

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/288873916>

# A Burgeoning Ecopsychological Recovery Movement

Article in *Ecopsychology* · December 2015

DOI: 10.1089/eco.2015.0021

---

CITATIONS

14

---

READS

599

1 author:



Susan M Koger

Willamette University

41 PUBLICATIONS 1,100 CITATIONS

SEE PROFILE

# A Burgeoning Ecopsychological Recovery Movement

Susan M. Koger

Willamette University, Salem, Oregon.

## Abstract

*Contemporary individualism, materialism, and unsustainable consumption reflect a cultural addiction. Like those who overuse or abuse various substances, many people are trapped by short-term conveniences and escapes from emotional pain provided via “thing-a-holism” (Clinebell, 1996) and techno-addiction (Glendinning, 1995), rather than focusing on the myriad long-term benefits associated with more sustainable practices. Regrettably, much of the messaging designed to promote change only serves to reinforce habitual and unsustainable behavior patterns. Various spiritually based initiatives emphasizing mindfulness, interconnectedness, community, and belief in something greater than one’s self are described as representing an emerging “recovery movement” that holds promise for responding to the “Long Emergency” (Kunstler, 2005), the topic of this special issue. Key Words: Addiction—Environmental anxiety/eco-anxiety—Climate change—Positive psychology—Spirituality.*

In his classic treatise on the potential for a nuclear holocaust, Lifton (1982) wrote the following about the crisis of his time (modifications in brackets to relate to our current ecological emergency):

We live now in a special realm of absurdity; we are haunted by something we can neither see nor imagine. We are afraid of something we call [climate change], and at the same time are removed from, and have little awareness of that threat.... There is a kind of structural layer to our absurdity; the obvious one [humans], poised to exterminate [themselves] and the rest of the world in the process. Then there is a second layer that is more or less existential; it is the way that we all live—with the sense that we can be anni-

hilated in a moment, along with everything we’ve known and loved and experienced in our existence, while at the same time we carry on our everyday activities, business as usual.... There’s a certain psychological stance that moves toward resignation: “Well, if it happens, it happens.” Or, in [a] more elaborate kind of rationalization: “What’s so special about *humankind*? Many other species have come and gone; maybe this is our turn....” Our situation is desperate and at the same time, hopeful. Desperate because of the danger, hopeful because something is really happening in this country and elsewhere. There is the beginning of a change, a shift in awareness. (pp. 619–620)

Overconsumption, particularly by citizens of the United States, is the basis of most if not all contemporary environmental challenges (e.g., Kitzes et al., 2008) that comprise the “**Long Emergency**” (Kunstler, 2005) being considered in this special issue of *Ecopsychology*. Our consumer culture and its underlying economic imperative reflects an addiction (e.g., Guo et al., 2011; LaChance, 2006) by which people numb out [i.e., “psychic numbing” (Lifton, 1982)] or attempt to mitigate their personal insecurities and anxieties through products purported to correct their various flaws, attract friends or mates, or otherwise improve their lives (Kanner & Gomes, 1995). The **predicted catastrophic consequences**, including a dangerously changed climate, represent the proverbial “elephant in the living room,” of which most people are at least somewhat aware but are **actively or passively ignoring, denying, or suppressing as they perpetuate the status quo via “pathological materialism”** (Clinebell, 1996) and compulsive use of various forms of technology (“techno-addiction,” Glendinning, 1995).

As in any addiction, the fixes obtained by shopping, eating (including heavily processed and packaged “junk” food), bingeing on electronic pastimes, or other consumptive behaviors provide a **brief respite from emotional pain, along with a burst of dopamine** within the brain’s reward system (Small, 2009). Yet the emotional hunger and associated cravings are never far behind. In fact, materialism is

associated with *reduced* well-being, including anxiety, depression, and substance use/abuse (Brown & Kasser, 2005; Kasser, 2002), but nonetheless continues to drive acquisitiveness (Otero-López et al., 2011). There is little scientific doubt that we as a species are soon to “hit bottom,” if we haven’t already. The forecasts concerning climate change, pollution, and other products of the industrial growth society are terrifying, and the most vulnerable populations, including island and indigenous nations, minorities, the poor, and other species of life are already suffering and will continue to bear the brunt of the impacts.

