

# **Mental distress caused by the climate crisis**

A qualitative study with recommendations of action for  
young adults

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## **Abstract**

**Introduction and aim:** The human made climate crisis is a threat to the physical and mental health of people. Research shows an increase in various mental distresses like climate-anxiety and depression, particularly in young people. Due to their development stage, this age group is vulnerable and therefore needs to be supported. This study aims to provide recommendations of action for young adults to mitigate or counteract mental distress caused by the climate crisis.

**Methods:** Five expert interviews with psychologists from Switzerland, Germany and England were conducted, as well as three semi-structured interviews with young adults. The interviews were transcribed and then coded using reflexive thematic content analysis.

**Results:** The analysis revealed ten recommendations of action. Hereby, *joint actions with others, therapy, hope and strengthening resilience* were identified to be most potent to mitigate mental distress in young people.

**Discussion:** It became obvious that measures to prevent mental distress caused by the climate crisis occur on the social and individual level. Social actions like *community building, activism* and *conversations* are beneficial to increase mental. Additionally, the importance of *setting boundaries* and *everyday activism* was proven to help best on a personal level. However, the small sample size and homogeneity of experts limit the transferability of the identified recommendations of action.

**Keywords:** mental distress, climate crisis, recommendations of action, qualitative study, young adults, expert interviews

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## **1 Introduction**

The first chapter presents the choice of topic and its relevance for health promotion and prevention. Next, the current situation is elaborated. Following, the thematic framework, as well as the research aim, and objective are explained. Finally, the content and structure of the thesis are displayed.

### **1.1 Choice of topic and relevance for health promotion and prevention**

The perception of the impacts of the climate crisis on future prospects is a threat for the mental health of young people worldwide, including Switzerland. Being active in climate strike communities, the negative effects of climate change on my mental health was an emerging and personal topic. As young people have a minor direct impact on politics and how they deal with the climate crisis, recommendations of action are needed to help them strengthening their mental health despite the frightening effects of global heating.

Promoting health and preventing sicknesses and diseases not only on the physical but also on the psychological level is crucial for every age. Particularly children and young people are vulnerable to mental health issues (see chapter 2). This is why it is important to support them during their development and ensure the access to care whenever necessary (World Health Organization (WHO), 2021).

One field of action described in the Ottawa-Charta for health promotion is “developing personal skills”. It wants to help people having more influence on their wellbeing and environment and enable them to change their daily live with the focus of increasing their health (World Health Organization (WHO), 1986). “Empowerment” is an important action strategy presented in the Ottawa Charta. Through “Empowerment” people are enabled to shape their social livelihood and life. Existing strengths are identified and increased, while new resources are supported (Brandes & Stark, 2021).

The aim of this work is to provide young people with recommendations of action that will enable them to develop their personal skills and put themselves in a position to help themselves to combat the psychological distress caused by the climate crisis.

### 1.2 Current situation

The climate is in constant change, this is a natural process. For example, volcanic eruptions lead to cooler temperatures, while strong solar cycles cause temperatures on earth to rise (Tolzmann, 2021). Since the 19th century, however, it has been evident that human activities are driving climate change additionally with enormous affecting consequences on all living beings and the entire ecology. The greenhouse gases in the atmosphere are increased by for example burning fossil fuels, world spanning mobility, and livestock farming. This leads to more hot days in summer and fewer frost days in the winter season as well as more extreme weather events (Bundesamt für Umwelt BAFU, 2022).

Besides the negative effects on nature, climate change is a threat for the health of humanity. Extreme weather events lead to an increase of sicknesses such as zoonoses, allergies and noncommunicable diseases. Wildfires, droughts and floodings cause injuries and a rise in mortality (World Health Organization (WHO), 2018). The World Health Organization (WHO) estimates 250'000 additional deaths per year between 2030 and 2050 as a result of the climate crisis (2018).

During the last few years, the psychological effects of global heating have been a widely discussed topic not only in media, but also in research. A systematic review published in 2020 by Cianconi et al. suggests a strong relationship between extreme weathers and mental disorders. Additionally, emotions of depression and hopelessness occur when humans are realizing the loss of plant and animal species (Cianconi et al., 2020). People that are experiencing "meteorosensitivity" and are therefore feeling the changes of weather more intensely in their body and mind, have an increased risk of developing specific diseases or an existing illness is becoming more severe. Possible mental health issues include headache, hypertension, anxiety and mood disorders (Mazza et al., 2012).

The long-term harm to the physical wellbeing related with global heating is increasingly reported. Despite the worldwide reportage of climate-related mental distress (Van Susteren & Al-Delaimy, 2020), studies about preventive measurements to mitigate the severity of mental distress are rare. Feelings and emotions associated with the climate crisis are fear, anger, hopelessness, sadness and worry (Frick & Gossen, 2022). Being fearful and worried about the impacts that the climate crisis will have on the future of humanity and the planet is called ecoanxiety or climate anxiety.

## Introduction

The American Psychological Association (APA) defines ecoanxiety as “A chronic fear of environmental doom.”(Clayton et al., 2017, p. 68). Although, no standardised definition exists, a literature review showed that this is the most used description of ecoanxiety (Coffey et al., 2021). In this paper, ecoanxiety, eco distress, climate anxiety, climate change anxiety are used interchangeably.

All the previously mentioned evidence imply that the climate crisis is a risk factor for humanity not only on the physical level, but also in regard to the mental health. For children and young people in particular, there is a risk that the quality of life will decline and mortality will increase due to global heating (Wu et al., 2020). A report from UNICEF used geographical data to survey how many children and young adults are vulnerable to environmental hazards, stresses, and shocks. Nearly half of the global population of children (1 billion) is at extreme high-risk exposure to the climate crisis and its effects. Children need to be protected because they are physically more prone to suffer from shocks resulting from floods, extreme weathers, droughts, or heatwaves. Moreover, their risk of dying from emerging diseases like malaria or dengue is higher compared to adults. Finally, their life only just started, and every deterioration of the environment has a long-lasting effect on their development and prosperity potential (United Nations Children’s Fund (UNICEF), 2021). The United Nations Children’s Fund (UNICEF) therefore declared that the climate crisis is a children’s rights crisis (2021).

Although, the impacts on mental health triggered by the global climate crisis in children and young people has been seldomly investigated, some studies show that it can significantly influence their wellbeing (Burke et al., 2018a; Clemens et al., 2022). It is expected that extreme weather and changes in socioeconomic factors favour the expansion of depressions, anxiety and post-traumatic stress disorders especially in children (Burke et al., 2018a; Cianconi et al., 2020).

Moreover, research showed that young people have a higher prevalence for developing climate anxiety than adults (Clayton, 2020; Searle & Gow, 2010). A quantitative study conducted in 2021 in 10 countries with 10’000 young people between 16-25 years investigated the emotions around ecoanxiety for the first time representatively and on a global level. The research revealed, that 60% of the participants felt “very” or “extremely” worried about global heating. With 45% of the participants mentioning that those feelings affect



their everyday lives in a negative way. 6734 of 10'000 (67.3%) young adults noted being afraid about the climate crisis and its effects (Hickman et al., 2021).

The climate emergency itself is a stressor for young people with the possible result of climate change anxiety. Since young adults are naturally at risk of developing and experiencing anxiety or depression due to their development stage (see chapter 2), it is crucial to enable them to mitigate or counteract mental distress caused by the climate crisis. However, research about interventions for young adults is scarce (Sanson et al., 2019). A selective literature search in preparation for this study found no recommendations of action or interventions tested on young people to prevent them from developing climate related distress or to support them while already being affected by ecoanxiety. However, the Australian Psychological Society released two information sheets for parents about how to raise children in a world that is changing because of global heating and how to discuss the climate emergency with children at different stages in their lives. They also offer ideas on what to do as a family to tackle the climate crisis and advice on how to respond to the children's feelings initiated by global heating (Burke et al., 2018c, 2018b). Specific scientific findings in this field are missing. This qualitative study aims to contribute to closing the research gap.

### **1.3 Thematic framework**

The following study is focusing on young people from countries of the Global North. Although extreme weather events are still influencing the daily life in high income countries less, research showed, that young adults are nevertheless at risk of developing mental distress caused by the climate crisis (Burke et al., 2018a; Clayton, 2020; Frick & Gossen, 2022; Hickman et al., 2021). The study excludes people from the Global South, as they are suffering from the direct effects and are threatened by existential problems. The research therefore spotlights on mental distress and differentiates itself from the direct physical impacts of the climate crisis such as heat related deaths.

### **1.4 Aim of the study**

The mental distress in young adults arising from the climate crisis as well as possible ways of preventing distress is under researched. By conducting expert interviews and interviews with young people as a comparison, this study aims to develop different recommendations of action to establish possible prevention methods.

### **1.5 Research objective**

The following question has been developed during the literature search to reach the aim of this work:

*What recommendations of action are valuable for young adults between 15-25 years to mitigate or counteract existing mental distress caused by the climate crisis?*

### **1.6 Preview of the content of the thesis**

This thesis is structurally divided into six chapters. Chapter 1 is devoted to the introduction, and Chapter 2 to the theoretical state of knowledge. Theoretical principles around the development of climate anxiety are explained. At the same time, it is shown why young adults are the focus of this work. Chapter 3 describes the methodological procedure. Building on this, Chapter 4 presents and summarises the results of the interviews. In Chapter 5, the results are critically discussed and related to findings in literature. It also points out limitations of the study. Chapter 6 describes conclusions and develops learnings for the professional field of health promotion and prevention.

