Eco-anxiety in the therapeutic context: Mental health professionals' experiences of working with climate distress in Aotearoa

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Abstract

The term eco-anxiety is widely used to describe the indirect impacts of climate change on mental health. However, this construct still eludes a clear definition and research on how this experience manifests is ongoing. There is little evidence on how therapeutic interventions might address eco-anxiety and a scarcity of research on how mental health professionals are encountering this therapeutically. This research sought to explore the experiences of mental health professionals in Aotearoa New Zealand who work with eco-anxiety. Six mental health professionals were interviewed and data was analysed using reflexive thematic analysis. Four overall themes were identified, along with sub-themes: a) eco-anxiety is rational, including sub-themes (i) validation is vital and (ii) a value-driven concern; b) a multidimensional construct, including sub-themes (i) an ambient stressor, with the sub-sub-theme gateway moments, (ii) collapsing time boundaries and (iii) colonisation's impacts; c) connection, including sub-themes (i) "we are all in this together", (ii) social support, and (iii) disconnection, and d) taking action, including the sub-theme "zone of capacity". Further research is needed on how people in Aotearoa are experiencing eco-anxiety and how mental health professionals are working with this. Future directions include how eco-anxiety may present as an ambient stressor, how colonisation may affect this experience and alternative frameworks to conceptualise eco-anxiety.

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Preface

Throughout this project I have wondered what it might be like to be researching a topic that I was interested in but could remain detached from. This seems like a luxury, to research something that does not have serious implications for humanity, something manageable and containable. Climate change is none of those things.

My first inkling of the dangers of global warming, as climate change was initially called, came from reading a book that described the risks humans are taking by emitting greenhouse gases into the atmosphere as being similar to your child balancing on the edge of a railing of a ship far out at sea: you do not know what will happen with any certainty, but the danger of what happens if they fall off is unthinkably dire. I do not remember the book title, but the horror of reading that particular sentence shut something down in me, and I pushed away the prospect that anything could be so threatening. After that came a vague awareness of climate change through news articles, but it was becoming pregnant with my first child, nine years ago, that anxiety started to break through. After a difficult birth, during which I came close to dying, these feelings solidified into general despair. I remember looking out the hospital room window and seeing fire and smoke, where there were only houses and hills. I remember driving in the South Island countryside soon after, when there really were bush fires blowing smoke across the road and feeling that the end really had come. I tried to tell people my fears, and how they should be frightened too, but was mostly met with confusion or bemusement.

Over time, I decided that nothing could be worse than my imagination, and it would be better to confront the reality of what was unfolding than sit crying and catastrophising. I started reading books, and through reading and listening to podcasts and with time, came to a place of equilibrium, or at least enough equilibrium to have a second child. Even though arguably the scientific situation is similar if not worse now, I found and still find heart in

people doing extraordinary, inspiring work on climate issues every day, work that often does unheralded. Many seismic shifts in human society often seem unthinkable until they happen. Only a few years ago the idea of having an electric vehicle was unbelievable, now it is unremarkable. In a few short years, the phrase ‘climate crisis’ has gained more traction, a very different phrase to the slower, safer, ‘global warming’. Albert Einstein said, “There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is.” I actively choose the latter, in appreciating the mystery and improbability of being alive at this time; it can be heart-wrenching, but it is all we have.

I come to this research with the immense privilege of not having yet experienced the acute physical impacts of climate change, with the security of living in a safe country and the comfort of financial stability. To further locate myself, as a Pākehā, I do not carry intergenerational loss of culture and land. As I slowly studied psychology one paper at a time over the last few years, my curiosity over how we humans are coping with climate change remained and I wondered when universities would cover this topic more specifically. This research has been motivated both from a curiosity of how eco-anxiety is showing up for therapists, and with the hope that it might generate insights into how we can support each other and find the agency and motivation to both cope and make changes for the better, while living in uncertain, often frightening times.

Introduction

The physical impacts of human-caused climate change have been well-documented, but research on the mental health impacts of a heating planet is still emerging (Cianconi et al., 2020). In particular, the indirect impacts of the climate crisis, or an awareness of the grave threat to the planet and human civilisation, are gaining attention (Clayton, 2020). One term that is increasingly used to encapsulate this experience is eco-anxiety (Dailianis, 2021) or climate anxiety (Clayton & Karazsia, 2020; Pitt et al., 2024), although it is understood to encompass a broad range of emotions such as anger, grief and guilt (Baudon & Jachens, 2021; Coffey et al., 2021). There is a growing body of evidence that concern about climate change is being experienced at high levels and can impact daily lives and functioning (Clayton & Karazsia, 2020; McLean, 2023). While eco-anxiety is widely acknowledged to be a rational response and is not understood as a mental disorder (Clayton, 2020; Feather & Williams, 2022; Pihkala, 2020), the mental health impacts of distress related to climate change are only expected to grow in the future and there is an increasing need for clinicians to be familiar with this experience and engage in supporting clients and communities (Baudon & Jachens, 2021; Crandon et al., 2022; Davenport, 2017; Li et al., 2022).

With regards to psychological interventions for people who are struggling with eco-anxiety, there is scant empirical evidence of effective approaches (Crandon et al, 2022) and most literature discusses current and potential approaches (Whitmarsh et al., 2022). Additionally, while distress around the climate crisis is said to be rising in Aotearoa (Clinton et al., 2022) and globally (Clayton & Karazsia, 2020; Kennedy-Woodard & Kennedy-Williams, 2022; Nugent, 2019) there is little research on how clinicians are working with this. The current literature is made up of online surveys (Gawrych & Holka-Pokorska, 2022; Trost et al., 2024), some mixed methods studies (Croasdale et al., 2023; Seaman, 2016) and therapists describing their own experiences (Bednarek, 2019; Hickman, 2020; Lewis, 2018;

Samuel et al., 2022). Silva and Coburn (2023)'s qualitative study exploring the experiences of therapists in Australia was the only research I found to use solely in-depth interviews.

Climate change will affect people differently and to different degrees; the pathways of how distress becomes debilitating, or in what ways people harness these painful emotions to engage meaningfully with the climate crisis, are still largely unknown. Additionally, given the scarcity of knowledge about how therapists feel about climate change, how this affects their work and what approaches they take with clients, it is crucial to have more understanding and awareness around this topic. To the best of my knowledge, no research has been conducted on this specific topic in Aotearoa. This study sought to explore eco-anxiety in the therapeutic context in Aotearoa through a qualitive, reflexive approach. By taking a qualitative approach in this new area, I aimed to help provide a foundation for future research. Through semi-structured, in-depth interviews, six mental health professionals were interviewed about how they understand eco-anxiety and their experiences of working with this therapeutically, to address the main research question: **how are mental health professionals in Aotearoa understanding and working with eco-anxiety?** Data was analysed using reflexive thematic analysis (Braun & Clarke, 2022). The reflexive element is important in acknowledging my role both as researcher and as someone with deep concern around about climate change, and this approach integrates how this shaped my interpretation and development of themes.

The contents of this thesis are organised into the following chapters: Chapter one briefly covers the destabilising threat of climate change and reviews current understandings of psychological distress in response to this, outlining how eco-anxiety as a concept is contested in terms of definition (Coffey et al., 2021) and may manifest differently depending on geography and sociopolitical context (Hogg et al., 2021; Marczak et al., 2023; Wray, 2021). This chapter includes how eco-anxiety is measured, current discussions around whether it is adaptive or maladaptive, and how people globally are being affected, along with

the relevance of experiences in Aotearoa including Indigenous perspectives. This chapter also reviews how psychology is meeting this form of psychological distress, current literature on interventions and how people are coping, as well as the available research on therapists' experiences working with eco-anxiety. Chapter two consists of a description of how the current study was carried out, including details of the reflexive process of each phase of data analysis. Results will be presented in Chapter three, with themes and sub-themes reported along with analysis and discussion of relevance to the existing literature. Chapter four will further discuss the implications of my findings, with a focus on how they contribute to the current literature, practical and theoretical implications, and proposed alternative frameworks for understanding eco-anxiety. Limitations of the current study and future directions will also be outlined in this chapter. Lastly, chapter four will include a conclusion to the thesis.

Chapter One – Literature Review

The threat of climate change

Scientific research over several decades has shown that greenhouse gases emitted due to human activity is causing global temperature rise. Scientific consensus around this issue has widely been found to be around 97% (Cook et al., 2013; Myers et al., 2021), and among those with the most expertise in climate science, 100% agree the planet is warming primarily due to human activity (Myers et al., 2021). From 2011 to 2020, global surface temperatures have reached 1.1°C above 1850-1900 temperatures (IPCC, 2023). This has led to increased extreme events such as heatwaves, drought, and cyclones in every region of the world, damage to human health and ecosystems and species loss, with irreversible losses occurring on land, at sea and in coastal areas (IPCC, 2023). Critically, each fraction of a degree of warming has implications for human suffering and increases harm to the planet (Doppelt, 2023). Extreme heat events have led to suffering, disease and death for human populations, with some mental health problems associated with increasing temperatures, trauma from extreme weather events and loss of culture and livelihoods (IPCC, 2023). Climate change is increasingly acknowledged as an emergency by governments and international bodies, as the evidence of negative impacts and risk to both human and natural systems mounts (Hobbhahn et al., 2019).

The direct impacts of climate change have exposed people to traumatic stress that can lead to psychopathology, and posttraumatic stress if the consequences are delayed (Cianconi et al., 2020) and high temperatures have been associated with increased anger and suicidal ideation (Hayes et al., 2018). If average global temperatures rise more than 1.5˚C above surface temperatures from the mid-1700s, we will experience dangerous and potentially irreversible impacts (Hausfather, 2020), known as climate overshoot, a likely scenario under current policy trajectories (Wunderling et al., 2023). Warming of 1.5-<2.0˚C above pre-

industrial levels increases the risk of reaching critical thresholds where a system irreversibly changes, such as the loss of the Greenland Ice Sheet (Wunderling et al., 2023). Even with immediate action taken to curb global greenhouse gas emissions, which continue to rise (United Nations Development Programme, 2024) the effects of this overshoot may continue for decades (Doppelt, 2023). As Doppelt (2023) writes in discussing the implications for humanity:

> …unless major initiatives are launched to prevent and heal them, the long climate emergency will generate tragedy, grief, and suffering on a scale that is far beyond anything that can be considered a normal part of human life (p. 7).

Until recently, most literature has focused on the physical effects of a warming planet, with mental health effects and complex emotional responses being considered more seriously since the 2000s (Doherty & Clayton, 2011; Pihkala, 2022). The psychological impacts of climate change have traditionally been classified as: direct, such as trauma from extreme weather events; indirect, such as emotional wellbeing being threatened due to concern about future risks; and psychosocial, for example stress on communities and the social fabric due to heat, migration or drought (Doherty & Clayton, 2011). Recently, research has focused on the negative mental health impacts of simply being aware of climate change, or its indirect impacts. These effects can be found even among those who have no direct experience of the physical consequence of climate change and for some, causes high levels of distress (Clayton & Karazsia, 2020).

Climate change can be understood as a “wicked” problem as it involves multiple factors interacting in unexpected and compounding ways, which can lead to uncertainty and the inability to cope with the resulting loss and distress (Doppelt, 2023, p. 8). The impacts of

climate change are expected to increase demand for mental health services and thus a need for clinicians to both be knowledgeable about mental health impacts and their own emotional responses (Crandon et al., 2022). This is a rapidly moving area of study, as expressed by Silva and Coburn (2023): “Any enquiry into the psychology of climate change is highly complex and is situated in a context of research and theoretical framings that is increasingly inter-disciplinary and fast-moving by necessity.” (p. 420)

What is eco-anxiety?

New ideas and language around climate-related distress are increasing. Phrases such as climate anxiety and eco-anxiety, as well as eco-rage and eco-grief have been described as “our new emotional taxonomy” (Kennedy-Woodard & Kennedy-Williams, 2022, p. 18). Eco-anxiety as a concept still escapes a precise definition (Clayton & Karazsia, 2020) and is not clearly understood, with a variety of terms used in the literature (Coffey et al., 2021). The phrase emerged from media reports from as early as 2006 (Cossman, 2013) and has gained traction in both academic literature and cultural awareness. In 2019, ‘climate anxiety’ was described by Grist magazine as the “biggest pop-culture trend” of the year (McGinn, 2019).

Since the 1990s there has been an exponential increase in articles mentioning ‘climate change’ or ‘global warming’ on the American Psychological Association’s (APA) PsychInfo database, with articles now numbering in the hundreds each year (Swim, 2022). Discussion in academic literature has significantly increased since 2017, which has been attributed to an APA report in 2017 that defined eco-anxiety as a “chronic fear of environmental doom” (American Psychological Association, 2017, p.68). Clayton (2020), a seminal researcher in the field, gives the definition of climate anxiety as the “anxiety associated with perceptions about climate change, even among people who have not personally experienced any direct impacts” (p. 2).

Research on eco-anxiety as a concept is nascent but the term is increasingly being used to describe climate-related distress, or mental and emotional states that arise when having greater awareness of this crisis (Baudon & Jachens, 2021). While eco-anxiety has become synonymous with describing the indirect impacts of climate change on mental health (Dailianis, 2021), much of the literature uses the terms climate anxiety or climate change anxiety (Clayton & Karazsia, 2020) and these terms are widely used in academic literature and the media (Pikhala, 2020; Pitt et al., 2024).

It is important to note that climate change has become almost synonymous with the concept of ecological degradation, with much environmental damage attributed to rising temperatures (Dailianis, 2021). As such, there is enormous overlap between the terms climate anxiety and eco-anxiety (Pihkala, 2020) and eco-anxiety can be understood as encompassing negative emotions about both climate change and ecological concerns such as deforestation, pollution and species extinction (Kurth & Pihkala, 2022). Some researchers suggest that climate anxiety is subsumed within eco-anxiety and that they are interconnected rather than distinct; research that has measured both ecological concern and anxiety around climate change found interconnection between anxiety around climate change, pollution and environmental degradation, suggesting a wider construct of eco-anxiety than just climate concern (Hogg et al., 2021).

There is wide agreement in the literature that eco-anxiety refers to a plethora of emotions, along with anxiety (Baudon & Jachens, 2021; Clayton & Karazsia, 2020; Coffey et al., 2021). Emotional responses to climate change can include eco-grief or eco-anger, and eco-anxiety can be seen as also incorporating worry, sadness and guilt (Clayton & Karazsia, 2020; Verplanken et al., 2020). Both anxiety and depression can be induced by the threat of climate change and there is some speculation that symptoms from these may overlap (Davenport, 2017). Hickman (2020), in focusing on children and young people's emotional

responses, also argues the term eco-anxiety cannot capture the range of powerful underlying emotions it refers to, such as grief, terror and powerlessness, which she understands as emotions people can rapidly move between.

A sense of grief and loss is prevalent in the literature, with the destruction of eco-systems described as leading to "a deep and troubling sense that something has gone wrong with the natural world and our relationship to it" (Clayton & Karazsia, 2020, p. 2). Ecological anxiety and grief can be differentiated by understanding anxiety as stress and apprehension, and grief as a response to loss (Cunsolo et al., 2020), although it is possible these responses are interrelated and may perpetuate one another (Davenport, 2017).

The idea of an existential crisis also comes up in the literature. Panu Pihkala, a theologian and Lutheran pastor, understands eco-anxiety as a form of death anxiety, stemming from a deep sense that things have gone terribly wrong with the natural world and humanity's relationship to it (Pihkala, 2018). Dalianis (2021) describes this as "an exciting area where psychology and spirituality merge in an attempt to grapple with, what is commonly regarded as, the most significant crisis facing humanity of all time." (p. 48).

Woodbury (2019) sees climate change as not only creating trauma but as an unfolding trauma itself, with the potential to set off past personal and intergenerational traumas. Climate change is viewed in this way as a collective or cultural trauma, altering group consciousness and future identity. The term 'pre-traumatic stress disorder' has also been used to describe the process of imagining and ruminating on future harm (Davenport, 2017). Psychiatrist Lise Van Susteren has commented, "I call it 'pre,' but there's nothing 'pre' about it. When we look around the world, we see people starved … But much of traumatic stress disorder is how we imagine things are going to be." (Kerecman Myers, 2017, p.3). This description invokes both an awareness of current trauma, and future imaginings of worsening events.

Similarly, Kaplan (2020) describes Pre-traumatic Stress Syndrome as involving symptoms such as being overwhelmed, panic attacks, intrusive thoughts, compulsive behaviours, dissociation and emotional freezing. This can be seen as post-traumatic stress disorder reversed, as an imagined future catastrophe causes trauma and its related symptoms (Kaplan, 2020). This may be a cyclical experience, as feeling overwhelmed and paralysed can both precipitate and perpetuate the experience (Ray, 2020).

A scoping review on clinical understandings of eco-anxiety identified a conceptualisation made up of the following dimensions: Firstly, it can manifest as maladaptive in people who have no direct experience of the ecological crisis. Secondly, there is a crisis of future-oriented hope. Thirdly, this experience can result in reduced quality of life, which can lead to the fourth dimension, an inability to take positive action to help mitigate ecological destruction. The fifth dimension is that eco-anxiety can be understood as an existential crisis, and can present with aspects of stress, trauma or grief (Dailianis, 2021).

Dailianis (2021) discusses how hopelessness is commonly a symptom of depression and there can be an overlap between presentations of anxiety and depression (American Psychiatric Association, 2013). Dailianis suggests eco-anxiety may be capturing depression in response to the ecological crisis, given other symptoms found in the scoping review that are associated with major depressive disorder included rumination, reduced flourishing, restlessness, insomnia, sadness, irritability, and appetite changes.

Dailianis speculates that an initial anxiety may become depression, with hopelessness manifesting if the person has not been able to take meaningful action or connect with others about their distress. However, Clayton and Karazsia (2020) have argued that climate anxiety is most similar to stress or anxiety, describing it as a response to an environmental situation, while depression is not so clearly associated with a specific cause.

Solastalgia

An important concept in understanding emotions related to environmental degradation is solastalgia, a term introduced by Glenn Albrecht (Albrecht, 2005), which blends the words ‘solace’ and ‘nostalgia’. The Latin roots combine comfort and pain, and a key idea of this word is being homesick without leaving home. The term captures the experience of the bonds to a precious place breaking, or seeing the environment degrade before your eyes (Davenport, 2017). Albrecht (2011) has suggested that strained, degraded eco-systems may give rise to chronic stress in humans, leading to a variety of “psychoterratic” syndromes. These include solastalgia, eco-anxiety, which is characterised by dread, ecoparalysis or an inability to act due to perception of an overwhelming threat, and econostalgia, or a belief that places were better in the past.

While solastalgia is a prevalent concept in many articles, it may not account for some local contexts, such as communities in the Pacific (Tupou et al., 2023). For Pacific peoples, wellbeing and mental health are intertwined with the relationship between land, ancestors and culture, with land viewed as sacred; solastalgia may be too narrow a concept to reflect this. According to Tupou et al. (2023) many understandings of ecological distress are shaped by economically powerful settler communities, with more social and economic ties to the land than cultural or spiritual, and suggest that more holistic perspectives are needed, as well as locating climate distress in the wider narratives of adaptation, displacement and migration.

Another consideration is that the concept of climate change is heterogeneous across the world with regards to understandings and perceptions, adding another layer of challenge to this field (Soutar & Wand, 2022). According to Google Trends, a search tool to assess the popularity of search terms, the term ‘climate anxiety’ is widely searched for in the United States of America, England, Australia and Canada, but scarcely used in the Global South, including Africa, Asia, Latin America and Oceania. In contrast, the phrase ‘climate change’, is more widely searched for across the Global South (Barnwell et al., 2020). This could

suggest that the idea of climate anxiety is more unfamiliar to those in the Global South, either as a concept or in the language being used.

From the literature discussed, it is unclear whether eco-anxiety can truly be understood as a future-oriented or distanced concept, when the physical impacts are already causing post-traumatic stress for many people around the globe, which in turn can lead to anticipatory anxiety (Doppelt, 2023). Even concepts such as “pre-traumatic stress disorder” involve current situations (Kerecman Myers, 2017). Additionally, while eco-anxiety is frequently conceptualised as future-oriented, concepts such as solastalgia refer to mourning the loss of a loved home that is being damaged in the present.

