From Climate Anxiety to Climate Action:
An Existential Perspective on Climate-Change Concerns within Psychotherapy

Abstract

With the growing body of knowledge climate change stands out as one of the most important contemporary problems. The Intergovernmental Panel on Climate Change (IPCC) confirms the urgent necessity to reduce greenhouse gases emission, as the window to address the problem is becoming narrow. Rising temperatures and bush-fires, melting glaciers and droughts make the acceleration of climate change evident, and citizens around the globe are increasingly worried about the magnitude of the problem. In this article, we propose an existential perspective on climate-change-related concerns. Although environmental worries are legitimate, they sometimes cause severe anxiety and distress so aggravated as to be discussed within the framework of psychotherapy. In the course of this research, we examine the experiences of ten Swedish psychotherapy clients addressing their climate concerns within treatment. We engage them into in-depth conversations about the experience of climate anxiety and inquire about the individual pathways toward recovery. Moreover, we propose the existential perspective as a tool to understand such experiences. We aim to address all existential concerns, as described in Ernesto Spinelli's themes of existence framework: death anxiety, spatiality, temporality, meaning, relatedness, authenticity, freedom, and responsibility. All of the above are present in

participants' reports of climate anxiety. In conclusion, we emphasize the value of introducing existential perspective to practitioners working with clients experiencing climate distress.

From Climate Anxiety to Climate Action:

An Existential Perspective on Climate-Change Concerns within Psychotherapy

If the creature destroys its environment, it destroys itself

(Bateson, 1972, p.332)

Global warming, loss of biodiversity, food-and-water crises, melting glaciers, rising seas, unpredictable changes in weather patterns–the environmental crisis has become the 21-century defining feature (Crutzen, 2006; IPCC, 2018). In the post-war acceleration of the consumer-and-fossil-fuel industry, humans have pushed the environment and geological systems near the breaking point (Ripple, Wolf, Newsome, Barnard & Moomaw, 2020). As a result, some philosophers (Cruzen, 2006) proceed to call the current geological epoch Anthropocene. The transition to Anthropocene springs from the idea that humans have brought their physical and biological environment to the brink of collapse of inter-related life-supporting systems. According to the IPCC (2018) report, the risks of crossing the threshold of 1,5 degrees Celsius of global warming, as compared to the preindustrial period, will cause an exponentially high risk to planetary ecosystems. The current global emission track is heading toward the even higher levels of warming, prompting the scientists to repeatedly warn humanity of changes ahead (Ripple at. all, 2020).

In the Anthropocene, humanity has demonstrated both unprecedented agency and unprecedented powerlessness. Agency, because humans have shown the power to change their planetary environment so as to force a new geological epoch to emerge. Powerlessness, since efforts to slow down global warming continuously fail (IPCC, 2018; Ripple et al. 2020). According to ethics professor Clive Hamilton (2017), the task of the Anthropocene is no longer a task for the future, but for the present. He points out the paradox: humans, the very same species that have driven the Earth to the brink of collapse, are now faced with the task of regulating the complex systems sustaining life on Earth, thus rendering the current geological epoch both dangerous and complicated.

Psychological factors, such as accepting or denying the reality of climate change and emotional coping with threatening information, are crucial and yet often overseen in addressing climate emergency (APA, 2009; Gifford, 2011). Most climate-related news is bad news, and communicating it in a manner that would not cause denial or despair is a challenge, especially for mass media. Caught by the headlines designated to grasp immediate attention, many readers find themselves stunned. As the media still have to find their way toward effective communication of environmentally related news, an increasing portion of society reports suffering from climate-related anxiety, grief, and depression (Cunsolo & Ellis, 2018; Doherty & Clayton, 2011).

A recent survey on behalf of WWF (2018) indicates that one-third of the Swedish population worry about the climate change and environmental destruction. Further, every second Swede expects the climate change to affect their lives negatively in the next twenty years. Specifically, 31 percent worry weekly, and 18 percent report to worry about the climate change every day (WWF, 2018). Similar numbers are found in the US data, where 36 percent of Americans report a daily concern about the climate change (Clayton, Manning, Krygsman &

Speiser, 2017). The recent survey done for the American Psychological Association (APA, 2020) indicates that more than half of adults in the USA (62 %) believe that the climate change is the most critical issue of today. Similar results indicating high threat perception among the majority of respondents are found worldwide (Brechin & Bhandari, 2011).

Mobilization of the young generation has become the symbol of new climate change awareness. School strike for climate initiated by Greta Thunberg, is now estimated to involve school children from over 71 countries under the hashtag #FridaysForFuture (Watts, 2019). Other citizen-based movements working for radical change, such as Extinction Rebellion or Earth Strike, have also established themselves across the globe. But as citizens mobilize to make the climate emergency public, the awareness of the threat, crisis, and danger is also growing within a society, taking a psychological toll on those who are aware of the magnitude of the crisis.

