CLIMATE CHANGE AND PSYCHOLOGY GLOSSARY

EFPA Expert Reference Group

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EFPA Expert Reference Group - Climate Change and Psychology

- Glossary -

Psychological Science and practice plays a major role in fighting climate crisis. Psychological knowledge and tools are essential to understand and nudge human behavior towards a more sustainable future. EFPA's Glossary aims to create a shared knowledge-base covering concepts and processes about Psychology and Climate Crisis, to be used by all Psychologists, independently of their field of expertise.

The glossary has been developed between December 2021 and May 2023 by members of EFPA's expert reference group for psychology and climate change. Terms for inclusion have been chosen based on peer consensus on what is most likely to be useful to psychologists for reference when working in this area. Definitions have been taken from what the authors consider to be mainstream literature and the work has been peer reviewed during development within the group.

Adaptation

Refers to changes to accommodate different or shifting circumstances. In this sense, the term often describes behaviours that enable individuals to adjust to the environment effectively and function optimally in various domains, such as coping with daily stressors. It is also more widely applied to climate crisis, referring to the process of adjustment to actual or expected climate and its effects, in order to reduce the current and future negative impacts of climate change or exploit eventual beneficial opportunities [1, 2].

Barriers to pro-environmental behaviour

Refers to conditions and factors that can compromise individual efforts to adjust behaviours toward living more sustainable lifestyles, avoiding harm to and/or safeguarding the environment [3], either in public (e.g., participation in environmental movements) or private domains (e.g., recycling) [4]. These barriers can be separated into larger (but normally related) categories: psychological, social/cultural, financial, political or structural.

Capacity building

A precondition necessary to enable effective adaptation to take place. The term refers to the need to strengthen individual, social, organizational and community resources to respond to environmental changes and stressors. It extends beyond awareness raising and knowledge building, aiming to empower people and communities by developing or mobilizing (new) competencies, skills, values, and priorities [5, 6, 7].

Coping

Refers to the use of cognitive and behavioural strategies to manage the demands of a situation when these are appraised as taxing or exceeding one's resources or to reduce the negative emotions and conflict caused by stress [1]. In the context of climate crisis, at least three forms of coping can be distinguished, each one implying specific psychological or emotional challenges: (a) problem-focused coping, when people actively address the problem (e.g., environmental activism, avoidance of flying, conscious eating and consumption); (b) emotion-focused coping, when people resort to cognitive strategies to get rid of their negative feelings (e.g., trivialization, repression, denial, reinterpretation, reframing); and (c) meaning-focused coping, which is the recognition of the stressor while emphasizing previous successes in coping with the problem; goes hand in hand with trust in the effectiveness of other actors, knowledge of one's own possibilities for action and trust in one's own effectiveness [8].

Climate Crisis / Climate Emergency

Terms used to describe climate change and emphasize its threatening consequences to humankind and planet. The critical consequences of climate change for humans and their habitats can be referred to, in their totality, as a climate crisis – a critical window of opportunity considering a (a) real, (b) persistent, (c) uncertain, (d) global, and (e) existential threat situation [(9)]. The crisis is acutely present in time and space, concretely experienceable, and emotionally distressing in its threatening magnitude (global, complex, not fully predictable, and individually uncontrollable). A complex array of different effects threatens both physical and mental health as well as societal stability [(10)].

Climate Justice

The term is used for framing global warming as an ethical, social and political issue, rather than one that is purely environmental or physical in nature. It links development and human rights to achieve a human-centred approach to addressing climate change, safeguarding equity and the rights of the most vulnerable people underprivileged populations (individual, social, economic, health, and other adverse impact) and sharing the burdens and benefits of climate change and its impacts fairly [(11)].

Climate Psychology

A field of psychological science and practice concerned with the emotions and the psychological and social processes related to the ecological and climate crisis[(1)]. It also aims to further understand the psychological processes that occur in response to climate change and its effects, as well as responses and processes of adaptation to it. It seeks to promote ways to engage with the public about climate crisis, promoting literacy at this level; to contribute to promote and support change at a personal, community, cultural and political level; to support activists, scientists, and policy makers to bring about effective change; to nurture psychological resilience to face the impacts, including in mental health, of climate change happening now and in the future.

Climate Stress (eco-stress)

A broad term for the various forms of psychosocial but also physiological threats posed by the climate crisis (or other socio-ecological crises) and its consequences. The threat can be experienced through acute events and through cognitive mediation or anticipation, and can relate to individual, social, or ecological domains or values. Thus, climate/eco-stress is the significant exposure of multiple acute/mediated/anticipated menaces posed by the climate crisis respectively to other socio-ecological crises [(12)].