In this research, I will use the term ‘eco-anxiety’ as Baudon and Jachens (2021) refer to it: “the emotional and mental states associated with heightened awareness of climate change and concurrent distress in the face of its threatening implications for the future” (p. 2). This definition is broad enough to encompass both psychological and emotional experiences and given the newness of this area and the multitude of emotions discussed in the literature, a wider definition is useful. While this definition refers to distress about the future, it also allows for a sense of awareness of the climate crisis. While ‘eco’ mostly refers to the climate crisis, I acknowledge this can also capture the related threats of biodiversity loss and ecological destruction. As many studies also use ‘climate anxiety’ (Pikhala, 2020; Pitt et al., 2024) I will use this term as well when discussing these studies.

Measuring eco-anxiety

Scholars have created a small number of validated scales addressing the psychological impacts of climate change, most notably the Climate Anxiety Scale (CAS; Clayton & Karazsia, 2020), the Hogg Eco-Anxiety Scale (Hogg et al., 2021), the Climate Change Distress and Impairment scale (Hepp et al., 2023) and the Climate Change Worry Scale (CCWS; Stewart, 2021). Notably, these measures do not always use the same terms to

describe psychological responses to climate change, or the same definitions (Coffey et al., 2021).

Clayton and Karazsia (2020) wanted to explore at what point rational concern becomes dysfunctional, impacting on day-to-day life and the ability to engage in action to help mitigate climate change. They used blogs, clinical websites and existing literature to come up with a list of symptoms, which included anecdotal evidence of physical pain or sickness, paralysis, and uncontrollable crying. Clayton and Karazsia (2020) measured functional impairment and cognitive-affective impairment, as well as climate change exposure and pro-environmental behavioural engagement. Rumination, behaviours associated with motivation and connection to nature were also measured, as was environmental identity, or a person's perception of their connection with nature. This measure was evaluated in two studies with samples from the general population in the United States, which showed the measure has two dimensions: cognitive and emotional impairment because of concern about climate change (including crying, rumination, difficulty sleeping or concentrating) and functional impairment (such as difficulty working or socialising). The impairment subscales made up the climate anxiety scale, consisting of 22 items.

Clayton and Karazsia (2020) found levels of climate anxiety were low in general, but that a significant minority of participants scored highly on subscales that assessed cognitive or functional impairment, together making up the climate anxiety score. A non-clinically significant response to climate change was found to be correlated with environmental identity and behavioural engagement, while these factors (identity and engagement) were weakly correlated with climate anxiety. This work suggests people can engage with the negative effects of ecological degradation while keeping a sense of psychological wellbeing. Clayton and Karazsia (2020) reported validity and reliability for their measure and their findings have been replicated by other researchers (Cruz & High, 2022).

Hogg et al. (2021) wanted to expand on Clayton and Karazsia's (2020) measure to incorporate repetitive thinking about climate change and environmental degradation, which they suggest may fuel rumination and greater eco-anxiety. In research with university students from New Zealand and Australia, results from an initial mixed-methods study suggested that affective symptoms of eco-anxiety are a distinct from general anxiety disorder. Hogg et al.'s findings also indicated that people who do not have anxiety at a clinical or sub-clinical level may still experience eco-anxiety. Utilising these insights, Hogg et al. (2021) incorporated them into a second study that included measuring behavioural and social impairments, rumination about the environment, depression, anxiety, stress, emotional reactivity to credibility of science and belief in climate change. They developed the 13-item Hogg Eco-Anxiety Scale, which captured the following dimensions of eco-anxiety: rumination, behavioural symptoms, affective symptoms, and anxiety about one's negative impact on the planet.

Hogg et al. (2021) found these dimensions are distinct from stress, anxiety and depression. The authors conducted a further longitudinal study, showing these factors were stable across time. Along with Clayton and Karazsia's (2020) factors of affective and behavioural symptoms, Hogg et al. found rumination and anxiety about one's own impact on the environment to be unique dimensions of eco-anxiety. The authors report the validation of this multidimensional measure is the first to capture anxiety in response to the environmental crisis rather than just climate anxiety. A unique contribution of this work can be seen in the influence of anxiety about one's personal impact, perhaps capturing the facet of guilt found in other literature. Hogg et al.'s (2021) findings also suggest that while there was some overlap, eco-anxiety was found to be distinct from depression, anxiety and stress. As a measure designed to assess feelings over the last two weeks, this scale also measured eco-anxiety over time, an important aspect exploring the stability of this construct.

Hogg et al. (2021) caution against pathologising eco-anxiety, stating that their research aims to understand and support people. Their participants mostly experienced mild eco-anxiety, and the authors state that as university students, this was an important population to explore as young adults are particularly likely to experience climate anxiety (Searle & Gow, 2010); however the samples were mostly female, and this research cannot show prevalence of eco-anxiety among the population. Since the initial study, the Hogg Eco-Anxiety Scale has been validated in French-speaking populations (Mathé et al., 2023), Germany (Stephan et al., 2023) and Argentinian and Spanish populations (Rodríguez Quiroga et al., 2024).

Also drawing on Clayton and Karazisa's (2020) work, Hepp et al. (2023) created the climate change distress and impairment scale, with the aim of differentiating climate change distress from impairment, so as not to pathologise negative emotional responses that have been linked to pro-environmental behaviours. Informed by previous literature, Hepp et al. (2023) included anger, sadness, anxiety and guilt to reflect negative affect relating to climate change, describing these as climate change distress. These emotions were also used because they relate to common sources of psychopathology. Hepp et al. also measured impairment in general and in the areas of work/school and social contexts. While developing these constructs of distress and impairment, the authors sought feedback on the items' cultural relevance from English speakers in India, Australia, Ireland, South Africa, and United States.

Hepp et al. (2023) conducted four studies (N=1699) across an international sample. Results showed moderate to high levels of climate change distress, but low to moderate levels of climate change impairment. Higher distress and impairment were linked to a higher probability of pro-environmental behaviours, demonstrating that affective responses can drive behaviours to reduce impacts of climate change. Findings showed that climate change distress is not pathological in itself, as discriminant validity for negative affectivity, as well as

depressive and generalised anxiety disorder symptoms was found (Hepp et al., 2023). These findings are especially pertinent given the large international sample size and the consideration given to cultural relevance of the constructs measured.

Taking a different focus, Stewart (2021) developed the Climate Change Worry Scale (CCWS), comprised of ten items, with the aim of measuring personal worry and expanding understandings of this construct. Stewart contends that worry is related to but distinct from anxiety and fear: while fear involves high somatic arousal and the appraisal of an immediate threat, anxiety involves both worry and arousal, or both repetitive negative thoughts about the future and physical symptoms. Crucially, Stewart points out that worry is also rooted in thought and language, which may be significant in the context of messages about climate change frequently disseminated by the media.

Stewart (2021)'s content was generated by literature on worry and climate psychology and focused on severe weather outbreaks and effects on others to keep the measure focused on personal worry rather than broad concern. Across three studies with university students from the United States, Stewart found climate change worry was related to stress, fear of storms and other severe weather, but less related to existing measures of worry, anxiety or depression. Stewart acknowledges the limitations of this research in only assessing personal worry, rather than a broader scope of concern, and in using participants from university from the United States may have different responses to other demographics. However, participants lived in an area that often experiences tornadoes, thunderstorms, extreme heat and flooding. An interesting finding from this research is that climate change worry was not strongly related to existing constructs of anxiety or depression, aligning with Hepp et al. (2023) and Hogg et al.'s (2021) findings that suggest their measures of climate distress and anxiety were distinct from existing constructs of anxiety and depression.

Gago et al. (2024) point out that current eco-anxiety measures such as the Hogg Eco-Anxiety Scale use existing measures of psychopathology such as the General Anxiety Disorder-7, and that while some overlap between climate anxiety and disorders such as depression and anxiety may occur due to their similarities, there is a need for positive measures of wellbeing as well as negative measures, in trying to assess climate anxiety as a unique form of distress (Gago et al., 2024). The CAS is also based on existing measures, and this scale does not encompass other emotions commonly associated with climate distress, such as grief (Ágoston et al., 2022; Whitmarsh et al., 2022) so may not be capturing a comprehensive experience.

Qualitative research

Ágoston et al. (2022) wanted to analyse eco emotions using qualitative methodology, with a focus on fear/worry/anxiety, sadness/grief, and guilt/shame, to help define these concepts and to explore ways of coping. Seventeen semi-structured interviews were conducted with a 'climate-sensitive population' in Hungary (participants were thought to be more sensitive either due to their profession, interest in the topic or exposure to climate change impacts) and analysed the findings using inductive and deductive qualitative approaches, using the coding process of thematic analysis (Ágoston et al., 2022).

Six components of eco-anxiety were found, including conflict around others' differing attitudes, empathy, being disturbed by changes, future generations, helplessness and frustration, and mental health symptoms. Ágoston et al. (2022) also found various types of eco-guilt: self-criticism, self-examination, self-blame; guilt/individual responsibility criticism; prophetic individual responsibility; dissatisfaction with personal actions; feeling guilty about one's past; system maintenance guilt; dilemma of harm (paralysis in the face of so much information that participants were not sure if their actions were good or bad); and guilt for one's existence. Two types of eco-grief were found, relating to loss of the

environment and species; and anticipated losses in the future. The authors suggest that some symptoms of pre-existing anxiety disorders are applicable to eco-anxiety, and that they may cause functional impairment temporarily. These findings also highlight the prominence of guilt, in comparison with other emotions.

A recent systemic review looked at qualitative literature on the scope of anxiety responses to climate change, including the construct of worry as related to anxious thoughts about climate change, and to explore geographical and sociodemographic factors that impact climate anxiety (Soutar & Wand, 2022). Fifteen studies were reviewed, and included participants from developing countries such as Ghana, Fiji and Tuvalu. Themes related to the scope of climate anxiety included worry about threats to livelihood, for future generations (this was more prominent in developed countries), and about apocalyptic futures. Other themes included anxiety at a perceived lack of response to climate change (such feeling only able to talk to a small number of people about their fears); competing worries (such as other political or financial stressors). Climate anxiety responses were consistent with symptoms of clinical anxiety (Soutar & Wand, 2022). These included: panic; a feeling of suffocation; and ruminating on negative emotions such as guilt and worry.

Interestingly, some participants showed little anxiety or worry related to climate change despite being extremely vulnerable to the effects of a heating world. Soutar and Wand (2022) suggest that this could be due to lack of understanding of Western concepts of climate change, and a more immediate pre-occupation with daily survival, which can be seen in the theme ‘competing worries’. However, proximity to the effects of climate change were related to anxiety responses in other studies, for example activists close to the physical effects of climate change experienced feelings of panic, while Tuvaluan citizens, facing great physical threats, reported anxiety impacting their daily function (Gibson et al., 2020). This research also shows the relatedness of future anxiety and the impact of climate-related events in

discussing populations experiencing both, and gives a broader scope than other studies with narrower definitions or more homogenous populations.

A more homogenous sample is found in Pitt et al. (2024)'s mixed-methods survey of 230 people who self-identified as having an interest in climate anxiety: participants were largely from Australia, the United States and the United Kingdom, with most (70%) female and White Caucasian (85%), and seventy percent held a MA or doctoral degree. Together, these demographics are less likely to reflect a diverse range of perspectives.

The survey combined qualitative and quantitative responses on climate anxiety and interventions, and qualitative data was analysed with reflexive thematic analysis (Pitt et al., 2024). The main themes reported were: climate anxiety is a healthy response to the current situation (this was seen as both negative and a powerful motivator); climate anxiety will continue to increase until there is climate action; climate anxiety interventions should be individualised (taking into account that climate anxiety is complex and multi-faceted and may need tailored, individualised approaches); climate anxiety interventions need to include the community and societal level; and climate-aware practitioners are required. Pitt et al. (2024) acknowledge that while their findings are consistent with other literature that endorses a non-pathological approach (Baudon & Jachens, 2021; Budziszewska & Jonsson, 2022) this study does not evaluate interventions, but reflects the opinions of participants.

In Aotearoa, Gaskell-Hahn et al. (2017) conducted a qualitative, exploratory study into the impact of anthropomorphic environmental change on the wellbeing and mental health of people aged between 18-30. Researchers conducted five semi-structured interviews that were analysed using thematic analysis and developed the following key themes: lack of care, or the lack of thought from governmental, corporate, and economic systems about the environment; human survival and progress, including ideas of returning to basic values and ways of living, and human connection; futility, which included feelings of helplessness, and

individual and systemic powerlessness in particular; and negative affect, such as stress, sadness, guilt, fear, frustration and overwhelm. The last theme was coping mechanisms, including both negative mechanisms such as apathy and withdrawal, and positive ones, such as optimism, humour, knowledge-seeking and lifestyle choices (such as sustainable behaviour or spending time in nature). Withdrawal from engaging with environmental concerns was also used as a way of coping for participants who were engaged with environmental issues.

Gaskell-Hahn et al. (2017) interpret these findings as reflecting the complexity of navigating environmental change, especially with regards to individual and social forces that maintain both environmental decline and coping mechanisms, highlighting the socio-political contexts in which people are able to express and cope with eco-anxiety.

Other qualitative work has looked at the experiences of young people. A paper co-authored by 23 young people, aged 16-29, explored their feelings[1] about the climate crisis and what support they needed (Diffey et al., 2022). Authors were from 15 different countries and nineteen of the authors had experienced direct physical impacts of climate-related weather events. Feelings discussed included worry, fear, anger, grief, sorrow, responsibility and hopelessness. Diffey et al. (2022) discuss how these feelings changed over time but were exacerbated by climate impacts both direct or in the news, or when faced with political or corporate inaction, leading to despair or anger. Conversely, the authors resort feeling relief and connection when the climate crisis is taken seriously by those in power, or by fellow citizens. Negative feelings were found to disrupt daily life and impact relationships, with the authors discussing their unease at talking with others about their feelings and uncertainty around whether they would be taken seriously, and some reported feeling intense amounts of

[1] The authors use the word 'feelings' rather than 'emotions', as they state that the term 'emotion' can be invalidating (Pihkala, 2022)

guilt living in countries such as Vietnam, where personal carbon footprints are lower than in many other countries (Diffey et al., 2022).

Other qualitative research has attempted to explore emotional reactions to climate change (Kemkes & Akerman, 2019; Marczak et al., 2023), which has captured the complexity of these experiences and highlighted the distress people feel at being complicit in harmful systems. Using narrative accounts from 17 people living on the south shore of Lake Superior in northern Wisconsin, where ice cover has been decreasing, Kemkes and Akerman (2019) explored people's experiences living in a changing climate. The authors found participants lived with a great deal of uncertainty, and used words such as "catastrophic", "apocalyptic" and "helpless" to describe how they felt about climate change (p. 6). Participants also spoke about the difficulty of discussing these feelings, even with friends, showing the contrast between how they felt and the discourses available to engage in. There was a desire to come together with others and make a positive effort, despite feelings of helplessness. Notably, Kemkes and Akerman (2019) found fear and helplessness are not only intertwined with perceptions of ecological collapse but arising from the experience of living in harmful systems that contribute to this ongoing damage. In this research, participants are not just experiencing anticipatory anxiety – they are already living in a changing, degraded environment.

Another qualitative study involved people in Norway who self-identified as highly concerned about climate change (Marczak et al., 2023). This study sought to understand the emotional experience of climate change awareness. Thirty-three in-depth interviews were conducted and analysed using thematic analysis. The authors found a "complex, contextually dependent palette of emotions" (p. 4), relating to themes including: loss, lack of engagement or harmful conduct, ignorance from other people, being trapped in a harmful system,

uncertainty, complexity, catastrophic visions, personal responsibility, humans as destructive, collective action and accepting it is too late to prevent catastrophic consequences.

Interestingly, some participants initially found it hard to speak about their emotions or mentioned any worry, before the authors introduced the 'emotion vocabulary'. Reported emotions were most commonly anger, fear, and sadness. Hopelessness, anxiety, despair, grief, depression, disappointment, regret and unrest were also often mentioned[2] and around a third of participants felt overwhelmed by climate emotions, at times feeling unmotivated to engage in activities or physically tense. There was anger over perception of failed leadership, and in particular over the Norwegian government's oil and gas production, which Marczak et al. (2023) suggest may reflect how emotional responses to climate change are shaped by the socio-cultural contexts.

The topic of children came up organically and spontaneously in this study, with strong painful emotions around existing or hypothetical children. Participants also felt alone and powerless, feeling that others were not as concerned as they were, and coped by hiding their concern both in public and private. Participants felt a high sense of responsibility which brought some pride, but also guilt and shame at living in an oil-rich country. Positive emotions such as love, joy and energy were also mentioned in the context of feeling connected to nature and collective climate action.

Marczak et al. (2023) say this study allows for more nuance than conceptualising emotional responses to climate change as solely negative; while participants felt emotions similar to anxiety such as uncertainty, or depression in terms of hopelessness and low mood, they did not report any serious impairment of function in day-to-day life. Additionally, participants did not have the constraints of pre-existing concepts often presented in surveys or

[2] Interviews were conducted in Norwegian and only quotes and emotion words were translated to include in the text.

questionnaires, allowing for more exploratory and ‘bottom-up’ research not driven by existing theories. Marczak et al. (2023) acknowledge that while climate anxiety may mostly affect middle-class White people in positions of privilege, their political capital may be meaningful in how emotional engagement may translate into taking influential action.

In summary, a number of scales aim to measure and expand understandings of eco-anxiety, incorporating cognitive, emotional and functional impairment (Clayton & Karazsia, 2020) repetitive thinking (Hogg et al., 2021) and worry (Stewart, 2021), with findings suggesting these measures of climate anxiety and distress may be differentiated from existing constructs of anxiety and depression (Hepp et al., 2023; Hogg et al., 2021). Meanwhile qualitative research has found complexity and multiple aspects of eco-anxiety such as helplessness, conflict with others, several aspects of eco-guilt, worry and anxiety, and stress, overwhelm, sadness and fear (Ágoston et al., 2022; Gaskell-Hahn et al., 2017; Soutar & Wand, 2022). Uncertainty and helplessness have also been described by participants in qualitative research (Kemkes & Akerman, 2019) along with difficulty speaking about climate concern and experiencing positive emotions such as joy and love as well as painful emotions, and socio-cultural influences may be shaping how people experience climate distress (Marczak et al., 2023).

Anxiety – adaptive or maladaptive?

Anxiety is characterised by physical symptoms and a focus on the future, and while it can be adaptive and appropriate, may become maladaptive (Clayton & Karazsia, 2020). Many understandings of eco-anxiety suggest the experience is characterised by a pervasive and generalised type of anxiety, related to existential concerns (Dailianis, 2021). Focusing on anxiety research may build more coherent understandings of eco-anxiety, which may be related but distinct to existing clinical definitions of anxiety (Kurth & Pihkala, 2022).

Uncertainty and unpredictability are key to anxiety, in particular with regards to future situations and the individual's belief that they cannot cope (Grupe & Nitschke, 2013). The feeling affects cognition and behaviour in response to unpredictable future threats, a concept that underlies the core anxiety disorders in the Diagnostic and Statistical Manual of Mental Disorders (APA, 2013). Fear is also a component of anxiety, in particular overestimating a perceived threat and the ensuing negative emotional response, along with a low perception of self-efficacy and underestimating the benefits of taking action (Witte, 1992).

As there is so much uncertainty around an unfolding ecological crisis, and little personal control, climate change can be seen as the "ultimate stressor" (Dailianis, 2020, p. 12). In terms of responding to this threat, an adaptive response may occur if a person has high self-efficacy. However in the case of low self-efficacy, a person may become avoidant or even paralysed, if they are overwhelmed by their internal response (Albrecht, 2011).

Some authors have suggested that a 'practical' eco-anxiety, at the right time and to the right intensity, can advance wellbeing, an idea that is still under debate (Kurth & Pihkala, 2022). In this understanding, eco-anxiety is experienced as unease when thinking about future threats, but also gives rise to motivation and active engagement to address the threats. This experience is understood not as pathological but as a feature of emotional life that is affected by factors such as coping resources, personality and the social-cultural environment. Kurth and Pihkala (2022) argue for a model that captures the entirety of eco-anxiety as typically experienced, not just its more pathological, clinical manifestations.

Verplanken and Roy (2013) also argue that worrying about ecological concerns is adaptive and constructive, while acknowledging that worry is not necessarily the same as anxiety. Habitual worrying generally is associated with psychopathological symptoms, but the authors found habitual ecological worrying was associated with pro-environmental attitudes and behaviours and a lack of psychopathology.

