

İSTANBUL BİLGİ UNIVERSITY  
INSTITUTE OF GRADUATE PROGRAMS  
CLINICAL PSYCHOLOGY MASTER'S DEGREE PROGRAM

EXPLORING ECO-ANXIETY AND COPING IN YOUNG ADULTS:  
A QUALITATIVE STUDY ON THE MENTAL HEALTH EFFECTS OF  
ENVIRONMENTAL CRISIS

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İSTANBUL  
2022

Exploring Eco-Anxiety and Coping in Young Adults:  
A Qualitative Study on the Mental Health Effects of Environmental Crisis  
Genç Yetişkinlerde Eko-Anksiyete ve Baş Etme Yöntemlerinin İncelenmesi: Çevre  
Krizinin Ruh Sağlığı Etkileri Üzerine Nitel Bir Araştırma

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Date of Approval of Thesis: 05.07.2022

Total Page Number: 115

Keywords (Turkish)

- 1) eko-anksiyete
- 2) çevre ve iklim krizi
- 3) toplumsal cinsiyet
- 4) genç yetişkinler
- 5) tematik analiz

Keywords (English)

- 1) eco-anxiety
- 2) environmental and climate crisis
- 3) gender
- 4) young adults
- 5) thematic analysis

## ACKNOWLEDGEMENTS

First, I would like to thank my dear thesis advisor, Anıl Özge Üstünel Balcı for her valuable support and guidance throughout the process of writing my thesis. I would also like to thank my jury members, Alev Çavdar Sideris and Sıla Demir. I appreciate their time and contributions to this thesis. And I would like to thank TÜBİTAK for supporting my academic career with 2210-A National MSc/MA Scholarship Program.

Finally, I would like to express my gratitude for my parents for their unconditional love and belief in me throughout my life.

*This thesis is dedicated to the memory of my beloved grandmother, who always supported and believed in me. She will always remain in my heart.*

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## ABSTRACT

The impacts of environmental-climate crisis on mental health have been investigated in the literature, and eco-anxiety is defined as a response to environmental-climate crisis involving negative feelings. Researchers identified disadvantaged groups in terms of experiencing negative effects of the crisis. Younger age groups and women are stated to be more vulnerable to experiencing eco-anxiety. Eco-anxiety and psychological effects of the crisis have been studied mostly with quantitative methods or with certain populations such as Western, Inuit or Sami communities. The present study aimed to explore young adults' experiences of eco-anxiety in the context of Turkey while adopting a gendered perspective. This study aimed to analyze how eco-anxiety develops and how participants cope with it. Eleven participants aged between 21-30 were interviewed. Thematic analysis method was used to analyze the data. The main themes were a) meanings of nature, b) becoming aware of environmental issues, c) experiencing negative outcomes, and d) attempts to cope with negative outcomes. The results showed that participants who had a close relationship with nature develop eco-anxiety through witnessing environmental degradation and getting informed about environmental-climate crisis. This process of becoming aware led the young adults to develop critical lens over the crisis and to experience negative feelings. Participants indicated attempts to cope with eco-anxiety, as well. The results showed differences in the attitudes of young women and men. The findings are discussed in the light of the literature. Clinical implications, strengths and limitations of the study and suggestions for future research are presented.

*Keywords:* eco-anxiety, environmental and climate crisis, gender, young adults, thematic analysis

## ÖZET

Çevre ve iklim krizinin fiziksel ve ruhsal sağlık üzerindeki etkileri son zamanlarda araştırılan bir konu olmuştur ve eko-anksiyete, çevre-iklim krizine karşı çeşitli duyguları içeren bir tepki olarak tanımlanmıştır. Araştırmacılar çevre-iklim krizinin etkilerini deneyimleme konusunda bazı dezavantajlı gruplar olduğunu belirtmişlerdir. Özellikle gençlerin ve kadınların eko-anksiyeteye karşı hassas olduğu bulunmuştur. Literatürdeki çalışmalar eko-anksiyete kavramını ve çevre-iklim krizinin psikolojik etkilerini çoğunlukla nicel yöntemlerle araştırmış, örneklem olarak Batılı topluluklar, İnuit veya Sami halklarını incelemiştir. Bu çalışma genç yetişkinlerin eko-anksiyete deneyimlerini Türkiye bağlamında araştırmayı amaçlarken eko-anksiyete ve buna bağlı deneyimlerin toplumsal cinsiyet özelinde farklılıklar gösterip göstermediğini de incelemeyi hedeflemektedir. Ayrıca eko-anksiyetenin gelişim sürecinin ve genç yetişkinlerin bu deneyimle baş etme yöntemlerinin araştırılması hedeflenmektedir. Bu çalışma kapsamında yaşları 21-30 arasında değişen 11 katılımcı ile görüşülmüştür. Toplanan veriler tematik analiz yöntemi kullanılarak incelenmiştir ve dört ana temaya ulaşılmıştır: a) doğanın anlamı, b) çevre sorunları üzerine bilinçlenme, c) olumsuz sonuçları yaşama ve d) olumsuz sonuçlarla başa çıkma yöntemleri. Elde edilen sonuçlar, çevre ve doğa ile yakın ilişkiler kuran genç yetişkinlerin doğadaki yıkıma tanık olarak ve çevre-iklim krizi konusunda bilgi edinerek eko-anksiyete geliştirdiklerini göstermiştir. Çevre sorunları üzerine bilinçlenen katılımcıların çevre-iklim krizinin nedenleri ve sonuçları üzerine eleştirel bakış açısı geliştirmeye yöneldiği ve çaresizlik, güçsüzlük, yalnızlık gibi duygular deneyimledikleri görülmüştür. Bu çalışmada genç yetişkinlerin eko-anksiyete ile baş etmek için kullandığı kişisel alışkanlıkları ve planları değiştirme, sosyal destek alma ve verme gibi yöntemler de incelenmiştir. Elde edilen bulgular literatürdeki çalışmalar eşliğinde tartışılmıştır. Klinik uygulamalara yönelik çıkarımlar, çalışmanın güçlü yönleri ve sınırlılıkları, ilerideki çalışmalar için öneriler sunulmuştur.

*Anahtar kelimeler:* eko-anksiyete, çevre ve iklim krizi, toplumsal cinsiyet, genç yetişkinler, tematik analiz

## INTRODUCTION

Humans' effects are the strongest transforming force on the planet, and they result in changing environmental patterns, climates, and increasing weather temperatures globally (Albrecht, 2011). The planet is now facing with a destructive and anthropogenically induced climate crisis which changes the environment that the human life has evolved within. The humans, other species and habitats do not have the capacity to adapt to such extreme and rapid environmental changes (Berry et al., 2010). Ecosystems and biodiversity are affected by these changes and organisms need to find and relocate to more advantageous environments instead of staying in barren habitats that are no longer habitable because of almost one-degree Celsius increase (Albrecht, 2011).

Humans are contributing to global warming by generating greenhouse gas (Cianconi et al., 2020). The industrialization and pollution, increase in population and greenhouse gas emission are leading to environmental destruction and climate crisis. The natural environment and existing climates are changing very quickly that we witness it during our lifespans, yet more environmental threats are anticipated in the future (Clayton et al., 2016). Climate change is a major global threat, even the most important problem for the future generations (Hrabok et al., 2020). Even though climate change and melting glaciers have been thought as problems that chiefly striking polar bears, human physical and psychological well-being is at risk, as well (Clayton, 2020).

Certain pathologies are found to increase as environmental degradation due to humans' impacts accelerates (Albrecht et al., 2007). Beyond its biophysical impacts, climate change leads to adverse outcomes on mental health (Doherty & Clayton, 2011). Effects of climate change on physical health have been investigated, however its effects on mental health have been overlooked (Arcanjo, 2019; Bourque & Cunsolo Willox, 2014). Besides being a scientific truth, climate crisis is a major source of emotional and psychological burden (Cunsolo & Ellis, 2018). Being aware of climate change and its current and future implications comes with anxiety about one's future, next generations, and the future of the planet

(Albrecht, 2011). Additionally, it is found that awareness and concerns about climate change is increasing in public, and accordingly symptoms of anxiety, distress, and depression are becoming more prevalent (Searle & Glow, 2010).

Climate change as a stress factor is considered as an environmental threat and a real danger. It brings uncertainty regarding future, and due to the unknown future, it makes people feel anxious. The change of existing climates is progressing and unfolding; therefore, it is not entirely possible to adapt to the ongoing changes (Clayton, 2020). Local changes in seasonal patterns, heatwaves, high temperatures and corresponding droughts, wildfires, floods are affecting people who live in specific natural disaster-prone areas and causing “place-based distress” (p. 52), however worldwide climate change is challenging bio-physical and mental health of every human-being on the earth (Albrecht, 2011). Even people who do not directly experience its effects are shown to be anxious about climate change (Clayton, 2020).

Today, it is too late to stop global warming and there have been insufficient efforts to prevent its consequences, and due to the lack of efficient international action, unfortunately the disadvantaged communities will be exposed to adverse climatic changes first (Berry et al., 2018). Moreover, it has become a more serious issue for those connected to the natural environment, and it will affect everyone on earth gradually (Cunsolo & Ellis, 2018).

In the light of research in the literature, mental health adversities related to environmental and climate crisis is increasing and they are expected to be more prevalent in clinical settings. There are many studies on psychological effects of environmental and climate crisis which were conducted mostly quantitatively and with Western populations. Previous researchers characterize these psychological effects as eco-anxiety and define it as intense distress and anxiety due to witnessing environmental and climate crisis (Albrecht, 2011; Coffey et al., 2021). However, there is a gap in the literature on this topic in Turkey. Even though the studies conducted abroad reports that younger groups and women are vulnerable regarding the climate crisis (Gifford & Gifford, 2016), they only reported the gender or age differences. The gendered vulnerability has also not been investigated in-depth in

the current literature. Additionally, there are no studies examining the experiences and the development of eco-anxiety qualitatively. Thus, the present study aims to deeply understand young adults' unique experiences of eco-anxiety and their ways of coping with it, and how eco-anxiety develops and its impacts on mental health. The study aims to explore eco-anxiety in the context of Turkey and to expand the understanding of this experience, since environmental laws, regulations and practices change across countries, and they may have implications for how eco-anxiety manifests. Lastly, the study aims to adopt a gendered perspective and to explore whether experiences and accounts related to eco-anxiety point to any qualitative differences according to gender.

## **CHAPTER I**

### **LITERATURE REVIEW**

#### **1.1.CLIMATE-ENVIRONMENTAL CRISIS AND MENTAL HEALTH**

According to eco-psychology, our physical and psychological wellbeing depends on the wellness of our planet, ecosystems, and the surrounding nature (Olza & MacDonnell, 2010). Albrecht (2011) suggests that wellbeing of all organisms, including human-beings, is linked to their habitats' existing patterns and rhythms. Due to anthropogenic activities, such as greenhouse gases increase in the atmosphere, and there is increase in changes in temperature and extreme weather events. This increase in extreme weather events cause a decrease in agricultural productivity, and thereby food and water scarcity (Alston, 2013).

Climate change, in contrary to global warming, is not equal to changes in temperatures only. Because of temperature changes many events such as loss of habitats, desertification, rise of sea level and melting ice caps occur (Swim et al., 2011). Moreover, climate change affects human health through changes in seasonal weather patterns which lead to an increase in diseases, along with drought or food scarcity (Bourque & Cunsolo Willox, 2014). Because of climate change, people are at risk for surviving extreme natural disasters and food and water scarcity, desertification, and migration (Cianconi et al., 2020).

Bushfires, wildfires, heatwaves, and droughts around the world are moving signs of climate change, and they cause negative impacts on physical health and increase in morbidity and mortality rates. In addition to psychical impacts, mental well-being of people experiencing these traumatic climate change related disasters is damaged enormously and they may need to migrate to more habitable environments. Migrating to unfamiliar ecosystems itself is a major stressor and emotional burden on mental health yet choosing to stay is more stressful and traumatizing because of witnessing the devastation due to climate crisis (Albrecht, 2011).

Because of climate change and its effects such as desertification or sea level rise, people are expected to leave their homes and homelands voluntarily or forcefully. The climate change related migrations, especially the international ones with crossing borders, may lead to conflicts when residents of the new lands do not accept the immigrants gladly. The migration process may be quite stressful since the immigrants make an uncertain beginning with potential economic, cultural, and social challenges (Clayton, 2020). It is argued in the literature that climate change will affect intergroup relationships, as well. Due to desertification, loss of habitats, and drought, intragroup and intergroup competitions over limited remaining resources are anticipated. Additionally, as owning the territory might be vital, the environmental refugees may not be welcomed due to limited resources (Doherty & Clayton, 2011).

It is not surprising to feel depressed or worried about future when facing with extreme weather events or risk of desertification due to climate crisis (Ballman, 2020). Climate crisis leads to changes in environment which has also impacts on daily life and livelihood. For instance, people lose their occupations due to climate change and in return experience psychological burden because of losing their autonomy or identity (Albrecht et al., 2007).

Implications of climate crisis on mental health have grabbed the attention of researchers recently, and they attempt to understand the effects of environmental changes on mental health regarding both acute and chronic responses. The reported experiences related to climate crisis are intense feelings such as sadness, despair, helplessness, hopelessness, distress, post-traumatic stress, depression, and anxiety, an increase in alcohol and drug usage and incidence of suicide, loss of autonomy, and cultural identity (Cunsolo & Ellis, 2018). For instance, Indigenous people who have strong bonds with the earth are reported to experience changes in climate and its impacts on environment and disturbances in the patterns and rhythm of their daily lives and give more intense emotional reactions to these changes. Their traditional lifestyle which is built on a close relationship with their environment is endangered (Albrecht, 2011).

### **1.1.1. Anxiety, Depression, and Suicide**

Any disruption on people's relationships with place and nature has negative impacts on human mental health and psychological well-being (Galway et al., 2019). Some studies in the literature investigate the mental health effects of these changes in relation to anxiety, depression and suicidal behavior. Climate change associated negative emotions are reported as increased anxiety, anger, hopelessness, and grief (Clayton, 2020). For instance, people losing appreciated environment, landscapes, and ecosystems report feeling grief and sorrow (Cunsolo & Ellis, 2018).

Climate change is found to affect mental health directly through exposure to frequent and severe natural disasters which makes people have acute and chronic anxiety (Berry et al., 2010). Even before experiencing a disaster, people report facing with anxiety, uncertainty, loss, and fear (Cianconi et al., 2020). Climate change evokes hopelessness and helplessness in people (Comtesse et al., 2021), and it threatens survival of the ecosystems, nature, and human beings. Therefore, it is inevitable to feel anxiety and hopelessness in the presence of uncertainty and anticipation of future disasters (Ojala, 2012).

The direct and indirect pathways of consequences of climate change on mental health are leading to rise in suicide mortality in addition to other psychological adversities (Berry et al., 2010). For example, it is shown that climate change results in poor harvests and financial problems which lead to increase in suicide rate among populations economically dependent on agricultural activities (Arcanjo, 2019). Additionally, drought, food scarcity or forced migration have indirect effects on mental health such as increased hopelessness, despair, depression, and suicide rates (Bourque & Cunsolo Willox, 2014). Alarming rise in trauma after natural disaster related to climate crisis, level of distress about the future of the planet, change in cultural practices, and increase in incidences of suicide are signals of significant burden on mental health (Arcanjo, 2019).



### **1.1.2. Post-Traumatic Stress**

The mental health impact of environmental changes has also been discussed in relation to trauma in the literature. Environmental and climate crisis causes acute or chronic distress and post-traumatic stress disorder through traumatizing people with natural disasters (Bourque & Cunsolo Willox, 2014). Post-traumatic stress has been defined as symptoms of reexperiencing the traumatic event, avoiding from reminders of the event, and experiencing hyperarousal (Furr et al., 2010), while post-traumatic stress disorder is defined as reacting with fear, dread and helplessness after being undergone a traumatic event and having post-traumatic stress symptoms (Yehuda, 2002).

Berry and colleagues (2010) argue that due to climate crisis, acute weather events are expected to be more frequent and severe, which in turn might induce danger and injury threat for people and then lead to post-traumatic stress disorder (PTSD). Such extreme weather events and natural disasters are also reported to make people dislocate and lose their homes, homelands, social groups, and networks; thus, incidence of depression, PTSD and climate-related mental health problems are aggrandizing (Berry et al., 2010). The limited number of studies that qualitatively explore eco-anxiety report that climate change negatively impacts Inuit people's feelings of place attachment by modifying their natural environment and therefore challenging their economic and social customs (Cunsolo Willox et al., 2012). Consistent with the definition of trauma (Dailianis, 2021), these forced changes in the environment may challenge beliefs and assumptions about the safety of the world, as they threaten the existence of each ecosystem on the planet. Feeling helpless and powerless against the threat in which the perpetrator is the reality and adverse outcomes of the crisis are consistent with the trauma response (Herman, 2015).

Moreover, climate crisis related disasters are reported to be more psychologically traumatic than accidental natural disasters, since the anthropogenically induced disasters are perceived as the events that could have been forestalled, thus subsequent grief and recovery processes are more

complicated (Bourque & Cunsolo Willox, 2014). Moreover, climate change causes existential crisis and accordingly a new division of trauma, “climate trauma” (Woodbury, 2019, p. 3). Woodbury (2019) defines climate trauma as an existential threat which induces fear and terror through frequent reminders such as natural disasters, and triggers former traumas as it is impossible to avoid from the consequences of climate crisis.

### **1.1.3. Life Decisions**

In the literature there is little research on the effects of environmental and climate crisis on life changing decisions. One of the studies show another negative outcome of irregular and unfamiliar climatic events is that people who are anxious for the unpredictable future are reported to choose to make short-term plans instead of long-term ones (Albrecht, 2011). Climate trauma with its significance and rising speed of environmental destruction, modify our perspectives on the world, decisions about our lives, career choices, where and how to live (Woodbury, 2019). Besides, climate crisis affects people’s choice to have children since they have valid concerns about the future of the planet (Clayton, 2020).

### **1.1.4. Social Connections**

The effects of environmental and climate crisis on social connections have been investigated in the literature. In contrast to acute aftereffects of natural disasters on mental health, climate change related disasters have chronic effects on psychological well-being. Some of the chronic effects on mental health are loss of places, autonomy and identity, along with experiencing eco-anxiety (Clayton et al., 2017). Cianconi and colleagues (2020) argue that our current lifestyles is inescapably altering, and we might readjust ourselves to new world order because of the climate change. They claim that we may lose our “sense of place” (p. 5) and daily activities because of climate change related natural disasters, which in turn negatively impact our mental health. For instance, a qualitative study conducted

with Indigenous people shows that hurricanes and other environmental changes increase feelings of sadness, distress, loss of cultural knowledge and practices (Billiot et al., 2019).

Environmental changes due to climate crisis may affect social interaction between people and their connection with nature, as well (Clayton et al., 2017). Climate change has been shown to cause a decrease in sense of group cohesion and belonging, and an increase in aggression (Clayton et al., 2017).

Additionally, climate change deteriorates social environment by degrading natural and physical environment on which their livelihood and culture depends (Berry et al., 2010). For instance, rise of temperature effects communities whose income is significantly depends on agricultural activities (Arcanjo, 2019).

## **1.2.ECO-ANXIETY**

### **1.2.1. Definition of Eco-Anxiety**

Even though eco-anxiety is not regarded as a mental health condition yet, it was defined by American Psychological Association as “chronic fear of environmental doom” (Clayton et al., 2017, p. 68). There are different ways of experiencing and expressing eco-anxiety as reported in the literature, such as feeling sadness, experiencing a panic attack, or making a life changing decision like forced migration or voluntary childlessness (Arcanjo, 2019). According to Arcanjo (2019), this diversity of expression makes eco-anxiety difficult to categorize as a mental health condition. Despite this variousness in expressions, the prevalence and psychological burden of eco-anxiety has been reported to rise (Arcanjo, 2019) and eco-anxiety is expected to be acknowledged as a mental health condition (Woodbury, 2019).

Eco-anxiety is mostly experienced because of witnessing environmental problems (Pihkala, 2018). According to Albrecht (2011) eco-anxiety is ecologically induced anxiety and distress due to varying environment and uncertain future. As the rate of environmental and climate change accelerates in the last decades, people

become more anxious and concerned for themselves, their children and future of the Earth. Thus, eco-anxiety describes heavy feelings coming from being aware of climate change and environmental crisis (Coffey et al., 2021).

Anxiety is the central response to climate change which brings anticipation of future environmental losses, and therefore eco-anxiety is oriented toward the future (Comtesse et al., 2021). The existing understanding of environmental systems and sense of safety is under threat of change due to climate crisis (Clayton, 2020). Such threats cause an increase in feelings of uncertainty, a sense that people cannot foretell the future impacts of climate change on their current lifestyles. Thus, anyone with climate anxiety becomes anxious because of uncertainty and negative anticipation of future (Clayton, 2020).

In the literature on eco-anxiety, there is an ongoing debate about how to distinguish normal climate anxiety from the pathological worry. Because of the unfamiliar psychological impacts of climate change, it is not yet clearly defined whether it indicates a normal level of worry (Doherty & Clayton, 2011). There are different conceptualizations of eco-anxiety by scholars in the literature. Some scholars prefer using “eco-anxiety” to define severe worry and fear about climate change, while the others think that low levels of anxiety should also be included in the definition of eco-anxiety (Pihkala, 2020a).

