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## Ecotherapy as a Tool for Mental Wellness

Jenna L. Matsumura

*Students are arriving on college campuses with more mental wellness concerns and higher rates of diagnoses than previous years. As universities explore ways to increase the programmatic efforts to address these issues, the role nature plays in regards to the human psyche is often not considered. Although universities offer outdoor education programs, the positive impact of the biosphere is relatively underutilized. In this article the author will (a) present a brief overview of the growing presence of mental illnesses on college campuses, (b) provide an introduction and critique of ecotherapy, and (c) propose the placement of house plants within university residence halls as a more socially just form of ecotherapy to promote the psychological well-being of college students.*

The topic of college students' mental wellness is of growing concern and is receiving significant attention on college campuses and among student affairs professionals. Ecotherapy is one psychotherapeutic approach that seeks to meld culture, humans, and the environment in order to help individuals answer the foundational question, "What is my place in the world?" (Robinson, 2009, p. 28). Due to the financial, racial, and ability-oriented privileges inherent within ecotherapy-based interventions, many students are unable to participate (Stanfield, 2005). By utilizing a critical view of ecotherapy and increasing the presence of plants in residence halls, universities and student affairs professionals have the potential to enhance the psychological well-being of college students beyond the counseling center.

### Mental Wellness on College Campuses

The rate of students entering college with previously diagnosed mental wellness concerns and those seeking psychotherapeutic treatment in college are higher than ever before and are continually rising (Reynolds, 2009; Schuh, Jones, & Harper, 2011; Zhang, Brandel, & McCoy, 2011). Universities and student affairs professionals are facing an increased amount of pressure to address and provide greater mental wellness-based services such as counseling and psychiatry (Reynolds, 2009; Zhang et al., 2011).

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College campuses and student affairs divisions have responded to the need for increased mental wellness programming by increasing the range of services available at counseling and wellness centers. Many institutions now offer group therapy in addition to individual therapy, and have created spaces where concerns of mental wellness can be discussed safely and openly, while also increasing the visibility and accessibility of said services (Reynolds, 2009; Zhang et al., 2011). Multiple facets of student life have the potential to be impacted by mental wellness concerns (Reynolds, 2009; Schuh et al., 2011; Zhang et al., 2011), and countermeasures should be as readily present. Most counseling and psychotherapeutic sessions occur in a highly controlled environment (Davis & Atkins, 2004) such as a counseling center or student health center. This leaves a vast area of campus, including residence halls, void of psychotherapeutic benefits. One way to maximize the efforts of fostering and maintaining healthy psyches of college students is through the incorporation of the environment into their daily lives. For this paper, psychological benefits, well-being, and healthy psyche will all be used when discussing ecotherapy induced:

changes in cognition, emotion, and physiology that are positively valued and/or enhance effectiveness and adaptive capacity. [Ecotherapy] also encompasses valued outcomes in which psychological processes may play a mediating role, such as increased social interaction and reduction of experienced pain and symptoms of poor health. (Bringslimark, Hartig, & Patil, 2008, p. 423)

### **Ecotherapy**

Ecotherapy is a branch of psychology that seeks to capitalize on the positive influences that nature can have on the human psyche (Buzzell & Chalquist, 2009; Louv, 2005; Perlman, 1994; Robinson, 2009). Ecotherapy is the behavioral counseling branch of ecopsychology that seeks to reconnect the human consciousness to the natural world (Buzzell & Chalquist, 2009). Many psychologists and environmentalists argue that this self-imposed separation has only harmed human beings (Buzzell & Chalquist, 2009; Hsian, Burke, & Miguel, 2013; Kashima, 2015).

In *Culture and Psychology in the 21<sup>st</sup> Century: Conceptions of Culture and Person for Psychology Revisited*, Dr. Yoshihisa Kashima detailed a harmful assumption made by the major frameworks of psychology: the “presumption of human-nature separation” (Kashima, 2015, p. 1). They described the many different ways in which human culture impacts the environment, and how the changes in the environment correlate with periods of social well-being or unrest (Kashima, 2015). In addition to Dr. Kashima’s assessment that the environment and climate change must be accounted for in psychology, numerous studies have shown that experiences with nature

are beneficial for the human psyche (Health Council of the Netherlands, 2004).

