

The Ecology of Adventure Therapy: An Integral Systems Approach to Therapeutic Change

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Abstract

Currently, a fragmentation in ideas exists regarding understanding psychological wellness and preferred routes to healing. This is evident in current adventure therapy (AT) literature, where unique combinations of experiential learning, challenge activities, novel experiences, group work, and other psychological theories are often used to account for positive outcomes and to explain mechanisms for change. Rarely is contact with wilderness environments included as an important variable associated with positive outcomes and change. AT has been rightly criticized for not recognizing the ecological paradigm of therapy conducted in wild nature. By including principles from integral systems theory, we offer adventure therapists a map, allowing for these seemingly disparate parts to fit together into a coherent whole. In addition, we propose that wilderness is a crucial cofacilitator in the change process. If seriously considered, these ideas pose a number of important questions for AT theory and practice.

Introduction

In recent years, integral systems theory has been increasingly used in both the natural and social sciences to improve understanding of how human and biophysical systems undergo change and transformation. A child of complexity and evolutionary systems theory, integral theory offers important insights for fields as traditionally diverse as forest ecology, developmental psychology, and psychotherapy. Further, there are new arguments that

suggest immersion in wilderness environments or wild nature during adventure therapy (AT) to be a crucial factor in facilitating lasting change (Nicholls & Gray, 2007; Trace, 2002)—a profoundly integrating force in stabilizing transformation following disequilibrium. AT is being defined broadly as a therapeutic approach utilizing challenge and experiential learning in conjunction with therapist-determined techniques. Moreover, despite advocating the use of wild nature in AT, we are not limiting our definition to wilderness AT (WAT). Instead, we wish to reach the broad AT audience and argue for the integration of the natural environment in the AT process.

In light of the nature of open systems (all living systems maintain their integrity as a result of exchanging energy with the environment), the context in which therapy occurs is a crucial variable. Thus, AT that ignores the potential therapeutic benefits of wild nature could be failing to utilize a valuable context. In this article we examine AT in light of integral systems theory. We make the argument that it is a useful model to examine the practice of AT—both in terms of how the wilderness adventure experience is a crucial component in facilitating individual change and reorganization, as well as the use of these theories in generating critical questions for further research.

Further, AT theorists have been criticized for their reluctance, or oversight, to connect wild nature to therapeutic change processes; AT theory has primarily developed in the context, dominant discourse, and territorialism of conventional psychological approaches (Beringer, 2004). Thus, limited AT literature exists, in which the therapeutic values of the “wilderness experience” in this type of approach are expressed (e.g., Greenway, 1995; Henderson, 1999; Miles, 1987). For the purposes of this article the authors are including contact with wild nature as a key component of AT, whereas current AT definitions often do not—the latter postulating greater influence by experiential learning practices and challenge/risk constructs, along with conventional “clinical” approaches, in therapeutic change. With our

inclusion of wild nature in AT, this approach may be considered an ideal expression of ecopsychology in action—a fertile ground for application of ecological thought in psychotherapeutic practice.¹

We have titled this article *The Ecology of Adventure Therapy* for the following reasons:

- (1) The term “ecology” is from the Greek “oikos” meaning house or home and “logos” meaning the study of—hence, the study of our home. This is our extended abode where we all live and upon which our lives and economies (“household management”) are utterly dependent (Barber, 1998, p. 442).
- (2) “Adventure” is from the Latin “adventura” and “advenire” (“ad” meaning “to” and “venire” meaning “arrive”)—hence, “to arrive.”
- (3) AT practice often includes the use of wilderness or similar outdoor environments in its definition. “Wilderness” is from the Old English “wild-deor” meaning wild animal. It is the abode of the nondomesticated and is out of the control of humans. Wilderness, then, is a place or context that is chaotic, unruly, and disordered and where people often feel out of control. “Wild” is also etymologically related to “will” and “willful”—hence, uncontrollable, chaotic, and without order (Nash, 1979, p. 1).
- (4) “Therapy” is from the Greek “therapeia” meaning “curing” and “healing.” The title of this article relates to the idea that within wilderness places or contexts (our extended home) where we are “out of control” or which is often “chaotic,” there exists a profound potential for arriving at a new level of wholeness or healing.

The rise of systems thinking

When we try to pick out anything by itself, we find it hitched to everything else in the universe

—John Muir (*My First Summer in the Sierra*, (1911/1996))

¹Ecopsychology has been questioned in the past for its lack of practical guidelines. This appears to be changing with the release of the recent anthology, *Ecotherapy: Healing with Nature in Mind* (2009), edited by Linda Buzzell and Craig Chalquist. It is noteworthy that adventure therapy, which occurs in a wilderness context, is perhaps one of the best articulations of ecotherapy as an application of ecopsychology. Usually referred to as wilderness adventure therapy, there currently exists a large body of research regarding the use of wilderness environments in terms of therapeutic change (e.g., Bendoroff & Scherer, 1994; Crisp, 1998; Davis-Berman *et al.*, 1994; Harper, 2009).