Unfortunately, the fear activated by such bad news is a potent trigger for “relapse” into habitual behaviors that only exacerbate the problems, as are messages that shame and blame the addict; yet fear- and guilt-based appeals remain the primary modus operandi of both scientists and environmentalists. Over a century ago, Yerkes and Dodson (1908) observed that optimal performance occurs at *moderate* levels of arousal or stress; people can’t solve problems, particularly complex and challenging ones, when they are emotionally overwhelmed (see also Weick, 1984). More recently, Dickinson (2009) applied the principles of *terror management theory* to climate change, noting that predictions about the dire and rapidly approaching consequences are—paradoxically—driving a more intense defense of the “American way of life” (i.e., cultural materialism) and attempts to enhance personal self-esteem, including via status symbols derived from material consumption. The Center for Research on Environmental Decisions (2009) among others has made similar points about the need to consider the *emotional* impacts of messages intended to persuade people to engage in more sustainable lifestyles (see also Macy, 1995; Macy & Johnstone, 2012; Moser, 2007; Roszak, 1994). Somehow, we need to convey the urgency of the situation and engage and empower our audiences without overwhelming them or sending them into despair or retail therapy.

*Contingency traps* (Baum, 1994) compound the problem, in that the immediate reinforcers associated with maintaining the consumptive status quo outweigh the long-term risks, which seem largely uncertain, unpredictable, and distant in time and place rather than “for sure, now, here, and to us” [Gattig & Hendrickx (2007, p. 22); see also Leiserowitz (2007), Weber (2006), and Gifford’s (2011) description of several other “dragons of inaction”]. This contingency trap resembles the addict’s “self-control problem” of having to give up any short-term comforts provided by using in order to avoid health, relationship, career, and other challenges that may or may not happen in the future, or to mitigate problems already in process.

In addition to these emotional and proximal factors are several potent social influences; as in drug addiction (Sheff, 2013), media, status and popularity symbols, and social norms all convey materialism, while there is a relative paucity of peer, adult, and organizational role-modeling of more sustainable lifestyle choices. “Sustainability” may be perceived by many as unappealing asceticism, as opposed to an opportunity to live a simpler, less stressful, spiritually grounded, and healthier life (Elgin, 2010).

It thus seems clear that a powerful and widespread “recovery movement” is urgently needed to heal our collectively self-destructive patterns (Glendinning, 1994; LaChance, 2006), while simultaneously fostering motivation to address the challenges and resilience to weather the coming storms. From an ecopsychological perspective, this includes reawakening our sense of interconnection with the natural world through mindful contact with nonhuman nature, reflective rituals, and other ecotherapeutic techniques such as intentionally engaging in “earth-caring actions” (Clinebell, 1996, p. 182; see also Roszak et al., 1995). Healing the disconnect between one’s self and the rest of Earth not only promotes more sustainable behavior but also is critical for overall mental and physical well-being (Howell, Dopko, Passmore, & Buro, 2011); in other words, “what’s good for the planet is good for us” (reviewed in Scott et al., 2016).

Psychologist and environmental scientist Bob Doppelt recently founded the International Transformational Resilience Coalition (ITRC)<sup>1</sup> based on the recognition that climate change poses serious global psychological, emotional, and social impacts (see also Doherty & Clayton, 2011). These consequences will not only impair mental health, increasing rates of depression, anxiety, PTSD, and substance use/abuse, but will also impede individual and group efforts to reduce emissions and respond constructively to the various predicted stressors. The ITRC is offering webinars, trainings, and workshops focused on building psychosocial resilience in communities (including through education, infrastructure, and strengthening local support services) and at the individual level (via mindfulness, cognitive skills, and values clarification).

While evidence concerning their effectiveness remains equivocal (e.g., Dodes & Dodes, 2014, vs. Lilienfeld & Arkowitz, 2011), 12-step programs may provide an appropriate model for conceptualizing a widespread solution (LaChance, 2006). The opportunity to publicly share one’s experiences, feelings, and struggles can reveal patterns and “create a new basis for integrity” (Glendinning, 1994, p. 147). Through fellowship derived from sharing a common addiction and

<sup>1</sup><http://www.theresourceinnovationgroup.org/intl-tr-coalition>

a desire to overcome it, support groups can foster courage and motivation to change destructive patterns, and hope from seeing others succeed—that is, a positive psychology emphasis (Galanter, 2007). Enhancing affiliation with “abstaining” social networks while simultaneously avoiding those who are still “using” seems to be a critical feature (Kelly et al., 2012).