### **2 Theoretical background**

This chapter explains the theoretical background of young people's high vulnerability to developing mental health problems. This is of utmost importance to develop valuable recommendations of action for young adults. It includes a deepening in the importance of mental health and resilience in light of the increasing burden of eco distress and trauma.

During adolescence, defined by the United Nations (United Nations Department of Economic and Social Affairs (UNDESA), 2013) as people between 15-25, several development tasks are happening which challenges the individuals and could be influencing their future. Important development tasks in this age are the decision about which education and job to pursue, finding a stable social network and a partner, dissolving, and maintaining the relationship to their parents, plus deciding whether to start a family on their own. This stage in life is therefore accompanied with choices that will impact the rest of the individual's life (Erikson, 2012; Freund & Nikitin, 2012).

Another major influence on the development of young adults are critical life events. These events are defined to be sudden experiences involving many emotions that could traumatise the individual. Possible critical life events in young adults are the realisation that the world is not a safe place (Brandtstädter & Lindenberger, 2007). Since the climate crisis is the biggest health threat in the 21<sup>st</sup> century (World Health Organization (WHO), 2018), it is one of the greatest challenges to the safety of the world. Therefore, the climate crisis strongly affects the health of young adults. Young people are facing high vulnerability to daily anxiety and the effects of stress, which can increase the risk for developing depression, substance misuse and permanent anxiety (Sheth et al., 2017).

The combination of development tasks, possible critical life events and the increasing threat of global heating can lead to the experience of climate anxiety (Sanson et al., 2019). Until now ecoanxiety is not classified in the ICD-11 (International Classification of Diseases 11th Revision) or DSM-5 (Diagnostic and Statistical Manual of Mental Disorders) as a mental health issue. Even though experts think that climate change anxiety could manifest similarly to other forms of anxiety, there is not enough research being done to know the range of possible symptoms. Allocating eco distress with a "V code" (problems which might need therapeutical treatment but are not necessarily classified as mental disorders)

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in the DSM could help patients. Firstly, by having a term for the phenomena they are experiencing, and secondly, it creates the basis to receive money for therapy from the health insurance (Rajalakshmi, 2022).

So far, climate anxiety does not classify as a psychiatric disorder, as it has for most people no significant effects on their daily life. However, it is a stressor, that could have negative long-term impacts on the mental health of individuals (Schwartz et al., 2022). Pathologizing ecoanxiety leads to the thought of it being treatable with psychotherapy. This individualises the issue and loosens it from the cause of the problem, the climate crisis, and the governmental inactivity (Climate Psychology Alliance, 2022; van Bronswijk, 2022). The Climate Psychology Alliance therefore recommends helping communities and individuals in building structures where people can share their experiences while being conscious of the effects of the climate crisis, rather than getting rid of the anxiety by medication or flee into denial (Climate Psychology Alliance, 2022). Bronswijk stated in her book that studies show different results about the impacts of ecoanxiety (2022). On one hand eco distress acts as a motivator, on the other hand it can lead to denial and is paralysing (van Bronswijk, 2022). To avoid this, it helps to know concretely what can be done (Sanson et al., 2019).

When capacity to act is limited, there is a risk of developing trauma on both the individual and population level. Traumas resulting from direct life-threatening events such as floods or fires can ruin one's capability to feel secure and lead to the experience of flashbacks and nightmares (Burke et al., 2018a). Traumas arising from climate anxiety are like complex traumas in which no traumatic event forms the initial situation. Merely experiencing the changing environment and unpredictability of the future can lead to the collective establishment of constant vigilance, which is one part of traumas (Climate Psychology Alliance, 2022). Such complex traumas are known to be passed on to subsequent generations (Cianconi et al., 2020). With more frequent extreme weather events, rising temperatures and sea levels many people, predominantly from the Global South, need to emigrate. This loss of home, culture, environment, and social surrounding increases the risk of developing climate trauma, particularly for children and young adults (Clayton et al., 2017; Fernandez et al., 2015).

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A protective element against the development of trauma is a good level of mental health. According to the Human Rights Council mental health is a human right (United Nations General Assembly, 1948). Mental health is a continuum, where one is never only seen as mentally ill or mentally well (World Health Organization (WHO), 2022). Mental health influences thought processes, feelings and the way people act. Mental health enables people to cope with stressors, thrive in a community, to work and learn successfully, as well as to build meaningful relationships. To prevent young people from developing climate anxiety or climate related traumas a stable level of mental health is crucial (Sanson et al., 2019).

One factor which is closely linked to mental health is resilience. Resilience is described as the successful adaptation to threatening experiences such as trauma, loss, or other stressors (Hobfoll et al., 2015). Meaning, that a person remains mentally healthy even though challenging circumstances occur (Rönnau-Böse & Fröhlich-Gildhoff, 2018). Being a resilient person, helps to cope with crisis generally. Including unforeseen or uncontrollable situations such as unemployment, war, pandemics, losses, but also the climate crisis (Fröhlich-Gildhoff & Rönnau-Böse, 2015). According to various psychological studies resilience is a skill that can be trained. The early stages of childhood are crucial for the ability to develop resilience. In those years resilience is attained through interaction with caregivers and successful coping experiences (Rönnau-Böse & Fröhlich-Gildhoff, 2018). The aim of building climate resilience is not only to mitigate the distress by global heating, but also to successfully adapt to the changes arising through warmer temperatures (Clayton, 2020; Sanson et al., 2019; van Bronswijk, 2022). In general, there are 14 strategies to specifically train climate resilience towards global heating. Among other measures acceptance, engagement, community building, boundary setting and self-care are seen as factors that increase resilience against mental distress caused by the climate crisis (Klar, 2020). Supporting people in the development of climate resilience is still a niche area, but an increasing number of climate crisis sensitive psychologists address this topic in groups or in individual therapy sessions (Climate Psychology International, 2021).

## Theoretical Background

As the climate emergency is a threat to the health of humanity in general, building climate resilience on a population level is necessary. Laying the focus on individual resilience building could be momentous. Seeing it as an individual task could lead to personalising the overall problem of global temperature rising and the necessary adaptation/mitigation to fight it. Collective resilience can be acquired through intersectoral partnerships between governments, non-governmental organisations, and international agencies. Moreover, minorities and indigenous people with their knowledge must be included to decrease structural inequality and reduce the absence of social cohesion. To achieve a climate-resilient world, significant changes to the functioning of society along with values, economic and political systems and social structures need to be made. Health for everybody improves by reducing inequities, injustices, and climate risks, additionally it restores humanities connection to nature (Pörtner et al., 2022).

### 3 Methods

In the following section, the method of this qualitative study will be explained. It includes the study design, the recruitment and description of the experts and young adults and the data preparation and analysis.

#### 3.1 Literature search

The literature search was carried out on one hand to sharpen the goal of the study and on the other hand to gain knowledge for writing the introduction and the theoretical background. A selective hand search was conducted using the reverse snowballing method (Wohlin, 2014). The starting point marked the quantitative study from Hickman et al. (2021).

#### 3.2 Ethics

According to the ethics checklist from the Zurich University of Applied Sciences (ZHAW) the performed type of research does not need ethical approval (see Appendix A). Additionally, it was researched if the project requires approval from the Cantonal Ethics Committee. According to the process scheme of the Cantonal Ethics Committee, qualitative research does not require permission (Kantonale Ethikkommission, n. d.).

#### 3.3 Study design

An explorative, qualitative approach was chosen to answer the research questions. A qualitative approach was chosen, because this study is based on the findings from the quantitative study from Hickman et al. (2021) that confirms in their study the high prevalence of mental distress in young people caused by global heating. Five qualitative interviews with experts (see chapter 3.4) were conducted. Additionally, three interviews with young adults were carried out, to gain a broader perspective on the mental distress experiences caused by the climate crisis (see chapter 3.5). Due to interviewing people from different European countries online meetings were chosen. The interviews lasted between 25-60 minutes.

To gather data on one hand expert interviews were picked as a study design. This is a frequently used method in empirical social research to efficiently obtain knowledge by means of suitable people (Meuser & Nagel, 2009). Regarding the inexistence of quantitative research data, expert interviews allow to identify the core problems and solutions through the viewpoint of different professionals (Meuser & Nagel, 2009).

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On the other hand, semi-structured interviews with the target population were conducted. Semi-structured interviews are used to collect a big amount of information in a structured way and allows the interviewees to openly talk about their experiences and feelings (Wildemuth, 2016).

A semi-structured guideline was the basis for all the interviews (see Appendix B). The guideline was first developed in German, then translated to English for the English-speaking experts. It includes an introduction to the topic and three questions regarding the relevance, impact, and long-term health consequences from mental distress attributable to global heating, as well as four questions concerning the recommendations of action. An adapted version of the guideline was developed for the interviews with the target population (see Appendix C). The version for young adults focused on their emotions and self-tested recommendations of action. The guideline was designed with open questions, stimulus questions were asked when necessary (Bortz et al., 2016). The last question was open for the participants to add anything regarding this topic that has not yet been part of the answers. According to the principle of data saturation, no new interviewees were searched, if no new insights were expected (Faulkner & Trotter, 2017). The interview was pre-tested with an independent person to check comprehensibility and time used for the questions. Based on the test, no adjustments were necessary.

### **3.4 Recruitment and description of experts**

Between November and December 2022 various possible experts were asked via e-mail to share their knowledge during an online interview. The experts were searched through the internet, on psychological websites and through private networks. The website “Psychologists 4 Future” (Psy4F) was the first source for experts. Two members from Germany and one from Switzerland could be recruited there. In total five people agreed to be interviewed in the study. The questionnaire was sent as preparation for the interview. Before the conversation the moderator pointed out, that the interviews will be recorded. Furthermore, it was asked if the interviewees agreed on having their answers shared in this study. Consent was obtained verbally. As publishing the experts’ names added no value to this study, the names were anonymised.