Eco-anger

In the context of eco-emotions and climate crisis, eco-depression can inhibit climate action and eco-anxiety can active avoidance, while eco-anger can promote climate action. It is a key adaptive emotional driver of engagement with the climate crisis [(13)]. While eco-anxiety and eco-depression are less adaptive, relating to lower wellbeing, eco-anger may be protective of mental health as well as predict greater engagement in pro-climate activism (such as protest or signing a petition) and personal pro-environmental behaviours (such as recycling or use of green energy and less energy consumption).

Eco-anxiety

A family of distinct, but related, eco-emotions [(14)] that relate to the generalized sense that the ecological foundations of existence are in the process of collapse [(15, 16)]. It should not be seen fundamentally as an

anxiety disorder, but instead as a wider phenomenon [16]. More specifically, it refers to a chronic fear or non-specific worry of environmental doom which is closely related to fear and worry, but it is even more characterized by uncertainty, unpredictability, and uncontrollability and it can be remarkably diverse in terms of intensity. Reaching pathological levels is rare [16, 17]. It can arise as *practical anxiety*, more connected with motivational (pro-environmental) aspects, or *paralyzing anxiety* or a more intense and longer-lasting strong anxiety, more connected with paralyzing consequences of hopelessness, despair, or depression [16]. Therefore, it can function as a motivational mechanism, in the sense of a future-oriented attendance, which motivates people to prepare adequately for an approaching threat or risk [9]; it can also be assimilated, in the sense of the psychological dissolution of anxiety via cognitive coping mechanisms (such as repression, trivialization, reinterpretation, or denial); and it can become pathological, when worries and fear become prevalent, intense, and long-lasting and the anxiety or its triggers appear uncontrollable to the individual.

Eco-confession

Refers to the practice of talking about one's own environmentally harmful behaviours, mainly in various internet forums, often linked to travel experiences, somewhat reminiscent of the ritual of confession in religious settings [18].

Eco-emotions

Refers to the affective reactions that are significantly related to the eco-social crisis. There are different factors that can influence people's emotions at a given time: their general life situation, their own character and values, daily events, social dynamics, and the specific (acute) impacts of eco-social crisis [16].

Eco-guilt

Refers to the feeling of guilt that arises when beliefs about acceptable conduct toward the environment are violated, i.e., when people acknowledge they have not met personal or societal standards for environmental behaviour [19], failing to do their part to protect the environment or thinking about their environmentally harmful behaviour. It often comes up in the context of tourism. People can reduce eco-guilt by engaging in pro-environmental actions to bring behaviour in line with normative standards [19], therefore, enhancing their sense of pride, a positive feeling about performing desired behaviours. Pro-environmental behaviours are more strongly influenced by anticipated pride than anticipated guilt [20].

Eco-grief

Refers to an emotional response to climate-related loss and mourning, that emerges from experienced or anticipated ecological losses, including the loss of species, ecosystems, and meaningful landscapes due to acute or chronic environmental change [21]. Though it can be felt by anyone, it can be particularly pronounced in people who retain close relationships with the natural environment, such as foresters, farmers, mountaineers, divers, or indigenous peoples. Broadly, it can be triggered by three types of loss: (a) acute or past physical ecological loss means the disappearance, degradation or extinction of species, landscapes and ecosystems (e.g., grief has been identified as a response to acute extreme weather events, such as an hurricane) [22] and gradual environmental changes (e.g., changing weather patterns) [23]; (b) the loss of environmental knowledge, referring to the disruption of personal and cultural identities that are constructed in relation to features and knowledge of the physical environment; (c) the anticipation of future loss of species, landscapes, ecosystems, ways of life or livelihoods.

Ecological awareness

Refers to an emerging form of social awareness that refers to one's attitude towards the natural environment, a set of information, beliefs, values, and opinions about environment and ecological issues, as well as a system of values that this person applies to it in their behaviour [24].

Environmental Psychology

An interdisciplinary field, which draws from a variety of disciplines, including geography, anthropology, sociology, public policy, education, architecture, landscape architecture, urban planning, education, and psychology, especially social and developmental psychology. It examines the interplay, interrelationships, and transactions between humans (human affect, cognition, and behaviour) and their physical surroundings, including built and natural environments (with early research emphasizing the former). These environments are defined broadly to include all that is natural on the planet, as well as social settings, built environments, learning environments, and informational environments. It aims to further understand how people shape their natural world and built their environments, and how these environments shape people in turn [25, 26].