In a recent study, Verplanken and colleagues (2020) explored the difference between “constructive and unconstructive” eco-anxiety about climate change. Unconstructive worry about climate change is found to be related to adverse effects on wellbeing, while constructive eco-anxiety is reported to be associated with pro-environmental actions. Verplanken and Roy (2013) showed with an online survey study that worrying about climate change is “a constructive and adaptive response to a serious problem” (p. 4). Being habitually worried about climate change was found to be positively correlated with pro-environmental actions, motivation to live ecologically, and being willing to listen different opinions. Thus, eco-anxiety may be manifested as a paralyzing state or a functional and adaptive reaction which leads to eco-friendly green actions (Pihkala, 2020a).

Anxiety is a psychophysical mechanism that leads to hypervigilance to and avoidance of potential threats, and it serves a survival function. According to Corr (2011), the anxiety becomes maladaptive when it cannot be regulated. Therefore, eco-anxiety is considered as an adaptive response to future possible threats of changing climate and environment (Pihkala, 2020b), yet if it is experienced with excessive and severe worry, it can easily be maladaptive (Comtesse et al., 2021). Even people who do not suffer from direct impacts of climate crisis may experience maladaptive eco-anxiety which results in hopelessness or paralysis (Dailianis, 2021) and diminishment in resiliency (Pihkala, 2018).

Overall, eco-anxiety is defined as a state of constant anxiety, worry, hopelessness and fear related to environmental and climate change in the literature. During the report “eco-anxiety”, “climate anxiety” and “climate change related anxiety” are used interchangeably. Although eco-anxiety is not considered as a separate mental health condition today, it has adaptive and maladaptive forms and can have debilitating consequences for individuals’ psychological well-being. Because eco-anxiety is a relative new term, it has been discussed along with other experiences that relate to environmental and climate crisis. In the next section, these experiences that are closely related with eco-anxiety will be briefly summarized.

### **1.2.2. Eco-Anxiety and Related Experiences**

Although eco-anxiety is defined by an emphasis on worry, fear and hopelessness, a review of the literature shows that eco-anxiety is closely related with other emotional experiences related to environmental changes and crisis. Nostalgia is a diagnosable syndrome experienced by people who are separated from their home environment and wish to go back (Albrecht et al., 2007). Albrecht and colleagues (2007) claim that within the next years, many people are expected to experience nostalgia because of climate change related voluntary or forced displacement. However, without displacement, people also feel losing their home environments when they encounter with environmental changes. The authors argue that people who are still at their home environment may be homesick and lack

consolation or solace received from the existing relationship with the home environment. (Albrecht et al., 2007; Connor et al., 2004).

Solastalgia, is another syndrome describing a sense of feeling homesick and distressed and lack of solace coming from the nature, due to chronic physical destruction of the environment that one resides and values, such as the desolation of loved landscape or trees for urbanization (Albrecht, 2011). Solastalgia is shown to be associated with the mental health impacts of witnessing changes in one's valued natural environment, and some of the mental health effects are reported to be depression and distress due to losing home environment (Galway et al., 2019). It is also found to be related with uncertainty regarding future, place attachment, and feeling powerless and losing trust in authorities (Galway et al., 2019).

Ecological grief is another response to climate change closely related with eco-anxiety, and it comprises past, current and future ecological losses (Comtesse et al., 2021). In this experience, the expected future losses are reported to trigger the present ones (Comtesse et al., 2021). For example, parents experience the current loss of environment in which they grew up, yet they also lose the environment their children will enjoy and grow up in the future (Comtesse et al., 2021).

Ecological grief is expected to be experienced more commonly as ecological losses continue to increase (Cunsolo & Ellis, 2018). The environmental crisis causes “unending and ongoing losses” (p. 279) which hinder having a closure or returning to a stable state following the environmental losses. The continuing environmental losses may lead to experience ecological grief (Cunsolo & Ellis, 2018). The researchers define it as a predictable reaction especially for those having a close relationship with nature. They propose that ecological grief can be experienced due to three types of loss; “physical ecological loss, loss of environmental knowledge, and anticipated future loss” (p. 276). The first is associated with environmental degradation and destruction after climate change related natural disasters. The loss of environmental knowledge is experienced through losing identity and ecological cultural learnings. The latter is related to anticipation of future environmental destruction (Cunsolo & Ellis, 2018).

Other researchers also emphasize the experience of loss and grief, suggesting that physical loss of landscapes, ecosystems, and existing climates can cause people to lose their identities, cultures and life-styles (Comtesse et al., 2021). Through ecological loss, the loved landscape or nature is lost, yet at the same time the past self of the individual before encountering with the loss is lost, as well. There is internal and external transformation in oneself after experiencing the loss. (Cunsolo Willox, 2012). Comtesse and colleagues (2021) state that destruction and climate crisis related changes in one's environment causes diminishment of self along with feelings of sadness and guilt.

With uncertainty about future, anxiety changes into helplessness and paralysis. Eco-paralysis is another syndrome which is different from apathy, denial, or avoidance of environmental and climate crisis (Albrecht, 2011). Researchers define it not as lack of any environmental concern or care, but as the incapability to sensibly respond to climate and environmental changes even wishing to do so, because of caring too much (Albrecht, 2011). In eco-paralysis, even though people are highly concerned about the planet, they may not know what action to take, while some people try to bring changes through activism (Albrecht, 2011). Thus, apathy and numbing are different responses than eco-paralysis (Moser, 2007).

People first concern about climate change, and then go numb when they realize the magnitude of the threat. It is too difficult to stand with doom future scenarios, thus people utilize defense mechanisms to lessen their worry. Even people who are concerned about climate change can be numbed by momentous threat and inability to prevent its impacts (Moser, 2007).

When climate change related changes and threats are not experienced directly, people are likely to underestimate the threat and may react less appropriately. Furthermore, if there is a current striking risk such as terrorism, climate change is pushed into the background. Thus, numbness about climate change is not because of being indifferent to it, but it is because of concerning other direct and overriding risks (Moser, 2007). Pihkala (2018) explains the reason behind denying climate change and not giving sufficient importance to

environmental crisis is that these changes remind people the idea of death, thus they distract themselves with other agenda.

Last but not least, there is eco-anger as another response to climate and environmental crisis. Stanley and colleagues (2021) suggested that eco-anger is an adaptive reaction, whereas eco-anxiety and eco-depression are maladaptive responses. Anger and anxiety are activating emotions, the first activates avoidance, while the second provokes approaching response. In contrast, depression restrains any action regarding the climate crisis. Therefore, eco-anger may play an important role as an adaptive reaction in coping with climate crisis and encourage pro-climate actions. Whereas, experiencing eco-depression and eco-anxiety negatively impact wellbeing and do not contribute to individual or collective actions. In context of climate crisis, the individuals experiencing eco-anger are more likely to change their personal habits and engage in collective actions to alleviate impacts of climate crisis.

Overall, eco-anxiety has been discussed in relation to a sense of nostalgia, loss, paralysis, and anger. Despite being a relatively new-term that relates to these different emotional experiences and reactions to environmental crisis, eco-anxiety has been shown to be influenced by a number of factors. These factors are discussed in more detail in the following section.

### **1.3.FACTORS AFFECTING ECO-ANXIETY**

Unfortunately, everyone is not affected by climate change equally since some will experience only indirect effects of climate change whereas some will suffer from both direct natural disasters and indirect impacts (Clayton et al., 2017). Thus, climate crisis is defined as a “social justice issue” (p. 294), since its effects are not shared equally by different social groups (Gifford & Gifford, 2016). Some factors are related to being more vulnerable to develop adverse psychological conditions after going through natural disasters. Particularly those with economic disadvantages, low educational levels, and pre-existing mental health disorders and women found to be more psychologically vulnerable following the disasters



(Hrabok et al., 2020). The effects of different factors on eco-anxiety are summarized below.

### **1.3.1. Age**

Climate anxiety is shown to be more prevailing among younger people (Clayton & Karazsia, 2020). Younger people who are under the age of 35 are reported to experience more distress about climate change than older age groups, as they are exposed to climate and environmental change related messages more and educated more about it at schools (Searle & Gow, 2010). However, the authors indicate that there is no age difference in reported feelings of helplessness and hopelessness regarding climate change (Searle & Gow, 2010).

It is showed that younger adults report higher levels of climate anxiety as opposed to older adults. Clayton (2020) proposes that the reason behind this finding may be younger participants think about and plan their future more than their older counterparts who mostly concentrate on their daily tasks. Additionally, younger population have higher levels of eco-anxiety because they are the generations who will suffer more from climate crisis in the future (Ballman, 2020; Ojala, 2012), and in near future they will make the decisions regarding the planet and determine its future (Kelly, 2017).

### **1.3.2. Gender**

Socially constructed genders are connected to social, political, or economic inequalities while reacting to climate change. Women are found to be unequally affected by climate change (Global Gender and Climate Alliance, 2016). As opposed to men, women are more likely to develop anxiety, depression, or stress related mental disorders after climate change related natural disasters (Global Gender and Climate Alliance, 2016). Men and women's experiences are reported to differ through and after climate crisis and its effects, since women are more vulnerable in terms of having access to resources or safety in case of climate change

related environmental outcomes (Alston, 2013). Consequently, women with low levels of income and education are more likely to be affected by the climate change both on personal and social levels (Doherty & Clayton, 2011).

In terms of adapting to climate change and its effects, especially in developing countries or communities with low socio-economic conditions, there is deficiency of resources and capital for women, which is a significant factor leading to gender inequality (Global Gender and Climate Alliance, 2016). However, the gendered inequality and vulnerability of climate change do not exist exclusively in developing countries, it may be evident in wealthier countries as well (Edvardsson Björnberg & Hansson, 2013).

### **1.3.3. Socio-Economic Resources**

Although researchers suggest that people from poor and developing countries will suffer more from the climate crisis, those with wealth and access to resources are expected to experience psychological impacts as well (Albrecht, 2011). Ecologically unjust circumstances occur when minority groups or groups with low socioeconomic status receive the environmental costs of environmental destruction and pollution (Clayton et al., 2016). This uneven distribution of environmental costs and risks is related to minority groups' lack of political and economic power (Clayton et al., 2016).

Climate and environmental crisis are a global challenge that requires extensive and worldwide collaboration of different social groups (Pearson et al., 2017). The groups that are more vulnerable and disadvantaged in the face of climate change are the ones that are less influential in policy making processes that may promote ecological methods or clean energies (Pearson et al., 2017). Even though climate change is experienced globally by each person, it affects those people who already endure social, political, or economic inequalities, live in the areas severely impacted by climate crisis, and lack any resources more (Global Gender and Climate Alliance, 2016).

The risk factors listed above such as gender or socioeconomic status are also the factors shaping people's perception and beliefs regarding climate change (Pearson et al., 2017). Psychological responses to climate change are reported to be influenced by the social atmosphere, and appropriate level of climate anxiety is shown to be determined by social acknowledgment of climate change (Clayton, 2020).

#### **1.3.4. Awareness of Environmental Issues**

Some people are more prone to experience eco-anxiety and ecological grief. The common denominators among these people are having close relationships with their natural environments, witnessing gradual and incremental environmental and climate changes instead of acute and extreme weather events, living in high climate risk regions, and personally and culturally valuing the nature (Cianconi et al., 2020; Cunsolo & Ellis, 2018). People identifying themselves as having powerful connections with nature are the ones who are more likely to develop eco-anxiety (Clayton, 2020). Clayton and Karazsia (2020) found certain associations which are consistent with the existing literature, reported that people concerning for nature are more prone to develop eco-anxiety.

People who are informed enough about climate and environmental crisis may be experiencing even more anxiety than the rest of the society that they live in. They live with psychological and emotional burden of being aware of the climate crisis (Albrecht, 2011). It is found that climate change causes "pre-traumatic stress disorder" (p. 292) in addition to PTSD. Climate change is shown to induce moderate to severe anxiety in people even they have not experienced any natural disaster (Gifford & Gifford, 2016). An imminent environmental crisis or anticipation of it, before experiencing any actual disaster, is sufficient to cause people experience distress, in other words eco-anxiety (Gifford & Gifford, 2016).

Media representations shape how people perceive threat of climate change, as well (Clayton, 2020). The ones enduring the distress of climate change are the people who are aware of climate change, its existing and future effects. Thus,

despite individual differences in vulnerabilities or resiliency, anyone having access to technology and information is described as being at risk of developing climate anxiety (Clayton, 2020). In Searle and Gow's study (2010), participants reported to become more worried about climate change currently compared to past. The increase in media's attention to climate change was thought to be related with this finding. News reporting climate change and its adverse effects make people feel conflicted, distressed, powerless and depressed. It is stated that particularly Western people who have high ecological awareness are the subject of such stressing news (Cianconi et al., 2020).

In general, certain populations are reported to be affected more by the environmental and climate crisis. Being young, female, having less access to economic and social resources, environmental awareness and close relationship with nature are shown to be associated with being vulnerable to increased eco-anxiety and negative effects of environmental and climate crisis. Existing research shows that individuals adopt different strategies to cope with these negative effects. Research on these coping mechanisms are presented in the next section.

#### **1.4.COPING WITH ECO-ANXIETY**

Coping refers to attempts to protect self from psychological damages resulting from social experiences (Pearlin & Schooler, 1978). In the literature, coping mechanisms are classified as emotion-focused and problem-focused strategies, with the former referring to coping with stressors through emotional reactions and the latter referring to the strategies to solve the problems related to the stressor (Parker & Endler, 1992). Other studies classify coping mechanisms as active and avoidant, with active coping indicating attempts to actively solve the problem, and avoidant coping referring to passive attempts such as denial and withdrawal (Frydenberg & Lewis, 2009)

With respect to eco-anxiety, coping mechanisms can play an important role in explaining the effects of environmental crisis on mental health. Climate change is both an environmental and a social problem (Clayton, 2020). Existing cultural

and social beliefs about nature and the effects of humans on it influence how people perceive the climate change (Wolf & Moser, 2011). In addition, responses to climate change are shaped regarding person's own experiences, values, and opinions (Doherty & Clayton, 2011).

People's judgments of climate change and its effects shape their psychological adaptation and ecological behaviors (Helm et al., 2018). The researchers showed that people experiencing distress because of climate change are more likely to develop psychological adaptation which reconciles feeling distressed and taking actions (Clayton & Karazsia, 2020). Thus, looking at the literature on effective coping mechanisms can shed light on adaptation and psychological adjustment in the context of environmental crisis.

#### **1.4.1. Resiliency**

Even though some individuals experience climate change related disasters, they show resiliency. Individual resilience is composed of strategies of coping and emotion regulation, capacity to handle a stressful or traumatic experience, and social support (Clayton et al., 2017). Individual resiliency can be supported through fostering coping, self-regulation, and realistic optimism, supporting social connections, and helping with preparing potential risks (Clayton et al., 2017). Some of the factors influencing resiliency to climate change are identified as physical distance to disaster, age, gender, level of income and education, individuals' coping mechanisms and emotion regulation abilities, and social support (Chen et al., 2020). Level of income and educational level, which are linked to each other, are found to be significant predictors of psychological resilience following climate change related natural disasters.

One's access to social networks and social support are also important factors of resiliency (Chen et al., 2020). Ng and colleagues (2015) indicated that having social support and connections raised communities' resiliency which alleviates the effects of flood and drought. Furthermore, Kaniasty (2012) stated that aftereffects of severe flood were buffered with the help of social cohesion and social support.

Thus, the social connections of a community were indicated to be an effective protective factor while coping with psychological impacts of natural disasters (Kaniasty, 2020).

#### **1.4.2. Hope and Denial**

Eco-anxiety as being a difficult state to hold comes with psychological defenses and coping strategies. When it is very difficult to process feelings such as loss of environment, people use certain coping mechanisms, one of which is denial (Doherty & Clayton, 2011; Pihkala, 2018). Denying the climate change because of anxiety rising from uncertainty makes people more anxious in turn, and they may deny more to deal with increasing emotional burden. The denial may be seen as apathy, yet beneath this apathy, paralysis and silence, there is deep intense feelings (Pihkala, 2018). People may stay in a state of denial because of the complexity and uncertainty of climate change (Clayton et al., 2017). Therefore, denial as a coping mechanism is considered to be ineffective regarding the environmental and climate crisis.

Furthermore, hope is a positive feeling itself, and it could also play a role in motivating people to act (Ojala, 2012). Ojala (2012) defines constructive hope regarding climate change and hope based on denial. The former which is positively correlated with pro-environmental behaviors consists of trusting efforts of lay people, scientists, or professionals, focusing on promising information and activating positive feelings. On the other hand, the latter is negatively related to engaging in environmental actions.

#### **1.4.3. Pro-Environmental Behaviors**

In order to cope with eco-anxiety, one of the frequently used strategies is engaging in pro-environmental behaviors (PEB) which means deliberately adjusting one's behaviors to reduce one's effects on the planet, such as participating in organizations or activism, changing lifestyle or recycling (Ballman, 2020).

Engaging in environmental activism and trying to mitigate the destruction are shown to have positive effects on psychological wellbeing (Clayton, 2020). Thus, climate activism is considered to be effective as a coping strategy for eco-anxiety and an adaptation way for the changing future (Clayton, 2020).

Ojala (2008) found that individuals with high levels of worry about climate change engage in pro-environmental behaviors more if they have higher levels of hope for the future. However, less worried young adults do not take proenvironmental actions if they have hope, because they probably deny environmental issues. This study also showed that worry and hope about environmental and climate crisis are positively correlated with recycling behaviors (Ojala, 2008).

In addition, Hayes and colleagues (2018) suggest that hope alone is not sufficient to deal with impacts of climate change on mental health. When the reality and the magnitude of the threat is accurately perceived instead of denying it, goals are intended, and individual and collective actions are taken, psychological adaptation to climate change will be developed.

According to Baier and colleagues (2013), the belief that there is justice in terms of ecology in the world and that everyone receives what they deserve regarding the environmental resources impress people into engaging in PEB (Baier et al., 2013). Being a victim of ecological injustice and experiencing uneven distribution of environmental risks also promote protecting pro-environmental behaviors (Clayton et al., 2016).

Overall, having resiliency, emotion regulation, social support, constructive hope and engaging in PEB are indicated to be effective in coping with eco-anxiety, as opposed to denial coping mechanism.

## **1.5.THE PRESENT STUDY**

As explained in the sections above, global awareness of climate crisis has increased, and people report feeling fear, hopelessness, anger, and loss due to climate change. Since there is an increase in global awareness, it has become more

important to comprehend anxiety response to climate change (Coffey et al., 2021). Eco-anxiety is the term addressing symptoms of distress and anxiety, hopelessness for future, stress, feelings of loss and grief (Coffey et al., 2021; Dailianis, 2021) due to climate crisis and worsening ecological conditions (Pihkala, 2020a; Usher et al., 2019). Although this condition or any climate change related mental disorder has not yet been acknowledged by the DSM as a separate condition, research shows that eco-anxiety is intricately related to various psychological symptoms and indicators of mental health, including general anxiety disorder, major depression, and post-traumatic stress disorder (Cianconi et al., 2020). The term eco-anxiety captures the experiences of worrying about future and self, feelings of helplessness, distress, and anxiety which could be regarded as adaptive responses to the threat of climate crisis (Pihkala, 2020b). However, in contemporary world, an accumulating body of research shows that eco-anxiety is becoming more prevalent and intense, because of environmental and climate changes. Woodbury (2019) argues that eco-anxiety can become a diagnosable mental health condition in near future.

Studies on the nature of eco-anxiety indicate that some individual, familial and socio-cultural factors are involved in its emergence. Existing studies show that eco-anxiety is experienced more by indigenous groups since they are connected to lands and climate changes affect their cultural and economic practices (Arcanjo, 2019; Coffey et al., 2021), or by young adults (Ojala, 2012) and women as they are prone to experience higher distress levels than other groups (Berry et al., 2010; Clayton et al., 2017; Clayton & Karazsia, 2020; Fritze et al., 2008).

During last two decades, frequency and severity of climate change related natural disasters have increased. Thus, psychological adjustment to these changes needs to be examined and understood (Chen et al., 2020). With respect to its relationship with mental health and coping, there is only a few studies that examined this link. These studies showed that eco-anxiety may have adaptive functions such as inducing climate activism (Clayton, 2020) or proenvironmental behaviors (Ballman, 2020).

The research on eco-anxiety is mostly conducted with western participants who experience distress due to environmental change, and these are mostly



quantitative studies (Cianconi et al., 2020). The groups which are identified as vulnerable for environmental change such as women, children, elderly, or native people connected to lands and nature and participants other than Americans, Australians or Finns are underrepresented in the literature. Research should be examining climate crisis experiences of diverse communities from other countries. Additionally, there is evidence that young population is vulnerable in climate crisis, yet there is no study focusing on their subjective eco-anxiety experiences (Coffey et al., 2021).

In the present study, the experiences of eco-anxiety of young adults in the context of Turkey are examined. Turkey is a developing country with growing population and industrialization, and recently Turkey's part in environmental degradation and greenhouse gas emissions have increased (Kıral Uçar et al., 2021). Kışoğlu and colleagues (2010) argue that environmental education, which aims to provide environmental responsibility and literacy and to be an efficient way to fight with environmental destruction is insufficient in Turkey. In their study with a Turkish sample, Kıral Uçar and colleagues (2019) found a relationship between climate change denial and level of education. The participants denying the climate change are the ones with low levels of education. Moreover, it is found that Turkish participants with stronger relationship with nature are more likely to engage in pro-environmental behaviors (Kıral Uçar et al., 2021).