In 2009, the American Psychological Association published a report predicting the climate change to become the most significant challenge to human wellbeing (APA, 2009). This was the first of the series of APA reports on the topic. Further reports highlight the psychological impact of climate change (Clayton, Manning, & Hodge, 2014) and its consequences for mental health (Clayton, Manning, Krygsman, & Speiser, 2017). Environmental stressors not only disrupt global economic and social structures but also affect community and individual health. Doherty and Clayton (2011) name PTSD, depression, and somatic disorders as direct consequences of climate change. Recent studies further indicate that higher temperatures affect mental wellbeing; e.g., associating higher suicide rates with an increase in temperatures in both developed and developing countries (Burke et al., 2018). Loss of ecosystems may further initiate a grief reaction (Cunsolo and Ellis, 2018).

The 2017 APA report (Clayton, Manning, Krygsman & Speiser, 2017) focuses on mental health consequences of climate change, distinguishing between direct and indirect impact of climate change. The report introduces the term "Ecoanxiety" as an outcome of environmental awareness and emotional reaction to ecological decline, which could be otherwise called "a chronic fear of environmental doom" (Clayton, Manning, Krygsman & Speiser, 2017, p. 68) and is listed among other anticipatory emotions; that is, indirect effects that spring from the awareness of the future threat. "Ecoanxiety" or "Climate Anxiety" has been recognized to have the potential to elicit such reactions as frustration, despair, powerlessness, guilt, and worry. Practitioners and psychotherapists around the globe report that climate change related distress makes way to the psychological practice and is more and more discussed within psychotherapy (Lewis, 2018; Weintrobe, 2012).

The experience of climate distress is often labeled "climate anxiety" or "climate depression" by patients themselves and by mass media reports. We also use the term climate anxiety in this article, since we find it vital to use the language of participants while naming their experiences in qualitative research. However, it is nearly universally noted by professionals (Randall, 2005; Weintrobe, 2012) that one has to be cautious while using clinical language for basically sound experiences. In addition, psychotherapists and practitioners (Levis, 2018; Randall, 2005) forward the idea that realistic fear of environmental destruction and climate change becomes subjected to collective defense mechanisms, such as denial and disavowal (Weintrobe, 2012), which results in labeling valid anxiety regarding climate change as individual pathology. Thus in popular discourse, various forms of emotional distancing from the problem are legitimized, while strong emotional responses are not (Randall, 2005; Norgaard, 2011). Looking at climate-change-related concerns from an existential perspective provides a way to avoid the trap of medicalization. Also, within the existential theory, anxiety is seen as a core

principle, not an experience to be medicalized or avoided at all costs (Horwitz & Wakefield, 2007).

The Existential Perspective

There are several conceptualizations of existential concerns formulated in philosophy and used in psychology and psychotherapy, their common premise being the focus on the subjectivity of experience rather than on external diagnostic categories. Moreover, the presence of existential concerns is understood within this philosophy as a core dimension of human life. Thus, the awareness of these concerns is valued as a token of authenticity and courage. However, facing existential concerns can also be at times emotionally challenging, especially if existential awareness is linked to major life events, such as loss or grief. Existential crises are understood as a natural part of life trajectory, and within the existential approach to psychotherapy it is assumed that they should be faced rather than avoided (Yalom, 1980).

Among others, Paul Tillich formulated the theory of Existential Anxiety as a fundamental core of existence (Tilich, 1952). He listed 1) fate and death, 2) emptiness and meaninglessness, and 3) guilt and condemnation as broad domains of existential concerns (Scott & Weems, 2013). In line with the general existential premises, these concerns constitute a core dimension to human life; however, if a person cannot find a way to integrate them, or their presence becomes at times overwhelming, they can mutate into sources of profound suffering. Research shows that persons exposed to traumatic events, such as hurricanes and other trauma, display heightened awareness of all these dimensions, coupled with significant personal distress (Scott & Weems, 2013).

Climate change awareness confronts persons with the possibility of multiple losses, as well as with the recognition of general human fragility and mortality. It also forces us to envision the terminal crisis of human civilization, which takes us back to Tillich's first existential domain

(fate and death). The threat to the heritage we wish to leave behind, including children and communities, undermines the fundamental meaning and value of human activity, thus evoking Tillich's second domain (emptiness and meaninglessness). In the end, the risk of human collective annihilation of themselves, other species, and landscapes via global environmental destruction brings the third Tilich's domain of guilt and condemnation into place. The awareness of the third domain poses a threat to the *collective human self-worth and self-value*, as the moral value of human civilization is being undermined. As most nations have built their economies on fossil fuels, the problem of guilt and responsibility can affect every personal dimension, causing severe distress.

