

Climate Anxiety Transformation Through Collective Environmental Action

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Abstract

Climate change generates emotional responses that extend beyond conventional environmental concern and may include worry, grief, fear, anger, helplessness, guilt, and uncertainty about the future. These responses are increasingly discussed through the concept of climate anxiety. Although persistent or functionally impairing climate-related distress deserves appropriate psychological attention, climate anxiety should not automatically be interpreted as pathological. Environmental concern can also reflect realistic recognition of ecological threats and may become a motivational resource when individuals possess meaningful opportunities to respond. This conceptual–methodological paper examines how collective environmental action may transform climate anxiety from isolated and potentially immobilizing concern into constructive environmental engagement.

The proposed framework integrates emotional acknowledgment, social connection, collective efficacy, shared environmental identity, achievable participation, and feedback from visible environmental outcomes. Existing research indicates that climate-related emotions have heterogeneous behavioral consequences: anxiety can coexist with lower well-being, whereas collective efficacy, constructive hope, group identification, and approach-oriented emotions can strengthen environmental participation. The study develops a five-domain transformation model and applies a transparent scenario simulation to illustrate the proposed relationship between collective efficacy and constructive climate engagement.

All quantitative values are hypothetical and are not presented as observations from actual participants. The analysis suggests that environmental action is most likely to become psychologically constructive when participation is socially supported, proportionate, achievable, and connected to visible collective outcomes rather than framed as an individual's responsibility to solve the climate crisis.

Keywords: climate anxiety, collective environmental action, collective efficacy, environmental psychology, climate engagement, constructive hope, community action, eco-anxiety.

1. Introduction

Climate change is not only a physical and ecological problem but also a psychological and social challenge. Increasing awareness of climatic disruption, biodiversity loss, extreme events, ecological degradation, and uncertain future conditions can generate emotional responses that include worry, fear, grief, anger, frustration, guilt, and helplessness. Cunsolo and Ellis describe ecological grief as a legitimate response to experienced or anticipated losses involving ecosystems, environmental

knowledge, landscapes, and ways of life. Pihkala similarly emphasizes that uncertainty, unpredictability, and perceived lack of control are central features of eco-anxiety and climate anxiety. These observations indicate that emotional responses to environmental deterioration should be understood within the objective context of ecological threat rather than interpreted automatically as irrational psychological disturbance.

The distinction between adaptive concern and harmful impairment is particularly important. Clayton argues that climate anxiety is a meaningful psychological phenomenon but emphasizes the need to differentiate potentially adaptive levels of anxiety from responses that significantly interfere with everyday functioning. Clayton and Karazsia's development of a climate-change anxiety measure likewise distinguishes cognitive-emotional and functional impairment from behavioral engagement. Their findings show that emotional distress and climate-related action cannot simply be treated as opposite ends of one continuum. A person may be strongly concerned yet active, highly distressed yet disengaged, or emotionally affected while participating constructively in environmental initiatives.

The scale of climate concern is especially visible among younger people. Hickman and colleagues' multinational investigation involving 10,000 participants aged 16–25 found widespread climate-related worry and substantial negative emotional responses, with many respondents also expressing dissatisfaction with governmental responses. Such findings suggest that climate anxiety cannot be addressed exclusively as an individual coping problem. When distress is partly associated with perceptions that institutions are failing to respond adequately to a collective threat, interventions focused only on private emotional adjustment risk ignoring the social and political context in which the anxiety arises.

Collective environmental action offers a potentially important pathway between emotional concern and constructive agency. Fritzsche and Masson's review of collective climate action identifies group identification, social norms, group-based emotions, and collective efficacy as important mechanisms through which people become collective environmental agents. Stanley and colleagues further demonstrate that different environmental emotions have distinct relationships with action and well-being. Eco-anger was associated with greater personal and collective climate action and comparatively stronger well-being, whereas eco-anxiety and eco-depression showed more complex patterns. These findings indicate that emotional transformation cannot be reduced to eliminating negative emotion; rather, the relevant question is whether environmental concern becomes connected with agency, social support, meaningful participation, and achievable action.