Ecological perspectives and their application to human systems and therapeutic change emerged largely as a response to the growing influence of scientific reductionism in the social sciences. The work of Bertalanffy (1968) and Laszlo (1996) introduced “general system theory” to return science and scientists to a holistic, unified way of thinking. By assuming the existence of structural uniformities at all levels of systemic inquiry, the systems theorist is able to recognize similarities and connections between otherwise disparate types of phenomena. The concept of “system” becomes an invariant facilitating the movement from one field of investigation to another, without losing one frame of reference or having to adopt another. The result is a significant impact on the conceptualization of physical and social sciences ranging from biologists to political theorists, to mental health professionals. Since that time, advancements in system thinking has brought with it a deep understanding of how systems undergo change and transformation. In recent years, much of this has been synthesized and articulated in integral systems theory.

Integral systems theory

Integral systems theory² regards the world in which we live as a self-organizing complex, consisting of a myriad number of systems or “wholes,” all of which are interconnected and interlocked. Within this perspective, an individual system—whether an atom, cell, plant, animal, human, community, or nation—is seen to interact with its environment by means of “feedback” mechanisms. It cannot therefore be properly understood separate from its relationship with the environment of which it is a part (Wilber, 2001).

An integral systems perspective sets out to demonstrate that the world in which we live is not some chaotic heap or aggregate of parts, but is instead an organized and highly elegant structure in which order and structural regularities are always in operation. The traditional systems theorists have typically looked at the implications of systems for the social domain (e.g., Psychology: Bateson, 1972; Political Theory: Taylor, 1999), whereas the integral systems approach also recognizes the importance of the biophysical context, in which human individual and social systems are embedded.

The interconnectedness and coevolutionary nature of both biophysical and social systems is a cornerstone of integral theory.

²Integral systems theory, although largely attributed to the works of Wilber (2001), has also been used in a number of different ways by scholars such as Haridas Chaudhuri and Ervin Laszlo. In this article, we draw on the works of Wilber (2001), Laszlo (1996), and Mahoney (2003) to articulate our own synthesis of ideas in light of adventure therapy.

Common to all natural systems are the following properties (see Laszlo, 1996; Taylor, 1999, Wilber, 1996).

Agency and communion

All natural systems are relative wholes, “holons” in systems terminology (Koestler, 1967; Wilber, 2001). Holons are embedded in, and continuously exchange, energy and information with other larger natural systems and environmental contexts. Consequently, a holon has both “agency” or relative identity, as well as “communion” insofar as it is also a part of a larger holon or context. An atom, for example, is part of a molecule and a child is part of a family. The two principles that operate to maintain balance between “agency” and “communion” are discussed in the following paragraph.

Stabilization and transcendence

Holons attempt to maintain themselves with respect to their larger environment. All living systems are open with respect to energy and information from their surrounding environment. Despite this continual flow-through of matter energy and information, and indeed because of that capacity, systems can self-regulate to compensate for changing conditions in their environment. Examples of this homeostasis can be found in biological systems, such as the regulative mechanisms in animals which maintain body temperature, blood pressure, sugar and insulin levels, and so on, notwithstanding variations in the surrounding environment.

Open systems tend to return to a level of steady-state following disturbances or perturbations, internally and externally, in their environment. However, at times, when challenges from the environment persist, they can fall apart (dissolution) or evolve (transcendence or self-organization) in response to these perturbations to a new level of complexity with new emergent properties.

The four-quadrant model

All humans, and arguably all sentient beings, have both agency and communion. At the level of agency, we all have “exteriority” or physicality as well as “interiority”—thoughts, feelings, perceptions, and so on. At the level of communion, we live in larger social and biophysical contexts of interobjectivity. And at the intersubjective level, we inhabit a world of cultural meanings, world views, values, and language. These four areas are referred to as the four-quadrant model (Fig. 1) (Esbjorn-Hargens & Zimmerman, 2009; Taylor, 2001; Wilber, 2001).

Largely attributed to the work of Wilber (2001) the four-quadrant model is a map of reality that encompasses all possible perspectives in which a system exists in the world. Thus, it allows for the most integrated investigation of any holon.

