duration of each interview was approximately one hour and was recorded on audio cassette tape. Participants were offered a copy of their interview transcription and each participant requested this. Once transcribed the transcript was sent to each participant. I undertook the transcription of the interviews myself, in the sequence in which they were recorded, but had completed all of the interviews before finishing the first transcription, so effectively the transcriptions were completed after all interviews took place. This meant that there were no changes to the interview questions for subsequent interviews and all interviews were conducted following the same ten-question guide.

3.5 Data Analysis – coding of data and a dialogic narrative analysis

I chose a two-step approach using a thematic analysis as a method for identifying, analysing and reporting patterns (themes) within the data (the ‘what’), and a dialogic narrative analysis (DNA) to explore the ‘who’, ‘when’ and ‘why’ as outlined by Riessman (2008), and Whooley (2006). Following Braun and Clarke’s (2006) step-by-step guide to doing thematic analysis they describe two fundamental approaches to identifying patterns (themes) – inductive or theoretical thematic analysis. In inductive analysis there would be “a process of coding the data without trying to fit it into a pre-existing coding frame, or the researcher’s analytic preconceptions”, whereas in contrast a theoretical thematic analysis “would tend to

be driven by the researcher’s theoretical or analytic interest in the area” (Braun & Clarke, 2006, p.84). Because I had no particular ‘analytic preconceptions’ to begin with I began the analysis process by reading and re-reading the transcripts, my approach *felt to me* very much like the inductive approach. I began coding the first transcript by noting key phrases in the participant’s narrative that I found interesting or poignant connected to my research question about climate change, chemtrails, and counsellor ‘climate-literacy’. This was informed by my research question, not by any theoretical or analytical framework. Phrases of interest that emerged in the coding of the first transcript included reference to the weather, the natural environment and nature, validating clients concerns, scepticism and distress about chemtrails, conspiracy and mistrust of authorities, disempowerment, feelings and self-trust. I then approached the next two transcripts coding in a similar way, but also noting where data extracts were similar (sometimes almost identical) to extracts in the first transcript. For example, data extracts coded for ‘the natural environment and nature’ were identified in all three transcripts (Table 2.). These emerged purely from a semantic analysis of coded extracts, and the initial coded extracts identified in the first transcript based on semantic content were also evident in both of the subsequent transcripts.

Table 2. Data extracts coded for ‘the natural environment and nature’.		
Note: Bracketed number refers to where in the transcript the extract appears.		
Extracts - Transcript 1:	Extracts - Transcript 2:	Extracts - Transcript 3:
How clients’ relate to nature (51), elements of nature that appeal to them (52)	Life force in nature (88) Finding the right element – garden, beach, mountains, ocean (89)	There is therapy in nature (66), to find harmony being attracted to the beach, rivers, mountains, lakes (67) healing that’s available in the environment (68)

From this process of analysis of extracts coded across all three transcripts the themes that began to emerge from the entire transcribed data set closely matched the initial ‘phrases of

interest' identified in the first transcript. Following Braun and Clarke's (2006) guide I started by identifying individual data extracts which, as they explain, had been "identified within, and extracted from, a data item [the transcripts]... only a selection of these extracts will feature in the final analysis" (p.79).

I began by reading and re-reading the transcripts that I had transcribed myself, noting interviewee replies and phrases connected to my interview questions and coding these (numbered in sequence for each transcript). Across the three transcripts I coded a total of 273 extracts (Transcript 1: 112; Transcript 2: 90; Transcript 3: 71). For each interview participant I noted their reason for participating, which was the first question I asked in each interview, and then noted the main concern each interviewee referred to from their experiences of working with a client (or clients) concerned or distressed about climate change and chemtrails and grouped these into the main 'client issue' for each of my interviewees (Appendix G: Emerging data extracts from interviewee transcripts). From this I identified a selection of related extracts from each transcript that were the most illustrative of my interview questions which I also tabulated into thematic groupings that were common across all three transcripts (Appendix H: Identification of themes from coded data extracts). There were seven distinct themes that emerged common to all three transcripts with multiple data extracts from each interview connected to each of these.

Braun and Clarke (2006) note that "Ideally, the analytic process involves progression from description, where the data have simply been organised to show patterns in semantic content [Tables 2&3] to interpretation, where there is an attempt to theorise the significance of the patterns and their broader meanings and implications..." (p.84). I began to further refine and categorise two main themes, and sub-themes (Table 3), keeping in mind Arthur Frank's previously referred observation that 'themes situate the stories; they do not substitute for the stories'. This was a crucial distinction in guiding my further analytical approach.

Returning to Braun and Clarke (2006): “It is difficult to specify exactly what *interpretive* analysis actually entails, particularly as the specifics of it will vary from study to study” (p.93 [my emphasis]). I had relied on Braun and Clarke’s guidance for the initial coding and data analysis steps but in order to situate myself, *as participant*, within the analysis, and more importantly for any possible ‘meaning’ that might be attributed by this, a further form of in-depth analysis would be needed.

Table 3. Refinement of themes and sub-themes	
Theme 1: Distress about climate change, weather, and the natural environment	Sub-themes common to both 1&2: <ul style="list-style-type: none"> • Clients’ feelings of disempowerment and needs for self-trust • Clients’ relationship with nature (healing and restorative power of nature) • Counsellor validation of clients’ concerns
Theme 2: Distress about chemtrails and witnessing chemtrails	
	Sub-theme (Theme 2): <ul style="list-style-type: none"> • Mistrust of authorities relating to conspiracy concerning weather and environmental manipulation • Encountered scepticism about existence of chemtrails

To this point I’d worked methodically guided by Braun and Clarke’s methodology, and was pleased with the range and depth of data (extracts, themes) I had identified, but in terms of getting to the meaning of it I turned to another methodology altogether, and selected a Dialogic Narrative Analysis approach.

3.6 Dialogic Narrative Analysis (DNA)

My choice in selecting DNA was derived principally from two fundamental elements to my research. Firstly, my research question which I returned to repeatedly during the process of analysis: What does being (or becoming) a mental health-related climate-literate professional

mean to counsellors? I felt that DNA was the most suitable methodology for identifying ‘meaning’ or ‘meaning-making’ especially because in my experience as a counsellor, both personally and in my experience with counselling clients, that ‘meaning-making’ (with the client, or in my supervision sessions) has been a central feature of my counselling practice. Further, that “meaning in the dialogic approach does not reside in the speaker’s narrative, but in the dialogue between speaker and listener(s), investigator and transcript, and the text and the reader” (Riessman, 2008, p.139). And secondly, from a position of reflexivity, a DNA approach would enable me to position myself as both researcher *and* research participant. For this I drew extensively from Kim Etherington’s work: *Becoming a Reflexive Researcher* (2004). Etherington describes researcher reflexivity as the capacity of the researcher to acknowledge how their own experiences and contexts inform the process and outcomes of inquiry and that “by using reflexivity in research we close the illusory gap between researcher and researched and between knower and what is known” (p. 32). Similarly, Arthur Frank emphasises that “DNA’s concern is how to speak *with* a research participant rather than about him or her” [author’s emphasis], and “to recognise that any individual voice is actually a dialogue between voices” (Frank, 2012, p.34). In reading about Frank’s description of stories as ‘artful representations’ of lives (lived experiences) I was taken beyond the notion of ‘the story emerging through the interaction of the researcher and participant’ (Creswell, 2013) and began to grapple with a deeper representation that Frank himself disclosed that he had long resisted:

“[T]hat stories have provisionally independent lives. To say that humans live in a storied world means not only that we incessantly tell stories. Stories are presences that surround us, call for our attention, offer themselves for our adaptation, and have a symbiotic existence with us. Stories need humans in order to be told, and humans need stories in order to represent experiences that remain inchoate until they can be given narrative form” (Frank, 2012, P.36).

As I began the analysis of my transcribed interviews, through the lens of DNA I realised my purpose was not to ‘find the story’, but rather to allow the stories to *find me*. I began with an analysis of an existing ‘story’ by writer Carey Dunne (2017), *My month with chemtrail conspiracy theorists* (see Appendix I), and started by identifying the key story elements as outlined by sociologist William Labov (as cited by Riessman, 2008, pp. 81-86) and summarised by Frank (2012): A story begins with an *abstract* (announces a story will be told); followed by *orientation* (sets time, place, central characters); then a *complicating action* (something happens requiring characters to respond); then a *resolution* (to the complicating action); and then an *evaluation* (was it done well or not?); and finally a *coda* marks the end of the story. I applied this analysis to the first 250 words of Dunne’s narrative adding my own reflexive commentary and found that an entirely different story can emerge through the re-storying process. This was a revealing experience for me, my first attempt at DNA which provided me some practice and a basis for applying DNA in the further analysis of my research participant transcripts.

3.7 Reflexivity as a feature of Dialogic Narrative Analysis

Riessman (2008) emphasises the significance of reflexivity in the dialogic approach where “intersubjectivity and reflexivity come to the fore as there is a dialogue between researcher and researched, text and reader, knower and known” (p.137). Etherington (2004) begins by discussing reflexivity as “a skill that we develop as counsellors: an ability to notice our responses to the world around us, other people and events, and to use that knowledge to inform our actions, communications and understandings” (p.19). It seemed natural to me that reflexivity would form a key feature for DNA and I felt familiar with this from my own counselling approach which is why I chose to incorporate reflexive commentary with a number of the narrative texts I selected from my transcripts. Etherington offered a reflexive comment about her experience of writing her PhD dissertation:

“I had ‘bracketed off’ myself – including myself just enough for the reader to have sight of my values and beliefs so that they could see more clearly where I was coming from and how this position might have influenced my analysis of the data. At that stage I could have done no more in the public arena; to be more reflexive and included myself any more than that would have felt too risky and not ‘proper research’. I had, however, used the personal pronoun ‘I’ throughout rather than ‘the researcher’” (Etherington, 2004, p.47).

There is very little ‘bracketing off’ in my approach to DNA, and this is evident in the style of the narratives I present where I position myself as a participant as well as an interviewer; “everything that happens is constructed by those involved in it, and therefore *not* to be reflexive, not to self-examine and not to put that process and the results out there, is to withhold some of the information that exists about the context which you’re examining” (Etherington, 2004, p.48).

With the transcripts of each of my research participants I selected sections of narrative and re-storied these in different ways, mainly in stanza form, to emphasise various aspects of possible meaning. I found that when I allowed myself to bring my reflexive interpretation of meaning from specific sections of narrative *as a participant*, that I could share my own ‘process’ of meaning-making. For example, with my second interviewee Miriam (Transcript 2.3), the section of our dialogue concerning feelings of disempowerment and ways of self-care, this section demonstrated a high degree of mutual dialogic co-construction. I found the more I allowed myself to creatively re-story the transcription (with myself as narrator) and the freer I felt to write reflexively, the more insight of my own ‘meaning-making’ I felt I achieved. I applied this technique to sections from the other two participants Claire (Transcript 1.3) and James (Transcript 3.2) as well.

3.8 Ethics, validation and trustworthiness

The ethical considerations for this research were assessed and approved by the University of Canterbury Human Ethic Committee. In terms of what might be of ethical concern in the

practice and representation of reflexive research Etherington (2004) discusses protecting the confidentiality of people included, or referred to, in the research when narrators' stories are closely bound up in theirs, and also the importance of transparency on the process of data collection and trustworthiness in how this is presented: "it is important that the voices of the researchers and researched are not merged and reported as one story – which is actually the researcher's interpretation" (p.83). To illustrate this point Etherington referred specifically to Lather and Smithies (1997) use of 'split text' where they represented the stories of their research participants at the top of the page and their own commentaries at the bottom of the page. I used a form of split text myself in the analysis of Dunne's (2017) article, and repeated this process *form* with each of my participant transcripts (1.3; 2.3; 3.2) in a three-column form with unedited text, re-storied text, and a reflexive commentary. Further, Etherington (2004) also discusses validity in terms of researcher reflexivity providing a social, cultural, historical, racial and sexual context, and whether the work contributes understanding and new learning about the subject of inquiry, and cites Lincoln (1995) noting that narrative texts "are always partial and incomplete" (p.82). Frank (2005) observes this notion of 'incompleteness' which he terms as a principle of 'perpetual generation'. On this note, I included poetry form in certain sections of my re-storied text which Etherington (2004) refers to as a means for emphasising pauses and speech since 'nobody talks in prose'.

In following and presenting a documented process for coding and identification of thematic content (Braun & Clarke, 2006), and situating re-storied content within a thematic context with attention to differentiating original dialogic narrative, re-storied narrative, and reflexive commentary readers can discern for themselves *whose* voice is represented for purposes of determining validity and trustworthiness.

Chapter 4 - Presentation of narratives, with Dialogic Analysis

In this chapter I present selected narratives from each of the three interviews, noting that although I interviewed three individuals on separate occasions that I myself feature as the ‘fourth voice’ of these common to all three narratives, and that “any individual voice is actually a dialogue between voices” (Frank, 2012, p.34). This notion of ‘dialogue between voices’ forms the first of five commitments outlined by Frank (2012), the second being to “remain suspicious” of monologue and to *witness* [Frank’s emphasis] the “gathering of voices to give them a more evocative force so that these storytellers could hear each other, and so that they could be heard collectively” (p.34). The third commitment seeks to extend the dialogue beyond any notion of finding or creating a story, but rather to give narrative form to the stories that are “presences that surround us, call for our attention, offer themselves for our adaptation, and have a symbiotic existence with us” (Frank, 2012, p. 36). The fourth commitment Frank outlines concerns ‘the unfinalised nature of persons’ underscoring a tension within Dialogic Narrative Analysis (DNA) being on the one hand, there is no ending, but on the other that research reports have a practical need to end. And finally the fifth commitment of DNA is not to summarise *findings* [Frank’s emphasis] but rather “to open continuing possibilities of listening and of responding to what is heard” (Frank, 2012, p.37).

With these five commitments in mind I have understood my purpose in the writing of this chapter to be to present the research interviews I conducted not as any kind of definitive record, but rather to give narrative form of my own creation to a selected gathering of stories. Thus, the narratives I present are but one version of a multitude of possible interpretations. As the *fourth voice* of these narratives I am represented by my own dialogic utterances in conversation with my interview participants, and in my reflexive commentary as a “meaning-making being” (Crotty, 1998, p.10).

It simply was not practicable to include the entire transcription for each interview as this would have entailed an analysis that would have spanned many chapters. Instead I have selected segments from each interview that I felt were illustrative of the main thematic content identified through the thematic coding process described in the earlier section (that was summarised in Table 3) and this will be discussed further in the subsequent chapter - Presentation of Findings. In doing so the narratives I present here are not the 'stories' of my interview participants, they are 're-storyed' narratives in which a story of sorts emerges as one particular version from a range of possible stories. In themselves they have no fixed meaning since they exist independently of any meaning the reader might assign to them. Like Kim Etherington (2004), I believe that "the world exists out there independently of our being conscious of its existence" and for me this is true also of stories that are told, or have yet to be told. Similarly to Crotty (1998) I believe that the world, or stories for that matter, become "a world of meaning only when meaning-making beings make sense of it" (Etherington, 2004, p.71).

In this section I present my own reflexive interpretations of the selected narratives, this is my own 'meaning-making' and part of *my* narrative as the 'fourth voice' but is not intended to be any kind of definitive statement of meaning for the reader. The meaning, if any, taken by the reader is entirely their own and I do not seek to prescribe this in any way. As a guide I have followed Etherington's example of how reflexivity can be used in research conversations:

"This kind of 'interviewing' is experienced by both parties as more of a conversation between equals than as a hierarchical interview in which the interviewer holds all the power"

(Etherington, 2004, p. 39). A further consideration about reflexivity:

"Reflexive interviewing can follow the usual format of the researcher asking questions that the participant answers: where it is different is that the interviewer also notices and/or shares personal experience of the topic and comments on the unfolding communication between both parties" (Etherington, 2004, p. 77).

Beginning with the first presented transcript (Transcript 1.1), which presents the first few minutes of my first participant interview, I chose to withhold any direct reflexive comment within the text, preferring to present a ‘complete’ story by identifying the key story elements as outlined by sociologist William Labov (as cited by Riessman, 2008, pp. 81-86) and summarised by Frank (2012, p.42): A story begins with an *abstract* (announces a story will be told); followed by *orientation* (sets time, place, central characters); then a *complicating action* (something happens requiring characters to respond); then a *resolution* (to the complicating action); and then an *evaluation* (was it done well or not?); and finally a *coda* marks the end of the story. To begin, an introduction to my first interviewee – Claire.

4.1 Claire’s narrative (re-storyed)

Claire is a European New Zealander, a professional counsellor and therapist in private practice with more than 30 years’ experience and a member of two professional psychotherapy associations. She works with clients on a one-to-one basis, as well as providing supervision services to other counsellors/therapists. Claire described herself to me as having been involved in various social change movements, was at one time a member of the Green Party, and was personally environmentally aware about climate change from years of “roaming around in the mountains, watching tarns and streams disappear with global warming”. It was evident to me through the course of our interview that Claire was very concerned herself about climate change and the environment, but that one particular session with a client stood out and that this had brought a focus about the environment directly into her counselling practice. She was one of the first counsellors to reply to my research e-mail, and because she was also the first available to meet with me she was my first research interviewee. Once we had settled in at her counselling room I started by asking her why she agreed to participate:

Malcolm: “So I would just like to begin by asking you this question which is... can you tell about why you agreed to participate in this research? What prompted you to want to be a part of it?”

She replied immediately by referring to a client she’d seen, and also mentioned some of her own concerns (Transcript 1.1). I have formatted (re-storied) this section of the transcript into five distinct scenes (see Methodology section; Frank, 2012). Scenes 1&2 are verbatim, there was a brief pause [11] where I asked:

“So you mentioned a client that... you mentioned a client experience, can you talk a little bit about that session and what emerged from that session.”

Her further reply is transcribed verbatim in scenes 3 to 5. What stood out for me within the very first couple of minutes of our interview was her directness in raising serious concerns, even “life sustaining” concerns, about the environment.

Transcript 1.1

Scene 1 - *abstract*

01 When I saw the research advertised I immediately thought of one particular
02 client experience that I had had a couple of years ago
03 where the person came with some intense concern
04 about the changes in the world, the environment, the weather, sustainability

Scene 2 - *orientation*

05 and that was my immediate response and
06 wanting to do justice to that persons concern
07 and letting it be known more widely that people are concerned in this way.
08 That’s part of it. The other part is my own personal concern for the planet
09 and the people on earth as climate change, weather and chemtrails
10 have more and more presence in our world.
11 [Malcolm’s reply]

Scene 3 – *complicating action*

12 The person came had been a previous client
13 but then booked with what sounded like quite some urgency
14 to come and see me again.
15 And when she came in she was very distressed
16 and she was pregnant,
17 she was not far from giving birth.

18 And although she had worked quite hard to become pregnant,
19 it had been something she had wanted for a long, long time.
20 She was incredibly happy when she did become pregnant,
21 so I was surprised to see her so distressed,
22 and the distress was overwhelming anxiety,
23 a guilt like really “what have I done?”

Scene 4 - resolution

24 “I’m bringing a soul into this world and it’s not a safe world.”
25 “The environment’s being damaged, you know like,
26 what’s going to happen to life?”
27 She was just shaking
28 just seized with guilt really for she said
29 “Oh have I just been selfish because I wanted a baby but I haven’t thought of
what it’s going to be like for this baby? What have I done?”
30 That was her phrase.... “What have I done?”
31 And it was chilling...

Scene 5 - evaluation

32 She is someone who is concerned for the environment
33 and from, I guess the hormonally sharpened eyes she was looking through,
34 she was seeing real worrying,
35 for her very deeply worrying signs that

Coda

36 the environment might not be able to be life sustaining in her child’s lifetime.