Irvin Yalom (1980) proposes yet another existential framework. He argues that successful psychotherapy must include the acceptance of the "givens of existence"; i.e., basic tenets of subsistence including, among others, isolation, mortality, freedom, as well as the effort to create meaning in a world where meaning is not warranted. Although the encounter with existential concerns is often painful, denial will not lessen its effect. Contrarily, resistance to this kind of basic acknowledgement will only reinforce the pain and anxiety inevitably linked to the 'givens' or premises of existence (Yalom, 1980).

The existential practitioner and psychotherapist Ernesto Spinelli (2015) lists three foundational principles: *existential-relatedness, -uncertainty,* and *-anxiety*, which tie together the existential concerns. The first principle, *existential relatedness,* refers to the subjective mode of 'being' in relation to others and the world. As existential theory refutes Cartesian dualism and the idea of the individual as separate, subjectivity is, in turn, understood as a consequence of *relatedness*. By acknowledging our subjective mode of 'being' and co-dependence, existentialism reminds us that the experience of life includes shared subjectiveness. Even if we feel alone as

individuals, we belong to this world as humans and share it with other species on the premises of our ecosystem.

The principle of *relatedness* suggests that "the experience of existence includes all subjectives" (Spinelli, 2015, p. 22). The second principle, *existential uncertainty*, is an outcome of self-reflection. *Existential uncertainty* reflects the lack of predictability of how one will experience oneself in various contexts. Spinelli (2015) suggests that only by accepting the paradoxical polarities of order and chaos, as well as structure and process, one may find peace with the *uncertainty* of existence. The third principle, *existential anxiety,* follows *relatedness* and *uncertainty* and is experienced as both incompleteness and self-actualization in relation to the uncertainty of existence. *Existential anxiety* includes clinical symptoms of anxiety, as well as the sense of exhilaration and liberty. This idea points to the inherent paradox and double-layered nature of existential anxiety. It can be both freeing and distressing. Existential anxiety is associated with the subjective sense of being fully alive, without being oblivious to the challenging, possibly terrifying side of existence. Based on these principles, Spinelli proposed a framework of important themes of existence. The main themes include Meaning, Responsibility, Authenticity, Isolation, Death Anxiety, Temporality, and Spatiality of Existence.

Meaning and Meaninglessness. Within existential psychotherapy, meaning is often discussed in relation to the experience of incongruity, when an already established worldview is incompatible with the reality of the situation. The principle of *existential anxiety* conveys the ongoing tension between meaning and meaninglessness (Spinelli, 2015).

Choice, Freedom, and Responsibility. The existential view of choice, freedom, and responsibility relies on the principle of *existential relatedness,* suggesting that choice, freedom, or responsibility can appear only as agents within the relational self. The self does not exist on its

own, but only in relationship with others. Hence, the interpersonal dimension is ever present in each responsible choice and every experience of freedom (Spinelli, 2015).

Authenticity and Inauthenticity. Authenticity here is understood as a relational process, not to be confused with the individualistic and inauthentic notion of 'being true to oneself.' Moreover, authenticity is seen by Spinelli as a value, as it 'can be an expression of choice, freedom and responsibility when situated within an indivisible grounding of relatedness' (Spinelli, 2005, p.47).

Isolation and Relatedness. From an existential perspective, the individual experience of isolation must be preceded by the experience of relatedness. As humans, we are always beings-in-relation (Spinelli, 2015).

Death anxiety. Death anxiety may solely concern the self but could be as strong--if not stronger--when related to other people. Death anxiety may be triggered by the thought of surviving the loved ones, at the sight of vanishing populations inhabiting other continents, or endangered species.

Temporality. Future-directed anticipation goes hand in hand with death anxiety because the future, as we can imagine it, will always depend on the past. Temporality may be interpreted as the crossing between what has been and what can be foreseen.

Spatiality. Never affixed to one location, whether physical or existential, we find ourselves in constant motion. Spatiality is embodied in our emotional stance, as our mood correlates with the flow of our physical and emotional proximity in relation to others.

Study Aim

The present study aims to explore the experience of climate anxiety as expressed by participants who have discussed this subject within the framework of psychotherapy and to understand this experience from the standpoint of existential theory. Moreover, we examine different existential themes within the scope of the climate anxiety experience in hope that such insights could provide help to individuals coping with climate anxiety within psychotherapy and beyond.

