

EcoWellness: The Missing Factor in Holistic Wellness Models

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A growing body of multidisciplinary literature has delineated the benefits that natural environments have on physical and mental health. Current wellness models in counseling do not specifically address the impact of nature on wellness or how the natural world can be integrated into counseling. The concept of EcoWellness is presented as the missing link in wellness models and counseling. Integrating EcoWellness in counseling provides new and potentially powerful interventions to enhance wellness across the life span.

Keywords: holistic wellness, EcoWellness, transcendence, environmental identity, spirituality

Nature, defined as “the elements of the natural world, as mountains, trees, animals” (“Nature,” n.d.), has been associated with many measures of wellness, including a reduction in symptoms of stress, attention-deficit/hyperactivity disorder (ADHD), depression and anxiety, decreased recovery time from illnesses, and improvements in positive outlooks on life, concentration, and productivity (Guite, Clark, & Ackrill 2006; Maller, Townsend, Pryor, Brown, & St. Leger, 2005). Some authors claim these findings are grounded in an intuitive sense, if not a genetic need for humans to be connected with nature (Kellert & Wilson, 1993). Others believe humans possess an inherent “ecological unconscious” that either thrives or hurts from the depth to which humans are in contact with and connected to nature (Roszak, 1992). Both theories have been substantiated by an abundance of interdisciplinary literature found outside of counseling (Wilson, Ross, Lafferty, & Jones, 2008).

Although the wellness effects of nature are clear, wellness models grounded in counseling have yet to explicitly account for such effects. For example, Myers and Sweeney’s (2008) Indivisible Self model (IS-Wel) purports to be both holistic and contextual, yet nature is not specifically identified as a context or component of wellness. Furthermore, current approaches to counseling based in nature connections, such as adventure-based counseling (Hill, 2007), do not fully account for the impact the human–nature connection has on wellness or how the natural world can be integrated into counseling processes. As a consequence, models that claim to be holistic are in actuality missing an important component known to contribute to positive well-being.

In this article, we introduce and define EcoWellness as a sense of appreciation, respect for, and awe of nature that results in feelings of connectedness with the natural environment and the enhancement of holistic wellness. We present models of wellness used in counseling and highlight the gap in relation to the human–nature connection. Dimensions of EcoWellness are explored through the perspective of interdisciplinary literature on the human–nature connection. A

case example is provided, and implications for counseling practice and research are discussed.

Holistic Wellness Models in Counseling

Wellness has been defined as “a way of life oriented toward optimal health and well-being, in which body, mind, and spirit are integrated by the individual to live life more fully within the human and *natural* community” (emphasis added; Myers, Sweeney, & Witmer, 2000, p. 252). This definition is the basis of both the Wheel of Wellness (Myers et al., 2000) and the IS-Wel (Myers & Sweeney, 2005). Both models share a foundation in Adlerian individual psychology and hence an emphasis on social interest, defined by Adler (1927/1954) as a sense of community with others and the world around us (see Sweeney, 2009).

The Wheel of Wellness (Witmer & Sweeney, 1992), a theoretical model, was developed from an interdisciplinary review of literature focused on quality of life over the life span, health, and longevity. The Wheel of Wellness includes five life tasks identified by Adler (1927/1954): spirituality (depicted as the core or central aspect of wellness), self-direction, love, friendship, and work. Self-direction includes an additional 12 subtasks, such as sense of humor, self-worth, and realistic beliefs. Witmer and Sweeney (1992) proposed the model as contextual and suggested that wellness is affected by education, media, government, and other factors, none of which explicitly refer to the impact human–nature interactions have on wellness.

The IS-Wel (Myers & Sweeney, 2005) was developed through structural equation modeling of a database initially developed using the factors identified in the Wheel of Wellness (Myers & Sweeney, 2008). In this evidence-based model, wellness is defined as a higher order, global factor reflecting the indivisibility of the self. Five second-order factors are also identified: Creative Self, Coping Self, Social Self, Essential Self, and Physical Self. Seventeen third-order factors

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are grouped within these second-order factors, all of which can interact to affect wellness in both positive and negative ways. Myers and Sweeney (2008) proposed the IS-Wel as an ecological model wherein individual wellness is affected by local, institutional, global, and chronometrical contexts. The global context was defined as factors “that connect one to others around the world” (Myers & Sweeney, 2008, p. 485).

