

Risk and the Human-Nature Connection

The Influence of Risk on Participants Connection to Nature within Outdoor Education

Wilderness Risk Management Conference 2023
Presenters: Dave Erbe & Kayla Scheid
Western Colorado University

Randall Gee



30TH ANNUAL
CONFERENCE
Facing Challenges Together



Portland, Oregon | October 18-20, 2023



Introductions



Dave Erbe (He/him/his)

- Lecturer of Recreation and Outdoor Education at Western Colorado University
- Outward Bound & NOLS Instructor
- Ph.D. Student at Auckland University of Technology



Kayla Scheid (She/her/hers)

- Undergraduate Student at Western Colorado University
- Instructor at the Dunn School, Outdoor Adventures by Boojum & the Rocky Mountain School of Expeditionary Learning

Presentation Overview

1. Introductions
2. Learning Objectives
3. Outdoor Education Intentions
4. Overview of Risk Pedagogy
5. Unpacking the Human-Nature Connection
6. Activity: Identifying Barriers and Pathways
7. Action Steps
8. Conclusion & Continuing Education
9. Questions & Discussion

Learning Objectives

Presentation attendees will be able to...

1. Articulate the ways risk can both inhibit and strengthen outdoor education participants' connection to nature.
2. Increase awareness surrounding the factors that influence a participant's connection to nature.
3. Apply human-nature leverage points concepts from both a field-based and administrative perspective.



Story Time

Turn to a partner

One person share a story about a time you experienced high risk in the outdoors and what came of it (how it made you feel, what happened afterwards etc.)

One person share about a time you felt strong connection to nature in the outdoors and what fostered it



Presentation Framing

- What are common outdoor education program outcomes?
- Why do participants opt into an outdoor education experience?

Presentation Assumptions:

- ❖ Connection to nature is a common program outcome.
- ❖ Risk and uncertainty is inherent in many outdoor education programs.

Presentation Question: Are the concepts of risk and human-nature connection mutually exclusive or mutually beneficial to the participant experience?



Risk Pedagogy in Outdoor Education

Actual Risk:

Emotional: Threat to emotional safety

- Social
- Psychological

Physical: Threat to bodily safety

- Financial risk

Perceived Risk:

Emotional: Thought threat to emotional safety

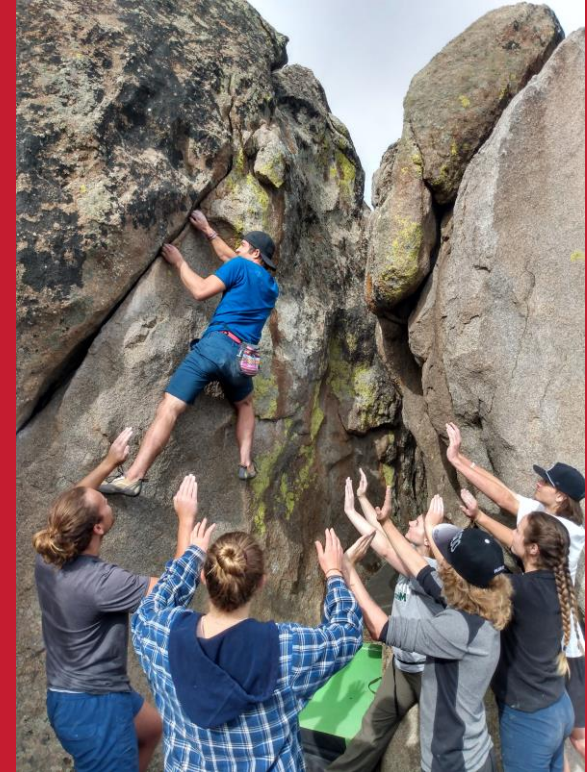
- Social
- Psychological

Physical: Thought threat to bodily safety

- Financial Risk

Risk is inherent in EVERYTHING....

.... How do we manage the risk in our own lives? How is it different from the risk we face outside?