In the light of the research findings that indicate the significance of age and gender for the experience of eco-anxiety, this study aims to analyze how eco-anxiety is experienced, how it develops and how young adults cope with it. A qualitative research method is employed in the present study, since lived experiences of participants are aimed to be explored and previous studies mostly examine the presence or severity of eco-anxiety symptoms rather than subjective experiences of the participants (Dailianis, 2021). The study also aims to examine these experiences from a gendered perspective and investigate if there are any unique perspectives and experiences reported by young women and men. According to Gaard (2015), climate crisis is a result of "masculinist ideology" (p. 20), and women are more vulnerable against the results of climate crisis because of

gender discrimination, and they are excluded from decision-making processes regarding the climate crisis by men. Additionally, ecofeminism claims that in a parallel manner women and nature are oppressed and dominated by the patriarchal systems, as the nature is assumed to be feminine and therefore inferior or subordinate to men (Eaton, 2021). Therefore, this study intends to answer the following research questions:

- a) How do young adults define and experience eco-anxiety?
- b) How do they develop and cope with eco-anxiety?
- c) How do young adults' gender influence their experiences with eco-anxiety?

Therefore, given the scarcity of research on this topic, the development of eco-anxiety and experiences related to this condition need to be investigated elaboratively, as highlighted in previous work (Dailianis, 2021).

## CHAPTER II

### METHOD

#### 2.1. DATA COLLECTION

Following İstanbul Bilgi University Ethics Committee's approval, the researcher used the convenience sampling method to recruit the participants. The study was announced with a flyer on the researcher's social media accounts (Instagram and Facebook), in WhatsApp groups, and psychology-related professional e-mail groups. Inclusion criteria for participation were a) being aged between 18 and 30, b) experiencing eco-anxiety which was described as anxiety and distress related to climate change and environmental degradation (Coffey et al., 2021; Pihkala, 2020a). The flyer presented the definition of eco-anxiety and participants who declared themselves as experiencing it were recruited, since the present study aimed to explore their subjective experiences and perceptions.

According to Arnett (2007), people aged between 30 and 40 or 45 are called young adults, whereas ages between 18 and 25 are considered as emerging adulthood. Erikson (1950) defined young adulthood as the age period from the late teens to middle adulthood, the ages between 18 and 40. In this study, "young adulthood" included the age period from 18 to 30. The age criterion was set according to the literature reporting that participants aged between 18-35 experience climate anxiety more than the other age groups (Clayton & Karazsia, 2020).

The exclusion criterion was not experiencing any symptoms of acute stress or trauma, since trauma symptoms might have interfered with eco-anxiety symptoms and the interview questions might have triggered the participants and increased their current stress level. Participation in the study was based on volunteering.

Twelve participants fulfilling the criteria were recruited. The participants were informed about the purpose and the procedure of the study, and the length of

the interviews beforehand via e-mail. Appointments with each participant were made and they were sent Zoom links. Before the interviews, the informed consent form (See Appendix A) and the demographic form (See Appendix B) were sent to the participants via e-mail. Through the informed consent form, the participants were informed about the goals of the study, the process and procedure of data collection, how the data will be used and kept, and their right to withdraw from the study. The demographic form included questions on the participants' age, gender, place of birth, where they grew up, the city of residence, level of education, occupation, level of income, previous or current psychological diagnosis and psychological or medical support, level of distress and level of eco-anxiety.

Due to COVID-19 pandemic, the researcher conducted the interviews online (Zoom). Semi-structured interviews were carried out to collect data and they lasted between 48 to 95 minutes. The interviews started with an explanation about the process of the study, and a brief introductory conversation before following the interview guide. The interview guide (See Appendix C) was prepared and followed during the interviews to understand the participants' experiences related to climate crisis and environmental degradation. The interview questions inquired about the participants' relationship with nature and environment, their witnessing of environmental degradation, how they experience climate crisis and eco-anxiety, their experiences of gaining environmental consciousness, how they experience climate crisis related distress in Turkish society, and how they cope with eco-anxiety. These questions were reviewed with the advisor and revisions were made before the data collection process. One pilot interview was conducted to test the content and order of questions and the duration of interviews. No revision in the guide was deemed as necessary after the pilot interview. The final guide included 30 main and 23 probe questions which were open-ended and moved from general to more specific as recommended by Braun and Clarke (2013). The researcher took audio recordings during all interviews with the participants' consent. Later, the recorded interviews were transcribed for further analysis.

## 2.2. PARTICIPANTS

Ten-12 participants were planned to be interviewed for the study, which is an appropriate number of participants for a medium-scale Thematic Analysis study (Braun & Clarke, 2013). Thus, a total of twelve participants (5 female, 7 male) were interviewed. One of the male participant's interview was not included in analysis, since his answers were not related to the research questions. The pilot interview was included in data analysis since no modification in questions was made after it. It was aimed to interview with an equal number of female and male participants to investigate possible gender differences in experiences.

The participants' age ranged from 21 to 30, with a mean age of 26.73. Nine of the participants were born in big cities (İstanbul, Ankara, Sakarya, and Hatay), and two participants were born in small cities (Çanakkale and Zonguldak). Six of the participants were raised in a metropole, three of them were raised in cities, one was raised in countryside and one in a town. Nine participants reported living in İstanbul, one lived in Ankara and the other participant lived in Çanakkale. The sample consisted of two university students, one participant with associate degree, four with bachelor's degree, one master's student, two participants with master's degree, and one PhD student. Seven of the participants were employed, having different professions. Seven of the participants reported having an average level of income, while three has low-income level and one has high-income level. Two participants had been diagnosed with depression and one participant had been diagnosed with anxiety. They had taken medication before, and one of them was still on medication. These three participants were going to therapy. The participants' mean level of general distress was 3.18 on a 5-point scale ranging from extremely low (1) to extremely high (5). Moreover, their mean level of distress related to climate crisis was 3.55 on a 5-point scale ranging from extremely low (1) to extremely high (5). The demographics are presented in Table 2.1. Each participant was given a number to ensure anonymity. Additionally, each participants connection to the nature is briefly explained below.

**Table 2.1.***Demographic Information of the Participants*

Participant ID	Gender	Age	Education	Occupation	Level of Income	City of Residence
P01	Male	28	Bachelor's degree	Accountant	Middle	İstanbul
P02	Female	30	Bachelor's degree	Unemployed	Low	İstanbul
P03	Female	30	PhD	Research Assistant	Middle	Ankara
P04	Female	24	Master's degree	Master's student	Low	İstanbul
P05	Female	29	Master's degree	Psychotherapist and Research Assistant	Middle	İstanbul
P06	Female	21	Bachelor's degree	University student	Middle	İstanbul
P07	Male	28	Bachelor's degree	Sound Technology Intern	Low	İstanbul
P08	Male	27	High school	University student	Middle	İstanbul
P09	Male	25	Bachelor's degree	Collector	High	İstanbul
P10	Male	29	Master's degree	Industrial and Organizational Psychologist	Middle	Çanakkale
P11	Male	23	Master's degree	Renewable Energy Investment Consultant	Middle	İstanbul

### **2.2.1. Participants' Connections to the Nature**

**P01:** The participant reported being closely related to the nature. He reported doing beekeeping as a livelihood and farming in his own garden in a village. He also stated that he was doing camping for 10 years and taking walks in nature regularly.

**P02:** The participant was a member of an association and a cooperation focused on climate crisis and ecological agriculture. She reported following the channels publicizing climate crisis facts. She also emphasized being highly protective towards nature, spending time in green areas, and using eco-friendly products.

**P03:** The participant stated that she was spending time in nature and camping, along with being sensitive for stray animals.

**P04:** The participant said that she was trying to protect the nature and her surrounding environment as her parents taught her to be environmentally sensitive. She stated that she was spending time in nature as much as possible.

**P05:** The participant highlighted the process of being environmentally sensitive as she went to a university with a green campus. She also told that she was careful in terms of reducing consumption and her carbon footprint.

**P06:** The participant reported being a climate activist and participating in projects of climate crisis and veganism. She emphasized trying to live in an eco-friendly way.

**P07:** The participant reported spending time and taking walks in nature and taking care of animals.

**P08:** The participant stated that he was enjoying spending time in nature in his spare time.

**P09:** The participant reported feeling connected to nature, doing camping and hiking in natural environments.

**P10:** The participant stated that he grew up in a village and spent most of his time in forests. He also reported taking walks in nature, and doing camping, cycling, and gardening as hobbies.

**P11:** The participant reported doing mountaineering and climbing. He also reported that he was working in the field of sustainable energy.

### **2.3. DATA ANALYSIS**

Thematic Analysis (Braun & Clarke, 2006) was used to understand participants' experiences of distress and anxiety due to climate crisis and environmental degradation. The commonalities in development and experiences of eco-anxiety and coping strategies were aimed to be found in this study. Besides, a social constructionist perspective was utilized since young adults' eco-anxiety related experiences should not be examined without considering the climate crisis discourse of the society that they live in.

During the analysis, 6 steps of thematic analysis was utilized as recommended by Braun and Clarke (2006). Transcriptions of the interviews and the field notes which were taken by the researcher after each interview were read and re-read at the beginning of coding. Second, the researcher identified initial codes for whole data. In this process of open-coding, investigator triangulation with the advisor was held and codes developed after the first interview were discussed and defined. Some examples of the initial codes generated in this step are "witnessing environmental degradation, witnessing insensitivity of others, insufficiency of individual attempts, negative anticipation of future, gaining consciousness, participating in organizations." Then, initial codes were grouped into potential candidate themes. While developing candidate themes, the frequency and conceptual relevancy of codes were examined. Next, the generated codes and candidate themes were evaluated. These candidate themes were discussed with the advisor to evaluate their meaning and fit to the data. Some candidate themes reviewed in this step were "emotional burden and negative feelings, criticizing the society, gaining consciousness, coping strategies." In the fifth step, the researcher finalized, named, and defined each theme. The themes and the subthemes were checked to include and reflect related codes. Finally, the findings and interpretations were reviewed overall, and final themes were determined before



writing the report, while reflecting on themes in relation to research questions. The researcher considered field notes and memos while determining final themes. MAXQDA Software program was used to code each interview and to form the themes.

Member checking was conducted after the final themes were defined to ensure the results reflected participants' experiences and to increase the trustworthiness of the analysis. For member-checking, final themes were summarized and shared with the participants via e-mail (Appendix D). Their feedback was sought and incorporated into the analysis to capture their experiences. Because none of the participants replied to member-checking, no revision was considered in the themes.

#### **2.4. THE RESEARCHER'S PERSPECTIVE**

In my adolescence years, I was living in Marmaris, a coastal town on the Aegean coast of Turkey, where I had the chance to spend time in nature, to create memories of joyful moments on seaside. Unfortunately, in 2021 summer, horrific wildfires started in the southwestern parts of Turkey and Marmaris was one of the towns that suffered huge damage on its wildlife and forests. I was in Marmaris when the wildfire started, and I sadly witnessed the disaster and its damage on wildlife, nature, and local people. As a human-being feeling closely related to nature and spending time in various outdoor activities, I was shaken by this catastrophe. Besides witnessing the wildfire, participating in firefighting works with the local people was traumatic as well. After the wildfire was put out thanks to local people's effort, I as a clinical psychologist participated in an organization, World Human Relief, and its "Turkey Fire and Flood Trauma Recovery Project". I had the chance to provide voluntary psychological support to Marmaris and its villages' citizens. With this project, I had the opportunity to not only support traumatized citizens, but also to heal my wounds of losing the forests and the landscape of peaceful nature.

Since my childhood, I have always been aware of "global warming" thanks to my teachers at primary school, and it has been a major consideration for me. I

have been attentive to reduce my water consumption and tried to minimize my carbon footprint. After witnessing the wildfire in Turkey and other wildfires that took place globally, I became more concerned about climate crisis, and these concerns turned into paralyzing fear and anxiety. Moreover, I was feeling isolated, since climate crisis was not on the agenda of my social groups. It was also disappointing to see that environment and climate crisis were not taken seriously in Turkish society, as there are always other social or political problems that are considered to be more important. I was feeling upset and wondered how other young adults felt about this crisis and its terrific effects, and how they handled those feelings? I was curious about their experiences.

During the interviews, the participants related with me as a peer and a researcher who witnesses the environmental corruption and shares similar environmental concerns regarding future. While listening to them, I shared their despair, anger, and disappointment. I felt sorrowful and shared the grief they felt about the loss of nature, and loss of places they used to hang out. Yet, as the interview questions inquired into how they coped with those experiences, I saw their hope that technological advancements and future generations would make a difference and save the planet.

As a researcher, one of the things I had difficulty with was to investigate male participants' feelings, since they named their feelings less than female participants did. They, as opposed to female participants who named their feelings and talked about them more frequently, told their experiences with fewer words or they used the same words instead of different expressions. Therefore, with my clinical psychology background, I found myself naming their feelings for them, as I do during therapy sessions with some of my clients. Being a clinical psychologist provided me another benefit, which was holding and sharing their despair and anger, and understanding them empathically during the interviews. Especially one of the participants told me that due to mucilage in Marmara and environmental degradation, he did not want to go to the bay that he loved since his childhood. At this interview, when he shared his loss, I shared it with him intensely, as I

experienced a similar loss in Marmaris. Another advantage of having a clinical psychology background was that I was open to hear individual experiences.

At the end of each interview, after I asked the interview questions about participants' strategies of managing and coping with eco-anxiety, they said that they were leaving the interview with hope after talking about all those negative experiences and emotional burden. It was a hopeful ending for me as well. It created a sense of solidarity between us; young, environmentally conscious, and sensitive people sharing similar concerns, and still believing that things may change in how the world works, or we may adapt to the changes even though we might lose nature.

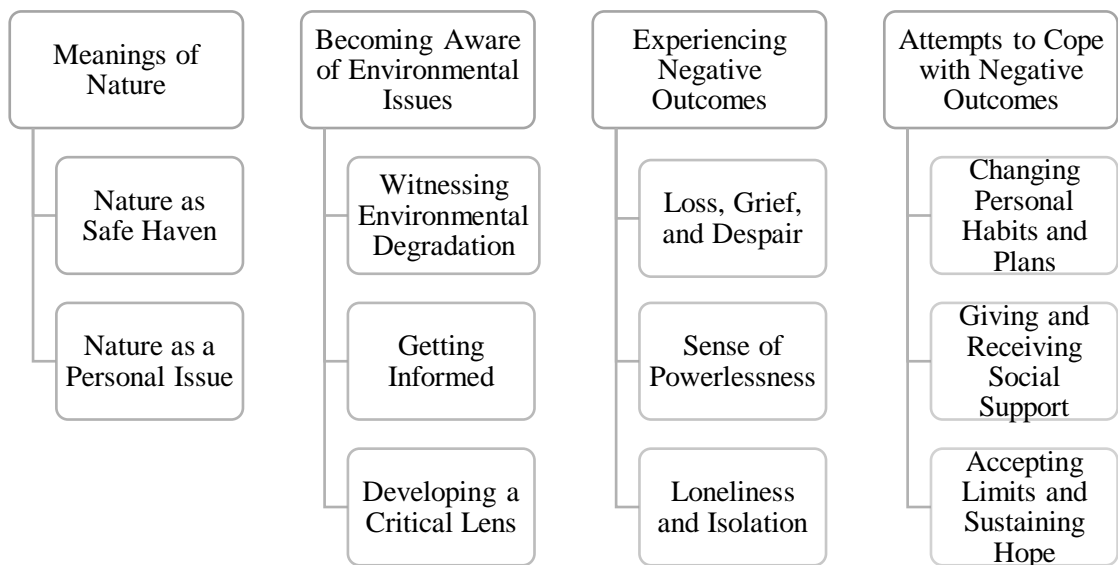
## CHAPTER III

### RESULTS

After thematic analysis of the data, four main themes were created to properly capture and explain young adults' experiences of eco-anxiety. The main themes are "meanings of nature", "becoming aware of environmental issues", "experiencing negative outcomes", and "attempts to cope with negative outcomes". The subthemes of each theme are presented in Figure 3.1. The themes and sub-themes are explained below.

**Figure 3.1.**

*Themes and Sub-themes of the Research*



### **3.1. MEANINGS OF NATURE**

All participants stated the importance of nature and spending time in nature in their narratives. This theme described the meanings they attributed to the nature and the environment, especially focusing on animals and forests. All participants had close relationships with their natural environment and cared for it. This theme had two subthemes, “nature as safe haven” and “nature as a personal issue”.

#### **3.1.1. Nature as Safe Haven**

The participants told the importance of nature and environment in their lives. They emphasized the positive effects of spending time in nature. It was told that nature had a therapeutic and healing effect, especially when participants were nervous or worried about their daily lives and concerns. Besides, majority of the participants stated that the time spent in nature helped them with reducing distress and anxiety related to environmental and climate crisis, and that the activities they carried out in nature, such as going for a walk in the city parks, also brought sense of peacefulness and happiness. In that sense, nature served as a safe haven to protect themselves from the stresses, anxieties, concerns and other upsetting emotions the participants experienced in their lives. Two participants described the positive impact of spending time in nature on their sense of emotional well-being.

*“I usually spend time in nature to relieve the distress or daily concerns of my life. And I do activities in nature... I normally use it as an escape.” (P01, M)*

*“I love spending time in nature, I enjoy it. That's why I'm doing it. I have observed that I feel less distressed there.” (P10, M)*

On the other hand, two participants stated the positive effect of nature to soothe their anxieties related to environmental issues, as well.

*“I feel the need to be in nature and experience it before losing it, because I am afraid of losing the nature. So is appreciating nature's worth more. It's*

*somehow driven by eco-anxiety, something that comes from the need to do something.” (P05, F)*

*“I don't feel anxious while doing the hobbies (camping, gardening, hiking) I mentioned... I feel like “I'm in nature and I'm alive, it feels like the Earth will stay like this” ... When I'm in the woods, on the mountain, in the sea I say, “it's a huge world, look, how nature can change?” (P10, M)*

Additionally, being dependent on nature for survival was highlighted. It was stated that nature and natural resources were fundamental for human beings to live. Therefore, nature was conceptualized as a safe haven, a place offering conditions to humans for survival and nourishment. Moreover, most of the participants emphasized the link between the wellness of ecosystems and the human health. As human beings were taken as part of the nature and having roots connected to the nature, they were feeling physically and psychologically related to it. One participant described nature in relation to other species and emphasized the interconnectedness of human beings' survival and their existence, while another participant talked about the feeling of peace and liveliness arising when surrounded by trees and animals:

*“People think as if human beings are the only resident of the planet, but other creatures also live on the earth. Many people see us as superior and at the top of the pyramid, but indeed we need other creatures and ecosystems as human beings. Without them, with the extinction of a single species, the ecosystem can be completely damaged.” (P08, M)*

*“Trees, the sea, and the environment are some of the rare things that make me feel peaceful. Being in the forest, feeling isolated from people, hearing the sounds of birds are the things that really affect me positively... Being away from people or traffic noise and being in nature makes me feel very good... when I am in nature, even the wind on my skin feels like different. Wind gives me a peaceful moment rather than disturbing me. I notice that there is such a thing as the sound of leaves during a walk in nature. When I close my eyes and listen to the nature, it is very relaxing. It really makes me feel more peaceful.” (P07, M)*

### 3.1.2. Nature as a Personal Issue

The participants generally defined themselves as being sensitive to nature, the surrounding environments, and animals, additionally doing their best to protect them. They mentioned that they developed a close relationship with nature, as well. Having a close relationship with nature was revealed as attributing personal value and creating emotional bonds with it. Since the participants felt positive effects of spending time in nature on their well-being, they reported feeling strongly connected to nature. Three participants described their relationship with the nature and their sense of personal connection with it:

*"I feel very connected to nature and the environment. I do not divide it into two as nature and human, I see myself as a part of nature."* (P09, M)

*"My relationship with the nature has been good since my childhood. This is something I learned from my family, they made me love nature. Consequently, I love the nature and the sea ... For example, we used to go to forests outside the city, go to the sea. We tried to spend time in nature and open spaces as much as possible... When I was little, I even loved trees on the street... I have a video of me hugging a tree when I was little (laughing)."* (P04, F)

*"You feel sad when a tree is cut down, you are more sensitive than other people when a wildfire starts. Maybe you can't sleep that night, but the other person sleeps peacefully... I think it's about being an environmentally sensitive person... One thinks, 'Am I going to worry about the environment when there are so many other things?'"* (P02, F)

Most of the participants told that while growing up they were guided by their parents to respect and care for the nature. Furthermore, their relationship with the nature had elaborated as they grew older. Especially going to the universities with green campuses and joining in student clubs of outdoor sports contributed to this process. Two participants described how they learned to establish a close and personal connection with their natural surroundings:

*“Since I grew up in a house with a garden, I learned that planting and taking care of the soil is very important. I grew up in a house with garden which was planted... I learned very well that if you have a garden, you should not waste it. You should plant something, you should harvest it, and this must continue... I learned to Spend time in the garden. We used to spend time in nature... You should care the environment and the nature; you should cultivate the land. I learned these from my family.” (P02, F)*

*“When I went to university, my curiosity and interest in nature continued. There was a gardening club at the university, and I joined it. There was a hobby garden which the school members cultivated... Of course, there was more than just gardening, it was a community with ecological concerns. We were talking about nature and environmental concerns.” (P10, M)*

Altogether, the participants stated that they attributed special meanings to the nature. They mentioned caring for animals, plants, and eco-systems, valuing their surrounding environments and the nature, and feeling dependent on and part of the nature. They also stated spending time in nature and its healing or comforting effects on them. Finally, how they developed strong emotional bonds with nature was mentioned. In the next theme, the process of realizing and perceiving environmental degradation is explained.