Although descriptions of these wellness models include explicit references to nature, environment, and natural community, such terms are not clearly defined and are not included in assessments based on the models. The validity of the contexts individually and collectively has not been examined. This is surprising given Adler’s (1927/1954) belief that humans strive toward being a member of an interdependent social system (Sweeney, 2009). Adler posited that individuals yearn for a community feeling, a sense of oneness with all of life, empathy and compassion for others, and a sense of connectedness, or *Gemeinschaftsgefühl*. Although social relationships between humans are central to the wellness models described here, what seems to be missing is an emphasis on connections between people and nature and the impact of those connections.

■ Effects of Nature on Wellness

The fact that nature has restorative effects on some individuals is largely indisputable (Ryan et al., 2010). Reductions in stress, increases in focus and concentration, enhanced academic performance, and increases in vitality have all been positively related to the presence of nature (Brymer, Cuddihy, & Sharma-Brymer, 2010). A growing body of interdisciplinary research in conservation psychology; environmental psychology; ecopsychology; parks and recreation; leisure studies; and hospitality, tourism, and management has shown that both viewing nature and being in nature contribute to these positive effects (Wilson et al., 2008).

Viewing nature has positive psychological, physical, and emotional benefits to human health (Leather, Pyrgas, Beal, & Lawrence, 1998). For example, viewing nature has been shown to improve student test scores and academic performance (Tennesen & Cimprich, 1995), decrease self-reported illness and headaches (Kaplan & Kaplan, 1989), and decrease stress (Grahn & Stigsdotter, 2003). In a randomized controlled trial, Ulrich (1984) found that postsurgery patients who had a view of nature (e.g., a garden) from their hospital room spent less time in the hospital and required less pain medication compared with patients who had a view of a brick wall.

The effects of being in nature have also been examined, with fairly consistent findings across studies. When they compared individuals sitting in a comfortable chair, walking in nature, and walking in an urban environment, Hartig, Mang, and Evans (1991) found that mental fatigue was relieved the most when individuals walked in nature. Kaplan and Kaplan (1989) found that increased happiness with one’s home, job, and life in general coincided with being in nature because of

the restorative effects of natural environments on concentration. These authors argued that viewing nature (e.g., seeing images of a forest or green landscape) or being in nature (e.g., going on a walk in a forest) elicits effortless or “soft” fascination that restores focus and concentration. Soft fascination provides relief from “hard” fascination, which is the directed attention placed toward activities or tasks that require full attention and effort to maintain concentration (e.g., watching a television show or working at the office).

Taylor, Kuo, and Sullivan (2001) observed that children exposed to green settings (i.e., to being in nature) displayed less severe ADHD symptomatology. Parents or caregivers of 7- to 12-year-olds ($N = 96$) overwhelmingly ranked green settings (e.g., soccer fields or fishing ponds) as more effective in managing ADHD symptomatology than indoor leisure pursuits. Furthermore, the greener the child’s everyday environment, the less severe were adults’ ADHD ratings.

Ryan et al. (2010) conducted five studies on the vitalizing (e.g., physical or mental energy) effects of being in and viewing nature. Using a combination of survey, experimental, and diary methodologies, they compared the vitalizing effects of indoor/outdoor, social/nonsocial, and physical/nonphysical activities and simply viewing images of nature. Across studies, participants experienced increases in vitality in the presence of natural images, vignettes, walks in a natural setting, and self-reported experiences. Outdoor experiences were almost universally reported as vitalizing.

The major limitations of the studies cited here include small and nonrepresentative samples and correlational designs. However, the conclusions are consistent and point to the significance of nature experiences as a component of well-being. Additional studies support the multidimensional nature of EcoWellness.

