OTHER PSYCHOLOGICAL THEORIES

Psychological denial mechanisms, like terror management theory and cognitive dissonance, add to our understanding of the psychology of climate change communication. Together with identity (chapter 5) and psychological distance (chapter 6), these denial mechanisms round out our section on psychology.

Terror Management Theory

In the fall of 2017, author Anne Armstrong facilitated an online course called "Climate Change Science, Communication, and Action." Part of her work involved managing a Facebook group with fifteen hundred participants, many of whom posted alarming climate-related articles daily. By the end of the three weeks, Anne found herself so overwhelmed by the volume of apocalyptic climate change news that at one point she decided she might as well give up and just live life according to perceived U.S. norms—drive her car everywhere, forget about shortening her showers, and abandon feeling guilty about the energy she used washing her little girl's cloth diapers (and indeed, about having made the decision to have a child at all). In response to the "emotional labor" required to uphold a façade of hope and positive energy,[1] and to real fear about the future, Anne had put up an emotional defense system to manage her fear of climate change.

According to terror management theory, we spend our lives trying to survive and yet are faced with the persistent realization that we will eventually die. Because of this awareness of our inevitable mortality, when confronted with

thoughts about death we engage in psychological defenses to ward off what could otherwise be a crippling "mortality salience." Climate change may provoke these psychological defense systems.[2] To counter the mortality salience that thinking about climate change evokes, people may focus on how unlikely it is that strong storm events or other climate change impacts will affect them and engage in "ego-protective processes," such as telling themselves it is highly improbable that such a storm would hit where they live. As news of deadly hurricanes, wildfires, tornadoes, and flooding, and their connection to climate change, becomes more common, such defensive processes may encourage irrational beliefs and behaviors that are, on their surface, seemingly unrelated to death. These beliefs and behaviors relate to reaffirming our sense of significance in the world. They can include bolstering our self-esteem by adhering more strongly to cultural symbols and group values.[3] For example, after reading about climate change threats, survey respondents from Austria reported that their intentions to engage in pro-environmental behavior decreased while their ethnocentrism increased.[4] Other self-esteem-bolstering behaviors in response to frightening climate messages could include the purchase of items like SUVs, which symbolize safety, stability, and success.[5]

Environmental education can provide alternative means to enhance self-esteem, such as stewardship activities that build self-efficacy.[6] Elena, Jayla, and Will try to moderate their audiences' fear responses by balancing descriptions of climate change threats with opportunities for action. In particular, Elena's and Will's stewardship projects provide opportunities for community building that help bolster people's self- and collective efficacy.

Cognitive Dissonance Theory

Cognitive dissonance theory suggests another means by which people might deny climate change or fail to engage in climate-friendly actions. According to this theory, individuals attempt to reduce negative feelings that accompany inconsistent (dissonant) attitudes and behaviors by changing either the behavior or the attitude, or by denying that any conflict exists.[7] Someone who holds pro-environmental values and flies frequently for work might feel an uncomfortable tension (called "dissonance") when thinking about her large carbon footprint, a tension she is motivated to reduce. To reduce this dissonance, she may commit to fly less and buy carbon offsets. Alternatively, she may relax her pro-environmental standards and even justify her behavior by denying that emissions are problematic or by telling herself that paying the bills and supporting her family are more important. As Per Espen Stoknes writes in his book *What*

We Think about When We Try Not to Think about Global Warming, "For my own part, I feel dissonance each time I fly. I still do it, though. It doesn't help much that I use my electric bike as much as I can when home. My own solution is to buy four times the amount of carbon quotas that I fly for, from the EU trading system. If I want to participate in our current society . . . I'll have to endure some inner dissonance."[8]

One way to combat cognitive dissonance is to provide audiences with actions they can take promptly and easily (see chapter 8). Stoknes purchases carbon quotas, but environmental educators have the capacity to involve people in actions directly through their programming. Each of the educators in the vignettes provides opportunities or examples of easily accessible mitigation and ecosystem-based adaptation actions. Elena runs a volunteer shoreline restoration program; Jayla's focus group suggests she link her exhibit to the center's rain barrel education program; and Will builds a tree-planting program into his climate change curriculum.

Bottom Line for Educators

Climate change programs risk activating people's terror management responses if they portray the issue as doom and gloom. Instead, educators should prioritize programs that inspire hope and help build participants' confidence in their capacity to be part of feasible climate solutions. Easy-to-implement actions that audiences can take on a daily basis, like biking, walking, or taking public transportation more often, may help reduce the cognitive dissonance that many feel when using energy and resources.