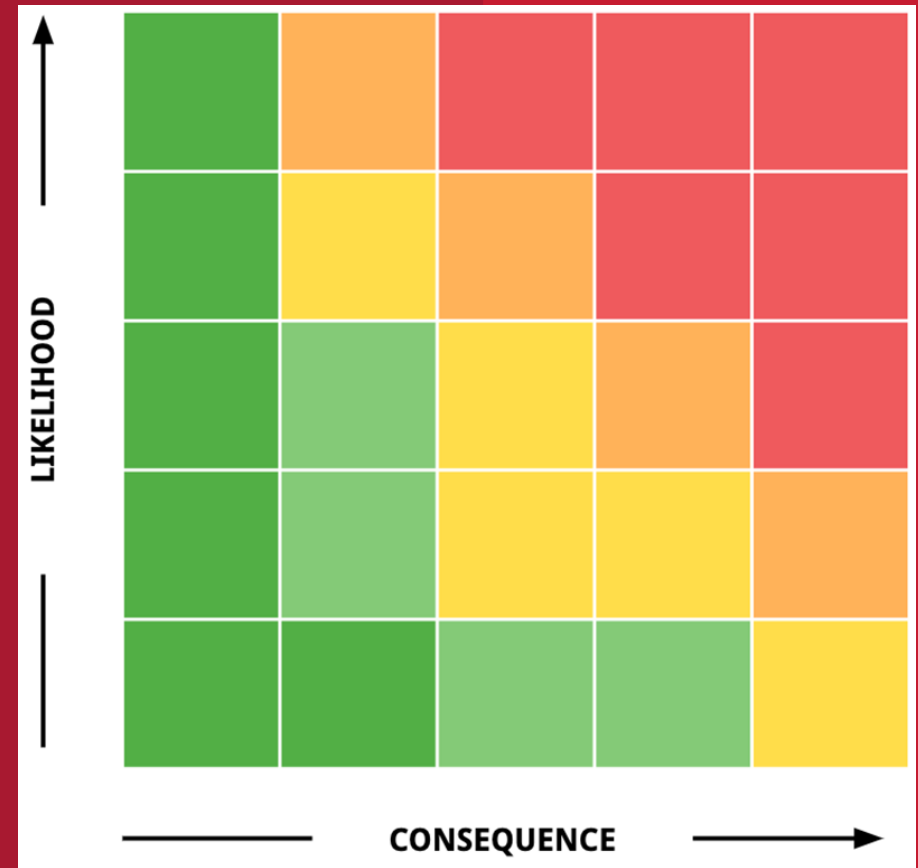
Coping with Risk

Mitigation:

- Risk Avoidance
- Risk Management
- Risk Policy/Prevention

Justification:

- Educational Tool
- Benefits Outweigh the Costs: “It’s Worth It”
- Acceptance: “What Happens, Happens”



Let's Talk About Assumptions

Assuming that risk leads to growth implies a few things...

1. Learners need to learn how to deal with risk and that this will be of benefit
2. That the benefits outweigh the risks and that all participants have the ability to recover from negative situations
3. Perceived risks have no consequences (e.g. stress injuries, PTSD, and other psychological trauma)
4. Risk tolerance in a group is decided by all members as opposed to individualized
5. Facilitators are competent and capable of assessing each individuals level of perceived risk to ensure that optimal learning will occur



(Martin & Wagstaff, 2012; Wolfe & Samdahl, 2005)

Unpacking the Human-Nature Connection

Terms:

- The Biophilia Hypothesis
- Deep ecology
- Pro-environmental attitudes
- Place dependence
- Environmentally responsible behavior (ERB)
- Pro-environmental behavior (PEB)
- Place attachment
- Place identity
- Nature connectedness
- Environmental identity