The present study therefore develops a conceptual model of climate anxiety transformation through collective environmental action. Transformation in this context does not mean that collective participation necessarily eliminates distress or that activism should substitute for psychological care when anxiety produces serious functional impairment. Instead, the term describes a shift from isolated worry, perceived helplessness, and low personal control toward socially supported engagement, collective efficacy, constructive hope, and participation in realistic environmental responses. Because no primary psychological dataset has been supplied, the quantitative analysis is explicitly simulated. The study seeks to provide a theoretically grounded framework that can subsequently be tested through longitudinal research, environmental-action interventions, community studies, educational programs, or experimental designs.

2. Objectives of the Study

2.1 To Explain the Psychological Pathway from Climate Concern to Collective Agency

The first objective is to develop a conceptual explanation of how climate-related anxiety may follow different psychological pathways depending on perceived agency and social context. Awareness of climate threats can produce a legitimate perception that valued places, future opportunities, human welfare, or ecological systems are at risk. Where individuals perceive little ability to influence these conditions, concern can become associated with helplessness, rumination, withdrawal, or emotional overload. Where credible opportunities for action are available, the same recognition of threat may instead support engagement.

The framework therefore examines emotional acknowledgment, social connection, collective efficacy, constructive hope, and environmental participation as interacting rather than independent processes. It proposes that collective action is psychologically significant because it changes the perceived relationship between the individual and the climate problem. Instead of confronting a global threat solely as an isolated individual, participants become members of a group capable of pursuing defined environmental objectives.

2.2 To Develop a Responsible Collective-Action Framework for Climate-Anxiety Transformation

The second objective is to identify characteristics of environmental participation that are most likely to support constructive engagement without intensifying personal burden. Collective action is not assumed to be inherently beneficial. Environmental campaigns can produce exhaustion, conflict, disappointment, exposure to distressing information, or unrealistic expectations when participants feel personally responsible for outcomes beyond their control.

The study therefore emphasizes proportionate action, shared responsibility, achievable objectives, visible progress, supportive group relationships, and realistic interpretation of outcomes. Environmental participation should increase agency rather than reproduce the message that individuals have failed whenever structural climate problems remain unresolved. This distinction is central to a psychologically responsible model of collective environmental engagement.

3. Review of Literature

3.1 Climate Anxiety, Ecological Grief, and Functional Distress

Climate anxiety belongs to a broader family of emotional responses associated with ecological deterioration. Pihkala's conceptual analysis emphasizes that eco-anxiety can involve multiple forms and that most expressions should not automatically be considered pathological. Clayton similarly argues that concern about climate change can be understandable given the seriousness of climatic risks, while recognizing that significant impairment may require psychological attention. This distinction provides an important foundation for research because measurement of worry alone does not reveal whether an individual is psychologically impaired or constructively concerned.

Clayton and Karazsia developed a specific measure of climate-change anxiety incorporating cognitive-emotional and functional dimensions. Their work demonstrated that climate anxiety was associated with emotional outcomes but was not simply equivalent to behavioral climate engagement. The finding challenges simplistic assumptions that greater anxiety necessarily produces either greater

action or complete paralysis. Instead, mediating variables appear necessary to explain why environmental concern leads to different behavioral outcomes.

Cunsolo and Ellis broaden the discussion through ecological grief, showing that emotional responses may arise from actual or anticipated ecological losses affecting landscapes, cultural practices, livelihoods, identities, and environmental knowledge. Their work reinforces the importance of validating climate-related emotions rather than treating them merely as cognitive distortions. A responsible transformation framework should therefore begin with emotional recognition, not emotional suppression.

3.2 Collective Efficacy, Group Identity, and Environmental Agency

Collective environmental action differs psychologically from isolated individual behavior because it introduces group membership and shared capacity. Fritzsche and Masson argue that collective climate action is shaped by social identity, group norms, group-based emotions, and perceived collective efficacy. Collective efficacy refers to the belief that a group can act effectively toward a shared objective. This perception is particularly relevant to climate change because the scale of the problem often exceeds what any individual can realistically influence alone.