	Interior	Exterior
	Subjective	Objective
Agency (Individual Systems)	Individual phenomenological experiences: E.g. individual thoughts, memories, emotions, perceptions, values etc.	Individual systems that you can observe: E.g. the physical body, behaviours, diet, one's health, etc.
	Intersubjective	Interobjective
Communion (Collective Systems)	Collective interior experiences: E.g. meaning-making, social norms, languages, relationships, cultural backgrounds, narratives, etc.	Interacting systems that you can observe: E.g. the biophysical environment, the social environment, technologies and infrastructure.

Fig. 1. Four quadrant model.

The self-system

Sato (2003a) refers to the self as the self-system. This is defined by “anything I feel a sense of unity with, whether it is a person, object, a place, an abstract concept, or a set of procedures” (p. 86). The self-system’s identification range can be from just one’s physical body and psychological states to one’s larger social group and biophysical world (Taylor, 1991). The Norwegian philosopher and deep ecologist Naess (2008) has defined the “self” in very similar terms. In turn, we have found it useful to regard the self-system as that which is emotionally and cognitively attached to and strongly identifies with in each of the four quadrants.

Sato (2003b) underscores this point by arguing that “the wider the variety of experiences we have, the more our self-system develops. . . although every response we make is guided by the self-system, every experience including the response and its consequence modifies the self-system as well” (p. 39). In essence, we create a conceptual system that allows us to relate to the world in a way we feel comfortable and are able to protect ourselves.

From this perspective the self-system is a process, or a verb, not an entity or noun (Davies, 2000). It is not separate or isolated, but instead “a fluid coherence of perspective from which we experience . . . and the sense of self emerges and changes primarily in relationship” (Mahoney, 2003, p. 7). The self-system is central to counseling and psychotherapy as it is the “dynamic and usually tacit process that holds together the sundry developmental lines, constructing something of a cohesive whole that recursively serves as each person’s psychological universe” (Marquis, 2008, p. 153).

Again, the first tendency of all systems, including the self-system, is for self-preservation—to maintain its relative autonomy and

agency in the face of changing environmental circumstances, stress, and perturbations. In terms of the client experience in AT, this could be described as stabilization or “client resistance.” Although discussions pertaining to client resistance to change is commonplace in therapeutic literature, there is little agreement on the details. Viewing resistance through an integral systems lens offers a promising perspective to understand resistance and breakthrough (or “transcendence”) in the context of AT.

When clients encounter a novel experience they often find themselves resisting the influence of the experience. The self-system is trying to make sense of a novel experience with its current mode of knowing. However, it will only be successful in integrating the experience by reorganizing itself in such a way as to be able to include it (Sato, 2003a). Thus, self-transformation first involves a form of surrender, which usually occurs after all previous resources for resistance have been exhausted in attempts to diminish the new experience. Indeed, transcendence involves disidentifying with that which has previously defined us.

AT in light of integral systems theory

When individual and group systems are highly unstable, both individual and group encouragement and focused intention can make a difference. Like a ball bearing perched on a mountain top, the smallest perturbation can send it into very different valleys. According to Corey & Corey (2006), group cohesion is not a static state, but instead a “process of solidarity that members earn through the risks they take with one another” (p. 152). Further, they explain that as a climate of trust is gradually created, members’ willingness to take risks will increase the likelihood that others will do the same. In AT the role of the small group is critical. These experiences serve as turning points in establishing increasingly greater degrees of trust and therefore can often springboard other group members level of readiness for challenge and change.

The chaos state

The psychology of chaos and its relevance for the practice of psychotherapy has been articulated most notably through the work of Mahoney & Moes (1998). Crisis, from the Greek word “krisis,” means a turning point or time of decision. Thus, a crisis is an opportunity for something new to emerge. Mahoney (2003) explains that when working with clients in the chaos state it is critical to communicate empathy and understanding for the importance of disequilibrium for potential breakthroughs vs. merely breakdowns. In light of integral theory, adventure therapists and group members are crucially interlocked systems as they serve as a gravitational force

attracting those whom are emerging from the chaos point toward transformation as opposed to dissolution. Thus, the chaos state also suggests that AT participants will likely undergo a period of state regression before reorganization occurs. Managing this process warrants further investigation and training as it is crucial that adventure therapists be cognizant of this stage, which may be very “healthy” and preclude a major breakthrough.