Green values

Values are desirable goals, varying in importance that serve as guiding principles in people's lives. All values are important, but when competing values are activated in a certain situation, choices are based on the values that are considered most important in a specific situation. There are three values that are indirectly related to pro-environmental behaviours – 1) egoistic, 2) altruistic, 3) biospheric. Egoistic values will specifically consider costs and benefits of pro-environmental behaviour for them personally – when perceived benefits exceed the perceived costs they will behave in an environmentally friendly manner and vice versa. People with altruistic values will base their decision on behaving pro-environmentally or not on perceived benefits or costs for other people. People with biospheric values will base their decision on behaving pro-environmentally or not on costs and benefits for the ecosystem and biosphere as a whole. All people hold the three values to some extent and all three may provide a distinct basis for pro-environmental behaviour. However, acting on egoistic values implies not behaving pro-environmentally because the personal costs outweigh the personal benefits. In contrast, acting on altruistic and biospheric values mostly entails acting pro-environmentally, because these behaviours are associated with societal and environmental benefits. Therefore, altruistic and biospheric values can be considered the green values given that they are associated with acting green [27, 28].

Green skills

Refers to knowledge, abilities, values, and attitudes needed to live in, develop and support a sustainable and resource-efficient society, which reduces the impact of human activity on the environment [29].

Human Benefit Approach

Refers to an approach to environmental and ecological issues that relates the effects of climate change to concepts of justice, particularly environmental justice, and social justice and by examining issues such as equity, human rights, collective rights, and the historical responsibilities for climate, as well as acknowledging disproportionate impacts of climate crisis on low-income communities [30].

Nature connectedness

Refers to a measurable psychological construct that moves beyond contact with nature to an individual's sense of feeling emotionally connected with the natural world [(31)].

Nature deficit disorder

Refers to the idea that human beings, especially children, are spending less time outdoors than they have in the past, and the belief that this change results in a wide range of behavioural problems and less well-being. The human costs of alienation from nature include diminished use of the senses, attention difficulties, and higher rates of physical and emotional illness [(32)].

Planetary boundaries

Refers to the thresholds within which humanity can survive, develop, and thrive for generations to come [(33)]. It defines environmental limits within which humanity can safely operate.

Pro-environmental behaviour

Also known as green, sustainable, or environmentally friendly (eco-friendly) behaviour, it refers to all possible actions aimed at avoiding harm to and/or safeguarding the environment [(3)], either performed in public (e.g., participation in environmental movements) or private domains (e.g., recycling)[(31)]. It includes, also, adaptive responses to the impact of climate crisis such as purchasing sustainable products (e.g., local food, green cleaning products), conserving water or energy, or changing travel modes (e.g., from driving to walking or cycling) to buying an electric vehicle or building an off-grid home.

Psychological distance

Psychological distance is considered one of the main barriers to climate crisis action. Psychological distance has four key dimensions: spatial or geographical distance; temporal distance; distance between perceiver and social target; and uncertainty [(34)]. There is a general awareness that climate crisis is a risk, but most people perceive climate change as a global risk and not as a personal and local risk. This way, climate change is a real concern, but a psychologically distant one – it will only impact other people, other communities, in a distant future [(2,35)].

Resilience

Refers to the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands [(1)]. As a process, it refers to a variety of dynamic interaction processes between an individual, organization, or community and the environment [(36)]. As an outcome, the focus is on a state: to successfully overcome a significant stressor [(37)]. It can also be understood as a capacity (in the sense of a set of interlinked capacities, processes, or skills) that can be built up in stable phases, for example, through educational, developmental, organizational, and social distribution processes. A distinction can be made between rather short-term reactive coping capacities, longer-term adaptive capacities, and participatory transformative capacities [(38)]. These facets of resilience can be viewed at nested levels: (a) the individual level; (b) the group or team levels; (c) the organizational or institutional levels; (d) the community level; (e) the societal or national level; and (f) level of international networks.

(Community) Resilience

Refers to the ability of a person or a community to function in face of adversity, to survive, and, perhaps, even to thrive. It can be described as a set of interlinked capacities that facilitate an ongoing and dynamic response to changing circumstances. Building resilience for acute events and to confront longer-term climate change will help communities alleviate adverse health outcomes, reducing vulnerabilities [(2)].