One proposal for understanding the functional aspect of eco-anxiety is utilising the Yerkes-Dodson Curve, a model used traditionally for anxiety which illustrates how some anxiety is useful, but too much can impair performance. McLean (2023) adapts the Yerkes-Dodson curve (Hotton et al. 2019) as a model of anxiety depicting the curvilinear relationship between performance and arousal, showing how as arousal increases so does performance, but too much hinders the ability to perform. In McLean's adaptation, low concern is associated with apathy and high eco- anxiety with inability to respond. Peak capacity to engage meaningfully is at the high, middle point of the curve. This would not account for how eco-anxiety arises but could be useful in seeing what level of eco-anxiety can be debilitating (McLean, 2023).

Eco-anxiety and mental health

It is unclear whether there is a causal relationship between poor mental health and eco-anxiety (Coffey et al., 2021) and currently, there is a lack of evidence linking climate change anxiety and clinical anxiety (Soutar & Wand, 2022). While some studies have linked poorer mental health with negative emotions around climate concern (Ogunbode et al., 2023; Reyes et al., 2023) and greater concern about climate change has been found to indicate more anxiety, psychological distress and general depression (Searle & Gow, 2010) it is unclear if negative responses to climate change exacerbate mental health challenges, or if people experience them in relation to climate change, as these studies are cross-sectional (Stanley et al., 2021).

In rare cases, there have been extreme pathological presentations of eco-anxiety. One case study outlines a patient who stopped drinking water due to anxiety about harming the environment and being responsible for the deaths of millions of people; they were undergoing significant psychological suffering and diagnosed with major depressive disorder with

psychotic features (Wolf & Salo, 2008). Ray (2020) also describes a case of suicide due to overwhelm and despair in response to ecological crisis.

While there is little evidence of causation in either direction, psychological stressors related to climate change are significantly linked with mental health (Ogunbode et al., 2023). Across 25 countries, researchers found a positive association between negative climate-related emotions and insomnia symptoms, and a negative relationship between climate-related emotions and self-rated mental health. Ogunbode et al. (2023) suggest that negative climate-related emotions are relevant for mental health at a global level and highlight the implications of experiencing insomnia, itself a key factor in healthy psychological functioning.

Some authors, writing from a psychodynamic perspective, connect childhood trauma with current ecological trauma, suggesting that childhood trauma may predispose an individual to experience anxiety related to the ecological crisis (Haseley, 2019). While understanding people's potential underlying vulnerabilities to high levels of climate distress is helpful, this perspective may contribute to the individualising of eco-anxiety, locating it within the individual rather than as a rational, human response to an existential threat and there is no clear evidence for this relationship. Hickman (2020) speculates that pre-existing mental health issues such as obsessive compulsive disorder may exacerbate eco-anxiety, such as frequently checking climate updates, but cautions that more research is needed in this area. Some argue that eco-anxiety can be seen as a significant stressor which can play a part in mental disorder pathogenesis (Coffey et al., 2021; Hickman et al., 2021), but this relationship is far from clear.

Clinical disorder or rational response?

In the work reviewed, there is a tension between the understanding that eco-anxiety is a reasonable response to a real threat, but that it can also have grave impacts on mental health

and psychological wellbeing. There is a need to both validate and support these emotions, but also help people deal with them in an empowering way (Kennedy-Woodard & Kennedy-Williams, 2022). Throughout the literature, researchers and therapists are adamant that care needs to be taken not to pathologise distress in response to climate change, as it is a rational response to a real threat (e.g. Bednarek, 2019; Pihkala, 2020; Rhodes & Dunk, 2023; Silva & Coburn, 2023; Verplanken & Roy, 2013). Negative emotional responses to the unfolding threat of climate change are not irrational or delusional, given the scientific consensus around the projected and current impacts that life on our planet faces (Clayton & Karazsia, 2020). Indeed, "It's illogical *not* to be alarmed" (Kennedy-Woodard & Kennedy-Williams, 2022, p. 28). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) does not currently recognise eco-anxiety as a disorder; however there is potential for this to change and the implications of this are debated (Baudon & Jachens, 2021; Mclean, 2023).

Diagnosing a mental illness can be both helpful and stigmatising; psychologists' public opinions on eco-anxiety carry more weight than others' and there is concern that describing eco-anxiety as a mental health problem will distract from the systemic causes of the climate crisis, and frame the experience as abnormal (McLean, 2023), with the risk of pathologising eco-anxiety and blaming the distress on the individual. Bednarek (2019) agrees that care must be taken with language; while terms such as 'eco-anxiety' or 'pre-traumatic stress' can effectively communicate complex psychological responses, they can put these responses in a clinical framework and suggests there is something to fix (Bednarek, 2019).

However, there may be benefits of being able to diagnose eco-anxiety. Not acknowledging the often-severe mental health impacts of climate change means it is more challenging to raise public awareness of how damaging climate change is to psychological wellbeing (McLean, 2023). Not having a diagnosis can also mean a person loses access to support, sick leave, and a diagnosis can help communication between the family and mental

health professional and validate people's experiences. Having a diagnosis of eco-anxiety, rather than general anxiety disorder, could make it obvious that their distress is caused by systemic factors. Furthermore, as McLean discusses, diagnostic taxonomies can spur on further research. McLean (2023) advocates for an instrumentalist approach with regards to eco-anxiety, that takes into account the costs and benefits of a diagnosis for a particular client, and stresses that the clinician should work to minimise any downsides of their decision. Similarly, in discussing the usefulness of having a 'frame' through which to understand eco-anxiety, Hickman (2020) gives the example of people petitioning to have post-traumatic stress disorder (PTSD) included in the Diagnostic and Statistical Manual to have their experiences validated.

Ultimately, how climate anxiety is classified has ramifications for the establishment of services and how treatments in the future may be funded and delivered (Kennedy-Woodard & Kennedy-Williams, 2022). While eco-anxiety may not need a formal classification, deeper understandings of the experience may lead to more effective therapeutic approaches – "The more we know, the better we can support" (Kennedy-Woodard & Kennedy-Williams, 2022, p. 43). Its status as a disorder may emerge as understandings of the experience increase, if it is distinct from other forms of anxiety to warrant its own diagnostic label, and if there is justification for its inclusion (Kennedy-Woodard & Kennedy-Williams, 2022).

Some have suggested that the mental health impacts of climate change can be understood through the stress diathesis model (Hickman et al., 2021), which would implicate factors such as genetics and personality as leading to more vulnerability to climate-related distress, and a higher likelihood of developing mental ill-health (Searle & Gow, 2010). There may be times of life when people are more vulnerable to this process, such as young people, who are more developmentally vulnerable (Hickman et al., 2021).

McLean (2023) interrogates the idea of how eco-anxiety can at once be a reasonable response, but at the same time damaging to mental health. The author discusses how both these understandings derive from a binary, reductive understanding of mental health, which has limited effectiveness in accounting for how an individual can have impaired functioning and be responding in a reasonable way. McLean highlights how accounting for how political and social contexts shape distress is necessary in understanding eco-anxiety.

In a discussion of why climate change is personally distressing, McLean (2023) explores the mechanisms of "destructive, deforming institutions" (p.45) as described by Maiese and Hannah (2019) in their work on how powerful institutions of the capitalist system shape minds and needs. McLean argues that these institutions hamper our ability to imagine different ways of being, and how we might respond to the crisis, which can contribute to distress and derail how we make sense of the situation. This may lead to extreme impairments, and a deep sense of being unable to cope.

With regards to the stress diathesis model and existing bio-psycho-social models of understanding mental illness, McLean (2023) criticises how eco-anxiety is framed as a vulnerability in this model, which may be problematic as distress may be a result of positive traits such as loving the environment. In a similar way, Hickman (2020) suggests reframing eco-anxiety as eco-empathy or eco-compassion, and that a therapeutic response could be to highlight the idea that people would not feel distress if they did not connect and care deeply about the planet and its living networks. This moves away from a pathologising framework and more to one of attachment, allowing ideas such as love, connection and relationship to enter the discourse.

Hickman (2020) also argues that eco-anxiety needs to be understood in the context of a global, social challenge, and suggests that rather than quibble over definitions and labels of painful emotions, how we navigate and respond to this suffering is more important. Also

advocating for a less narrow understanding, Lewis (2019) urges clinicians to consider that clients may have multiple pathways to climate distress, such as anticipatory anxiety and the direct effects of extreme weather, that may not be able to be packaged up in a definition given by the existing academic literature. Similarly, Woodbury (2019) cautions that psychologists do not simply come up with an array of new language to pathologise distress, but regard this distress as ecological in nature and arising in humans as we comprehend the earth's distress. Woodbury (2019) advocates a shift in consciousness to activate the collective power needed to enact systemic change.

Some scholars have argued that psychological practice in general is ill-equipped to respond to climate-related emotional distress (Rhodes & Dunk, 2023). This is due in part to the field's understanding of distress as existing at an individual, intrapsychic level, requiring individual treatment, and a traditional reticence to engage with politics and structural inequality. Additionally, Rhodes and Dunk argue that an ontological shift is required to respond to climate change adequately, by not just embracing distress and cultivating resilience and hope but acknowledging human involvement in how the climate crisis has unfolded. The authors advocate for a widening of the psychological lens to include the planet and other species, and a recognition that psychological suffering can be caused by a rupture between nature and the human mind. Rhodes and Dunk (2023) write, "Any response to climate distress must include climate action, activism, not simply coping, if models are to be built that can build hope in the face of this emergency" (p. 155).

How distress is showing up in populations

Concern about the climate is increasingly reflected in global surveys. In the People's Climate Vote 2024 (UNDP, 2024), the planet's largest survey on public opinion of climate change of over 73,000 people in 77 countries, found over half of people surveyed are more worried about climate change than they were last year, with more than half of people

surveyed reporting they thought about climate change daily or weekly. In another large study, Hickman et al. (2021) sampled 10,000 young people across 10 countries from the Global North and South. They found nearly 60% were “extremely” or “very” worried about climate change, and 45% reported that their worry negatively impacted on day-to-day life. Notably, government inaction was found to be a key factor in young people’s distress (Hickman et al., 2021).

Closer to home, around 96% of young people in Australia, aged 7-25, considered climate change to be a serious problem. Eighty-nine percent worried about the effects of climate change, more than 70% were concerned that their opinions would not be taken seriously, and a feeling of disempowerment was common (Chiw & Ling, 2019).

While Aotearoa has been largely unaffected by extreme weather events up until recently, we are witnessing ecological degradation in the form of over-fishing, polluted waterways, and the threat of sea level rise (Dailianis, 2021). The longitudinal New Zealand Attitudes and Values Survey found that eco-anxiety significantly predicted an increase in psychological distress after a year, but the effect size of this was small (McBride et al., 2021).

Who is most affected?

Risk factors for climate-related distress are still being explored. According to a scoping review, climate scientists and naturalists, people who feel more connected to nature, those who have experienced environmental change or extreme weather related to the climate crisis, younger people, and women are most likely to experience eco-anxiety (Coffey et al., 2021). Women and girls are at greater risk of poor mental health, through pathways such as increased caregiving responsibilities and gender-based violence (Crandon et al., 2022). Living in a place prone to climate-related disasters, having poor social support and poverty are also risk factors for climate-related distress (Feather & Williams, 2022). People experiencing mental illness are more vulnerable to the effects of climate change, both

physically and mentally, and Indigenous populations are more affected as the climate crisis brings both new disruptions and exacerbates existing inequalities (Crandon et al., 2022).

The effects are also the most severe for people who are closely connected to the land, including Indigenous populations (Clinton et al., 2022). However, climate anxiety is often reported anecdotally by middle-class, white individuals (Ray, 2021). This may be because they are able to think beyond everyday survival, and in some ways this anxiety could be seen as a privilege or luxury.

With regards to why some people develop severe levels of eco-anxiety, evidence is scant (Dailianis, 2021). There is some speculation that people already prone to anxiety may be more susceptible to eco-anxiety. For example, fear of global threats such as nuclear war can increase anxiety for those who already have psychological conditions (Alyami et al., 2020). Psychological flexibility has been implicated in whether climate distress is experienced, with psychological inflexibility being shown to moderate the association between climate concern and climate-related distress (Feather & Williams, 2022).

In an online survey in the United Kingdom (N = 1338), high levels of climate concern were found, in contrast to low levels of climate anxiety as measured by the CAS (Whitmarsh et al., 2022). Climate anxiety was found to be higher among younger age groups, those with higher climate concern, people with higher generalised anxiety and lower mindfulness, higher nature relatedness and more climate change information-seeking behaviour. The authors state this study is the first to show a negative association between mindfulness and climate anxiety, which aligns with evidence that mindfulness is negatively correlated with anxiety (Whitmarsh et al., 2022). The authors replicated this study with a sub-sample of respondents, and report that there was little change from 2020 to 2022, finding a stable level of climate anxiety. Whitmarsh et al. interpret these findings as being due to the Covid-19 pandemic not hampering worry about climate change.

Indigenous and local perspectives

Indigenous populations are underrepresented in the current literature on eco-anxiety (Coffey et al., 2021), yet crucially support an estimated 80% of biodiversity globally (Raygorodetsky, 2018) and many contemporary therapeutic frameworks draw from Indigenous worldviews and wisdom (Davenport, 2017). Most research has been undertaken in Canada, Australia and the United States of America, and studies are predominantly qualitative (Middleton et al., 2020).

A scoping review of literature on Indigenous mental health in the context of climate change encompassed vicarious and anticipated experiences (Middleton et al., 2020). Exposure to change such as drought, changes in sea ice, wildlife and vegetation was frequently linked with feelings of anger, sadness, loss, worry and ongoing distress but not directly associated with PTSD, suicide or depression. However, several papers suggested the cumulative effects of repeated exposure to such events, along with other factors such as food insecurity, could manifest in mental illness and maladaptive coping strategies, including suicidality and substance abuse. Middleton et al. (2020) also describe strong emotions related to anticipated changes to the environment, such as sadness, grief and anger. The authors found that climate change is compounding emotions linked to ongoing disempowerment, with helplessness and anger frequently reported, and feelings of abandonment by the global community.

Middleton et al. (2020) discuss the deterioration of "intangible (non-economic) climate-induced losses and damages" (p. 12) such as local knowledge systems, that are less visible but are crucial for community wellbeing; these forms of harm are found across research on climate-related mental health impacts on Indigenous communities but are currently under-recognised. This has implications for Māori in Aotearoa given the current and anticpated losses of vital cultural resources (Dixon et al., 2022).

Some commentary has been critical of the framing of eco-anxiety as an existential threat, as this ignores similar threats that communities have experienced historically such as slavery and colonialism (Ray, 2021). Ray argues that historically oppressed peoples have developed resilience through their brutal history, and that privileged people experiencing eco-anxiety should explore how they are connected to the climate crisis, rather than seeking relief for their anxiety and using resources that could otherwise be deployed to challenge social injustices. In the United States, Black, Indigenous and people of colour face more disproportionate suffering due to climate change, but climate anxiety is being felt more by privileged White people, according to Ray (2021).

The Asia-Pacific and South Asia regions are home to twice as many people in high-exposure climate zones, compared with all other regions in the world (Dixon et al., 2022). While there is often a dominant narrative of vulnerability around populations most exposed to the physical impacts of a warming world, activists and leaders in the Pacific are challenging this notion (Kirsch, 2020). While accepting the lived reality that island nations such as Tuvalu, the Marshall Islands and Kiribati may become uninhabitable through sea-level rise, many climate leaders and activists have rejected playing the role of victim, instead stridently advocating for greenhouse gas reductions on the world stage. Activists have found strength in the identity of their connection to seafarers who travelled the Pacific, with no fear of the power of the ocean. The slogan of Pacific Climate Warriors reflects this spirit: “We are not drowning, we are fighting!” and the group aims to challenge dystopian narratives about Pacific people’s futures (Kirsch, 2020, p. 828).

Meanwhile in Tuvalu, which geographically is especially vulnerable to the impacts of a warming climate, research on experiences of distress with regards to both hearing about global climate change, and witnessing local environmental impacts, found high levels of distress. Researchers found a high proportion of people had psychological distress that caused

them impairment in daily life (Gibson et al., 2020). Around half of the participants sampled reported extreme distress around both abstract knowledge and local observations, illustrating again the significant impact on mental health that just being aware of climate change can have.

In Aotearoa, climate change is expected to negatively affect mental and community health and exacerbate existing inequalities (Royal Society Te Apārangi, 2017). Māori are particularly at risk of negative impacts and will disproportionately experience the effects of climate change due to existing inequalities and reliance on the environment and natural resources with regards to economic, social and cultural wellbeing (Dixon et al., 2022). Resources such as sacred waterways and burial sites are likely to be lost through rising seas and pollution. Psychology has both an ethical imperative to minimise harm to these communities and must acknowledge the value of Indigenous worldviews in mitigating the physical and psychological harm from climate change (Dixon et al., 2022).

Dixon et al. (2022) highlight the importance of voices from both Māori and Pacific peoples being heard and the authors suggest Indigenous perspectives should play a key role in change initiatives that are urgently needed. Nature is a key part of New Zealanders' identity, and from a te ao Māori (the Māori wordview) perspective, human wellbeing is inseparable from that of the natural world and its ecosystems (Durie, 2003). This can be seen in Durie's (1985) health model Te Whare Tapa Whā, where whānau, hinengaro and tinana rest upon the whenua, in interconnectedness. This interconnectedness can be seen in the concept of whakapapa, which can be translated as "layers of descent from one point to another" (Dixon et al., 2022, p. 79). This embraces a lineage that goes back to the origin of the universe and extends to beings yet to be born and is a key philosophical assumption of te ao Māori (Tassell-Matamua, 2021). This spiritual and physical connection is threatened by destruction of any one part of the whole. Dixon et al. (2022) suggest psychology embracing a concept

like whakapapa can bring a shift in understanding life as interconnected, in turn influencing people's behaviour.

The Māori population in Aotearoa today is diverse both with regards to people's relationship to te ao Māori (Apiti et al., 2023) and lived realities (Tassell-Matamua et al, 2021). As Aotearoa has changed overtime, many factors have affected connections and traditional practices. Apiti et al. (2023) caution against assuming all Māori have a strong connection to the environment, as events such as colonisation have negatively impacted Māori, with its effects flowing on to impact everyday concerns and needs. However, the authors emphasise that in general, the Māori worldview understands Māori as part of nature, not separate and dominant over the living world.

Apiti et al. (2023), in studying the relationship between environmental identity, Māori identity and environmental distress, surveyed 314 Māori participants. The authors found almost three quarters of respondents reported witnessing negative changes to the local ecology, leading to less ability to take part in traditional practices. Findings also showed that Māori identity was strongly associated with an enhanced sense of environmental connection. Interestingly, environmental distress was not strongly influenced by being Māori, but instead a sense of environmental connection that the authors suggest may exist outside of, or alongside, cultural influences, was influential on whether distress is felt due to environmental changes (Apiti et al., 2023)

The authors suggest that for many Māori, insecure housing and unemployment, poor health and food insecurity may be immediate concerns front of mind, meaning it is more challenging to give attention to broader environmental concerns. There may be feelings of powerlessness in Māori populations due to historical and intergenerational events, such as land confiscation. The authors speculate that this may play a role in people feeling less environmental connectedness, and therefore distress.

Tassell-Matamua et al. (2021) investigated whether Māori participants' stronger sense of connection to the environment, as indicated by higher Māori cultural identity scores, was related to pro-environmental behaviours. The authors found that people with higher cultural identity scores showed significantly greater positive regard for the environment, and also found a positive correlation between environmental connectedness and recuring pro-environmental behaviours (Tassell-Matamua et al., 2021).

The social context of pro-environmental behaviours may also be important, regardless of the strength of cultural identity, with results showing that participants living in rural areas showed greater environmental connectedness. Results support the idea that a sense of connectedness between te taiao (the environment) was linked to Māori cultural beliefs and values. Cultural identity did not directly predict pro-environmental behaviour, but the degree of environmental connectedness, within or without a cultural context, may be most influential. Together, these findings suggest that for Māori, environmental connectedness rather than cultural identity may be more important in predicting pro-environmental behaviour and distress due to environmental changes, and may have implications for how eco-anxiety manifests in Aotearoa.

Hogg et al. (2021) also suggest that eco-anxiety may manifest differently in the Global South, and that there is anecdotal evidence that those on the front lines of negative climate impacts, with limited ability to respond or recover, may be experiencing more rage, frustration and burnout, in contrast to those in the Global North who may feel more anxiety and guilt for being part of the unfolding crisis (Wray, 2021). However, Diffey et al. (2022) report high levels of guilt for some people living in Vietnam, a population with low carbon footprints, so drawing broad conclusions about this distinction may be premature.