Method

Participants

Ten Swedish adults, five men and five women (mean age 35, age range 18-49) participated in the study. They were recruited via advertisements on environmentally-related groups on social media. The recruitment criteria for participants were: a) to be over 18 years and speak fluent Swedish, b) to have current or past concerns about the climate change, the future of civilization, and natural environment, c) to have had past or current experience of discussing these concerns within psychotherapy; all of the participants were born in Sweden, one participant had immigrant parents. All participants lived in or close to the five largest cities in Sweden and reported moderate to high socioeconomic status. They all had past or current experiences of being involved in psychotherapy, although types of treatment varied. Several persons mentioned receiving Cognitive Behavioral Therapy, while all others received integrative forms of treatment, not related to a particular school. As cultural and spiritual background is important for understanding existential concerns, we also asked the participants whether they identified with any particular religion or culture. Most of them declared to be nonreligious and not identifying with any specific spirituality or culture. Two persons identified as Christian, but did not practice their religion within a church; one person felt "drawn towards Buddhism." Few individuals self-

identified with "atheism," "modern or modernist western culture," "Swedish culture," or "left-wing." Only one person was a member of a formal "green" organization, and only very few were active in their local communities in other ways than making personal lifestyle choices. Therefore our participant group involves mainly non-activists.

Data Collection

A semi-structured interview guide was developed to cover a broad area of participants' climate change and environmentally-related concerns and the history of psychotherapy experiences related to this topic. The interviews consisted mostly of open-ended questions aimed at understanding of the in-depth subjective experience of a person; e.g., Which worry do you consider the most concerning in regard to the future of civilization and the natural environment? When did you start to have these concerns? What do you feel when thinking about these concerns? How and on what occasion the topic about the future of civilization and environment came up for discussion in your therapy? [S.J] conducted all the interviews personally. The interviews lasted from 1 to 2 hours and were audio-recorded. This study received IRB acceptance; the ethical guidelines were followed. The data, including individual quotations, are presented in a manner that protects the participants' anonymity. The names are changed, and all identifying details have been removed from the quotations.

Data analysis

This study was initially developed as a phenomenological exploratory study. In correspondence with this phenomenological perspective we focused on the experiential claims and concerns of the persons taking part in the study rather than on the external, factual content of the narratives. The interviews were transcribed verbatim. Each interview was first analyzed on

its own terms, which involved several close readings of each transcript and the documentation of emergent motifs by taking detailed notes on each transcript. The initial analysis was first conducted by both authors independently and then compared and discussed. Following this initial analysis and based on our discussion results, we decided on to follow with the theoretically-driven approach. The rationale for the second step analysis was that the data from participants' narratives appeared to match the preexisting conceptualization of existential theory; i.e., Spinelli (2015) themes of existence model. As this framework added explanatory potential to the interpretation of the results, we decided to use a preexisting theoretical model to guide our analysis. The deductive thematic analysis, as described by Braun and Clarke (2006) provides a flexible methodological background for this process, because unlike other qualitative approaches, it can be also performed deductively, as a theory-driven analysis. The two-step analysis was collaboratively developed by both authors. The analytic process began with close rereading of all transcripts; accompanying notes, this time, were rooted explicitly in the existential theory. The analysis, as it is typical of qualitative approaches, developed into team discussion, comparing notes, and the collaborative writing process. Several drafts preceded the final form presented here. Reliability procedures in this study included discussion within the team and final agreement of both authors on the written form of the analysis. Additional procedures, enhancing rigor and reliability, involved documenting the analysis and researchers' thought processes at all stages of the process by taking detailed notes, using supervision and self-reflexivity, and assuming transparency of the results. However, it should be noted that, in accordance with the phenomenological and qualitative character of the study, this abbreviated discussion of the results cannot necessarily by interpreted as the only possible or all-encompassing representation. Instead, our aim is to present a systematic, interpretative, and theoretically grounded attempt at fathoming participants' experience.

Results

Death anxiety. The accounts of distress evoked by climate-change awareness share some common features. The awakening moment is often triggered by one, especially troubling, bit of information, most often found in the media, such as daily papers and social media, concerning the climate change. The participants recognize the seriousness of the climate situation and convey the sense of helplessness when facing complex societal and ecological systems.

> These massive states, systems, actors… The enormous structures and entire countries. The immensity of it!

While some participants experience moments of mortal dread, the moments of intense fear and mortality salience are present in all their narratives. The heightened sense of mortality is nearly always connected to the idea of societies falling apart as a result of climate change.

> It will be terrible to see all the dead coral reefs and flooded cities… People fleeing, masses of people dying. We must understand that we are all facing more and more situations that will require survival skills. (…) I think it will happen during my lifetime, when I will be old and fragile and in need of the security of a functional society more than ever.

Surprisingly, participants seldom fear direct consequences of climate change (such as heat waves or extreme weather); instead, they mostly emphasize social consequences of the climate shift, which are often pictured as the breaking down of a social contract.