(Social) Resilience

In the context of socio-ecological crisis, it can be broadly understood as the ability of individuals, organizations, or communities to cope with various environmental hazards and social threats [(33)]. Against the backdrop of global crises, resilience is a concept for holistically considering the capacity of people, groups, institutions, and social systems to remain intact and capable of acting in interaction with a stressful environment, to develop, and to actively influence the stressful environment with the aim of ending the stress without creating new stresses as a result. In the face of global ecological crisis, a distinction should be made between two goals of resilience [(12)]: a) adaptation, in the sense of adapting to changing circumstances ("remaining healthy or capable of acting"); and b) transformation, in the sense of a change of the whole system. In order to "survive" or remain healthy and able to act, it can help in the short term to react adaptively. Transformation, on the other hand, pursues the goal of overcoming the crisis in the long term and can thus lead to actual resilience at all.

Social resilience, also known as social capital/social cohesion, is the communities' collective strength to deal with significant adversity and risk. Social factors reduce the negative impacts of disasters at the individual, family and societal levels and help them recover more quickly. Social resilience has different dimensions and the bonding, bridging, and linking social capital model is a useful framework for understanding the importance of equity, social cohesion, and climate resilience. One dimension is intra-group social cohesion – social cohesion within the community and civic participation (bonding social capital). Another is inter-group social cohesion – inter-group social cohesion and heterogeneous relationships (bridging social capital). Lastly, social cohesion built through political participation, activism, efficacy, and trust (linking social capital). All these dimensions of social resilience play a role in making changes to the policies, systems and environments that can make communities more cohesive, equitable and resilient [(39, 40)].

Social transformation

Refers to any process in which the general structure or character of a society is altered. Social transformation can be a varied phenomenon, but in the context of climatic change it is linked with the need to develop a sustainable society, that lives differently, and meets the needs to address climate change. It involves changing people's and communities' attitudes and habits, lowering resource use, and changing public policies. It also includes changes in societal norms, narratives, structures, activities, identities, livelihoods, and ways of being [(1,41)].

Socio-ecological crisis

In distinction to the description of natural science phenomena such as "climate change", "global warming" or "biodiversity loss", behavioural sciences use a term that encompasses the crisis-like interaction between human-induced triggers and consequent ecological changes which, in turn, impacts on human living conditions. A socio-ecological crisis describes ecological changes with consequences that range from significant to disruptive for human living conditions. The ecological changes themselves are the consequence of human influence on its ecological environment. In contrast to conventional crises, socio-

ecological crises can last over a long period of time and take on different dimensions over this period. This is also because ending the crisis requires fundamental changes in the ways humans relate to each other in the economic, political, social, and ecological domains. One concept with which such a major transformation is to be achieved is that of *sustainability* [42, 43].

Solastalgia

As opposed to nostalgia (the melancholia or homesickness experienced by individuals when separated from a loved home), it is a is a form of homesickness one gets when one is still at home, but the environment has been altered and feels unfamiliar. It refers to distress (e.g., feeling lonely, insecure, powerless) produced by environmental change impact directly connected to one's immediate environment (e.g., because of mining, industrialization)[44].

Sustainability

Sustainability is related to the management of Earth's resources and putting an emphasis on not exhausting what the planet can supply[45]. Threats such as pollution, depletion of natural resources, rapid deforestation, pushing species to the brink of going extinct, and excessive amounts of greenhouse gas are unsustainable practices[46]. To create a sustainable society, we need to strive for a sustainable development – development that meets the needs of the present without compromising the ability of the future generations to meet their own needs[47]. Movement towards a sustainable direction is maintained or continued with both technological solutions and sustainable behavioural changes. Sustainable behaviours aim for changes in lifestyle choices (e.g., the way we live, how we move from one place to another, how we eat and what we buy), social norms (e.g., by participating in climate justice organizations or engaging in activism), contexts (e.g., creation of off-street bike lanes) and policies (e.g., voting for ecologically-minded politician candidates)[48].

(Community) Vulnerability

Some social groups experience deeper impacts of climate crisis, experience greater loss of resources, greater impacts to livelihoods on mental health and cultural identity than others, exacerbating pre-existing social determined vulnerabilities (e.g., poverty, racial and ethnical minorities, access to resources, children). Vulnerability is a multidimensional process influenced by social, political, and economic forces that can be defined as a function of exposure, sensitivity, and adaptive capacity. More vulnerable communities have less access to resources, information and protection and are disproportionately exposed to extreme climate change events[49].

Warm Glow

Refers to the personal emotional gain from the act of giving. A sense of satisfaction that people experience from "doing their part." At its core there is an egoistic motivation, driven by the prospect of awards such as praise and respect (as opposed to a purely altruistic motivation, driven by a genuine joy of giving) [50]. Acting in an environmentally friendly way can signal to ourselves that we are good people. Thus, acting in a pro-environmental way can be psychologically rewarding, providing us an intrinsic reward [51].

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