How is psychology playing a role?

Mental health professionals have an ethical obligation to manage and minimise psychological harm related to climate change, to act as agents of change (Li et al., 2022) and to support communities beyond the therapy room (Crandon et al., 2022). Clinicians can play a part in creating the transformational change that is needed, in supporting clients to align their behaviour with their values and advocating for positive change both systemically and individually (Davenport, 2017). There is a need to increase awareness of eco-anxiety among clinicians, as acknowledging and validating this presentation within mental health and the broader community is key to understanding and providing support (Dailianis, 2021). With regards to the rise in climate distress among young people, there have been calls for psychologists to respond before developmental trauma and significant effects on mental health take hold of young people in the long term (Wu et al., 2020).

In 2019, the Climate Psychology Alliance in the UK reported being "inundated with requests for therapeutic support", while in the United States the Good Grief Network, which coordinates support groups for eco-anxiety, reported a rise in activity in 2019 (Nugent, 2019). Professional bodies have begun engaging with climate change, with the United Kingdom's Climate Psychology Alliance (CPA) and Psychology for a Safe Climate in Australia developing strategies for therapists to reflect on personal experiences and professional practice (Silva & Coburn, 2023). Both organisations began by supporting activists, and now more recently, practitioners. The CPA is also working with professional bodies and therapeutic providers to develop training for therapists, while Psychology for a Safe Climate is developing material to support practitioners working with children and young people (Silva & Coburn, 2023). In New Zealand, clinicians are seeing distress related to the environment in their clients (Ricketts, 2024; New Zealand Psychological Society, 2018). While there is a clear demand for mental health professionals to engage with climate distress, many clinicians do not feel they are skilled in this area. A subgroup of the Global Psychology Alliance

surveyed members on climate change and of the 63% who responded, only 18% felt well informed on the topic (Clinton et al., 2022). Internationally, an online survey conducted in Germany of 573 psychotherapists found around 72% reported having clients with climate change concern. While 79% said they felt prepared to work with this topic with their current skills, 50% reported a lack of information on how to navigate this in therapy (Trost et al., 2024). With specific reference to the climate crisis, the Australian Psychological Society (2022) has encouraged psychologists to upskill in the areas of anxiety, uncertainty, and "cumulative trauma" (Australian Psychological Society, 2022, p. 117).

Therapeutic frameworks

There is scant empirical research on therapies that target eco-anxiety and little evidence for what constitutes effective support (Crandon et al., 2022; Dailianis, 2021), with most literature suggesting potential approaches rather than assessing effectiveness (Whitmarsh et al., 2022). Despite a lack of evidence, there is widespread agreement that acceptance and validation of eco anxiety is important (Crandon et al., 2022) and there are some commonalities throughout the available literature. While some interventions such as acceptance and commitment therapy (ACT) are suggested, a holistic, interconnected approach is common, and many therapeutic approaches aim to de-individualise eco-anxiety while still supporting the individual and reducing their distress (Dailianis, 2021). Containing and supporting emotions, identifying meaning and values, and strengthening resilience are also approaches that frequently come up (Budziszewska & Jonsson, 2022; Kennedy-Woodard & Kennedy-Williams, 2022). Notably, some of the literature reviewed concerns not just anticipatory anxiety but the effects of extreme weather events (Crandon et al., 2022; Doppelt, 2023; Xue et al., 2024), potentially reflecting how this distinction is changing given the increasing incidence of extreme weather events.

As a therapeutic approach, ACT may be effective for people going through high levels of distress in response to climate change (Feather & Williams, 2022; Mah et al., 2020). Processes central to ACT such as identifying values, acceptance, value-based action and cultivating hope may aid in the process of accepting climate distress, and allow space for people to engage in value-aligned action (Feather & Williams, 2022). As ACT focuses on the relationship to emotions and thoughts rather than questioning their validity, this approach may especially align with navigating rational emotions such as eco-anxiety (Croasdale et al., 2023). Meanwhile, Budziszewska and Jonsson (2022) found a range of treatments used in therapy for eco-anxiety, from cognitive behavioural therapy (CBT), integrative, and psychodynamic therapy combined with CBT. Some participants in this study found CBT useful in managing their anxiety, despite the understanding that this anxiety was valid.

Dailianis' (2021) scoping review suggests existing therapies such as CBT, mindfulness-based therapy, ecotherapy and psychodynamic therapy can be adapted for eco-anxiety, while evidence-based methods for working with grief, trauma, anxiety or depression should be used in cases where the symptoms of eco-anxiety present within these frameworks. This may illustrate the potential of utilising pre-existing frameworks, depending on an individual's experience of eco-anxiety.

People who self-identified as highly concerned about climate change have endorsed interventions such as connecting to nature, mindfulness/meditation, engaging in climate activism, engaging in pro-environmental behaviours, participating in group grief-processing, seeing a therapist and art therapy (Pitt et al., 2024). Similarly to other work reviewed here, these results are the opinions of people concerned about climate change, rather than an evaluation of interventions. A recent scoping review looked at mental health and psychosocial interventions operating individual, group, and social levels (Xue et al., 2024) . They included nature-based activities, psychotherapy, climate activism, resilience-building programmes and

community strengthening networks, to target an array of climate emotions from direct and indirect exposure to climate change, as well as anxiety, depression, PTSD, and emotional strength and resilience. Again, the authors comment that interventions at the intersection of climate change and mental health have not been formally evaluated, though show promise.

A consideration here is what interventions are trying to achieve, not a key focus discussed in the literature. Extinguishing or eliminating eco-anxiety is not something any authors discuss, perhaps given the widespread support for rationality of eco-anxiety. As the idea of a clinical threshold at which functional impairment occurs, or debilitating eco-anxiety, is something that measures seek to differentiate from a more functional anxiety, perhaps tolerating and navigating feelings of eco-anxiety while finding meaning and functioning effectively may be a desired outcome. Lewis (2018) advocates for this idea, arguing that the therapeutic goal should not be to erase the anxiety, but to witness and validate it, and foster engagement, relationships and hope.

Finding meaning was also a key theme for Budziszewska and Jonsson's (2022) participants. Feeling they had agency, and the importance of engaging in positive action, was discussed and there was tension between feelings of meaningless and agency. Some participants found engaging in therapy strengthened feelings of hope and agency, while others found political engagement gave a sense of meaning. Crucial to the process of therapy, and recovery, was creating personal meaning around climate distress, acknowledging its functional aspects, and channelling emotion in a positive way.

Enhancing resilience is a common goal in addressing eco-anxiety, with the aim of strengthening adaptive coping and encouraging positive cognitions and behaviour while staying engaged in the climate crisis (Crandon et al., 2022; Dailianis, 2021). Interestingly, Dailianis suggests the development of resilience skills are more important than the modality practiced by the clinician.

Fostering inner resilience was also a key theme of Baudon and Jachen's (2021) scoping review of interventions for treating eco-anxiety, seen as focusing on cognitions, meaning and emotion, with the aim of supporting clients' inner experience so they could safely experience their emotions. Understanding and managing emotions was an important and positive aspect for people undergoing therapy for eco-anxiety (Budziszewska & Jonsson, 2022). Emotions are seen as critical in how a person responds to the climate crisis, and whether they engage functionally with solutions or become overwhelmed (Albrecht, 2011; Mah et al., 2020; Ray, 2020). Engaging in emotional regulation techniques and recognizing emotional states arising can help bolster resilience and preparedness; conversely, repressing emotions may cause a maladaptive response such as overwhelm and emotional freezing (Pihkala, 2019; Ray, 2020). In therapeutic approaches such as CBT, ACT, dialectical behaviour therapy and Mindfulness practices, emotional regulation is central.

With regards to coping skills, Mah et al. (2020) discuss Ojala's (2013) work that suggests psychologists and educators should emphasise coping flexibility rather than relying on one coping style as being most effective. Emotion-focused coping is recognised as useful for the uncontrollable, widespread aspect of the climate crisis, while problem-focused coping may be more appropriate for dealing with local impacts. Proactive coping, or building skills to mitigate anticipated distress, may build resilience to eco-anxiety, and adaptive coping could help encourage behaviours and thoughts to manage stress.

Bingley et al. (2022) found that interventions focused on emotion management, problem-focused action and strengthening social connections had beneficial effects on individual, social, and environmental outcomes. However, the authors acknowledge that these are not necessarily interventions that are most effective at reducing distress on an individual level, and further, these three areas may interact with each other in ways that have not been explored yet, such as the dynamic between group cohesion and individual wellbeing.

The interactions between climate change and mental health are complex, and may necessitate a shift from isolated approaches to incorporating connection and communication as part of an effective response (Crandon et al., 2022) with group-based approaches to managing eco-anxiety possibly being especially helpful (Dailianis, 2021). In Baudon and Jachen's (2021) review, a key theme was strengthening social connection by joining groups that supported people experiencing eco-anxiety, as well as encouraging clients to take both individual and collective action. Sixty-two per cent of the interventions reviewed aimed at connecting people with groups, not just for action but for social connection and emotional support. The authors suggest that groups feature prominently in their review as "they can act as powerful emotional containers for the profound, existential distress that tends to accompany eco-anxiety." (Baudon & Jachens, 2021, p. 14). While there are distinctions made here between individual and group action, it should be recognised that an individual strengthening their own coping strategies and resilience in the face of climate stress often has flow-on effects on the strength of their own communities and eco-systems (Mah et al., 2020).

Bingley et al. (2022) and Baudon and Jachens (2021) suggest the need to move away from an individual focus when working with climate anxiety, and discuss approaches such as problem-focused action, emotional management, social connection and nature-based interventions. Other authors have advocated for resilience and wellness to be built into communities, taking a population-level prevention approach (Doppelt, 2023). Doppelt contends that treatment for severe trauma caused by the effects of climate change should complement such an approach, but not be the focus. Instead, focusing on how to help people manage the impacts of climate change without harming themselves (for example substance use) or others (such as aggression) is important. Pitt et al. (2024) also state climate anxiety interventions need to take place on the community and societal level with a system-level focus, and Diffey et al. (2022) suggest that community-based support such as action or

mental health support groups, listening circles, helplines, and talk therapy, could be much-needed ways to help people cope as the climate crisis unfolds. Croasdale et al. (2023) also argue the burden for action should be on leaders, not clients, moving responsibility from individuals and placing it with larger forces such as governments and corporations.

While taking action to mitigate environmental damage is a key protective factor for communities and individuals, Ray (2021) and Pitt et al.'s (2024) participants contend that engaging in action can be beneficial for some people but may be harmful for others. Similarly, other authors caution that trying to change behaviour when emotions and thoughts are not first addressed may backfire, and taking action without compassionately accepting feelings could be harmful (Feather & Williams, 2022), with activism possibly leading to burnout or persecution (Budziszewska & Jonsson, 2022).

There is support for the benefit of ecotherapy, or connecting deeply with nature (Clayton, 2020; Cunsolo et al., 2020; Pihkala, 2019); however, spending time in nature may be triggering for some people rather than therapeutic (Pitt et al. 2024).

In their qualitative study, Ágoston et al. (2022) identified coping mechanisms such as taking actions, planning; and confrontation (trying to persuade others to be more environmentally friendly), as problem-focused ways of coping. Positive reappraisal, optimism; withdrawal, acceptance; and problem avoidance/denial/wishful thinking were all emotion-focused ways of coping. Social support also emerged as a coping mechanism and includes elements of both problem- and emotion-focused strategies (Ágoston et al, 2022).

With regards to managing climate anxiety, five themes were found in Soutar and Wand's (2022) review: distancing and avoidance (this included downplaying the seriousness of climate change, and activists needing to consciously distance themselves to manage painful feelings); taking action; fostering support (such as seeking support and prioritising self-care); adapting; optimism and hope (actively choosing these responses to manage

anxiety); and intersection of anxiety, sadness and solastalgia (people described their worry as being difficult to separate from these other emotions).

Davenport (2017) advocates for a shifting of mindsets brought about by a deep understanding of interdependence and describes the necessity of "emotional buoyancy" in undertaking therapeutic work with eco-anxiety (p. 21). She calls for a rethink of the goal of therapy as reflecting awareness beyond personal satisfaction, to understand the interrelatedness of nature and humans. Along with the principle of connection in guiding therapeutic work, Davenport suggests deep listening, which may include mindfulness or inner listening and self-acceptance, along with creativity, presence, commitment, resiliency and compassion. Interventions such as mindfulness, grief rituals, communing with nature and creative expression discussed by Baudon and Jachens (2021) reflect this shift in awareness, and they suggest accessing something greater than themselves was helpful to clients.

Additionally, recognising the interconnectedness of humans and nature, finding connection with others and incorporating spiritual-based practices such as mindfulness, meditation and self-compassion are commonly discussed (Dailianis, 2021; Feather & Williams, 2022). Spirituality also featured prominently as a therapeutic intervention in Dailianis' (2021) review. In particular, Buddhist psychology was seen in practices of mindfulness and acceptance, along with acknowledging the nature of impermanence and suffering that existing in the world brings.

There have been calls for a climate lens to be added to psychological assessments, for example noticing signs of distress induced by climate change (Davenport, 2017). For someone experiencing extreme eco-anxiety, McLean (2023) argues a good formulation should take into account the client's wider context in society and their situation, and how power and perceived agency operate in their life. Their treatment should balance both acknowledging systemic problems and how to cope with these meaningfully. Care needs to

be taken not to prematurely decide distress needs to be changed, or that negative emotional reactions are not a problem and do not need supporting.

McLean (2023) warns that given clinical psychology's focus on personal and interpersonal analysis, there is a risk the climate crisis, or systemic causes of distress, will not be taken into account during assessment and formulation. This presents a challenge for therapists working with eco-anxiety, to both validate these emotions and support their client, or even to recognise latent eco-anxiety, while taking care to see the source of the problem as in wider structures.

Validation

The idea of validating eco-anxiety runs throughout the literature, along with the importance of therapists connecting with their own eco-emotions in order to support clients. This can be seen in the experiences of people who sought therapy for climate anxiety (Budziszewska & Jonsson, 2022). Therapists' knowledge and competence around climate change, and their validation and management of emotions, were crucial to a positive therapeutic experience. A key theme developed in this study was that of a companion who understood the client, and whom the client did not have to educate. The perception of a therapists' ability to manage climate emotions meant that clients felt their own distress would be contained, and that they had a safe space to discuss their distress.

Significantly, some participants mentioned limiting their discussion of climate change as they did not want to burden a therapist who they perceived as not understanding the seriousness of the issue. Emotional validation was particularly important and health professionals were seen as having a privileged role in validating emotional reactions to climate change. Conversely, being questioned about their eco-anxiety was frustrating and damaging to the therapeutic relationship (Budziszewska & Jonsson, 2022).

The idea of validation can also be found in Pitt et al.'s (2024) research, with one respondent stating that talking with a therapist who did not take climate anxiety seriously was "…like talking to a surgeon who doesn't understand anatomy". (p. 223). Bednarek (2019) also reports that her clients have talked about other mental health professionals as treating their anxiety as pathological and unfounded, further contributing to their distress and sense of helplessness. Further, Silva and Coburn's (2023) participants reported their clients were relieved to have their emotions acknowledged and not pathologised. They spoke about how difficult it was to talk to others about the climate crisis and how they found value in taking part in the study. Meanwhile Diffey et al. (2022) also report that a lot of distress comes from eco-anxiety being invalidated or treated as disordered. The authors call on mental health professionals to hold space for climate-related feelings, but also to be authority figures in validating these emotional responses and raising awareness.

Therapists' experiences of working with eco-anxiety

There is a small body of literature on clinicians' experiences working with eco-anxiety, and much of the work deals with a mixture of disciplines including psychiatry, social work, general practice, psychotherapy and psychology. Methods employed include quantitative surveys (Trost et al., 2024), surveys gathering qualitative and quantitative data (Croasdale et al., 2023; Seaman, 2016) and discussion papers and interviews (Bednarek, 2019; Lewis, 2018, 2019). Some recent qualitative research has drawn on mental health professionals' perspectives and experiences (Samuel et al., 2022; Silva & Coburn, 2023).

Bednarek (2019) reports only a few clients presenting explicitly with climate-change anxiety, who were coping with scientific information in a professional capacity such as activists, scientists, students or journalists. While their distress was primarily concerned with future disasters affecting themselves and loved ones, clients also felt isolated and disconnected from others in terms of their concern.

A point of interest is experiencing passing mentions of climate change, mentioned by Lewis (2019) and Seaman (2016). In surveying mental health clinicians in the United States on how emotional responses to climate change are coming up in therapy, and how therapists respond to this, Seaman (2016) reported quantitative data from 160[3] participants and qualitative responses from 35. Seaman found therapists report more passing comments about climate change than emotionally significant conversations (7.6% of respondents said climate change came up in passing often, with 27.8% saying the topic arose sometimes). One participant reported feeling off guard by mentions of climate change and uncertain how to proceed, calling passing comments to climate change "doorknob moments" (Seaman, 2016, p. 67). Others responded to these comments by trying to create space, so clients could elaborate if they needed to. Around half of clinicians surveyed reported being inadequately prepared to work with eco-anxiety.

From a psychoanalytic perspective, Lewis (2019) also notes that climate is often brought up by clients in passing. Lewis recommends the therapist should notice these moments and open up the subject, as the client may be waiting to see if the therapist can cope with this issue. In discussing how she works with eco-anxiety from a psychotherapeutic perspective, Bednarek (2019) notes that many clients personal fears are tied into larger topics, and that conversations are often around how clients feel anaesthetised from the state of the world or nature. Staying with this topic is important and after bringing language to this numbness, feelings of care and a desire to connect often arise, according to Bednarek.

Seaman's (2016) qualitative findings from 35 participants, from a mixed-methods survey, suggested that therapists' own emotional reactions to climate change may be impacting how they work with clients who discuss this topic. More than half of therapists reported that they experienced fear, anxiety, anger and/or sadness when the topic of climate

[3] This is approximate, as not all participants responded to all questions.

change came up, and some discussed how their own emotions impacted their connection with clients. For some, this was a positive experience and helped clinicians feel connection and alignment, and less alone. However, one clinician was concerned their own fears could influence their responses, “including potentially maintaining a discussion on what might have been a passing comment or alternatively not focusing on the fears for fear of inciting my own anxiety.” (Seaman, 2016, pp. 67).

Samuel et al. (2022), writing as mental health professionals working in the climate crisis and sharing their lived experience, wanted to normalise the idea that mental health practitioners can be distressed about climate change, and that this can impact professional perspectives. This paper gives a more global perspective, as the authors are from Southeast Asia, the Caribbean, the United Kingdom and the United States. The authors called on other mental health professionals to take up the challenge of engaging emotionally with the climate crisis, writing, “If we, as mental health professionals, cannot sit and connect and be present with these feelings then how can we expect other people to make the changes.” (Samuel et al., 2022, p. 529). The therapist’s own inner work and education was also an important theme in Baudon and Jachen’s (2021) work, with regards to exploring their own climate-related distress so that it did not subconsciously affect therapy.

Silva and Coburn (2023) carried out a study in Australia exploring therapists’ experiences of climate change, with a focus on the ‘personal’ and the ‘professional’. The authors interviewed eight therapists from a range of modalities, and who worked with a variety of demographics including children, adolescents and young adults, older adults, climate activists, LGBTQI+ and indigenous communities (Silva & Coburn, 2023).

All participants in Silva and Coburn’s study reported strong emotions in response to the climate crisis, such as outrage, disgust, grief, powerlessness and shock. They felt unsettled and frustrated in being participants in an unfolding crisis. As a subordinate theme,

being ‘gaslit’ by social discourse, in particular professional bodies not taking climate change seriously enough, was mentioned. Similar feelings can be found in Samuel et al.’s (2022) work, where the authors discussed feelings of rage, grief and despair, and write about how this disrupts both personal and professional lives. The authors felt isolated and frustrated that their professional bodies, and colleagues, seemed oblivious to the threat.