The collective dimension may therefore reduce the mismatch between perceived threat magnitude and individual response capacity. Stollberg and Jonas explain that climate change can threaten fundamental needs involving control, certainty, and existence, but collective responses can support anxiety reduction while strengthening pro-environmental engagement when they are connected with supportive norms. Group participation can provide evidence that concern is shared and that responsibility is distributed rather than individually concentrated.

Collective agency also introduces social reinforcement. Environmental action undertaken with others can create opportunities for shared learning, emotional validation, skill development, and visible coordination. These experiences may be particularly relevant where individuals previously interpreted climate change as an overwhelming problem beyond meaningful influence. The psychological value of participation therefore lies not only in environmental outcomes but also in creating credible evidence that coordinated action is possible.

3.3 Constructive Hope, Emotion, and the Research Gap

Hope has long been discussed as an important psychological resource in environmental engagement, but not all forms of hope are equally constructive. Ojala found that constructive hope was positively associated with pro-environmental engagement among young people, whereas hope based on denial showed the opposite relationship. Later research by the same author similarly associated constructive hope with environmental engagement and with communication that acknowledges negative emotions while remaining solution oriented. Constructive hope therefore differs from reassurance that minimizes climate risk.

Emotional differentiation is equally important. Stanley and colleagues found that eco-anger was associated with stronger climate activism and personal environmental behavior, whereas eco-anxiety and eco-depression had more complicated relationships with action and well-being. Another large study found that hope experienced when contemplating climate action was a particularly strong predictor of

action intentions, whereas anxiety by itself was not a strong predictor. These findings indicate that climate anxiety may require an intermediate transformation process before it becomes sustained engagement.

The research gap therefore concerns the mechanism through which environmental concern becomes socially supported agency. Existing scholarship has addressed climate anxiety, ecological grief, environmental emotions, constructive hope, collective efficacy, and collective climate action, but these themes are not always integrated into one sequential framework. The present study addresses this gap by conceptualizing collective environmental action as a process through which emotional acknowledgment, shared identity, efficacy, achievable participation, and feedback can transform the experience of climate concern.

4. Research Methodology

4.1 Conceptual–Methodological Research Design

The study employs a conceptual–methodological research design based on structured synthesis of established environmental-psychology and climate-mental-health literature. Its purpose is framework development rather than estimation of population prevalence or causal treatment effects. No participants were recruited, and no clinical, survey, or experimental dataset is represented as original evidence.

The analytical unit is the climate-anxiety transformation mechanism, defined as a psychological or social process through which climate-related concern becomes more or less likely to develop into constructive environmental engagement. The literature was reviewed for recurring mechanisms involving emotional acknowledgment, interpersonal support, identity, efficacy, hope, environmental action, and feedback from collective participation.

4.2 Transformation-Domain Framework

Five domains were synthesized from the literature. These domains represent a progression from isolated recognition of climate threat toward collective environmental agency. The model should not be interpreted as strictly linear because individuals may move between stages, experience setbacks, or participate in action while continuing to experience substantial climate concern.

Table 1: Conceptual Framework for Transforming Climate Anxiety Through Collective Action

Transformation Domain	Primary Psychological Challenge	Collective-Action Mechanism	Expected Constructive Function
Emotional acknowledgment	Climate emotions are suppressed, stigmatized, or individualized	Safe discussion and validation of climate-related emotions	Reduces isolation and legitimizes concern
Social connection	Individual experiences the climate threat alone	Peer groups, community networks, and shared	Creates belonging and distributed

Transformation Domain	Primary Psychological Challenge	Collective-Action Mechanism	Expected Constructive Function
		environmental identity	responsibility
Collective efficacy	Climate problem appears too large for meaningful response	Participation in achievable group objectives	Strengthens perceived capacity to influence outcomes
Constructive hope	Future is perceived as predetermined or hopeless	Solution-focused but scientifically realistic engagement	Supports motivation without denial
Sustained collective agency	Initial participation may be temporary or exhausting	Feedback, shared achievements, role rotation, and institutional support	Stabilizes engagement and reduces dependence on individual effort

Source: Author's conceptual synthesis based on environmental-psychology and climate-action literature. The framework deliberately separates collective efficacy from optimism. Collective efficacy does not require believing that every environmental objective will succeed. Instead, it concerns the credible belief that coordinated groups can influence specific outcomes.