> I think there are several likely catastrophic scenarios. Starvation is one of them, something very likely and currently impending. Lack of clean water. I have been in the Himalayas, seen the glaciers, and been shown where they were twenty years ago. Glaciers that provide one billion people with clean water. When they no longer have access to it… I think they will fight to their last breath to access it.

A characteristic feature of climate distress narratives is the presence of such concerns as worries about children and younger generations, which are often more aggravated than self-concern.

> I fear death, just like anyone else who has not come to terms with it. What I am most worried about is the future for my younger siblings, 12 and 10 years old /.../ I imagine that I might reach 50 before shit hits the fan for real, but then they will not even have reach the age that I have now! /.../ I am sometimes filled with grief because I want the best for the people that I care for. Of course, death scares me on a private level, but it is rather the suffering and the death of them that scares me the most, actually.

However, it is the presence of the apprehension of the possible breakdown of civilization and human extinction which differentiates the climate anxiety from other concerns, such as terrorism, and brings it closer to the atomic war and other apocalyptic foreboding.

> It is very fundamental. Death is a valid concept to worry about, and it (climate change) becomes death-extended. Not only is it my own death, but the death of humanity.

Therefore we posit that such accounts of climate anxiety testify to an existential crisis, connected with increased mortality salience on all levels.

Spatiality. Following Spinelli's notion of spatiality, participants' mood fluctuate with the shift of the physical and mental distance to climate change.

> As I grew up in - and currently live close to nature… I experience the problems first hand. When there are no fish in the lake, I notice it straight away since I like to fish. When the ducks disappeared from the archipelago, I noticed the increased algae concentration… Everything comes so close.

The physical and emotional closeness to climate change manifestations, such as hot summer days that instantly serves as a reminder of the problem. Or a noticeable shift in a cherished environment, such as the disappearance of small brooks and animals from a forest one knew from childhood, is also prominent in the narratives.

Temporality. In existential understanding, the future that we can foresee will always depend on the past. Temporality may, therefore, be interpreted as the crossing between what has been and what is expected. Earlier losses, lack of safety in the family, grief or estrangement are sometimes connected in psychotherapy to participant's present emotions. The inner emotional landscape of a person finds its reflections in the modes of experiencing climate change. For

example, one of the participants describes herself as grieving both the passing of her father and the climate. She depicts how one grief enhances the other, providing an example of existential temporality.

> I think that I am connecting the climate change with the death of my father and my feelings related to that, because what I find difficult with climate change is that it is so serious. There is no indication that things will be alright; this is real. Just like with father, he is dead. He is not just taking a walk, and he won't be back later. That is the reality, and it causes me such grief.

Meaning. The massive, urgent challenge of climate change combined with the awareness of global failure to curb greenhouse gas emissions can be experienced as overwhelming, a reason to give up hope. For some participants, this shift calls into question the meaning of any human activity. In addition, the participants highlight the constant tension accompanied by fluctuations in their feelings.

> I don't think my thoughts are different; what's different is how I feel... On a good day, I perceive the global environmental concerns as problematic, but I do not perceive them as catastrophic ... On a bad day, I often find myself thinking "Alright, this is only another evidence of the meaninglessness of existence."

Experientially, the principle and condition of *existential anxiety* convey the ongoing tension between meaning and meaninglessness (Spinelli, 2015). Persons in acute stages of climate anxiety no longer mention the tension but focus on experiencing the loss of meaning. However, some participants solve the crisis by becoming involved in climate action. Following that, they experience an emotional turnover; the climate crisis becomes the source of meaning. Participants tend to alternate between these states in time: meaning and meaninglessness, activity and passivity, hope and resignation. This can point to the existential nature of anxieties related to facing the realistic global threats and to the very idea of hope. From a psychotherapeutic point of view, the ability to tolerate these tensions appears to be crucial.

Relatedness. Among all other themes of existence, relatedness is most broadly manifest in climate change concerns. According to Spinelli's approach, relatedness is not only a theme of existence but also it is a more general principle pervading all other themes. This is also the case in our analysis. Relatedness to all other beings, including non-human beings and nature, is a common theme. The mere realization of the mutual co-dependence of humans and ecosystems is a pervading idea, but it can be threatening, too. To be dependent is to be fragile. The consequence of a massive planetary threat, such as the climate change, means that humans and nature share a common fate. The ambivalence in regard to relatedness (alternatively accepted and sometimes rejected by participants) testifies to the ongoing existential tension contained within this theme. On the practical level, accepting relatedness is expressed as solidarity and care. The choice between solidarity and conflict is crucial to addressing the climate change, both practically and emotionally.