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The first expert (E1) is a psychotherapist that works in the southern part of Germany. She has her own practice for adults but is generally interested in how children and young adults cope with the climate crisis. Moreover, she is active in the network Psy4F. She is supporting climate activists, is organising discussion groups for people with mental health issues caused by global heating, as well as developing a self-support group which discusses topics such as climate emotions and sustainable activism.

The next expert (E2) is a lecturer in Social Work at the University of Bath (England). There, she teaches communication skills, counselling, attachment issues, child development and mental health. She has over 20 years of experience as a psychotherapist with children, young adults, and adults. In the last 10 years, her focus laid on research about the trauma because of the climate crisis in children and young people. Other than that, she works with youth activist groups, supports them, is developing a psycho-educational model to support young people around mental health issues and trauma related to global heating. She is also one of the main authors of the quantitative study about climate anxiety in children and young people (see chapter 1.2).

The third expert (E3) is a teacher working in a primary school in Switzerland, but she is also a psychologist with a specialisation in motivation-, socio and religion psychology. Furthermore, she has an education in trauma and is an activist for veganism. She is part of the Psy4F network and helps with her knowledge regarding motivation.

A psychotherapist working in Berlin was the fourth interviewed expert (E4). She studied psychology in Kiel (Germany) and did an education as a children and adolescent therapist. Now, she works as a research assistant at the Humboldt University Berlin and oversees a research project on feelings about climate in childhood and young adulthood. In addition, she is employed at the Charité Berlin and works as a psychotherapist with young people.

The last expert (E5) studied environmental and health psychology at the Carl von Ossietzky University (Germany), along with a minor in Landscape Ecology. He specialised in the potential of the environment to strengthen health including 'forest bathing' but also is an expert in the field of health promotion and its possibilities to reduce stress. He is the co-founder of Dialog-n, which conducts research projects and evaluations in the interface of people and environment and develops environmental communication concepts.

### **3.5 Recruitment and description of young adults**

For the interviews with the target population three young adults were asked to participate in an online interview. All of them agreed to answer the questions. They received the guideline for preparation. Ahead of the interviews, the interviewer asked if it is allowed to record the conversation for transcribing. It was assured that all the information will be handled with care and the interviews will be anonymized. Consent was obtained verbally.

Two participants are students. One young person (YA1) is studying in Germany in her 5<sup>th</sup> semester, she is 23 years old. The other student (YA2) is studying in Switzerland in his 5<sup>th</sup> semester. He is 24 years old. The third participant (YA3) is working as a coordinator for a non-governmental organisation. She is 25 years old.

### **3.6 Data preparation and analysis**

The qualitative data was transcribed verbatim in German or English using the Software MAXQDA 2022 and the recordings of the meetings. Hereby, the transcription rules for simple transcription according to Dresing & Pehl (2018) were adapted and used (see Appendix D). All anonymised transcripts can be found in Appendix E. The transcripts were sent back to the interviewees to get confirmation about the rightness of the data for further usage (Bortz et al., 2016).

The analysis was carried out using reflexive thematic content analysis according to Braun and Clarke (2022) with the analysing tool MAXQDA 2022. This method allows to identify, analyse and report themes within data and goes beyond that by interpreting the different aspects that are part of the research topic (Braun & Clarke, 2020). The six phases of the thematic analysis were followed (see Table 1).

## Methods

**Table 1**  
*Phases of thematic analysis*

Phase	Title of Phase	Content of Phase
1	Familiarising with data	Transcribing, reading and re-reading all the interviews, identifying first emerging topics
2	Generating codes	Coding all documents in a systematic way with codes and sometimes subcodes, code segments with all potential codes
3	Searching themes	Sorting codes into broader themes, thinking about relationship between themes/codes/different levels of themes
4	Reviewing themes	Investigate if themes work in relation to codes and full data set (reviewing and refining), recoding missed data within themes, generating a thematic map of analysis
5	Defining and naming themes	Analysis of specifics of each theme, finding coherent definitions and names for themes, exploring how theme fits into general story
6	Producing report	Selection of statements from themes which bring about the essence of each theme, relating themes to research question and literature, producing report for dissemination

*Note.* According to Braun and Clarke (2020), own design

All texts were read through, and a code system (see Figure 1) was created based on all the documents. Codes that appeared less than five times were omitted for clarity and relevance. The codes were then transferred into themes, which were defined and brought into relation with the quotes from the experts and the young adults. This process was repeated recursive, and the topics were condensed until all statements could be clearly assigned to a code.

**Figure 1**  
*Code system*

Code	Frequency
Codesystem	173
Recommendations of action	0
Emotion regulation	1
Being realistic	1
Trust	1
Compassion, humor	2
Therapy/Professional Help	9
Hope	9
Activism with others	23
Resiliency	5
Boundary setting	24
Conversations	22
Not talking	1
Everyday activism	20
Community building	24
Acceptance	12
Self-efficacy	11
Mindfulness	5
Gratitude	3

*Note.* own design

### 3.7 Criteria for qualitative research

According to Flick (2019) there is no generally valid criteria set for qualitative research. However, three main aspects have emerged and are seen as useful for this specific type of research: communicative validation, triangulation and transparency (Flick, 2019). These criteria are taken into account for the present study (see Table 2)

**Table 2**  
*Quality criteria for qualitative research*

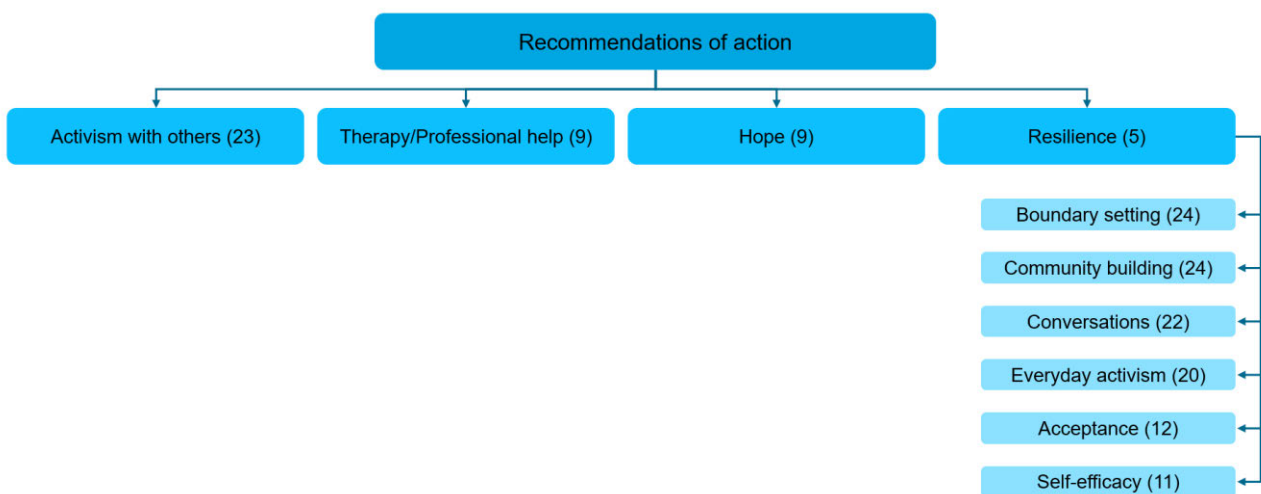
<b>Quality criteria</b>	<b>Consideration in paper</b>
Communicative validation	<ul style="list-style-type: none"> <li>• Member validation of transcript before analysis</li> <li>• Validation of interviews with young adults through expert interviews</li> <li>• Peer debriefing with supervisor</li> </ul>
Triangulation	<ul style="list-style-type: none"> <li>• Triangulation of methods through interviews with experts and young adults</li> <li>• Verification of results with literature</li> </ul>
Transparency	<ul style="list-style-type: none"> <li>• Accurate description of used method</li> <li>• Creating postscripts of interviews</li> <li>• Ensuring possible reproduction through truthful writing down of recruitment and interview guideline</li> </ul>

*Note.* According to Flick et al. (2019), own design

## 4 Results

The findings from the expert interviews and the ones from the young adults are presented. On the basis of five expert and three interviews with young adults and the coding process four themes were developed (see Figure 2). First, the themes are defined, then they are explained with the usage of quotes from the interviews.

**Figure 2**  
Overview of codes/themes



*Note.* The numbers in brackets indicate how often a code was mentioned, own design

### 4.1 Activism with others

Within *Activism with others* any joint action tackling the climate crisis are considered. This includes joining demonstrations from Climate strike, Fridays 4 Future (FFF), Extinction Rebellion (XR) or similar organisations. Furthermore, it is about being part of a network or group that discusses about how to raise awareness about the climate emergency. The focus lies not only on large scale political actions, but also small local activities.

Being active and taking actions with others as a team was mentioned very often by the experts and the young adults as being helpful to deal with the distress. Seeing others participating in actions increases the motivation and is a supporting factor not to lose hope. One expert stated that studies found a positive correlation between activism and the increase of self-efficacy.

## Results

[REDACTED]

[REDACTED]

Furthermore, it was mentioned by one young person that it needs everybody to combat global heating and having a community leads to a feeling of power.

[REDACTED]

### 4.2 Therapy/professional help

*Therapy or professional support* is defined as talking to climate crisis sensitive psychologists about the feelings related to global heating. This contains not only establishing structures and places where young people can talk with professionals and their concerns are taken seriously, for example at universities or education facilities. It also includes disseminating professional knowledge about mental health.