Another important component of Alcoholics Anonymous (A.A.), Narcotics Anonymous, and other 12-step programs is a *spiritual transformation*, where the addict learns how to overcome his or her self-centeredness by focusing on being of service to others, thus finding more meaning in his or her life (Galanter, 2007; Kaskutas, 2009). As Clinebell (1996) wrote, “Healing the idolatry of things requires dealing with the vacuum in spiritual meaning and value that people try vainly to fill by compulsive consumption” (p. 102). Some relevant spiritual traditions include mindfulness, feeling connected to something larger than one’s self, and self-transcendent (vs. self-enhancement) values related to broader societal needs, including the ecological crisis (Clinebell, 1996). Such practices are all correlated with sustainable lifestyles as well as higher levels of subjective well-being and several measures of physical health (e.g., Brown & Kasser, 2005; Ericson et al., 2014). Consequently, the requisite societal transition away from individualism and materialism need not involve “huge sacrifices, and a trade-off between well-being and the environment, *as if they were in conflict*” (Ericson et al., 2014, p. 74, italics theirs). In fact, one of the core tenets of ecopsychology is that human health is entirely dependent upon “environmental health (e.g., Koger & Winter, 2010; Roszak, 1992; Scott et al., 2016).

To invoke another model from the addiction literature (e.g., Di-Clemente, 2003), I believe we are past the *pre-contemplation* phase; most people understand, at least peripherally, that widespread change is necessary and needs to begin sooner rather than later. **However, continued calls to action that provoke fear and anxiety are unlikely to be effective. Instead, people need a positive vision and strategies that enable them to tap into hope, purpose, and empowerment.** The Civil Rights Movement provides an illustration of why it is critically important to build motivation for social change from a positive frame:

Martin Luther King Jr.’s “I Have a Dream” speech is famous because it put forward an inspiring, positive vision that carried a critique of the current moment within it. Imagine how history would have turned out had King given an “I have a nightmare” speech instead! (Shellenberger & Nordhaus, 2004, p. 31)

It is encouraging that various faith-based organizations including the Vatican are recognizing the need to respond to climate change as a

moral imperative and over-arching social justice issue (Gibson, 2015; Rasmussen, 2012; Whitney & Whitney, 2012) and are providing some direction for that response.<sup>2</sup> This endeavor builds on the legacy initiated in the 1980s by Dr. Robert Bullard (e.g., Bullard, 1987, 1993) and the United Church of Christ (Commission for Racial Justice, United Church of Christ, 1987), demonstrating disproportionate exposures to toxic pollution as a form of *environmental injustice*. Recently, the Reverend Robyn Hartwig conceived EcoFaith Recovery, a

faith-based leadership development effort ... [that seeks] wisdom from the traditions of Christian faith, ecology/eco-justice, relational organizing and 12 step recovery for the purpose of revitalizing congregational ministries to make a lasting difference for the healing of the world. (EcoFaith Recovery, 2015b, para. 6)

Their programs include student internships, local food-based potlucks (Simply in Season, based on the eponymous Mennonite cookbook by Lind & Hockman-Wert, 2015), and activism against fossil fuel dependency and transport.

Secular initiatives include the Council on the Uncertain Human Future, which brings together scholars and artists “who might be influential in the transformation of attitudes and actions as we move toward a future on a radically altered planet” (Council on the Uncertain Human Future, 2015, para. 1). The Work that Reconnects<sup>3</sup> and Active Hope workshops based on Joanna Macy’s perspective (Macy & Brown, 1998; Macy & Johnstone, 2012) engage participants in a methodology that combines mindfulness, gratitude, recognition of our interconnectedness with each other and other species, and identifying one’s individual strengths and interests to effectively engage with the Great Turning (Korten, 2006), the emergent transition to a sustainable society. The Transition Town Movement involves local visioning and creating a less consumptive, more community-focused lifestyle that enables rejection of fossil fuel-based energy economies (Hopkins, 2008). The Northwest Earth Institute<sup>4</sup> has long been offering resources to help “Create your community of change.” Many more such efforts are arising internationally (Hawken, 2007).