> I wonder what will happen to society, will we act in solidarity with each other, or will it be even more difficult in some sort of class-society? (...) If we happen to be struck by some catastrophe, which in turn will unfold social consequences when people will not cooperate but fight over resources. What may happen then, how will life look? It could be a very difficult and brutal life, a life in which people won't be happy.

When referring to their daily life, however, participants bring out another aspect of relatedness. Their social isolation and solitude comes forth as a practical concern, in response to the climate change disavowal expressed by some members of their families or communities. As they choose to talk about it openly and to express anxiety, they sometimes feel isolated.

> I don't understand how people continue to act as if nothing is happening after this summer! It is maddening! I feel so alone (…).

Authenticity. Authenticity for Spinelli is strongly connected to the idea of accepting relatedness. Thus, self-realization is not something achieved at the cost of others or via separation. However, some participants develop a fantasy about sustaining a utopia or a safe

haven, in which they dwell isolated from others and the reality of the modern world. The

discrepancy between dream and reality is recurrent in the participants' narratives:

> I would like to live even further away from the city, have a larger garden and cultivate
> more crops, but that might also become a problem. We might become dependent on a car.
> I would not want that, either.

Ecological projects based on a retreat from society are also reported to collide with

everyday commitments such as the needs of children and other family members, sometimes

leading to a conflict within a family.

Freedom, Choice, and Responsibility. Spinelli (2015) posits that existential dimensions

of freedom, choice, and responsibility can be understood as a fundamental choice between

accepting or rejecting existential relatedness. One presented outcome is to exist in a way as to

experience oneself as indifferent and detached from all others; humans, non-humans, and nature.

Another outcome is to endorse oneself in relatedness and to do as much as possible to live right

by it--even if the steps involved do not offer much hope for an individual choice to ever initiate a

systemic change. However, this option is embraced by participants as both morally and

existentially sound. Again, the actuality of children is crucial to this resolution.

> The arrival of the kids made me realize that I am willing to walk through fire for their
> sake. The thought of them growing up in this deteriorating world is rather heavy.

Some participants also found, through the experience of climate anxiety, a gateway to

climate activism and collective action, which in turn helped them overcome fear. Climate

activism; i.e., working for local communities (classes for children, setting up shelters for insects,

joining ecologically-oriented organizations and political parties, and community outreach)

successfully lessened the degree of climate anxiety for several, but not all, participants.

> I have found an increased interest in active participation. Seeing that anxiety and
> depression often comes from destructive thoughts about oneself, I have found a way to
> become a better person through that, not only for myself but for my surroundings. If one

can manage to turn that (emotional distress) into something positive [smiles], then, sure, maybe there is a meaning in that.

Discussion

Participants' descriptions of their experiences adhere to the seven main existential themes: Meaning and Meaninglessness, Freedom and Responsibility, Authenticity and Inauthenticity, Isolation and Relatedness, Death Anxiety, Temporality, and Spatiality under the three vital existential principles of *existential relatedness*, *uncertainty*, and *anxiety*. Noteworthy, for this study, the lived experience of climate anxiety appears to refer in the greatest degree to the fundamental principle of *relatedness*. Specifically, the loss of, the lack of, or the longing for *relatedness* with others and the world is the recurring theme among all participants. As the climate is a common good (Paavola, 2011), its preservation needs collaboration of all. Thus, the importance of relatedness connects to the plethora of issues with cooperation, which are on many levels present in the efforts for the reduction of greenhouse gases emissions.

Another conclusion following from our study is that--in line with the existential approach--practitioners should not reduce climate anxiety, even if extreme or distressing, to individual pathology (Cunsolo & Ellis, 2018; Horwitz & Wakefield, 2007, Lertzman, 2015; Stockens, 2015). *Existential angst* is not only a tenet of existence but also serves as a signal of uncertainty and relational change (Spinelli, 2015). The experience of climate anxiety as a consequence of biological mass extinction and climate change (Ripple et al., 2020) may actually be a sign of integrity (Head, 2016). Indeed, the study by Verplanken & Roy (2013) finds no relationship between habitual ecological worrying and pathological worry; instead, climate worry correlates to openness to experience and pro-environmental behavior.

Further, climate anxiety underlines the magnitude of what is at stake and motivates a new form of cultural discourse to affect governmental policies (Bristow & Harkes, 2018, Butler, 2004). Collective experiences of emotions, including climate anxiety, grief, and worry, have a power to play a transformative role in a community (Butler, 2004). Therefore, it is essential to see the practice of psychotherapy as embedded in a social context. Persons who experience climate anxiety can be seen as signalers. They communicate to a society that the situation has reached a critical level and needs urgent action (Ripple et al, 2020). Kari Norgaard (2011) argues that enabling communication, including everyday conversations and emotional sharing, is crucial to climate action on all levels. In this study, some participants have overcome their emotional difficulties by undertaking various forms of ethical activism. Becoming active in the real world is an appropriate reaction to a realistic threat, and doing so on the collective level via collective action is a necessary reaction to a risk that cannot be solved by isolated individuals. Activism can be seen as a way to express connectedness and care, thus enforcing existential relatedness.