From the very beginning of Claire’s story (Transcript 1.1) she referred to one particular client from “a couple of years ago” with ‘intense’ concern about ‘changes in the world’ “the environment, the weather, sustainability” (Scene 1). Wanting to “do justice to that person’s concern” and letting it “be known more widely” that ‘people’ are concerned in this way indicates that Claire is not only speaking about her client, and also speaking to a wider audience than only to me (Scene 2). In Scene 2 she introduces the further characters to her story (people that are concerned; people on earth) and brings herself into her story when she talked about her “own personal concern for the planet” and then introduces the main story elements – climate change, weather, and chemtrails. In Scene 3, following my question to “talk a little more” about the client, Claire develops this character by giving her a history, “had been a previous client”, and describes her (pregnant, not far from giving birth) and that

she had been “incredibly happy when she did become pregnant”. But Scene 3 also introduces the dramatic elements of *urgency* and *distress*. These dramatic elements are developed further in Scene 4 as the two leading characters interact, “I was surprised to see her so distressed” her distress was “overwhelming anxiety [and] guilt”. The tension builds as the client reaches a climactic epiphany and Claire narrates using direct speech for the client “what have I done?”, “this world and it’s not a safe”, “the environment’s being damaged... what’s going to happen to life?” The climax passes, a form of resolution, and the tension eases “she was just shaking” (but ‘seized with guilt’) and then Claire grounds the tension, like quenching a fire with water, by bringing her own emotional response into the narration “and it was chilling...” In Scene 5 the character Claire takes an ‘eye of God’ role (all seeing; can see inside the client) and also asserts her professionalism by providing her own analysis and epilogue: “the hormonally sharpened eyes she was looking through”, “for her very deeply worrying signs”. And then delivers the final coda with ‘chilling’ effect: “the environment might not be able to be life sustaining in her child’s lifetime.”

In re-storying this short section from Claire’s interview I’m stuck by the intensity of this, and it is only the very beginning of her entire narrative. It reads like a prologue to a dramatic novel with all the elements of character development - the protagonist, her troubled client, ‘people of Earth’, embroiled in vast ‘Earth threatening’ events – climate change, global warming, and chemtrails. And at the core of these vast global concerns (the macro) a universally recognisable singular character (the micro) that represents, or could be said to be representative, of all of humanity – a pregnant woman, her unborn child, and her fears for a future in which the planet Earth may no longer be life sustaining. However, in re-storying and presenting this section in this way I have manipulated Claire’s narrative for dramatic effect – why? Because to me it is both dramatic and tragic, and a ‘story’ all in itself that effectively presents a prologue to this section, it is how *the story* of the interviews with my research

participants began. Every story has an ending, of sorts, and here I have departed from any sequential order – because, to my way of thinking, an ending can be a beginning in reverse. Much later in our interview, toward the end, I asked a closing question for the interview. This is how my interview with Claire ended: Based on your experiences of working with clients concerned or distressed about climate change and chemtrails what meaning does being a mental health-related climate-literate professional have to you?

Claire’s response is summarised in re-storyed form (Transcript 1.2), with coded stanzas that connect to Claire’s description of herself as a therapist and to her own notions of what constitutes responsible professional practice. Again, the presentation is of my choosing with identification of ‘codes’ from my own privileged interpretation: Professional responsibility to be informed; Theory and being informed; Therapy being relevant to the times; Redemption (to remedy, or ‘repurchase’). The codes I have identified will be discussed in terms of ‘meaning’ in detail in the findings and discussion chapters, and the term ‘redemption’ is explored in a later narrative (Transcript 1.3).

Transcript 1.2

Claire’s narrative (re-storyed)

Professional responsibility to be informed

01 When you put it to me in those terms, it’s just like how could I call myself
02 a mental health professional if I didn’t take into account the reality of the world
03 like if I didn’t become literate in issues around abuse, issues around depression and
04 anxiety, issues, all the issues that affect human beings well-being are my professional
05 responsibility to be informed of.

Theory and being informed

06 As a good gestalt practitioner I would go straight back to the field theory and other
07 modalities might have other names for it, but everything within a person’s life
08 experience impacts on their well-being or otherwise and we can’t just exclude them
09 because we don’t want to know about them or can’t be bothered or whatever. We
10 have to be as informed on environmental issues as we are on anything else that
11 impacts on life, I would say.

Therapy being relevant to the times

12 I think that therapy is something that has to change with the times, has to be relevant
13 to the conditions of the current world, if that means politically, environmentally,
14 socially, spiritually, in every possible way. I mean even in my little life of 30 years
15 being a therapist a lot has changed, what we think therapy is and what should or
16 shouldn't be included it's evolving thank God. And it's a great joy to me to know that
17 this research is being done, that these things are being brought to the therapy world's
18 attention.

Redemption

19 Hopefully before some planetary cataclysm gets us first, while there is still time to
20 assist humanity to remedy itself.

These re-storied presentations as a 'prologue' (Transcript 1.1) and ending or 'epilogue' (Transcript 1.2) to the interview provide an opening and a closing, but are entirely lacking in one of the central characters who is purposely absent – myself. In presenting these transcripts I was presenting myself as a listener and observer only, and for me there is no meaning-making in that. In the next section (Transcript 1.3) I bring myself into the dialogue, not as researcher but as participant. I wanted Claire to speak about her experiences or learning from that session with the pregnant client and I wanted to know about what she might have learned from this connected to my research, and also as a way to open up the conversation more specifically to the subjects of climate change and chemtrails within a counselling context. I began by asking:

“So as a consequence of that particular session, has there been any learning or reflection by you about generalised anxiety around climate change and or the chemtrail phenomena, or ways that you as a counsellor... you know, need to be cognizant to that or... you know, in some ways prepared for that when working with clients... What's your learning around that I wonder?”

This was not a planned question, this arose entirely from our dialogue. In order to present this *as dialogue* I've used a three column format allowing for:

1. Claire's unedited narrative (my part is slightly abridged for context);

2. A re-storying column, to illustrate how this might be presented as ‘story’;
3. A third column for my reflexive comments to represent my own ‘meaning-making’ from this conversation.

The first column begins with Claire’s unedited response to my question. The second column (re-storyed) is where I position myself and Claire as ‘characters’, myself as protagonist and exercise literary agency to re-story from my perspective. The third column is where I reveal myself as research ‘participant’ and share my reflexive commentary. The point of this three-column format is to contrast the unedited transcription with *a version* of the dialogue and then re-tell the story reflexively as a research participant disclosing my own reflections and meaning-making. In re-storying this section of Claire’s narrative (Transcript 1.3), and writing my reflexive commentary, I noticed how closely the concerns raised by Claire about climate change and chemtrails matched many of my own.

It is an extremely privileged position to write and re-write narrative accounts from various perspectives, but it also provides the reader with contrasting perspectives from which to discern their own interpretation, and whatever meaning they may make of that.

Transcript 1.3 Dialogue: Claire’s narrative (unedited) Malcolm’s (abridged for context)	Narratives re-storied (Malcolm as narrator)	Reflexive commentary (meaning-making)
<p>Claire: Well, very much that yes this is something we have to know how to respond to, people are not stupid, people can feel the planet changing, people look at media, people look at evidence, and people know things are not going to continue... as they have been. So, and also... stop me if I'm not quite on track, but I've noticed in these last few months almost every client who comes as we walk into my room which is up a staircase they're talking about the weather, the cloudy grey weather how depressing it is, or if there's been a glimpse of blue sky how incredibly helpful and uplifting that is given the general greyness, and so I am..., I have to face as a therapist that people are carrying these concerns. And it is not my job as a therapist to deny or minimise those concerns – my job is to acknowledge and validate and help them find ways within this undeniable distress to remain, to have some avenue of hope. And I think that redemption is still possible.</p> <p>Malcolm: You also mentioned [earlier] that you've been aware of the chemtrail phenomenon through social networks and other sources... what's your feeling of peoples' interpretation of those phenomena? Because climate change is</p>	<p>Clare began by telling me about how she felt that people are aware of planet changes and how many people she encounters comment about the weather and if it's grey and cloudy and how depressing this can be, or if it is sunny that this can feel uplifting. She mentioned that as a therapist she has to acknowledge that people are carrying these concerns, and to be able to validate these for her clients.</p> <p>And I was thinking, yes the weather effects peoples mood and climate change is having a significant impact on weather systems and extreme weather events. I was touched by the pathos of her description – to me, poetry:</p> <p><i>The cloudy grey weather how depressing it is or if there's been a glimpse of blue sky how incredibly helpful and uplifting that is...</i></p> <p>She said she thinks that people are distressed about this, and that her role is to help them find hope, to find redemption. While she was talking about distress and redemption I was thinking about chemtrails...</p>	<p>Planet changes – that climate change is an ever present concern for some people.</p> <p>The weather affects people’s mood, and even something as everyday as this can be a concern for attention in a counselling session.</p> <p>That people are ‘carrying these concerns’ like something heavy or disheartening.</p> <p>In re-storying our dialogue I discovered what I felt to be a depth of sadness in Claire’s descriptions.</p> <p>Claire mentioned ‘this undeniable distress’ and finding ‘redemption’ – <i>for whom?</i> I feel some of the distress (and redemption?), that she referred to may have been her own.</p> <p>Undeniable distress – of the environment, the planet, or of humanity? To find hope, a weighty responsibility for a counsellor.</p> <p>I recognise that I was purposefully steering our conversation in this direction (more about chemtrails). I regret that I didn’t linger with her</p>

<p>very well reported, the chemtrail phenomenon is hardly reported at all... what's your experience of those two phenomena?</p> <p>Claire: My experience with the chemtrail phenomenon is, until recently, has been almost universally that people have been sceptical. Like they couldn't believe such things would be done, such things would be deliberately done. And they don't want to believe it determinedly... of late I've noticed people are a little more open because they do see these things.</p> <p>Malcolm: What is the feeling that you've detected with people about their concern and what implications that might have for counsellors or therapists if they were working with clients like this?</p> <p>Claire: A very very big... I'm just thinking of how to name... it's kind of like a gateway that people have to go through... to... there's a certain... like a... an acceptance that irrevocable things are happening... people need to be supported to... a) to find a strength, to accept that before they can then begin to find any energy inside themselves to be able to they feel they can respond in some way that is meaningful to them. Other than just being completely crushed into a helpless kind of resignation. Like that mother that came to me, that pregnant woman who came was in danger I feel of losing hope, losing hope for the viability of her child's life... that is massive for a woman who's</p>	<p>So I asked her about this.</p> <p>She told me that most of the people she'd encountered about chemtrails were sceptical about their existence, but lately she'd noticed that some people had become a bit more open to this because, as she said, "they do see these things".</p> <p>I'd seen these things too. My next question was about how people who are concerned this might be feeling. I wanted to know what Claire might have to say about this, but I felt I couldn't just ask her opinion, so I also asked what implications this might have for counsellors or therapists. As if Claire would know?</p> <p>Claire talked about a kind of a 'gateway' that people go through, that leads to an acceptance that "irrevocable things are happening". And that counsellors can support this, for clients to find strength and ways to respond, other than being completely crushed.</p> <p>She mentioned the pregnant woman again, it seemed to me that this was who Claire was meaning had felt crushed, that she felt was in danger of losing hope.</p> <p>She spoke hauntingly about her, how she felt her losing hope for the viability of her child's life, and how massive that must have felt for a woman who's about to give birth.</p>	<p>and explore what she meant about redemption, a missed opportunity – I was preoccupied with what I wanted to discuss, not with her.</p> <p>I too had encountered scepticism in some social media groups about chemtrails, but Claire's description offered a kind of explanation about this: "Like they couldn't believe such things would be done, such things would be <i>deliberately</i> done."</p> <p>She used the word 'deliberately' again later on, as if it was the <i>deliberateness</i> of the phenomenon, rather than the phenomenon itself that is what people find hard to accept.</p> <p>A gateway? An acceptance? It's like Claire was describing a sort of 'rite of passage', or as another counsellor later described it to me a 'waking up'.</p> <p>I recognised what I felt she meant about being '<i>crushed into helpless resignation</i>', the scale on which the climate is changing, and being changed, is vast, it's global, and what can one person do?</p> <p>As a counsellor – <i>what can I do?</i> I'm reminded of Cornforth's question to the counselling profession – what can <i>we</i> do?</p>
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<p>about to give birth [M that's huge] so the process by which people's natural concerns or observations can be validated, although it might feel like the opposite of inducing hope, has to be the first thing. Ok, can we let ourselves believe we're in dire straits, or that really harmful things are being done to us, deliberately. To even ponder that takes a huge amount of courage.</p> <p>Malcolm: With the people you've encountered who do talk about the chemtrail phenomena and perhaps how that might be potentially harmful, what are some of the things that they're saying about that, what do you think their concerns are?</p> <p>Claire: Firstly what are they saying, I mean the first thing that happens is absolute wordlessness. Like people are lost for words, you can feel that process... kind of something turning over inside them and go 'could this be true?', 'could this be done?' Until there's then a sort of a dawning its often very cautious-full, or maybe I need a bit more information. Can you help me to find out a bit more, surely I don't have to believe this, but I'm willing to learn more. So it's a gradual... it's like acclimatising to something, so reprehensible, something that we so don't want to believe. And it takes time for that corner to be turned. And then there's like 'who else knows this, who can we join up, how can we make our voice heard?'</p>	<p>To be able, as a counsellor, to validate those concerns even though that might not feel very hopeful, seemed important to Claire. But then Claire went a little further, talking about her belief that we're in dire straits. Did she mean <i>all of us</i>? And that really harmful things are being done to us – <i>deliberately</i>. She told me that it would take courage to even ponder that.</p> <p>But I didn't ponder that, instead I asked another question. But not about her, instead about people she'd encountered who talk about chemtrails.</p> <p>What she told me was that, to begin with, they are lost for words, incredulous even. But then they start to think it through, they question "could this be true?" and look for further information.</p> <p>Claire described this to me as a gradual process of a 'sort of dawning' of awareness or acceptance. She described this as 'acclimatising to the reprehensible', and I felt the poetry of her description: <i>It's a gradual it's like acclimatising to something so reprehensible something that we so don't want to believe. And it takes time for that corner to be turned...</i></p>	<p>Through my reading and research I knew of recent media reports of some women choosing to not have children because of their concerns about climate change. She gave me a glimpse of what it might have felt like for her pregnant client, terrifying? Here is that word again- <i>deliberately</i>.</p> <p>And here, through the re-storying process, I realised that I completely missed her (again).</p> <p>Instead, I asked another question.</p> <p>Claire mentioned validation again, the role of the counsellor to acknowledge and validate the feelings and experiences of another.</p> <p>Maybe easier to do if they are feelings or experiences I've had myself.</p> <p>That we (humanity?) are in 'dire straits', and that 'harmful things are being done to us deliberately', I have to admit that this has at times felt frightening. I think I get what she means about courage.</p> <p><i>To accept that climate change is a 'consequence' of industrial civilisation is one thing, but to accept that chemtrails are a harmful thing being done deliberately to the Earth and to humanity is quite another.</i></p>
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Following this section the next question I asked Claire was directly from my personal concern as a counsellor that I was encountering environmental issues in my practice, but had never had any formal training or education to prepare me for this.

Malcolm: “So for a counsellor, or therapist for that matter, I mean, you know the, the environment, nature, the health of the planet doesn't normally feature in counsellor or therapist training. Have you ever been... you're trained as a psychotherapist and as a counsellor, has that ever been part of your training in any way, has there ever been any training around, you know, our relationship with the environment.”

Clare: “Well, that's a really interesting question. When I trained it was prior to... there's a current Eco-therapy movement, when I trained there's a... since I've trained there's been a growing movement, its generally call Eco-therapy, where people in the psychotherapy world are starting to say 'hey, this is our relationship to life, that effects everybody so, how are we supporting ourselves and our clients in these times' so that's really interesting work.”

I'd heard of Eco-therapy before, but had not looked into it in any detail. Claire's reference to this reminded me about this and I began to investigate further for my thesis research. I subsequently came across a growing body of eco-therapy research and from what I'd read so far I'd found it tremendously helpful personally (see Literature Review). In my understanding of it the fundamental premise is 'the healing power of nature', something I'd always intrinsically felt. In discovering how badly the environment is being treated I'd found eco-therapy as a kind of antidote to all the abuse and destruction of nature I'd learned about and this became a vital element in my reflexivity as I continued with my research. I began to turn to nature myself for solace, and to view concerns raised by my research participants more closely within a context of our (humanity's) relationship with nature – this will be discussed further in the findings chapter.

4.2 Miriam's narrative (re-storied)

Miriam, a female of European descent, is a professional therapist in private practice with 10 years' experience. She is a member of a professional association and works part-time with clients on a one-to-one basis, as well as providing supervision services to other counsellors or therapists. Miriam told me about why she wanted to be part of my research and agreed to be interviewed:

“I wanted to be part of this interview because I'm aware of chemtrails, I've had only one person come and talk to me about it and the impact on them, but I'm aware of other people who are very concerned about this. And I think it is a matter of time before people start, as they start to register what's really going on there'll be more concern and they may necessarily seek professional support.”

I started the interview by asking her to tell me about her experience with the client she mentioned (Transcript 2.1), and what struck me was the way that Miriam shared the personal impact that this session had on her, that she found talking about chemtrails personally stimulating and that “sometimes I get quite angry about it.” She also mentioned how this can feel disempowering and that her way of responding to this was to “come back to my own awareness because that's the only power and the only power I do have”. Miriam began by talking about the client she had seen who'd been “very very concerned about chemtrails” but that there'd been a “numbing down process” (Scene 1). In Scene 2 (*orientation*) she said that he (the client was a male) didn't allow himself to become overly concerned as much as he'd used, but in Scene 3 Miriam questions her own sense of what her client was wanting, she said he'd wanted to be ‘at peace’ with it, but that that didn't really happen, although he might have... “I mean yes and no.” In Scene 4 (*resolution*) Miriam said that the client got ‘insights’ into other parts of his life [that may have been beneficial?], and a partial resolution or sorts, but not closure.

Transcript 2.1

Scene 1 - *abstract*

01 From memory it was a wee while ago, they said originally they'd been very
02 very concerned about chemtrails. But I would say there'd been a numbing
03 down process, you know as its become a reality, and they don't quite know
04 what to do with it or where to take it.

Scene 2 - *orientation*

05 They don't, even though they're quite proactive, but they don't really know,
06 they don't allow themselves, they don't allow themselves to become overly
07 concerned compared to how they used to be. They'd have been, when they'd
08 see a chemtrail they'd be furious. Compared to now, ok this is happening what
09 can I do? But it's still sort of, is a concern despite everything I've said as well...

Scene 3 - *complicating action*

10 Does that make sense? Umm... not, I'd suppose they were wanting to find a
11 way forward in terms of being at peace with it, yeah.
12 Ah... No. I mean yes and no.

Scene 4 - *resolution*

13 Because inevitably when people come they also talk about other parts of their
14 life so he got insights into other parts, but I don't believe he got a huge shift,
15 because it feels like you're dealing with an implacable... energy if you like, an
16 implacable force that somebody's decided to spray the general population,
17 so..., and what can you do about that? You're just one person so..., yeah.

Scene 5 - *evaluation*

18 It was interesting because obviously when you're working with people
19 sometimes what they say stimulates you. So, um, and it did. Um, but any time
20 I come up against you know the conversation around chemtrails I find it
21 stimulating. And, but I, and sometimes I get quite angry about it. Because I feel
22 quite disempowered, but then I have to make a conscious choice to actually
23 keep returning to myself. And come back to my own awareness because that's
24 the only power the only power I do have in a very disempowering situation

Coda

25 Where am I in my consciousness at this moment in time.

However, while Scene 4 indicates some form of resolution for her client Miriam introduces an element of helplessness to her client's situation (Line 17): "so..., and what can you do about that? You're just one person so..., yeah."