### **Critiques of Ecotherapy: Racism and Classism**

In addition to the history and stereotype of psychotherapy as something predominately practiced by White people, outdoor adventuring and the separation of humans and nature are the pursuits of America's Eurocentric elite (Cronon, 1983; Outka, 2008). In order for universities and residence halls to successfully introduce ecotherapy to their campuses, staff members, particularly student affairs and mental wellness professionals, must be knowledgeable about the racist and classist history of ecotherapy and the outdoors.

#### **Race**

Racial minorities are becoming the marginalized majority in the general population, but when it comes to accessing nature reserves such as national parks, the numbers do not follow the same trend. Although 32% of White individuals say that they have visited a national park within the last year, only 13% of Black individuals have entered a national park (Solop, Hagen, & Ostergren, 2003). This racial imbalance is present throughout topics relating to the environment. In conversations of environmentalism, conservation, environmental justice, and ecotherapy, communities and voices of Color are often silenced (Finney, 2014).

Additionally, people of Color are less likely to seek psychotherapeutic services. In 2010, Hispanic Americans and African Americans were found to be half as likely to seek treatment for mental health concerns as Caucasians, and Asian Americans were one-third as likely (Agency for Healthcare Research and Quality, 2010). When working to increase the presence of ecotherapy on college campuses, student affairs and mental health professionals should keep in mind which populations are most likely to benefit from ecotherapy, and which populations are not receiving care elsewhere in their lives.

#### **Access: Time and Money**

Time and money are the top reasons preventing the practice of ecotherapy (Walsko & Hoyt, 2012). These barriers to ecotherapy exist for clients wishing to seek psychotherapeutic treatment on a broader spectrum. Insurance companies restrict the types and frequency of visits that a client can be covered under their insurance. Ecotherapy often falls beyond insurance benefits, making it all but impossible for the majority of health care recipients to afford.

Even though the psychology field at large is working to improve the access and attention given to low socio-economic status communities (e.g., operationalizing

language, challenging assumptions and biases within the profession, etc.), many systematic boundaries endure (Smith, 2005). Additionally, adopting a multicultural perspective has helped psychologists address issues relating to poverty (Smith, 2005). When clients feel there is a socio-economic class difference between themselves and the professional, positive outcomes are unlikely to be met (Thompson, Cole, & Nitzarim, 2012).

If universities and residence halls can gain funding opportunities through grants, donations, and fees, then the financial cost of ecotherapy will be dispersed among the population instead of resting on one individual. By providing access to plants and nature without additional charges to students, universities can help meet the needs of their student population and foster a healthier campus climate. Additionally, if ecotherapy is ingrained in university infrastructure and design, students will not be required to spend additional time traveling to nature, unless they want to. For those students who face increased stress and anxiety when considering spending time away from studies, work, or family in nature, exposure to nature in their routines is likely to ease anxiety instead of increase it.

Due to the concerns presented by traditional ecotherapy techniques (e.g. outdoor education, wilderness retreats, outdoor activities, etc.), universities seeking to increase the presence of ecotherapy on their campus should investigate sustaining houseplants within their residence halls, academic buildings, and student life centers. The presence of houseplants has similar effects on the psyche as traditional ecotherapy techniques without barriers such as cost and ability. The racist implications of ecotherapy are lessened by installing houseplants because their effects are experienced as part of the general environment instead of creating additional barriers.

### **Houseplants as an Alternative Form of Ecotherapy**

Limited research has been conducted on the possible therapeutic benefit of houseplants due to the deeply rooted notion that nature and the outdoors are synonymous. Current research on this topic has struggled with issues of external validity due to the heterogeneity present among participants and plants in true experiment-based research samples (Bringslimark, Hartig, & Patil, 2008.) The lack of external validity is present when following a meta-analysis of available selected research, which could not conclusively say whether or not plants have a positive effect on study participants. At worst, the research has pointed out that houseplants have a neutral effect on the well-being of participants (Bringslimark, Hartig, & Patil, 2008).