These diverse examples may reflect an emerging recovery movement, where individuals are converging to share their “experience, strength, and hope” (to quote one of the mottos of A.A.) as they rethink their relationship with human and nonhuman/environmental

<sup>2</sup>For example, GreenFaith, <http://www.greenfaith.org/about>; Ecumenical Ministries of Oregon, [http://www.emoregon.org/global\\_warming.php](http://www.emoregon.org/global_warming.php); Interfaith Power & Light, <http://www.interfaithpowerandlight.org>

<sup>3</sup><http://workthatreconnects.org>

<sup>4</sup><http://www.nwei.org>

communities. Like 12-step programs, they are grass-roots, independent, local, and utilize social bonds to facilitate change; like other treatment strategies for addiction such as Acceptance and Commitment Therapy, Dialectical Behavior Therapy (Hayes & Levin, 2012; Williams & Kraft, 2012), and Buddhism-based approaches (Griffin, 2004; Levine, 2014), many of these coalitions encourage mindful awareness of underlying emotions, thoughts, values, and experiences that contribute to (un)sustainable actions. For instance, Simply in Season (Lind & Hockman-Wert, 2015) potlucks help “make connections between Christian faith, spirituality, and the impact our food purchase and production choices have on ourselves, our neighbors and all of God’s creation” (EcoFaith Recovery, 2015a, para. 3). As participants pay more attention to where their food is grown and how it is produced, they will presumably make fewer impulsive purchases on “autopilot” while at the grocery store (cf. mindfulness-based relapse prevention; Witkiewitz et al., 2014).

Research suggests that mindfulness contributes to proenvironmental behaviors (Amel et al., 2009), reduces overconsumption (De Wit, 2008; Goleman, 2009), and shrinks ecological footprints (Brown & Kasser, 2005), including by activating core values to increase one’s willpower (Schmeichel & Vohs, 2009). By noticing and “sitting with” uncomfortable feelings, rather than reacting impulsively and compulsively, materialists, like other addicts, can learn to “defuse their triggers” (Sheff, 2013, p. 178). **A recent boom in popular press by prominent clinicians and researchers advertises the power of such strategies to literally rewire our brains (neuroplasticity; Hanson, 2009; Merzenich, 2013; Siegel, 2011), likely a necessary component of the conversion to a more sustainable society.**

It remains to be seen whether we are on the verge of a “sea change” in terms of public opinion and action on climate change, resource conservation, or other aspects of our current challenges. However, there seems to be reason for hope, as it is described by David Orr (2011): “Hope is a verb with its sleeves rolled up. In contrast to optimism or despair, hope requires that one actually do something to improve the world. Authentic hope comes with an imperative to act” (p. 17). Hopefully, this emerging recovery movement will soon become as widely known as A.A., and will enable our collective ability to respond effectively to the “Long Emergency” by fostering a transition back to a healthier, life-supporting planet.

### Author’s Note

I appreciate the helpful input provided by two anonymous reviewers.