It is mentioned by one expert that only a few young people will need psychotherapy, much more important is education about self-strengthening and reflection.

[REDACTED]

### 4.3 Hope

*Being hopeful* and training to be hopeful was mentioned equally often as therapy. It contains the term of “radical hope” defined as accepting how the current stage is but wanting to play an active, connected, and brave role to develop solutions to the threat.

## Results

[REDACTED]

According to one expert, obtaining hope is reached through researching positive news and projects that were successful as well as seeing how many people are taking actions regarding a sustainable future. One young adult mentioned that she tries to stay hopeful to protect herself from insanity. She does not know how she maintains hopefully, but somehow believes in the good in people.

[REDACTED]

### 4.4 Resilience

In this study, *resilience* was identified as an overarching theme of six sub-themes, which are described in the following sub-chapters.

*Resilience* in general is understood as the ability to withstand challenges and recover fast from them. Sometimes, it is even seen as improving and growing from the resistance (see chapter 2). Regarding global heating, resilience is supposed to help dealing with the challenges not only on the physical, but also on the mental level.

The experts mention, that building emotional resilience forms a recommendation of action for young adults. In the United Kingdom a resilience project, which is led by young people, teaches other young adults how to improve their resilience. This is seen as beneficial for decreasing mental distress.

[REDACTED]

[REDACTED]

## Results

### 4.4.1 Boundary setting

*Setting boundaries* is defined as the ability to distance oneself from the constant worry about any threat such as the climate crisis and its impacts on humanity and the planet. This includes spending time doing things that are not related to fighting global heating and activities which are seen as relaxing. Moreover, it is about consuming negative news wisely and the skill to realize when rest or a break from activism is needed.

[REDACTED]

[REDACTED]

[REDACTED]

This recommendation of action was mentioned the most by experts, and all young adults referred to this capability as being useful. The point is to learn how to protect oneself from negative emotions accompanied with global heating. Further, it is about actively resisting to participate at every demonstration and thereby practicing self-care.

[REDACTED]

[REDACTED]

[REDACTED]

Another aspect of *boundary setting* is taking time for psych hygiene. This also means accepting to stop any activism from time to time. One expert said that building coping resources is important, thus realising what brings joy in live, finding ways to relax. Ideas are to start with a new hobby, go for a hike with friends, explore nature, experience fascination in a new area or to watch an interesting movie.

[REDACTED]

[REDACTED]



## Results

### 4.4.2 Community building

*Community building* is closely linked to the topic *activism with others* and *conversation* as it highlights the social aspect of the recommended actions. Building a community is seen as spending time with likeminded people, showing solidarity and creating a sense of unity. This then strengthens the trust that the climate crisis can be solved together and increases efficacy. The focus hereby lies on the community aspect and not the action.

[REDACTED]

[REDACTED]

It is mentioned by experts that through community building, positive emotions are generated, while normally negative emotions are the only emotions associated with global heating. Having a community means developing friendships, where one is accepted with all the feelings accompanying them. It is about building partnerships with people from different sectors, supporting each other and ultimately joining forces to achieve the best possible outcome.

[REDACTED]

[REDACTED]

Another strength of *community building* is that knowledge is being shared with people who would usually not have access to it, leading to a spread and increase of awareness about the climate emergency and ultimately more activism.

[REDACTED]

[REDACTED]

### 4.4.3 Conversations

The topic of *conversations* is defined as all types of talks, be it to a good friend, a group of likeminded people, a psychotherapist, family, or during school/university lessons. For a conversation to happen, an occasion, a person willing to listen and time is required. In addition to the difficulty of talking about feelings related to the ecological crisis, it is even more difficult to perceive, admit and acknowledge them at all. Getting the impression that these emotions are wrong or inappropriate, makes it hard to open oneself up.

## Results

[REDACTED]

However, once a person or group has been found to whom the feelings can be shared without judgement, it is seen as a benefit. This leads to the experience of not being left alone with these emotions, sentiments and anxieties, creates togetherness and shows young adults that their feelings are being taken seriously.

[REDACTED]

Moreover, advice and ideas how others deal with worries about the climate crisis can be adapted to oneself. Various experts mentioned the advantage of climate-cafes. These are conversation groups where climate feelings can be shared with other affected people.

[REDACTED]

#### 4.4.4 Everyday activism

*Everyday activism* comprises all individually influenceable actions that are environmentally friendly and thus contribute to reducing personal CO<sub>2</sub>-emissions. *Everyday activism* is distinguished from *activism with others*, as this are individual actions to address measurements to prevent global heating. Individual actions are also closely linked to *self-efficacy*, as most actions regarding a reduction of CO<sub>2</sub>-emissions raise the feeling of being able to change the outcome of the climate crisis, even if it is just on a small scale.

## Results

Experts stated different options about *everyday activism* such as publishing letters in the newspaper, eating vegetarian/vegan, forego flying, lobbying family or policy makers, informing oneself and expanding one's knowledge. Most of all it is crucial to see the positive aspects of a sustainable lifestyle rather than it being a waiver.

[REDACTED]

[REDACTED]

This action is especially beneficial because it shows that everybody can be part of the solution without being dependent on the decisions of politicians and major global corporates. This also prevents young adults from feeling guilty about their privileged position.

[REDACTED]

[REDACTED]

[REDACTED]

In doing so, one young adult pointed out that one should start with the smallest and most concrete step that is within one's power to get one step closer to the vision of a world that is sustainable enough for humanity to survive.

[REDACTED]

[REDACTED]

### 4.4.5 Acceptance

The topic *acceptance* summarizes the ability to acknowledge a situation as it is. One of the main aspects is not to endure or tolerate it, but to assume its own responsibility and limit in the whole process. Accepting the state of the earth helps focussing on the individual's possibilities and puts the seemingly insurmountable hurdles on the global level into perspective.

[REDACTED]

[REDACTED]

This theme includes *radical acceptance*, which was stated by various experts as being beneficial. *Radical acceptance* means accepting the current state of something that is out of one's control and do that without judgement. It suggests being sensitive about the feelings, but not allowing the pain to turn into suffering.

## Results

Transferring this to the climate crisis implies reflecting on whether one is allowing themselves to feel worse than necessary and if there is a better solution than falling into suffering.

The interviews showed that accepting the climate crisis and its effects can lead to a reduction of the level of distress in young adults. Additionally, it gives the possibility to adapt to the new circumstances. Experts state that it is not only about accepting global heating, but also the feelings associated with the threat, allowing them, and giving them space.

[REDACTED]

Feeling mentally distressed because of the climate crisis is a normal reaction. Accepting the distress, the emotions connected to it, and allow them to take up space is necessary to prevent desperation. This includes feeling like sadness, anger, left alone, sleepless, restless, worry, but also shame.

[REDACTED]

### 4.4.6 Self-efficacy

*Self-efficacy* refers to feeling that the individual's action is part of the solution. It includes *everyday activism* and is linked to *activism with others*.

Increasing self-efficacy is stated as not merely a great recommendation of action to mitigate mental distress triggered by the ecological crisis, but also seen as a resource in general. It is particularly essential because young people experience powerlessness to decisions regarding the climate emergency.

[REDACTED]

## Results

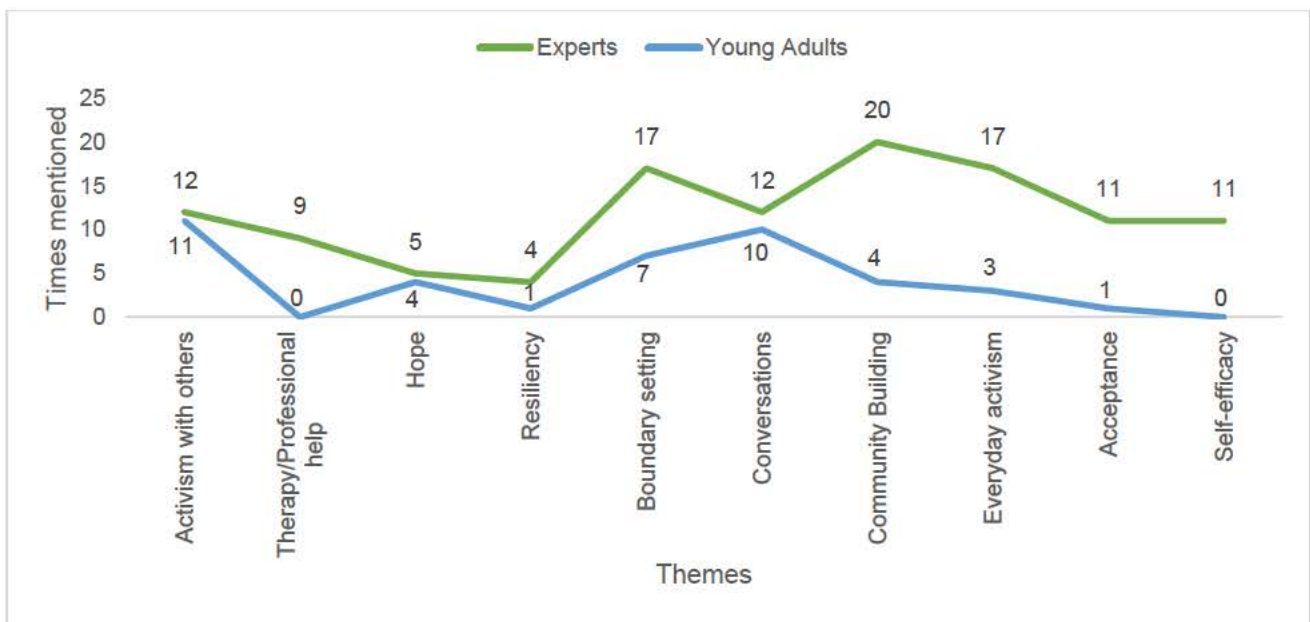
An expert said that sociopsychological research proved the importance of self-efficacy to experience well-being and putting plans into action.