■ Dimensions of EcoWellness

Our review of research related to the human–nature connection led to the hypothesis that EcoWellness is not a unitary construct but rather comprises three discrete dimensions. These include access to nature, environmental identity, and transcendence in nature. Each dimension contributes unique perspectives for understanding the EcoWellness construct.

Access to Nature

Kuo (2010) presented a strong argument for the proposition that access to nature contributes to greater health. Environmental quality is a central factor in the nature–health relationship, with hazardous wastes, air pollutants, and other toxins having a negative effect on health. The inequitable distribution of negative living environments based on class and race has been well established (Strife & Downey, 2009). Wells (2000) demonstrated that children who had recently moved to housing that had access to nearby nature showed increased attention capacity compared with children who moved to areas without access to nature.

Faber Taylor, Kuo, and Sullivan (2002) studied the effects of views of nearby nature on inner-city children and found that girls received better ratings in self-discipline the more nature they were able to view from home (e.g., trees and grass). Wells and Evans (2003) found that stressful life events caused less psychological distress, as measured by children's global self-worth and parent-reported psychological distress, among children living in housing "high" in nature as opposed to children living in places lower in nature. After controlling for income, the authors found that low levels of nature had the strongest impact on children experiencing the highest levels of stress.

Such findings are not limited solely to children. In a survey of 1,000 adults, Guite et al. (2006) concluded that population density and dissatisfaction with quality of green spaces surrounding a person's home were inversely correlated with perceptions of mental well-being. People who were satisfied with the quality of green spaces around their home reported higher perceived well-being. In an earlier study, Kuo and Sullivan (2001a) interviewed women living in a housing complex in Chicago and found that women who had views outside of their building that were mostly concrete and asphalt reported higher levels of aggression and violence compared with those with more views of green spaces that included trees and grass. Women with a smaller view of nature reported increased psychological aggression, violence, and acts of aggression. In a separate study, Kuo and Sullivan (2001b) found that as the amount of green vegetation decreased surrounding an apartment complex, the incidence of violence increased, including assaults, robberies, homicides, and batteries. In terms of EcoWellness, these findings on access to nature can be explained at least partly in the context of environmental identity.

Environmental Identity

The second aspect of EcoWellness, environmental identity, incorporates a consideration for the positive and negative aspects of current-day environments. Positive environments are those that enhance well-being and contribute to health, whereas negative environments, such as the inner-city housing described earlier without access to nature, distract from health and contribute to nonhealthy responses to life. The process by which wellness can be harnessed through access to nature seems to be integrally related to how one identifies with the environment or how one incorporates nature into one's concept of self. Several authors have described the complex role of environmental identity development in promoting environmental beliefs and actions to protect the natural environment (e.g., Cantrill, 1998), which in turn are essential components of social interest as defined by Adler (1927/1954). People who possess strong, positive environmental identities feel more connected with and drawn to spend more time in natural environments (Nisbet, Zelenski, & Murphy, 2008), thereby experiencing greater wellness.

Adults who present with strong environmental identities typically report having special relationships with nature as

children. In a study of approximately 2,000 adults in U.S. urban cities, Wells and Lekies (2006) found that both "wild nature," such as hiking and camping, and "domesticated nature," including activities such as planting trees and picking flowers, were related to positive environmental attitudes as adults. Time spent in wild nature prior to age 11 increased the likelihood of proenvironmental attitudes and beliefs among adults, apparently because time spent in nature as a child influences the adoption of a self-concept identifying with nature.

Environmental identity has also been directly correlated with factors associated with wellness. Mayer and Frantz (2004) connected an environmentalist identity directly with both nature connectedness and a measure of well-being. Nisbet, Zelenski, and Murphy (2010) found that nature relatedness correlated significantly with positive affect, autonomy, personal growth, purpose in life, and self-acceptance. In their study, students enrolled in an environmental psychology course scored higher on nature relatedness and sustained higher well-being scores over time, and those who felt closely connected with nature reported greater wellness overall. In some instances, greater wellness was related to explicit experiences of transcendence, the third component of EcoWellness.