Questioning the individual-centredness of mental health systems was a key focus for all the authors in Samuel et al.’s (2022) paper. The need for collective spaces where awareness and painful emotions around the climate crisis can be shared was highlighted and the authors discussed the need for new models that incorporate societal and structural causes of mental health problems. Silva and Coburn (2023) also found participants advocated moving away from an individualised model of mental health, to looking at the lived systemic, political, cultural and social contexts that give rise to this distress. One participant described the understanding of distress as intrapsychic, with relation to climate change, as “ludicrous” (Silva & Coburn, 2023, p. 428). Existing therapeutic modalities were discussed as potentially “unfit for purpose” for responding to an uncertain, frightening future (Silva & Coburn, 2023, p. 429)

Croasdale et al. (2023) surveyed 75 mental health professionals in the United Kingdom to explore their perceptions on the impact of climate change on service users, using qualitative and quantitative methods. Respondents reported a significant increase in emotional distress related to climate change and believed that this will increase. While this subjective reporting it cannot be seen as an accurate measure, but a strong sign that distress is increasing (Croasdale et al., 2023). Croasdale et al. further acknowledge that their sample is not representative, and there is the possibility of bias as respondents had a high level of climate awareness and concern, a similar characteristic of other literature reviewed (e.g. Diffey et al., 2022; Pitt et al., 2024).

In exploring Polish psychologists and psychotherapists' perspectives on mental health issues related to climate change, Gawrych and Holka-Pokorska (2022) found almost half of the 72 participants surveyed reported climate related topics coming up in therapy. Over 60% of participants reported that most patients did not link disorders such as depression with ecological issues (Gawrych & Holka-Pokorska, 2022). The authors highlight the need for more knowledge around climate-related mental health as well as potential interventions.

While much of this work can help inform how eco-anxiety is coming up in a therapeutic context, there is a lack of research on how therapists experience this phenomenon clinically and little is known about how they are working with this issue. An additional consideration is that some of this research or commentary is from several years ago; this is a rapidly moving area of research as climate change increasingly enters public consciousness and extreme weather events increase worldwide, so what is happening in therapeutic interactions may have changed since then.

The current study

The mental health impacts of climate change are expected to worsen in the future (Doppelt, 2023) and mental health professionals are urged to take up the work of supporting both clients and communities navigate these impacts (Clinton et al., 2022; Crandon et al., 2022; Li et al., 2022). To date, there is a scarcity of research on how therapists are engaging with eco-anxiety therapeutically, particularly with regards to qualitative work (Silva & Coburn, 2023) which is needed to develop deeper insights and understanding, particularly for newer, emerging topics (Corbin, 2015).

While eco-anxiety is reported to be increasing in therapeutic presentations in Aotearoa (New Zealand Psychological Society; Ricketts, 2024), there are gaps in our knowledge about how mental health professionals are experiencing these interactions, an important area given the current literature's emphasis on the role of the therapist in this context (Budziszewska &

Jonsson, 2022). Given the importance of eco-anxiety as an emerging and growing topic, and the current knowledge gaps, my aim for this study was to explore **how mental health professionals in Aotearoa are understanding and working with eco-anxiety.** In doing so, I aim to contribute to existing knowledge about how therapists make sense of eco-anxiety and how they are working with clients in this context.

Chapter Two - Methods

Theoretical assumptions

This research is underpinned by the ontological theory of critical realism, a position that maintains the idea of a material reality, but one that is accessible only in relation to human meaning-making and experience (Braun & Clarke, 2022). This stance is appropriate given that while climate change results from physical changes in the natural world caused by heat-trapping gases, this is a human-made problem and emotional responses among people can vary widely and can be subject to cultural and social understandings (Soutar & Wand, 2022; Tupou et al., 2023).

Epistemologically this work is situated in contextualism, which aligns generally with a critical realist ontology in that a separate reality is acknowledged, but knowledge is always partial and contextually situated (Braun & Clarke, 2022). Contextualism also allows for the researcher to be part of knowledge production, an integral aspect of this reflexive process. I hewed to an experiential framing of language, in that experiences and meanings are familiar to participants, rather than a critical, interrogative stance (Braun & Clarke, 2022). Data analysis was mostly inductive, or data-led. However, induction-deduction can be seen as a continuum, rather than one or the other, and some deduction was involved in developing themes that made sense to the research questions (Byrne, 2022).

Research design

As this is a relatively new area of research, it is informed by qualitative principles which are appropriate for exploring new phenomenon and developing deeper understanding of them (Corbin, 2015). I developed a questionnaire schedule with six open-ended, broad questions that would guide semi-structured, in-depth interviews (Appendix A) expected to take up to one hour. As this research is exploratory, I chose to use semi-structured interviews to allow new meanings around this construct to come up, as well as incorporating questions

around existing theory (for example group-level approaches) and to give space for participants to give context and depth to their experiences. This format also allows for flexibility, allowing the interviewer to clarify particular points and expand further on a particular aspect of the interview (Galletta, 2016).

Ethics

To consider a bicultural perspective, I had a cultural consultation to discuss the project and how to further acknowledge and incorporate Māori worldviews. From this consultation, I decided to expand questions to include how eco-anxiety may be affecting particular populations in Aotearoa, and to expand sections in the literature review to incorporate Indigenous perspectives of ecological degradation, considering that Western conceptualisations of eco anxiety may be too narrow or unfit for some populations.

To maintain confidentiality, participants were asked before recording the interview whether they wanted to use a pseudonym during recording and in the transcript, as well as in the written-up research. Pseudonyms were used while writing up results, as participants wanted to retain anonymity in the final research report. Additionally, I have broadly described participant demographics but have not gone into further detail to preserve anonymity, given the small workforce of mental health professionals in New Zealand and as requested by two participants.

As participants were mental health professionals, I considered it reasonable to assume they would have networks such as supervision in place to manage any distress that might arise. However to comprehensively consider participant wellbeing, in the case of a participant becoming distressed during the interview I planned to pause and offer comfort, and offer to stop the interview. In this case, I also planned to ask if participants needed to de-brief or follow-up on our interview. Throughout the interviews, no additional support was needed by

participants. This research project gained approval from the Massey University Human Ethics Ohu Matatika 3 21/31 in August 2023.

Recruitment

I aimed to recruit between six and 12 participants, as around nine interviews are generally considered to be sufficient to identify common thematic issues and reach saturation, or the point at which no new information emerges (Hennink, 2020), although some work suggests 15-20 (Given, 2008). Sample size may also be dependent on the context of the study, with frequency less important than variations in the data – saturation may be achieved more quickly if the sample is cohesive, for example from the same demographic (Given, 2008).

The study advertisement (Appendix B) was circulated by the New Zealand Association of Psychologists' e-newsletter in late 2023 and early 2024. The advertisement was also circulated by the New Zealand College of Clinical Psychologists and sent to Massey University's Psychology Clinics at Albany, Palmerston North and Wellington. Two psychologists responded to these advertisements and took part in interviews. As there were no further responses, I had a discussion with my supervisor and decided to expand criteria to include all mental health professionals. I felt this was appropriate given the newness of the area of research, initial low uptake, and because a participant had recommended including psychotherapists, considering this scope of practice to be more familiar with the area of eco-anxiety.

I contacted the New Zealand Association of Psychotherapists who circulated the advertisement via email and circulated the advertisement on a Facebook page hosted by the New Zealand Psychological Society Climate Action Network for Psychology in NZ Roopu te Taiao (PsyCANZ). I also approached Anxiety NZ, who circulated the advertisement among their staff. Final participant criteria included being a mental health professional working in Aotearoa and having worked with eco-anxiety.

Participants

In total, six participants were recruited: Two clinical psychologists, one counselling psychologist, one counsellor and two psychotherapists. Participants were aged from 30s to 62, and included two males, two females, and one was non-binary. Ethnicities were reported as two New Zealand European/Pākehā, Pākehā, Pākehā/Tangata Tiriti/New Zealand European, one New Zealand European/South African and one North American.

Procedure

Before the interviews, participants were emailed the study information sheet (Appendix C) and electronically signed an emailed consent form (Appendix D), in which they agreed to take part in the study and were aware that the interview would be audio-recorded. Before starting the interviews and recording, I checked with participants that they were comfortable to be audio-recorded and all indicated that they were. Participants then took part in a semi-structured interview lasting around 45-60 minutes. The interview schedule (Appendix A) included open-ended questions such as, 'What are your experiences of eco-anxiety manifesting in a therapeutic context? And, 'Anxiety in response to climate change can be understood differently and affect groups in specific ways. How have you noticed this coming up in your practice?'

Five interviews took place over Zoom and one at the participants' workplace, which was close to my home. In accordance with my safety plan, I informed my husband of the address of the workplace and how long I would be away. Interviews were recorded on my phone and immediately transferred to my password-protected laptop and deleted from my phone. I transcribed all the interviews manually and emailed participants their transcripts. Participants had the opportunity to review their transcripts and make any amendments they thought were necessary. Participants received a $40 online voucher in recognition of their time.

Data analysis and reflexivity

I chose to use Braun and Clarke's (2022) reflexive thematic analysis (TA), one of a cluster of TA approaches (Braun & Clarke, 2021). Broadly, TA is a "method for developing, analysing and interpreting patterns across a qualitative dataset, which involves systematic processes of data coding to develop themes – themes are your ultimate analytic purpose." (Braun & Clarke, 2022, p. 4.)

I felt Reflexive TA was appropriate given the critical realist epistemological stance of this research, as opposed to other forms of TA such as coding reliability, which is aligned with post-positivism and processes such as attempting to remove researcher bias and the aim of discovering accurate themes. Rather, in reflexive TA the researcher is "a situated, insight-bringing, integral component of the analysis." (Braun & Clarke, 2022, p. 10.) Reflexivity is an important aspect of this research, given my own position as someone who cares deeply about climate change and its emotional impact, and this stance recognises how integral the researcher is in interpreting these meanings and experiences. Given the centrality of reflexivity in my data analysis, I kept notes around this process and have included these in phases outlined in the data analysis.

Reflexive TA is guided by six phases: familiarisation with the data, data coding, generating themes, developing themes, refining themes and writing the final report (Braun & Clarke, 2022). These phases are expanded on below:

Phase one – Familiarisation

Braun and Clarke (2022) describe familiarisation as being both immersed and critically engaged with the data, and keeping questions in mind such as: "*How* does the person make sense of whatever it is they are discussing? *Why* might they be making sense of things in this way (and not another way)? In what different ways do they make sense of the topic? What assumptions do they make in describing the world?" (Braun & Clarke, 2022, p.

44). Braun and Clarke also suggest the researcher ask themselves why they are reacting to the data in a certain way, and how else they might make sense of it.

Through listening to recordings of the interviews while transcribing, I became more familiar with the interviews' content. Afterwards, I read through hard copies of the transcripts to gain more familiarisation, making notes as I went. During this phase, I noticed that there was a lot of discussion around taking action, or an underlying assumption that any therapy should lead to action or agency of some sort. I also noted that there was an underlying assumption that eco anxiety is a normal response and that people *should* be concerned, or bewilderment from participants when clients were not concerned – talk of some clients being unconcerned or in denial was spontaneously brought up by participants. I found there was a lot of mention of the therapist as part of, not separate from, discussion about eco anxiety.

I also got the impression from reading the transcripts that eco-anxiety may be dynamic and on a spectrum – moving from background to foreground for some people, and often with complex variables contributing to the experience. There was also a general sense that people need a safe space to talk about eco emotions, and that this is often culturally silenced. As a lot of these observations were similar to concepts covered in a lot of the literature, I found it reassuring. However, I felt slightly overwhelmed by some aspects, such as looking at eco-anxiety through the lens of intergenerational trauma, as this may be a much more complex understandings than what has been initially proposed.

Phase two – Data coding

The transcripts were broken into data points between one and several sentences and imported into the application Miro (miro.com/app/). I systematically coded each data point, which involved labelling each data point with word or phrase, duplicating them when there was a need for more than one code. I used the 'sticky note' feature to move data points and codes around. Mostly coding was done at a semantic, or explicit, level of meaning. This aims

to describe what participants are expressing rather than exploring latent meanings that may lie beneath the data (Braun & Clarke, 2022; Byrne, 2022). In some cases where I identified latent meaning in codes such as underlying assumptions, they were coded as such. This way of coding tied in with my primarily inductive or data-led approach, in that I aimed to express participants' meanings without drawing on existing frameworks to allow new meanings and insights, although as Byrne (2022) points out, there is always an element of deduction in this process as the researcher must have criteria around what data is relevant to the research question.

I generated around 300 codes initially, but many were very similar and ended up being brought together under one code. While data coding, I noticed some strong patterns throughout the codes, such as the idea of taking action, not treating eco-anxiety as a disorder and the importance of connection. Nevertheless in taking a granular approach, I tried to avoid 'analytic foreclosure', or being too influenced by my initial thoughts of what themes might be developed.

Phase three – Generating initial themes

This phase involved engaging with the data to start shifting codes into larger patterns of meaning. As I was generating themes, I moved the data codes to cluster around these central concepts. A key idea was the many facets of eco-anxiety, or multiple emotions such as grief and guilt, seemed to come up. These codes were all clustered around the concept of complexity but in a way this idea became almost a 'dumping ground' for many aspects of eco-anxiety that I was not sure fitted in anywhere, such as impacts of colonisation and the questioning of time distinctions. Other concepts I found common in the codes were ideas around voicing or unpacking eco-anxiety through noticing anxiety around weather, or general statements about the state of the world. I had a separate label for codes that did not seem to

relate to my main research question, ‘How are therapists understanding and working with eco-anxiety?’

Phase four – Developing and reviewing themes

I played with several ideas of how to best communicate this data, drawing multiple mind maps in the process. Some broad themes I thought about as candidate themes included ‘Collapsing of traditional boundaries’, to reflect the idea of the therapist having a different, closer relationship to the concept of eco-anxiety than being able to ‘treat’ it in a detached way. Other candidate themes I noted down were ‘Uncertainty’ to convey therapists’ thoughts around how to describe eco-anxiety and what to call it, and the idea of ‘background-foreground’ with regards to eco-anxiety as an ambient stressor. Another concept that seemed like it could be a theme, when I zoomed out from the Miro board and took a more holistic view, was that of a dichotomies playing against each other – for example, powerlessness-agency, love-fear, personal-structural, overwhelm-apathy. However, I wondered if this was too broad to truly capture other dimensions and depth of the data. Braun and Clarke (2022) emphasise that this phase is especially recursive, in terms of moving back and forth between the data, while keeping in mind that you are not too far from the data and that the themes address the research question in a compelling way. Through mind maps, I developed the four main themes of eco-anxiety as rational; that it has a multitude of emotions and complexity; connection as critical; and the idea of taking action (Figure 1). In developing the theme of multidimensionality and complexity, this allowed for the expression of the idea of multiple emotions as well as the idea of ambience and local expressions of eco-anxiety, through subthemes.

Phase five – Refining, defining and naming themes

Throughout this phase, I refined sub-themes, such as the idea of validation and values, facets of the theme ‘Eco-anxiety is rational’. Part of this process was writing a definition of

each theme, to clarity the central point of these as organising concepts. Naming themes was still ongoing at this stage, with several participant quotes, phrases and words being considered.

Phase six – Writing up

Along with theme descriptions, this phase involved selecting vivid and pertinent participant quotes to illustrate each theme. With regards to quotes, I used […] where some words have been removed. These parts were irrelevant and did not contradict what the participant was saying. I also took out some repetitions such as 'um', 'like', 'you know,' as they did not add or change the meaning of participants' words, and this process allows greater accessibility to the meaning of the quote (Braun & Clarke, 2022). Where there is uncertainty or contradiction in accounts, I have highlighted this and made it transparent. While writing up my findings, there were some further revisions to sub-themes, such as adding sub-themes of 'Social Support' and "We are all in this together", to the theme Connection, as suggested by my supervisor, as there were too many ideas under this one theme. Final changes also included breaking the theme 'a multidimensional construct' down further to incorporate the sub-theme 'an ambient stressor' with the sub-sub-theme 'gateway moments, and adding the subtheme 'collapsing time boundaries', to help communicate this theme more clearly. As part of writing up my findings, I incorporated some discussion of my findings' implications and alignment with existing literature.

Transferability

With the understanding that qualitative research generally does not aim to draw universal claims from a large data set to achieve generalisability, transferability can be understood as the contextualisation of research that allows the reader to judge if, and to what extent, they can safely transfer the analysis to their own setting (Braun & Clarke, 2022). To maximise transferability, Yardley (2017) suggests highlighting an awareness of context,

including practices related to data collection and an awareness of participants' perspectives and the sociocultural context of the research, as well as how this is interpreted by the researcher. Throughout this study, by way of reflexivity and description, I have shown transparency in how the study was undertaken and the contexts this has taken place, as well as locating myself as researcher in this context and how this might affect interpretation.

While I have broadly described the demographics of participants, I have kept this general as some participants were concerned about anonymity, given the small population of mental health professionals in Aotearoa. While this is a balance, I feel it is most important to protect the anonymity of participants, given that this research would not exist without their generosity, honesty and participation.

Participants' quotations are also widely used throughout the data analysis, along with interpretation and discussion of relevant literature. Use of quotations supports the interpretations presented and allows the reader to determine if the interpretations presented are grounded in participants' experiences (Morrow, 2005).

Chapter Three - Results

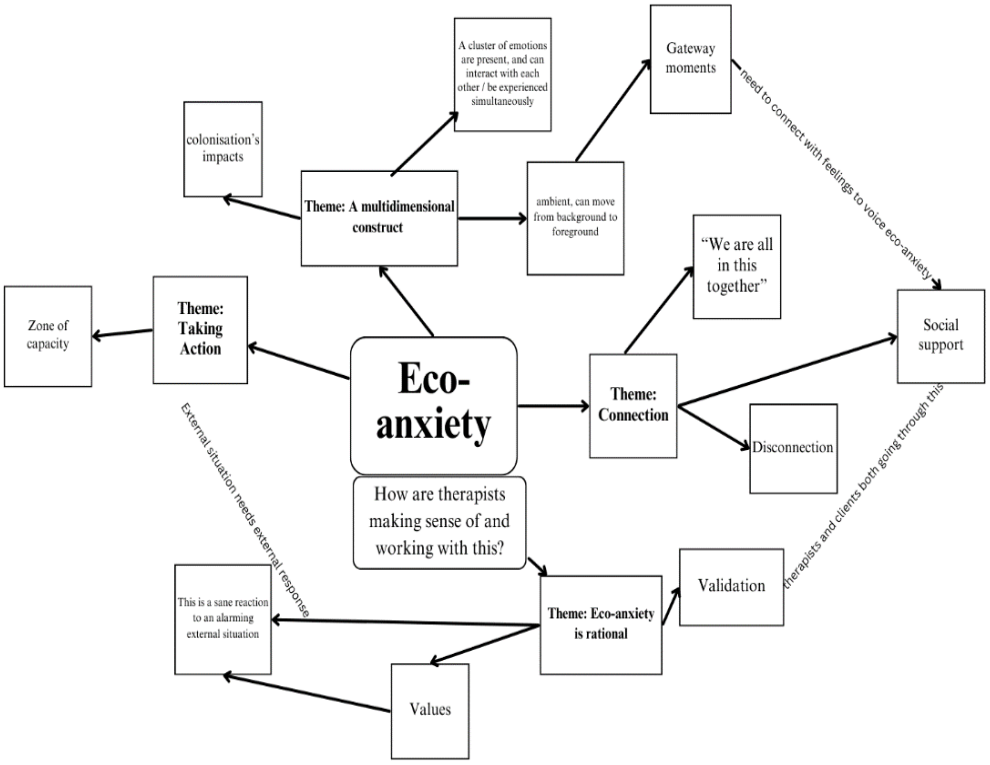
Overview

Participants discussed eco-anxiety as complex and multi-faceted. They primarily focused on how they understand and make sense of emotional responses to the climate crisis, how this is manifesting in therapy and their perceptions of how to navigate this, both personally and professionally. Through engaging with the data I identified four broad patterns, which I developed into the following themes: 1) eco-anxiety is rational with subthemes (i) validation is vital and (ii) a value-driven concern; 2) a multidimensional construct with subthemes (i) an ambient stressor, with the sub-sub-theme gateway moments, (ii) collapsing time boundaries and (iii) colonisation's impacts; 3) connection, with the subthemes (i) "we are all in this together", (ii) social support and (iii) disconnection; and 4) taking action, with the subtheme "zone of capacity". The themes are presented in an organic order, in that they move from a describing a rejection of pathology and the characterisation of eco-anxiety as sane and rational, to the multidimensionality of eco-anxiety, to the importance of connection and community, and finally, the imperative of taking some kind of action. I have taken the analytical approach of reporting results together with analysis (Braun & Clarke, 2022).