### **3.2. BECOMING AWARE OF ENVIRONMENTAL ISSUES**

This theme described how participants acquired environmental consciousness and gained awareness of environmental and climate crisis. It covered the processes of understanding, making sense of and developing a critical perspective on the environmental and climate crisis as a personal, social, and political issue. These processes played an important role in the development of the participants' eco-anxiety. This theme had three subthemes which were “witnessing environmental degradation”, “getting informed”, and “developing a critical lens”.



### 3.2.1. Witnessing Environmental Degradation

Most of the participants, in addition to spending time in nature or participating in outdoor activities, became aware of environmental pollution, degradation and destruction because of their occupations. One of the participants was a beekeeper, who witnessed the environmental destruction by losing his bees because of other beekeepers' unrestrained chemical usage. Moreover, the participants developed environmental awareness through transferred experiences of their parents. For example, one of the participants' parents-in-law were doing farming as a hobby, and she told that 5-6 tons of crops were wasted because of the extreme weather conditions, and they did not get harvest last summer. Another participant shared this memory with his father.

*“We underestimate the death of a tree because trees do not give us the feeling of being actively alive like other living things. For example, a site was being built on the neighboring land, and my father had planted 20 small trees on the border of the land. During the excavation work, they damaged 3-4 trees, a large amount of stone soil was poured on them due to workers' negligence. I've never seen my father so angry before... I thought about it later, why he went crazy... Why planting those trees should be different from feeding animals?... Why shouldn't we hold the workers accountable for the death of trees? There is a death and one can become angry and react to it... Of course, we should feel sorry for trees.” (P07, M)*

All participants said that they had directly witnessed the effects of climate crisis. They pointed out the increase in frequency of extreme weather events, such as extreme downpours and following floods, extreme heatwaves, drought, and wildfires. They also shared their negative experiences of witnessing environmental pollution and degradation. The mucilage in Sea of Marmara was frequently mentioned. Most of the participants said that they did not want to go to nature because of the fear of witnessing the environmental destruction or getting angry because of seeing pollution. Therefore, they did not want to spend time in nature anymore. For example, when they took a walk in parks for instance, they saw the

waste, and the negative emotions were triggered such as anger or disappointment. They preferred not spending time in nature, where they used to go to soothe themselves and to calm down in the past. Thus, the calming effect of nature was lost, and it was not as therapeutic or relaxing as it had been before. Two participants described how their relationship with nature changed and their negative emotions increased as a result of directly witnessing degradation:

*“I normally do activities where I get in touch with nature to relieve the stress or worries of my life. But in recent years, every time I go to nature, this increases my anxiety level. While I was normally seeing it as an escape, when I go there, I am worried more now... I witness environmental destruction.... We went to collect waste a few times, but it is not something that can be done all the time. It saddens me to lose the nature. When you go there, you see beer bottles, trash, harmed trees. When I set up my tent, I feel like I'm camping in a dumpster, as if I've come to a dumpster. The level of environmental consciousness is insufficient... I was very happy that the communities related to camping started to become widespread in Turkey, but I see that large groups go to camping and cut wet trees to burn... There is the scene that everyone loves nature and returns to it. But they indeed go to pollute and destroy it. Of course, it makes me sad.” (P01, M)*

*“When I go to the forest and encounter heaps of garbage, my eyes start to twitch slightly, and I get nervous. This happens to me so much that sometimes I am in a dilemma whether to go or not. If I go, I will see that filth and environmental pollution again... Greenery is something we don't have much in Istanbul, Istanbul is a place where we can't breathe. We try to compensate for it by going to forests or green areas, but when I encounter such a situation, I am frustrated.” (P08, M)*

In addition to losing the positive effects of nature, some of the participants talked about their relatives' health issues due to environmental and climate crisis. Lung cancer due to weather pollution, increase of respiratory and cardiovascular diseases because of heatwaves, increase of distress and anxiety related to environmental and climate crisis were stated. Two participants explained how

witnessing their loved ones' health problems caused by environmental degradation or directly experiencing it themselves increased their related worries and anxieties:

*“One of my acquaintances has cancer. The doctor said that the air pollution in the region in Kocaeli, the industrial zone, where he lives is also a reason of his cancer. It made me anxious.”* (P02, F)

*“In the summer of 2019, I traveled to Europe with my girlfriend. That summer was the hottest days ever. I've been in Paris before; it was like 30°. When we went in 2019, it was 40-42°... When you go somewhere as a tourist, you walk, ride a bike. We had severe thirst and sunstroke; I have never experienced such a thing before in my life.”* (P11, M)

While witnessing the climate crisis and environmental changes, the participants emphasized the invasion of nature. They witnessed that the society did not care for nature and they considered that human beings' needs and wishes were treated as more important than the environment and other creatures. They underlined the greediness that they witnessed and the destructive results of excessive consumption in the society.

*“There is a lake here, a place close to the village where I carry out beekeeping activities. People come there to picnic and socialize. It is a small lake in the forest, but the fishermen are throwing 50 fishing lines. A single fisherman throws 7 fishing rods. I think this is very wrong and this is not getting better.”* (P01, M)

*“When I go to the Belgrade Forest, I see the waste there and I question why a person could do such a thing... You will go there again in a few months, and you will sit in the same place again, don't you see the garbage? ... Or they have barbecue there, no one has to breathe your barbecue smoke... You're bothering others, don't you realize that? ... I generally get a response like ‘I do what I want, no one can hold me accountable, I can pollute the environment, or I clean it if I want, it's up to me, it's nobody's business’. There is such a situation.”* (P08, M)

One of the participants was a civil engineer, yet he did not do this profession as a livelihood because of the bad reputation of it. The participant associated the

construction industry and civil engineering with the destruction of nature, damage to forests, and cutting trees. He criticized the construction of new buildings on green areas and the zoning of forest lands for construction in Turkey. As he highlighted that the construction works slaughtered the forest ecosystems, the participant said that he did not want to pollute the Earth with concrete.

*“It's partly because of this, I can't say it is the only reason but one of the reasons why I don't do my profession. There is no need for civil engineering... I hate my job because of the vision in our country. There is a mob that only cares about tearing things down and constructing buildings... So, I think that the concrete I pour will not add anything to the world. And I am like, 'I'm not going to pour concrete'.” (P07, M)*

### **3.2.2. Getting Informed**

After witnessing environmental destruction and climate crisis, the participants chose to be informed about these changes and entered a process of gaining awareness. They stated that meeting people sharing similar environmental concerns and discussing these issues with their friends contributed to the process of getting informed. Through socialization and social media, they increased their level of awareness and had access to scientific knowledge on environmental and climate crisis. Additionally, they emphasized the role of education and certain global or local actions in developing consciousness.

Participants mentioned that they had already gained environmental consciousness during their education before university. The image of polar bears on melting glaciers in the Arctic circle was one of the significant memories of participants. They were briefly taught about global warming at schools by teachers. Later, as they matured at university, they became more sensitive about climate change and acquired environmental consciousness through individual efforts such as taking courses and researching on environmental and climate crisis at university, reading articles and news, listening to podcasts, or watching documentaries on this issue.

*“I guess since our childhood, global warming has been in the primary school books. The polar bear on the glacier, or the penguin photos, were shown to us. Together with these, the idea that there will be a change is being formed... The subject of global warming in primary school books, the things we learned in high school, the courses I took at university, all contributed to this process... The articles I read, the documentaries I watched, the things I learned from my teachers, and everything I talked to with my friends informed me in different ways and made me gain consciousness.” (P11, M)*

*“People who are a little more aware of this issue are drawing attention to it...I remember a teacher at the university in preparatory year. Even at that time, years ago, some people were somehow taking this issue seriously, worrying about it and informing others about it. I think it is something very impressive.” (P05, F)*

*“I watched documentaries about climate change. First, it raised my awareness ... Seeing animals getting hurt started to upset me and I tried to be more careful ecologically. When I see it in the news of the local or foreign press, for example, a fish is caught, plastic foils come out of the fish. When I saw these, I started to get irritated... I developed consciousness with the news and climate change documentaries I watched.” (P08, M)*

Moreover, they developed awareness and consciousness through social means. They stated that their social groups or university student clubs contributed to their process of getting informed. Additionally, the climate change mitigation actions were particularly emphasized by the participants. Climate activists such as Greta Thunberg, Fridays for Future movement, local movements in Turkey such as movements in İkitidere and Mount Ida against mining, and Northern Forests Defense to protect remaining forests in Istanbul from destruction were mentioned.

*“I guess Greta Thunberg influenced me too. I thought ‘why does a 15-year-old have to worry about climate change? Why does she have no other daily concerns and why does she have to think about it?’” (P05, F)*

*“A lot happened in the time of the Gezi Park regarding the trees. While people were trying to defend the park, I realized how treeless Istanbul is... People shielded themselves for trees or reacted to mining activities... When there is a collective reaction and people gather around for a purpose, we are informed. Or something will happen in our immediate environment... There was a fire in Izmir... We witnessed that something was destroyed, be it a man-made sabotage or climate change, then it came to our minds. At such times, I have a desire for awareness.” (P07, M)*

Another significant point here was that as the participants became anxious about environmental and climate crisis, they tried to be more informed. Yet, as they became aware of the issue, they ended up being more distressed instead of calming themselves down. The participants said that they had a close relationship with nature as explained in the previous themes, and, thus, they were more careful about the environmental degradation and climate change. Since they were sensitive about the nature, any change triggered eco-anxiety in them. As their eco-anxiety level increased, they felt the need to research on these issues. The process of getting informed was stated to be a way of coping with eco-anxiety, as well. However, reading, researching, or learning about environmental and climate crisis, its effects, and its severity increased their eco-anxiety levels more.

*“As I became more conscious, my anxiety started to increase... As I became aware of what could happen, and read the apocalyptic scenarios or scientific research, I got more anxious for the future.” (P04, F)*

*“I was less worried in the past... Unless one really witnesses the changes with one's own eyes, one cannot fully grasp the danger. You see it as just the melting of the poles and the rise in sea level, but over time you begin to realize that it is much more than that. As a result, your stress level increases.” (P08, M)*

### 3.2.3. Developing a Critical Lens

All participants indicated that as they were getting informed through personal witnessing, reading or researching, they realized societies' and governments' deficiency of environmental consciousness. Following this realization of inadequacies, they tried to understand the issue of environmental and climate crisis at personal, social and political levels and they developed a critical lens. First, they criticized their social environment and the society, then the state and governments. Finally, the system in general was criticized.

*“Society remains indifferent to the environmental crisis. There is an indifference in the world and in developed countries. Developing countries are dealing with their own problems. Developed countries remain indifferent, and ignore it because of industrialization, and the money is at stake... I see the environmental crisis as society ignoring a real threat. People continue to live as if nothing has happened, but there is a fact saying ‘I am here’.”* (P08, M)

*“None of the political parties in Turkey are doing anything about the environmental crisis properly, this issue is not on the agenda of any party. When it is on their agenda, it is only for show and PR work.”* (P10, M)

*“I came to the conclusion that the solution to the environmental and climate crisis is not actually independent of the economic and political system.”* (P04, F)

Some participants indicated witnessing a gender difference in environmental consciousness. They stated that in their social groups, women are more environmentally sensitive and conscious, whereas men seem to be more indifferent. As they pointed out the gender difference, some participants mentioned gender roles as the reason behind this difference.

*“I think men are less environmentally conscious, or they have different problems in their lives. For instance, they worry more about their work life. Since they put their problems such as working and earning money at the center of their lives due to gender roles, the environmental and climate crisis*

*seem to be in the background. Or as if they don't want to think about this issue. It's as if they have other concerns in their lives, and eco-anxiety is far behind them.” (P08, M)*

*“I think men are more insensitive than women on many issues, not just the environmental and climate crisis. Maybe insensitivity is not the right word, but how can I say, as if men think that nothing ever happens to them, things always go as they want... maybe it is because men feel more entitled. Even if things go wrong, a man tries and gets what he wants. I think they feel like nothing can hurt them.” (P10, M)*

*“I think that because of the way they were brought up and the norms imposed by gender roles, men may have more difficulty in contacting with their anxieties. Thus, men may be avoiding eco-anxiety... In a way, avoiding from it will make you feel less anxious. Maybe there is such a difference.” (P05, F)*

The participants emphasized lack of environmental consciousness in society, which was stated to be a result of insufficiency of environmental education at schools. They also witnessed the lack of collective actions or cooperation between individuals. The society was criticized for not taking environmental and climate crisis seriously, as well.

*“The villagers are not reacting to it (environmental pollution and excessive hunting of fishermen). I talked to the chief of the village, and I said ‘this is our land, you should try to protect it. You can collect 10 liras from each villager and pay a salary to someone to protect the lake’. He said, ‘are we going to deal with it?’. They don't see it as something worth concerning about. This sounds ridiculous to me... After the age of 40, it is not possible to change him or to raise environmental awareness. If the Ministry of Education issues regulations for children, this can have a positive effect. At least, we can say that children and youth are brought up with environmental consciousness and sensitivity. It may have a positive effect in the future, but there is no effort in this regard now.” (P01, M)*



*“I think there are lots of messages in society that this (climate change) is something reversible with a magic wand. By the way, when I say society, I think of the whole world... There is such a thing as if technological advancement or science could save us. Or there is a fantasy of escaping to Mars... I think there is a thought like ‘nothing will happen to us’.” (P05, F)*

In addition, they shared their observation of people’s greediness over resources and arrogance. The participants criticized the authorities’ inconsiderate desire to exploit and consume natural resources for having wealth and financial profit and defined those efforts as greediness.

*“It makes me very angry that we have exploited the resources without thinking about the future, and that responsible people are not thinking of anything other than the short-term financial profit they will achieve in the near future”. (P03, F)*

*“Nature is considered more as something that belongs to us and that we will use. It is not seen as something that we are a part of. It is not like something we belong to, but nature is a resource that we reach, use, and change in line with our purposes. I think that's how it is viewed by most people.” (P10, M)*

*“People are a little arrogant. This is an arrogant society. It is not a society that is aware of being a part of nature, and people think that the environmental destruction is not and will not be reflected on themselves, because they see themselves as separate and superior to nature... These people have isolated themselves from nature for too long, thus they are indifferent. Somehow, they don't see the effects of crisis... this is a society that is not environmentally conscious.” (P07, M)*

A majority of the participants revealed that they encounter behaviors and attitudes that they consider as hypocrisy, and they pointed out the inconsistency between environmentally-friendly discourses and destructive actions. They witnessed that what was promised and what was done are conflicting. This inconsistency was perceived as greenwashing which indicates that organizations or governments give the false impression of taking pro-environmental actions to the

public and other countries. Two participants expressed their thought regarding the greenwashing activities:

*“I think that the effective interventions are not made for the environmental and climate crisis. I think that the steps taken in this direction are the greenwashing of the media, and the PR work.”* (P09, M)

*“Actions on the climate crisis are like PR works to deceive us. It is like ‘let’s show the Europeans that we care about the climate’ and ‘we signed the Paris Agreement, give us money’. That’s it. I don’t think there are any effective moves.”* (P10, M)

Some of the participants expressed distrust and accompanying disappointment in nongovernmental organizations’ ecological campaigns, as well.

*“When we look at Western countries, I get angry at them too, there is hypocrisy. Besides, they act like environmentalists and appear like that in the world press, but they do not take any steps.”* (P08, M)

*“I don’t trust people or NGO’s either. Greenpeace, for example, seems like a fraud to me... I feel like they raise donations but they’re not doing anything.”* (P07, M)

Moreover, they criticized the governments of Turkey and other countries. They pointed out the shallow and ineffective governmental policies on climate and environmental crisis. The participants told that realistic, efficient, and credible measures to prevent the negative outcomes of climate crisis were lacking. Lack of policies or national campaigns to promote environmental consciousness or to reduce environmental pollution were also stated.

*“Because it is not realistic for a bank to say, ‘we stop financing coal mining’, then they give a 1-million-dollar loan to the company that launched a rocket.”* (P09, M)

*“Developed countries choose to remain indifferent, they do not care about environment because they care about earning money.”* (P08, M)

*“It also arouses anger, beyond despair and anxiety. We have consumed so insensitively without really thinking about the future, and responsible*

*people with power do not care about anything but the short-term profit they will gain in the near future. These are infuriating.” (P05, F)*

The participants described the current crisis as an environmental and ecological massacre engaged by industries and states’ policies of overconsumption of resources. They expressed anger and frustration toward the authorities due to their policies regarding exploitation of resources, and lack of any policy to protect nature, resources, or ecosystems. They also mentioned losing trust in authorities whose priority was stated to be earning profits. One participant emphasized the economic policies as the reason behind environmental degradation:

*“They all seem interconnected to me. Indeed, I think that the environment is somehow damaged because of economic policies, the decisions of states and politicians. Therefore, I think it's all related to each other. Including technology, too.” (P02, F)*

Furthermore, the global and Turkish media were criticized by the participants. They stated the media’s inattentiveness to environmental and climate crisis or the shallow news which lacked emphasis on the reason behind the climate crisis related natural disasters.

*“If we consider the media, especially in the mainstream media, when fires or storms are reported as news, no one mentions the impact of the climate crisis on it or whether the climate crisis triggers it or increases its impact.” (P05, F)*

The participants said that as long as the capitalist and consumption-oriented economic and political system did not change, nothing would change in terms of the environmental and climate crisis.

*“It is a system of economics and politics that has existed for centuries, this is a problem advancing more rapidly and has the potential to strike everyone's life at once.” (P04, F)*

*“I think states and people holding power should do something about this issue and take responsibility. It is something much bigger and beyond us. Something that makes me feel helpless. Major steps are needed to be taken...”*

*Steps should be taken to change the capitalist and consumption-oriented system.” (P05, F)*

*“There are the feelings of injustice and distress created by late-stage capitalism, not directly fed by the environmental and climate crisis. In other words, the climate crisis is already a product of this system... I think it's a frustration caused by mobs and societies because of not seeing what exactly is causing the environmental and climate crisis, or what are the real steps we need to take to solve it.” (P09, M)*

Overall, the participants indicated that they gradually learned more about and became more aware of environmental issues as they directly witnessed and experienced the negative effects of environmental degradation and climate change, got more informed through different sources and developed a critical lens on the issue. This awareness was a precursor to the development of eco-anxiety and other negative emotional reactions that the participants expressed, as explained in the next theme.

### **3.3. EXPERIENCING NEGATIVE OUTCOMES**

Under the third main theme losses of nature and the environment, negative emotions such as grief, despair, guilt, loneliness, hopelessness, disappointment, and injustice due to the environmental and climate crisis were explained. This theme also included the experiences and feelings coming from encountering with society's ecological indifference. During the interviews, male participants used fewer words expressing their emotions as opposed to females who described their experiences and feelings more elaborately throughout the interviews. There were three subthemes: “loss, grief and despair”, “sense of powerlessness”, “loneliness and isolation”.

### 3.3.1. Loss, Grief and Despair

All participants indicated that they were encountering with losses due to environmental and climate crisis. They mentioned the loss of environment and loss of habitats, particularly due to climate change related natural disasters such as wildfires. Loss of the natural habitats of forests and loss of trees were most mentioned experience. It was clear that current natural disasters due to climate crisis, especially the wildfires, were triggering the feeling of loss. One participant said that he was deeply touched by wildfires in southern provinces of Turkey. When his feelings were asked, he said:

*“A kitten died in the garden of our studio recently, we realized it when it's been 12 hours. I had to pick up that kitten's body. It was the first time I had contact with death. That was the first thing that came to my mind when you asked it. I have never thought about this feeling before, but when you asked, it was the first image that came to my mind. It's like going out and carrying that dead kitten, to witness the death firsthand. It's like remembering its reality.” (P07, M)*

One of the participants shared a negative experience. He said that he felt like losing his favorite place, as it had undergone environmental pollution and became unfamiliar for him. He expressed the feeling of injustice, as he attached a bond to that place that was polluted by others, as if it was bereft. He stated that while he was caring for that special place, it was unjust to witness its degradation. This inconsiderateness aroused anger in the participant. Besides, he underlined that the responsible actor for that environmental destruction was not identified, and therefore it was difficult to direct his anger toward the true accountable factor.

*“Maybe feeling of injustice... I come here many times; I never leave any garbage behind. But one day I come and see the pollution. This is not fair. It is also like losing a part of yourself. You embrace those places as they are 'yours', you establish a bond with them. When that is the case, it is very striking when it does not stay the way you want it to be...In other words, it's a bit like something that a person attaches meaning to is taken away from*

*his life... I love swimming and spending time on the beach in the summer... I went to the sea last summer. It was known that mucilage existed only in the Marmara, and it was not seen in the Aegean. I went to the Aegean Sea. When I went out from the sea, I felt something sticky on my skin. I went home, took a shower. I was disgusted and angry. I do not know who the interlocutor is. Whose fault is it? How can you take this right away from me? How could you withhold this right from me?" (P10, M)*

Besides having physical losses, the participants said that they were losing their familiar environment and climates from their childhood. They were also feeling like they lost their dreams and plans for future, since everything would be different in near future.