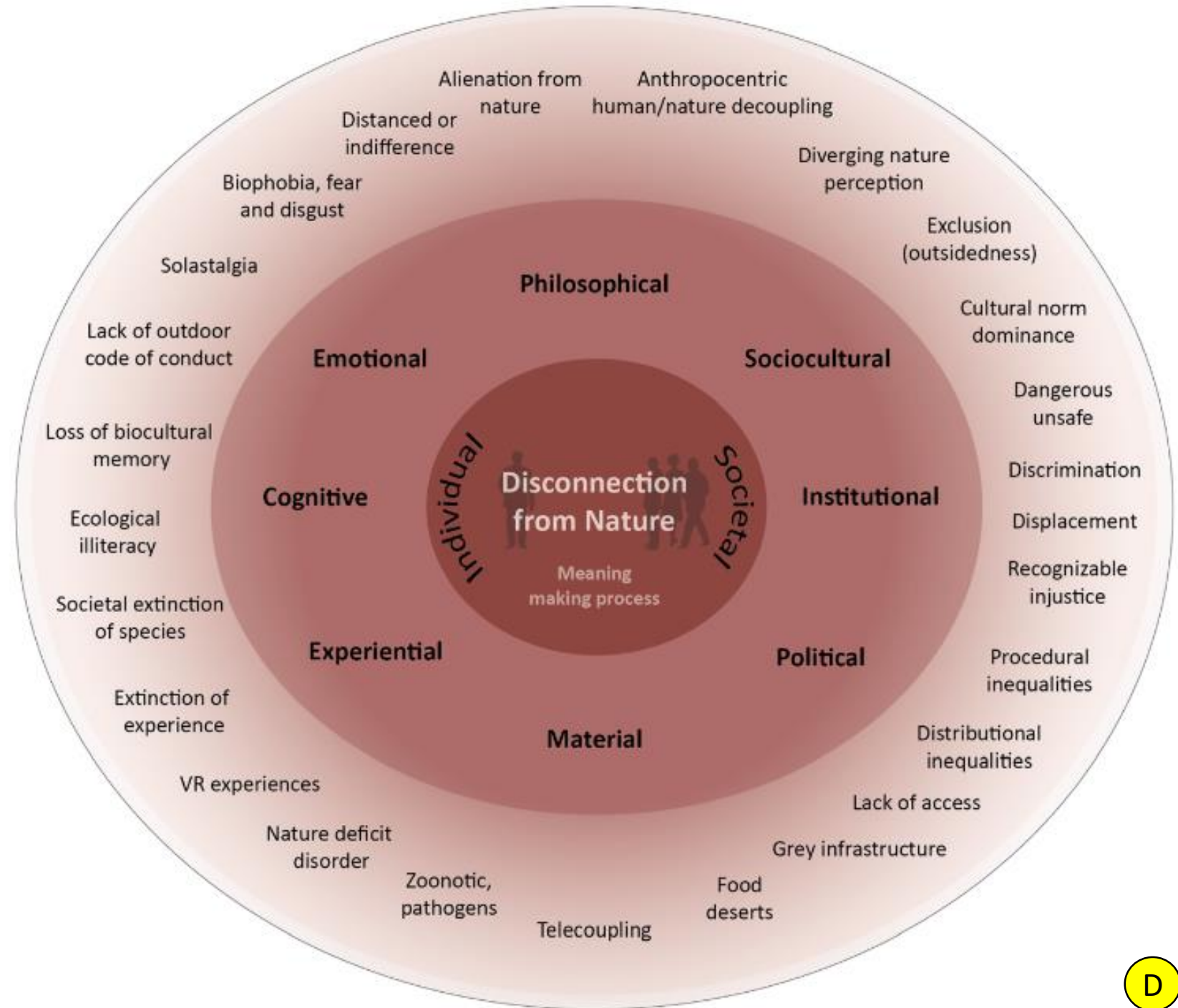
Concepts:

- ❖ HNC as Mind, HNC as Experience & HNC as Place
- ❖ Anthropocentric vs Biocentric/Altruistic Connection

(Ives et al., 2017; Diehm, 2020; Ives et al., 2019)



Forms of Disconnection From Nature



(Beery et al., 2023)

Risk and HNC Continuum Activity

Is risk a barrier for Human-Nature Connection (HNC) or does risk enhance our connection to nature?

Group A:

Risk is a Barrier to HNC

If risk is a barrier, identify the specific barriers that exist in different environments and student populations.

Group C:

Risk Enhances HNC

If risk enhances our connection, identify the mechanism of connection and how this connection is strengthened through risk.

Group B: Somewhere in Between

If risk is both a barrier and enhancer, identify how it plays a role as both, and what the determining factors are of this relationship.

Evidence Supporting Both Sides

There is evidence to support both sides of the discussion...