Transcendence

In the 1960s and 1970s, many people began using experiences in nature as a means of self-transcendence. Maslow (1971) defined the term *peak experiences* as those experiences through which individuals could reach beyond themselves to connect with others and the external world, believing that they could bring about deep feelings of interconnectedness and unity with all things. Two aspects of these experiences are spirituality and community connectedness.

Spirituality. Various studies have examined the relationship between nature and spirituality, many of which describe the transcendent qualities of spending time outdoors (Ellard, Nickerson, & Dvorak, 2009). Nature positively influences people to experience awe; wonderment; feelings of connectedness to nature and others; a Higher Power; heightened external awareness of surroundings; and a tendency to experience positive feelings of self, love, peace, and increases in emotional well-being (Sweatman & Heintzman, 2004). Fredrickson and Anderson (1999), in a study of women exploring the Grand Canyon, found that the presence of positive interpersonal interactions increased one's tendency to fully appreciate the spiritual aspects of nature.

In a review of the literature on the complexity of the nature-spirituality connection, Heintzman (2010) discussed the antecedent conditions to experience spirituality in nature, the setting components, the recreation components, and the spiritual outcomes of nature-based spirituality. He argued that not everyone will have a spiritual connection with nature and whether one spiritually benefits from nature depends on aspects such as one's developmental history with nature and current life circumstances, the kinds of outdoor settings in which nature

experiences take place, and the kinds of activities that one uses in nature. For example, whether one is currently feeling depressed, in a natural or human-constructed outdoor setting, or engaging in an active process such as canoeing or in a more passive process such as star gazing will affect the extent to which spiritual outcomes result from nature-based experiences.

Daniel (2007) conducted a retrospective study that explored the effects of a Christian-based, 20-day wilderness excursion and found that the uniqueness of the nature experience, the timing of the lives of the participants, and the extent to which the wilderness expedition connected with memories of other life experiences contributed to one's total experience in nature. Participants reported greater awareness of God, nature, and self. Overall, nature appears to positively affect feelings of transcendence of the self, providing opportunities to feel connected with nature, with one's conception of God, and with others.

Community connectedness. Community connectedness reflects the propensity for individuals to consider the needs of other living things as much as their own needs when exposed to natural environments. Several studies have demonstrated that people exposed to nature transcend self-needs by increasing attitudes and actions associated with promoting the well-being of others (Weinstein, Przybylski, & Ryan, 2009). Weinstein et al. (2009) conducted four studies to determine the effects of nature on intrinsic and extrinsic value aspirations. In each study, participants were randomly assigned to natural environments, including pictures of natural landscapes in the first three studies or a room with four plants in the fourth study, or to nonnature environments, such as pictures of urban environments in the first three studies or a room without the four plants in the fourth study. Across studies, participants who were more highly immersed in natural settings self-reported higher intrinsic value aspirations, reflected in a focus on relationship and community wellness, and lower value aspirations placed on extrinsic values such as fame and money. Participants in natural settings made more generous decisions (e.g., a decision that had a positive consequence on another participant following a nonselfish act) than did those in the nonnature setting, demonstrating that immersion in natural settings affects values associated with relationship and community wellness. Moreover, relatedness to nature and self-reported autonomy in natural settings predicted greater intrinsic and lower extrinsic values and an increase in generosity. The more one felt connected with nature, the greater one's tendency to consider others' needs and meet those needs through a generous act.

Just as nature seems to affect feelings of generosity toward others, natural environments have been shown to enhance community connectedness. Community gardens, shared community spaces that urbanites frequent to grow their own produce, have been shown to decrease feelings of isolation (Wakefield, Yeudall, Taron, Reynolds, & Skinner, 2007) while facilitating the growth of social connections (Milligan, Ga-

trell, & Bingley, 2004). Milligan et al. (2004) found that community gardens members demonstrated increased generous acts of caring for others by taking care of the garden plots of people who were unable to tend to them. Findings related to nature exposure on community connectedness are noteworthy in that time spent in nature has the ability to expand one's sense of community and care for others. People become more generous and inclusive in natural settings, and participants in these studies described feeling safer and less isolated.