4.3 Scenario Simulation and Analytical Measures

To illustrate the proposed relationship between collective efficacy and constructive engagement, a scenario-based simulation was developed. Eight hypothetical efficacy conditions were assigned values ranging from relatively low to high collective efficacy. Corresponding Constructive Climate Engagement Index values were generated to represent the theoretical expectation that stronger collective efficacy is associated with increased engagement when social support, achievable objectives, and realistic expectations are present.

The index is not a validated clinical or psychometric instrument. It is used only to make the conceptual model transparent. Future empirical research would require validated psychological measures, appropriate ethical review, sampling procedures, reliability testing, and longitudinal or experimental analysis before claims concerning actual psychological effects could be made.

5. Analysis

5.1 From Isolated Worry to Shared Environmental Meaning

The analytical model begins with the proposition that climate anxiety can become more burdensome when individuals experience environmental concern as private, uncontrollable, and disconnected from meaningful response pathways. Climate-related information often concerns global temperature change, ecosystem disruption, future disaster risk, and long-term uncertainty—conditions that can generate a

substantial discrepancy between perceived threat and perceived personal control. Pihkala's analysis specifically identifies uncertainty and uncontrollability as important components of eco-anxiety.

Collective participation changes this psychological context by placing concern within a social system. Discussion with peers can establish that climate emotions are neither uniquely personal nor evidence of individual inadequacy. More importantly, group interaction can convert generalized concern into defined problems, tasks, and roles. Instead of asking whether one person can stop climate change, participants can examine what a particular group can reasonably influence.

This reframing is central to transformation. The emotional signal remains connected to a serious environmental problem, but perceived agency increases. Anxiety is not denied; rather, it is situated within a context of shared responsibility and actionable environmental objectives.

5.2 Simulated Relationship Between Collective Efficacy and Constructive Engagement

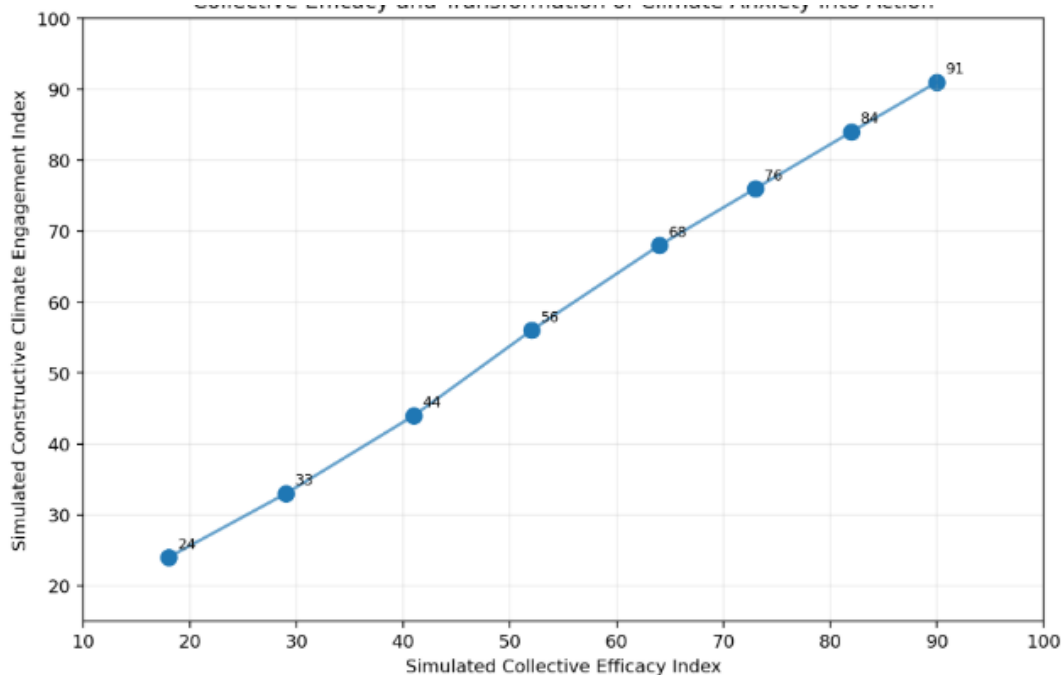
Table 2: Simulated Collective Efficacy and Constructive Climate Engagement