### REFERENCES

- Amel, E. L., Manning, C. M., & Scott, B. A. (2009). Mindfulness and sustainable behavior: Pondering attention and awareness as means for increasing green behavior. *Ecopsychology, 1*, 14–25.
- Baum, W. M. (1994). *Understanding behaviorism: Science, behavior, and culture*. New York: HarperCollins.
- Brown, K. W., & Kasser, T. (2005). Are psychological and ecological well-being compatible? The role of values, mindfulness, and lifestyle. *Social Indicators Research, 74*, 349–368.
- Bullard, R. D. (1987) *Invisible Houston: The Black experience in boom and bust*. College Station, TX: Texas A&M University Press.
- Bullard, R. D. (1993). *Confronting environmental racism: Voices from the grassroots*. Boston, MA: South End Press.
- Center for Research on Environmental Decisions. (2009). *The psychology of climate change communication: A guide for scientists, journalists, educators, political aides, and the interested public*. New York: Center for Research on Environmental Decisions.
- Clinebell, H. J. (1996). *Ecotherapy: Healing ourselves, healing the Earth*. New York: Haworth Press.
- Commission for Racial Justice, United Church of Christ. (1987). *Toxic wastes and race in the United States: A national report on the racial and socio-economic characteristics of communities with hazardous waste sites*. New York: Public Data Access, Inc. Retrieved May 16, 2015, from [http://d3n8a8pro7vhmx.cloudfront.net/unitedchurchofchrist/legacy\\_url/13567/toxwrace87.pdf?1418439935](http://d3n8a8pro7vhmx.cloudfront.net/unitedchurchofchrist/legacy_url/13567/toxwrace87.pdf?1418439935)
- Council on the Uncertain Human Future. (2015). *Council on the Uncertain Human Future*. Worcester, MA: Clark University. Retrieved November 18, 2015, from <http://www.clarku.edu/higgins-school-of-humanities/initiatives/council-on-uncertain-human-future.cfm>
- De Wit, M. J. (2008). An exploration of modern consumer society and a guide towards mindful consuming. *Dissertation Abstracts International, 69*(3-B), 1948.
- Dickinson, J. L. (2009). The people paradox: Self-esteem striving, immortality ideologies, and human response to climate change. *Ecology and Society, 14*, 34–50.
- DiClemente, C. (2003). *Addiction and change: How addictions develop and addicted people recover*. New York: Guilford.
- Dodes, L., & Dodes, Z. (2014). *The sober truth: Debunking the bad science behind 12-step programs and the rehab industry*. Boston, MA: Beacon Press.
- Doherty, T. J., & Clayton, S. (2011). The psychological impacts of global climate change. *American Psychologist, 66*, 265–276.
- EcoFaith Recovery. (2015a). *Simply in Season small groups*. Portland, OR: EcoFaith Recovery. Retrieved November 18, 2015, from <http://www.ecofaithrecovery.org/initiatives/simply-in-season>
- EcoFaith Recovery. (2015b). *Welcome to EcoFaith recovery*. Portland, OR: EcoFaith Recovery. Retrieved November 18, 2015, from <http://www.ecofaithrecovery.org>
- Elgin, D. (2010). *Voluntary simplicity* (2nd ed.) New York: HarperCollins.
- Ericson, T., Kjøstad, B. G., & Barstad, A. (2014). Mindfulness and sustainability. *Ecological Economics, 104*, 73–79.
- Galanter, M. (2007). Spirituality and recovery in 12-step programs: An empirical model. *Journal of Substance Abuse Treatment, 33*, 265–272.
- Gattig, A., & Hendrickx, L. (2007). Judgmental discounting and environmental risk perception: Dimensional similarities, domain differences, and implications for sustainability. *Journal of Social Issues, 63*, 21–39.