*"I mentioned that I want to do a PhD, but I don't think much about the future. I've been setting shorter-term goals like this for a long time. Who knows what will happen after that?... It affects my life and my plans. Even if nothing too bad happens to us, I think we may have other priorities in the future, such as concerns about what to eat or drink... The climate crisis reminds itself frequently... Eco-anxiety is constantly in my mind. Now, I am applying to doctoral programs. I think that I should spend the years of doctoral education in a better place. Let me spend next 4-5 years in peace, as if I have only 4-5 years ahead of me. Later years are up to God (laughing)." (P04, F)*

*"It's a disappointment that a future like I had dreamed of until today or the last few years is not possible. The world will not be the same as when we were children. For example, it's not even snowing anymore. I grew up in Ankara and it snowed a lot, it was a part of my childhood that I loved very much... Constantly imagining a future where even such simple things have disappeared from our lives... when I have all these thoughts, I am experiencing intense sadness and depressive mood." (P05, F)*

The participants expressed sadness and grief over environmental losses. They were also feeling sorrow regarding the trees, plants and animals that were being lost because of natural disasters. The future generation and especially

children were seen as innocent in terms of contributing to environmental and climate crisis and the participants expressed their sorrow for them as well.

*“Another thing that worries me is my younger brother's future. Of course, it is the common fate of children on Earth right now, but one worries about his own family differently. My father has a 1-year-old son from his second wife. Worrying about his future reminds me more often the common desperation of all innocent children, animals, plants, and creatures who cannot choose what is happening to them.”* (P04, F)

Furthermore, they revealed losing their belief in change in future. All participants indicated that they had negative anticipation for future such as drought, desertification, decrease of agricultural productivity, scarcity, financial crisis, increase in poverty, environmental and climate migrations, and wars over water resources. In other words, the participants were expecting a dystopic or apocalyptic future as depicted in the movies.

*“I know it will result in much greater loss of life and suffering and pain for the survivors.”* (P09, M)

*“How will we be able to live on Earth that gets so hot? There will be drought... As I said, I am confused as to whether the poverty will be a result of the climate crisis or the result of the things that caused the climate crisis... But I think we will have a poorer life in every sense. Our lives will be deprived of the beauties of nature, and poorer financially.”* (P05, F)

The anticipation of apocalyptic future and current environmental and climatic changes made participants feel fear, distress, worry and anxiety. One of the participants was a psychotherapist and she shared her worry about future and her career's future demands.

*“Maybe I can tell my own experience... A long-term concern for the future, anxiety that makes it difficult to plan the future. I think it arouses anxiety about my profession too. I mean, in the future that I have in mind, as a psychologist, how will I help people, what will I be doing? ... The anxiety of survival, maybe 10 years from now, things will be different from our current concerns in our lives. Will the main concerns be about survival? On the*

*other hand, it is very difficult to live with anxiety, it is very difficult to contain.” (P05, F)*

Moreover, uncertainty about the future made it difficult for the participants to make plans since they could not foresee a safe future. Along with the feelings mentioned above, they were feeling despair, which was being experienced as a state of hopelessness for future, as if there was nothing anyone could individually do to prevent the effects of crisis no matter how much they tried, and consequently everything would worsen.

*“It makes me feel helpless because I don't know how to deal with it exactly. After all, how can we make the state hear our voices? There are methods, such as protests, public pressure, but it still makes you feel helpless. But it also makes you feel like you have to do something.” (P05, F)*

*“There is probably only one word that will repeat throughout this conversation, it is always the first thing that comes to my mind, and let me tell you from the beginning, despair. Probably the first answer I will give to all these questions will be despair... Because I cannot get rid of the feeling of helplessness when my individual struggle is against all industries, holdings, companies, and factories comes to my mind... Fear, anxiety, hopelessness, always negative feelings. But, at first there is a feeling of despair.” (P07, M)*

*“Sometimes I feel like I can't persuade anyone, I feel like my voice is not coming out. And it feels desperate because, for example, someone will decide about those burned forests. They will either plant trees there and wait for it to regenerate or start construction. You don't know what will happen. You're waiting, hoping that something good will happen, but you don't know if it will. So, it feels hopeless. Experiencing such things in this society makes one feel like a ghost sometimes.” (P10, M)*

The participants stated that their everyday distress and anxiety level increased with the addition of eco-anxiety. Experiencing eco-anxiety was reported by the participants to increase existing hopelessness about future and emotional burden. They also emphasized that they became more sensitive about



environmental and climatic changes and noticing and witnessing such changes triggered negative feelings as mentioned above.

*“Like, it was the last straw (laughs). Eco-anxiety was all I need when there was so much going on... I think it makes me sensitive in my daily life. For example, when I go to a park and see a leaf that didn't fall on time, or a flower bloomed before its time... It immediately draws my attention. And I get into a thought process about that when I go out, when I see it, when I read. I say ‘yes, it’s worsening’. It makes me worry about it; it takes my whole day. (P02, F)*

Some of the participants indicated that they experienced certain physical symptoms accompanying eco-anxiety. They described these symptoms as heart palpitation, chest tightness, or having breathing difficulties. Due to having anger towards the insensitivity of others, they stated suffering from tightness in jaw muscles, as well. In addition, experiencing physical pain, especially pain in the abdomen, was expressed.

*“Sometimes something intense happens. At that time, there may be physical symptoms such as an intense state of distress, difficulty in breathing and especially abdominal pain. Dreaming of the future, that is, how the future will be?” (P05, F)*

*“It is a level of anxiety that I experience as a stomachache that I feel physically when I am exposed to the news or when I actively follow it rather than being exposed to it. Where are we going? Won’t we live in a normal world? Will nothing ever get better? ... Am I always going to see destruction of nature and raising buildings?... I feel anxiety and fear...It's like holding my breath involuntarily, being speechless when I see the smoke of a burning forest... There were times when I couldn't breathe, it was such a pain. Abdominal pain, cramps. I experience anxiety physiologically... Like a pain, real physical pain.” (P07, M)*

*“When I think of eco-anxiety, I get nervous... my teeth are clenched... what I can do is very limited, not throwing garbage on the ground, not throwing cigarette butts, or recycling the waste. But when there is no awareness in*

*society, when I face with it, my heart starts to beat, I start to get angry, my teeth start to clench, I feel chest tightness... I don't know if I define eco-anxiety correctly, but this is what I experience.” (P08, M)*

### **3.3.2. Sense of Powerlessness**

The participants indicated a feeling of injustice throughout the interviews. The current damage the ecosystems and animals were facing, and the apocalyptic future coming for children were highlighted by the participants. Because of their innocence in terms of contributing to environmental and climate crisis, it was described as unfairness. Additionally, they stated that they were subjected to unjust consequences, as well. They compared their individual effects on environmental destruction with companies’ or authorities’ share in the big picture.

*“I feel the injustice and a bit of absurdity in putting the responsibility of this issue on individuals. In other words, in a world where an individual's spending half an hour in space and returning to the planet is equivalent to the pollution of plastic straws used by 3 billion people. I think it is a great dishonesty and deceit to try to bring this down to individuals.” (P09, M)*

*“Wildfires are the first thing that comes to my mind...Climate change or disasters such as wildfire or drought, they are human-made. To witness them, to be exposed to them and feel the pain of the damage that humanity has done to nature... feeling of being individually punished for what all humanity has caused... It is unfair because I did not directly contribute to the climate crisis. I actually have a clear conscience in an individual sense, but the world is like this, and I am being accountable for it and this is unfair.” (P07, M)*

The participants felt responsible for environmental and climate crisis, although they argued that it was unjust to be encumbered individually. Although the participants argued that environmental and climate crisis was caused mostly by consumption focused capitalist system and collective and large-scale actions need to be taken, they reported feeling accountable for being a part of humans’ damage

on Earth. With this feeling of responsibility, they started to feel a pressure on themselves, as if they were caught between the feeling of responsibility and the inadequacy of the individual measures. Along with this tension, they were feeling responsible for the environmental and climate crisis and trying to do something about it.

*“When I think about the environment and climate crisis, I feel responsible... I try to be environmentally conscious... I feel responsible about it... I always tried to be a responsible person, I tried to be an activist in these matters. If there is a problem that affects the whole world, I should also have a share and be responsible, and I tried to inform myself about it as much as possible or I tried to participate in activism as much as I could.” (P06, F)*

*“It's like giving an account. Not just punishment, but accountability. Okay, maybe you didn't do anything individually, but you are part of the human species, you must take responsibility for being a part of this species... If you have a negative effect, you should reduce it, or if you do not cause any negative effects, you should do something to compensate for those who cause negative effects. Eco-anxiety is like a feeling as if a court decision has been sentenced and you are trying to bear it.” (P07, M)*

All participants stated that their individual attempts to reduce environmental degradation or climate crisis effects were insufficient. They emphasized the need for collective actions, global decisions, and environmental policies. Feeling that their efforts were not adequate to create desired changes in the absence of large-scale policies, the participants' sense of powerlessness increased, adding to their sense of unfairness, frustration and anger. Besides, stating that the individual measures were not sufficient or efficient, they expressed anger toward the people holding power and the society in general for doing nothing, remaining silent, or condoning the environmental destruction.

*“Of course, it feels bad to witness these changes. Even if I try to do something, gas is emitted from the factories. I don't know, I feel like there's nothing I can do. This leads to despair. Even though I try to reduce my*

*carbon footprint by not consuming meat or dairy, when you think about what is going on, of course, you get desperate.” (P04, F)*

*“At the end of the day, I don't think that the things I individually do have any effect at all.” (P09, M)*

*“There is no comprehensive view in politics, such as the planetary boundaries or considering triggering factors for the reduction of marine biodiversity. It [environmental and climate crisis] is viewed very superficially. That's why I'm angry at anyone who has such perspective, at those who have the power and do nothing.” (P11, M)*

Beyond realizing the insufficiency of individual efforts, the participants felt disappointed by other people's and states' insensitivity. For example, the participants were knowledgeable about the decisions made with international agreements, but they did not rely on them. They mentioned having doubts about those agreements in terms of the degree of effectiveness or applicability of those decisions.

*“As I said, I don't see NGOs doing anything other than collecting donations. Because of this, I think I am a little distant from NGO's or society.” (P08, M)*

They shared feelings of demoralization and discouragement in terms of engaging in pro-environmental behaviors, since their individual attempts were thought to be insufficient to mitigate the effects of environmental and climate crisis. This sense of insufficiency in changing practices and policies that lead to environmental damage increased their powerlessness, evoking anger, frustration, loss of hope and pessimism. Three participants explained how they lost the motivation to act individually while there was a lack of collective actions:

*“If we are going to change the world, we will do it together, I think it will develop through collective actions. If we can't unite, nothing will happen, and things will not change. And it makes me feel pessimistic for future.” (P06, F)*

*“What will change even if I do something individually? I have hard time finding motivation. I guess I'm on the more pessimistic side. I feel despair...*

*I hope I can be more optimistic and proactive... Right now, eco-anxiety manifests itself as worry about future negative scenarios. But it does not motivate me to take a step.” (P05, F)*

*“I cannot change these people one by one; these people will continue to pollute the environment. Okay, I warned them once, then after a couple of hours, they will throw garbage again... I tried to warn them several times, but there was no change. This infuriates me.” (P08, M)*

### **3.3.3. Loneliness and Isolation**

The participants complained about the society’s insensitivity and indifference toward the effects of environmental and climate crisis. They emphasized the lack of environmental concern in their social groups and society in general. They stated that people prioritized economic or daily concerns. Environmental destruction and climate change were in the background. They also indicated that in their daily lives, eco-anxiety might be pushed into the background due to other current issues, such as graduation, seeking jobs, financial problems, the pandemic, social and political problems, and femicide in Turkey. One participant defined the state of feeling eco-anxiety as a luxury, give all the other issues that societies had to deal with.

*“Experiencing eco-anxiety is a luxury (laughs). Because there is so much going on that it seems like a luxury to feel sorry for the environment. People die in wars, they die while they migrate, they starve. Now, our economy is getting worse day by day, people are starving more and more, the economic situation is getting worse... There is a battle for survival. There are people who migrate to survive or who cannot even have food right now... There are more fundamental concerns... Concerning about climate change is higher level. When you think of Maslow's pyramid, we are more at the lower levels. Because we really can't meet safety or other basic needs yet. Eco-anxiety is a like a luxury. First, basic needs must be met so that we can then pass to the next levels.” (P03, F)*

A majority of the participants indicated that the presence of financial and political issues left no room for many people to think about the environment. Because all these other issues such as affording a living were so overwhelming for a large segment of the society, the participants expressed that they were left feeling alone in their experience of eco-anxiety and reported a sense of loneliness and isolation.

*“It's a difficult experience because when we try to talk about it, people say, ‘we're hungry’... People living in Turkey have priorities in different issues and they think that this is an issue that should be thrown behind... So, it's a difficult experience. If you try to take action, people will probably find it unreasonable. For instance, they say ‘why don't those kids [referring to Fridays for Future] go to school? Will they change the world one day by not going to school? Is Greta Thunberg a fraud?’ ... I think in metropolitan cities, in Istanbul, Izmir, and Ankara, eco-anxiety can be thrown into the background because people mostly worry about finding food or being politically free.” (P06, F)*

*“People are also indifferent and thinking ‘this is how the world is, people live like this, what should we do?’ There is also the effect of the economic crisis. ‘1 dollar is already equal to 15 Turkish liras; will people think about environment?’ At one point, they're right. It's 15 Turkish liras (laughing).” (P11, M)*

Some participants revealed that they did not have a social group to discuss and share their feelings related to environmental and climate crisis. Moreover, when they shared eco-anxiety in their groups, they felt the lack of emotional support. They indicated that they were not receiving any messages of sensitivity or support from society and the state. They felt like their ecological concerns were not shared, and no one else was caring for environmental issues. By this way, they experienced more intense eco-anxiety, along with anger, disappointment, and loneliness.

*“I also feel angry at the generation before mine since they didn't do anything about this issue. I feel anger at my generation, too. They are not doing anything. I feel anger at politicians and companies.” (P10, M)*

The participants also mentioned the labels associated with the experience of eco-anxiety. As a majority of the society was not interested in ecological changes, they at times labeled the ones experiencing eco-anxiety. They stated that being labeled for worrying about the environmental and climate crisis made them feel not understood, differentiated, and even excluded from the rest of the society. Since their environmental concerns were not shared and expressing these concerns made them feel labeled, they reported feeling unheard, lonely, and isolated. One participant described her experiences on labeling and others' attitude toward her eco-anxiety:

*“For a while, before the pandemic, I was telling people ‘There is the climate crisis and its effects are like this’, and they were telling me ‘How anxious you are, why are you thinking about these things?’ I used to tell people what I read. I realized that I was anxious in their eyes. They told me that I was worried. Being anxious about this issue was normal for me, I had not exactly thought of it as anxiety... Other than that, it made me worry that when I said, ‘I’m reading about climate crisis’, the other person said, ‘you too?’ Maybe it might have created anxiety such as ‘God, why am I like this?’...When I told a person about it, ‘You too? I have one more friend like you. He’s just like you. If you met, you could talk to him’. You know, they do not say he is crazy, but ‘he’s a bit like you, he’s obsessed with such things’... I think eco-anxiety is somewhat an isolating experience. You don’t live in Berlin; you’re not sharing your thoughts with those people. When I talked to my friends living there, they told me that these issues and interventions were already being discussed there. But here, it is different. You feel a little lonely... It seems to me to be an isolating experience and it requires self-care... The anxiety we experience should not be underestimated, and we must embrace it at some point.” (P02, F)*

Two participants described how they felt lonely and even marginalized with regards to be environmentally conscious. They stated feeling as if they came from a minority group and could communicate their environmental concerns with a small

group of people. As a result of these feelings, they expressed feeling alienated from the rest of the society.

*“Sometimes it feels like we're the minority on this subject. Despite everything, even when I see all those reactions in social media in Turkey, I think how few people mention it. There is despair... They try to suppress or silence the people who raise their voices for climate crisis. And it's real injustice.”* (P07, M)

*“It feels lonely. You feel like a black duck in public. In fact, you are doing the right thing, but people look at you like you are an alien. They find it strange when I carry the garbage in my hand for 10-15 meters or when I put it in my pocket instead of throwing it on the ground... Like I said, it makes you feel lonely. You can talk to certain people about these issues. The rest of the society mostly looks at me like ‘what is this guy saying’ or exhibits such an attitude. You can't talk to everyone; you can only talk to some specific people.”* (P08, M)

Ultimately, the participants said that they distanced themselves from people who were insensitive about environmental and climate crisis. They started to restrict the communication with those people, not prefer talking to them about these issues, and even not want to be friends with them. Thus, this created a cycle of increasing physical and emotional distance between the participants and the environmentally insensitive or indifferent people.

*“It also affects my social relationships. This has turned into a litmus paper at some point. In other words, I think that I have difficulty in communicating openly and sincerely with people who do not take climate crisis seriously or who somehow do not sufficiently inform themselves about it. Of course, no one must accept the same solutions, but I cannot establish comfortable, open, and secure communication with people who actively support policies and ideologies that will perpetuate the environmental and climate crisis.”* (P09, M)

*“I guess an ecologically insensitive person is not someone I want to be friends with. So, this is an important feature for me. For example, when I*



*see a person throwing garbage, I really feel estranged from him or I do not want to have a close relationship with him or when I meet someone denying climate change, I don't think 'he denies climate change but he has other good features'...So, this is an important issue for me. I think that a sane person who lives with the facts should accept it and give importance to it. I don't want to have a close relationship with someone who is not attentive and sensitive about it.” (P10, M)*

In sum, the participants revealed their negative experiences of environmental and climate crisis. They described how they were experiencing eco-anxiety, beside undergoing physical and emotional losses, and consequently feeling grief and despair. They also mentioned the sense of powerlessness in terms of mitigating the effects of crisis. Feeling lonely and isolated from the rest of the society who were stated to be indifferent were described under this theme, as well. In the next theme, how participants managed these negative outcomes is explained.

### **3.4. ATTEMPTS TO COPE WITH NEGATIVE OUTCOMES**

The fourth main theme covered the methods of managing adverse experiences and coping with negative outcomes related to the environment and climate crisis. In this theme, various individual measures, participating in organizations, and efforts to raise awareness in the social context were explained. Finally, accepting the limitations of what one can individually do and adaptation plans were mentioned. The last main theme consisted of the following sub-themes: “changing personal habits and plans”, “giving and receiving social support”, and “accepting limits and sustaining hope.”

#### **3.4.1. Changing Personal Habits and Plans**

Some participants indicated that experiencing eco-anxiety and climate crisis related negative outcomes prompted them to say, ‘we need to do something about this crisis’ and take certain actions. These changes took the form of adopting

different habits in one's life related to consumption, food preferences and other pro-environmental behaviors. Some participants found the motivation to make these changes in their experience of eco-anxiety and felt the need to do something about it.

*“Ultimately, at the maximum level, eco-anxiety must turn into something constructive. I couldn't make sense of this anxiety at first either, but people are experiencing it too and something needs to be done about it... If you are someone having eco-anxiety, you need to do something... People who worry about the environmental and climate crisis are the ones who will change the world. People worry and they take actions. (P02, F)*

A majority of the participants shared their individual efforts to cope with eco-anxiety and to lessen their share in environmental and climate crisis. They chose to acquire more information on this issue through reading and researching. They reduced water consumption, waste, and plastic use. They stated using eco-friendly products, collecting wastes, and reducing their carbon footprint. Vegan diets and consuming less meat and dairy products were emphasized by the participants to reduce their environmental impact, as well.