In this line (17) “what can you do about that? You’re just one person” could be interpreted as a form of resolution (i.e. nothing more can be done), or a form of resignation and it is not entirely clear whether Miriam is speaking only about her client or also about herself (?).

In Scene 5 (*evaluation*) Miriam was very personally reflexive, she could have talked about her experience in terms of how she worked with the client which she began with, but instead she chose to talk reflexively about how she’d felt personally stimulated (19, 20, 21). She mentioned feeling angry about seeing chemtrails (21), and how this could feel disempowering for her “in a very disempowering situation” (24), which brought her to talk about her way of supporting herself as “a conscious choice to actually keep returning to myself” (22, 23) “...because that’s the only power and the only power I do have” (24). This was in contrast to her early disclosure of helplessness (17). The coda (25) “Where I am in my consciousness at this moment in time” captures the energy of the ‘power I do have’ and the choice we all have to be conscious of ourselves and the choices this offers us.

Throughout the interview Miriam returned to referring to feelings of disempowerment (Transcript 2.2) and a certain kind of mindfulness or inner-awareness that she described very early in the interview as “my consciousness at this moment in time” (Transcript 2.1). This self-disclosure I felt would be valuable to explore further since counsellors might encounter clients with similar feelings or experiences about witnessing chemtrails, so later in the interview I asked Miriam about this.

Malcolm: “So, I think the next question I’d like to ask is to come back to what we were talking about a few moments ago when you mentioned that you know you learned about chemtrails through social contacts and people that you knew, what I’d like to know is, you know from your experience, from your own kind of professional experience, what you’ve noticed or encountered among people who witness chemtrails, what are the impacts for people?”

Miriam's reply (Transcript 2.2) is presented here in coded stanzas where I have codified points such as feelings of anger and disempowerment which are repeated.

Transcript 2.2

Professional practice *Stanza 1*
01 As a professional
02 because I've only come up against this once before
03 as a professional

Friends and on social media *Stanza 2*
04 But in terms of what I see on social media and amongst friends
05 particularly on social media
06 I've noticed people get very angry about it

Anger and disempowerment *Stanza 3*
07 And that anger is really rooted
08 in a deep sense of disempowerment
09 because you know, what can they do
10 and what can be done
11 apart from maybe writing on Facebook
12 or umm... yeah.

Starting to wake up *Stanza 4*
13 And also you know on social media
14 often people having arguments among themselves
15 and that can sometimes be a bit
16 it's just indicative how really disempowered people are feeling
17 and how in some ways they're
18 I mean this one area they're disempowered
19 and they probably start waking up to how disempowered they are
20 in many other areas

How controlled people are *Stanza 5*
21 We have so many laws for virtually everything
22 that people don't actually realise how controlled they are
23 till they have this kind of experience

What can I do? *Stanza 6*
24 They start seeing actually there's something going on in our skies
25 and I'm just one person
26 and what can I do that will really make a difference

Wanting to make a difference *Stanza 7*
27 And most people want to feel that their lives
28 on something as important as this
29 that they can make a difference
30 but actually one person can't make a difference
31 unless they join with everybody else

Joining together	<i>Stanza 8</i>
32 It has to really be a real groundswell of many people	
33 noticing the chemtrails and then speaking up about it	
Anger is toxic and disempowering	<i>Stanza 9</i>
34 But also the whole thing is becoming really angry	
35 and it's totally understandable	
36 but if you keep going there then it becomes quite toxic as well	
37 for themselves the person becoming, yeah, you can use the word toxic	
38 in a different kind of way	
39 so internally toxic because they're constantly getting angry	
40 constantly feeling disempowered	
41 and they don't know they don't know what else to do	
42 or what choice they can make that can make them feel better	
43 at least within themselves	
	<i>Coda</i>
44 Not better about what is happening but better within themselves... yeah.	

The coda (44) is quite revealing, particularly within a counselling context about ‘feeling better’: “Not better about what is happening but better within themselves”, since it connects back to how Miriam described her client’s intention for his counselling session “to find a way forward in terms of being at peace”. The repeated theme of anger and disempowerment, and the coda, also connects with how Miriam introduced this: “it feels like you’re dealing with an implacable... energy” (Transcript 2.1) inferring that her client (and herself ?), as having no agency over changing what is being done, only over how they can respond to it internally, to “feel better, at least within themselves”. In this case reference to the ‘implacable’ was about the client’s, and others, concerns about chemical aerosol spraying from aircraft, but could also be considered in the context of climate change being another global phenomenon over which individuals have very little, if any, direct agency. However, while individual direct agency over climate change and the chemtrail phenomena might be quite limited, the extent to which options or actions that individuals can take (direct agency) to allow them to ‘feel better’ could be numerous and I wanted to explore this further with Miriam.

Later in the interview Miriam talked a little about ways she takes care of herself, and so I asked her if she ever shared these with clients that had similar concerns. Since I'd begun my research into this topic I'd found what I was learning about (global warming, environmental destruction, chemtrails and atmospheric weapons), personally distressing at times and I'd had to find ways to support myself in dealing with my own feelings of anger or disempowerment, so I was keen to hear about this from Miriam (Transcript 2.3) presented in the three-column format used earlier.

Transcript 2.3 Dialogue: Miriam & Malcolm's narrative (unedited)	Narratives re-storied (Malcolm as narrator)	Reflexive commentary (meaning making)
<p>Miriam: So, how I take care of that myself...</p> <p>Malcolm: And do you have ways that you do that?</p> <p>Miriam: Yes, I do.</p> <p>Malcolm: And, are those ways that you'd be able to share with your clients if they had similar concerns? Or helping them to find ways that would work for them?</p> <p>Miriam: Yeah, it might take, it depends on where the client is at, so for me it's always about choosing to reconnect myself and to reconnect to my heart which doesn't get a lot of prep you know connecting to your heart... but that is a choice that I can make nobody else can make that for me and umm and when you make that choice then there's a shift in your perception and in the way you see the world around you and it's very supportive, but not every client who walks in my door is necessarily going to want that or... you know.</p>	<p>I'd asked Miriam to talk a bit more about the ways she had of taking care of herself, but I wanted to know if this was something she'd shared with her clients.</p> <p>I knew that counsellors typically focus on client agency, exploring steps/actions clients can take, but on occasion I've shared some of my own experiences, or actions that have worked for others if there has been a point of mutuality that might be beneficial for the client to consider or try. I'd wondered what Miriam's experiences had been of this.</p> <p>She began by referring to 'the client' and then spoke about reconnecting to herself and to her heart as 'a choice that only she can make'. I suppose she was referring to her own self-agency.</p> <p>She talked about a 'shift in her perception' that enabled her to see the world around in a different and supportive way, but that not every client she's worked with would want that.</p>	<p>Counsellors and therapists are really no different to their clients in that we all have to find ways to take care of ourselves, and being able to share something about this with our clients can, in my experience, help clients to view the counsellor as 'a normal person' with some of the same feelings or concerns that the client might also have.</p> <p>Miriam described her choice to 'connect to her heart' as a 'shift in perception' in the way she sees the world that she finds personally supportive.</p> <p>It certainly speaks to personal agency over how we can decide to view a situation, rather than being a victim to certain circumstances we can choose to be active participants in some way.</p> <p>How we feel, and <i>choose</i> to respond to our feelings, is another form of agency, our feelings are always intimately our own.</p> <p>I wanted to know more about Miriam's particular way of self-support which prompted my next question.</p>

<p>Malcolm: When you talk about connecting to your heart is that a way of describing a particular kind of self-care?</p>	<p>I wondered, and asked: Was she talking about a particular kind of self-care?</p>	<p>In re-reading this very short section (Miriam's description of 'life force') I'm struck by the depth of insight and meaning I've taken from this.</p>
<p>Miriam: If I, yes there is like meditation, umm chanting, umm but it's also about going for walks in nature and really connecting to the feeling of the life force that exists everywhere it's in nature everywhere it's in the trees that are growing, in the grass that's growing, it's in the river flowing by or waves of the ocean, the turning of the moon you know there's a force that's life, that nobody has yet found a way to contain well... you know to subjugate, I mean there is a really good effort going on to do that, but it hasn't it's still there it exists and if it wasn't there we wouldn't be here either.</p>	<p>She mentioned mediation and chanting, and going for walks in nature and 'connecting to the feeling of the life force that exists everywhere in nature'. I loved the poetry of her descriptions... <i>The life force that exists everywhere</i> <i>it's in nature everywhere</i> <i>it's in the trees that are growing in the grass that's growing</i> <i>it's in the river flowing by or waves of the ocean</i> <i>the turning of the moon</i> <i>you know there's a force that's life.</i></p>	<p>She mentioned taking walks in nature, something I do regularly, and 'connecting to the feeling of the life force that exists everywhere'. Miriam was clearly very influenced by her experiences in nature, and the feeling she has of a 'life force' in growing plants, as if the 'growing' is the life force.</p>
<p>Malcolm: Yeah exactly.</p>	<p>She also talked about attempts to contain or 'subjugate' this life force energy that seemingly we all rely upon for our existence. I felt that I understood what she meant by this, but that would be my meaning, not necessarily hers. So I asked her if her way of 'reconnecting' was something that she encouraged with her clients. She wisely replied that what she found supportive might not necessarily be supportive for everyone. I replied, "yes of course".</p>	<p>The 'feeling' of life force isn't only about what I see, touch, smell, hear or taste (sometimes when I'm in nature I do all of these), but the feeling that I have from these. Since re-storying this section I've noticed that I've become much more sensitive to these sensations and the feeling I have from these when I'm in contact with nature. This has also reminded me of my interview with Claire where she and I talked about Eco-therapy and since then I've begun to experience my contact with nature as a kind of Eco-therapy of my own. My meaning of her mentioning subjugation: That nature is being controlled through genetic modification, geoengineering and weather manipulation, atmospheric weapons, and all the insane ways human beings are using nature for control, for profit, and for war. As if I needed to add the 'of course', who did I need to affirm or convince?</p>
<p>Miriam: Yeah.</p>		
<p>Malcolm: And you can do that for yourself... is it that something that you encourage or support with your clients?</p>		
<p>Miriam: I do, I do if they're open to that and they want it, because my practice is personal to me and they support me they won't support everyone.</p>		
<p>Malcolm: Yes of course.</p>		

<p>Miriam: So, but going for a walk in the garden will support most people, or some people prefer the beach, you know it's like the right element, do you like being up in the mountains, do you like being by the ocean, they need to go places that really support them and that they really relate to.</p> <p>Malcolm: And when you have worked with a client in that way have you heard back from them, you know if they've tried that has that you know have you had any feedback around how that has worked for people?</p> <p>Miriam: Umm I haven't had anybody say they've gone into nature for example but umm... And I've only had one chemtrail person, but generally speaking most people, the way I work is primarily with feelings and so umm they, they do take steps, they do take steps, yeah. But it's not, yeah they do take steps is what I'd say...</p> <p>Malcolm: So just being conscious of your relationship with the environment and with nature, and the life force energy of nature is, you know a healing connection that you can find for yourself and that some clients find too.</p> <p>Miriam: Yes.</p>	<p>She spoke about walking in the garden and that that would support 'most people', or that some people might prefer the beach or the mountains or the ocean of whatever element or place they relate to.</p> <p>I wanted to know if any of her clients had tried this, and what they'd shared with her about this, but she told me she'd hadn't heard back from a client about this specifically.</p> <p>But according to Miriam, 'they do take steps', and although this seemed a bit vague to me, I accepted this.</p> <p>I was very interested in her comments about finding your 'element' when she mentioned gardens, mountains, the ocean, and it occurred to me that being in touch with this consciously, and with the 'life force energy', that this could in itself be healing.</p> <p>Miriam clearly found personal benefit in this herself, and seemed to think some of her clients did too.</p>	<p>For me, the conscious decision to take time in nature 'for therapy' has increased and enhanced the feelings of wellbeing I take from this.</p> <p>Miriam's description of 'the right element' really connects me to the concept of Eco-therapy, that people might intuitively seek out environments that they enjoy, but that this might also be a way that an Eco-therapist could work with a client to help them find their 'right element' and for them to consciously choose to spend time in these places for healing and restoration.</p> <p>What I take from Miriam's reply is that she may have not deliberately checked with her client(s) about their experiences in/with nature, it hasn't been a focus of her practice, but that seemingly it does happen in the course of her work that her client(s) 'do take steps'.</p> <p>Since I've been learning about Eco-therapy I have been consciously 'taking steps' to spend more time in and close to nature, to take short 'Eco-breaks' in my day when I go outside and spend a few moments under a tree, sitting on a lawn, or simply standing and contemplating a garden scene close to my office.</p> <p>This is also influencing my counselling practice as I have on a couple of occasions asked clients about ways they connect with nature, and if they find this restorative or supporting in some way.</p>
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In re-storying this section from Miriam's interview (Transcript 2.3), with my own reflexive commentary, I've been reflecting on my core research question: What meaning does being, or becoming, a mental health-related climate-literate professional have for counsellors? For me part of my meaning-making of this has been my growing sensitivity to the natural environment, and the feeling I have for the healing power of the 'life force' of nature. I wanted to know what meaning this (being climate-literate) had for Miriam. In some ways Miriam impressed me as being 'climate-literate' in ways that few would consider seriously, for example:

“Well I suppose, you know, um you hear people talking about climate change and what does that really mean? So for me it becomes more related to the reason why there is climate change and that's because of the chemtrails.”

Some researchers claim that introduced aerosols (chemtrails) 'do not cool the planet; they heat it up' (see literature review: Carnicom, 2016), so to me Miriam was demonstrating quite a sophisticated level of awareness by expressing a causative link between chemtrails and climate change that is contrary to much of the geoengineering literature that few would appreciate. When I asked her about being 'climate-literate' her reply was: "I've never considered myself in that light". Although Miriam had never consciously considered this, she did have some conversancy with the notion of 'climate literacy' so I asked her to elaborate. She mentioned some of the commonly attributed consequences of climate change (fires, floods, etc.) but she also referred to the environment 'being tampered with' which connected with her earlier comment about chemtrails contributing to climate change. Here presented in a two-column format (Transcript 2.4) as a dialogue in stanza form, with my corresponding reflexive commentary.

Transcript 2.4 <i>(arranged in thematic stanzas)</i>	Reflexive commentary (meaning making)
<p><i>As a 'climate-literate' professional</i></p> <p>Miriam: So, I haven't had, I haven't seen myself in that way. Because I've never had a need, I haven't had any event in New Zealand where I've had to support people, you know because of a flood or because of umm fires, like in South Australia, I haven't had to support people as a result of 'natural' quote unquote, catastrophes brought about by climate change.</p> <p><i>What counsellors might need</i></p> <p>Malcolm: Exactly yeah, although there is a growing body of research around the, you know the notion that increasingly these will become, umm you know...</p> <p>Miriam: Needed.</p> <p>Malcolm: Yeah needed. You know distress within communities that are affected by climate change.</p> <p>Miriam: Yeah, but I mean the counsellors themselves will need to be really conversant with what comes up for them in those situations as well in order to support someone else.</p> <p><i>Environmental awareness for counsellors</i></p> <p>Malcolm: Well, that's probably right and the other thing is, you know, in professional counselling and therapy training programmes understanding our relationship with the environment is not usually a feature of counsellor training is it.</p> <p>Miriam: No, because we take our environment for granted. You know we just, we, the notion that it's being tampered with is not really high in our awareness.</p> <p>Malcolm: So part of this research is to explore that notion and perhaps understand or inform the counselling world around how we might be more conversant with you know the broader issues of environmental change or climate change.</p>	<p>The term 'climate-literate professional' was new to Miriam and so she'd never thought of herself in that way because, as she said, she'd never had a need to, and hadn't ever professionally counselled anyone affected by a climate related event. She mentioned floods and fires as a natural catastrophe brought about by climate change. For counsellors working in areas that have been directly impacted by flooding or wild fires I wonder how they might view themselves as climate-literate? This would be worthwhile research to be undertaken.</p> <p>We discussed the notion of counsellors increasingly having to work with communities impacted by climate change, and what they might need to be able to do this. Miriam mentioned that "the counsellors themselves will need to be really conversant with what comes up for them". As counsellors, like our clients, we may be affected in personal ways as much as some of our potential clients. In 2011 I was practicing part-time as a counsellor during a year in which Christchurch experienced thousands of earthquakes and I had to find ways to support myself personally with this in order to work effectively with clients also distressed by the constant earthquakes.</p> <p>Through the process of my thesis research it became increasingly evident to me that professional counsellor training programmes do not tend to include environmental values or climate change awareness as a specific feature. Miriam's comment that "we take our environment for granted" was not particularly specific to the counselling profession, as a modern industrial society the environment has been exploited and 'taken for granted' for generations, but that is beginning to change. In the last three decades environmental values have increasingly featured within the public education system, and in 2019 school students in countries around the world staged international climate change 'strikes'. I've become more environmentally conscious as a result of my research, and I wonder whether</p>

<i>Making sense (or meaning-making)</i>	
Miriam: Yeah that makes sense.	
Malcolm: Does that, that does make sense?	the time has come for the counselling profession to adopt environmental values and climate change education as a part of counsellor training.
Miriam: It does make sense, yeah.	Miriam seemed to agree, although she voiced some hesitation, “it’s hard to know”, and mentioned New Zealand hadn’t had any extreme climate related event upsetting people’s lives. But I think Miriam might have overlooked, or just not thought about, the many weather-related floods and storm damage events New Zealand does have, and the fact that tens of thousands of New Zealanders live in identified coastal ‘inundation zones’ some of which have already experienced seasonal flooding, and which are predicted to be seriously impacted by sea-level rise over the next century.
Malcolm: Do you think it’s probably useful for counsellors to have that, that, con, conversancy?	
Miriam: I would say yes, yeah. So I suppose in the context of New Zealand it’s hard to know... we haven’t got any extreme weather patterns that are upsetting peoples’ livelihoods, or touch wood, you know, at this stage anyway.	

In this section (Transcript 2.4) Miriam disclosed that she’d never thought of herself as climate-literate in a professional sense because she “haven’t had any event in New Zealand where I’ve had to support people” from a ‘natural’ catastrophe. In further discussion she pointed out that “counsellors themselves will need to be really conversant with what comes up for them in those situations as well in order to support someone else”. Looking back on Transcript 2.3 where Miriam talked about ‘ways she takes care of herself’, and Transcript 2.1; “sometimes what they say stimulates you. So, um, and it did” (line 19), the reoccurring theme-line in Miriam’s narrative has been how her experiences have impacted her at a very personal level. So while we had been discussing much of her experiences in a professional context many of her responses had been quite personal. In terms of ‘meaning-making’ about climate-literacy my observation would be that Miriam’s meaning-making connects very closely to her personal experiences of the chemtrail phenomenon, contact through friends and via social media, and some exposure to mainstream media which have been informed her notions about climate change and some of the impacts these are having on people she has encountered concerned or distressed about these phenomena.

4.3 James' narrative (re-storied)

James, a male of European descent, is a professional therapist in private practice with more than 20 years' experience. He is a member of a professional association and works full-time in his own diverse business that includes therapy services and natural health products. His therapy practice with clients is on a one-to-one basis but also includes group work, supervision services to other counsellors, training, and personal development seminars. As with the other interviews I had conducted (James was the third) I started by asking him why he agreed to participate in my research, his reply:

“For a number of years now I’ve had numerous clients who have expressed similar concerns, similar anxieties and worries around the same subjects. And so when you came forward asking about this subject and the study you’re wanting to do it fitted quite perfectly because I had been seeing aspects of this for some time.”