These patterns of meaning are depicted in Figure 1 to illustrate how although they can be understood as separate organising constructs, they frequently interconnect with each other (Byrne, 2022).

Figure 1

Mind Map of Working Themes, Sub-themes and Connections



Eco-anxiety is rational

A strong pattern that came across in the data relates to the idea of eco-anxiety as a rational, normal response to an alarming external situation. Participants understood emotions related to the climate crisis as not just as sane, but expected, given the unfolding climate crisis. Eco-anxiety is not understood as a disorder to be treated, and the idea of pathologizing it is seen as problematic and unjustified. This was also seen in participants' uncertainty around how to talk about eco anxiety as a clinical phenomenon.

Claudia explained, "I think it's a completely sane thing to be concerned about, no wonder this is having a huge impact on you, how could it not have a huge impact on you, if your eyes are open." These statements were often bound up with uncertainty around how to label eco-anxiety in a clinical context to avoid pathologising it. For example, Nick said:

> …It is a completely sane and normal reaction and that's why it's hard to even […] – what do we even call it? Do we call it climate anxiety? Because that's pathologising a normal reaction … So you can see even the words we use, because the words we use as psychologists matter, and we don't even have an agreed upon terminology for this thing yet. (Nick)

There was concern around using words that might describe eco-anxiety as a disorder, highlighting the power of definitions and language in shaping understandings of emotional responses. This uncertainty around language can be seen in the literature (Kennedy-Woodard & Kennedy-Williams, 2022) .While therapists such as Bednarek (2019) resist the idea of clinical terminology, the concept of needing to bring language or labels to emotional responses to climate change is discussed by Hickman (2020), who argues such definitions might facilitate connection between people feeling fearful and alone, in finding common ground.

While some participants discussed some anxiety as being particularly debilitating, there was resistance to the idea of eco distress as being a mental health disorder. For instance:

> I don't think about treating ecological anxiety, or anger … it may be complex why the extent to which some people are affected, others less so. There'll be individual factors, and socio-cultural factors and all of that. But I'm not treating those, or pathologising those. (Carl)

While Carl was clear about eco-anxiety not being pathological, he acknowledges that different people may be affected by climate anxiety in various ways and to different degrees,

an idea also put forward by participants in Pitt et al.'s (2024) study in advocating for tailored approaches to addressing eco-anxiety to take these differences into account.

Bea meanwhile commented, "I think I would be on the Bednarek[4] side of thinking that it's a malignant normality to pathologise it as anxiety when I think it's quite a sane response." Bea also differentiated between debilitating anxiety and distress:

> I think you do have anxiety that shows up that's paralysing and distressing and that precludes action, and that can be really overwhelming, and it's that which I would classify as more of an ecological anxiety. Whereas I think ecological distress, just the kind of connection to the awfulness of how awful it all is, that seems really sane to me. (Bea)

All participants were clear in firmly rejecting psychopathology; however as reflected in Bea's quote about eco-anxiety as debilitating, recent studies have sought to find a 'clinical' threshold of eco-anxiety, to further understand and support this experience (Clayton & Karazsia, 2020; Hepp et al., 2023; Hogg et al., 2021). These quotes also resonate with Kennedy-Woodard and Kennedy-Williams' (2022) stance that people 'should' be alarmed, and that therapists working in this area should be careful not to pathologise a rational response (Clayton & Karazsia, 2020; Pihkala, 2020; Verplanken & Roy, 2013).

Going further, the idea of connecting even debilitating anxiety directly to the climate crisis was questioned by Carl, "...that's probably quite a long bow to link somebody that's feeling paralysed or debilitated in their own life with this particular phenomenon, like a causal relationship to that level of impairment, I think is deeply problematic." This quote

[4] Steffi Bednarek, psychotherapist and climate psychology researcher

emphasises resistance to locating disorder or pathology in the individual, and hesitance at ascribing causality in a simplistic way.

Again, characterising emotional responses as justified by an external situation, Claudia discussed the potential inappropriateness of diagnosing eco-anxiety with human responses to those suffering in the war in Gaza, "… those people will be living in fear, right? Anxiety is going to be huge, and all the emotions that go with that. Would we diagnose that? Other than PTSD, we wouldn't diagnose that. So, I don't know ..."

In describing a teenage client's distress about climate and the future, including suicidal thoughts, Ivy said, "…and then he went, 'Sorry, you know I'm not actually going to kill myself'. But really, there's a part of me that thinks that's a really rational response to the world right now." This quote shows a deep empathy with clients' distress over the state of the world, and a recognition that in a way this is justified.

While there was some mention of occasional debilitating effects of eco-anxiety in the current study, participants did not bring up developing a measurement or category to diagnose eco anxiety. The idea of eco-anxiety as a diagnostic construct was primarily discussed as problematic, in that it attributed psychopathology to a rational response to an external environmental situation or was met with uncertainty.

In grappling with what term to use to describe eco-anxiety, Nick suggested using the concept of burn-out, an "occupational phenomenon" according to the World Health Organization (WHO, 2019):

> …We would have to do some really creative work around not pathologising it, because it's a normal reaction just like burn-out […] is a normal reaction to a really bad work environment. So climate anxiety would have to be classified again, in its own bucket, its own category, as a normal reaction to a really bad environmental

> situation… That's my explanation for people that ask, 'so, what's wrong with me doc, is it a diagnosis?' I'll talk to them about burn-out and say … climate anxiety is not a diagnosis just like burn-out isn't, it's a situational problem. (Nick)

Nick is balancing how to give eco-anxiety validity, but without categorising it as a mental health disorder. This idea may also have explanatory power for what clients are going through, but locates the source of distress in the threatening, unstable environment that is increasingly being experienced by humans.

In discussing eco-anxiety as a normal reaction, participants expressed the assumption that if you are aware of the climate crisis, it will surely have an emotional impact. As Claudia commented, "I'm not sure that other psychologists would ask that, is climate anxiety one of the things that stirs your anxiety up? Here at mental health and addictions, most people say 'no', and I'll think, 'why not?'". Ivy also discussed how there is "unfortunately" not much room for eco anxiety in her current workplace, implying she would prefer there was space for this.

Along with the assumption that people should be worried, participants talked about how mention of the climate crisis and corresponding worry or distress was starting to become more prevalent, and that eco-anxiety is certain to persist and increase. Sue reflected on the current context while recognising that eco-anxiety is certain to persist, saying "One thing's for sure, this isn't going away.". Carl echoed these sentiments, "It will grow I imagine out of necessity because people will be confronting it clinically more, as more and more extreme events happen more and more frequently [...] it's going to increase, it's very clear from the science." In highlighting the need for therapists to deal with their own climate feelings, Ivy said, "I think we've got a responsibility to go there, because I think our clients will increasingly go there."

Validation is vital

In describing how they work with clients and their own experiences, participants spoke of the importance of validating and accepting climate anxiety. For instance, Carl said: "My first impulse is to be validating, and helping, if I can, helping people to really connect with what they think, and how they feel and not to impose my own take on that too much."

Sue also described a client bringing up climate anxiety as being a "real risk", "…because she'd had experience, she was afraid it would be really minimised, or that the therapist would focus on the wrong thing."

Participants described the damage that can be done by dismissing or invalidating climate anxiety, which has been found by a number of other researchers and therapists (Bednarek, 2019; Budziszewska & Jonsson, 2022; Diffey et al., 2022; Silva & Coburn, 2023). Two participants spoke about their own experience feeling invalidated or not able to fully express themselves with a therapist, with Bea giving a vivid account:

> The therapist was like, '…what do you think the real thing you're worried about is?' […] And it felt like if you'd said, 'oh my mother is dying, I'm really sad my mother is dying,' and the person going, 'you wouldn't really be sad about your mother dying, so what do you think you're displacing onto that? ... It felt like I was being told that what I was grieving for wasn't worth grieving for, I wasn't really grieving for it, it was an awful experience […] I think all that I would really have needed was someone to kind of be like, 'yeah, this is very sad,' and for me to kind of have that space to just feel really respected in what I was grieving for. (Bea)

This quote shows how being unaware of the gravity and reality of Bea's emotions was inappropriate and in fact harmful – distress over the natural world is not seen as 'real' or

worthy of grief, and perhaps speaks to ideas around how Western worldviews and some modalities of therapy do not fully take into account human inseparability with the natural world (Rhodes & Dunk, 2023).

Bea's description of this experience of invalidation as "awful", echoes other accounts of participants feeling deeply hurt and disconnected through invalidating therapeutic interactions (Diffey et al., 2022; Pitt et al., 2024). In offering their own accounts, participants were willing to weave in their own experiences of eco anxiety and emotions, further adding to the idea of the intertwinement of therapist and client as both facing the threat of the climate crisis.

A value-driven concern

Some participants suggested that both clients' and their own emotions often came from a place of love and care, understanding these responses as being value-based. This is reflected in Claudia's comment, "This is a value-driven worry, it's telling you you want to be doing something in this area." On a personal level, Ivy discussed connecting with her own feelings:

> …I realised that my grief was there because I love the world so much…It was really powerful, embracing the sadness, to then realise actually the sadness was the love, and the sadness was a deep care, and then there was an energising of like, 'okay! Let's go out and do stuff, this needs to be sorted out. (Ivy)

Also framing eco-anxiety as coming from a place of care, in talking about discussing eco anxiety with a client, Sue described ensuring her reaction as being "… not at all quick to judge it as a form of mental illness to care about the world." Sue also describes her own

feelings in an interaction, working with a client experiencing eco distress, “I really respected her heart for te taiao, for the natural world, her deep distress about it as well.”

Reframing eco-anxiety as eco-compassion or eco-empathy, to move away from a disorder framework, is suggested by some researchers (Hickman, 2020), who also describes eco-anxiety as an “emotional gateway” to understand the complexity of these responses (p. 414). This is also similar to a theme developed by Pitt et al. (2024), ‘climate anxiety is a healthy response to the current situation, which sees climate anxiety as not just a negative emotion but one that is adaptive, and that can be powerful and motivating (Pitt et al., 2024). In discussing the value of validating and finding motivation in eco-anxiety, ACT was mentioned by Nick and Claudia as being a therapeutic framework that may have value in working with these emotions, an approach also discussed in the literature (Dailianis, 2021; Feather & Williams, 2022; Mah et al., 2020). ACT is also suggested by Croasdale et al. (2023) as being particularly helpful in working with rational emotions, as it not about changing but accepting thoughts, and connecting with meaningful values. As Claudia explained, “…This is the approach that I would probably take most often, an ACT approach, an acceptance and commitment therapy approach, where we look at understanding their fears through the lens of their values.”

A multidimensional construct

The idea that eco-anxiety is a complex, dynamic and multi-layered experience was a strong pattern in the data. Eco-anxiety was described as involving a cluster of emotions that include not just anxiety but grief, trauma, fear and anger, depression and a general, global sense of overwhelm that can arise not just because of climate change but other global threats.

In describing how she understood eco-anxiety as manifesting as a multitude of emotions, Claudia said:

> I think there's a cluster, so the cluster is anxiety, and reasonably often a part of it - say with anxiety - is a high sense of responsibility. And then out of that, feeling guilty, guilt perhaps, at not doing enough. And then that feeling of guilt can kind of be part of depression sometimes. And then also grief, you know, grieving what we have actually lost… (Claudia)

Claudia described how these emotions might interact with each other, such as guilt arising from a feeling of responsibility. Guilt has been widely discussed as being potentially debilitating as an emotional response to climate change (Ray, 2020), with recent research finding eight aspects of guilt including Prophetic individual responsibility and System maintenance guilt, compared with only two types of eco-grief (Ágoston et al., 2022). Other qualitative research has also found multiple co-occurring and linked emotions, including feelings of personal responsibility and guilt for living in an oil-rich country, Norway (Marczak et al., 2023). Kemkes and Akerman's (2019) research also highlights the idea of conflicting feelings, for example feeling guilt around contributing to ecological harm while feeling powerless to change the systems causing this harm. My findings support this research in that emotions such as guilt and responsibility can interact and co-exist with grief and depression for some people.

Guilt was mentioned by some participants as being something they personally experienced, with Ivy vividly describing her experience:

> The guilt thing is a constant theme … [two weeks ago] I was just wracked with grief and overwhelm in my complicity, both in the climate crisis, the biodiversity loss, and our mental health system, our failing mental health system. And just feeling like, oh

> my goodness, these systems are so big, and so wildly immoral, and I'm part of it, I'm complicit in it, and it's horrific, it just felt horrific to me. (Ivy)

Ivy is bringing in wide systemic injustices, and her own part in them as being almost intolerable, although she also discusses realising that for the most part, guilt should lie with those most responsible for the climate crisis, such as CEOs and fossil fuel companies. Ivy's quote also shows how she has moved from intense, painful emotions, in the past, to a different perspective that takes some of the personal responsibility away from her. Ivy's perspective can also be seen in relation to McLean's (2023) discussion around dehumanising, deforming institutions and how being part of these can cause distress, and her desire to locate guilt with powerful leaders is also echoed by Croasdale et al. (2023).

In describing the complexity of eco-anxiety, Bea spoke about anxiety as a layer on top of other emotions, "So it's just really sitting with, um, all the other things beyond anxiety, because anxiety is often the paralytic, or the freeze response, and that underneath the anxiety there's often rage, or real grief, or fury and powerlessness."

Sue talked about the complexity of a client's emotions about her child, while grappling with the climate crisis:

> It had been a massive process for her to come to the decision of actually having a child in the first place, and then she'd been feeling more optimistic about our ability to fight climate change so she had got pregnant, and now she was not in the least bit optimistic […] and now she was feeling guilty about having a child at the same time as deeply loving her daughter, her little toddler […] so for her it was this presenting issue of just intense ambivalence. (Sue)

Sue also spoke of her client having “intensely conflicting emotions” such as love for the natural world and her daughter – but wanting to protect her daughter from loving nature as it could be destroyed. While there is conflict here, the client’s love is contributing to distress. These extracts also illustrate how eco-anxiety can ebb and flow, or come to the foreground at times, bringing up painful and sometimes conflicting emotions, an important aspect of eco-anxiety and one that has been reported in other studies (Diffey et al., 2022).

Some participants spoke about powerlessness in the face of looming environmental catastrophe:

> “There's a general sense of powerlessness I think […] I think there’s a moral injury component to witnessing something and not acting to stop it, there’s the powerlessness component of trauma … but I think it’s kind of like a trauma in slow motion, like this mass, collective, slow-motion trauma.” (Bea)

Bea captures the experience of being part of, and witnessing, destruction on a grand scale and the sense of powerlessness this can bring on, as well as the traumatic nature of unfolding ecological collapse, similar to Woodbury’s (2019) understanding of climate change as a collective, unfolding trauma. Bea describes this as a “slow horror” that also involves crises in the Middle East, and lingering fear from the Covid 19 pandemic, as affecting some clients, bringing in global crises as another layer of potentially overwhelming powerlessness.

Nick also refers to the unfolding climate crisis as “…a trauma that we are all going through, as well as helping our clients go through,” a quote that emphasises the interconnectedness of therapist and client in being in the climate crisis together.

Carl talked about anger, as well as fear and powerlessness, “So certainly anger, but also terror or some version of that, about the scale and speed and the combination with how powerless we are at an individual level to do anything, apparently, to influence that.”

Participants all discussed climate anxiety from various standpoints, such as framing it around weather anxiety, or loss of connection to land, or a general sense of global overwhelm – because participants came from different scopes of practice, including private and public, they acknowledged that how their clients presented with climate anxiety was likely to be different. Claudia mentioned that she had come across eco-anxiety frequently working in private practice, but less so in the public system. Bea spoke about how many clients had complex early lives, which was more pertinent for their work than just a presentation of climate anxiety, commenting, “…I don’t think we can separate out the various different sources of ecological distress.”

There was also uncertainty and contradiction around whether acute issues such as poverty meant there was no room for eco-anxiety:

> So, if somebody has housing insecurity, and food insecurity, and financial insecurity - I think the reality of climate change, in a day-to-day way, isn’t going to impact them, because they’ve got their own, really close-to-home real problems to deal with. (Claudia)

This ties in with the idea that eco-anxiety as anticipatory, as it has been classically understood (Doherty & Clayton, 2011), may be more of a privilege for people unused to intergenerational loss and trauma (Ray, 2021). However, Carl described the idea of how climate anxiety can be one more layer of overwhelm for some people:

> It can get complex … when there's an overlay of other mental health difficulties, and someone's finding it hard to get out of bed, and they'll say "well why should I bother, when the world's so fucked up anyway." So it can be a compounding factor and then it does become like a clinical thing. (Carl)

Discussing this idea, Carl mentioned the idea of a client's personal difficulty or pain interacting with "the broader uncertainties and anxiety or fear about what's unfolding globally".

There was some disagreement around whether acute distress takes precedence over any distress around climate, as suggested by Claudia, or whether eco-anxiety can contribute to more overwhelm for some people and exacerbate existing distress. One point of agreement for participants was that different people will experience climate anxiety in different ways. Possibly both aspects, being worn down by mental health and socioeconomic challenges can be exacerbated by anxiety around the climate crisis, or more acute issues mean someone has little energy to give to global threats, could be true for different people. Eco-anxiety has been described as an additional source of stress by the APA (American Psychologial Association, 2017) and some authors have argued that eco-anxiety should be thought of as a significant stressor that can play a role in the development of mental health disorders (Coffey et al., 2021; Hickman et al., 2021). Currently, the nature and direction of this relationship is far from clear.

Understanding eco-anxiety as multi-faceted and containing a multitude of emotions is widely agreed upon in the literature (Baudon & Jachens, 2021; Clayton & Karazsia, 2020; Coffey et al., 2021), with some suggestions that they can be moved between (Hickman, 2020; Marczak et al., 2023). Souter and Wand (2022), in a review of managing climate anxiety, discuss the theme of 'Intersection of anxiety, sadness and solastalgia,' with people being

unable to separate out these emotions. However, some research attempts to separate out these facets; for example, in discussing how depression tends to be demotivating while anxiety can be motivating with regards to climate action, some authors have suggested that eco-anger is associated with greater engagement in both collective and personal pro-climate behaviours (Stanley et al., 2021). While useful in looking at how different emotions may affect climate action, these conceptualisations do not allow for the idea that these emotions may arise for the same person at different times, or potentially interacting with each other.

From a psychoanalytic perspective, Lewis (2019) highlights the importance of clinicians recognising that there may be multiple pathways to climate distress that are hard for existing definitions to capture. These may include the effects of extreme weather (Lewis, 2018, 2019), something that several participants mentioned with regards to Cyclone Gabrielle being a cause of worry for some clients or bringing on greater awareness of the climate crisis.

An ambient stressor

As well as multiple emotions coming up in the data, eco-anxiety was frequently described as an overarching, background concern that at times moves to the foreground for clients. Despite eco-anxiety not being experienced as a presenting issue for most of the participants, climate anxiety as a persistent, pervasive background stressor was mentioned. Ivy also referenced the collective anxiety around Covid 19 as comparable, in this quote:

> I suppose similar to the covid anxiety, even a long time after the physical danger had passed, I feel like the anxiety in the air around the realisation that we're vulnerable, has just hung around for so long. That's kind of how I think about climate [...] It's just now something that's in the air, always hanging around, making everything else worse. (Ivy)

Carl also commented, “I would say it’s there in the background for most people, most of the time.” The idea of climate anxiety as looming in the background has been described by Davenport (2017), who describes media reports on climate crisis as creating an “ambient stress” (p. 109) and the “ultimate stressor” (Dailianis, 2020, p. 12) given high levels of uncertainty and low levels of personal control.

This ambient quality was often tied up with a general sense of global overwhelm. It may be hard to differentiate or untangle thoughts about climate catastrophe with other global threats, as Carl said, “There are so many threats for a start, climate is one, nuclear proliferation, AI and what's happening with biochemical weapons and geopolitics is like, we’re in a heavy time. And I think those threats shift and foreground-background as well.” This state of overwhelm from multiple sources may defy traditional categories of how eco-anxiety has been understood in the past, with regards to anticipatory anxiety (Doherty & Clayton, 2011).

Gateway moments.