The problem of climate anxiety corresponds vividly to the contemporary debate about the role of psychotherapy in a modern world (Randall, 2005). There is an apparent dichotomy between psychotherapy, with its focus on individual solutions, and the need for collective/political transformative action, which is called for by structural problems (Kemkes & Akerman, 2019). In terms of climate emotions, anxiety and worry might be distressing for an individual, but on collective level these are desired emotions, valued for their power to signal, motivate action, and eventually facilitate a legal and environmental change. For example, Stockes (2015) observes that an act of bringing one's climate worries privately to a therapist prompts an impression that climate change anxiety is a taboo topic, not intended to be publicly discussed. As a result, psychotherapy smooths the way for the privatization of public problems. However, our results particularly in terms of the importance of relatedness, testify to the

contrary, and we wager that the notion of relatedness is a good starting point to resolve the apparent dualism between psychotherapy and collective level action. The participants of our study often experienced their individual developments within the psychotherapeutic process as enabling open communication about climate issues within their families and communities; they also often found themselves empowered enough to embrace direct action.

This study has several limitations. It was done in a relatively safe and affluent milieu of Sweden, a western European country with a high level of environmental awareness, where various environmental concerns are shared in society. Also, ecological information is broadly available to the general public and the practice of psychotherapy is common. The experiences of persons living in other cultures, especially more collective ones, facing economic challenges could be very different. Moreover, most participants were not religious and not practicing within any organized church communities. They also did not identify with any particular cultural background, apart from being part of general western and modern culture. The lived experience of existential concerns would be probably very different for persons who have more definite religious of cultural backgrounds and consider themselves embedded in communities and cultures that are more collective and traditional then the Swedish one. Such differences should be addressed in future studies. Also, the results emphasizing the positive side of activism should be seen with caution. In this study, activism was seen by some—but not all—participants as a way to overcome passivity, as well as an ethical endeavor contacting them to other people. However, many forms of activism, such as protest or direct action are also emotionally challenging. They pose a risk for those who would like to cope with difficult emotions by adding additional stress factors.

In terms of self-reflexivity, both authors of this study are psychologists with a strong interest in psychotherapy. The first author has a formal training and experience in integrative but mostly humanistic psychotherapy, while the second one was in her training at the time of the study. Our background in psychotherapy influences the way we see and interpret the results, and look for ways to understand them. We share an intention in this study that our results be helpful for practitioners in conducting psychotherapy and for general public in understanding climate emotions in their existential context. Instead of pushing them in the realm of psychopathology, these emotions need to be attended. We both also share a long-term concern and involvement for the future of the climate. Our personal engagement have been addressed within a peer-supervision and discussed at all the stages of conducting the study.

Following recommendations for practice can be cautiously inferred from this study. Practitioners can help their clients by including existential dimensions in psychotherapeutic conversation about climate change to normalize them. An existential choice between accepting and resisting the givens of existence, especially relatedness, can be crucial in dealing with climate change-related emotions. Strong concerns about climate problems can lead to isolation and helplessness. This is why overcoming isolation via relationships and community focus, as well as staying active in the face of realistic threat, might be essential. Our results agree with the recent recommendations for coping with climate-change-related stress–formulated by the Australian Psychological Society (APS, 2019). Authors of these recommendations come to similar conclusions based on different types of studies, including quantitative research and neuropsychology. These recommendations also emphasize that active coping strategies, community focus, and relatedness are crucial factors for contending with climate-change-related distress.

References

American Psychological Association. (2020). *Majority of US Adults Believe Climate Change Is Most Important Issue Today.* https://www.apa.org/news/press/releases/2020/02/climate-change.

American Psychological Association. (2009). *Psychology and global climate change: Addressing a multi-faceted phenomenon and set of challenges. A report of American Psychological Association Task Force on the Interface between Psychology and Global Climate Change.* http://www.apa.org/science/about/publications/climate-change.aspx.

Australian Psychological Society. (2019). *Coping with Climate Change Distress.* https://www.psychology.org.au/for-the-public/Psychology-topics/Climate-change-psychology/Coping-with-climate-change-distress.

Bateson, G. (1972). *Steps to ecology of mind.* New York: Ballantine.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2).

Brechin, S. R., & Bhandari, M. (2011). Perceptions of climate change worldwide. In *Wiley Interdisciplinary Reviews: Climate Change*, 2 (6).