I wanted James to be more specific, so I asked: “Ok, so can you just let me know, just sort of maybe in broad terms, what are some of the concerns that you’ve encountered with clients distressed about climate change and chemtrails?”

James gave quite a long reply (Transcript 3.1) here presented in stanzas as this format allows for identification of a number of themes such as anger, disempowerment, and distrust of authority which were common to identified themes that emerged in the earlier two participant interviews.

Transcript 3.1

Thinking about life differently

Stanza 1

01 So there's lots of layers to this there's lots of layers
02 because people have their own personal relationship with what affects them
03 now being based here in Christchurch of course we've had big environmental disaster
04 which has had different impacts on people and one of those things it's done
05 for some people, not all, it's actually got them stirred and thinking about life
06 differently, looking at life differently, it's changed their perspective
07 and it's got them questioning things as well

People start waking up *Stanza 2*
08 And so there's this kind of general term you could call 'waking up'
09 now it's a term that affects people in different ways
10 so there's lots of again, my experience has shown me there's lots of different levels
11 of waking up and consequently when people start waking up they get curious
12 and they start researching, they start looking, and what I've seen is a period
13 of adjustment that people seem to go through when
14 the version of life they've been told is not the version of life they start discovering

Information that challenges their way of life *Stanza 3*
15 There's lots of documentaries, there's lots of information on the internet
16 some of it might be true some of it might be fictitious, some of it might
17 actually be stretching our sense of possibilities in ways we've never thought
18 we'd be asked to do and I'm not here to debate what's right or wrong
19 my role has been to support people in understanding what actually is happening
20 to them as one way of living is challenged by the possibility of another way of being

Questioning of authority about chemtrails and weather modification *Stanza 4*
21 Particularly when they start to question whether the world they've been told
22 by those in positions of power actually is the world we are living in
23 and this is where things like geoengineering chemtrails might come into question
24 weather modification a whole range of things

Feelings of anger anxiety and disempowerment *Stanza 5*
25 And so my generally speaking my experience has been watching and supporting
26 the anxiety that grows inside of people and it transforms it sort of over the time
27 I've watched it go from "Oh my God we've got to do something about this
28 it's so wrong" feelings where people feel really disempowered
29 probably the really big one is the sense of recognition of how disempowered
30 how little people feel they can do about it
31 anger feelings of rage impetus and or impotence sorry
32 and what happens is that there's a kind of a settling that occurs

Resignation or a different way of living *Stanza 6*
33 Now it either leads to a resignation, or it moves toward a shift inside someone
34 where they actually start to live their life differently
35 so they choose to take this information and look
36 at how they're personally living their life
37 and personally that's what I try to encourage

Disempowerment *Coda*
38 Because if you look at it on a global level it becomes incredibly disempowering.

In writing my analysis of James' narrative for this section (Transcript 3.1) I decided to make my own reflexive comments on each stanza from my own experience, which were also

informed by the transcriptions of Clare and Miriam that I'd already begun working on, so I have presented this analysis with references to Clare and Miriam's transcripts since James' transcription was completed after I'd begun analysis of the other two transcriptions. What struck me immediately was how in the very first few minutes of our interview, and following only one question from me, James touched on the themes of disempowerment and questioning of authority (vis-à-vis 'distrust of authority') that were mentioned by Clare and Miriam as well.

Stanza 1: Thinking about life differently

James began by mentioning a "big environmental disaster" (03). Was he referring to the 2010-2011 Christchurch earthquakes? Intuitively I think he was referring to the earthquakes (EQ) and in that sense I felt that I appreciated James' view about "thinking about life differently, looking at life differently" (05-06) as that had certainly been part of my experience since 2011. I wonder whether anyone can live through the devastation of an entire city without looking at life differently in some way. My EQ experiences had stimulated me to think about my life differently. His statement "and it's got them questioning things as well" (07) also resonates to me personally, as it has been my own questioning that led me to the subject of this thesis.

Stanza 2: People start waking up

I relate to this point very closely, that "when people start waking up they get curious and they start researching, they start looking" (11-12) as this had certainly been my own experience since encountering a client concerned about chemtrails in my own counselling practice. And it appears that this was a similar observation shared by Clare and Miriam in their counselling practice as well. Personally and professionally I found the next comment most intriguing, that: "the version of life they've been told is not the version of life they start discovering" (14). This connects to later comments about questioning of authority (Stanza 4).

Stanza 3: Information that challenges their way of life

Both Clare and Miriam referred to people accessing information via social media, and James notes that “some of it might be true some of it might be fictitious” (16) and that “I’m not here to debate what’s right or wrong” (18). Professionally, as a counsellor I concur closely to James’ further disclosure that “my role has been to support people in understanding what actually is happening to them as one way of living is challenged by the possibility of another way of being” (19-20). This connects closely to the role counsellors can take in supporting clients through any kind of life change or transition and James goes on to contextualise this in the next stanza.

Stanza 4: Questioning of authority about chemtrails and weather modification

My interpretation is ‘questioning of authority’ as his meaning when he said “they start to question whether the world they’ve been told by those in positions of power actually is the world we are living in” (21-22). I’ve also referred to this in other sections of my thematic analysis as ‘Distrust of Authority’ so perhaps the clients he is referring to don’t actually ‘distrust’ authority, but in their ‘waking up’ they might be questioning the accuracy or reliability of some authorities.

Stanza 5: Feelings of anger anxiety and disempowerment

Feelings of anger, rage, anxiety, and disempowerment were mentioned in my earlier interviews with Clare and Miriam, and Miriam mentioned how often these feelings are expressed by people on social media. I too have viewed various social media groups where people express these feelings about chemtrails and weather modification on-line. In my research of these topics I’ve had my own feelings of anger arise as I’ve discovered how the natural environment has been abused by technologies such as geoengineering, and it is very understandable to me how people witnessing chemtrails could also feel frightened or anxious. James also mentioned that “what happens is that there’s a kind of a settling that occurs” (32),

and that I find extremely interesting from a counselling perspective – a ‘settling’ of feelings?

A kind of acceptance? I wanted to understand more about what James meant by this.

Stanza 6: Resignation or a different way of living

James began with “Now it either leads to a resignation” (33) which would be an extension of feelings of disempowerment (giving up) or, as he put it “it moves toward a shift inside someone where they actually start to live their life differently” (33-34). Again, this really interested me from a counselling perspective because it speaks to some form of client agency, ‘a shift inside’, and naturally James’ disclosure that “that’s what I try to encourage” (37) speaks to his work as a counsellor. It also speaks to my own experience through the process of researching and writing this thesis, to the ‘shift inside’ myself as I’ve encountered information that I’ve found at times distressing and how I’ve needed to learn how to use that information in constructive and purposeful ways.

Coda: Disempowerment

In setting out the stanzas of this transcription I chose the final sentence to James’ narration: “Because if you look at it on a global level it becomes incredibly disempowering” (38). For me this single sentence captures the essence of the super-consciousness of the global climate change and chemtrail phenomena, because if I do (as many others have) look at these phenomena ‘on a global level’ it *does* feel incredibly disempowering. Governments are failing to effectively address climate change and there are many political and commercial agendas at play to leverage public opinion in favour of geoengineering as a solution. It’s difficult to know what to believe about climate change as it is reported by mainstream media and I’ve found through my own research much of what is reported is not necessarily accurate, and in some cases deliberately misleading.

In coming to the conclusion of the interview with James I finished with the question that I posed to all of my interview participants, about being (or becoming) ‘a mental health-related climate-literate professional’:

“So, I’m just going to ask you as a kind of finishing question, and it’s quite a wordy question, it’s actually the title of my research, this is how it works, but here it is: Based on your experiences of working with clients concerned or distressed about climate change and chemtrails what meaning does being a mental health-related climate-literate professional have to you?”

For the presentation of James’ reply (Transcript 3.2), that is very much a dialogue, it is in some ways as much my reply as it is his and there are clearly shared understandings. I’ve presented this in a three-column format used in other analysis in order to re-story the narrative and add my reflexive comments indicating my ‘meaning-making’ from this.

Transcript 3.2 Dialogue: James & Malcolm's narrative (unedited)	Narratives re-storied (Malcolm as narrator)	Reflexive commentary (meaning making)
<p>James: This is the first time I've heard that title, and I think they're tapping into a very important need. So when you asked the question earlier what's the future, this has to become part of it so that awareness of our relationship with the environment has to be understood, on a spiritual level, the sacred level, on the divine level, on a shamanistic level right...</p> <p>Malcolm: I don't think the APA has spirituality... [Laughter]</p> <p>James: Right, but they are moving towards, ah, an understanding if you like, and so from that perspective we will then be able to see the needs of clients much more clearly from a much, much more broader sense, we no longer question the way a child is treated in its home how that may affect them as an adult. We see the linkage...</p> <p>Malcolm: Well we see the linkage to the social environment [James: yeah...] yeah, but they're really talking about our linkage to nature, our physical environment to the world...</p> <p>James: Absolutely, and, and it's seen there is therapy in nature, there is therapy in connecting with nature, we have such a, umm, an innate need to find our harmony again this is why we're</p>	<p>James hadn't heard of the title of 'mental health-related climate-literate professional' but thought it was tapping into an important need. He referred to our conversation about the future of counselling/therapy and his awareness of our relationship with the environment which he described as spiritual, as sacred, as divine, or even 'shamanistic'.</p> <p>We shared a moment of humour about the APA.</p> <p>James generalised about how we recognise, see the linkage of how the social environment affects us, referring as an example to the way a child is treated and how that might affect them later as an adult.</p> <p>But I wanted to keep the focus of our discussion on our linkage to nature and the physical environment, and steered our conversation that way.</p> <p>James replied: "it's seen there is therapy in nature", and that people have an innate need to find harmony through a connection with nature. He talked about finding harmony in nature and mentioned beaches, rivers, mountains and lakes. He also mentioned a 'life force', and 'a feeling you gain' a "formidable force of nature".</p>	<p>The 'they' James was referring to is the American Psychological Association (APA); the term 'mental health-related climate-literate professional' is from an APA sponsored report. James' choice of words reflects a deeply spiritual sense of nature and a very personal or intimate relationship to the natural environment, often associated with indigenous cultural and environmental values and is somewhat representative of some aspects of Eco-therapy.</p> <p>The APA being a clinically and empirically based hegemonic system might not appreciate the depth of James' spiritual references. In counselling and psychotherapy, and psychology, the social environment is extensively recognised as having psychosocial (emotional, behavioural, developmental) impacts on children, hence organisations such as Oranga Tamariki, but the natural environment is not well recognised and often overlooked.</p> <p>I was struck by how similar his description was to Miriam's who also mentioned 'the beach' mountains and the ocean.</p> <p>Is it this 'feeling' that can be healing? James seems to think so.</p>

<p>attracted to the beach, the rivers and mountains and lakes, because we're looking to feel this it's been recognised now that hugging a tree is no longer just some hippie thing to do, there's a life force, there's a feeling that you gain, there's a connection, this formidable force of nature, and so there is not just the question of the connection to the environment but also the healing that's available in the environment, the way that people can actually open.</p> <p>In prisons now they're putting in gardens, they're recognising that people suffer without sunshine you know again there's so many layers to be taken into account that can help someone see the simple steps they can take to make their life more aligned with what's right for them. The problem is we're talking about the natural environment, it's when people start becoming affected by the man-made creations, the destruction the planet is experiencing, the shift that's occurring, and also this question about things like chemtrails and how that affects because you can't necessarily make yourself feel a bit better hugging a tree while you're watching a plane spray barium and aluminium or whatever it is that's meant to be coming out of them. So there's sort of, we're in this window of time where there is this shift toward recognition of a different way of living, but we're still living in the world by those who hold on to the old way.</p>	<p>And for me, the poetry of his words... <i>Hugging a tree is no longer just some hippie thing to do.</i> <i>There's a life force there's a feeling that you gain there's a connection this formidable force of nature.</i> <i>And so there is not just the question of the connection to the environment. But also the healing that's available in the environment. The way that people can actually open.</i></p> <p>James went on to talk about how gardens in prisons are used for rehabilitative and therapeutic benefit, and mentioned that people are being affected by 'man-made' creations and, like chemtrails, the destruction of the environment. He talked about a 'shift' and "a different way of living" that is needed, but that we're living in a world is still holding on to 'old ways'.</p>	<p>Like Miriam, he also referred to a 'life force' in nature. I found this extremely interesting: "it's seen there is therapy in nature". I see this too and remind my counselling clients of this if the opportunity arises. James said: "there's a life force, there's a feeling that you gain, there's a connection, this formidable force of nature". I wonder: Is this 'feeling' a prerequisite for being a 'mental health-related climate-literate professional'?</p> <p>Can such a thing be defined by a feeling?</p> <p>I couldn't help seeing a sad irony that prisons have gardens for rehabilitation purposes and supplying vegetables for the prison kitchen, which was also a feature of psychiatric hospitals in the 19th and early 20th Centuries. However today, very few inpatient mental health facilities have gardens and secure facilities tend to have sparse, if any, shrubbery to deter patients from hiding or finding ways to escape. The natural environment rarely features in in-patient psychiatric treatment, which tend to focus on containment and compliance with psychotropic medication. Nature, it seems, is not seriously considered as a therapeutic source in the treatment of mental illness. What will be <i>a different way of living</i>? Will it be life enhancing, or as it is for many, a way of living that becomes harder and harder to sustain?</p>
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My experience of interviewing James, and how this differed from the other participants I interviewed, was that it felt more like a collegial conversation where although I was following my list of interview questions we were in authentic dialogue. In re-storying James' narrative I was impressed by a sense of his world-view which at times included ritualism and spirituality, as well as environmentalism and an awareness of societal and political concerns. He talked about a 'shift' and "a different way of living" and certainly the effects of climate change are forcing that upon us, but I am left wondering - will it be a different way of living that is life enhancing, or will it be, as it is for many, a way of living that becomes harder and harder to sustain? And who are 'those that hold on to the old way'? He could be referring to the established institutions of power and control, and those who adhere to those systems. In terms of my meaning-making of this as a counsellor I have felt for some time that the counselling modalities developed in the mid to late 20th Century are now 'the old way' of counselling and that a more contemporary and environmentally connected approach is needed for the 21st Century. I felt that James held similar views about this. In many ways I think James and I shared similar values and concerns and it felt very natural to dialogue with him which led me to my closing remarks:

“Well, I think that is a really brilliant and eloquent summary of largely what we've been talking about [James: my pleasure], so James thank you very much, I appreciate your participation, what will happen next is the recording will be transcribed, I'll provide you a copy of the transcription to check and that will become a part of my thesis.”

In writing my reflexive comments to this section of James' transcription I've been thinking about my own meaning-making to my research question about being, or becoming, a mental health-related climate-literate professional. Certainly my conversation with James has informed my own thinking, as has the process of writing this thesis, which I will elaborate upon in the conclusions section. James' final comment was most encouraging:

James: Fantastic, I wish you luck with it it's very important.

Chapter 5 - Presentation of findings

In presenting each of my research participant's narratives (Chapter 4), and in the presentation of these findings I was mindful of two points made by Riessman (2008), the first being that "the research relationship is an unfolding dialogue that includes the voice of the investigator who speculates openly about the meaning of a participants utterance", and secondly that "the research report becomes 'a story' with readers and audience, shaping meaning by their interpretations" (p.137). Also, being conscious of Frank's 'five commitments' of DNA and not to summarise 'findings' but rather "to open continuing possibilities of listening and of responding to what is heard" (Frank, 2012, p.37), I have attempted in this chapter to keep my own speculations about the participant narratives (and what they might mean) to a minimum and instead provide some reflexive commentary, and offer my observations and present participant narratives in various forms in order to facilitate and allow a variety of 'meaning-making' by the reader.

5.1 Reacquainting with my research participants

Through the process of re-storying and analysis of sections of the narratives of the interviews with my three research participants I felt I'd become immersed in their narratives, in some way connected with their experiences and the aspects of their personal and professional lives that they chose to share with me. I recognised some of my own experiences in what they shared with me and felt both closer to each of them and closer to myself because of this. There were many similarities in the narratives of each participant, and some differences, as well as the unique characteristics to each of them shaped and influenced by the personality and experiences of each participant. Claire, my first interviewee, was the most mature in age having been in professional counselling and therapy practice for more than 30 years with a well-established private practice including supervision and some teaching. Describing herself as being oriented

to 'social change movements and the environment' I felt Claire to be someone I might think of as an advocate or perhaps even an activist for social and environmental change and it was she who brought the term 'Eco-therapy' into our conversation and referred to the 'elements of nature':

"I'm very much inclined to ascertain with clients how they relate to nature, how they might be supported by elements of nature that appeal to them. And so it's always... how can you be a wellness practitioner of any kind without including people's relationship to the environment? And of course in our day that's threaded through with these worries, with these concerns, people are going 'well can I trust mother Earth?' can I trust Gaia, can I trust the weather? And that's significant I think that there's no longer... that the freedom to kind of inculcate that trust in people, I would love to." [Transcript 1; extracts: 51-55].

Much of the focus of Claire's narrative was about client experiences connected to the environment, and professional interest in how counsellors can be better informed about the environmental issues that might impact on clients. It was clear to me that Claire was very informed about environmental issues and conversant with a variety of counsellor and therapist modalities and training programmes. About Eco-therapy she said: "it's alive and well in Christchurch, but more as people bringing their individual interest into psychotherapy rather than psychotherapy inculcating that."

When I asked her whether counsellors and therapists need to be trained in environmental values she replied: "Just completely, it can't not, and the training I did was gestalt psychotherapy and the whole basis of their approach it's called 'field theory' and that means everything that's in a client's field of awareness will impact on them and needs to be taken care of in the therapy to be acknowledged. So the basis is sitting there for it, and it needs the specifics added."

Claire was very specifically advocating for environmental conversancy to be part of counsellor and therapist training.

In contrast my second interviewee Miriam, being somewhat younger than Claire and with about 10 years' experience with professional counselling/therapy practice, tended to focus more upon her own experiences with a client and the chemtrail phenomenon rather than the broader climate change and environment issues. When I asked her about this she replied: "any time I come up against, you know, the conversation around chemtrails I find it stimulating. And, but I..., and sometimes I get quite angry about it." This disclosure is in itself quite revealing and for counsellors working with a client on any issue that they themselves may be stimulated or angry about poses its own challenges. I asked Miriam if she had received supervision about this for her counselling practice and she said she hadn't, but that she'd decided that she would seek this. Whereas Claire had spoken about her observations of others responses/reactions to the chemtrail phenomenon, Miriam tended to express more of her personal feelings about this and about what she was observing in others on social media. Anger and disempowerment were repeatedly referred to by Miriam, whereas Claire's description was more akin to bewilderment and reluctant acceptance (e.g. 'acclimatising to the reprehensible').

Later in the interview when we began discussing being a 'climate-literate' professional, like Claire Miriam also referred to the 'elements of nature':

"You know it's like the right element, do you like being up in the mountains, do you like being by the ocean, they need to go places that really support them and that they really relate to."

There was a very close correlation in both Claire and Miriam's narratives in terms of their choice of language, and suggestions about supporting clients to find the 'elements of nature that appeal to them'. While Claire came across to me as someone professionally informed about the role of nature in therapy, such as Eco-therapy as a modality, Miriam spoke more from her personal experiences of the healing power of nature and ways that this has

supported her. When we discussed the notion of counsellors becoming ‘climate-literate’ and the idea of environmental values forming a part in counsellor training, Claire’s comment about ‘inculcating’ environmental awareness was in notable contrast to Miriam’s view which was more personally intimate, that is, the impact on counsellors themselves:

“Yeah, but I mean the counsellors themselves will need to be really conversant with what comes up for them in those situations as well in order to support someone else.”