Scenario	Collective Efficacy Index	Constructive Climate Engagement Index	Analytical Interpretation
1	18	24	Concern remains largely individualized
2	29	33	Initial peer recognition develops
3	41	44	Participants identify achievable shared tasks
4	52	56	Group coordination and environmental identity strengthen
5	64	68	Visible participation reinforces perceived capability
6	73	76	Collective achievement supports constructive hope
7	82	84	Shared responsibility stabilizes continued engagement
8	90	91	Strong collective efficacy supports sustained agency

Note: All values are hypothetical scenario scores. They are not observations from actual individuals, clinical populations, activist groups, or community organizations.

The simulated pattern does not suggest that increasing collective efficacy mechanically eliminates climate anxiety. Instead, it illustrates a different proposition: people who believe that their group can undertake meaningful environmental action may be better positioned to transform concern into constructive participation than individuals who experience identical environmental threats without collective agency.

Graph 1: Collective Efficacy and Transformation of Climate Anxiety into Action



The graph shows a positive conceptual association between collective efficacy and constructive climate engagement. The increase from a simulated engagement score of 24 to 91 should not be interpreted as an empirical effect size. Its function is to illustrate the proposed relationship that future research can test using real participants and validated measures.

5.3 Characteristics of Constructive Collective Environmental Action

Not every form of environmental participation is equally likely to support constructive transformation. Actions that repeatedly expose participants to catastrophic information without providing credible response pathways may increase distress. Similarly, groups that imply moral failure when members cannot sustain intensive participation may reproduce guilt and burnout rather than build resilience.

Constructive collective action should therefore combine meaningful environmental purpose with psychologically sustainable participation. Members need roles that match their available time and capacity, opportunities to learn, visible evidence of progress, shared responsibility, and permission to reduce or rotate involvement. Collective action should communicate that climate outcomes are produced through institutions, economies, technologies, communities, and policies—not through the moral performance of isolated individuals.

Environmental projects can range from local ecological restoration and community energy initiatives to climate education, institutional sustainability campaigns, public consultation, active-transport advocacy, waste reduction, biodiversity programs, and policy participation. The psychological mechanism is less dependent on the specific activity than on whether the action creates credible agency, social connection, competence, and shared purpose.

6. Discussion

6.1 Climate Anxiety Should Be Validated Without Romanticizing Distress

The first major implication concerns how climate anxiety is framed. Treating every instance of climate worry as pathology risks invalidating emotional responses to a genuine environmental threat. Cunsolo and Ellis' work on ecological grief demonstrates that emotional suffering can be a legitimate response to environmental loss. Clayton similarly emphasizes distinctions between adaptive and maladaptive responses. A responsible framework should therefore acknowledge environmental emotions without assuming that distress is desirable.

The opposite error is to romanticize climate anxiety as inherently beneficial because concern may occasionally motivate action. Stanley and colleagues demonstrate that environmental emotions have differing relationships with engagement and well-being; anxiety cannot simply be assumed to produce activism or resilience. Climate concern becomes psychologically constructive only under particular conditions, including sufficient perceived agency and supportive coping resources.