The following narrative is from one of the author’s journal following a participant’s experience of “crisis”:

The 15 year old appeared very tense. The others in his group had already balanced their way along the log that provided the only way of crossing the stream. But he was “different”—having been born with no feet and only one hand, he was the “crippled kid.” We all waited. Some shouted words of encouragement and others just held their hands in anxious expectation. For the past three days he had seemed to have gone out of his way to show his unhappiness with the entire trip. In turn, he had been chided for having brought along his I-Pod. Having had it removed only upped his feelings of being thoroughly pissed off. Now he was being asked to cross this. What would be the repercussions if he fell? On—on—slowly—stop, a slight stumble, now a lurch—he had done it! All at once the collective tension broke into cheers and hugs. Later around the campfire our new hero’s tale was told over and over. It began to take on an almost Homeric life of its own and began to being owned by everyone there. Indeed it was a pivotal event that allowed others to partake of a new identity and more courage collective “self.”

Witnessing the instability of the chaos state and the appearance of recovery, on the part of the teenage boy was a catalyst for others to let go in turn. But what about the process of reorganization? In terms of integral theory, nature is not just a backdrop to AT, but is a connected larger “holon” that embraces the individual and group system. In this way, the reorganization of both the smaller individual and group systems are facilitated by the support of the AT practitioner as well as the larger biophysical systems of nature in which these experiences are given context.

Nature as partner in AT

In wildness is the preservation of the world

—Henry David Thoreau (*Walking*, 1862/cited in Nash, 1979)

In recent years, there has been increasing evidence suggesting that the natural world can act as a powerful forum for healing—for all of us—and in particular, in the therapy of individuals with physical and psychological challenges. The rationale for this is underscored by integral systems theory, which views humans and their social and

biophysical environments as comprising inextricably connected and interdependent wholes. For example, just as a grizzly bear cannot be separated from its larger context—metaphorically it is 5% claws, teeth, fur, and bone and 95% forest, salmon rivers, ocean beach, and alpine meadow—so too, we are very much emergent properties comprising both biophysical and societal contexts. Upon commencing AT in wild nature, most clients are still in the metaphorically 95% habituated urban context. Placing them in a very different environmental and cultural context becomes a key element in their disequilibrium and eventual reorganization process.

All human systems are open, having the potential to adapt and reorganize with respect to the larger environment. There is now mounting evidence that supports the thesis that natural environments in themselves are contexts for healing and potential therapeutic transformation. The interest in this thesis is becoming more apparent in psychological treatment literature. For example, Berger & McLeod (2006) suggest that nature is more than just a setting but can be an active catalyst and cofacilitator during therapeutic transformation.

These findings are echoed in the Scandinavian literature of “fri-luftsliv” or “free air life,” which shows that human internal rhythms and cycles begin to mirror natural cycles after periods spent in wilderness (Gelter, 2000). In turn, studies by Taylor & her colleagues (2001) at the University of Illinois have confirmed that contact with nature supports attention functioning in children, and an array of other studies suggest that contact with nature has beneficial impacts on both adults as well as children with respect to a range of physical and psychological indices (e.g., Frumkin & Louv, 2009).

Currently, most depictions of AT do not consider our connection with nature or the role it plays in the therapeutic process. In addition to the facilitator-initiated “reflective debrief” session, the researches of Trace (2002) and Nicholls & Gray (2007) suggest that allowing participants quiet time to engage in “mindfulness” of their own thoughts and sensations and just experiencing nature without focus may be a vital and underutilized component of processing and integrating change following disequilibrium. There is little doubt that incorporating nature into the client–therapist–environment mix has numerous benefits, although current empirical efforts to understand these relationships seem to result in more questions than answers (Harper, 2009). Consequently, more studies need to take place as to how nature can be most effectively utilized in the AT context.

The AT process

In light of our discussion regarding the implications for AT of both integral systems theory and the human–nature connection, we propose a model to map out process in Figure 2.

Accumulation phase. The self-system is already encountering limits in its ability to maintain balance given its individual and collective social realities.

Novel experience. The introduction of manageable novelties is the basis for all therapeutic change. These might be novel social and environmental contexts.

Disequilibrium (the decision window or edge). The demands of the situation faced are too much for the current self-system. At this point the self-system’s capacity to maintain its configuration in light of the novelties require it to enter into a period of collapse–regression, also known as “springboard downward.” Facilitators of the AT experience aim to compel the participant into a state of imbalance. The need for support is critical here as the fragile self-system can bifurcate—sometimes referred to as the “springboard effect.”

The between—Falling into a hole (springboard down). The self-system, being forced to collapse, is now at a critical juncture. Its reorganization is dependent upon its level of individual resilience as well as the support of the peers, facilitators, and the ability of the participant to access the transformative potential of nature.

New level of complexity phase (reorganization/transcendence—springboard up). The reconfigured self-system has potentially experienced new ways for dealing with the stresses that helped to lead to its collapse. It has become more complex with a greater degree of differentiation. There is an opportunity for a new level of dynamic homeostasis and the reorganization of existing ideas and information. Conversely, self-stabilization forces may be too strong to allow for a change.