The concept of eco-anxiety as a background stressor leads to the sub-sub-theme that eco anxiety often needs to be languaged or discovered and brought forward in a therapeutic context, a process the therapist plays a role in. This has been discussed in other literature, for instance in passing comments by clients being noticed as ‘doorknob moments’ by therapists (Seaman, 2016) and Lewis (2018, 2019) encourages therapists to notice and explore passing comments about climate change, as clients may be assessing to see if the therapist can cope with this topic. With the acknowledgement that they are alert to passing mentions of weather, participants spoke about noticing these mentions or digging deeper into a general sense of anxiety. Carl’s quote illustrates one way of how this may play out in a therapeutic context:

> I'm inclined to say it's kind of background-foreground thing. Like when there's climate-related events like the wildfires, the climate-induced wildfires in Australia, or the climate-induced cyclone Gabrielle, or the climate-induced disasters in Muriwai, all these things. Like it really moves into the foreground of people's awareness, and I find that people are way more likely to reference it, be distressed by it, their concerns about the future are more prominent and in the foreground, so we can deal with it quite explicitly. (Carl)

Nick also mentioned that New Zealanders may have more awareness of global events than people in other countries, and that this may bring on anxiety as well. In talking about climate anxiety being bound up with other presentations, Nick said, “Even when someone comes in for a different presenting problem, like, I was in a car accident, but also, man, this weather’s got me kind of freaked out. It comes up a lot.” Nick described this as something he is more recently aware of:

> That used to just be chat, now it’s a bit of a screener as well, you know, ‘oh, hey, I can’t come to my appointment because it’s raining.’ ‘Okay, it’s raining, not flooding, what’s going on with you and rain, man?’ (Nick)

All participants had a keen interest in eco-anxiety and were deeply concerned about climate change, so unsurprisingly were alert to any mention of general anxiety or weather-related worry. Claudia reflected on her experience, “I suppose I wouldn’t do that [ask about climate anxiety] if I didn’t hold that there is a concern for myself, if it wasn’t something I couldn’t relate to.” Carl also commented, “[…] how much would people just be talking about

it [climate distress] and bringing into clinical work, if I wasn't on the alert for it, and saying, 'Are you concerned about this bigger picture?' Because I do do that."

Participants' comments demonstrated how they created space, or gave permission, for clients to talk about their climate-related emotions, with Ivy talking about how in some cases, she mentions climate change in order to open up space for this topic:

> I want to give clients permission, I'm increasingly giving clients permission to talk about climate. So I'll often name it first. They'll say, oh the world's so hard, and I'll be like, 'yeah, take climate for example,' and they'll be like, 'yes, exactly!' (Ivy)

Carl also talked about inviting clients to elaborate, if they mention a generalised worry:

> So if someone says, 'we're living in worrying times', I might say, 'yeah, and let's bring that forward, when you say that, what are you referring to, there's many things to be concerned about'. Then they might start saying, 'yeah well there's climate, there's ecological breakdown.' (Carl)

Giving voice when working with an ambient eco-anxiety was explained by Bea:

> So the steps that I would usually take is to make sure that we can language, so make sure it can be conceptualised, make sure that we can … either experience it as a physical thing, or a spiritual thing, or a mental thing, but that there's some kind of consciousness, that there's not just this inchoate stress. (Bea)

Ivy also discussed the idea of 'unpacking', "It is increasingly coming in [to her workplace], in terms of increasingly having young people coming in who are suicidal, and through unpacking that, they'll mention the state of the world, and climate change."

In talking about being able to articulate a sense of loss or grief to nature, Bea mentioned Kaupapa Māori approaches as having more awareness and language around expressing this disconnection, "I think that's mostly an artefact of Western capitalist culture, because most of the te ao Māori therapists and counsellors and Kaupapa Māori psychotherapists I work with, have it down pat."

Some participants talked about how people in Aotearoa feel uncomfortable talking about climate change, with Sue saying, "But it is still quite confronting for most people to even have to talk about climate change. There is a big social contract I would say, in New Zealand, that we just don't talk about it." Similarly, Carl commented, "I think people are holding a lot of on their own, and often concerned about the impact on other people if they were to really talk about it." Researchers such as Kemkes and Akerman (2019) and Diffey et al. (2022) have reported similar findings.

Collapsing time boundaries

Another aspect of eco-anxiety that challenges traditional conceptualisations of this as anticipatory, or time-bound, is the idea that for some people, emotions over environmental loss and damage may be in the past, or happening right now as they witness or experience environmental degradation or extreme weather events, made more likely by climate change. Bea spoke about how people are experiencing the climate crisis and a disruption to a connection with nature in their own ways, influenced by history and current context:

> I think the threat of the climate crisis in the Anthropocene is one of them [sources of ecological distress], but people have all kinds of complexities within their relationship

> to land, and some of those are personal, and some of those are generational, and some of those are collective, and that for a lot of them they're happening right now. They've happened in the past, they're part of the present and they will be part of the future. So just the complexity of the experience is hard to separate out. (Bea)

In discussing the idea of time distinctions becoming less relevant as we grapple with extreme weather locally, Ivy remarked, "I really celebrate that lack of distance, like yes, people must wake up […] I keep thinking there has to be some disaster that will wake everyone up." In speaking of how people are in a way asleep, or disconnected from reality, Ivy expresses both how there is no room for future anxiety as the crisis is on our doorstep, but also that currently there is huge disconnection between reality and awareness.

Colonisation's impacts

The cultural differences between relationship to nature and how this may shape expression of eco distress in Aotearoa was discussed by Bea and Sue, who are both New Zealand/European/Pākehā. They spoke from experiences talking with Māori clients and therapists rather than their own cultural identity, so I am cautious to draw conclusions from this. However while this is a small number of participants, in terms of relevance it is worthy of note (Braun & Clarke, 2022). While colonisation was mentioned by several participants as a structural force in perpetuating ecological and social injustices, two participants further spoke about how in Aotearoa New Zealand, cultural identity and colonial history may be shaping local expressions of eco anxiety for both Māori and Pākehā:

> That's really important I think, to bring a bit of a decolonising lens to this, when it comes to anxiety and anticipatory distress. That in some ways that's a White person's problem because it actually undermines the colonial worldview. Because the colonial

> worldview is, we are here to make this a better place […] I think that's part of the issue of climate change, is that the whole idea of that, maybe actually what we've done to Aotearoa is destructive, and unsustainable, and may in fact implode on us, and destroy some of the things which we've worked hard for. To me that's like a really big source of eco anxiety, or anticipatory distress, because it undermines the value system that we've inherited from our whakapapa. It undermines the whole colonial project. (Sue)

In this quote, Sue explored why talking about climate change openly may be still culturally silenced or uncomfortable, in that in some ways addressing this issue might confront a Western, capitalist, extractive mindset that some argue is a source of the climate crisis. To voice this, or become aware of this discomfort, may be particularly challenging for people who have built their identity or livelihood around the systems that are now causing destruction and extinction. Bea also spoke about how sociopolitical and cultural contexts might be affecting the expression of eco-anxiety in Aotearoa:

> …You hit a lot of grief, a lot of generational trauma, and for Pākehā in New Zealand, you often have a lot of anxiety around race, or around what it means to be a settler, or what it means to navigate racism in your family. And a lot of that is really land-based, around […] who does the land belong to, and how should the land be used? (Bea)

This quote draws out what people who may be more conscious or aware of historical injustices may be contending, and possibly the element of historical guilt when Bea talks about 'anxiety around race'. Ray (2020) also explores the intense guilt many people feel as part of a damaging system, but points out that Indigenous populations protect and conserve

huge amounts of the natural world, and that human impact on nature does not have to necessarily be harmful. Sue expanded on the idea of climate distress as part of another ecological injustice for Māori:

> Whereas for Māori it's very different, Māori bring a very different experience to this whole concept of environmental destruction, for them it's just yet another, yet another, thing. Their ancestors … their grandparents fought this, their great-grandparents fought this, their great-great grandparents fought it. And so for them it's a story of struggle. So that's not about anticipatory distress, it's about intergenerational trauma, and the intergenerational resilience. (Sue)

An interesting aspect here is taking the anticipation out of the idea of eco-anxiety and viewing in as an ongoing struggle. This challenges concepts such as 'pre-traumatic stress syndrome' where an imagined future causes trauma-related symptoms (Kaplan, 2020) and instead understands eco emotions as ongoing and intergenerational. However, these quotes should be understood in the context of participants identifying as NZ/European/Pākehā in reporting their impressions from conversations. Perhaps more salient here is their discussion around the guilt that can arise from navigating a 'settler identity' as the environmental impacts of colonisation worsen.

This subtheme also gives local context for how eco-anxiety is not homogenous but experienced differently around the globe. The language currently used in the literature may not be appropriate for all populations (Tupou et al., 2023), and this understanding put forward by Bea and Sue certainly challenges the idea of anticipatory anxiety. It also raises questions around whether the discomfort around having a settler identity may play a role in the cultural discomfort around voicing climate anxiety in colonised countries such as Aotearoa.

Connection

This theme firstly refers to the idea that clients and therapists are together in experiencing the climate crisis, with the idea of a detached or neutral therapist called into question. Participants discussed the need for therapists to connect with their own feelings about the climate crisis was as essential, and saw themselves as experiencing the climate crisis along with clients. Also important was need for clients to find people to connect with as a way of navigating and healing eco-anxiety, with this taking place in groups or through community connection.

"We are all in this together"

The idea of everyone being affected by the climate crisis was captured succinctly by Carl, "No, there's no separation, we're all in it." Nick also expresses this, saying, "Global warming, is there anxiety? Well, you know, I'm on the globe too…" The importance of connection and community was also highlighted by Ivy: "You will go insane if you try to do it by yourself […] The only way to survive it is, by being in relationship with each other, and being in community, knowing that you're not alone in feeling like this."

Participants also discussed how traditional notions of therapeutic detachment were called into question, given the nature and reality of the climate crisis.

> You can have a conversation about schizophrenia as a non-schizophrenic person and say, 'oh okay, well there's some clinical detachment there.' You can't have a conversation about climate without stepping into it yourself, and yeah, that's a change for us […]100 plus years of psychology have taught us to have that separation … you can't do that anymore, not with this topic. (Nick)

In talking about detachment, Ivy brought up the idea that therapists have a moral obligation to steer away from neutrality, "Detachment is so invalidating […] I would almost say immoral. Because what kind of psycho is neutral about us not having a liveable planet?" In this extract, traditional notions of therapy are called into question, with detachment seen as being extremely harmful – and pathology being put instead on a person who tries to remain neutral. This aligns with Kennedy-Woodard and Kennedy-Williams' (2022) assertion that *not* being alarmed about climate change is illogical. Rhodes and Dunk (2023) argue that traditional therapy is not fit for purpose when dealing with emotional responses to climate change, an idea also expressed by participants in Silva and Coburn's (2023) study.

The importance of therapists connecting to their own feelings around climate change is a key facet of this theme, and some literature suggests this may be integral to therapeutic relationships when clients are seeking help for eco-anxiety. Budziszewska and Jonsson's (2022) participants reported feeling that it is imperative for therapists to engage with their own climate-related emotions to work effectively to support clients, and help clients feel safe and contained in their discussions. This perspective is also encouraged by Samuel et al. (2022), writing as mental health professionals navigating the climate crisis. This idea was expressed by Ivy, "I think it's so important that as professionals we're comfortable with the feelings ourselves and that we can model them, but obviously in a modulated way, when we're working." Ivy extended the idea of connecting with emotional reactions to climate change, but also demonstrating that they can be contained and tolerated, found in other discussions (Kennedy-Woodard & Kennedy-Williams, 2022).

Social Support

Participants frequently referred to the importance of clients connecting to others who were experiencing similar emotions, to feel safe and understood. Nick commented, "sometimes it's good to find like-minded people, sort of normalise your feelings." This was

also expressed by Sue, "…I do think that the therapeutic challenge is partly a spiritual one, about helping people to find safe spaces where they feel connected." Bea also endorsed the idea of finding connection and safety in a group setting, both to share feelings and take action, to navigate eco-anxiety, "I think it's one of the things where group work and various forms [of] embodied, or creative, or out in-the-wild or land-based therapies are probably going to be much better overall, than individual one-to-one therapy." Nick also spoke about the importance of working through eco-anxiety beyond individual therapy, saying, "I think a community and group sort of wider approaches, treatments, interventions, whatever you want to call it, I think that's the way to go." In these quotes, it is evident that approaches beyond individual therapy are called for as a way to navigate and heal, and again Nick expressed hesitancy over using the terminology 'treatment' or 'intervention'. Carl talked about encouraging clients to find safe connections, in the context of living in a society where often people do not feel they can voice eco-anxiety:

> …I think that if some of my anxiety for my clients comes in to that equation, which I think it does sometimes, particularly for parents of little ones, I'm thinking about for them, how can you be supported, who are your people, whom you trust, that you can have these conversations with without feeling like you have to pretend, or shut it down … (Carl)

This quote illustrates not just the importance of finding a safe space or safe people where clients can openly connect about their feelings, but how Carl's own feelings affect these interactions, as discussed earlier in terms of how both therapist and client are involved emotionally in this topic. Also evident in this extract is the notion that being validated and accepted, in expressing these fears, is extremely important.

Social support, through sharing feelings and taking action, is a common coping mechanism identified in the literature (Baudon & Jachens, 2021; Dailianis, 2021; Diffey et al., 2022) and community-based support, rather than mental health interventions in the therapy room, have been advocated as ways to help people cope as the climate crisis unfolds (Diffey et al., 2022; Doppelt, 2023). Bednarek (2019) also states that connection is vital in going through trauma and turmoil, and without this support, anxiety can be exacerbated.

Disconnection

For their own part, some participants also spoke about feeling alone professionally, in caring about the climate crisis. Carl explained, "…it still feels like professionally my colleagues are not asking for help around this."

Ivy also expressed her sense of professional isolation, "…it's really hard, it's really hard. I often feel like the only champion, in my workplace." Ivy also described judging her colleagues "harshly" for understanding the severity of climate change, but not taking any action, "Because they know better, because they're supposed to be emotionally aware and developed. Because they're supposed to be comfortable holding hard feelings […] And yet they are not doing this, yeah."

The talk of feeling alone or isolated is something found in overseas literature of therapists' experiences as well, who felt isolated and frustrated by lack of attention to the issue by professional bodies (Silva & Coburn, 2023; Samuel et al., 2022). Meanwhile Claudia spoke of the importance of connecting with "champions", or other professionals she knew who were involved in working with eco-anxiety, but that they had to be sought out, and she spoke of a need for more people in these roles. Some participants expressed the desire for more connection between mental health professionals in coming together to address the mental health impacts of climate change, with Carl saying, "I would like to see a breakdown of the traditional professional boundaries in this space."

Some participants referred to the idea of dissonance or disconnection between scientific reality and how many people respond, described by Sue as oscillating between "emotional insulation" and "emotional vulnerability":

> To me the most interesting thing is how most of us, most of the time, manage to ignore it, and manage to avoid it. There is so much information out there, there is so much news coming through, … it's like you can rock along okay sort of insulated from it, and then occasionally there'll be something which will just kind of flash it up to awareness, and then it'll be this emotional hit of awfulness. Kind of let ourselves, just let themselves for a moment grapple with the awfulness of the earth's situation. And then we kind of find a way to extricate ourselves from it. (Sue)

This echoes Woodbury's (2019) description of the threat of climate change to living with a terminal illness: 'You may put it out of your mind for spells, but the grief associated with prospective loss comes at you in waves' (Woodbury, 2019, p. 5) which also ties in with my findings around how eco-anxiety can be foregrounded but is often in the background. This has implications for how people can protect their emotional wellbeing while acknowledging the need to engage with climate-related emotions and action; it may be necessary to have some insulation or distance, in order to engage effectively with the climate crisis. This sort of coping was found Soutar and Wand's (2022) systematic review, with some climate activists needing to distance themselves from the issue to protect themselves from painful feelings and overwhelm.

Several participants mentioned spontaneously that it may be hard for therapists to engage with clients who do not wish to discuss eco emotions or accept the scientific reality of climate change:

> I think probably the other side of it, therapists aren't very good at, which is if people just don't care, or are keeping it at a distance. I think therapists and pastoral carers would struggle to go, 'you're just avoiding this, aren't you!' [...] it doesn't feel very client-centred to try and make someone concerned about something that they're not really concerned about. (Sue)

Nick also brought up clients who may not want to talk about anxiety they may feel:

> It's interesting, because some people [...] don't even want to talk about their weather anxiety or they don't want to talk about climate change or will outright deny climate change, and we've got to work with the whole spectrum, from deniers, to the acknowledgers, believers, to the really anxious, with that whole range of people. (Nick)

These participants are thinking beyond just eco-anxiety to the implications of how being a climate-aware therapist can have its own challenges, an area that may be a rich topic to explore in future study; the mechanisms around climate denial as important to consider has also been brought up by participants in an online international survey around climate anxiety interventions (Pitt et al., 2024). Similarly talking about the dissonance between behaviour and scientific reality, Carl (62) described his generation as "complicit" in the climate crisis but also largely disconnected and defensive about feelings of guilt.

Taking action

The last theme I developed was centred around the importance of doing something, not necessarily as a way to eliminate eco-anxiety, but as part and parcel of the process of

experiencing this distress. All participants brought up the idea of taking action as an integral part of how they work with eco-anxiety therapeutically, as Claudia said, “I like the idea of that, share and connect, and so, what are you going to go away and do?” In speaking about validating and making space for eco-anxiety, and advocating connection with others, Carl added, “And also there is a question there, I don’t often raise it but there is a question, “what is yours to do, what is mine to do? How do I show up in these times?” This suggests that ‘doing’ is important, but that we may have different paths of action or ‘showing up.’

Bea described a process of both giving safe space to painful feelings, as well as finding a way of doing something:

> So kind of being able to hold that despair and grief and rage and let it kind of be fully felt, and let it flower, without overwhelming. And then, [as that] is felt, I would be thinking about activism of some kind for the client. So some kind of agency. (Bea)

According to Bea, painful eco-anxiety is experienced as being able to be coped with, as well as potentially opening up ways to take action in the world, although Bea cautions that what this looks like may be different for different people. This is a consideration acknowledged in other studies, as not everyone will find engaging in activism, for example, a helpful way to cope but may discover other ways to find agency (Budziszewska & Jonsson, 2022; Pitt et al., 2024).

Nick also spoke about how he brings the idea of agency into conversations with clients:

> I think it is that sense of, bringing it back to that internal locus of control because so much of weather anxiety, climate anxiety, is external. We can’t control the weather,

> we can't control when the next earthquake's going to come, we can't control that sort of thing. What can we control? Well, we can control the people we're around, we can control the messaging. So many people get caught up in the loop of, 'oh well I was on Facebook, or I was on Instagram […] behavioural change – put down the phone. (Nick)

This quote shows that realising both personal limits but also agency can be seen as a way to cope with uncertainty and powerlessness. Similarly focusing on 'doing', Claudia spoke about acknowledging what actions a client is already doing, when coping with distress and guilt around personal responsibility:

> …you might be acknowledging what you're doing, and reminding yourself that you're taking steps x, y, and z to help in whatever way you can. Whether that's small steps, like taking public transport over a car, or donating money, or activism, or whatever else. Acknowledging what you're doing on a day-to-day basis. (Claudia)

Within the tension of individuals coping with huge systemic forces, both societal and environmental, and feeling guilt and powerlessness, these statements have at their core the significance of doing something: in one case being mindful of exposure to media, which was mentioned only sporadically by participants, and in another putting value on individual pro-environmental behaviours that are within reach.

"Zone of capacity"

An important facet of this theme was the importance of finding balance, or being in a 'zone of capacity', where neither apathy nor overwhelm hindered action:

> Sort of holding the balance between what you can do about the problem, how can you do that and still live a happy and fulfilling life that's not overridden by anxiety …...treatment, if you're going to use the word 'treatment', of climate anxiety I think needs to be really action-based, yeah. It's not about changing your thinking about the problem, to change the way you feel. (Claudia)

Here Claudia is also expressing the assumption (not shared by all participants) that being in distress over the ecological situation is not always necessary or inevitable, and there is some uncertainty in her hesitation over using the word 'treatment', showing uncertainty around using clinical language. Her thoughts also reflect the idea of holding the balance between experiencing painful feelings without becoming overwhelmed and paralysed, in order to be able to act.

Being active, particularly in a community setting, was talked about as bringing a sense of agency but also purpose:

> …that's been my approach in the absence of any other guidance, is: Yes you're thinking of these global problems, but what can you do in your community to prepare, to help others prepare, that sort thing. So giving people that sense of purpose again. (Nick)

There are several elements worth mentioning in this comment. Firstly, the need to do something meaningful along with others, relating to action but also finding connection in community, and the idea that we need to be building resilience locally. Nick also mentions the lack of current guidelines around how to effectively work with eco-anxiety, potentially speaking to the isolation some mental health practitioners feel in this area.