My third interviewee James provided further contrast in perspective to Claire and Miriam, being a male (whether that matters?), a little younger than both of the others, but with more than 20 years’ experience in counselling and therapy practice. Like Claire, James also referred to his observations of people being concerned about climate change and becoming aware of the chemtrail phenomenon: “they start looking, and what I’ve seen is a period of adjustment that people seem to go through”. And like Miriam, James also referred to peoples’ feelings of anger and disempowerment, “the sense of recognition of how disempowered, how little people feel they can do about it, anger, feelings of rage...” But unlike Claire who tended to focus on her role in validating her clients’ concerns, and Miriam who was more inclined to disclose her own feelings about these phenomena, James shared a further observation that was uniquely different and in some way took the conversation with me one step further:

“What happens is that there’s a kind of a settling that occurs. Now it either leads to a resignation, or it moves toward a shift inside someone where they actually start to live their life differently so they choose to take this information and look at how they’re personally living their life and personally that’s what I try to encourage” (Transcript 3.1).

Claire also mentioned a ‘kind of settling that occurs’, that she described as “acclimatising to something so reprehensible” which I think is reflective of her own feelings about the chemtrail phenomenon, and Miriam said about her client “there’d been a numbing down

process, you know as it became a reality”. James described this ‘acclimatising’ or ‘numbing down’ process as ‘a kind of settling’ but he specifically referred to this leading to either resignation (disempowerment), or toward a ‘shift inside’ where a person will ‘start to live their life differently’ which is what he, as a counsellor, would aim to encourage.

This notion of ‘living life differently’ seemed to me to go beyond simply validating clients concerns about climate change and chemtrails and invited a deeper analysis of James’ interview transcript. In reviewing the transcripts of each of my research participants I recognised similarities in themes that emerged within each interview, but also differences in how each participant expressed or responded to the themes as they were discussed. It was evident to me that Claire’s responses were reflective of her history with social and environmental movements with comments like “who else knows this, who can we join up, how can we make our voice heard?” Miriam’s responses were more personal to her own intrinsic experiences, such as her comment about coming “back to my own awareness because that’s the only power and the only power I do have in a very disempowering situation”. James’ responses tended to be more specifically focused on client agency, for instance: “they actually start to live their life differently so they choose to take this information and look at how they’re personally living their life”. In discussing client agency James referred to people’s relationship with authority and generalised that “we’ve all been brought up to be taught that anyone in authority above us knows better than us.” At one point I asked James to elaborate on this:

“What I know, this happens, is that we have a tendency to look for the narrative that supports our argument so, which can actually bind people into a corner both in the for or against situation.”

James appears to have been referring to what is often called *confirmation bias* where “individuals are likely to seek information to confirm the hypotheses they have established”

(Wright-McDougal & Toriello, 2013, p.3). This can be a common occurrence in counselling where a client creates a narrative about themselves that in some way confirms what they have already decided about themselves or a situation, even though their self-narrative may not be self-supportive. In relation to authority, when people believe ‘authority above us knows better’ then the self-narrative could be ‘then I must be wrong’ which may not actually be the case. James described it this way:

“You’re either going to believe the narrative you’ve been told or you then have to also have some sort of self-reflective capacity to then challenge the narrative that’s coming at you, the evidence that’s coming at you, and a lot of people don’t want that they just want it to just be all okay.”

5.2 Feelings that connect you to your heart

When it comes to climate change, widespread environmental degradation, and the global chemtrail phenomenon clearly the situation is not ‘all okay’. Counsellors can’t solve these global problems with their clients, but they can work with them to *re-story* their personal narrative in ways that may be more empowering for them (White & Epston, 1990). However, when addressing this in the context of what is potentially global environmental destruction this is hardly straightforward counselling, as James elaborated: “So there’s a real sense of feeling a great challenge to hold someone in this work to find their own power as they start to wake up to realising how powerless they really feel.” To illustrate this directly I’ve included an unedited section from James’ transcript (Transcript 3.3) where James describes one particular client that was highly distressed about the environment and other global issues well beyond her range of personal influence. James offered a brief introduction (01-02) then in line 03, “she feels completely disempowered, I mean to the point of suicidal” conveys the seriousness of her distress.

Transcript 3.3 Unedited section from James' transcript

01 I've been working with a young client recently who, particularly the younger souls who
02 are very sensitive. She's feeling profoundly overwhelmed by what she's become aware
03 of in the world and she feels completely disempowered, I mean to the point of suicidal,
04 around feeling like she can do absolutely nothing, it affects her so badly. I've had
05 numerous people tell me over the years they've just stopped watching the news, that
06 it, there's nothing good on it, the same story over and over again, in a different format,
07 and they've realised it's not actually helping them just to know that stuff was going on.
08 And yet that's not about disconnecting from the world, it's about choosing what you're
09 plugging into and how that supports your heart, so I've seen as a counsellor that you
10 cannot separate the environment, you cannot take a child out of its house and say that
11 house does not affect that child. You cannot take a child out of a destructive parental
12 environment, domestic abuse, and say that child is not affected by that. This is our
13 home, this planet is our home, how can we not be affected when we see the distress
14 of things.

Again, as covered in other sections of James' transcript the issue of disempowerment is evident (04) and in lines 05-06 he mentions he's had numerous clients who have stopped viewing media that keep repeating the "same story over and over again". Lines 08-09 provide an insight to James' approach to working with this particular client: "And yet that's not about disconnecting from the world, it's about choosing what you're plugging into and how that supports your heart..." As James described it in an earlier section of the interview:

"My job is to support people in understanding their feelings, and helping them make sense of why they feel what they feel."

Miriam also mentioned 'heart'. In her interview it was how she herself would choose "to reconnect myself and to reconnect to my heart" which was another point of difference between Miriam and James. Where Miriam tended to speak about her own feelings, James' focus was more on how he'd support the feelings of his clients. James went on (09-14) to talk about how the natural environment, "this planet is our home", can affect us as much as our social environment, which has been identified by other researchers (e.g. Albrecht, 2007; Solastalgia: the distress caused by environmental change).

5.3 Redemption and the life-force of nature

The dialogic analysis of selected sections of each of the participants' interview transcripts revealed thematic similarities between participants in the context of each interview dialogue, as well as differences of emphasis, nuance, and lived experiences of each of them. I have largely left the interpretation of themes to the reader, and have selected for closer analysis the process of meaning-making through re-storying and in particular the use of poetic form. Meaning does not exist independently; the world, the universe, existence itself, only has meaning "when meaning-making beings make sense of it" (Etherington, 2004). I used poetic form in sections of my re-storying as a means of expressing *feeling* and meaning-making. In my conversation with Claire I'd asked her about her learning about generalised anxiety around climate change and the chemtrail phenomenon (Transcript 1.3), and in re-storying her response I felt a deep sadness in her reply, but also a sense of hope (she used the word 'redemption'). I'd wondered what she'd meant by *redemption* and in re-storying part of her narrative in poetic form I made meaning of this. As we'd begun to discuss, and would discuss further, the weather as no longer being a purely natural phenomenon in terms of being artificially manipulated, I found meaning in Claire's reference to redemption in this short stanza:

*The cloudy grey weather
how depressing it is
or if there's been
a glimpse of blue sky
how incredibly helpful
and uplifting
that is...*

That single phrase ‘*a glimpse of blue sky*’ as if nature itself can redeem us from our own moodiness, yet if the weather is no longer an entirely natural phenomenon then the redemption that Claire referred to may be more in the collective hands of humanity than with the forces of nature.

Miriam also referred to nature, specifically the ‘*life-force*’ of nature. Using poetic form allowed me to find meaning in the rhythm of her speech, that this ‘*force that exists*’ has life, and is life. For me poetic form made her narrative come *alive* and have *feeling*, and I found this more meaningful than a script of unedited text:

*The life force that exists
everywhere
it's in nature
everywhere
it's in the trees
that are growing
in the grass
that's growing
it's in the river
flowing by
or waves of the ocean
the turning of the moon
you know there's a force
that's life.*

There is a rhythm and a natural iteration to nature, like the ‘*waves of the ocean*’, like ‘*the turning of the moon*’ and somehow Miriam naturally expressed this in her narrative which for me was so very expressive of her relationship to nature – that she *feels* it as a ‘life force’.

Since re-storying this short poetic section I’ve been feeling this too in my own life, pausing in

my day to watch the wind rustling the branches of a tree and feeling this *energy* that's "*in the trees that are growing, in the grass that's growing*" and in the feeling recognising that it is in me also, '*that's life*'.

And finally in James' narrative another description of 'life-force' so startlingly similar to Miriam's but speaking more directly to the therapeutic benefit that can be possible from connecting to this energy:

*Hugging a tree is no longer
just some hippie thing to do.
There's a life force
there's a feeling that you gain
there's a connection
this formidable force
of nature.
And so there is
not just the question
of the connection
to the environment.
But also the healing
that's available
in the environment.
The way that people
can actually open.*

James specifically mentions "*there's a feeling that you gain*" and I've been purposefully giving attention to the feeling of being in nature and I've found in my experience of this that he is correct, that "*there's a connection*" to the life-force of nature that since beginning this thesis has been increasingly personally therapeutic. Some might call this a form of mindfulness, but for me it is not an experience of the mind, it is a feeling, an intrinsic

existential knowingness. Could this be “*the healing that’s available in the environment*” that James refers to?

My answer to this question, from my recent experiences, is that for me it has been.

5.4 Being, or becoming, a mental health-related climate-literate professional

My use of dialogic analysis allowed me to re-story selected sections of dialogue and find my own meaning, but I could not explore every theme or re-story every section of dialogue (it would run into multiple chapters), so I had to be selective. What I chose to include for analysis was what appeared most relevant to my research questions and that also provided a range of coverage and perspective across the three narratives. This brings me to the single most qualitative constant across all of the interview dialogues, which was the closing question that I asked in the same wording to each participant toward the end of the interview:

Based on your experiences of working with clients concerned or distressed about climate change and chemtrails what meaning does being a mental health-related climate-literate professional have to you?

Claire, Miriam, and James’ responses are outlined in detailed analysis in each of their re-storied narratives (Claire: Transcript 1.3; Miriam: Transcript 2.4; James: Transcript 3.2).

Their individual responses tended to be consistent with other characteristics of their unique dialogic form. Claire focused on ‘professional responsibility’ and referred to therapeutic methodology (Gestalt Field Theory) and emphasised her view that therapy needs to ‘change with the times’: “*that means politically, environmentally, socially, spiritually, in every possible way.*”

Miriam, in keeping with her more internalised reflexive style of response, spoke more about herself: “*I haven’t seen myself in that way. Because I’ve never had a need*”. She also generalised her own experience of being stimulated about this subject by referring to counsellors as themselves needing to be ‘conversant with what comes up for them in those

situations’. In contrast to both Claire and Miriam, and unlike Claire, James did not mention professionalism or responsibility or any particular counselling or therapy modality and he did not dwell upon his own personal experiences as much as Miriam, but rather focused on what the client’s experiences of, or relationship with the environment might be, or could be: “*our relationship with the environment has to be understood, on a spiritual level, the sacred level, on the divine level... we will then be able to see the needs of clients much more clearly*”. In drawing attention to these differences between participants there is no intention by me of comparison or evaluation, as each of these counsellors contribute something unique of themselves to the combined narratives of this research and provide a form of triangulation of perspectives that together enriches the whole (Table 4.).

Table 4. Comparison of participant responses to the question about counsellor climate change literacy		
Claire	Miriam	James
<p>Focus on counsellor/therapist professionalism, responsibility to be informed.</p> <p>Reference to modality and theory, and keeping up to date with social and environmental changes and the evolving of therapy and practice to be ‘changing with the times’.</p> <p>Prior-dialogue: References to Eco-therapy as a modality.</p>	<p>Focus on own internalised experiences of climate change and the environment.</p> <p>Attention to personal responses and the need for counsellors to attend to what may be stimulated for them.</p> <p>Recognition of her own meaning-making in relation to encounters in her practice.</p> <p>References to the ‘life force’ of nature.</p>	<p>Focus on the clients’ experiences and their intrinsic relationship to the natural environment – that may be conscious or unconscious, or as a spiritual dimension.</p> <p>Recognition of ‘healing power’ of nature and ways that could feature in intentional ways for therapeutic benefit.</p> <p>References to the ‘life force’ of nature.</p>

All participants expressed their agreement that the natural environment can provide therapeutic benefit, and that they encourage their clients to connect with nature in some way for healing or enhanced wellbeing. They each expressed support for counsellors and therapists to include environmental values and awareness in some form within their scope of practice, and for Claire in particular that it should be ‘inculcated’ in training or competency

for practicing counsellors. In combining the range of perspectives (Table 4.) three discrete yet intersecting domains are evident:

1. **Personal domain** (Miriam) – Counsellors’ personal experiences of climate change related therapy concerns, and the impact this has on them at a personal level.
2. **Professional domain** (Claire) – Professional standards and training for counsellor competency for working effectively within a social and political milieu of climate change.
3. **Practice domain** (James) – Skills and experience for working effectively with clients experiencing distress about the environment, and/or seeking therapeutic or health benefits from the natural environment.

It appears that ‘being’ (or becoming) a *mental health-related climate-literate professional* has different nuanced meanings for each of the participants. In terms of my own meaning-making I am privileged in being able to view and compare the responses from each of the participants. The categorising of their responses is my own interpretation and as such represents a *form* of my meaning-making, but is also reflective of (and perhaps in some ways influenced by) epistemological sources referred to by other researchers (e.g. Skovholt & Starkey, 2010) that will be explored in the discussion section. Like Claire, I would advocate for some form of conversancy about climate change and environmental values being part of counsellor training that could connect to ways of practicing and the therapeutic benefits for clients as suggested by James. And like Miriam, I have had my own process of recognising my internalised responses (thoughts and feelings) to my experiences of climate change encountered in my life and in my counselling practice, and these feature and contribute significantly to my meaning-making about climate change in relation to my work, my professional identity, and my practice as a counsellor as ‘a mental health-related’ professional.

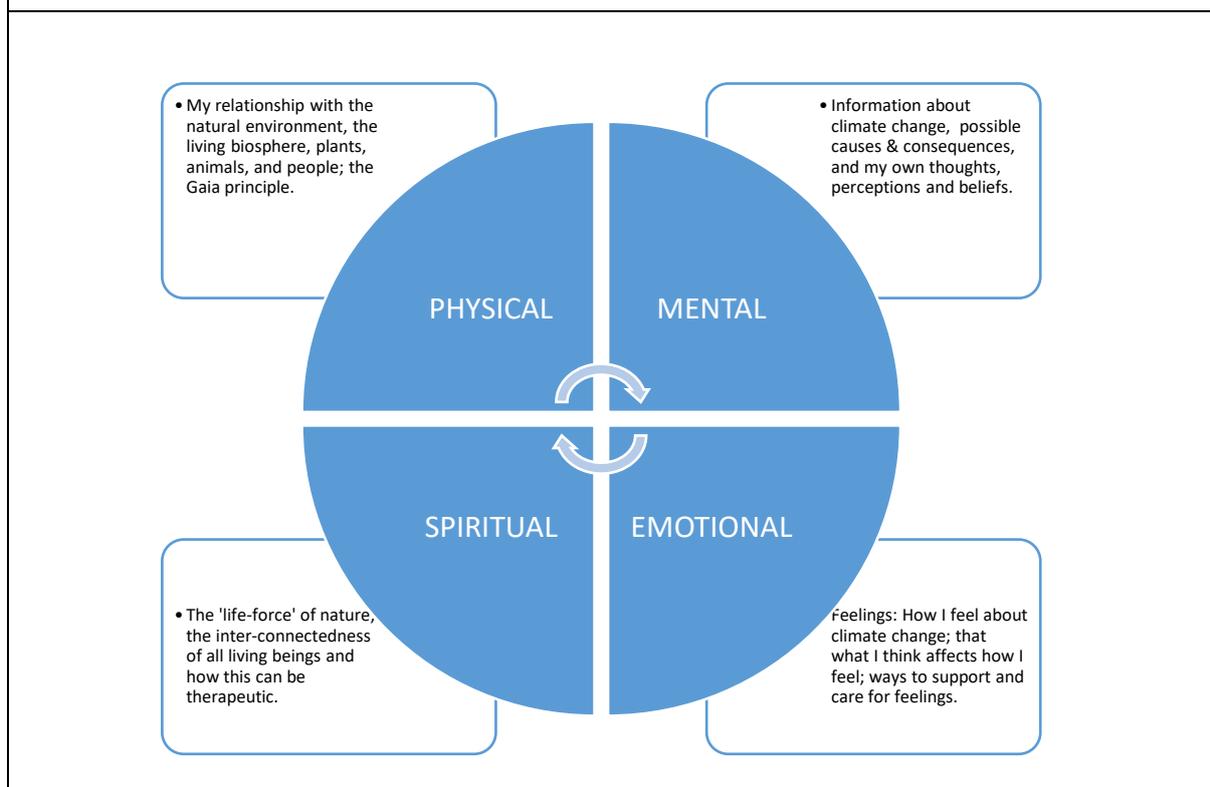
Counselling and psychotherapy training programmes and professional associations generally do not inculcate nature or environmental values or awareness in formal training programmes, but with the looming catastrophe of global warming and the many recent reports outlining the psycho-social impacts of climate change I'd begun to think that this is needing to change. I'd begun to question whether many of the current modalities of counselling and psychotherapy in use, invented or developed in the 20th century, are still relevant or fit for the challenges of the 21st century?

5.5 A formative model for mental health-related climate-literate professionals

Through the process of writing this thesis I have become far more 'climate-literate' than I would have ever imagined before I began, and as a result I have begun to think of myself in terms of being a mental health-related climate-literate professional. The way I would describe this, as I have reflected on this over the many months of this research, would be in terms of four principle dimensions: Physical, Mental, Emotional, Spiritual, with each dimension forming a distinct yet complementary descriptive dimension within the broader domain of climate-literacy (Figure 5.). This emerged for me through my own reading and reflexivity during the period of this thesis, and from and with my eclectic counselling background. All of my research participants referred to these four dimensions in one way or another (which could be the basis of a further analysis at some point in the future). My own description of this begins with the physical dimension, recognising that I am a living being within a living biosphere of plants, animals and other people and acknowledging the principle of Gaia that we are all interdependent upon each other for our survival and mutual wellbeing. The mental dimension encompasses relevant information about climate change, its possible causes and likely consequences including my own thoughts and perceptions, and beliefs about this. The emotional dimension describes how, as a mental health-related professional, I view mental health as being fundamentally about what, and how, people *feel*. That feelings are often

influenced by thoughts and beliefs and that in my view, unlike cognitively based modalities, acknowledgement and care for a person’s feelings must precede any type of therapy concerned with challenging or changing a person’s thoughts or beliefs. In my experience thoughts and beliefs can be erroneous, but feelings, when fully acknowledged and accepted, never are.

Figure 5. Four dimensional model for a mental health-related climate-literate professional.