Relationships Among EcoWellness Components

Although the three components of EcoWellness have been described individually, they are clearly related. Exposure to natural environments (access to nature) contributes to the development of one's sense of self (environmental identity) and to both spiritual well-being and community connectedness (transcendence). Although the relationships between the proposed dimensions of EcoWellness require validation through future research, EcoWellness provides a practical lens through which counselors can determine the relevance of implementing nature-based counseling interventions with the diverse populations they serve. Careful assessment of how each of the dimensions interacts with and affects clients' holistic well-being can provide practitioners with many powerful EcoWellness counseling strategies.

■ EcoWellness Counseling: Practical Strategies

Each dimension of EcoWellness serves as an important consideration in determining whether it will be beneficial to address nature-based interventions in counseling settings. In addition, some counseling interventions may be more effective in addressing each dimension of EcoWellness than others. The following list of questions can be useful in identifying what kinds of nature-based interventions will be helpful early in the counseling assessment process. When using questions such as these, the counselor needs to pay close attention to the content and nonverbal signals the client may be sending with regard to her or his relationship with nature.

- Did you have access to natural settings as a child? If so, what kinds of natural settings and what did you do?
- Describe one of your earliest memories in nature. Was it a memory in which you associate positive or negative thoughts and feelings?
- Who introduced you to nature as a child? What was their outlook on nature?
- To what extent do you currently have access to what you would consider as nature?
- How often do you spend time in what you consider being nature?
- How do you normally spend your time when in nature?

- What thoughts and emotions do you typically experience when you are in nature?
- To what extent would you consider nature being part of who you are as a human being?
- How important is it for you to take part in environmentally friendly behaviors such as recycling? How often?
- How has being in nature affected your relationships with others in your life?
- How does time spent in nature affect your sense of community with others?
- How does being in nature affect your ability to connect with something bigger than yourself?
- How does being in nature affect your relationship with your sense of spirituality?

All three dimensions of EcoWellness can be integrated into counseling. Clients can be educated on the importance of accessing nature through brochures, books, and websites. Some clients, especially clients in urban settings, may not have access to nearby parks that are safe. Developing a strategy for clients and their families to access nature can be an important way to establish or restore client connections with nature. Counselors with access to nature might also find it beneficial to integrate natural settings into the process of counseling. Walking, identifying plants and other wildlife, and sitting on a park bench and reminiscing on childhood memories have all been found to be beneficial by clients in restoring a connection with nature.

Some clients live in physical environments that are unsafe, embedded with toxins and harmful materials produced by humans. Helping to empower clients to take action might enhance environmental identity while improving feelings of self-efficacy. Counselors knowledgeable in sustainable environmental practices can also provide individual or group psychoeducational sessions to teach clients ways in which they can decrease their carbon footprint. For example, counselors can help clients identify everyday practices for which they might experience guilt, such as driving to work every day when their workplace is only a mile away. Together, the counselor and client might explore the alternatives, such as public transit, walking, or carpooling, and how these alternatives might assist the client in feeling more in touch with and a part of nature to experience holistic wellness.

Group approaches to transcending the self can incorporate nature in the process of counseling both indoors and outdoors to deepen the “other” awareness of group members to one another and their conception of nature to improve holistic wellness. In vivo group experiences in this context may appear similar to adventure-based counseling interventions as described by Hill (2007). What EcoWellness offers in addition is a specific focus on the human–nature connection as central to holistic wellness. Intentional exploration of feelings about nature and feelings of connectedness to nature will be part

of group discussions and may provide a starting point for examining holistic wellness and discussing other components of wellness, such as community and self-spirituality, social support, or leisure. Simply clarifying values about nature and the role of nature in relation to each individual’s well-being can be significant.

Each aspect of EcoWellness can be integrated into counseling processes. Increasing access, promoting an environmental identity, and providing nature-based experiences that elicit transcendence can all be powerful ways of promoting holistic wellness. A brief case example is provided to underscore the potential power of EcoWellness counseling.