Bristow, T., & Harkes, R. (2018). The New World Order: Anthropocene Anxiety, Climate Grief, Solastalgia. *Global Journal of Archaeology & Anthropology*, *5*(1).

Burke, M., González, F., Baylis, P., Heft-Neal, S., Baysan, C., Basu, S., & Hsiang, S. (2018). Higher temperatures increase suicide rates in the United States and Mexico. *Nature Climate Change, 8*(8), 723–729.

Butler, J. (2004). *Precarious life: the powers of mourning and violence.* London: Verso.

Clayton, S., Manning, C.M., Krygsman, K., Speiser, M. (2017). *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance.* Washington, D.C.: American Psychological Association, and ecoAmerica.

Clayton, S., Manning, C., & Hodge, C. (2014). *Beyond storms & droughts: The psychological impacts of climate change.* American Psychological Association and EcoAmerica.

Crutzen, P., J. (2006). The "Anthropocene". In: Ehlers E., Krafft T. (eds) *Earth System Science in the Anthropocene.* Berlin/Heidelberg: Springer.

Cunsolo, A., & Ellis, N. R. (2018). Ecological grief as a mental health response to climate change-related loss. *Nature Climate Change,* 8, 275 - 281.

Doherty, T. J., & Clayton, S. (2011). The Psychological Impacts of Global Climate Change. *American Psychologist*, *66*(4), 265–276.

Gifford, R. (2011). The Dragons of Inaction: Psychological Barriers That Limit Climate Change Mitigation and Adaptation. *American Psychologist*, *66*(4), 290–302.

Hamilton, C. (2017). *Defiant earth: The fate of humans in the Anthropocene*. John Wiley & Sons.

Head, L. (2016). *Hope and Grief in the Anthropocene: Re-conceptualizing human–nature relations*. London/New York: Routledge.

Horwitz, A. V., & Wakefield, J. C. (2007). *The loss of sadness: How psychiatry transformed normal sorrow into depressive disorder*. Oxford University Press.

IPCC. (2018). *Global Warming of 1.5° C: An IPCC Special Report on the Impacts of Global Warming of 1.5° C Above Pre-industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. Intergovernmental Panel on Climate Change. Available from: https://www.ipcc.ch/sr15/

Kemkes, R. J., & Akerman, S. (2019). Contending with the nature of climate change: Phenomenological interpretations from northern Wisconsin. *Emotion, Space and Society, 33,* 100614.

Lewis, J. (2018). In the room with climate anxiety, part 1. *Psychiatric Times*. 35(11):1-2.

Lertzman, R. (2015) *Environmental Melancholia: Psychoanalytic dimensions of engagement.* New York: Routledge.

Norgaard, K. M. (2011). *Living in denial: Climate change, emotions, and everyday life.* Cambridge, Mass.: MIT Press.

Paavola, J. (2012). Climate change: the ultimate tragedy of the commons? In: D. Cole & E. Ostrom (Eds.), *Property in land and other resources.* Lincoln Institute of Land Policy.

Randall, R. (2005). A new climate for psychotherapy? *Psychotherapy and Politics International*, *3*(3), 165–179.

Ripple, W. J., Wolf, C., Newsome, T. M., Barnard, P., & Moomaw, W. R. (2020). World Scientists' Warning of a Climate Emergency. *BioScience*, 70(1), 8-12.

Scott, B. G., & Weems, C. F. (2013). Natural Disasters and Existential Concerns: A Test of Tillich's Theory of Existential Anxiety. *Journal of Humanistic Psychology*, 53(1), 114-128.

Stoknes, P. E. (2015). *What we think about when we try not to think about global warming: Toward a new psychology of climate action.* Chelsea Green Publishing.

Spinelli, E. (2015). *Practicing Existential Therapy: The relational world*. London: SAGE.

Tillich, P. (1952). *The courage to be.* New Haven: Yale University Press.

Verplanken, B., & Roy, D. (2013). "My worries are rational, climate change is not": habitual ecological worrying is an adaptive response. *PloS one*, 8(9), e74708.

Watts, J. (2019). Greta Thunberg, schoolgirl climate change warrior: 'Some people can let things go. I can't'. *The Guardian*.

https://www.theguardian.com/world/2019/mar/11.

Weintrobe, S. (2012). The difficult problem of anxiety in thinking about climate change. In:

Weintrobe S. (Ed.) *Engaging with Climate Change: Psychoanalytic and Interdisciplinary*

Perspectives. London: Routledge.

WWF (2018). *WWF's klimatbarometer & Sifo-undersökning* [Data file]. Retrieved from

https://www.wwf.se/dokument/klimatbarometern-2018-sifo-undersokning/

Yalom I. (1980). *Existential Psychotherapy*. New York, NY: Basic Books.