Speaking about a local climate group, Ivy said:

> The theory about it, or the tagline, is, 'finding the sustainable sweet spot to our emotional responses. So if you're thinking about that stress graph, you know the bell curve, basically people can be like completely overwhelmed, and rocking under the table, or not stressed enough, and chilled - and both of these people aren't doing anything. (Ivy)

The idea of finding a place of balance in order to take action has also been put forward by Doppelt (2023), who conceptualises healthy coping through the climate crisis as taking place in the Resilience Zone. This is understood as the ability to release fight-flight-freeze responses, or the nervous system maintaining a traumatic reaction if it stays in a 'high' or edgy zone, or alternatively 'low', numb or disconnected (Doppelt, 2023). Bednarek (2019) also discusses a spectrum along which strong emotions can be tolerated, from numbing to panic, and equates this to working with trauma, with reference to the process of engaging with painful emotions while staying connected.

Ivy's mention of the stress graph has similarities to McLean's (2023) discussion of adapting the Yerkes-Dodson curve depicting the relationship between arousal and performance, in this case seeing the relationship as between level of climate concern and ability to take action. Sue also spoke about her understanding of finding a place of balance:

> I like to talk about it as a zone of capacity, with on one side it's […] the arm's length thing. And on the other side is overwhelm, where the emotions are just too awful. And that's the kind of zone of mental illness I suppose, or it's an incapacitation because of too much information, or too much emotion, and on the other hand is incapacitation

> because of not enough emotion. And in the middle somewhere, is this creative space where people are motivated enough, caring enough, let themselves feel enough, to focus that in a particular direction. (Sue)

This quote is interesting in that Sue uses the phrase “mental illness”, with regards to someone being debilitated – a threshold is impaired function is commonly used by other researchers to delineate at what point someone might meet a clinical level of eco-anxiety (Clayton & Karazsia, 2020; Hepp et al., 2023). In Sue’s quote she equates incapacitation with not enough emotion, in a similar way to Ivy talking about how being detached or not concerned was possibly pathological in itself. There is also reference here to people allowing themselves to feel enough, again suggesting the disconnection many people experience when it comes the climate crisis. In describing a healthy state of coping, Sue is implicitly tying in how ‘doing’ is an essential part of this.

Taking action, which may be different for individuals, ties in with how eco-anxiety is understood by participants as a rational response to an alarming situation: an external situation that calls for external solutions. The idea of being spurred to do something aligns with the understanding eco anxiety not as pathological but a potentially practical response to future threats, that may enhance people’s wellbeing if harnessed, as Kurth and Pihkala (2022) suggest.

Rhodes and Dunk (2023) urge responses beyond just coping with climate distress to include action and activism, and taking action has been found as a way for some people to cope with climate anxiety (Soutar & Wand, 2022). Budziszewkda and Jonsson (2022) also highlight the importance of agency and engaging in action, with their participants reporting different ways of doing this. Some found therapy gave them more hope, while others found this in political engagement. In the current research, some participants said clients preferred

to tend a garden alone, with others suggesting joining a political organisation. What agency looks like may be different for everyone, a perspective also put forward by Pitt et al.'s (2024) participants.

Chapter Four - Discussion

This study explored mental health professionals' understandings of eco-anxiety and how this experience is manifesting therapeutically in Aotearoa. My findings highlight the complexity of eco-anxiety as a new and rapidly evolving area of research. In taking a qualitative approach, this research generated rich insights into the experiences of therapists' experiences, as reflected in the depth and scope of the themes developed. While there was some uncertainty and disagreement among participants, there were similarities found across the data. The broad agreement across these patterns of meaning is especially pertinent given participants were from different scopes of practice and suggests that while there may be differences in how eco-anxiety is manifesting clinically (for example in private versus public practice), there may be some commonalities across scopes of practice.

Many of the findings resonate with current literature, supporting the general understanding of eco-anxiety as a rational, potentially adaptive anxiety that should not be pathologised (Crandon et al., 2022; Kurth & Pihkala, 2022; Rhodes & Dunk, 2023). The findings also add to other researchers' and therapists' emphasis on the need for validation and connection (Baudon & Jachens, 2021; Dailianis, 2021), with all participants agreeing on the need to take eco-anxiety seriously. My findings also conceptualise eco-anxiety as multidimensional and complex, and as presenting with multiple emotions such as fear, grief, trauma and guilt, found in other literature (Coffey et al., 2021; Dailianis, 2021; Marczak et al., 2023) and these emotions were discussed as being layered, or interacting with each other. In particular, participants mentioned guilt and responsibility as coming up for clients and a powerful component of eco-anxiety.

Theres was strong agreement among participants, both explicitly and sometimes implicitly assumed in their quotes, that taking some kind of action, or finding agency, was crucial in any processing of eco-anxiety, also found by Budziszewska and Jonsson (2022).

This may look different for different people, with options suggested ranging from joining a political organisation to tending a garden; these different types of agency may be a consideration for mental health professionals when discussing taking action with clients.

My findings also depart in some ways from the current literature and give new insights into how eco-anxiety may be manifesting locally, for example guilt arising from having a settler identity in the context of Aotearoa's colonial history, or Māori having a unique experience of climate distress, influenced by intergenerational struggles. Māori clients and therapists may have ways of understanding eco distress that do not fit with the narrower definitions of eco-anxiety. However as these perspectives are derived from Pākehā participants, this concept has limitations in the current discussion, but their thoughts around Pākehā guilt may hold more weight.

Another area of insight is how eco-anxiety may be bound up with other issues and possibly be latent, or part of an underlying general sense of overwhelm, until it is talked about or unpacked in a supportive environment. Descriptions such as "inchoate stress" reflect this ambient nature, and indicate the need to voice eco-distress. This finding highlights the importance of therapists being aware of eco-anxiety being latent or presenting alongside other issues. Findings also suggest clients may be struggling to articulate their emotional responses to the climate crisis. A consideration here is how therapists' approach eco-anxiety when they themselves hold significant concern; some participants mentioned bringing climate up first if general worry was mentioned, while others took a more exploratory approach, for example if a client mentioned anxiety around weather events. Given participants' views that climate and eco-anxiety are often culturally silenced topics, giving permission to open this up as a topic may be beneficial, or conversely could influence or 'prime' clients who may not already have this as a worry. Croasdale et al. (2023) caution that mental health professionals may in some cases attribute clients' distress to climate change incorrectly or inflate its significance.

Findings such as how this distress may be manifesting as a background stressor that can come to the foreground, and the multitude of emotions that are brought up possibly in conflicting ways, add to knowledge of how mental health professionals might be experiencing this in their practice. This has practical implications potentially, in being aware of mentions of weather or global events, or general overwhelm. The experience of eco-anxiety as multi-faceted, as well as grounded in reality as a rational reaction to an existential threat, may be seen as a reflection of the complexity of the climate crisis itself: slow moving, ever present, with abrupt changes such as extreme weather events that can break this reality into people's consciousness, and potentially the narrow descriptor of eco-anxiety cannot capture the complexity of this experience. Therapists may also need to consider that anxiety around climate may be hard for clients to talk about and allow permission for this without pre-empting the topic.

While there is general agreement in the literature and the findings of this study that eco anxiety should not be pathologised, thinking around how to understand this is still nascent and my findings have some theoretical implications. One participant's suggestion of developing a category such as burn-out, to give validation and weight to eco-anxiety but locate it externally, may be a fresh conceptualisation of how to conceptually communicate the weight and impact of eco-anxiety. Burn-out is described as a syndrome not a medical condition, although it is included in the 11th Revision of the International Classification of Diseases and is described as resulting from unmanaged workplace stress, characterised by exhaustion; distance, negativity or cynicism towards one's job; and reduced efficacy professionally (WHO, 2019).

Other work has attempted to understand 'climate anxieties' using the Power Threat Meaning Framework (PTMF) (Barnwell et al., 2020; Morgan et al., 2022), although this is acknowledged as an understanding that is still evolving (Morgan et al., 2022). The PTMF has

been put forward as an alternative to viewing psychological distress as located in the individual and conceptualised by psychiatric diagnoses, and instead understands people as enmeshed in community, relationships and culture, accommodating for local expressions of distress. In seeking to identify patterns of emotional distress, the PTMF identifies: how power functions in someone's life; what threats this power may pose and how this is mediated by biology; how people make meaning of this and their strengths and resources; and lastly, learned and evolved responses to threats as a way of survival or protection (Johnstone & Boyle, 2018). This allows for psychological or social adaptations to threats and power to be explored (Barnwell et al., 2020).

In applying this trauma-informed framework to eco-anxiety, Barnwell et al. (2020) argue that climate anxieties must not be decoupled from their social context. In a study exploring climate-related distress in a South African mining town, the authors argue that socio-political challenges underpin experience of the climate crisis, such as unequal historical power relations interacting with environmental threats, seen in the violent and unjust systems many communities operate in. This illustrates power relationships implicated in climate distress, and how climate stress can be an additional threat to multiple other stressors, with the authors writing: "Climate change, therefore, is not a single event, but an additional event to a range of cumulative psychological adversities" (Barnwell et al., 2020, p. 12).

In the current study, several participants mentioned structural injustices such as colonisation and capitalism. These understandings fit well with the PTMF, in that the climate crisis be understood as a symptom of a damaging system and may be understood as one threat among many. It may also set off or exacerbate historical injustices, and in Aotearoa, a history of colonisation and loss of land may be seen in asymmetrical power relations between Pākehā and Māori and historic injustices. Barnwell et al. (2020) propose that through awareness and analysis of their socio-political situation, communities can come together and advocate for

themselves, for example by demanding better environmental standards and more participation. In this way, they find social agency and adapt to the threats they face and Barnwell et al. recommend support for communities experiencing injustices.

Limitations

I intended for this study to only focus on one scope of mental health practice, clinical psychologists. As recruitment was slow, as outlined in the Methods section, I expanded my criteria. In some ways this has affected the data; some participants took a psychotherapeutic approach as this was their scope of practice, and this may differ from how psychologists would have responded. However, as this is a topic that affects all therapists, having a broad range of scopes may in some ways be a strength, bringing different perspectives to light. Participants also worked in private or public practice; these contexts may affect whether clients bring up eco-anxiety, as participants said, so research only on those working in private practice for example could have generated more specific insights and perhaps more knowledge about clients whose sole presentation is eco-anxiety.

Additionally, I aimed to recruit up to nine participants and the final number was six. While this is still appropriate for qualitative research, it is at the lower end of what is recommended (Hennink, 2020). While more participants would have generated more data, the quality and depth of insights generated is more important than sample size (Morrow, 2005) and the themes I developed have variety, depth and richness.

Another limitation lies with the length of interviews; while they were all on average 46-60 minutes, follow-up interviews based on previous interviews, or insights from other participants, may have led to greater depth and range of data. Given the context of participants working in demanding roles and the preciousness of their time, I did not feel asking for additional time or greater commitments was reasonable and was acutely aware of this while conducting interviews.

As part of my own reflexivity, often the interviews felt more like conversations as both I and participants were enthusiastic about the topic and had many points of agreement. In some ways this may be a strength in building rapport and allowing for free-flowing, natural interactions. In a similar way, in conducting in-depth interviews, Marczak et al. (2023) position themselves as being motivated by emotions around climate change and state their emotional engagement with the topic created a "connective medium" between themselves and participants (Marczak et al., 2023, p. 3). For my part, while this rapport may have been beneficial and allowed interviews to flow more easily, I wondered if my responses could have been more open-ended at times, allowing for other aspects of the topic to come up.

Another consideration is brought up by Ágoston et al. (2022), who discuss how guilt talked about by participants in interviews may have been a by-product of the interview process. For instance, people may have been reminded of the harm being done or that humans are behaving irresponsibly/damaging the environment, because the line of questioning used by interviewers. This is a possibility in the current research, but not as likely given that participants were already highly aware and concerned about climate change before the interviews.

Future directions

These findings open up further avenues for future research to explore. These include therapists' experiences on working with climate denial and apathy, as this was spontaneously mentioned by participants. Further exploration on how mental health professionals see climate change and possibly distance themselves from this, could also be useful in how to engage more people professionally in this topic.

The current study also contributes to opening up other avenues around how eco-anxiety can be understood without resorting to pathologisation. The concept of eco-anxiety

being given similar status to the condition of burn-out, as suggested by one participant, is one potential alternative way of validating eco-anxiety and taking it seriously.

Further qualitative research could explore how guilt may be a facet of eco-anxiety and how this relates to our colonial history, while exploring how eco-anxiety may be manifesting differently for Māori in terms of this being seen as an ongoing struggle. This could be a rich avenue of research, taking care that epistemological assumptions of such research allow for Māori worldviews or values or ideally are undertaken by Kaupapa Māori researchers.

Further research on eco-anxiety as an ambient sense of overwhelm could be useful as well, to explore what may be triggering or foregrounding this. There was some contradiction around whether day-to-day struggles are pushing any broader, global concerns out of consciousness, or if being at a low ebb and overwhelmed can exacerbate feelings of overwhelm; possibly different people experience this in different ways, so more qualitative research on people's experiences of eco-anxiety would be useful.

For greater understanding of how eco-anxiety is being experienced by mental health professionals in Aotearoa, quantitative studies could contribute to knowledge about how often this is a primary presenting issue or if it is presenting alongside other concerns, how therapists are working with eco-anxiety, and whether therapists think any sort of classification or measure is necessary. In addition, the understandings described by participants challenge the idea that eco-anxiety can be measured as a stable construct, particularly given the idea that it may move from background to foreground; longitudinal research could provide further insight about this experience.

Conclusion

In seeking to explore the experiences of mental health professionals who work with eco-anxiety, I found broad alignment between the current literature and the themes I developed. This included support for the idea of eco-anxiety as a sane response to a dire environmental situation and the necessity for therapists to validate eco-anxiety. The concept of connection, with regards to other people, emotions and nature, was a key finding discussed by other researchers, as was the importance of taking some kind of action. This research contributes to the field in understanding eco-anxiety not just as multidimensional but as an ambient stressor that may exacerbate current mental health challenges or present as a general sense of overwhelm. Findings also suggest eco-anxiety for some people may be shaped by local experiences of colonisation. Future qualitative and longitudinal research on both therapists' experiences, and the wider population, is needed, with potential areas of focus considering how to approach clients' denial or apathy, and what may be bringing forward a sometimes-ambient sense of climate-related distress or overwhelm.

Given the existential, global threat of a warming climate and frequent calls for climate-aware therapists, further knowledge on how mental health professionals are making sense of, and working with, eco-anxiety provides valuable insights and may contribute to supporting people in both therapeutic and community settings. To my knowledge, this is the first qualitative study on this specific topic in Aotearoa. I hope that insights generated from this study may be useful for informing future research and practice as therapists and clients, and individuals and communities, navigate a rapidly changing world together.

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Appendices

Appendix A - Interview Schedule

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UNIVERSITY OF NEW ZEALAND

Interview Schedule (semi-structured)

Key Questions:

1. What are your experiences of eco-anxiety manifesting in a therapeutic context?

2. Anxiety in response to climate change can be understood differently and affect groups in specific ways. How have you noticed this coming up in your practice?

3. Do your own feelings about climate change affect these interactions? If so, how? Or why not?

4. Have any therapeutic approaches/frameworks been successful in working with people going through climate anxiety? Please explain.

5. As a mental health professional, do you feel supported in this area? What do you need to feel better supported?

6. With regards to effective approaches or interventions in coping with eco-anxiety, what thoughts do you have about utilizing these to develop support for groups or communities, rather than individualising these emotional responses?

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Appendix B - Study Advertisement

MASSEY UNIVERSITY
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UNIVERSITY OF NEW ZEALAND

I am seeking participants for a qualitative study on how mental health professionals experience working with clients who are going through eco-anxiety/climate distress, for a Master's thesis in Psychology.

Participants need to be clinical or general psychologists or registered psychotherapists who have worked with people experiencing eco-anxiety or similar negative emotions relating to climate change.

Participants will take part in one semi-structured interview. The expected time commitment for this study is around one hour.

Participants will receive a $40 voucher as koha in recognition for their time.

For more information please contact Jennifer van Beynen at j.vanbeynen@gmail.com

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Appendix C - Information Sheet

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NGĀ KUPU WHAKAMĀRAMA/INFORMATION SHEET

He aha te kaupapa o tēnei rangahau? / What is this research about?

Eco-anxiety is a relatively new but growing area. Much of the literature in recent decades on climate change and mental health has been around the direct effects of extreme weather, but anticipatory anxiety around climate change is increasingly being acknowledged. Climate anxiety in the context of this research is understood as anticipatory and an indirect effect, rather than an acute effect of climate change. There has been some work on how this is affecting mental health professionals overseas, and to my knowledge none in Aotearoa New Zealand. To understand this growing area more, I am conducting a qualitative study into how eco-anxiety is manifesting in the therapeutic context and what sort of support mental health professionals need in this area.

Ma wai e mahi tēnei rangahau? Who is doing this research?

My name is Jennifer van Beynen, a postgraduate student of the School of Psychology, Massey University. Dr Nicole Lindsay is the supervising staff member. The research will contribute towards the requirements of a Master of Arts in Psychology.

He aha āku mahi mā ngā kairangahau? / What will I be asked to do?

Should you decide to take part, you will be required to take part in a semi-structured interview. This interview will be audio recorded. The questions will be around your experiences working with clients who have experienced eco-anxiety. Some questions will also ask about your own emotional responses to this topic. There is potential for discomfort or distress during the interview, and the researcher is available to debrief and discuss further sources of support, if needed.

The interviews will take place either via Zoom or a convenient public space. You can decide if you would like to use a pseudonym. In this case, interviews will be conducted via the use of pseudonyms and no real names will be used from the recording or during the transcription process.

It is anticipated the interview will take up to 60 minutes to complete. As compensation for your time, and as a token of gratitude, you will receive koha of $40.

Ma wai ngā tāngata e whai wāhi tēnei rangahau? / Who can take part in this research?

If you are a registered psychologist or psychotherapist in Aotearoa New Zealand who has experienced working with eco-anxiety, then you are eligible to take part in this study.

He aha ōku mōtika? What are my rights as a participant?

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You are under no obligation to accept this invitation. If you do participate, you have the right to skip, or decline to answer a particular question, ask questions about the study, and withdraw from the study up to one month following the interview. You will have the opportunity to have your interview data discarded after the interview, should you change your mind and decide to withdraw from the study up to one month following the interview.

Verbatim quotes may be used as part of the findings. You will be able to review your transcript and if necessary, make changes. If you choose to use a pseudonym, your interview transcript will remain completely anonymous, and name changes will occur during the write up of the project. All raw data, including audio recordings, will be kept on a password secured computer and external hard drive using encryption software, and data security will adhere to the Massey University Code of Responsible Research Conduct. Raw data will be destroyed at the completion of the thesis or after a period of five years. Beyond dissemination in a Master's thesis, data may be used in case of publication.

Me aha ahau ināianei? What do I do now?

If you feel you would like to participate in this research, please email j.vanbeynen@gmail.com

Mēnā he pātai āku, mā wai aku pātai e whakautu? Who can I contact about the research?

If you have any further questions, queries, or would like to know more about this study, please contact Jennifer or Nicole:

Primary Investigator

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This project has been reviewed and approved by the Massey University Human Ethics Ohu Matatika 3, Application OM3 23/21. If you have any concerns about the

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conduct of this research, please contact the Chairperson, Massey University Human Ethics Ohu Matatika 3, email humanethics3@massey.ac.nz.

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Appendix D - Consent Form

Eco-anxiety in the therapeutic context: mental health professionals' experiences with climate distress in Aotearoa

PARTICIPANT CONSENT FORM - INDIVIDUAL

I have read and understand the Information Sheet attached as Appendix I. I have had the details of the study explained to me, any questions I had have been answered to my satisfaction, and I understand that I may ask further questions at any time. I have been given sufficient time to consider whether to participate in this study and I understand participation is voluntary and that I may withdraw from the study at any time.

1. I agree/do not agree to the interview being sound recorded.
2. I agree to participate in this study under the conditions set out in the Information Sheet.

Declaration by Participant:

I _____ [print full name]_____ hereby consent to take part in this study.

Signature: _____ Date: _____

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