- Gibson, D. (2015, April 15). Pope Francis throws the weight of his office behind tackling climate change. *Sojourners: Faith in Action for Social Justice*. Retrieved May 18, 2015, from <http://sojo.net/blogs/2015/04/15/pope-francis-throws-weight-his-office-behind-tackling-climate-change>
- Gifford, R. (2011). The dragons of inaction: Psychological barriers that limit climate change mitigation and adaptation. *American Psychologist*, 66, 290–302.
- Glendinning, C. (1994). *My name is Chellis, and I'm in recovery from Western civilization*. Boston, MA: Shambhala.
- Glendinning, C. (1995). Technology, trauma, and the wild. In T. Roszak, M. E. Gomes & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 41–54). San Francisco, CA: Sierra Club Books.
- Goleman, D. (2009). *Ecological intelligence: How knowing the hidden impacts of what we buy can change everything*. New York: Doubleday.
- Griffin, K. (2004). *One breath at a time: Buddhism and the twelve steps*. Emmaus, PA: Rodale.
- Guo, Y., Vale, R., & Vale, B. (2011). Rehabilitating affluent lifestyles? Moving towards sustainability. *The International Journal of Environmental, Cultural, Economic, & Social Sustainability*, 7, 211–222.
- Hanson, R. (2009). *Buddha's Brain: The practical neuroscience of happiness, love and wisdom*. Oakland, CA: New Harbinger Publications.
- Hawken, P. (2007). *Blessed unrest: How the largest movement in the world came into being, and why no one saw it coming*. New York: Viking Press.
- Hayes, S. C., & Levin, M. (2012). *Mindfulness and acceptance for addictive behaviors: Applying contextual CBT to substance abuse and behavioral addictions*. The Context Press Mindfulness and Acceptance Practica Series. Oakland, CA: Context Press.
- Hopkins, R. (2008). *The transition handbook: From oil dependency to local resilience*. White River Junction, VT: Chelsea Green Publishing.
- Howell, A. J., Dopko, R. L., Passmore, H.-A., & Buro, K. (2011). Nature connectedness: Associations with well-being and mindfulness. *Personality and Individual Differences*, 51, 166–171.
- Kanner, A. D., & Gomes, M. E. (1995). The all-consuming self. In T. Roszak, M. E. Gomes & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 77–91). San Francisco, CA: Sierra Club Books.
- Kaskutas, L. A. (2009). Alcoholics Anonymous effectiveness: Faith meets science. *Journal of Addictive Disorders*, 28, 145–157.
- Kasser, T. (2002). *The high price of materialism*. Cambridge, MA: MIT Press.
- Kelly, J. F., Hoepfner, B., Stout, R. L., & Pagano, M. (2012). Determining the relative importance of the mechanisms of behavior change within Alcoholics Anonymous: a multiple mediator analysis. *Addiction (Abingdon, England)*, 107, 289–299.
- Kitzes, J., Wackernagel, M., Loh, J., Peller, A., Goldfinger, S., Cheng, D., & Tea, K. (2008). Shrink and share: Humanity's present and future ecological footprint. *Philosophical Transactions of the Royal Society of London, Series B, Biological Sciences*, 363, 467–475.
- Koger, S. M., & Winter, D. D. N. (2010). *The psychology of environmental problems* (3rd ed.). Psychology for Sustainability. New York: Taylor & Francis: Psychology Press.
- Korten, D. C. (2006). *The great turning: From empire to Earth community*. Bloomfield, CT: Kumarian Press.
- Kunstler, J. H. (2005). *The long emergency: Surviving the end of oil, climate change, and other converging catastrophes of the twenty-first century*. New York: Grove Press.
- LaChance, A. (2006). *Cultural addiction: The Greenspirit guide to recovery*. Berkeley: North Atlantic Books.
- Leiserowitz, A. (2007). Communicating the risks of global warming: American risk perceptions, affective images, and interpretive communities. In S. C. Moser & L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 44–63). Cambridge, UK: Cambridge University Press.
- Levine, N. (2014). *Refuge recovery: A Buddhist path to recovering from addiction*. San Francisco, CA: HarperOne.
- Lifton, R. J. (1982). Beyond psychic numbing: A call to awareness. *American Journal of Orthopsychiatry*, 52, 619–629.
- Lilienfeld, S. O., & Arkowitz, H. (2011, February 17). Does Alcoholics Anonymous work? For some heavy drinkers, the answer is a tentative yes. *Scientific American*. Retrieved May 18, 2015, from <http://www.scientificamerican.com/article/does-alcoholics-anonymous-work/?page=2>
- Lind, M. B., & Hockman-Wert, C. (2015). *Simply in season: A world community cookbook*. (10th anniversary ed.). Harrisonburg, VA: MennoMedia.
- Macy, J. (1995). Working through environmental despair. In T. Roszak, M. E. Gomes & A. D. Kanner (Eds.), *Ecopsychology: Restoring the Earth, healing the mind* (pp. 240–259). San Francisco, CA: Sierra Club Books.
- Macy, J., & Brown, M. Y. (1998). *Coming back to life: Practices to reconnect our lives, our world*. Gabriola Island, BC: New Society Publishers.
- Macy, J., & Johnstone, C. (2012). *Active hope: How to face the mess we're in without going crazy*. Novato, CA: New World Library.
- Merzenich, M. (2013). *Soft-wired: How the new science of brain plasticity can change your life*. San Francisco, CA: Parnassus Publishing.
- Moser, S. C. (2007). More bad news: The risk of neglecting emotional responses to climate change information. In S. C. Moser & L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 64–80). Cambridge, UK: Cambridge University Press.
- Orr, D. W. (2011). *Hope is an imperative: The essential David Orr*. Washington, DC: Island Press.
- Otero-López, J. M., Pol, E. V., Bolaño, C. C., & Mariño, M. J. S. (2011). Materialism, life-satisfaction and addictive buying: Examining the causal relationships. *Personality and Individual Differences*, 50, 772–776.
- Rasmussen, L. (2012). *Earth-honoring faith: Religious ethics in a new key*. New York: Oxford University Press.
- Rozzak, T. (1992). *The voice of the Earth: An exploration of eco-psychology*. New York: Simon & Schuster.
- Rozzak, T. (1994). Green guilt and ecological overload. In M. Walker (Ed.), *Reading the environment*. New York: W.W. Norton & Co.
- Rozzak, T., Gomes, M. E., & Kanner, A. D. (1995). *Ecopsychology: Restoring the Earth, healing the mind*. San Francisco, CA: Sierra Club Books.
- Schmeichel, B. J., & Vohs, K. (2009). Self-affirmation and self-control: Affirming core values counteracts ego depletion. *Journal of Personality and Social Psychology*, 96, 770–782.
- Scott, B. A., Amel, E. L., Koger, S. M., & Manning, C. M. (2016). *Psychology for sustainability* (4th ed.). New York: Psychology Press.
- Sheff, D. (2013). *Clean: Overcoming addiction and ending America's greatest tragedy*. New York: Houghton Mifflin Harcourt.
- Shellenberger, M., & Nordhaus, T. (2004). *The death of environmentalism: Global warming politics in a post-environmental world*. Retrieved November 18, 2015, from [http://www.thebreakthrough.org/images/Death\\_of\\_Environmentalism.pdf](http://www.thebreakthrough.org/images/Death_of_Environmentalism.pdf)
- Siegel, D. J. (2011). *Mindsight: The new science of personal transformation*. New York: Bantam Books.