*“I was sewing clothes myself so I wouldn't buy anything... I use public transport, and never buy anything when I don't need it... I try to read even PDF books.” (P02, F)*

*“As I became more environmentally conscious, I started to think about what I could do. Although what I can do individually is very limited, I try to do them. For example, I separate waste oil and paper as much as I can... I try to reduce the use of plastic.” (P03, F)*

*“Especially for a year, since the pandemic, I have been trying to minimize the water I consume, except drinking water. Now I have a reflex like not turning on the water fully while taking a shower or washing my hands. And I try to recommend it to my girlfriend, family and close friends... I don't do anything other than reducing water consumption, but I am very sensitive about water.” (P07, M)*

Both female and male participants acknowledged the environmental and climate crisis and its current and future effects. Female participants mentioned changing their personal habits and getting social support more than males. Although females accepted that the effects of individual measures were small, they continued to do so. However, male participants were found to be less active in changing their personal habits compared to females, as they thought that the overall effect of individual measures was negligible. Moreover, male participants emphasized the importance of systemic changes more than females did. Individual efforts such as reducing carbon footprint, vegan diet, reducing meat and dairy consumption, using less plastic were mostly shared by the female participants. For instance, one of the female participants told the individual steps she had taken:

*“I prefer biodegradable products to generate less waste as much as possible... I reduced my consumption; I do not buy anything if I don't need it. I reuse things, barter or borrow clothes. What we can do individually seems to be limited to these.”* (P05, F)

Whereas three of the male participants underlined the need for systemic changes:

*“At the end of the day, I don't think that the individual measures I took actually had any effect. For example, perhaps reducing meat consumption may be an important step, but it depends on how widespread it is. This sector needs to end rather than reducing individual consumption... The individual measures do not seem to affect the climate crisis in any way... There is no point in being vegan right now. The effect of the meat I eat myself on carbon emission or environmental and climate crisis is mathematically zero... Stopping meat consumption and change in the system can be a solution.”* (P09, M)

*“I think that am I the one going to save the planet? That's why I eat meat... Or if I have to travel somewhere, I fly... It's something that policy makers should take care of, so it doesn't seem fair to me to individualize it and put the burden on individuals. I don't think we can do anything individually. I*

*don't know, at this point there is no difference between eating meat and dieting vegan. It doesn't make any difference.” (P10, M)*

*“Unless we evolve into truly great technology, we do not have the power to prevent the climate crisis. Therefore, it is not possible for the small things I do to affect this. That's why I can't find motivation to change my life.... Yes, there is nothing I can do but at least I'm not selling oil. There is nothing I can do individually, but there is still a lot that states can do.” (P11, M)*

Another point highlighted by the participants was voluntary childlessness. They were hesitant to have children in the future because of the negative anticipations about the future. Therefore, they changed their plans of having children in order to adjust the future. Three participants expressed their decision of not having children:

*“I used to want to have a family with many children, I would love to have children, but now, it will be such a cliché, but it feels like a real selfishness to bring another child into this world when I'm not taking enough responsibility myself to save the planet. There is also great uncertainty. We do not know exactly what awaits us. What will the world really be like? It's hard to imagine.” (P05, F)*

*“My girlfriend and I both want to have children. But the more I think about these issues, especially recently, I'm so desperate and I don't want to have a child... Does the world really need another child? Should I leave legacy of eco-anxiety to my future child? It is not fair... I did not directly contribute to the climate crisis... If my future child experiences injustice, I will feel guilty about it. Even the possibility of this justifies not having children. This should not be considered as a marginal idea. In fact, I think the idea of having children should be considered as marginal... The world does not need the human population to increase.” (P07, M)*

*“I don't want to start a family and have children because I certainly don't want to leave such a legacy to my child, while it is not yet clear what kind of crisis our generation will face. This was one of the most radical thoughts for me. I would like to have a beautiful family, have children, but right now*

*I definitely think that this is one of the worst things that can be done to a person... Such a shitty climate, such a shitty world. It's cliché but I really don't know what kind of problem I will deal with in 20 years... If I have a child, I will leave my child in a very bad environment and I will die, then he will have to deal with it.” (P11, M)*

### **3.4.2. Giving and Receiving Social Support**

Another attempt to manage eco-anxiety and cope with negative experiences that the participants shared was giving or receiving emotional support from their social environments. They stated having their families' and friends' support who were environmentally conscious and sharing their concerns.

*“Sharing with others is important in terms emotional support. If you share something, you can get rid of it more easily. There is such emotional support, but there is no support such as ‘the world will get better, Bill Gates is working on the nuclear power plant, he will solve it’. If you were to talk to Bill Gates, maybe he would say ‘I will handle it, don't worry’ (laughing). It's more like emotional support, of course, talking about it with someone is always good.” (P11, M)*

They also highlighted the importance of raising awareness in others through talking to them about environmental and climate crisis. They told sharing social media posts on environmental issues with their followers.

*“Raising awareness in other people, engaging in recycling activities, learning how to recycle and teaching it to others. Both raising awareness and spreading this information. Maybe it could be meeting to protest something, actively working in the field... I think it would be more effective to do such things.” (P03, F)*

Meeting with people having similar ecological concerns was said to be helpful while managing eco-anxiety. Considering the labeling and lack of recognition associated with eco-anxiety in one's social context, the presence of people who could offer understanding and emotional support was described to be

valuable. Further, one participant suggested arranging group therapy for individuals with eco-anxiety.

*“I don't know, but is there group therapy? Why not? Because I just read a book and there is a syndrome in very wealthy countries such as Sweden or Norway, people are thinking ‘there are people living in bad conditions in other countries, the climate is changing, the ecological balance is disrupted, the planet is in a very bad state’. Due to eco-anxiety, people experience serious depressions and group therapies are managed for this issue. I don't know if it is fictional, but it seemed real to me. Although it is not that common in Turkey, I think it might be useful for people who experience intense eco-anxiety. All the patients can be good for each other like AA or NA. Why not? If people can be organized, it can be good to share their feelings with each other in such an environment.” (P07, M)*

Moreover, the participants shared a feeling of solidarity, which made them feel powerful and not alone, through participating in organizations or projects on environmental activism.

*“It gives a feeling of solidarity, as if we are stronger.” (P09, M)*

### **3.4.3. Accepting Limits and Sustaining Hope**

At the end of the day, the participants accepted their limits, and the impossibility of making global changes by themselves. They acknowledged environmental and climate crisis, recognized their eco-anxiety, accepted the inevitable future changes and inadequacy of their own attempts. Three participants explained how they got used to the fact of environmental and climate crisis and experiencing eco-anxiety:

*“I think I get used to it. I have already been exposed to the reality of climate change from an early age. It is a reality that I have been aware of for the last 10-15 years, it is not shocking or a surprise... This is real, and it is upsetting, depressing. But it has existed for a long time. I am getting used to it.” (P09, M)*

*“I was more worried about this issue in the past... Now I say, ‘we’ll see what happens’, just like in the pandemic... I guess I used to be worried. I mean, I’m very worried right now, but maybe I’m used to be worried.”* (P10, M)

*“I accepted eco-anxiety and climate change 100%. So, this is the future, there is nothing that we can do about it. When I realized this, I had peace of mind. Of course, this process was not that easy, but at some point, I found inner peace... We are already heading towards the inevitable end... As I said, before I was worried about how preventing it individually, and I was struggling against it. But now I have evolved to the point that this is part of my life with a sense of acceptance... Acceptance took the place of sadness, anger, worry, and disappointment.”* (P11, M)

As they accepted the inevitable future, they pointed out the necessity of global political movements, raising awareness in public, and changes in economic and political systems. For some of the participants, accepting the limits of individual action can drive them to engage in activism and to pressure for macro-level changes, which in turn serves as a way of coping with eco-anxiety.

*“I think the most fundamental thing to do is to create public pressure on the officials to change their policies on this issue... I think this is the thing that has to change. It is necessary to make an effort to change the larger system.”* (P05, F)

*“The climate crisis intersects with the indigenous people’s crisis, the resource crisis, the migrant crisis, the capital crisis, the class crisis. All are interconnected. For instance, we are talking about gender inequality, and there’s evidence that women will be affected more than men by the climate crisis. Then, it becomes obvious that it is necessary to continue environmental struggle while continuing other struggles.”* (P09, M)

The participants stated that they accepted their limits, but at the same time they mentioned to sustain the hope. They were believing in change in the future.

*“Of course, there is some hope. Maybe, after all, this anxiety pushes people to do something, and if they do it together, people can find solutions. Maybe I need to keep my hope and hold on to it in the long run.”* (P05, F)

They also mentioned feeling hopeful thanks to ecologically sensitive and caring people or organizations. Three participants pointed out the local environmental movements in Turkey which provided them hope and belief in change.

*“I think that there are local and important movements. We don't know them, but there are small cooperatives. Some people quit their jobs and start organic farming to do something more sustainable, not to damage the environment. Or there are trustworthy organizations, too.”* (P02, F)

*“There are of course social movements that started a few years ago, even if they are minorities, especially conducted by the youth. That gives some hope, I can't deny it. There are important movements that have an impact all over the world and even in Turkey... Those social movements show hopeful part of the society.”* (P04, F)

*“I think we can already see this from the rural movements. Their struggle against thermal power plants and hydroelectric power plants are very impressive... They are the people who have direct relations with water resources, agricultural areas and environment affected by chemical wastes, and they also express their reactions and raise their voices... That's why I think that the society we live in could be very agile and active with guidance and organization to take the measures against the climate crisis.”* (P09, M)

On the other hand, one of the participants stated that living with eco-anxiety was difficult for her. It was stated to be hard to contain those negative feelings.

*“It is very difficult to live with a feeling or anxiety that is very difficult to contain. Sometimes I don't feel like I live on a planet that is on the verge of annihilation or in danger of annihilation. I can't fully accept it. There is still a side of me denying it. It's hard to live with eco-anxiety. One may want to escape from it.”* (P05, F)

Finally, it was also indicated that participants needed a distraction or a break when they were overwhelmed with eco-anxiety and related intense negative feelings. They told they were playing video games, watching movies or doing sports at those times. Three participants expressed the positive effects of going to therapy



in terms of developing emotion regulation skills and calming themselves. Meditation was stated to be an effective way to regulate eco-anxiety, as well. One participant said that talking about environmental and climate change during this study helped her meaning making process of her eco-anxiety experiences.

*“Maybe we really need to experience it, the acceptance, the need to mourn... We lost a lot of things, forests were destroyed, water resources were severely reduced, the planet is warmed. Now, there is no way for us to turn it down... Eco-anxiety requires accepting it and confronting those losses, as well...I wanted to participate in this study, because I thought that talking about climate crisis is something that can contribute to coping with eco-anxiety through meaning-making of it. It's also good that you asked questions that I didn't ask myself.” (P05, F)*

To conclude, the participants described their efforts to manage the negative outcomes. They mentioned changing their personal habits to reduce their contribution to environmental and climate crisis and changing their plans to adjust themselves to the inevitable future changes. The importance of giving and receiving social support was also stated. Finally, accepting the limits of what they individually could do to mitigate the effects of the crisis and attempts to sustain their hope was explained. The individual attempts to cope with eco-anxiety were shortly mentioned, as well. In the next chapter, the findings of the present study are discussed.

## **CHAPTER IV**

### **DISCUSSION**

The aim of the study was to explore eco-anxiety experiences of young adults in the social context of Turkey. Through this study, how eco-anxiety developed and its impacts on mental health were aimed to be understood. Besides, young adults' ways of coping with eco-anxiety were qualitatively investigated, and their experiences were examined from a gendered perspective. After the analysis of semi-structured interviews of the participants, four main themes were identified: 1) meanings of nature, 2) becoming aware of environmental issues, 3) experiencing negative outcomes, and 4) attempts to cope with negative outcomes.

The first main theme indicated the importance and meanings the participants attributed to the nature. The participants emphasized the positive effects of nature on their physical and mental well-beings. This theme had two subthemes which were "nature as safe haven" and "nature as a personal issue." The second theme included the processes of developing environmental consciousness and gaining awareness regarding environmental destruction and climate crisis. There were three subthemes under this main theme, named as "witnessing environmental degradation", "getting informed", and "developing a critical lens." The third theme described the participants' negative experiences related to eco-anxiety and emotional burden of witnessing environmental and climate crisis. The sub-themes of this theme were "loss, grief and despair", "sense of powerlessness", and "loneliness and isolation." The final main theme covered the ways participants used to manage negative outcomes and cope with eco-anxiety. Three sub-themes of final theme were "changing personal habits and plans", "giving and receiving social support", and "accepting limits and sustaining hope".

These main themes are discussed in the light of the previous research in the literature in the next session. Then, based on the present results, clinical implications are discussed. Finally, limitations of the present study and suggestions for future research are presented in the following sections.

## **4.1. DISCUSSION OF THE THEMES**

### **4.1.1. The Development of Eco-Anxiety**

The first theme was “meanings of nature.” Under this theme, the importance participants attached to nature was identified. The participants mentioned having close connections with the nature. They also indicated being sensitive to nature, animals, and ecosystems. In the literature, it is stated that people who are concerned for and value the nature and are closely related to their natural environment are at risk to develop eco-anxiety (Cianconi et al., 2020; Clayton, 2020; Clayton & Karazsia, 2020; Cunsolo & Ellis, 2018). Therefore, it can be implied that participants of the study, who are sensitive to and closely related to nature, are the ones enduring eco-anxiety and volunteered to share their experiences in the present study.

Spending time in nature, joining outdoor activities, doing nature sports, taking walks in parks are some of the activities mentioned by all participants. The interdependence between humans’ physical and mental health and the wellness of the nature were highlighted by the participants during the interviews. This finding was consistent with the literature which states that humans and their surrounding natural environments are interconnected (Seabrook, 2020). Norton (2009) highlights a fundamental notion of ecopsychology by emphasizing the mutual synergetic relationship between planet’s well-being and humans’ welfare and suggests that psychological and physical well-being are connected to the surrounding environment.

Furthermore, the participants pointed out the therapeutic and relaxing effects of spending time in nature when they were feeling distressed or anxious. Increased contact with natural environment was mentioned to be bringing feelings of healing, peace, and happiness. In the literature, activities such as spending time in nature are suggested to be effective in promoting physical and mental well-being, in addition to alleviating eco-anxiety and related negative feelings (Cunsolo et al.,

2020). In addition, according to Speert (2016) the nature can be a source of psychological healing through its effects of reducing anxiety, depression, and feeling of isolation. Similar effects on increasing psychological well-being have been reported by the participants in the present study, as well as other studies that demonstrate an association between spending time in or being related to nature and less depression and anxiety symptoms (Burns, 1998; Korpela et al., 2016; Martyn & Brymer, 2016). Korpela and colleagues (2016) state that nature walks in green spaces or parks are significantly effective in decreasing depressive symptoms and promoting mental health through reducing stress. Moreover, Martyn and Brymer (2016) showed that participants feeling connected to their natural environments reported lower levels of anxiety. Burns (1998) explains the positive effect of nature on mental well-being and ameliorating depressive symptoms with the natural environments providing plenitude of valuable and gratifying stimuli for the patients with depression.

Despite the positive meanings attributed to nature, the participants also talked about how their contact with the natural environment turned into a trigger for feelings of anxiety, hopelessness, frustration and anger in time. In this process, the participants dwelled upon their experiences of “becoming aware of environmental issues” in the second theme through direct and indirect experiences as well as educational efforts. The participants witnessed the environmental changes due to climate crisis and the environmental destruction through various channels. Then, they started to develop environmental awareness and gain environmental consciousness. As they gained information and educated themselves about environmental consciousness, they developed a critical lens and started to criticize the society, the authorities, and the consumption-focused system.

The participants reported witnessing environmental degradation through various means, such as direct experiences or shared experiences of their family members or friends. They also mentioned currently witnessing climate crisis through extreme weather events in Turkey. Similarly, in the literature, it is stated that eco-anxiety and related negative experiences such as solastalgia, hopelessness or anger are reported to increase with witnessing the outcomes of climate crisis

(Albrecht, 2011; Cianconi et al., 2020; Coffey et al., 2021). Moreover, the participants stated witnessing the invasion of nature with greediness over resources. According to Hasbach (2015) the Earth is recently conceptualized as a resource that can be plundered and exploited by human beings for the sake of technological civilization. Therefore, these findings supported the research in literature arguing the effects of witnessing degradation on increased eco-anxiety.

Besides direct experiences and witnessing, other means of gaining knowledge on environmental and climate crisis were mentioned. The participants got informed through education at schools, their social groups, local and global environment-climate movements, and worldwide known actions of activism. Kışoğlu and colleagues (2010) underlines the significance of environmental education to raise environmental consciousness and to mitigate the environmental crisis. It is found that people with lower levels of education are more likely to deny the climate crisis (Kıral Uçar et al., 2019). In a supporting vein, the participants of the present study who were environmentally literate gained environmental consciousness through education. Albrecht (2011) states that people who are aware of and informed about climate crisis and its future implications are more prone to experience climate anxiety than people who are unaware of it since they bear this knowledge as a “burden” (p. 48) every day and cannot avoid it as its effects become more visible. The participants told that as they developed eco-anxiety, they needed to get informed, and learned more about environmental and climate crisis. However, the process of getting informed caused their eco-anxiety level to rise, in turn. This process created a vicious circle where the participants wanted to learn more about environmental issues in order to understand more fully, and yet became more sensitive and vulnerable to more debilitating forms of eco-anxiety.

This brings forth the question of whether becoming more knowledgeable about environmental issues alleviates or worsens eco-anxiety. It is important to have knowledge and access true information regarding the environmental and climate crisis, yet on the other hand Albrecht (2011) argues that people who are aware of uncertainty regarding the future and have knowledge about severe implications of the crisis are more likely to experience anxiety which could turn

into feeling helpless and having eco-paralysis. Therefore, awareness and knowledge may cause negative emotional burden on people.

During the interviews, the participants also expressed developing a critical lens on environmental and climate crisis. They criticized lack of environmental consciousness or concerns in the society. According to Clayton (2020), climate crisis is a social issue and people's reactions to climate change is influenced by whether the society addresses it or not. Accordingly, the participants pointed out the society's indifference and lack of effective channels to increase environmental consciousness to address the crisis. They also criticized the Turkish and worldwide governments' insufficiency or unwillingness to take prevention or intervention strategies. Wolf and Moser (2011) stated that lack of governmental support and green policies may cause the public to lose their willingness to take environmental or climatic actions, and the government's failure to take action could be the reason behind the society's indifference.

The representation of environmental and climate crisis in media was criticized by the participants, as well. Doherty and Clayton (2011) argue that the news of climate change related natural disasters can be presented misleadingly by media, since the media may not aim to provide the scientific truth to sensationalize the news. Moreover, Cunsolo Willox (2012) states that media do not recognize the loss of environment and species other than humans as a source of mourning, which does not correspond with people's experiences. Consequently, the participants of the study expressed criticism and their disappointment about the media's neglect on environmental and climate crisis related issues.

Furthermore, overconsumption of the resources and the consumption-focused capitalist system were criticized by the participants. According to Ballman (2020), governments or companies may be held accountable for environmental degradation and exploitation of natural resources in the name of economic policies, and by contributing to climate crisis and polluting natural resources, they may evoke frustration in public. In this study, the participants were found to be deeply frustrated by the authorities who were being held responsible for environmental degradation.

The development of critical consciousness that led the participants in the present study to feel frustrated with and disappointed at the government, the media and private companies is in fact characterized as a vital step in the empowerment of individuals and communities when they face with a social injustice (Gutierrez, 1995). Defined as critical consciousness in the literature, this perspective means becoming more aware of systems of oppression and inequality in the society and situating one's individual experiences within these systems (Watts et al., 2011). Critical consciousness is shown to be associated with a sense of empowerment and increased motivation for improvement in areas such as immigration, racial injustices, gender-based discrimination (Opatow, 2011). Critical consciousness on ecological problems have not been examined in the literature. However, the reason behind participant's experiences of eco-anxiety and lack of social action against ecological and social injustice could be explained by the fact that the participants were not feeling empowered enough to engage in actions, even though they developed critical consciousness on this issue. As Gutierrez (1995) mentions, one needs to believe in "self and collective efficacy" (p. 230) which is the belief that one is efficient to change their own life and the social order they live in. Therefore, in the present study, the participants' awareness of lack of environmental sensitivity and consciousness in the society and their lack of trust the society or the authorities could be the reason behind the increase in their eco-anxiety level, instead of making them feel empowered and directing them toward taking social actions.

The participants of the present study were young adults coming from the context of Turkey and having environmental concerns regarding environmental and climate crisis. In the literature, the studies conducted with Turkish samples show that Turkish people have high levels of environmental concern (Clayton & Kılınç, 2013; Sarigöllü, 2008). Additionally, young women and men participated in the present study were equally environmentally conscious, valuing and spending time in the nature.

#### **4.1.2. Eco-Anxiety and Mental Health**

As a result of increasing awareness on environmental degradation, the participants described their experiences of eco-anxiety which seemed to be a multifaceted phenomenon and involved a number of negative emotional reactions, named as “experiencing negative outcomes” in the third theme. The participants shared their experiences and feelings regarding the environmental and climate crisis along with their eco-anxiety experiences. They talked about the experiences of losing the nature, ecosystems, and their plans for future. Dailianis (2021) suggested that climate crisis could be conceptualized as a new classification of trauma since it threatens existence of every living organism on Earth, and such a massive loss comes with a process of grieving. The grief of losing the environment and accustomed lifestyles was emphasized by the participants, as well. In the literature, it is emphasized that people experience ecological grief after the loss of surrounding nature, ecosystems, landscapes or current lifestyle and the future (Comtesse et al., 2021; Cunsolo & Ellis, 2018; Pihkala, 2018). In a similar vein, feelings of loss and grief, and despair were frequently mentioned during the interviews. The participants were feeling desperate and powerless in terms of being unable to mitigate the effects of environmental and climate crisis.

According to Clayton (2020), anxiety is stated to be not a problem itself, and even occasionally it is an adaptive response to prepare oneself for potential threats. However, anxiety is stated to become maladaptive when it is too intense, frequent, uncontrollable, and causing disturbance in daily functioning (Clayton, 2020). Doherty and Clayton (2011) separated adaptive reactions to climate change from maladaptive and pathological responses. For instance, worry is an adaptive reaction to deal with anticipated threats, yet when it becomes pervasive and extreme, and interferes with daily functioning, it is maladaptive. In the study, the participants said that they were experiencing eco-anxiety almost at a stable level, yet it was triggered by witnessing environmental degradation or climate change effects. They added that, sometimes eco-anxiety was being experienced intensely, and they could not focus on their daily tasks. In other words, eco-anxiety interferes



with their daily functioning particularly after being triggered, and it may easily become maladaptive for the participants.