And finally the spiritual dimension describes my relationship to the ‘life-force’ of nature. That all living beings are inter-connected by a life-force energy sometimes referred to as Prana, Shakti, or Chi in Eastern spiritual traditions and well documented within Hindi, Buddhist, Zen and indigenous cultural traditions. For Māori the term ‘mauri’ means alive or life-force, associated with vitality, integrity and energy and contained in all things – animate and inanimate (Mead, 2003, p. 363). The term ‘Mauri Ora’, meaning ‘flourishing’ is also related to the health of the wider environment (ibid). These notions of life-force, common to

indigenous cultures are seemingly not widely recognised or understood within Western scientific paradigms. Mason Durie's widely recognised Te Whare Tapa Whā framework developed in the 1980's for Māori health (Rochford, 2004) refers to these four dimensions, plus Taha Whānau (family/community) and Whenua (land/Earth). Taking this into account the four-dimensional model presented here would be enhanced if it is conceptualised within a fifth over-arching dimension of culture which in New Zealand would be predominantly European, Māori and Pasifika cultures.

5.6 Finding more of myself through my research

What can a researcher ever really say about the people that are the subjects of their research? The 'findings' I've presented in this section are *informed* by my interactions with my research participants, but these are unavoidably mostly about myself. At every stage of writing this thesis I have gathered and reviewed a wide range of information about climate change (mental dimension) that has informed and influenced my perceptions and beliefs about this, and about *being* climate-literate which I've had the privilege of exploring with my interviewees. This has at times stimulated quite strong feelings for me that I've needed to reconnoitre with my counselling supervisor, and at times within my own therapy sessions (emotional dimension). It has invited me to reflect deeply about my relationship to nature and the environment (physical dimension) and in doing so I've discovered a deepening sense of spiritual and energetic connection to nature (spiritual dimension) and healing in nature. As a result I've come to increasingly relate to the environment through my physical senses, my feelings, and through an innate 'knowing' of my inter-relationship with nature and the natural environment.

In this chapter I have reported on selected 'findings' and my own *meaning-making* of these.

In this process, inadvertently since this was never an intention of my original research

proposal, I have found something more of myself. Like the now famous and often repeated quote from T.S. Elliot (Little Gidding, published 1942), my exploration has returned me to where I began, but experiencing myself and the world much differently:

"We shall not cease from exploration and the end of all our exploring will be to arrive where we began and to know the place for the first time."

The writing of this thesis has been a deepening inner exploration for me, and this sort of makes sense given that this is a *counselling* thesis. In researching climate change, the healing power of the natural environment, and delving deeply into the murky world of chemtrails and geoengineering I would say that I have become more caring and appreciative of nature, and more acutely conscious about my life-style choices (what I consume, and what and how I dispose of what I've consumed) that impact on the environment.

I'm reminded of the lyrics of a song by Mike Love – '*Step Lightly*':

*They're cutting down the forests, filling up the landfills
Blackening the skyline, choking out the sun
'Til there's nothing left but garbage, steel, concrete and sorrow
People this doesn't have to be our tomorrow
If you listen closely, you will hear Her crying
Do you even care that She is slowly dying
We got to make a change now, if not for yourself then do it for your children

Step lightly, you are trodding on sacred ground
Step lightly, there is beauty to be found, look all around
Step lightly, for you don't wanna leave a scar
Step lightly, or for your children this will be no more*

I would say that in *becoming* 'a mental health-related climate-literate professional' I have learned much about myself, about nature, and am learning to better 'step lightly'.

Chapter 6 - Discussion

In this chapter I will discuss the findings already outlined from the presentation of narratives chapters of this report. The purpose of this discussion will be to fulfil several objectives, the first, while not taking any particular priority will be to link selected findings to some of the established literature already mentioned in this report. The second will be to briefly discuss some of the themes that were identified and elaborate on the process of meaning-making through re-storying. Next, I'll discuss implications for counsellor education about climate change and climate-literacy, followed by a section on conspiracy narratives within a counselling context. Finally, I'll mention several points for consideration of further possible research about the topics covered in this report that may further inform the counselling profession.

6.1 Findings that link to established literature

The primary question for investigation of this research has been: What does being a mental health-related climate-literate professional *mean* to counsellors in relation to working with clients concerned or distressed about climate change and chemtrails?

Firstly, the historical context in which this research has taken place cannot be taken for granted (Whooley, 2006), given that the notional concept of any kind of mental health-related professional being, or needing to be 'climate-literate' is entirely contextual to the first two decades of the 21st century, now being referred to as the epoch of the Anthropocene (Carrington, 2016). Humanity's impact on the global climate system through industrialisation and, more recently, the technologies of geoengineering has led to what is now being referred to as a climate emergency and an ecological crisis (see literature review). To my knowledge the term 'mental health-related climate-literate professional' does not appear in the literature prior to 2017 and was unfamiliar to the participants of this research (myself excepted). All of

the participants of this research, myself included, had experience of working with at least one or more client(s) concerned or distressed about climate change and chemtrails. There is a recent (about the last decade) and developing peer-reviewed or evidence-based literature about public concern, anxiety, or distress related to climate change or associated environmental degradation (Albrecht et al., 2007; Angeloni, 2019; Clayton et al., 2017; Higginbotham et al., 2007; Hulme, 2008; Preston, 2017; Royal Society of New Zealand, 2017; Psychologists for Social Responsibility, n.d.; American Psychological Association, n.d.). In contrast to this, the peer-reviewed literature concerning public anxiety or distress about the global chemtrail phenomenon, frequently referred to as a ‘conspiracy theory’ (Brewer, 2007; Cairns, 2016; Shearer et al., 2016; Tingley & Wagner, 2017), is extremely sparse. One possible explanation suggested by Cairns (2016) is the observation that:

“[T]he invisibility of the chemtrail conspiracy in social scientific work on geoengineering is striking. It is perhaps indicative of a collective drawing of boundaries within academia around what is considered to be the rational political sphere, with the label of ‘conspiracy theorist’ being used to constitute chemtrail believers as a ‘pathological political other’...” (Cairns, 2016).

This notion of the “pathological political other” (Fenster, 1999, p.18) cited by Cairns about the effect of labels such as ‘conspiracy theorist’ identifies the marginalisation or even denigration of the experiences of people who report witnessing what they believe to be chemtrails. The potential effect may thus be two-fold: Firstly distress about the possible threat that chemtrails pose to the environment and people, and secondly feelings of distress that what they believe they are witnessing may not be believed by others. The intersection of the many narratives, of which there are a multitude, about *climate change* and to a lesser extent *chemtrails*, as they may be encountered in a counselling setting as outlined in this research, provided a deeply multifaceted milieu of counsellor-client engagement for the exploration of the counsellor’s experiences. Counsellors may therefore be encountering a

two-fold dynamic with such clients – on the one hand, their distress about chemtrails, and on the other any stigma they may be experiencing for having these concerns. Counsellor notions, thoughts, ideas, beliefs and feelings about what they may have encountered with such clients, might then inform perceptions of themselves as being, or becoming, mental health-related climate literate professionals.

There were a number of identified themes (Appendix H) that emerged through the process of transcription analysis, summarised as:

1. Distress about climate change, weather, and the natural environment;
2. Distress about chemtrails and witnessing chemtrails;

With a number of sub-themes including:

- Counsellor and clients' relationship with nature;
- Clients' feelings of disempowerment and counsellor validation of clients' concerns;
- Mistrust of authorities about alleged weather and environmental manipulation;
- Scepticism of others encountered by clients about the existence of chemtrails.

The first of the main themes (1.) connects to a significant volume of established literature (see literature review), whereas the second theme (2.) is virtually unknown within academic literature (Cairns, 2016), but partially referenced within some journalistic publications (Dunne, 2017; Freeland, 2018).

These themes, where they emerged, were variously shared or raised by the research participants as either concerns of their own, or concerns of their clients', or both. The theme concerning client's relationship with nature was examined through a re-storying process in the findings chapter and relates to the practice of eco-therapy that has gained a growing recognition in the last decade or so (Buzzell & Chalquist, 2009; Owton, 2013; Summers & Vivian, 2018). The issue of scepticism about the existence of chemtrails, and distrust of

authorities, connects to the conspiracy narrative associated with this phenomenon (Cairns, 2016). In a counselling context this may have some comparison to other contexts where a conspiracy narrative has featured in a health setting, for example HIV testing in South Africa (Bogart et al., 2008), AIDS in the United States (Ross et al., 2006; Klonoff & Landrine, 1999). However in this research all three participating counsellors had their own experiences or encounters with the chemtrail phenomenon which enabled them to validate their clients' concerns and eliminated any element of counsellor scepticism. Clients' feelings of disempowerment, that their concerns or beliefs would not be taken seriously by others (or by authorities), were somewhat consistent with findings from an Australian survey of young people aged 7 – 25 years on the subject of climate change (Chiw & Ling, 2019), who identified young peoples' concerns about not being taken seriously.

6.2 Meaning-making through re-storying

Counsellors can *learn* from their clients (Hatcher et al., 2012), and “experienced therapists rate their clients as their number one source of knowledge” (Skovholt & Starkey, 2010). My own initiation and subsequent learning about the chemtrail phenomenon in a counselling context was from an encounter with a client which led to my choice of topic for this research. Counsellors also assist their clients to re-story their own narratives (Morgan et al., 2011; Ricks et al, 2014; White & Epston, 1990) as a process of meaning-making for a therapeutic benefit or outcome. I used re-storying in various forms (stanza, poetic verse, etc.) as a means for presenting certain thematic content but mainly as a process for reflexivity and dialogic analysis of narrative *for* meaning making.

There were a number of themes that emerged through the process of transcription analysis, some of which were explored through the re-storying process, but I have left any thematic interpretation largely to the reader because for me, and in the context of this research, a

‘theme’ or themes in themselves do not represent meaning, but rather provide a contextual starting point for further *ways* of meaning-making. Here, described by Frank (2005):

“[T]hemes are tentative beginnings of the more significant task of representing individual struggles in all their ambivalence and unfinalisability” (p.972).

To attempt to make interpretive assumptions about *meaning* from thematic material alone would, in my view, risk overlooking or marginalising the personal struggle inherent in every story for it is human struggle that personalises and humanises narrative *into* story.

Individual struggle was present at each stage of this research, and in every story: Claire describing her pregnant client’s guilt; Miriam describing her client’s (and possibly her own) resignation - “what can you do about that? You’re just one person so... yeah”, and James talking about his near suicidal client: “feeling like she can do absolutely nothing, it affects her so badly”. And in my own experience of researching this subject matter, struggling with what I felt about it and what to include or what to leave out, and how much to disclose of my own struggle and never feeling wholly satisfied, being mindful that: “Who speaks at what length in those pages is decided by the author’s inner dialogue with now-absent participants” (Frank, 2005, p.971). This is a crucial point raised by Frank and speaks directly to the process of meaning-making through dialogic analysis, which is that the dialogue may continue long after the actual conversation, and that whatever meaning is ‘made’ (taken or created, however it might be described) from the entire *dialogues* (there being more than one) rather than from any sequential or temporal order that the original dialogue may have had – evident in my selection of presentation of narratives, and my choice of findings.

My inner-dialogue with ‘now-absent participants’ has continued throughout the lengthy period of thesis writing, and so too has my meaning-making.

In storying sections from each of the participant narratives with myself as narrator (Transcripts 1.3; 2.3; 3.2), the research narrative (first column) became *my story* (column 2), and the added reflexive commentary (column three) an expression of my inner-dialogue that persisted throughout the period on this research. As a result I've begun to think a lot about how re-storying features unconsciously in people's lives when people ruminate or repeatedly go over events or experiences they have internalised, creating or re-telling to themselves different versions of the experience. Referred to as repetitive thought or rumination in psychotherapy Hughes, Alloy, & Cogswell (2008) found that rumination can feature significantly in depression, and in the overlap of depression and anxiety. During the writing of this thesis I found myself at times ruminating over certain aspects of my research, sometimes feeling stuck and searching for a way forward, which at times I found anxiety provoking. The re-storying process, *in writing*, helped me to externalise my thoughts and feelings and supervision sessions with my own counsellor assisted me to re-story my experiences in self-affirming ways. As a result I have found that my relationship (internalised) to the global phenomena of climate change and chemtrails has changed significantly over the period of this research, as has my notion of myself as a 'mental health-related climate-literate professional'. I presented an aspect of my meaning-making about this as a four dimensional model (Chapter 5, Figure 5.) encompassing the physical, mental, emotional, and spiritual dimensions for being (or becoming) a mental health-related climate-literate professional.

6.3 Implications for counsellor education about climate change

There is much that could be considered for further research – each of the themes or sub-themes identified through the transcription analysis could be the basis of further research, as could the further analysis of my participants' transcripts through the lens of the four-dimensions outlined in the formative model of the findings chapter (Figure 5.). For the

purposes of this discussion, and in keeping with the principal research question, I have selected the comparison of research participants' nuanced notions about being (or becoming) a mental health-related climate-literate professional (Chapter 5, Table 4.).

When viewed collectively these covered three distinct domains that I identified and that could apply to counselling as a profession – personal experiences, professional development, and methods or skills for practice. From the literature this correlates somewhat closely to Skovholt & Starkey's (2010) concept of the Three-legged Epistemological Stool – personal life, academic research, and practitioner experience. As I outlined in the findings section, each of the research participants spoke to a greater or lesser extent to each of these epistemological sources. In consideration of any further research about being, or becoming, a mental health-related climate-literate professional Skovholt & Starkey (2010) provide a vital point of reference for informing the counselling profession and counselling educators investigating ways for implementing climate-change literacy within the profession. Drawing specifically to the findings of this thesis, common to all the participants as a pervading theme was people's relationship to the natural environment and that 'nature' can provide therapeutic benefit. In his article '*The climate change crisis is caused by our separation from nature*' Alex Pezza (2019) makes the point that in his view the true root of the climate crisis, that is understood in many indigenous traditions, is "a false sense of separation between us and the environment". Pezza asserts that virtually every indigenous culture understands that the health of the environment is crucial for our own wellbeing and that:

“We need to regain our emotional and spiritual connection to the natural world from a place within the heart, not just the mind. When we do that, wellbeing will come naturally, and our addiction to growth at the expense of the environment will automatically disappear” (Pezza, 2019).

Cornforth (2008) noted that the counselling profession has no particular guiding ethic that extends the concept of relationship to nature and, like Alex Pezza, that 'the natural world is

largely viewed as a resource available for use' (and exploitation), but concludes that the counselling profession may have a professional, ethical, and theoretical mandate for the inclusion of the natural environment into training and professional development programmes:

“Practitioners would be encouraged to weave this theme into their work in order to invite awareness, in clients, of their relationships with, and responsibilities to, the natural world. This might become one of the makers of wellness, and ability to facilitate its outcome might be made examinable” (Cornforth, 2008, p.152).

Media and public attention to climate change in the last two decades has transformed the notion of ‘climate literacy’ as being no longer the preserved domain of the interdisciplinary environmental sciences. According to the United States National Oceanic & Atmospheric Administration (NOAA) climate science literacy is “an understanding of your influence on climate and climate’s influence on you and society” (NOAA, n.d.). The Climate Literacy and Energy Awareness Network (CLEAN), an educational service associated with NOAA offers educational resources for use by schools and other education providers with ‘easy-to-read’ “explanations of science and policy, designed to step students through the key principles of climate and energy” (CLEAN, n.d.), and the New Zealand Association of Science Educators (NZASE) provides information about teaching resources for use in schools (NZASE, 2014). The term ‘mental health-related climate-literate professional’ put forward by Clayton et al. (2017) provides a usefully comprehensive descriptive title for mental health professionals to become climate-literate, but their report focuses mainly on the societal and mental health impacts of climate change and does not offer any specific guidance about knowledge or competencies for being climate-literate. Competency as a generic term has no widely accepted single definition but can generally be considered to be a blend of codified knowledge, practical skills, and personal attributes consistent to a specific task or application in order to perform competently (Hoffman, 1999). Sources such as NOAA, CLEAN,

NZASE, The Royal Society of New Zealand (RSNZ, 2017), and reports such as the one by Clayton et al. (2017) may provide well researched and relevant information about the climate and climate change (codified knowledge), but are entirely silent on the subject of competency for climate literacy. The New Zealand Association of Counsellors (NZAC) noted that “Nature can be a powerful tool for our mental health and encourages a healthy lifestyle, even just by breathing in the fresh air and going for a walk” in a short article headlined:

Counsellors embrace nature during Mental Health Awareness Week (NZAC, 2017).

However, the NZAC 2016 Counsellor Education Standards for membership covering ethics, Te Tiriti o Waitangi, counselling theory and research, and practicum requirements makes no reference to nature, the natural environment, or climate change (NZAC, 2016). The NZAC promotes ‘nature’ for a healthy lifestyle and mental health but appears to be silent on how its members should be conversant with this or how to put this into practice.

Counselling and psychotherapy accrediting organisations, as well as counselling educators, should consider without delay the recommendations by public health and scientific authorities such as The Royal Society of New Zealand, and others such as the American Psychological Association and ecoAmerica (Clayton et al., 2017), of the need for environmental values (Cornforth, 2008) and awareness of the health and psychosocial impacts of climate change for climate-literacy. This could include coverage of selected climate change educational material and report summaries (e.g. RSNZ, 2017; Clayton et al., 2017; etc.), as well as discussion articles covering climate anxiety, Solastalgia, eco-therapy, and indigenous cultural perspectives relating to society and the environment, and nature-based healing systems. Clearly further research would be needed to assist in determining what sources and selection of material would be most relevant to practicing counsellors and therapists, and might also depend on their particular practicing modality.

6.4 Conspiracy in the counselling room, chemtrails and contested truths

Not all conspiracy theories are false, and some although seemingly unbelievable have been proven to be accurate such as the notorious 1950's CIA mind-control and torture research programme known as MK-ULTRA (Sunstein & Vermeule, 2009). Independent analysis by expert engineers that dispute the official explanations by the 9/11 commission for the World Trade Centre building collapses (citing evidence of thermite, a pyrotechnic compound), and video footage analysis concluding controlled demolition of buildings one, two, and six (Jones et al., 2016) might be considered another example. On this and many other world events conspiracy theories that contest 'accepted truths' by official reports or inquiries abound and accepting that public opinion is increasingly influenced by new media and social media sources (Wood et al., 2012), there is a growing adherence by the public to sources other than those *authorised* as 'official' narratives. On the subject of chemtrails and the conspiracy narrative of '*hidden in full view*' (Freeland, 2018), and where this might feature in climate-literacy, the obvious connection to climate change is the science of atmospheric aerosol geoengineering as a proposed technology for climate change mitigation. Given widespread conspiracy labelling by academic and media sources associated with the chemtrail phenomenon it is unsurprising that accounts by members of the public about chemtrails *and* geoengineering receive virtually no consideration within climate change literature. Shovholt and Starkey (2010) note that a "hallmark feature of counselling and psychotherapy is ambiguity" (p. 126). Counsellors who encounter clients with beliefs about climate change (particularly where chemtrails may feature) that deviate from the scientifically accepted narrative should at least have some fluency in understanding that there are wide-ranging views about this, including beliefs that might contest what they personally believe to be 'truth'.

McLeod and Cooper (2012) describe and recommend a *pluralistic* approach, a willingness “to accept the validity of other answers to a question, even while adopting a specific position” (p.339). For counsellors encountering clients who hold beliefs they themselves might consider conspiracy theory Cooper and McLeod discuss the risks of people ‘losing touch’ with the reality of the world and those around them through *either/or* thinking, which can also apply to counsellors themselves. In advocating a pluralistic approach they emphasise the importance of being open to the *otherness* of the ‘Other’ [client], which can mean that “we are willing to go beyond what is familiar to us and embrace the Other in their indefinability and complexity” (Cooper & McLeod, 2012, p.3). Further, a pluralistic approach can be conceived as “a positive alternative to the perceived arrogance of those who claim that their belief, and their belief alone, is true” (Birkett, 2006, p.606, as cited in Ross, 2012).