Collective action should consequently be presented as one possible pathway for people whose concern can be productively connected with environmental participation, not as universal treatment for climate-related psychological distress. Where climate anxiety significantly disrupts functioning or creates serious psychological difficulty, appropriate professional support may be necessary in addition to, or instead of, environmental engagement.

6.2 Collective Efficacy Converts Scale Mismatch into Achievable Agency

Climate change creates a distinctive psychological scale problem. Individuals are repeatedly informed that everyday activities influence the climate, yet the drivers of climatic change involve global energy systems, industrial structures, infrastructure, markets, land use, technology, public policy, and political institutions. Expecting individuals to experience strong personal responsibility while possessing comparatively limited individual control can intensify helplessness.

Collective efficacy provides a response to this mismatch. Fritzsche and Masson emphasize that perceptions of what groups can achieve contribute to collective climate agency. Stollberg and Jonas similarly identify collective responses as potentially important for dealing with threat-related anxiety and promoting engagement. The group becomes an intermediate level between individual concern and global environmental systems.

This does not require exaggerating the effectiveness of any one campaign. Collective efficacy is strongest when it is evidence based. A neighborhood group should understand which outcomes it can realistically influence, which require institutional partnerships, and which depend on broader political change. Visible but modest progress can provide stronger agency than unrealistic promises of transformational impact followed by disappointment.

6.3 Constructive Hope Emerges Through Action, Evidence, and Social Connection

Hope is often recommended in climate communication, yet empty reassurance can undermine trust. Ojala's research distinguishes constructive hope from denial-based hope and shows that constructive forms are more strongly associated with environmental engagement. Constructive hope does not require assuming that climate risks are minor or that technological solutions will inevitably succeed.

Within the proposed framework, hope develops through evidence that action is possible. A community that restores a degraded local habitat, secures an institutional emissions commitment, increases participation in active transport, establishes a local renewable-energy initiative, or influences a policy decision gains experiential evidence of agency. These outcomes may be small relative to global climate change but psychologically significant because they demonstrate that collective effort can alter social or environmental conditions.

Social connection reinforces this process. Shared activity allows participants to exchange information, distribute tasks, recognize emotional experiences, celebrate progress, and persist through setbacks. Climate engagement then becomes not merely a response to threat but also participation in a community organized around valued environmental goals. This social dimension may be particularly important for preventing the isolation that can accompany persistent ecological concern.

7. Conclusion

Climate anxiety reflects a complex interaction between awareness of genuine environmental threats, emotional responses to uncertainty and loss, perceptions of control, and the social conditions under which people encounter climate information. It should neither be universally medicalized nor automatically celebrated as a source of environmental motivation. The central question is whether climate-related concern remains isolated and overwhelming or becomes connected with credible forms of agency.

This paper developed a conceptual framework in which emotional acknowledgment, social connection, collective efficacy, constructive hope, and sustained collective agency provide a pathway from climate concern toward environmental participation. The model emphasizes that collective action is psychologically constructive when responsibility is shared, objectives are achievable, environmental risks are communicated accurately, and participants receive evidence that their coordinated efforts can influence meaningful outcomes.

The simulated analysis illustrates a theoretical positive relationship between collective efficacy and constructive climate engagement, but the numerical values are explicitly hypothetical. Future studies should test the proposed framework through longitudinal community research, controlled environmental-action interventions, validated climate-anxiety and efficacy scales, qualitative interviews, and comparative analysis of different types of environmental organizations. Research should also investigate circumstances in which activism increases fatigue or distress, thereby avoiding an assumption that greater participation is invariably beneficial.

The broader implication is that responses to climate anxiety should extend beyond individual emotional management. Governments, educational institutions, environmental organizations, workplaces, and community groups can influence psychological resilience by creating credible opportunities for collective environmental agency. When people are able to acknowledge climate

concern, connect with others, participate in proportionate action, and observe meaningful progress, anxiety may become less exclusively associated with helplessness and more closely connected with informed, socially supported environmental responsibility.

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