REVIEW

Beyond the roots of human inaction: Fostering collective effort toward ecosystem conservation

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The term "environmental problem" exposes a fundamental misconception: Disruptions of Earth's ecosystems are at their root a human behavior problem. Psychology is a potent tool for understanding the external and internal drivers of human behavior that lead to unsustainable living. Psychologists already contribute to individual-level behavior-change campaigns in the service of sustainability, but attention is turning toward understanding and facilitating the role of individuals in collective and collaborative actions that will modify the environmentally damaging systems in which humans are embedded. Especially crucial in moving toward long-term human and environmental well-being are transformational individuals who step outside of the norm, embrace ecological principles, and inspire collective action. Particularly in developed countries, fostering legions of sustainability leaders rests upon a fundamental renewal of humans' connection to the natural world.

The ecological systems upon which humans rely for life support are in crisis, and human behavior is the root cause. These problems are thus not environmental, but rather related to how humans meet their needs and wants in ecologically disruptive ways. Manipulating, exploiting, and destroying nonhuman nature are not new activities for our species, but today these occur at an unprecedented scale and escalating rate.

As the decades since the 1970s have revealed, merely educating people about what actions they can take does not dramatically shift behavior; nor does inspiring fear or guilt. Despite widespread awareness and concern, many people continue to engage in behaviors that further environmental destruction, both mindlessly and consciously. For example, nearly half of Americans are "concerned" or "alarmed" about global warming (*1*), yet those who can afford it routinely fly to vacation destinations, drive solo, and keep their homes at a constant 72°F (22°C). Further, messages about predicted environmental catastrophes may actually increase anti-environmental behavior as individuals attempt to soothe their anxiety through materialistic pursuits (*2*). Psychological science can shed light on many such counterintuitive and counterproductive responses to our ecological predicament.

Human behavior is determined by forces both inside and outside of the individual. Internal factors such as emotions, beliefs, attitudes, and values influence behavior to some extent (*3*–*5*), but behavior occurs within a powerful context comprising cultural worldviews, social networks, status inequalities, policies, scripts, roles, and rules. Situations are such potent determinants of behavior that behavior-change campaigns focused solely on values, emotions, or knowledge are destined to fail if such change is not facilitated by an individual's social milieu as well as the surrounding infrastructure.

Humans are driven by external circumstances,

what they don't know and value. Indeed, numerous studies have found a significant positive correlation between feeling connected to nature and ecologically responsible behavior (*4*) and between "significant life experiences" in nature during childhood and later environmental advocacy (*8*). Experiencing the self as separate from nature is the foundation of humanity's damaged relationship to planetary resources.

The mismatch between humans' ancient origins and today's industrialized world leads to an array of other difficulties in recognizing and responding to environmental degradation. Humans evolved in a world where dangers were sudden and obvious, and thus our senses are ill equipped to detect largely invisible and gradually worsening ecological problems such as climate change

Individuals and collective action

The power of the individual to mitigate environmental harm is severely constrained by physical and social contexts, such as the industrial infra-

changes are thus needed to stop damaging the natural world and adapt to a permanently altered environment.

Psychological research suggests that humans can move toward a sustainable society by creating conditions that motivate environmentally responsible collective action—conditions that help people surmount cognitive limits, create new situational drivers, foster need fulfillment, and support communities of social change.

Individuals whose actions are informed by a deeper understanding of how the planet really works can galvanize collectives to change the larger systems that drive so much of human behavior. To radically alter the way humans think and live; educate the next generation; and design physical, governmental, and cultural systems, humans must experience and better understand their profound interdependence with the planet.

Further psychological research needs to elucidate how to accelerate the adoption of ecologically grounded worldviews and how to activate ecologically compatible engagement,

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