■ EcoWellness Counseling in Action: The Case of Kaleef

Nine-year-old Kaleef (a pseudonym of a former client) presented to counseling with the first author with problems relating to his peers and acting out in the classroom. Kaleef would frequently yell, hit, and scream at his peers when he perceived them as making fun of him or purposely keeping toys and video games away from him. He had few successful peer relationships and was increasingly socially isolated.

In the first session, I asked permission from Kaleef’s mother to go to a nearby park and provided her with some of the research associated with nature and mental health. I then met with Kaleef and discussed his comfort in nature, how much time he spent outdoors, how he identified with nature, and how he felt about going to the park. Kaleef expressed excitement about going and immediately wanted to bring a ball to play with.

Kaleef was gently immersed into an outdoor setting over the course of two sessions at the nearby park. We threw a football and played soccer in nature while talking about his presenting concerns. After rapport had been established and Kaleef became comfortable in the outdoor setting, I integrated the use of metaphor into counseling in the third session. In a transcendental exercise, I asked Kaleef to seek out an organism in nature that represented his current self and then identify a second living organism in nature that would represent him if everything were to suddenly be different.

Kaleef identified an isolated, dying tree, which bore no leaves, and indicated that the lack of leaves meant the tree had no friends. There were no neighboring plants. He said that there were no neighboring plants because the tree had pushed them away. For the second organism, Kaleef pointed out a nearby tree that appeared strong, had many leaves, and provided shade for other nearby wildlife. Kaleef indicated that he wanted to become more like that second tree by sharing his “shade” with others by giving other people turns when playing video games. After I prompted how the leaves gently fall off the tree during the fall season, he excitedly indicated that he could drop his anger when he felt upset by the actions of others in place of yelling or crying when things did not go his way.

This metaphor stuck with Kaleef throughout the counseling relationship. Over the course of the next several weeks, he visited the two trees and shared how he was making progress to be like the bigger, stronger tree that shared with others. His crying spells had decreased and he began getting along better with others, as evidenced by a decrease in hitting peers and siblings and an increase in sharing behaviors.

Each aspect of EcoWellness was addressed in working with Kaleef in the park. Kaleef described himself as feeling comfortable outdoors, identifying with nature through use of play and admiration, and accessing nature often. He felt good about being in nature, and after rapport was established, he and I easily integrated nature metaphors into counseling. Kaleef identified with the bare, dying tree and took note that the tree itself was alone and isolated, much like him. He then compared the tree he felt like with another tree that he hoped to identify more with after time. He transcended himself by identifying how one tree was in community with others whereas the other tree was not; he noted a parallel process in himself, in which he felt alone and wanted to connect more with others through friendship. Through accessing nature over time, developing a strong therapeutic alliance with me, identifying with specific elements of nature, and transcending the self, Kaleef improved his ability to interact with others and feel better about himself.

Implications for Research

The concept of EcoWellness provides a basis for integrating nature into the counseling process to enhance holistic wellness. Multiple studies support the importance of each construct in relation to positive well-being; however, studies linking the components of EcoWellness to holistic wellness models are currently lacking. Such studies will provide important information on which to base counseling interventions to promote EcoWellness. Research is needed to validate the three dimensions of EcoWellness and relationships among the components and to determine the benefits of EcoWellness in counseling practice and counselor preparation. Studies that demonstrate relationships between EcoWellness components and holistic wellness factors may further inform counseling practice and the development of both holistic wellness and EcoWellness models and interventions. Exploration of these relationships requires the development of reliable and valid measures of EcoWellness in addition to qualitative explorations of the meaning of EcoWellness to people of varying demographics and life circumstances. Studies based in counseling should be carefully constructed to overcome the limitations of existing research, including a preponderance of correlational studies with small convenience samples.

Studies that develop and test EcoWellness interventions are also needed. These studies may be specific to settings and populations, such as schools, hospitals, prisons, or long-term care environments. Strategies for enhancing access to nature, environmental identity, and transcendence for diverse populations

across the life span will illuminate both the individual meaning of these constructs and how relationships among the constructs combine to create a greater and lasting sense of holistic wellness.

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