- Small, G. (2009, July 22). Techno addicts: Dopamine is responsible for the euphoria that addicts chase. *Psychology Today*. Retrieved May 16, 2005, from <https://www.psychologytoday.com/blog/brain-bootcamp/200907/techno-addicts>
- Weber, E. U. (2006). Experience-based and description-based perceptions of long-term risk: Why global warming does not scare us (yet). *Climatic Change*, 77, 103–120.
- Weick, K. E. (1984). Small wins: Redefining the scale of social problems. *American Psychologist*, 39, 40–49.
- Whitney, L., & Whitney, L. (2012). Faith based statements on climate change. Retrieved February 20, 2015, from <http://citizensclimatelobby.org/files/images/Faith%20Based%20Statements%20PDF%20for%20printing.pdf>
- Williams, R. E., & Kraft, J. S. (2012). *The mindfulness workbook for addiction*. Oakland, CA: New Harbinger Publications.
- Witkiewitz, K., Bowen, S., Harrop, E. N., Douglas, H., Enkema, M., & Sedgwick, C. (2014). Mindfulness-based treatment to prevent addictive behavior relapse: Theoretical models and hypothesized mechanisms of change. *Substance Use & Misuse*, 49, 513–524.
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18, 459–482.

Address correspondence to:  
*Susan Koger*  
*Willamette University*  
*900 State St.*  
*Salem, OR 97301*

*E-mail: skoger@willamette.edu*

Received: March 19, 2015  
Accepted: September 18, 2015

**This article has been cited by:**

1. Christine Wamsler, Johannes Brossmann, Heidi Hendersson, Rakel Kristjansdottir, Colin McDonald, Phil Scarampi. 2017. Mindfulness in sustainability science, practice, and teaching. *Sustainability Science* 37. . [\[CrossRef\]](#)
2. Panu Pihkala. 2017. Environmental education after sustainability: hope in the midst of tragedy. *Global Discourse* 7:1, 109-127. [\[CrossRef\]](#)
3. Susan M. Koger, Britain A. Scott. 2016. Teaching Psychology for Sustainability: The Why and How. *Psychology Learning & Teaching* 15:3, 214-225. [\[CrossRef\]](#)