### 4.5 Differences between experts and young adults

In some cases, large differences were observed between the topics and their frequency mentioned by experts and young adults. Whereas *activism with others* and *hope* was stated nearly equally by both groups, *community building* and *everyday activism* showed big disparities between the two interviewed groups. Both, *community building* and *everyday activism* were mentioned far more often by experts than by the young adults. Additionally, *self-efficacy* and *therapy/professional help* was mentioned much by the experts, none of the young adults cited those two themes (see Figure 3).

**Figure 3**

*Difference in naming the codes/topics between experts and young adults*



Note. According to MAXQDA 2022 profile comparison chart, own design

### 5 Discussion

In the discussion, the most important results based on the research question are summarised, compared, reflected, and related to the general scientific knowledge. Furthermore, limitations and strengths of the presented study are reviewed.

#### 5.1 Summary of main findings

Five interviews with climate crisis sensitive psychologists were conducted for the purpose of developing recommendations of action for young adults to mitigate or counteract mental distress caused by the climate crisis. These interviews indicate the importance of *building a community* and *setting boundaries* as well as *being active with others*. *Everyday activism* on an individual basis is considered almost equally meaningful as finding understanding people with whom one can *talk about emotions* and experiences can be exchanged. *Accepting* the state of the earth and mainstream politics regarding global heating and therefore focussing on increasing *self-efficacy* through small but concrete actions are seen as other important measures to decrease mental distress.

Three semi-structured interviews with young adults highlight that joining in in *collective actions*, having the option to openly *discuss feelings* related to global heating and *taking a break* influence the mental health state positively.

#### 5.2 Answering the research question: Recommendations of action

In the following subchapters the research question of this thesis will be addressed. For this purpose, the recommendations of action are divided into the social and the individual level. Actions on the individual level that emerged from the interviews include building *resilience*, seeking help through *therapy*, along with increasing *self-efficacy*, which is closely connected to *everyday activism*. On a social level *activism*, building *community* and *conversations* are essential.

## Discussion

### 5.2.1 Individual level

A well-known concept to raise mental health is paying attention to resilience. All experts and young adults referred in their interviews to resilience in general or factors of it. Various studies underline the power of individual and collective resilience to withstand the increasingly frequent extreme weather conditions and its associated mental distress (Clayton et al., 2021; Frick & Gossen, 2022; Sanson et al., 2019)

One factor for building resilience is acceptance of the disturbance or threat. Hence, the acceptance of the threats caused by the climate crisis and that individuals can only have a small impact on mitigating it by reducing their carbon footprint. It is known that 1% of the world's population is responsible for 15% of total CO<sub>2</sub> emissions (Gore, 2020), which makes it hard to believe in the impact of individual actions (Sanson et al., 2019). This could be one reason why acceptance was mentioned by experts rather often, but only by one young adult. Being mindful through for example meditation helps to develop non-judgmental awareness of the present moment (Klar, 2020). Enjoying small successes and maintaining self-efficacy and hope through small and concrete goals in order to achieve the visualised aspired world are recommended actions (Bandura, 1997; Snyder et al., 2002). By individual actions optimally others will be inspired to minimise their CO<sub>2</sub> emissions and join existing global climate movements. This initially helps to improve personal resilience and in the long term prevents climate anxiety from affecting daily life.

The interviews indicated that finding distance from the predominantly negative feelings about the climate crisis plays an important role in mitigating mental distress. This result builds on existing evidence of Frick and Gossen (2022), who interviewed young activists. They discovered that not only setting boundaries about own activities, but also consciously leaving a place which is closely associated with engagement helps to improve mental health (Frick & Gossen, 2022). The statements of the young adults who were interviewed are consistent with these findings. They confirmed that reducing the amount of time spent on activism can prevent mental overload. Nevertheless, it is important not to fall into denial and thereby become inactive. A healthy balance between activism and pause is crucial (Van Susteren & Al-Delaimy, 2020). Additionally, finding ways to connect with nature is another powerful method to increase mental health. As several experts stated, taking a walk in the forest, or going on a hiking trip is one form of psych hygiene and self-care.

## Discussion

This is in line with the findings of Roberts et al. (2020), who demonstrated that time in nature significantly reduces stress levels and increases wellbeing in general.

As stated in the theoretical background (see Chapter 2), the discussion whether climate anxiety needs a clinical classification is controversial. The interviewed psychologists agreed that professional help is required if a person is affected by mental distress in a negative way on a daily basis. This goes hand in hand with the recommendations from Raile and Rieken (2021), who stated that therapy is solely necessary when the quality of life is highly affected and one is not able to improve their mental wellbeing oneself. Although finding climate crisis sensitive psychologists proves to be difficult, it is seen as particularly beneficial (Raile & Rieken, 2021). The counselling services of Psy4F, which also offer group sessions, are especially recommended.

A mixed-methods study conducted in the United States surprisingly found only a small buffering effect of individual actions on the psychological distress triggered by global heating (Schwartz et al., 2022). As the study by Schwartz et al. (2022) examined people between 18 and 35 years of age, this could explain the different perspectives (experts vs. young adults) on recommendations for action. Whilst the interviewed experts in this paper weighted everyday activism and self-efficacy as effective recommendations of action, young adults seldomly used those terms to describe supportive measurements. It is assumed that the discrepancy between the answers of the young people and the experts is due to the fact that the young adults implement recommendations of action in these areas, but do not explicitly mention them.

### 5.2.2 Social level

Taking part in collective actions is seen as a protector from mental distress and climate anxiety. This analysis supports the theory, that such actions decrease feelings of helplessness and fear, while simultaneously increase hope and connection with others (Raile & Rieken, 2021). Hope has been found to be a catalyst for environmentally friendly action (collectively and individually) (Ojala, 2012), which in turn strengthens mental health (Frick & Gossen, 2022). Although everyday activism might be beneficial to increase self-efficacy, community activism includes the social aspect which conclusively raises the wellbeing on a broader scale (Lorimer et al., 2022).



## Discussion

Klar and Kasser (2009) discovered that activism leads to a significantly higher level of vitality compared to non-activists. Furthermore, interviews with students who participate in school strikes showed that activism helps to reduce ecoanxiety and transform it into courage, optimism, and determination. Participation in such demonstrations promote learning of valuable developmental skills that are useful throughout life (Sanson et al., 2019).

Sanson et al. (2019) stated in their paper, that increasing self, but also collective efficacy is crucial to promote mental health of young people. Other researchers argued that joint activities support the belief that together change can be achieved. This impression is effective and gives the feeling of a sustainable living (Raile & Rieken, 2021). These results are consistent with both the expert interviews and the interviews with the young adults. Joining for example a global climate strike and knowing that thousands of others are demonstrating in their own countries as well, enhances a feeling of power and togetherness. Feeling how many people are active in the climate movement can be a source of pride (Frick & Gossen, 2022). Although research results indicate that activism mostly works as a buffer for mental distress and climate anxiety (Schwartz et al., 2022), it is essential to have a social support system that can absorb the various impressions and emotions as well as assists in handling them (Frick & Gossen, 2022).

Talking to people who deny the climate crisis or do not take it seriously has a negative impact on the well-being of persons who care about global heating (Hickman et al., 2021). In contrast, sharing emotions and concerns about the climate crisis with people familiar with the climate change movement, is seen as a relief. This is recognised as another positive aspect of being an active participant in “Friday 4 Future” demonstrations. At such actions energetic people are present who share concerns about the future of the planet. Thus, it often results in inspiring each other and provides energy to continue to engage for sustainable life styles (Frick & Gossen, 2022).

Dominant feelings regarding the mental distress are isolation and loneliness, accompanied by acquaintances that cannot relate to those emotions. These can be reduced, as mentioned by several experts, in attending climate cafés, forming discussion groups, and regularly exchanging ideas with other affected people. Or as van Bronswijk (2022) described it in her book: simply sharing one's fears with a trusted person can lead to a reduction in mental distress.

### **5.3 Theory-practice transfer**

The next step is to disseminate the recommendations of action that have been identified in the interviews. For this purpose, a handout with the summarised recommendations was prepared (see Figure 4). It is designed to be attractive to the target group. Thereby, the knowledge how to cope with mental distress caused by concerns and fear about global heating can be shared. It shall inform concerned young adults about measures to mitigate or counteract mental distress caused by the climate crisis. The flyer can be distributed to multipliers as well as directly to young people or be shared via social media.

**Figure 4**  
Handout recommendations of action

*Are you concerned about the effects of the climate crisis on your future?*

**RECOMMENDATIONS OF ACTION FOR YOUNG ADULTS BETWEEN 15-25 YEARS**

This paper summarises the most important recommendations of action and gives concrete advices on how to improve your mental health state caused by the climate crisis.

**ACTIONS IN GROUPS**

**Activism with others**



**Climate action now!**

Join a global or regional movement e.g. fridays4future, extinction rebellion, climate strike, sunrise movement.

**Community building**



Find and connect with likeminded people who you can connect with. They will support you when having a hard time. Together you are stronger.

**Conversations**

*LET'S TALK IT OUT*



Talk to family, friends, teachers, therapist or activists about your concerns regarding the climate crisis and your mental health state. Opening up might be hard at first, but rewarding in the long run.