6.5 Consideration for further research about the chemtrail phenomenon

As climate change continues and creates more and ever increasing extreme weather related catastrophes the psychosocial impacts, and potential trauma, are also likely to intensify or become more widely experienced by individuals and communities. The mental health implications have been well documented (see literature review), and as already discussed the counselling organisations such as the NZAC have begun to make attempts to respond to these. Further research into the role that counsellors can take in response to climate change, and in particular to counsellor education, have been discussed. Where there appears to be no research whatsoever is in relation to psychosocial impacts of climate change mitigation technologies such as aerosol geoengineering and aerial spraying operations, especially as these may become more prevalent and visible to the public. Considering the steep rise in public awareness of the chemtrail phenomenon in the last decade it appears that this may already be happening. In the United States, Canada and the United Kingdom the reported level of public awareness of chemtrails in 2010 ranged between 2.6 - 16.6% (Mercer et al.,

2011), but by 2016 this had increased in the United States to 9 - 28% (Tingley & Wagner, 2017). If this trend continues it is increasingly likely that counsellors in New Zealand and other parts of the world will encounter this in their practice at some point. However, on the basis of up-take of prospective participant response to this research (four respondents from approximately 400 counsellors within the Canterbury region) it would seem that barely 1% of counsellors in the Canterbury region in 2018 had encountered clients concerned or distressed about climate change *and* chemtrails in their practice, or at least were willing to respond to the invitation for this research. It is possible that as public awareness about chemtrails increases, or more people report witnessing or being affected by chemtrails that counsellors may encounter this more frequently. Very little is known about the psychological, affective, or behavioural effects of chemtrails on people that witness this phenomenon although Dunne's (2017) article about visiting with chemtrail witnesses does provide some limited insight. While this thesis focused specifically on the experiences of the participating counsellors, rather than their clients, future research could also include interviews with individuals who have accessed counselling or other therapeutic support for distress about chemtrails in order to appreciate more fully concerns that they may present with for counselling and any psychosocial, health or mental health concerns associated with the chemtrail phenomenon. Given the widespread controversy and scepticism prevalent among media commentators, and denials by governmental officials and some academics about the existence of chemtrails, researching this subject with vulnerable participants would require a high degree of ethical caution and supervisory assistance, as well as close and on-going support of participants to avoid possible trauma or re-traumatisation.

Chapter 7 - Conclusions

In coming to a conclusion to this research, and in forming *any* conclusions, I return to the core research question posed to each of the participants:

Based on your experiences of working with clients concerned or distressed about climate change and chemtrails what *meaning* does being a mental health-related climate-literate professional have to you?

Each participant had their own uniquely nuanced response to this question (Chapter 5.4). They each made *meaning* of this in different ways which I interpreted and summarised in a way that made meaning to me (Chapter 5, Table 4.). The chemtrail phenomenon featured in some way within each participant's narrative about climate change and influenced to some extent their understanding of climate change. They all expressed a view that the natural environment can provide therapeutic benefit, and that they encourage their clients to connect with nature in some way for healing or enhanced wellbeing. They also each expressed support for counsellors and therapists to include environmental values and awareness in some form within their scope of practice.

As I mentioned in the methodology section, in the interviewing of the participants and the transcription and analysis of their narratives, my task was not to make or find a story within their narratives but to allow the *stories* to find me. That is what I believe counsellors do when they *truly* listen.

People *make* meaning through stories, told either to themselves or to each other. Counsellors can therapeutically assist their clients by facilitating with them to *re-story* internalised narratives. However, meaning-making can take time. It requires reflection and reflexivity, and it can be – in my experience at least – a deeply personal and transformative experience. I have had the privilege of many months of meaning-making in the writing of this thesis,

something that busy practicing counsellors may not always have the time or space to do as much of. I've discussed some of my own meaning-making in the 'findings' section (Chapter 5.5 – 5.6), but in many respects it is the discussion chapter, 6.3 – Implications for counsellor education about climate change, which provides the most tangible and potentially more readily adoptable conclusions to this research. Pezza (2019) points to humanity's separation from nature as fundamentally the primary *cause* of climate change as an existential crisis facing humanity. Cornforth (2008) outlined some of the counselling profession's ethical obligations to include the natural environment within its training and accreditation programmes.

The findings of this research conclude that at least some practicing counsellors (all of the interviewees) appreciate the natural environment as a source of healing and wellbeing for themselves and their clients. While the New Zealand Association of Counsellors offers some reference to nature as a powerful *tool* for our mental health (NZAC, 2017) what is actually meant by this is open to interpretation and the NZAC offers no further clarification. What may be concluded by this is that the NZAC as an organisation refers to 'nature' as a form of publicity for *promoting* mental health, but has no explicit or applied organisational knowledge or practice standards relating to nature or ways that its counsellor members could or should be conversant with this in practice.

I have put forward my own formative four-dimensional model, based on my meaning-making about climate-literacy, for informing the counselling and therapy professions (Chapter 5, Figure 5.) as a basis for possible or potential education about climate change, nature, and environmental values for practicing counsellors. This should also be viewed through a 'fifth-dimension' of ethnic and cultural values relevant to whichever community this might serve.

The existential crisis of the global climate change emergency outlined by the wide variety of research articles, expert and media reports referred to by this research provides a source of reference and a sufficient basis for other counselling researchers and professional counselling associations to further explore and investigate the moral, ethical, and practical obligations of practicing counsellors to be or become climate-literate.

And finally, it is worthy of consideration that within the broader milieu of climate change the science and technologies of atmospheric aerosol geoengineering as a weather manipulation and/or climate change mitigation strategy are likely to gain wider public awareness over time as these technologies are developed and become more widely adopted. Therefore, the public health professions, counsellors, and other mental health professionals who *are* or *aspire to be* climate-literate should be broadly conversant with the existence of these technologies. They should also be at the very least *aware* that a portion of the public may be, or at some point may become concerned or distressed about what they witness or believe to be the global chemtrail phenomenon.

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Appendix A

Comparison of survey results of public awareness of chemtrails 2010 to 2016.

Mercer, Keith, & Sharp (2011); Tingley & Wagner (2017).			
In both surveys prior questions concerned solar geoengineering providing some familiarity with the concept of 'aerosol spraying'.			
2010 survey: Mercer, Keith, and Sharp; (n=3015)		2016 survey: Tingley & Wagner; (n=1000)	
Some people think the government has a secret program that uses airplanes to put harmful chemicals into the air (often called chemtrails).		Appears the same question used as the 2010 survey (1), but also included a "best guess" follow-up question (2) to respondents who provided an initial 'true' response.	
Survey Question: Do you believe it is true that the government has a secret program that uses airplanes to put harmful chemicals into the air?		Survey Question: Do you believe it is true that the government has a secret program that uses airplanes to put harmful chemicals into the air (often called "chemtrails")?	
Respondents: 'somewhat true'	14%	Respondents: 'somewhat true' (Q1. to 'best guess' Q2.)	19% to 29%
Respondents: 'completely true'	2.6%	Respondents: 'completely true' (Q1. to 'best guess' Q2.)	9% to 10%
Overall concurrence with belief in the chemtrail phenomenon	16.6%	Overall concurrence with belief in the chemtrail phenomenon (Q1. & Q2.)	28% & 39%
Respondent 5 point scale: <i>Completely false, somewhat false, somewhat true, completely true, I am unsure.</i>		Respondent 5 point scale: <i>Completely false, somewhat false, somewhat true, completely true, unsure. Q2. Was not surveyed to the 'unsure' respondents (who made up 25% of the Q1. Respondents).</i>	

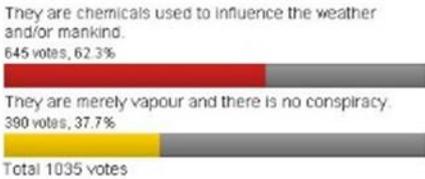
Appendix B

A Decade of Alleged Atmospheric Geoengineering in New Zealand: 2009-2019

<p>Abridged time-line: A very condensed briefing, there are many other accounts and reports not covered in this summary. (Prepared by: Malcolm Scott, University of Canterbury: malcolm.scott@pg.canterbury.ac.nz)</p>	
<p>Prior to 2009</p>	<p>Isolated incidences of alleged aerosol trails reported by the public, limited media coverage.</p>
<p>2005</p>	<p>Betty Rowe a resident in the Marlborough Sounds, was interviewed by Anderson & Anderson for Chemtrails - Special Interview. "Betty had told us that she had first seen Chemtrails in the year 2000". The Andersons reported that Betty had collected samples of material that she believed originated from particles dispersed by aerosol spraying.⁹</p> <p>For the period 2005-2009 the Civil Aviation Authority (CAA) disclosed one report only by a member of the public that alleged high-altitude aerosol spraying (CAA data released under the Official Information Act).</p>
<p>From 2009</p>	<p>Alleged NZ joint military coordinated operations commenced at full-scale in late 2009 (reported by an anonymous source with links to the aviation industry).</p>
<p>2010</p>	<p>Mayor of Kaikoura District Council wrote to Dr Nick Smith, Minister for the Environment, requesting an explanation for repeated reports of aerosol trails by locals, but the Ministry for the Environment (MfE) did not investigate.¹⁰</p> <p>Nick Smith, Minister for the Environment, questioned in parliament about alleged atmospheric aerosol spraying operations, but denied there is an orchestrated programme in NZ (Parliament, 15 June 2010).</p>
<p>2010</p>	<p>Media coverage increased: Otago Daily Times: Clouded in mystery, 11/12/2010. http://www.odt.co.nz/news/galleries/gallery/your-town/140238/reader-photos-cloud-formation-over-dunedin</p> <div style="text-align: center;">  <p>Brett Doherty's view above Dunedin Airport, 9.28am.</p> </div> <div style="text-align: center;">  <p>Otago Daily Times readers share their photos of the unusual cloud formation, believed by many to have been an aircraft vapour trail, seen over Dunedin on Thursday morning.</p> </div>

⁹ Retrieved from <http://mysteriousnz.co.nz/chemtrails/chemtrailsbettyrowe.html> AND <https://chemtrailsnorthnz.wordpress.com/2015/04/15/what-happened-to-betty-rowes-interview-about-chemtrails-with-mysterious-nz/>

¹⁰ Director Information, MfE, 27 May 2010; ENV4443.

<p>2010 – 2013</p>	<p>Nick Smith repeatedly reiterated his position of denial despite receiving frequent correspondence on this subject from the public and geoengineering researchers.¹¹ For the period May 2010 to January 2012 the Ministry for the Environment disclosed it had received a total of 11 separate reports of alleged evidence of aerosol spraying operations from the public covering an excess of 15 occurrences.¹²</p> <p>A July 2012 survey by the Taranaki Daily News (<i>n</i>=1035), reported that 62% of respondents indicated their awareness of a chemical spraying operation. http://www.stuff.co.nz/taranaki-daily-news/news/7328148/Struck-by-a-fit-of-the-vapour-trails</p> <p>Results</p> <p>What do you make of the vapour trails left behind aircraft?</p>  <table border="1"> <thead> <tr> <th>Response</th> <th>Votes</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>They are chemicals used to influence the weather and/or mankind.</td> <td>645</td> <td>62.3%</td> </tr> <tr> <td>They are merely vapour and there is no conspiracy.</td> <td>390</td> <td>37.7%</td> </tr> <tr> <td>Total</td> <td>1035</td> <td>100%</td> </tr> </tbody> </table> <p>Latest News Headlines</p> <ul style="list-style-type: none"> Speeding driver 'had a disorder' Drysdale has winning tips for business owners Te Henui walkway ramped up by new footbridges Masculine methods create feminine art Birthday blues for sick father and son Rose of Tralee to be crowned tonight <p>Related story: Struck by a fit of the vapour trails</p> <p>And in 2013: Opotiki becomes a conspiracy centre (Opotiki News, 17/1/2013).</p>	Response	Votes	Percentage	They are chemicals used to influence the weather and/or mankind.	645	62.3%	They are merely vapour and there is no conspiracy.	390	37.7%	Total	1035	100%
Response	Votes	Percentage											
They are chemicals used to influence the weather and/or mankind.	645	62.3%											
They are merely vapour and there is no conspiracy.	390	37.7%											
Total	1035	100%											
<p>2014</p>	<p>Amy Adams (standing in for Nick Smith) claimed: New Zealand government does not allow geoengineering.¹³</p>												
<p>2015</p>	<p>Ministry officials acknowledged they receive regular correspondence about alleged atmospheric geoengineering activities, but disclaim any knowledge about them.¹⁴ According to the ministry Climate Change Directorate they received approximately one enquiry each month about alleged aerosol spraying occurrences (e-mail from Manager Climate Change Analysis, 20 November 2015), and that “<i>Following up on these is not a priority for the Ministry</i>”.¹⁵</p> <p>For the period February 2013 to December 2015 a further 14 reports covering at least 22 further alleged sightings/occurrences were received by the Ministry¹⁶ but none of these reports were investigated.</p>												
<p>2016</p>	<p>For the period 2010-2016 the Civil Aviation Authority (CAA) disclosed more than a 1000% increase in report/enquiries by a members of the public about alleged high-altitude aerosol spraying from aircraft.¹⁷</p>												

¹¹ OIA request OIA191 submitted 31 December 2010. 10 March 2011: B. Quayle, e-mail of 4 February 2011: ENV6401. 14 April 2011: J. Jefferson, e-mail of 11 March 2011: ENV6749. 5 Dec 2011: N.Small, e-mails of 8, 15, 26, 30 October 2011: ENV7876, 7936, 8004.

¹² Director Climate Change, MfE, 30 June 2016 (OIA 16-D-00669).

¹³ Amy Adams, Letter 4 July 2014.

¹⁴ OIA request 15-D-0811 submitted to the MfE 2 November 2015.

¹⁵ E-mail, Manager Climate Change Analysis, 5 January 2016.

¹⁶ Director Climate Change, 29 February 2016 (16-D-00142); Minister, N. Smith, 11 April 2016 (16-O-00321).

¹⁷ CAA data released under the Official Information Act (2016).

Nick Smith released the following statement which could not be substantiated by any known information held by the Ministry for the Environment: *New Zealand is not involved in any programme of geoengineering or atmospheric aerosol solar radiation management.*¹⁸

Ministry officials requested the destruction of an internal memo about alleged aerosol geoengineering activities mistakenly leaked by a ministry staff member.¹⁹

The request for destruction of the memo was subsequently withdrawn one month later²⁰ after the contents of the memo was made public. The memo indicated that ministry officials regularly monitored public and media attention concerning alleged atmospheric geoengineering operations in New Zealand, and were therefore conversant with a much wider range of possible evidence than the aforementioned reports held or disclosed by the Ministry.

The Ministry released sections of correspondence between MfE staff and officials of the Civil Aviation Authority (CAA) concerning the revision/updating of a CAA webpage to which the MfE began referring the public to in early May 2016.²¹ It appears that the CAA webpage was created/revised at the request of MfE officials.

A notable increase in social media attention to alleged aerosol operations. One Facebook group with 1500 members had 21 separate reports posted in July 2016; another group – Weather Modification Watch New Zealand, 34 reports for the same period and in November 2016 a membership increase from 600 to over 5,000.

An incident report was filed in October 2016 with the CAA concerning two Air New Zealand A320 aircraft photographed within 350 vertical meters of altitude of each other. The centre aircraft was emitting a typical contrail, the other a voluminous ‘aerosolised’ trail inconsistent with typical A320 contrails and unlike the other A320. The CAA did not investigate the incident claiming the voluminous trail was caused by ‘atmospheric conditions’.²²



¹⁸ Nick Smith, 11 April 2016 (16-O-00321).

¹⁹ Internal MfE Memo 16-D-00142.

²⁰ Director Climate Change, Letter 16-P-001.

²¹ OIA request 30 June 2016 (16-D-00669).

²² CAA: 27 February 2017 (17/OIR/146).

<p>2017</p>	<p>Also in 2016 Minister of Defence Gerry Brownlee denied any NZDF involvement in high altitude aerosol spraying operations, but also refused to grant approval for a request for an independent inspection of RNZAF facilities for evidence aerosol spraying supplies and equipment, or to allow an audit of military air traffic records.²³</p> <p>International March Against Geoengineering (IMAG) 18 June 2017: New Zealand demonstrations and events in Auckland, Raglan, Taranaki, and Christchurch and in more than 30 other cities internationally. October 2017 the Labour lead coalition government took office – David Parker appointed Minister for the Environment.</p> <p>Air New Zealand A320 aircraft photographed with engine pylon discharge pipes indicating recent pylon modifications: The CAA claimed these are standard A320 fittings²⁴ and declined to re-open the incident report of October 2016.</p> <div data-bbox="336 689 1334 1169" data-label="Image"> </div> <ol style="list-style-type: none"> 1. A320 pylon tarnishing, surface condition indicates recent repair/modification 2. Distinctive 'three-trail' emission alleged to be from pylon discharge
<p>2018</p>	<p>David Parker re-iterated the same 'official' statement that: <i>"New Zealand is not involved in any programme of atmospheric geoengineering"</i>.²⁵</p> <p>A complaint to the Office of the Ombudsman (June 2018) concerning Minister Parker's handling of an OIA request (OIA section 14) was upheld, and the Ministry for the Environment subsequently disclosed that for the two year period March 2016 – March 2018 the Ministry had received a further 14 enquiries/reports from the public concerning aerosol spraying operations.²⁶</p> <p>An on-line petition (change.org) being prepared for presentation to parliament about atmospheric spraying operations initiated in 2018 had attracted more than 4,900 signatures by October 2018.²⁷</p>

²³ Brownlee, Letter 2 November 2016.

²⁴ CAA 25 July 2018 (19/OIR/24).

²⁵ David Parker, Letter 16 May 2018 (COR1477).

²⁶ Director, Legal and Procurement, 22 August 2018 (18-D- 01771).

²⁷ Change.org (2018). Geoengineering petition. Retrieved from <https://www.change.org/p/zane-o-neill-ban-geo-engineering-weather-modification-in-new-zealand>

2019

In March 2019 Switzerland introduced a resolution at the UN Environment Assembly in Kenya calling for an assessment of climate engineering methods and governance frameworks for each by August 2020.²⁸ New Zealand has no policy or legislative framework for the governance of wide-scale geoengineering and as a consequence has failed investigate or attempt to regulate the alleged and reported occurrences of aerosol geoengineering operations in New Zealand since 2009.

CLEINZ: CLimate Engineering Impacts on New Zealand, a five year \$9.9 million proposal submitted through the MBIE Endeavour Programme fund by Bodeker Scientific²⁹ aiming to create a comprehensive body of research that quantifies potential impacts of SRM (Solar Radiation Management) on New Zealand’s climate, environment, economy, and society. An earlier version of the proposal was submitted in 2018, but was declined by MBIE and the 2019 bid, resubmitted to MBIE following feedback on the 2018 proposal, was also declined.

Despite the continuing denials about alleged atmospheric geoengineering by various government agencies there remains an active on-line social media community that report and share information on a daily basis, although the numbers of active members is very low:

Geoengineering Watch New Zealand – 1,782 members (as at July 2019);

Chemtrails over New Zealand – 1,464 members (as at July 2019).

However, the number of signatures to the 2018 on-line petition indicate that at least approximately 5,000 members of the public take an active interest in alleged geoengineering operations and want to call a halt to this.

change.org Start a petition My petitions Browse

Ban Geo-Engineering & Weather Modification in New Zealand
5K supporters

PETITION UPDATE

Almost at 5000 signatures!

Zane O'Neill
Rotorua, New Zealand

Petition Closed
This petition had 4,914 supporters

Share on Facebook

Send a Facebook message
Send an email to friends
Tweet to your followers
Copy link

OCT 15, 2018

²⁸ <https://www.climatechangenews.com/2019/02/26/swiss-push-talk-geoengineering-goes-sci-fi-reality/>

²⁹ <http://www.bodekerscientific.com/projects/cleinz>

Appendix C

Research Questions

Research Questions

Submitted for approval by the Human Ethics Committee, University of Canterbury.