The question of whether the participants' experiences of eco-anxiety can be considered as a trauma response can be addressed on the basis of the present results. Psychological trauma is defined as "an affliction of the powerless" (p. 33) and feeling helpless due to the force coming from outside of the victim (Herman, 2015). Complex trauma, on the other hand, is described by Herman (1992) as "prolonged, repeated trauma" (p.377) in which the victim is subordinate to the control of the perpetrator. Comparing these symptom profiles with the accounts in the present study, it can be asserted that some participants manifested a trauma response. Some examples of their trauma reactions were feeling as a helpless or powerless victim to overcome the adverse effects of environmental and climate crisis, and feeling captivated by the control of environmentally insensitive and indifferent public and authorities, losing their connection with nature and the society, and searching the existential meaning of life on the planet which is on the verge of apocalypse. As White (2015) argues, climate crisis is recognized as a threat with being overwhelmed and feeling powerless.

Considering all these experiences, one important question is how specific the experience of eco-anxiety is compared to other forms of anxiety related to different domains of life. According to American Psychiatric Association (2013) anxiety disorders consist of extreme and persistent fear and anxiety accompanied with muscle tension or avoidance behaviors. In addition, Albrecht (2011) defines eco-anxiety as a form of anxiety that is triggered by environmental changes with anticipation of future threat. Therefore, eco-anxiety could be considered as a distinct construct, as it is different from the existing taxonomy of mental disorders in terms of being triggered by real environmental threats. Moreover, Diagnostic and Statistical Manual of Mental Disorders (5<sup>th</sup> ed.; DSM-5; American Psychiatric Association, 2013) defines anxiety as a response to "anticipation of future threat" (p. 189). Yet, environmental and climate crisis is a real and impending danger. Therefore, "eco-anxiety" term could be replaced by a new term that captures

individual's experiences in their social context and the reality of imminent threat of environmental and climate crisis.

Climate change is reported to cause people to feel depressed or lose their physical and mental well-being as well as to be in a state of paralysis which is defined as a state of silence that is "socially constructed" (p. 545, Pihkala, 2018). Furthermore, Clayton (2020) stated that climate crisis could cause polarization in public, and it demoralizes people to express their feelings related to climate crisis and leads to silence and feeling isolated, which consequently leads to losing one's social support. In the study, the participants told how lonely and isolated they were feeling in terms of experiencing eco-anxiety in society in Turkey, because their ecological concerns were not heard. They also highlighted the choice to keep their distance from the people who were indifferent to climate crisis. Therefore, experiencing eco-anxiety can be considered as a relational issue, influencing and being influenced by social circles and community attitudes. The participants said that they were hurt more by the insensitivity and indifference of others in addition to the physical threats of the crisis. Beyond the effects of the environmental and climate crisis, the reactions of other people, that is the unresponsiveness, put more emotional burden on the participants and emotionally hurt them.

Overall, it seems viable to understand the experience of eco-anxiety from an ecological perspective looking at multiple layers of the environments that human beings are part of. These environments can include both social and physical environments. As suggested by Bronfenbrenner (1979), ecological perspective is an approach to consider an individual's environment as interrelated systems from the intermediate surrounding to the broader context such as culture and sociohistorical events that shape the individual's interactions with others through the process of development. This perspective can help to understand the participants' experiences of eco-anxiety from a broader perspective in that the participants talked about loss and grief at the individual level, feeling lonely and isolated at the community level and feeling powerless at the societal level to describe their experiences of eco-anxiety.

### **4.1.3. Coping with Eco-Anxiety**

Although a majority of the participants talked about their experiences of eco-anxiety as being overwhelming to some extent, they also shared how they tried to cope with it as explained in the final theme entitled “attempts to cope with negative outcomes.” In their accounts, the participants talked about how they were coping with eco-anxiety and other negative outcomes of witnessing environmental degradation and climate crisis. They described personal and social means they were using to deal with the heavy emotional burden of this issue.

The participants of the study, consistent with the literature, emphasized the fact that environmental crisis is mostly because of human activities in the name of economic advancement. Kals and Russell (2001) suggest that to reduce environmental degradation, people need to change their “behavioral patterns” (p. 367), even though such change means decreasing in economic growth or abandoning accustomed living standards. As Hasbach (2015) states, there is the need for building an alternative relationship with the Earth and the ecosystems with which we share our planet. Thus, the concept of the world as a resource to be recklessly exploited should be changing into an awareness that environment, ecosystems, and human beings are interconnected (Hasbach, 2015).

Additionally, the participants emphasized the need for global and collective actions. Fritze and colleagues (2008) argue that climate crisis, since it is a worldwide threat, could provoke collaboration between different groups and unite international communities. Moreover, participating in social groups is stated to be helpful to enhance mental health through expressing eco-anxiety and sharing negative feelings related to climate crisis such as loss, sadness, guilt or worry (Comtesse et al., 2021). The participants shared that they were feeling solidarity through joining in activism groups and ecological movements and emphasized social support as an effective attempt to cope with eco-anxiety.

Nonetheless, as explained earlier, there were some challenges the participants faced when it came to establishing a social support system. The participants emphasized the lack of environmental consciousness in the society.

Although they reported feeling solidarity in activism groups, they felt the loneliness in the society in general. The lack of social support in environmental and climate activism was highlighted by the participants. Feeling lonely and isolated could be psychologically more challenging for the participants when society's environmental insensitivity and indifference are considered. Moreover, the negative outcomes of loneliness and social isolation on mental and physical health were examined in the literature. For instance, research by Richardson and colleagues (2017) supports that loneliness is related to experiencing disturbances in mental health, anxiety, distress, and depression. In addition, Cornwell and Waite (2009) found that feeling socially disconnected and isolated were correlated with low levels of physical wellbeing.

Building hope and faith in public is reported to play a key role in promoting climate change related mental health (Fritze et al., 2008). The participants of the present study indicated that after experiencing eco-anxiety and related experiences, they utilized certain individual and collective coping ways to sustain their hope. When they felt they had done their best to mitigate the effects of environmental and climate crisis, and there was not any other measure that they could personally take, they accepted their limits. At this point, they chose to believe in change and technological advancements in the future, and this made their adjustment easier. Moser (2007) argues that hope for the future in terms of climate change is about facing the reality and developing efficient strategies which should encourage people to imagine a future and fight for it. According to Moser (2007) in order to make people believe in change, the efforts of people concerning the nature and environment should be pointed out and collective actions and prevention strategies should be developed. Similarly, the participants acknowledged the limits of their individual efforts, and yet simultaneously underlined the need for hope and belief that the change is possible with collective actions.

Resilience could be another protective factor while coping with eco-anxiety. It is conceptualized as an ability to adapt to and overcome struggles and to preserve mental well-being in the face of various adversities (Herrman et al., 2011; Rutter, 2006). According to Rutter (1993), resilience is present both within the self and

one's social environment. Masten and Garmezy (1985) highlight the importance of social support in addition to personality traits and support from the family in the development of coping strategies and resilience. In addition, Herrman and colleagues (2011) state the two levels of resilience, which are the individual level and the sociocultural level, and emphasize that resilience could be enhanced through promoting the social support the individual receives. In the literature, interpersonal and relational sides of resilience are also stated. Goodley (2005) points out the construction of resilience through social relations and social support, that it is a product of social relations in the collective settings. According to Cadell and colleagues (2001), providing "social safety nets" (p. 32) especially for socially isolated and excluded people could instill hope, resilience, and empowerment. Therefore, it is necessary to promote individual and collective resiliency for young adults experiencing eco-anxiety who stated to feel lonely and isolated in the present study.

Furthermore, Zimmerman (2000) emphasizes that the empowerment in community and organizational levels involve the collective actions to improve socioeconomic conditions or to succeed such goals. Cadell and colleagues (2001) argue that individual and collective empowerment mutually promote each other, as one's individual and social contexts are interweaved. Empowerment is defined as an ability to have control over and make decisions about one's surroundings while having critical awareness of the sociopolitical context (Zimmerman, 2000). Therefore, resilience and empowerment at social level are as important as individual resiliency and empowerment for individuals' mental health (Cadell et al., 2001). In the present study, the participants indicated the positive effects of receiving and giving social support on coping with eco-anxiety. The results indicate the effectiveness of social empowerment and its positive influences on coping should be considered. In addition to the microsystem of an individual, the results point out the importance of supporting other ecological systems (Bronfenbrenner, 1977) consisting of social interactions with others, cultural values, sociopolitical ideologies, and of raising climate awareness and ecological sensitivity.

Dijkstra and Homan (2016) showed that avoidance from the stressors as a coping strategy was negatively associated with feeling in control of the situation and psychological well-being, whereas confrontation with the stress factors were found to be positively related with feeling of control and mental well-being. The participants of the present study stated occasionally denying and avoiding environmental and climate crisis, eco-anxiety, and related intense feelings when this emotional burden was difficult for them to handle. Thus, it could be considered that they sometimes utilized avoidant coping strategies. Moreover, Nezu (1985) showed that an individual believing in effectively solving their problems was less likely to experience depression, anxiety, and distress. In the present study, it could be thought that the participants were inclined to experience eco-anxiety and distress, since they believed that they could not mitigate the effects of the environmental and climate crisis. Moreover, the participants stated that acceptance accompanied denial of the environmental and climate crisis, as they witnessed its effects.

Overall, the results of the present study indicated that young adults who are closely related to and care for their natural environments are the ones who experience eco-anxiety and are willing to share their experiences with someone who studies their environmental concerns. Young adults develop eco-anxiety through processes of witnessing the changes and natural disasters, becoming aware of environmental and climate crisis, and gaining knowledge and information about this issue. As they become more conscious about the crisis, and its social, economic, and political reflections, they develop a critical lens. Through these processes, they experience eco-anxiety along with losing the nature and ecosystems, grieving for the loss, feeling desperate, helpless, and hopeless. They are disappointed by others' insensitivity and indifference; they are frustrated and feel lonely and isolated from the rest of the society. On the other hand, they try to deal with eco-anxiety and heavy emotional burden, and cope with negative outcomes of the environmental and climate crisis. They change their behaviors, look for social support and try to raise their hope.

#### **4.1.4. Eco-Anxiety and Gender**

The present study also aimed to investigate if there are any gender differences in experiencing eco-anxiety. As Pearson and colleagues (2017) argue, women declare their environmental concerns, acknowledge the climate change, and have more knowledge about climate change more than men do. Furthermore, Stern and colleagues (1993) found gender difference in having environmental concerns. They stated that as opposed to men, women have more environmental concerns because of considering the potential future harms to themselves, the others, and the Earth in general. On the other hand, men were found to think on the connections between the change in environmental conditions and its potential consequences. Additionally, Davidson and Freudenburg (1996) state that men are likely to be less environmentally concerned compared to women. They explain the gender difference regarding environmental concerns that men are more concerned with providing financial sources, whereas women are primarily concerned about caring and nurturing the family due to gender socialization processes they are grown up with in the society. Moreover, in relation to the gender roles, men consider themselves as entitled to control or change their environment, while women see themselves as a part of and in relation to their surrounding environment (Davidson & Freudenburg, 1996). In the present study, no such difference was observed between female and male participants in terms of having environmental concerns and consciousness. Given the inclusion criterion of “experiencing eco-anxiety; anxiety and distress related to climate change and environmental degradation”, the participants were the ones with environmental concerns and volunteered to participate. Therefore, both female and male participants were similarly concerned and worried about environmental and climate crisis.

In the present study, both women and men were similarly experiencing negative outcomes and eco-anxiety, in addition to being equally environmentally conscious. Moreover, both female and male participants reported developing critical lenses and criticizing the deficiency of the society and the authorities in terms of mitigating the effects of environmental and climate crisis. However, male

participants expressed their criticism with feelings of anger more than females did. Women participated in the present study were similarly aware of the environmental insensitivity and indifference in society and the system, yet they mentioned the negative experiences and feelings related to eco-anxiety more. In other words, while becoming aware of environmental issues and developing a critical lens, the discourses of men included more expressions with an angry tone, and they accepted the environmental and climate crisis and its consequences. In addition, they seemed to be experiencing eco-paralysis. On the contrary, female participants expressed feelings such as hopelessness, despair, or powerlessness more rather than anger. The reason for this finding of gender difference in expressing emotions, might be that men are more likely to express anger than other emotions since expressing anger is more compliant with the gender norms of the society (Chaplin, 2015). According to Sharkin (1993) men express their anger more easily compared to women, since it is more acceptable for men to feel and express anger because of the socialization patterns and gender roles. Kring and Gordon (1998) showed that even though there was no difference in women's and men's experiences of emotional reactions, women expressed those emotions more than men did. They also indicated that growing up in an expressive family caused being more emotionally expressive. This finding supports the fact that social factors effect emotion expression. Brody and Hall (2008) highlighted the effects of culture and socialization factors on gender difference in emotion expression. They emphasized that female and males had distinct emotional expressions after adapting to traditional gender roles in the developmental process. Therefore, the difference in emotional expressions of male and female participants could be explained by gendered differences in socialization processes.

In this study, young adults' coping with eco-anxiety was investigated, as well. Female participants reported engaging in pro-environmental behaviors more than male participants. Female participants mentioned changing their behavioral patterns to minimize their carbon footprint, such as using eco-friendly products, or switching to vegetarian or vegan diets. However, male participants who advocated the insufficiency of individual attempts as opposed to global and radical changes to



mitigate the effects of crisis, were found to engage in personal attempts less and not to adjust their lifestyles to be more ecological.

One reason why male participants reported fewer individual actions than females might be that males may feel more hopeless and worried than females and believing that individual attempts to mitigate environmental and climate crisis will not be effective. Conversely, female participants reported engaging in pro-environmental behaviors more, perhaps because they feel more hopeless and worried, and try to deal with eco-anxiety through these behaviors. In their study, Searle and Gow (2010) showed that female participants who are under the age of 35 are more distressed about environmental and climate crisis and having tendency to display pro-environmental behaviors. In other words, young women are reported to be more worried and more likely to perform these behaviors (Searle & Gow, 2010), which is consistent with the findings of the present study. In a consistent vein, in the literature, it is shown that having higher levels of eco-anxiety is positively associated with pro-environmental behaviors (Ballman, 2020; Ojala, 2008).

Another reason why women are more likely to change their individual habits might have to do with their gender socialization experiences. Eckes and Trautner (2000) emphasize the process of gender construction through social input and socialization processes, in which individuals acquire the knowledge of gender roles in relation to the differences related to sex. During gender socialization processes, girls and young women are expected to perform caretaking roles (Davidson & Freudenburg, 1996) such as looking after siblings, pets or undertaking cleaning chores. Therefore, female participants might be more prone to engage in pro-environmental behaviors.

In the literature it is stated that women are expected to be affected more by the environmental and climate crisis, because of their financial and political disadvantages which are related to gender inequality (Alston, 2013; Edvardsson Björnberg & Hansson, 2013). The participants underlined the gender inequality in the world, and shared their thought that women are more disadvantaged than men due to oppressive gender roles and social pressure in terms of having access to

protective factors and economic sources when they face with the changes and risks of the environmental and climate crisis. This gendered vulnerability emphasized by the participants is consistent with the literature (Alston, 2013; Edvardsson Björnberg & Hansson, 2013; Global Gender and Climate Alliance, 2016; Hrabok et al., 2020). However, they said that they personally did not experience such gendered disadvantage. They told what they observed so far in terms of the gender oppression, and that they believed it would be the same in the future. In the following section, clinical implications of these findings are discussed.

#### **4.2. CLINICAL IMPLICATIONS OF THE PRESENT STUDY**

Climate crisis is a major physical and psychological hazard that human health is facing with in 21<sup>st</sup> century (Bourque & Cunsolo Willox, 2014). Therefore, mental health professionals are challenged and required to be professionally equipped and ready to offer help and adaptive strategies to people with eco-anxiety (Clayton, 2020). While working with mental health impacts of climate change, mental health professionals should be educated about adverse impacts of climate crisis on mental health (Gifford & Gifford, 2016). Given the climate crisis effects on mental health, they should be aware of its adverse impacts on mental wellbeing and be sufficiently qualified for intervention. They should also be trained to evaluate the psychological needs, to assist the survivors and to promote their resiliency (Bourque & Cunsolo Willox, 2014), since resiliency is a significant protective factor to reduce climate anxiety (Padhy et al., 2015). In short, mental health professionals have an important responsibility while working with the mental effects of the climate crisis. They should try to ease the climate change related distress and emotional burden.

Some of the measures providing psychosocial adaptation to climate change effects reported in the literature are policy-making, individual and community-based interventions, psychopharmacology, stress regulation (Hayes et al., 2018) and individual or group therapies (Cunsolo et al., 2020). Art-based activities and therapy modalities may be helpful to cope with eco-anxiety through providing the

individuals a holding space to express their feelings instead of denying them (Pihkala, 2018). On the other hand, ecotherapy emphasizes strengthening the bond between nature and human mental health. It suggests different treatment practices aiming to mutually heal human psychology and the natural environment (Chalquist, 2009).

Individual based mental health interventions regarding climate change are reported to be less effective without integrating societal adaptation strategies, and even global attention and measures should be provided (Clayton, 2020). According to Weber (2006), people from most of the regions on the planet have not experienced impacts of global climate change yet, thus there is need for finding means to raise awareness and effective reactions to climate change. Those means should grab the public's attention, evoke emotions, and call for collective actions (Weber, 2006). Additionally, MacDonnell and colleagues (2016) found that engaging in activism and receiving social support positively affects mental health. Therefore, having knowledge of local networks or local activism through acknowledging such movements, participating in them, and sharing similar concerns and taking collective steps may be helpful to manage negative outcomes of environmental and climate crisis.

In terms of gender, in most of the countries, women have less economic power, and they are vulnerable to climate change in terms of accessing adaptive means which might be highly costly in near future due to limited resources or recovering after a climate change related natural disaster (Edvardsson Björnberg & Hansson, 2013). Therefore, gendered vulnerability to environmental and climate crisis should also be considered by mental health professionals. Adaptive strategies to increase women's resiliency and to provide emotion regulation could be emphasized while working on psychological effects of the crisis with female patients. On the other hand, in the present study male participants reported taking actions less than female participants did. Thus, it could be inferred that male participants were experiencing eco-paralysis which was defined by Albrecht (2011) as being unable to react although being highly concerned about environmental and climate crisis. In other words, male participants can benefit from effective coping

strategies to manage eco-anxiety. Thus, it is also important to consider the challenges involved in adaptively responding to and coping with environmental and climate crisis while working with male patients experiencing eco-anxiety.

In sum, eco-anxiety should be considered in the light of ecological systems theory (Bronfenbrenner, 1977). The ecological systems theory suggest that an individual's development is mutually influenced by the relationships with their both varying immediate and larger social environments. Eco-anxiety is regarded as an individual mental health disorder, yet it has relational, social and environmental components. Therefore, when an individual who experiences eco-anxiety and receives only individual interventions or treatments, these interventions may run the risk of ignoring the impact of the social and political contexts that they live in and psychologically hurt and damage them with their indifference and insensitivity. The society's perspective on environmental and climate crisis should be taken into consideration while working with eco-anxiety, as it increases the emotional burden, hopelessness, and loneliness. Darling (2007) states that ecological systems theory conceives that the context and culture an individual lives in is interrelated with their development and experiences, and thus, beside individual interventions, social and large-scale intervention methods should be taken. For this reason, while working with eco-anxiety in the social context of Turkey, mental health professionals should be aware of actions and organizations that aim to raise public awareness of climate and environmental crisis. They could also inform the public of potential mental health issues related to environmental and climate crisis to lessen stigmatization and advocate for social and political interventions in order to prevent further psychological burden (Bourque & Cunsolo Willox, 2014).

#### **4.3. STRENGTHS AND LIMITATIONS OF THE PRESENT STUDY AND SUGGESTIONS FOR FUTURE RESEARCH**

The present study aimed to contribute to the literature by examining young adults' eco-anxiety and coping experiences with a qualitative analysis method. This study focused on young adults' individual experiences, the process of developing

eco-anxiety, experiencing it in the context of Turkey, and the ways they use to cope with it and related experiences. It was aimed to explore their experiences through in-depth interviews with their personal narratives, as opposed to the majority of research in the literature which are mostly focused on the psychical and psychological symptoms of the effects of climate crisis. In Turkey, there is lack of research on the effects of climate crisis on mental health, and the present study aimed to fill this gap by taking a preliminary step to understand eco-anxiety in Turkish context with a qualitative approach as it relates to mental health and coping. Additionally, this study contributed to recognize and understand eco-anxiety experiences of a sample other than groups that are frequently studied on this issue such as Indigenous or Sami populations. Moreover, this study aimed to bring attention to possible gendered differences in environmental and climate crisis related experiences.

The findings of the present study are mostly consistent with the literature, and it is expected to contribute to clinical practices of mental health professionals as the psychological effects of environmental and climate crisis and incidence of eco-anxiety increase in near future. On the other hand, the present study has limitations. The study was conducted with participants who were educated, sensitive to nature, and from big cities with similar socio-economic status backgrounds. The participants volunteered to take part in the study, since they reported experiencing eco-anxiety and suffering from the effects of environmental and climate crisis. Therefore, there was a self-selection bias.