**ACTIONS ON YOUR OWN**

**Resilience**

**Acceptance**



Allow all feelings associated with the climate crisis and its mental distress. Give them space.

**Self-efficacy**



Start with the smallest step possible into the direction of your vision of the world.

**Everyday activism**



Get active & change your habits regarding mobility, nutrition, consumerism, activism.

**Boundary setting**



Schedule time for things that nurture you. E.g. sports, reading, watching a movie.

**Hope**



Remain hopeful and try to play an active and brave role in the solution. Search for successful actions and projects to motivate you.

**Therapy/professional help**




Search for climate-sensitive psychologists to talk about your feelings with an expert. E.g. [www.climatepsychologyinternational.org](http://www.climatepsychologyinternational.org)

**QUESTIONS?**

**REFERENCES**

All used references can be found in the thesis from Moira Trüb with the title: "Mental distress caused by the climate crisis - A qualitative study with recommendations of action for young adults"

Note. own design

## Discussion

### 5.4 Limitations and strengths

Evidence based recommendations of action to mitigate or counteract existing mental distress caused by the climate crisis for young adults are up to date non-existing. For this paper, scientific studies which examined or discovered helpful resources for young people were combined with findings from interviews with psychologists and young adults. However, neither the experts nor the studies read presented any tested and effective recommendations of action for young adults aged 15-25. Nevertheless, important indications were collected in order to work out concrete measurements in a next step and to test them with the target group.

Generally, the sample size was not diverse and large enough to represent knowledge from the wide field of climate crisis sensitive psychology. In addition, the transferability is limited by the geographical location of the experts/participants. The results can only be transferred to people between 15-25 years living predominantly in high income countries across Northern Europe. When transferring the results to other nations, regional differences such as culture, right to demonstrate, political system and possible tabooing of mental illness must be regarded. Only one male person was among the interviewed experts. Thus, it is difficult to draw conclusions about gender differences. Although the care teams from Extinction Rebellion, Climate strike and Greenpeace Switzerland were contacted for an interview none of them replied. This led to a more homogenic sample. Further, only two psychotherapists stated to have experience with patients with symptoms belonging to climate anxiety. One expert has specialised in the field of climate crisis sensitive psychotherapy but has so far only applied it through the network Psy4F. The other experts are not psychotherapists and therefore could not argue with insights from working with young adults.

Another limitation of this study is the subjectivity of the researcher and its possible bias during execution and analysis of the interviews. The researcher has personally experienced climate anxiety, which may have led her to prioritise those recommendations of action that helped her.

Despite those limitations qualitative expert interviews provided valuable insights into the new field of recommendations of action for young adults to decrease the mental distress arising from the climate emergency. Including interviews with young people ensured a comparison between the experts' opinion and that of the target population.

### **6 Conclusion**

The climate crisis poses a global threat to the mental health of everyone, with young people being more vulnerable and increasingly exposed to these threats. Supporting them with effective recommendations of action to counteract or mitigate existing mental distress is crucial. Therefore, further studies should test the effectiveness of the recommendations of action that were identified.

Furthermore, professionals in the field of health promotion and prevention are called to take action through focussing on this topic with the preparation and dissemination of knowledge, measures, as well as the provision of exchange experience forums on mental distress caused by the climate crisis. The connection between the climate crisis and health must become an integral part of the curriculum of health promotion and prevention. This enables future health promoters to address climate crisis triggered mental distress in settings such as schools or universities, but also in the work environment. This will also raise the importance of this threat in the health sector and bring it to the attention of the public.

Recommendations of action for young adults shall be examined thoroughly and disseminated with the help of multipliers. This will de-taboo the topic and young people are supported to acquire the necessary skills to help themselves to cope with mental distress caused by the climate crisis. Health promoters therefore play a crucial role in putting this issue on the political agenda and can thus make a lasting contribution to supporting young people in strengthening their mental health.

## 7 References

### 7.1 Literature reference

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman/Times Books/  
Henry Holt & Co.

Bortz, J., Döring, N., Pöschl, S., Werner, C. S., Schermelleh-Engel, K., Gerhard, C., &  
Gäde, J. C. (2016). *Forschungsmethoden und Evaluation in den Sozial- und Hu-  
manwissenschaften*. Springer. <https://doi.org/10.1007/978-3-642-41089-5>

Brandes, S., & Stark, W. (2021). *Empowerment/Befähigung*.  
<https://doi.org/10.17623/BZGA:Q4-I010-2.0>

Brandtstädter, J., & Lindenberger, U. (2007). *Entwicklungspsychologie der Lebensspanne:  
Ein Lehrbuch*. Kohlhammer.

Braun, V., & Clarke, V. (2020). One size fits all? What counts as quality practice in (reflex-  
ive) thematic analysis? *Qualitative Research in Psychology*, 18(3).  
<https://doi.org/10.1080/14780887.2020.1769238>

Braun, V., & Clarke, V. (2022). *Thematic Analysis: A Practical Guide*. SAGE Publications.

Bundesamt für Umwelt BAFU. (2022). *Klima: Das Wichtigste in Kürze*.  
[https://www.bafu.admin.ch/bafu/de/home/themen/thema-klima/klima--das-wich-  
tigste-in-kuerze.html](https://www.bafu.admin.ch/bafu/de/home/themen/thema-klima/klima--das-wichtigste-in-kuerze.html)

Burke, S., Sanson, A. V., & Van Hoorn, J. (2018a). The Psychological Effects of Climate  
Change on Children. *Current Psychiatry Reports*, 20(5).  
<https://doi.org/10.1007/s11920-018-0896-9>

Burke, S., Sanson, A., & Van Hoorn, J. (2018b). *A guide for parents about the climate cri-  
sis*. Australian Psychological Society. [https://psychology.org.au/getmedia/f7d0974d-  
4424-4d60-a7eb-cfa0431b6860/parents-guide-climate-crisis.pdf](https://psychology.org.au/getmedia/f7d0974d-4424-4d60-a7eb-cfa0431b6860/parents-guide-climate-crisis.pdf)

## References

- Burke, S., Sanson, A., & Van Hoorn, J. (2018c). *Raising children to thrive in a climate changed world*. Australian Psychological Society. <https://psychology.org.au/get-media/e8cda6ca-ecfe-42c7-8538-492950bac8ba/raising-children-climate.pdf>
- Cianconi, P., Betrò, S., & Janiri, L. (2020). The Impact of Climate Change on Mental Health: A Systematic Descriptive Review. *Frontiers in Psychiatry, 11*. <https://doi.org/doi: 10.3389/fpsy.2020.00074>
- Clayton, S. (2020). Climate anxiety: Psychological responses to climate change. *Journal of Anxiety Disorders, 74*. <https://doi.org/10.1016/j.janxdis.2020.102263>
- Clayton, S., Manning, C. M., Krygsman, K., & Speiser, M. (2017). *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance*. American Psychological Association and ecoAmerica. <https://doi.org/10.1037/e503122017-001>
- Clayton, S., Manning, C. M., Speiser, M., & Hill, A. N. (2021). *Mental Health and our Changing Climate: Impacts, Inequities, Responses*. American Psychological Association and ecoAmerica. <https://www.apa.org/news/press/releases/mental-health-climate-change.pdf>
- Clemens, V., von Hirschhausen, E., & Fegert, J. M. (2022). Report of the intergovernmental panel on climate change: Implications for the mental health policy of children and adolescents in Europe—a scoping review. *European Child & Adolescent Psychiatry, 31*(5). <https://doi.org/10.1007/s00787-020-01615-3>
- Climate Psychology Alliance. (2022). *Handbook of Climate Psychology*. Climate Psychology Alliance. <https://www.climatepsychologyalliance.org/images/files/handbookofclimatepsychology.pdf>
- Climate Psychology International. (2021). *Climate Psychology International—Existing groups*. [https://climatepsychologyinternational.org/participate/groups?layout=\\*](https://climatepsychologyinternational.org/participate/groups?layout=*)

## References

- Coffey, Y., Bhullar, N., Durkin, J., Islam, M. S., & Usher, K. (2021). Understanding Eco-anxiety: A Systematic Scoping Review of Current Literature and Identified Knowledge Gaps. *The Journal of Climate Change and Health*, 3. <https://doi.org/10.1016/j.joclim.2021.100047>
- Dresing, T., & Pehl, T. (2018). *Praxisbuch Interview, Transkription & Analyse: Anleitungen und Regelsysteme für qualitativ Forschende* (8. Edition). Eigenverlag.
- Erikson, E. (2012). *Der vollständige Lebenszyklus* (8. Edition). Suhrkamp.
- Faulkner, S. L., & Trotter, S. P. (2017). Data Saturation. In *The International Encyclopedia of Communication Research Methods*. John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118901731.iecrm0060>
- Fernandez, A., Black, J., Jones, M., Wilson, L., Salvador-Carulla, L., Astell-Burt, T., & Black, D. (2015). Flooding and mental health: A systematic mapping review. *PloS One*, 10(4). <https://doi.org/10.1371/journal.pone.0119929>
- Flick, U. (2019). Gütekriterien qualitativer Sozialforschung. In N. Baur & J. Blasius, *Handbuch Methoden der empirischen Sozialforschung* (pp. 473–488). Springer Fachmedien. [https://doi.org/10.1007/978-3-658-21308-4\\_33](https://doi.org/10.1007/978-3-658-21308-4_33)
- Freund, A. M., & Nikitin, J. (2012). Junges und mittleres Erwachsenenalter. In U. Lindenberg & W. Schneider, *Entwicklungspsychologie* (7.). Beltz Verlagsgruppe.
- Frick, V., & Gossen, M. (2022). Junge Menschen in der Klimakrise I Eine Untersuchung zu emotionaler Belastung, Bewältigungsstrategien und Unterstützungsangeboten im Kontext von Klimawandel und Umweltproblemen in der Studie 'Zukunft? Jugend fragen! 2021'. *Institut für ökologische Wirtschaftsforschung (IÖW) Berlin*.
- Fröhlich-Gildhoff, K., & Rönau-Böse, M. (2015). *Resilienz*. Ernst Reinhardt Verlag. <https://elibrary.utb.de/doi/epdf/10.36198/9783838536132>