1. Opening question: Tell about why you agreed to participate in this research? What prompted you to want to be a part of it?
2. In what ways are their clients concerned (or distressed) about climate change and chemtrails?
3. How do counsellors support clients with these concerns?
4. What ethical or practice concerns emerged for the counsellor?
5. What exposure to these phenomena had the counsellor had to these (if any) prior to working with clients?
6. What did the counsellor learn about these phenomena through working with a client(s)?
7. How have these experiences informed their notion of themselves as a mental health-related climate-literate professional?
8. How does the designation of 'professional' change or influence what they think or say about themselves?
9. What further learning have they identified as a result of this, or as a result of participating in this research?
10. Based on your experiences of working with client(s) concerned or distressed about climate change and chemtrails, what meaning does being 'a mental health-related climate-literate professional' have to you?

Appendix D

Ethics approval



HUMAN ETHICS COMMITTEE
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2018/26

14 May 2018

Malcolm Scott
School of Health Sciences
UNIVERSITY OF CANTERBURY

Dear Malcolm

The Human Ethics Committee advises that your research proposal “Becoming "Mental HealthRelated Climate-Literate Professionals": Counsellors Meaning-Making in Relation to (Therapeutic Experiences of) Client Distress about Climate Change and Chemtrails” has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your emails of 2nd and 8th May 2018.

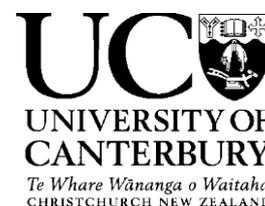
Best wishes for your project.

Yours sincerely
PP.

Professor Jane Maidment
Chair
University of Canterbury Human Ethics Committee

Appendix E

Research Information and E-mail



School of Health Sciences
Telephone: +64 3 369-3395

Email: malcolm.scott@pg.canterbury.ac.nz

28 May 2018

Becoming ‘mental health-related climate-literate professionals’: counsellors meaning-making in relation to (therapeutic experiences of) client distress about climate change and chemtrails.

Information for prospective research participants.

I am Malcolm Scott, a practicing counsellor and post-graduate student completing a Master’s degree in counselling. I am researching counsellors experiences of working with clients concerned or distressed about climate change and chemtrails, and the meaning they make about becoming a mental health-related climate literate professional.

The effects of climate change are increasingly impacting on the lives and livelihoods of people and communities in many parts of the world, and are becoming a significant cause of distress for individuals and communities. Chemtrails form part of the climate change narrative and since 2010 chemtrails (chemical aerosol trails from aircraft) have been witnessed and reported by hundreds of people in New Zealand. While the exact significance (purpose) of these chemtrails is both controversial and unsubstantiated, chemtrail witnesses report feelings of anxiety, fear, or anger, and express concerns about the effect chemtrails have on the environment, the weather and climate. Some individuals have sought counselling for these concerns. It is counsellors who have encountered these concerns with clients in their practice that I would like to interview.

If you choose to take part in this study, your involvement in this project will entail an interview with me (about 90 minutes) at the University of Canterbury or in your own office that will be recorded and transcribed. You will be given a copy of the transcript to view before any analysis is undertaken. Your identity will be anonymized, and you will not be asked to disclose any details about your clients. The interview will focus on your experiences in response to working with client(s) concerned about climate changes and chemtrails (and not specifically the concerns of your clients). You will not be asked to name or identify a client. The interview transcript will be kept secure, and the audio recording will be erased.

As a follow-up to the interview, you may be asked to make further comments or clarifications about the transcript before analysis takes place, this might require a second meeting, but may not be necessary.

Participation is voluntary and you have the right to withdraw at any stage without penalty. You may ask for your raw data to be returned to you or destroyed if you withdraw, I will remove information relating to you. Analysis of raw data will start from mid-July 2018.

The results of the project may be published, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public under any circumstances.

To ensure anonymity and confidentiality a pseudonym will be used for each interview participant, and only myself, the transcriber (who will sign a confidentiality agreement) and my research supervisors will view the full transcripts. These will be retained securely (university servers are password protected) for five years and then destroyed. A thesis is a public document and will be available through the UC library, but only brief sections or paragraphs of each transcript will be included in the thesis, or in any other subsequently published material.

Please indicate to the researcher on the consent form if you would like to receive a copy of the summary of results of the project.

The project is being carried out for the Masters of Counselling degree by Malcolm Scott under the supervision of Dr Shanee Barraclough, and Dr Lois Tonkin. Shanee can be contacted at shanee.barraclough@canterbury.ac.nz. She will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in the study, you are asked to complete the consent form and return to:

Malcolm Scott

University of Canterbury

Private Bag 4800, Christchurch 8140.

Or scan and e-mail: malcolm.scott@pg.canterbury.ac.nz

E-mail for participant recruitment.

This message was sent by e-mail with the research information and consent form attached. This was sent to prospective participants from e-mail lists of professional counselling and therapy association members in the Canterbury region.

E-mail message:

Kia ora,

Re: Request for counsellor participants for research project – expressions of interest.

My name is Malcolm Scott, I'm a practicing counsellor and post-graduate student of the University of Canterbury, completing a Master's degree in counselling. I am researching counsellor's experiences of working with clients concerned or distressed about climate change and chemtrails, and the meaning they make about becoming a mental health-related climate literate professional.

I'd like to invite counsellors that have experience of client(s) that have expressed concern or distress about chemtrails in relation to climate change to participate in this research – a summary description about what would be involved is attached.

If you have any questions or want further information you are welcome to contact me before you decide to participate. I welcome any expressions of interest, all interested counsellors will be considered for selection and a maximum of FIVE will be interviewed.

Please contact me by 30 June 2018 to be considered for inclusion in this research.

Thank you for your attention, please contact me by e-mail if you any questions/clarifications, or you can phone me.

Kind regards,

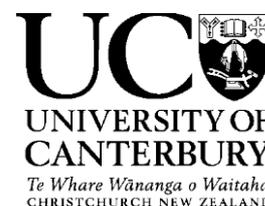
Malcolm Scott

P: 03 369 3577

E: malcolm.scott@pg.canterbury.ac.nz

Appendix F

Consent Form



School of Health Sciences
Telephone: +64 3 369-3395

Email: malcolm.scott@pg.canterbury.ac.nz

Becoming ‘mental health-related climate-literate professionals’: counsellors meaning-making in relation to (therapeutic experiences of) client distress about climate change and chemtrails.

Consent Form for research participants.

If you agree to consent to participation please tick each box and sign, date, and return this form:

- I have been given a full explanation of this project and have had the opportunity to ask questions.
- I understand what is required of me if I agree to take part in the research.
- I understand that participation is voluntary and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- I understand that any information or opinions I provide will be kept confidential to the researcher the research supervisors, and that any published or reported results will not identify the participants or their professional association. I understand that a thesis is a public document and will be available through the UC Library.
- I understand that all data collected for the study will be kept in locked and secure facilities and/or in password protected electronic form and will be destroyed after five years.
- I understand the risks associated with taking part and how they will be managed.
- I understand that I can contact the researcher Malcolm Scott (malcolm.scott@pg.canterbury.ac.nz) or his supervisor Shanee Barraclough (shanee.barraclough@canterbury.ac.nz) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz) I would like a summary of the results of the project (a link to the published thesis will be provided).
- By signing below, I agree to participate in this research project.

Name: _____ Signed: _____ Date: _____

Email address (*for report of findings, if applicable*):

Return to: Malcolm Scott, University of Canterbury, Private Bag 4800, Christchurch 8140

Or scan and e-mail: malcolm.scott@pg.canterbury.ac.nz

Appendix G

Emerging data extracts from interviewee transcripts

Emerging data extracts from interviewee transcripts Note, the number (in brackets) indicates the coded data extract from each transcript.		
<p>Clare (Total extracts = 112) Reason for participating: Personal concerns about the Earth, climate, weather and chemtrails (2)</p> <p>Client(s) issue: Client's distress about environmental change (7)</p> <p>Related data extracts:</p> <p>Validating clients' concerns (9, 11, 20, 93)</p> <p>Clients' talk about weather and the effect on their mood (19)</p> <p>At first people sceptical and unbelieving about chemtrails (21)</p> <p>People are seeing chemtrails (22)</p> <p>Crushed into a helpless resignation (24)</p>	<p>Miriam (Total extracts = 90) Reason for participating: Aware of chemtrails and that people may seek professional support (1, 4)</p> <p>Client(s) issue: Client very concerned about chemtrails (5)</p> <p>Related data extracts:</p> <p>Validating clients' experiences (71) for client to receive a reflection of who they really are (80)</p> <p>Fire is important when there's no sun (55) can't flourish without a source of fire (56)</p> <p>Conspiracy a way people deny chemtrails (76)</p> <p>Are jet-streams chemtrails (34), People seeing what's going on in our skies (63)</p> <p>Angry and disempowered (17, 18)</p>	<p>James (Total extracts = 71) Reason for participating: I have been seeing aspects of this subject for some time (2)</p> <p>Client(s) issue: Clients with similar concerns and anxieties (1) Climate change causing distress in people (15)</p> <p>Related data extracts:</p> <p>Relief to be able to talk about chemtrails (48)</p> <p>People suffer without sunshine (69)</p> <p>Chemtrails, can't believe this is true (18) conspiracy can confirm their need to dispel chemtrails (21)</p> <p>No chemtrails when I was a kid now they are everywhere (47)</p> <p>Overwhelm and disempowered (25, 37, 51)</p>

<p>People are lost for words (29), could this be true (30), who else knows (35)</p> <p>Acclimatising to the reprehensible (33)</p> <p>How clients' relate to nature (51), elements of nature that appeal to them (52)</p> <p>People being experimented on (83)</p> <p>Help clients decide for themselves (94) To trust what we feel and know (97)</p> <p>Disinformation about chemtrails, a parallel to other kinds of abuse, perpetrator blames the victim (102)</p> <p>Research Q. (Climate-literate professional): We have to be as informed on environmental issues as we are on anything else that impacts on life (108)</p>	<p>People are shocked to learn about this (42) and mistrust of the government (43)</p> <p>A numbing down process (6)</p> <p>Life force in nature (88) Finding the right element – garden, beach, mountains, ocean (89)</p> <p>Spraying of the population (13)</p> <p>Support people in what they feel and know is true for them (79)</p> <p>Wounding damaging to not be heard (73) Conspiracy a way to discredit people (74), for authorities to undermine people (75)</p> <p>Research Q. (Climate-literate professional): I've never considered myself in that light (46)</p>	<p>People are distressed and angry about what they are seeing (63) connection with environment and peoples' experience of chemtrails (64)</p> <p>A kind of settling occurs, can be resignation (11)</p> <p>There is therapy in nature (66), to find harmony being attracted to the beach, rivers, mountains, lakes (67) healing that's available in the environment (68)</p> <p>Hard to feel better watching a plane spraying chemicals (71)</p> <p>An emotional space to feel life (57) to trust inner guidance (58) permission to know and trust how we feel (62)</p> <p>Belief that authority knows better than us (17)</p> <p>Research Q. (Climate-literate professional): Tapping into a very important need, our relationship with the environment has to be understood (65)</p>
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Appendix H

Identification of themes from coded data extracts

Identification of themes from coded data extracts	
Identified Theme	Relevant extracts from transcribed data (code reference)
Climate change and the weather.	Client's distress about environmental change (1:7) Clients' talk about weather and the effect on their mood (1:19) Fire is important when there's no sun (2:55) can't flourish without a source of fire (2: 56) Climate change causing distress in people (3:15) People suffer without sunshine (3:69)
The natural environment and nature.	How clients' relate to nature (1:51) elements of nature that appeal to them (1:52) Life force in nature (2:88) Finding the right element – garden, beach, mountains, ocean (2:89) There is therapy in nature (3:66), to find harmony being attracted to the beach, rivers, mountains, lakes (3:67) healing that's available in the environment (3:68)
Scepticism and distress about chemtrails.	At first people sceptical and unbelieving about chemtrails (1:21) People are seeing chemtrails (1:22) People being experimented on (1:83) Are jet-streams chemtrails (2:34), People seeing what's going on in our skies (2:63) People are shocked to learn about this (2:42) Spraying of the population (2:13) Chemtrails, can't believe this is true (3:18) No chemtrails when I was a kid now they are everywhere (3:47) Hard to feel better watching a plane spraying chemicals (3:71) People are distressed and angry about what they are seeing (3:63) connection with environment and peoples' experience of chemtrails (3:64) Relief to be able to talk about chemtrails (3:48)
Validating clients concerns.	Validating clients' concerns (1:9, 11, 20, 93) Validating clients' experiences (2:71) for client to receive a reflection of who they really are (2:80) permission to know and trust how we feel (3:62)
Conspiracy and mistrust of authorities.	People are lost for words (1:29) could this be true (1:30) who else knows (1:35) Disinformation about chemtrails, a parallel to other kinds of abuse, perpetrator blames the victim (1:102) Conspiracy a way people deny chemtrails (2:76) mistrust of the government (2: 43) Conspiracy a way to discredit people (2:74) for authorities to undermine people (2:75) questioning authority (3:7a) conspiracy can confirm their need to dispel chemtrails (3:21) Belief that authority knows better than us (3:17)
Feelings of disempowerment.	Crushed into a helpless resignation (1:24) Acclimatising to the reprehensible (1:33) Angry and disempowered (2:17, 18) A numbing down process (2:6) Wounding damaging to not be heard (2:73) Overwhelm and disempowered (3:25, 37, 51) A kind of settling occurs, can be resignation (3:11)
Feelings and self-trust.	Help clients decide for themselves (1:94) To trust what we feel and know (1:97) Support people in what they feel and know is true for them (2:79) An emotional space to feel life (3:57) to trust inner guidance (3:58)

Appendix I

Dunne, C. (2017). My month with chemtrail conspiracy theorists. The Guardian 22 May 2017.

Whooley (2006) refers to three different layers of context – the micro level of textual context (intertextuality), the local content (interaction between a speaker and a listener), and the historical context (time, place, political environment, etc.). According to Whooley narrative researchers have analysed intertextuality and local context successfully, but *have paid less attention to the effects of the general historical context* because “most analysis tends to take the historical context for granted” [*emphasis added*] (Whooley, 2006, p.298).

The historical context of my research about climate change and the chemtrail phenomenon are highly contextual to the global environmental and geopolitical milieu. In re-storying the first introductory section of Dunne’s article I was able to add this historical context to the narrative, and in adding my own reflexive commentary was able to situate myself within the broader narrative of geoengineering and the chemtrail phenomenon presented by Dunne. This re-storying offers a *version* of DNA and provides an intertextuality and local content analysis, and the reflexive commentary adds a depth of historical context as a ‘lived experience’.

Dunne’s unedited text (formatted for five distinct scenes)	Narrative re-storied (Dialogic Narrative Analysis)	Reflexive commentary
<p><i>Scene 1</i> Standing between beds of golden beets and elephant garlic in the garden of Lincoln Hills, a small organic farm in Placer County, California, Tammi Ried looks up and points to a stripe of white haze running across a cloudless blue sky.</p>	<p><i>Abstract</i> In a beautiful garden setting in Lincoln Hills, California, a story is about to be told... Dunne is the ‘storyteller’, this is his story and he introduces Tammi, his first character.</p>	<p>I live 60 kilometres from Christchurch city in a natural rural setting on Banks Peninsula. While gardening I frequently observe “a stripe white haze running across a cloudless blue sky” emitted from aircraft. Scene 1 is very familiar to my own experiences.</p>
<p><i>Scene 2</i> “See that?” she asks, raising her eyebrows. “What do you think that is?” I look up. The white stripe looks like a normal contrail of jet engine exhaust to me.</p>	<p><i>Orientation</i> Tammi Ried is the central protagonist of Dunne’s story. She draws attention to something in the sky... “I look up” Dunne introduces himself to the narrative.</p>	<p>I’ve met many people like Tammi, and there are numerous social media groups where people share information about types of aircraft trails. To the uninitiated any ‘white stripe’ in the sky is frequently associated with aircraft contrails, as Dunne assumes. However, like Tammi, I grew up prior to the 2000’s and the lingering types of trails visible today are nothing like the short trails that aircraft used to emit in the 70’s, 80’s and 1990’s. According to a 2017 survey an estimated</p>
<p><i>Scene 3</i> But to Tammi, a 54 year-old organic farmer, it’s a “chemtrail”: a toxic cocktail of aluminum, strontium and barium sprayed from planes in a</p>	<p><i>Complicating action</i> The ‘white stripe’ is not normal after all and a sinister element is introduced... ‘chemtrails’.</p>	

<p>plot to control the weather, the population and our food supply. “See how it dissipates and becomes cloud cover?” she says. “That’s not normal.”</p> <p><i>Scene 4</i> I nod, unsure how to respond to this unexpected declaration, and Tammi resumes demonstrating how to cover crop rows with frost blankets.</p> <p><i>Scene 5</i> For the month of January, in an attempt to escape seasonal and post-election depression, I applied to work as a part-time farmhand at Lincoln Hills in exchange for room and board after spotting the arrangement advertised on the website HelpX. To someone accustomed to New York City’s mouse-infested apartments, the farm was cartoonishly idyllic: on 10 acres in the Sierra Nevada foothills, sheep graze on blackberry bushes, a baby mule frolics, and free-range chickens pluck worms from compost heaps.</p> <p><i>Coda</i> But for the residents who subscribe to the chemtrails conspiracy theory, what looks like a perfect bucolic scene feels shrouded in danger.</p>	<p><i>Resolution</i> A non-committal response from Dunne, he has yet to declare his opinion about this, and they resume their gardening.</p> <p><i>Evaluation</i> The brief interchange about the ‘white stripe’ in the sky is temporarily disregarded and Dunne goes on to reflect on how he came to be in Lincoln Hills, and the innocent beauty of the garden-farm setting. Dunne’s describes this as “cartoonishly idyllic” as if nature is somehow unreal (?). Dunne’s disclosure about his background serves to offer some context to his presence in Lincoln Hills, but also to distance himself from Tammi and the other (yet to be introduced) residents. As if to say ‘I’m not from here, this is not who I am’.</p> <p><i>Coda</i> But the innocence of the garden-farm setting is illusory, and danger threatens. But is the danger that Dunne intimates from the presence of chemtrails, or the ‘conspiracy’ being spread about them? And who exactly is endangered? The residents, or Dunne himself?</p>	<p>29% of Americans (over 100 million people), like Tammi, believe in the chemtrail phenomenon. Since 2010 in New Zealand the public reporting of alleged chemtrails has increased exponentially from only a few random sightings in the early 2000’s to sightings reported via social media on a nearly daily basis. In my experience it has been common for people to be unresponsive when they first hear about the chemtrail phenomenon as it tends to be outside of their everyday range of experience. I’ve spoken with numerous people about this phenomenon since I started researching this subject in 2013. I have found in my own conversations with people who witness chemtrails that they can express concerns about their safety and frequently express concerns about the toxicity of alleged ‘fall-out’ and its damage to the environment. Dunne resolves the conflict referred to in Scene 3 by his non-committal response, and then talking about himself and how he got to be there (not <i>from</i> there). Dunne then delivers the ‘punchline’ (Coda) and reveals his true response, a feeling of being endangered. Later in his narrative Dunne reveals that he does not subscribe to the chemtrail ‘conspiracy’ and positions himself as a rational sceptic, inferring that Tammi, and the other characters he later introduces as ‘conspiracy theorists’ are by contrast not rational.</p>
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