❖ **Heightened risk & stress can lead to participant disconnection from nature:**

- Exploring the Human-Nature Connection and the Perceived Risk of Nature in Children (Prasad et al., 2021)
- Disconnection From Nature: Expanding Our Understanding of Human-Nature Relations (Beery et al., 2023)

❖ **Heightened risk & stress can enhance participants connection to nature:**

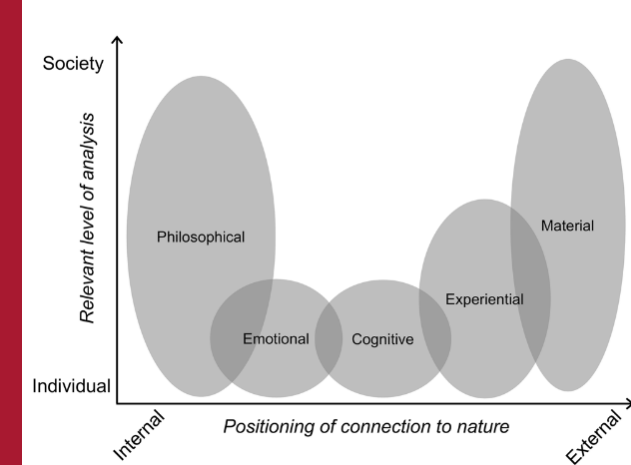
- Flow Theory (Csiksszentmihalyi, 1975/2000)
- Extreme Sports as a Precursor to Environmental Sustainability (Brymer et al., 2009)



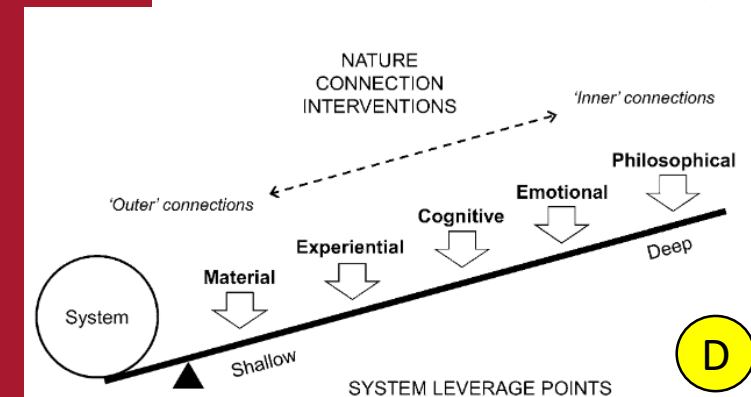
Human-Nature Connection Mechanisms

Five Mechanisms of HNC:

1. **Material/Consumptive:** Consumption of goods and materials from nature; resource extraction and use.
2. **Experiential:** Direct interaction with natural environments; recreational activities within the environment.
3. **Cognitive/Identity:** Knowledge, beliefs, attitudes and awareness of the environment and attitudes/values towards nature; a sense of self that is defined in relation to the natural environment.
4. **Emotional/Attachment:** Feelings of attachment to or empathy towards nature; positive or negative feelings and affective responses towards nature.
5. **Spiritual/Philosophical:** Perspective or world view on what nature is, why it matters, and how humans ought to interact with it; being at one with nature through the belief that all things in nature, including humans, are connected.



(Ives et al., 2018; Meis-Harris et al., 2021)



Human-Nature Connection Pathways Activity

In small groups, your task is to discuss and document the answers to the following questions:

Q1: Identify specific examples of how program administrators and field-based instructors can foster participants connection to nature within your affiliated organization.

Q2: For each example, determine one or more of the Five Mechanisms of Human-Nature Connection it most directly correlates with.

Q3: What are the risk-based factors that could promote and/or inhibit each example identified in Q1?

Q4: Describe how you might address these risk-based factors?

Five Mechanisms of Human-Nature Connection:

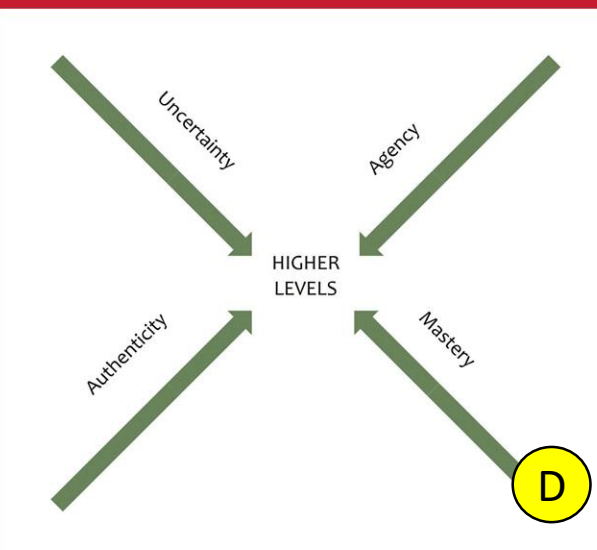
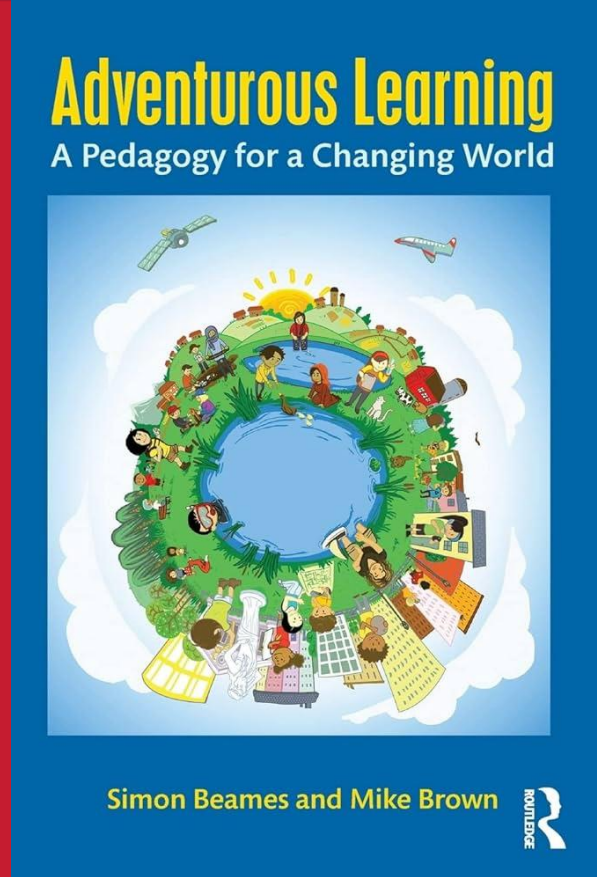
- (1) Material/Consumptive
- (2) Experiential
- (3) Cognitive/Identity
- (4) Emotional/Attachment
- (5) Spiritual/Philosophical

(Ives et al., 2019)

The Four Dimensions of Adventurous Learning

1. **Authenticity**: Learning must have context that is relevant to students.
2. **Agency**: Giving learners responsibility for choices and decisions.
3. **Uncertainty**: Embracing the unknown element of adventure as a process.
4. **Mastery through Challenge**: Emphasizing skill progression that builds on previous knowledge.

(Beames & Brown, 2016)

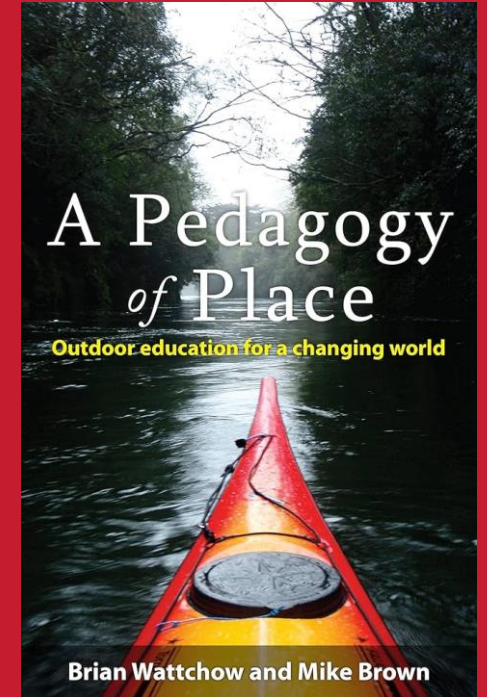


Fostering Connection to Nature

The four signposts of Place Responsive Pedagogy:

1. Being present in and with a place
2. The power of place-based stories and narratives
3. Apprenticing ourselves to outdoor places
4. The representation of place experiences

(Wattchow & Brown, 2011).