## References

- Gore, T. (2020). *Confronting Carbon Inequality: Putting climate justice at the heart of the COVID-19 recovery*. Oxfam.
- Hickman, C., Marks, E., Pihkala, P., Clayton, S., Lewandowski, R. E., Mayall, E. E., Wray, B., Mellor, C., & van Susteren, L. (2021). Climate anxiety in children and young people and their beliefs about government responses to climate change: A global survey. *The Lancet Planetary Health*, 5(12). [https://doi.org/10.1016/S2542-5196\(21\)00278-3](https://doi.org/10.1016/S2542-5196(21)00278-3)
- Hobfoll, S. E., Stevens, N. R., & Zalta, A. K. (2015). Expanding the Science of Resilience: Conserving Resources in the Aid of Adaptation. *Psychological Inquiry*, 26(2). <https://doi.org/10.1080/1047840X.2015.1002377>
- Kantonale Ethikkommission. (n. d.). *Zuständigkeit der Kantonalen Ethikkommission*. Kanton Zürich. <https://www.zh.ch/de/gesundheit/ethik-humanforschung/zustaendigkeit-kantonale-ethikkommission.html>
- Klar, M. (2020). *Klima-Resilienz fördern: 14 Strategien zum emotionalen Umgang mit der Klimakrise*. Psychologists 4 Future. [https://www.psychologistsforfuture.org/wp-content/uploads/2020/04/20-04\\_Psy4F-Klimaresilienz-14-Strategien-13.1.2020.pdf](https://www.psychologistsforfuture.org/wp-content/uploads/2020/04/20-04_Psy4F-Klimaresilienz-14-Strategien-13.1.2020.pdf)
- Klar, M., & Kasser, T. (2009). Some Benefits of Being an Activist: Measuring Activism and Its Role in Psychological Well-Being. *Political Psychology*, 30(5). <https://doi.org/10.1111/j.1467-9221.2009.00724.x>
- Lorimer, K., Knight, R., & Shoveller, J. (2022). Improving the health and social wellbeing of young people: Exploring the potential of and for collective agency. *Critical Public Health*, 32(2). <https://doi.org/10.1080/09581596.2020.1786501>
- Mazza, M., Di Nicola, M., Catalano, V., Callea, A., Martinotti, G., Harnic, D., Bruschi, A., Battaglia, C., & Janiri, L. (2012). Description and validation of a questionnaire for

## References

- the detection of meteoropathy and meteorosensitivity: The METEO-Q. *Comprehensive Psychiatry*, 53(1). <https://doi.org/10.1016/j.comppsy.2011.02.002>
- Meuser, M., & Nagel, U. (2009). Das Experteninterview—Konzeptionelle Grundlagen und methodische Anlage. In S. Pickel, G. Pickel, H.-J. Lauth, & D. Jahn (Eds.), *Methoden der vergleichenden Politik- und Sozialwissenschaft: Neue Entwicklungen und Anwendungen* (pp. 465–479). VS Verlag für Sozialwissenschaften.  
[https://doi.org/10.1007/978-3-531-91826-6\\_23](https://doi.org/10.1007/978-3-531-91826-6_23)
- Ojala, M. (2012). Hope and climate change: The importance of hope for environmental engagement among young people. *Environmental Education Research*, 18(5).  
<https://doi.org/10.1080/13504622.2011.637157>
- Pörtner, H.-O., Roberts, D. C., Tignor, M. M. B., Poloczanska, E. S., Mintenbeck, K., Alegría, A., Craig, M., Langsdorf, S., Löschke, S., Möller, V., Okem, A., & Rama, B. (2022). *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*.
- Raile, P., & Rieken, B. (2021). *Eco Anxiety – die Angst vor dem Klimawandel | Psychotherapiewissenschaft in Forschung, Profession und Kultur*. Waxmann.
- Rajalakshmi, N. (2022). Does ‘climate anxiety’ belong in the DSM? Scienceline.  
<https://scienceline.org/2022/03/does-climate-anxiety-belong-in-the-dsm/>
- Roberts, A., Hinds, J., & Camic, P. M. (2020). Nature activities and wellbeing in children and young people: A systematic literature review. *Journal of Adventure Education and Outdoor Learning*, 20(4). <https://doi.org/10.1080/14729679.2019.1660195>
- Rönnau-Böse, M., & Fröhlich-Gildhoff, K. (2018). Was ist Resilienz und wie kann sie gefördert werden? [https://doi.org/10.1007/978-3-658-24990-8\\_5](https://doi.org/10.1007/978-3-658-24990-8_5)

## References

- Sanson, A. V., Van Hoorn, J., & Burke, S. E. L. (2019). Responding to the Impacts of the Climate Crisis on Children and Youth. *Child Development Perspectives*, 13(4).  
<https://doi.org/10.1111/cdep.12342>
- Schwartz, S. E. O., Benoit, L., Clayton, S., Parnes, M. F., Swenson, L., & Lowe, S. R. (2022). Climate change anxiety and mental health: Environmental activism as buffer. *Current Psychology*. <https://doi.org/10.1007/s12144-022-02735-6>
- Searle, K., & Gow, K. (2010). Do concerns about climate change lead to distress? *International Journal of Climate Change Strategies and Management*, 2(4).  
<https://doi.org/10.1108/17568691011089891>
- Sheth, C., McGlade, E., & Yurgelun-Todd, D. (2017). Chronic Stress in Adolescents and Its Neurobiological and Psychopathological Consequences: An RDoC Perspective. *Chronic Stress (Thousand Oaks, Calif.)*, 1.  
<https://doi.org/10.1177/2470547017715645>
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2002). Hope theory: A member of the positive psychology family. In *Handbook of positive psychology* (pp. 257–276). Oxford University Press.
- Tolzmann, J. (2021). So funktioniert der natürliche Klimawandel. *quarks.de*.  
<https://www.quarks.de/umwelt/klimawandel/so-funktioniert-der-natuerliche-klimawandel/>
- United Nations Children's Fund (UNICEF). (2021). *The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index*. UNICEF. <https://www.unicef.org/media/105376/file/UNICEF-climate-crisis-child-rights-crisis.pdf>
- United Nations Department of Economic and Social Affairs (UNDESA). (2013). *Definition of Youth*. <https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf>

## References

- United Nations General Assembly. (1948). *Universal Declaration of Human Rights*. United Nations.
- van Bronswijk, K. (2022). *Klima im Kopf*. oekom Verlag.
- Van Susteren, L., & Al-Delaimy, W. K. (2020). Psychological Impacts of Climate Change and Recommendations. In W. K. Al-Delaimy, V. Ramanathan, & M. Sánchez Sorondo (Eds.), *Health of People, Health of Planet and Our Responsibility* (pp. 177–192). Springer International Publishing. [https://doi.org/10.1007/978-3-030-31125-4\\_14](https://doi.org/10.1007/978-3-030-31125-4_14)
- Wildemuth, B. M. (2016). *Applications of Social Research Methods to Questions in Information and Library Science, 2nd Edition*. ABC-CLIO.
- Wohlin, C. (2014, May 13). Guidelines for snowballing in systematic literature studies and a replication in software engineering. *Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering*. EASE '14: 18th International Conference on Evaluation and Assessment in Software Engineering, London England United Kingdom. <https://doi.org/10.1145/2601248.2601268>
- World Health Organization (WHO). (1986). *Ottawa-Charta zur Gesundheitsförderung*.
- World Health Organization (WHO). (2018). *COP24 special report: Health and climate change*. <https://www.who.int/publications-detail-redirect/9789241514972>
- World Health Organization (WHO). (2021). *Adolescent mental health*. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- World Health Organization (WHO). (2022). *World mental health report: Transforming mental health for all*. <https://www.who.int/publications-detail-redirect/9789240049338>
- Wu, J., Snell, G., & Samji, H. (2020). Climate anxiety in young people: A call to action. *The Lancet Planetary Health*, 4(10), 435–436. [https://doi.org/10.1016/S2542-5196\(20\)30223-0](https://doi.org/10.1016/S2542-5196(20)30223-0)

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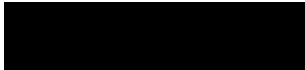
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## **8 Declaration of autonomy and word count**

"I hereby declare that I have written this thesis independently, without the assistance of third parties and using the sources indicated."

Signature



Word count of the abstract: 223

Word count of the Bachelor thesis: 9392

## 9 Appendix

### A. Checklist for the self-assessment of studies for ethical soundness

Diese Checkliste ist als Hilfe und Unterstützung gedacht, wenn Forschende an der ZHAW ihr Forschungsprojekt darauf beurteilen, ob es dazu ein Votum zur ethischen Unbedenklichkeit braucht. Sie kommt in ähnlicher Form an vielen anderen Schweizer Hochschulen zum Einsatz.