Regarding gender differences in experiencing and coping with eco-anxiety, differences observed in female and male participants' discourses were very limited. The reason behind it could be that female participants of the study were educated and having less economic or political disadvantages. Besides, the environmental and climate crisis effects such as scarcity or drought are not yet experienced dramatically in Turkey. Thus, female participants might not experience gendered vulnerability in facing the outcomes of crisis, so that they did not express any gendered differences during the interviews. The future research should be focused

on social context and the individuals' experiences and feelings toward societies' attitudes, instead of exclusively studying climate crisis related symptoms.

Another limitation of the present study is that pathological or adaptive forms of eco-anxiety reported by the participants of the present study were not differentiated. Future studies could investigate whether the eco-anxiety that young adults reported is adaptive or maladaptive. Another limitation of the present study is that pathological or adaptive forms of eco-anxiety reported by the participants of the present study were not differentiated. Future studies could investigate whether the eco-anxiety that young adults reported is adaptive or maladaptive. Moreover, future studies could differentiate general anxiety disorder and eco-anxiety from each other through studying the symptoms of these two mental health conditions, and examine the relationship between experiencing eco-anxiety, and experiencing general anxiety disorder or being temperamentally prone to experiencing anxiety. In addition, among the coping strategies stated by the participants, effective or ineffective means were not identified. The future research could explore the more effective attempts to cope with eco-anxiety. Moreover, the present study did not examine in depth how the participants were experiencing hope and how it was possible for them to sustain their hope. The future studies could also research the experiences of sustaining hope in detail.

In the present study, qualitative method was utilized and investigator triangulation was conducted with the thesis advisor while identifying the themes. However, the interviews were coded and the analysis was done by only the researcher. Thus, the absence of a second coder in the study could be considered as another weakness of the study. Lastly, in future studies, focus group method could be employed to investigate the socialization process and effects of Turkish context or gender on young adults' experiences of eco-anxiety.

## CONCLUSION

The purpose of the present study was to understand how young adults define and experience the eco-anxiety, and the development process of and ways of coping with it. The study also aimed to examine these experiences from a gendered perspective and investigated whether there were any unique perspectives and experiences reported by young women and men. In this study, it was aimed to contribute to clinical studies and interventions that can support mental health through understanding eco-anxiety experiences.

The present study is one of the first studies focusing on eco-anxiety experiences in the context of Turkey. Young adults' eco-anxiety and coping experiences were examined through in-depth interviews which revealed that individuals having close a relationship with nature and caring for the natural environments and ecosystems were experiencing eco-anxiety through witnessing environmental degradation and getting informed about the environmental and climate crisis. They were overwhelmed by the knowledge of the inevitable future of Earth along with developing a critical lens on this issue. Being aware of the environmental and climate crisis, its causes and effects led the participants to feel grief, helpless, hopeless, desperate, powerless, and lonely. The individual measures they took to mitigate the effects of environmental and climate crisis were reported to be insufficient, and they emphasized the lack of collective actions. It was also seen that feeling lonely and isolated in the society and the world in terms of the crisis was being experienced by young adults. Eco-anxiety is reported to be an emotional burden for them. Feeling lonely and isolated, experiencing eco-anxiety as an emotional burden were stated to increase due to the insensitivity and indifference of the society. The participants also mentioned effective and ineffective methods they were utilizing to cope with eco-anxiety. The findings of the present study support the ecological systems theory (Bronfenbrenner, 1979) which implies the necessity of considering the influences of various environments on individuals' experiences while working with eco-anxiety.

According to Woodbury (2019), climate crisis is “the elephant in the room” (p. 4), yet we try to avoid admitting and talking about it. Cianconi and colleagues (2020) state that new terms are generated to name the recent impacts of climate change on mental health in the literature, however, neither DSM-5 nor ICD-10 has identified climate change related mental health conditions yet. As studies investigating climate change effects on mental health are accumulating, climate change related mental health conditions could be officially recognized and acknowledged in these manuals (Cianconi et al., 2020). It is important to recognize the effects of environmental and climate crisis on mental health while considering its psychological impacts as adaptive responses rather than pathologizing them as mental health disorders. As a result, the present study aimed to contribute to research on the effects of environmental and climate crisis on mental health and professionals.



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## APPENDICES

### APPENDIX A. INFORMED CONSENT FORM

#### Bilgilendirilmiş Onam Formu

<b>Araştırmanın Yürütüldüğü Kurum:</b>	İstanbul Bilgi Üniversitesi
<b>Araştırmanın Adı:</b>	Genç Yetişkinlerde Eko-anksiyete ve Baş Etme Yöntemlerinin İncelenmesi
<b>Araştırmacının Adı:</b>	Melissa Elitok
<b>Araştırmacının E-mail Adresi ve Telefonu:</b>	
<b>Araştırmanın Danışmanı:</b>	Dr. Öğr. Üyesi Anıl Özge Üstünel Balcı
<b>Danışmanın E-mail Adresi ve Telefonu:</b>	

Bu araştırma, İstanbul Bilgi Üniversitesi Klinik Psikoloji Yüksek Lisans Programı öğrencisi Melissa Elitok tarafından Dr. Öğr. Üyesi Anıl Özge Üstünel Balcı danışmanlığında yürütülmektedir. Bu araştırmanın amacı, genç yetişkinlerin eko-anksiyete kavramını nasıl tanımladığını, deneyimlediğini ve bu deneyimin nasıl geliştiğini anlamaktır. Araştırma eko-anksiyetenin nasıl oluştuğunu anlayarak ruh sağlığını destekleyecek klinik çalışmalara ve müdahalelere katkı sunmayı hedeflemektedir.

Bu araştırmaya katılmayı kabul ettiğiniz takdirde, yaklaşık 60-90 dakika sürecek bir görüşmeye online olarak katılmanız beklenecektir. Bu görüşmede, çevre ve iklim krizi ve buna bağlı meydana gelen değişiklikler ile ilgili duygularınız, düşünceleriniz ve deneyimleriniz hakkında bazı sorulara yanıt vermeniz istenecektir. Yanıtlarınız, sonraki analizlerde kullanılmak üzere ses kaydına alınacaktır.

Bu araştırma bilimsel bir amaçla yapılmakta ve katılımcı bilgilerinin gizliliği esas alınmaktadır. Verdiğiniz tüm bilgiler gizli tutulacaktır. Ses kayıtları ve doldurduğunuz kısa anket, araştırma süresince yalnızca araştırmacının ve danışmanının erişimi olan bir harici bellekte muhafaza edilecek, araştırma ve

bilimsel yayın süreci sona erdiğinde silinecektir. Araştırma bulgularının sunumu ve raporlamasında gerçek kişi isimleri kullanılmayacak ve katılımcıların kişisel gizliliği korunacaktır. Elde edilen bilgiler bilimsel yayınlarda kullanılacaktır.

Bu araştırmaya katılmak tamamen isteğe bağlıdır. Görüşmeye ve ankete katılmanın üzerinizde herhangi bir olumsuz etki yaratması beklenmemektedir. Ancak görüşme sırasında yanıt vermek istemediğiniz, size kendinizi rahatsız hissettiren sorular olursa bu soruları yanıtlamadan geçebilirsiniz. Görüşme sırasında dilediğiniz zaman kaydın durdurulmasını isteyebilirsiniz. Görüşme başlamadan önce, görüşme sırasında veya sonrasında dilediğiniz zaman soru sorabilirsiniz. Katılmayı kabul ettiğiniz takdirde çalışmanın herhangi bir aşamasında herhangi bir sebep göstermeden araştırmadan çekilme hakkına sahipsiniz. Araştırmadan çekildiğiniz durumda verdiğiniz bilgiler değerlendirmeye alınmayacaktır.

Görüşmenizin sonuçları, araştırma sonlandırılmadan önce gözden geçirmeniz için sizinle e-mail yoluyla paylaşılacak ve geri bildiriminiz doğrultusunda gerekli değişiklikler yapılacaktır. Burada amaç, sizin görüşlerinizin ve deneyimlerinizin en doğru şekilde anlaşılmasını sağlamaktır.

Araştırmayla ilgili bilgi almak, soru sormak veya yorumlarınızı paylaşmak isterseniz, araştırmacı Melissa Elitok ile elitokmelissa@gmail.com adresinden iletişime geçebilirsiniz.

Araştırmaya katılmayı kabul ediyorsanız, aşağıdaki metni e-mail yoluyla araştırmacıya iletebilirsiniz.

Bu çalışmaya tamamen gönüllü olarak katılıyorum. Bilgilendirilmiş Onam Formu'ndaki açıklamaları anladım. Çalışmaya katılmayı, görüşmenin ses kaydının alınmasını ve verdiğim bilgilerin bilimsel amaçlı yayınlarda kullanılmasını kabul ediyorum.

<b>Katılımcı Adı-Soyadı:</b>	
<b>Tarih:</b>	

## APPENDIX B. DEMOGRAPHIC FORM

### Demografik Bilgi Formu

Yaşınız: ..... Cinsiyetiniz: .....  
Doğum yeriniz: ..... Yaşadığınız yer: .....

Büyüdüğünüz yeri nasıl tanımlarsınız?

Kırsal / Kasaba / Küçük şehir / Büyük şehir

En son mezun olduğunuz okul: .....

Şu anda okuyor musunuz? Evet / Hayır

Evet ise, bölümünüz: ..... Sınıfınız: .....

Çalışıyor musunuz? Evet / Hayır

Evet ise, mesleğiniz: .....

Kaç senedir çalışıyorsunuz? .....

Gelir düzeyiniz: Düşük / Orta / Yüksek

Herhangi bir psikiyatrik tanı aldınız mı? Evet / Hayır

Evet ise, tanınız: .....

Bu tanı için;

Daha önce herhangi bir psikiyatrik destek (örn. İlaç desteği) aldınız mı?

Daha önce herhangi bir psikolojik destek (örn. Danışmanlık, terapi) aldınız mı?

Şu anda herhangi bir psikiyatrik destek (örn. İlaç desteği) alıyor musunuz?

Şu anda herhangi bir psikolojik destek (örn. Danışmanlık, terapi) alıyor musunuz?

Evet ise, ilaç adı ve dozu, ne kadar zaman önce ve ne kadar süreyle kullandınız? .....

Genel stres seviyenizi 1-5 arası bir ölçekte nasıl değerlendirirsiniz?

(1: çok düşük, 2: düşük, 3: orta, 4: yüksek, 5: çok yüksek) .....

İklim krizine bağlı olarak yaşadığınız stres ve endişe seviyenizi nasıl değerlendirirsiniz?

(1: çok düşük, 2: düşük, 3: orta, 4: yüksek, 5: çok)

## APPENDIX C. INTERVIEW GUIDE

### Görüşme Soruları

#### 1. Tanışma

- Biraz kendinizi tanıtır mısınız? Ne işle meşgulsünüz? Hangi bölümde okuyorsunuz/ bitirdiniz?
- İş dışında nelerle ilgilenmekten hoşlanırsınız? İlgilendiğiniz bir hobiniz var mı?

#### 2. Eko-Anksiyete

- Çevre ve doğayla ilişkiniz nasıldır?
- Çevrede, doğada, iklimde bazı değişimler meydana geliyor. Siz nasıl değişimler gözlemliyorsunuz? Bu değişimlerle ilgili neler düşünüyorsunuz?
  - Çevre krizi deyince aklınıza neler geliyor?
  - İklim krizi deyince aklınıza neler geliyor?
- Çevre-iklim krizi ve buna bağlı değişimler ile ilgili duygu ve düşüncelerinizi tanımlamanızı istesem aklınıza neler gelir?
  - Çevre-iklim kriziyle ilgili duygularınızı nasıl tanımlarsınız?
  - Çevre-iklim kriziyle ilgili düşüncelerinizi nasıl tanımlarsınız?
- Eko-anksiyete deyince aklınıza neler geliyor?
  - Eko-anksiyete sizin için nasıl bir deneyim?
  - Çevre-iklim krizi için endişelenme deyince aklınıza ne geliyor? Bu sizin için nasıl bir deneyim?
- Çevre-iklim değişikliği ile ilgili stres ve kaygı düzeyinizi nasıl tanımlarsınız?
- Çevre-iklim krizi sebebiyle ileride hayatınızda nasıl farklılıkların olacağını, nelerin değişeceğini düşünüyorsunuz?
- Eko-anksiyete günlük yaşamınızı nasıl etkiler?
- Eko-anksiyete sosyal ilişkilerinizi nasıl etkiler?



### 3. Eko-Anksiyetenin Gelişimi

- Çevre-iklim krizi bilinci geliştirmenize katkıda bulunan deneyimler neler?
- Çevre-iklim değişikliği ile ilgili kaygılanmaya ve bu konu üzerine düşünmeye ne zaman başladınız?
- Çevre-iklim kriziyle ilgili endişeleriniz nasıl oluşmuş olabilir? Genel olarak düşündüğünüzde aklınıza ilk neler geliyor?
- Geçmiş deneyimlerinizi ve şu anı düşündüğünüzde, bu endişelerinizin gelişimini nasıl tarif edersiniz?
  - Geçmişte nasıldı?
  - Şimdi nasıl?
- Zaman içinde çevreyle ilgili duygu ve düşüncelerinizde herhangi bir değişim oldu mu?
  - (Olduysa) Nasıl? Ne yönde bir değişim?
  - Bu değişim nasıl gerçekleşti?
  - (Olmadıysa) Nasıl?
- Ailenizden, sosyal çevrenizden, okuldan çevre ve iklim krizi ile ilgili neler öğrendiniz?

### 4. Eko-Anksiyete, Toplumsal Cinsiyet ve Sosyalleşme

- İçinde yaşadığımız toplumda çevre ve iklim krizi için endişelenmek, eko-anksiyete hissetmek nasıl bir deneyim? Aklınıza neler geliyor?
- Sizce içinde yaşadığımız toplum, çevre-iklim kriziyle ilgili nasıl mesajlar veriyor?
  - Bu mesajlar sizi nasıl etkiliyor?
  - Bu mesajlar hakkında siz ne düşünüyorsunuz?
- Sizce kadınlar/erkekler çevre-iklim değişikliğini nasıl deneyimliyor?
- Sizce kadın ve erkeklerin eko-anksiyete deneyimleri birbirinden farklılaşıyor mu?
  - (Evetse) Nasıl farklar gözlemliyorsunuz?
  - (Hayırsa) Nasıl benzerlikler gözlemliyorsunuz?

- Sizce içinde yaşadığımız toplumda çevre-iklim kriziyle ilgili duyduğumuz mesajlar kadınları nasıl etkiliyor? Erkekleri nasıl etkiliyor?
  - Nasıl farklar gözlemliyorsunuz?
  - Nasıl benzerlikler gözlemliyorsunuz?

## 5. Eko-Anksiyete ve Baş Etme

- Eko-anksiyete ile baş etmede size yardımcı olan deneyimler desem, aklınıza neler gelir?
- Çevre-iklim krizi ile ilgili stres ve endişeye/olumsuz duygulara kapıldığınızda neler yaparsınız? Bu duygularla nasıl baş edersiniz?
  - Bu şekilde baş etmeyi nasıl öğrendiniz?
  - Nereden öğrendiniz?
- Çevrenizdeki kişilerle çevre-iklim krizine bağlı kaygı ve stresinizi paylaşıyor musunuz?
  - (Evetse) Paylaştığınızda nasıl tepkiler alıyorsunuz?
  - (Hayırsa) Nasıl?
- Bu konuda çevrenizdeki kişilerden destek alabiliyor musunuz?
  - (Evetse) Kimlerden ve nasıl?
  - (Hayırsa) Desteğini hissetmediğiniz kişilerin bakış açısı nasıl?
- İklim kriziyle ilgili yoğun endişeler yaşayan kişilere nasıl öneriler vermek istersiniz?
- Çevre-iklim krizi konusunda olumlu yönde bir değişim yaratmak için neler yapabiliriz?

## 6. Sonlandırma

- Sizin eklemek istediğiniz herhangi bir şey var mı?
- Benim sormadığım ama önemli olduğuna düşündüğünüz bir şey var mı?
- Bugün burada konuşmak, bu görüşmeye katılmak size nasıl geldi?

## APPENDIX D. THE TEXT USED IN MEMBER CHECKING

### Genç Yetişkinlerin Eko-Anksiyete ve Çevre-İklim Krizinin Etkileriyle Baş Etme Deneyimlerinin İncelendiği Çalışmanın Bulgularının Özeti

Merhaba,

Öncelikle genç yetişkinlerin iklim ve çevre krizi nedeniyle yaşadıkları eko-anksiyeteyi nasıl tanımladıklarını ve deneyimlediklerini, bu olgunun gelişim sürecini ve bu olguyla nasıl baş ettiklerini anlamayı hedefleyen bu çalışmaya katıldığınız için teşekkür ederim.

11 katılımcıyla yaptığım görüşmeler sonucunda sizlerin eko-anksiyete deneyimlerinizi anlamlandırmaya, Türkiye’de iklim ve çevre krizi için endişe, öfke, umutsuzluk gibi duygular yaşayan genç yetişkinlerin deneyimlerini anlamaya yönelik ulaştığım bulguları sizinle paylaşarak deneyimlerinizi yansıtmayı yansıtmadığına dair geri bildirimlerinizi almak için sizlere yazıyorum.

Kullandığım araştırma yöntemiyle sizleri dinleyerek sıklıkla paylaştığımız ortak deneyimler üzerinden belirli temalara ulaştım. Görüşmelerimiz sonucunda deneyimlerinizi ana ve alt temalar altında şu şekilde topladım.

#### 1. Tema: Doğanın anlamı

İlk temada doğanın hem sığınılacak güvenli bir liman hem de hayatta kalabilmek için gerekli bir kaynak olarak görüldüğünden bahsedildi. Doğaya ve çevreye olan bağlılıktan, köklerin doğada olduğunun hissedilmesinden söz edildi. Ayrıca doğada geçirilen zamanın kişileri rahatlatan ve iyileştiren tarafları olduğu görüldü. Doğa ve çevreyle yakın ilişki kuran, doğa ve doğadaki canlılar için hassasiyet gösteren kişilerin çevre ve iklim krizi konusunda da endişeli olmaya daha yatkın olabileceği düşünüldü.

Bu ana temanın iki alt teması vardır:

*Güvenli bir liman olarak doğa*

*Doğanın kişisel hayattaki anlamı*

## **2. Tema: Çevre sorunları üzerine bilinçlenme**

Bu tema kişisel, sosyal ve politik bir mesele olarak çevre ve iklim krizini anlama, anlamlandırma ve eleştirel bir bakış açısı geliştirme süreçlerini kapsamaktadır. Bu ana tema altında kişilerin kendi deneyimleriyle doğadaki yıkıma tanık olmalarından, iklim ve çevre krizi hakkında bilgilenme süreçlerinden bahsedildi. Ek olarak topluma, şirketlere, devlete ve sisteme iklim ve çevre krizi konusunda duyarsız kalmaları, yıkıma neden olmaları veya önüne geçmemeleri üzerinden geliştirilen eleştirel yaklaşımlardan bahsedildi.

Bu temanın alt temaları şöyledir:

*Yıkıma ve tahribata tanık olma*

*Bilgi edinme*

*Eleştirel bakış açısı kazanma*

## **3. Tema: Olumsuz sonuçları yaşama**

Bu ana temada doğa ve çevredeki kayıplardan, yas süreçlerinden, çevre ve iklim krizi nedeniyle hissedilen çaresizlik, suçluluk, yalnızlık, umutsuzluk, hayal kırıklığı, haksızlık gibi olumsuz duygulardan bahsedildi. Toplumda ekolojik kaygıların karşılık bulamamasından, çevre hassasiyeti olmayan kişilerden uzaklaşmaya bu temada yer verildi. Ayrıca geleceğe, değişime ve sivil toplum örgütlerine duyulan güvensizliğe vurgu yapıldı.

Üçüncü ana temanın alt temaları şu şekildedir:

*Kayıp, yas ve çaresizlik*

*Güçsüzlük hissi*

*Yalnızlık ve soyutlanma*

## **4. Tema: Olumsuz sonuçlarla başa çıkma yöntemleri**

Son tema çevre ve iklim krizine bağlı yaşanan olumsuz deneyimlerle baş etme yöntemlerini kapsıyordu. Burada karbon ayak izine veya su tüketimine dikkat etme, atık tüketimini azaltma gibi kişisel önlemlerden, örgütlere veya organizasyonlara katılarak destek almaktan ve vermekten gelen dayanışma hissinden, sosyal çevreyi bilinçlendirme çabalarından söz edildi. Son olarak kişisel olarak yapabileceklerin

kısıtlı olmasını kabul etmekten ve geleceğe yönelik adaptasyon planlarından bahsedildi.

Sonuncu ana tema şu alt temalardan oluşmaktadır:

*Kişisel alışkanlıkları değiştirme*

*Sosyal destek alma ve verme*

*Sınırlılıkları kabul etme*

Bu araştırmada paylaştıklarınız eko-anksiyete deneyiminin anlaşılabilir ruh sağlığını destekleyecek klinik çalışmaların ve önleyici müdahalelerin geliştirilmesine katkı sağlaması açısından oldukça değerli.

Çalışma ve bulgular üzerine sorularınız veya yorumlarınız varsa bunları benimle paylaşmanızdan memnuniyet duyarım.

Her birinize çalışmaya katıldığınız, değerli vaktinizi ayırdığınız, deneyimlerinizi paylaşarak bana bu çalışmada eşlik ettiğiniz için teşekkür ederim.

## **ETHICS BOARD APPROVAL**

Ethics Board Approval is available in the printed version of this dissertation.