3 Action Steps

1. Re-evaluate how your program seeks to use risk as agent for growth, change, and development.
 - Where is risk benefiting your program and where is it detracting?
2. Identify and mitigate barriers inhibiting participants connection to nature within your program.
3. Establish impactful pathways to foster the human-nature connections for all participants in your program (field-based instructors, students, and administrators).
 - Are the policies and curriculum you have in place to make this connection? What can you add?



Additions, Questions & Comments

A huge thanks to the following programs for providing funding:

- The Colorado Outward Bound School
- Western Colorado University Professional Activity Fund
- Western Colorado University Recreation, Exercise, and Sport Science Department
- The Western Fund for Scholarly Opportunities, Undergraduate Research, and Creative Expression at Western Colorado University.”

Thank you to our exhibitors & sponsors:



**OUTWARD
BOUND**



Fred C. Church
INSURANCE
fredchurch.com

Pachner & ASSOCIATES
INSURANCE BROKERS & CONSULTANTS

Dave Erbe (derbe@western.edu)

Kayla Scheid (kayla.scheid@western.edu)



References

- Beames, S., & Brown, M. (2016). *Adventurous learning: A pedagogy for a changing world*. Routledge
- Beery, T., Stahl Olafsson, A., Gentin, S., Maurer, M., Stålhammar, S., Albert, C., Bieling, C., Buijs, A., Fagerholm, N., Garcia-Martin, M., Plieninger, T., & M. Raymond, C. (2023). Disconnection from nature: Expanding our understanding of human–nature relations. *People and Nature*, 5(2), 470–488. <https://doi.org/10.1002/pan3.10451>
- Brymer, E., Downey, G., & Gray, T. (2009). Extreme Sports as a Precursor to Environmental Sustainability. *Journal of Sport & Tourism*, 14(2–3), 193–204. <https://doi.org/10.1080/14775080902965223>
- Csikszentmihalyi, M. (2000). The contribution of flow to positive psychology. In J. E. Gillham (Ed.), *The science of optimism and hope: Research essays in honor of Martin E. P. Seligman* (pp. 387–395). Templeton Foundation Press.
- Diehm, C. (2020). *Connection to nature, deep ecology, and conservation social science: Human-nature bonding and protecting the natural world*. Lexington Books
- Ives, C. D., Abson, D. J., von Wehrden, H., Dorninger, C., Klaniecki, K., & Fischer, J. (2018). Reconnecting with nature for sustainability. *Sustainability Science*, 13(5), 1389–1397. <https://doi.org/10.1007/s11625-018-0542-9>



References continued...

- Ives, C. D., Giusti, M., Fischer, J., Abson, D. J., Klaniecki, K., Dorninger, C., Laudan, J., Barthel, S., Abernethy, P., Martín-López, B., Raymond, C. M., Kendal, D., & von Wehrden, H. (2017). Human–nature connection: A multidisciplinary review. *Current Opinion in Environmental Sustainability*, 26–27, 106–113. <https://doi.org/10.1016/j.cosust.2017.05.005>
- Martin, B. & Wagstaff, M. (2012). *Controversial Issues in Adventure Programming*. Human Kinetics
- Meis-Harris, J., Borg, K., & Jorgensen, B. S. (2021). The construct validity of the multidimensional AIMES connection to nature scale: Measuring human relationships with nature. *Journal of Environmental Management*, 280, 111695. <https://doi.org/10.1016/j.jenvman.2020.111695>
- Prasad, A., Lal, P., Wolde, B., Smith, M., Zhu, M., Samanthula, B. K., & Panorkou, N. (2022). Exploring the human-nature connection and the perceived risk of nature in children. *Applied Environmental Education and Communication*, 21(1), 87-101. <https://doi.org/10.1080/1533015X.2021.1991508>
- Wattchow, B., & Brown, M. (2011). *A pedagogy of place: Outdoor education for a changing world*. Monash University Publishing.
- Wolfe, B. D., & Samdahl, D. M. (2005). Challenging Assumptions: Examining Fundamental Beliefs That Shape Challenge Course Programming and Research. *Journal of Experiential Education*, 28(1), 25-43. <https://doi.org/10.1177/105382590502800105>