#### Stufe 1: Prüfung auf Notwendigkeit der Gutheissung eines Forschungsvorhabens durch externe Gremien

Nr.	Frage	Ja	Nein	Unklar
1.	Handelt es sich bei dem Forschungsvorhaben um eine klinische Studie?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Handelt es sich um ein Forschungsvorhaben zu Krankheiten oder Aufbau und Funktion des menschlichen Körpers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wird eine der Fragen eins oder zwei mit JA beantwortet, ist die Durchführung des Forschungsvorhabens von der Kantonalen Ethikkommission des Kantons Zürich ([KEK](#)) genehmigen zu lassen. Bei Unklarheit muss bei der KEK die Zuständigkeit abgeklärt werden (Zuständigkeitsabklärung).

Eine Ausnahme stellen Forschungsvorhaben dar, die bereits vorliegende anonymisierte oder anonyme gesundheitsbezogene Daten verwenden oder in denen gesundheitsbezogene Daten im Rahmen von Befragungen anonym erhoben werden. In diesem Fall muss das Forschungsvorhaben nicht von der KEK geprüft werden.

Nr.	Frage	Ja	Nein	Unklar
3.	Handelt es sich um ein Forschungsvorhaben, z. B. aus den Bereichen Forschung an und mit Tieren, Genetik oder genetische Forschung, das unter entsprechende gesetzliche Regelungen und Vorgaben einer ethischen Bewertung in Gremien ausserhalb der ZHAW fällt?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wird die Frage drei mit JA beantwortet, sind die entsprechenden Gremien zu kontaktieren, z. B. bei Bundesbehörden oder kantonalen Behörden zum Tierschutz, zur Aussetzung genetisch veränderter Pflanzen usw.

#### Stufe 2: Prüfung auf Notwendigkeit der Gutheissung eines Forschungsvorhabens durch den internen Ethikausschuss

Wenn das Forschungsvorhaben nicht von der KEK oder anderen übergeordneten Gremien genehmigt werden muss, dienen die folgenden Fragen dazu, zu beurteilen, ob eine Ethikprüfung beim Ethikausschuss an der ZHAW sinnvoll wäre.

Nr.	Frage	Ja	Nein	Unklar
4.	Besteht die Gefahr, dass Studienteilnehmenden durch ihr Verhalten in der Studie oder durch ihre Nichtteilnahme an der Studie Nachteile entstehen? Dies trifft z. B. zu, wenn Studienteilnehmende in einem Abhängigkeitsverhältnis zu Personen stehen, die Zugang zu personenbezogenen Daten aus dem Forschungsvorhaben haben.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix

Nr.	Frage	Ja	Nein	Unklar
5.	Ist die Teilnahme von eingeschränkt urteilsfähigen, urteilsunfähigen oder minderjährigen Personen möglich oder vorgesehen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Ist im Forschungsvorhaben vorgesehen, dass Studienteilnehmende nicht über ihre Teilnahme informiert werden, z. B. verdeckte Beobachtung an nicht öffentlichen Orten, und sie somit keine informierte Einwilligung geben?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Werden Studienteilnehmende absichtlich unvollständig oder falsch über die Ziele und das Verfahren des Forschungsvorhabens informiert (deception), z. B. durch manipulierte Rückmeldungen über ihre Leistungen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Werden die Studienteilnehmenden gebeten, persönliche Erfahrungen (z. B. belastende Erlebnisse), persönliche Informationen (z. B. sexuelles Verhalten, Drogenkonsum) oder Einstellungen (z. B. politische Präferenzen) preiszugeben?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Kann die physische Integrität der Studienteilnehmenden negativ beeinflusst werden, z. B. bei sportlichen Belastungen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Kann die psychische Integrität der Studienteilnehmenden negativ beeinflusst werden? Können heftige emotionale Reaktionen ausgelöst werden, z. B. durch das Zeigen schockierender Bilder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Kann die soziale Integrität der Studienteilnehmenden negativ beeinflusst werden, z. B. bei Gruppenexperimenten, in denen die Studienteilnehmenden in eine sozial unangenehme Situation gebracht werden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Wird den Studienteilnehmenden ein finanzieller Anreiz angeboten, der über die übliche Vergütung bei Studienteilnahmen hinausgeht?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Verlangt der Forschungsträger (z.B. SNF oder EU) oder ein Verlag eine Genehmigung des Forschungsvorhabens durch eine Ethikkommission?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Handelt es sich um Forschung an und mit Tieren oder an und mit Pflanzen, die zwar nicht unter die gesetzliche Regelung durch ein Gremium ausserhalb der ZHAW fällt, aber ethisch möglicherweise strittige Fragen und Aspekte berührt, z. B. Auswirkung auf den Menschen?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Handelt es sich um Forschung aus weiteren Bereichen, die möglicherweise Einfluss auf die gesellschaftlich konsentierten Vorstellungen von Menschsein, Autonomie, Integrität, Freiheit und Unverletzlichkeit hat oder die Grundwerte des menschlichen Zusammenlebens verändern könnte?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wird eine der Fragen mit JA beantwortet oder kann eine der Fragen nicht beantwortet werden, wird empfohlen, die Durchführung des Forschungsvorhabens vom Ethikausschuss der ZHAW prüfen zu lassen.



Appendix

Für ein Forschungsvorhaben mit anonymen oder anonymisierten Personendaten, die von Dritten zur Verfügung gestellt werden, ist in der Regel keine ethische Prüfung vorzusehen.

**Erlassinformationen**

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### **B. Guideline interview experts**

#### **Interview Guidelines: *Mental distress caused by the climate crisis - A qualitative study with recommendations of action for young adults***

Institution:

Date of interview:

Interviewee:

*I would like to audio-record the interview so that I can transcribe the contents. After the interview, I will send you the transcript to review and would be grateful if you could check it and give me feedback if I have understood everything correctly.*

#### **Introduction**

Since the 19th century, it has been evident that human activity is additionally and negatively impacting natural climate change. Already today, certain populations are suffering from the direct consequences of the climate crisis. In countries of the Global North, the effects on humans' physical health have so far rarely been felt, except on extreme heat days. However, on a psychological level, feelings of helplessness, fear and paralysis are spreading. In 2021, a comprehensive study from Hickman et al. in which 10'000 young adults from 10 countries were asked about their psychological state caused by global heating. It revealed that a majority is concerned about the impacts of the climate crisis on their mental health.

*In my bachelor thesis, I would like to find out what options young adults have to counteract the psychological stress caused by the climate emergency or to mitigate the mental health impairments that are already present.*

1. How big and how relevant is the burden on mental health in young adults caused by the climate crisis in your point of view as an expert?
2. How does the problem manifest itself? What are the long-term health effects of it?
3. What preventive measures are there to strengthen mental health (general or specifically for climate anxiety, climate emotions)?
4. What recommendations of action are there to mitigate existing stress?
5. Are there recommendations of action that have already been tested and were successful? Which ones?
6. Which actions do you find particularly beneficial?
7. Is there anything else you want to add?

### C. Guideline interview young adults

## Interview-Leitfragen zum Thema: *Psychische Belastung aufgrund des Klimawandels – Eine qualitative Studie mit Handlungsempfehlungen für junge Erwachsene*

Datum des Interviews:

Interviewte Person:

*Ich würde das Gespräch gerne audio-aufzeichnen, um die Inhalte transkribieren/protokollieren zu können. Nach dem Gespräch sende ich Ihnen das Protokoll zur Durchsicht und wäre Ihnen dankbar, wenn sie es prüfen könnten und mir ein Feedback geben könnten, ob ich alles richtig verstanden habe.*

### Einleitung

Seit dem 19. Jahrhundert ist ersichtlich, dass das menschliche Handeln den natürlichen Klimawandel zusätzlich und in negativer Weise vorantreibt. Schon heute leiden gewisse Bevölkerungsgruppen unter den direkten Folgen des Klimawandels. In Ländern des globalen Nordens sind die Auswirkungen beim Menschen auf die körperliche Gesundheit, ausser bei extremen Hitzetagen, bislang selten spürbar. Jedoch verbreiten sich auf psychischer Ebene Gefühle wie Hilflosigkeit, Furcht und Lähmung. 2021 ergab eine umfassende Studie, bei der 10'000 Jugendliche aus 10 Ländern zu ihrem psychischen Befinden aufgrund des Klimawandels befragt wurden, dass eine Mehrheit besorgt bis sehr besorgt ist. *Im Rahmen meiner Bachelorarbeit möchte ich herausfinden, welche Handlungsmöglichkeiten junge Erwachsene haben, um den psychischen Belastungen aufgrund des Klimawandels entgegenzuwirken oder bereits vorhandene Belastungen abzuschwächen.*

8. Wie gross und wie relevant ist das Thema der psychischen Belastungen aufgrund des Klimawandels aus deiner Sicht?
9. Wie zeigen sich psychische Belastungen aufgrund des Klimawandels bei dir?
10. Was sind die kurz- und langfristigen gesundheitlichen Auswirkungen davon für dich?
11. Was hilft dir mit den psychischen Belastungen umzugehen?
12. Möchtest du sonst noch etwas sagen?

## D. Transcription rules

### Transcription rules according to Dresing & Pehl (2018)

- It was transcribed verbatim into German or English. Swiss German was transcribed to German.
- Word, sentence breaks and stutters were not marked, and double words were only used when it was used for emphasis.
- Punctuation was used to increase readability.
- Pauses were not marked.
- Special stresses were emphasised by capitalisation.
- "Whole" half-sentences, which are only missing the completion are written down and marked with the abort sign /.
- A new paragraph was made between each change of speaker.
- Words or passages that were unintelligible were marked with "unintelligible" in brackets.
- The interviewees were marked with "Expert" or "Young adult" and the interviewer with "Interviewer".
- All mentions of names during the interview were anonymised.

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