Afterward, the world and self-system may be experienced in a slightly different way. For many clients this will be a transitory “state” experience that is contingent upon this particular context. Upon arriving home, the negative feedback from habituated patterns of living and previous social relationships commonly force the client into entrenched patterns. For the reorganization state to be stabilized, it may take a four-quadrant approach over an extended period of time. Lack of this integrated approach has been recognized as an issue in WAT practice (Harper & Russell, 2008). Broader interventions including the family, community, and other systems of influence are required.

Conclusion

Currently, a fragmentation in ideas exists regarding understanding psychological wellness and preferred routes to healing. This is

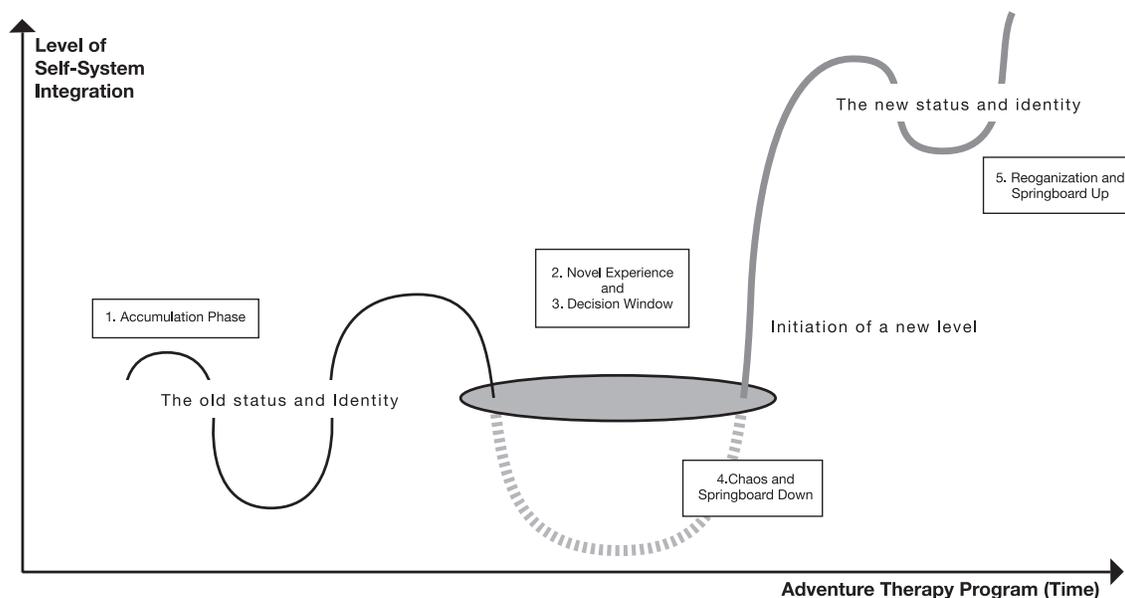


Fig. 2. Adventure therapy process.

evident in current AT literature, where unique combinations of experiential learning, challenge activities, novel experiences, group work, and other psychological theories are often used to account for positive outcomes and to explain mechanisms for change. Rarely, contact with wild nature is included as an important variable associated with positive outcomes and change. Recent research in integral systems theory demonstrates the profound impact of the larger social and biophysical contexts, suggesting AT practitioners consider the following questions:

- (1) How can adventure therapists effectively midwife clients through the chaos state?
- (2) What role does nature play in self-stabilization?
- (3) To what extent is the wilderness experience itself a powerful force for reorganization or transcendence?
- (4) To what extent have the “quadrants” of the integral approach been investigated with respect to each AT participant?

Further, the facilitator cannot consider themselves isolated from this process. Gass (1993) and Norris (2009) have pointed out the importance of the change agents in AT, as they need to possess specific skill sets in the areas of therapeutic change as well as adventure pursuits. Having an appreciation and understanding of the importance of chaos in a person’s change process is invaluable. Recognizing

the self as an open system requires an understanding that therapists themselves will undergo change as a result of changes in people and contexts around them. In agreement with Mahoney (2003), adventure therapists facilitate change by being open to change themselves. In light of the aforementioned implications, how do we reassess the role of the AT practitioner both as a subject and agent of change?

When we recognize that all systems are open, we are compelled to recognize the importance of nature. How willing are conventional therapists, and even office-based ecopsychologists, to venture beyond the walls of their office and encounter the potential for chaos? As we know, wildness is the realm of the unpredictable and loss of control. It is also the primordial and creative force of the universe that allows for both destruction and rebirth.

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