The limited research regarding the positive psychological effects of houseplants points to college students being the most susceptible to the influence of houseplants

(Bringslimark, Hartig, & Patil, 2008; Peterson, 2001; Stamps, 1999). In a study conducted by Texas A&M University, student productivity increased by 15% when in the presence of flowers and plants (PR Newswire, 2003). Gender also played a role in the psychological benefits of houseplants; women-identified participants are more likely to experience a positive reaction to houseplants (Kim & Mattson, 2002). Studies also found that flowering plants have a greater effect on pain tolerance and the length of influence than non-flowering plants (Park, Mattson, & Kim, 2004).

Much of this research is based on Ulrich's theory regarding psychophysiological stress-reduction (Bringslimark, Hartig, & Patil, 2008). This foundation presented a challenge for experiment-based research because it required participants who were experiencing stress to be remedied. Due to the nature of stress, researchers are faced with a quality control issue as participants experience and rebound from stress at different levels. This uncontrollable variable often invalidates experimental findings (Bringslimark, Hartig, & Patil, 2008). However, finding college students who experienced high levels of distress is a relatively feasible task; college students are the most stressed and anxious population in the United States (National College Health Assessment, 2015). The current research demonstrates that although houseplants remedy problems that are previously in existence, they do not inhibit stress, anxiety, and mental illness from manifesting (Hartig & Staats, 2006).

The same heterogeneity found amongst the research methods were also found among participants (Bringslimark, Hartig, & Patil, 2008). A serious deficit in this research is the lack of attention given to how the role of culture, society, and identities play in affecting an individual's relationship with houseplants and ultimately, the beneficial influence plants may have. In order to better validate the claim that houseplants have beneficial effects on individuals' mental health, productivity, and general health, researchers have to devote more efforts to increasing the specificity of study parameters. Additionally, more studies and cost-benefit-analyses need to be explored regarding the actual cost of acquiring and maintaining houseplants, and whether or not the investment of houseplants reduces the number of visits to counseling centers and money spent on other mental wellness strategies.

### Conclusion

Fatigued and anxious college students have shown restoration across many psychological and physiological dimensions tested after they walked in the woods.

—Craig Chalquist, *A Look at the Ecotherapy Research Evidence*, 2009

As counseling centers are attending to more and more students each year, higher education institutions must look for ways to continuously increase the mental wellness of their students. One possible way to lessen the stress, anxiety, and depression students face may be to increase the presence of flowering houseplants in high traffic areas such as residence halls and lecture halls. With the growing demands and expectations being placed on college students, it is unlikely that the mental health crisis universities are facing will cease without continued intervention. If, as Dr. Craig Chalquist stated, students experience a better state of mind, body, and spirit after spending time with the outdoors, perhaps it is time to bring the outdoors inside.

## References

- Agency for Healthcare Research and Quality. (2010). *2010 National Healthcare Disparities Report*. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from <http://www.ahrq.gov/research/findings/nhqrdr/nhdr10/index.html>.
- Baker, N.L.. 1996. Class as a construct in a “classless” society. In M. Hill & E. D. Rothblum (Eds.). *Classism and feminist therapy: Counting costs* (pp.99-106). New York: Harrington Park.
- Bringslimark, T., Hartig, T., & Patil, G.G. (2008). The psychological benefit of indoor plants: A critical review of the experimental literature. *Journal of Environmental Psychology*, 29(4), 422-433. doi:10.1016/j.jenvp.2009.05.001.
- Buzzell, L. & Chalquist, C. (2009). *Ecotherapy*. San Francisco, CA: Sierra Club Books.
- Chalquist, C. (2009). A look at the ecotherapy research evidence. *Ecotherapy* 1(2). doi:10.1089/eco.2009.0003
- Clinebell, H. (1996). *Ecotherapy: Healing ourselves, healing the earth*. Minneapolis, MN: Fortress Press.
- Davis, K. M., & Atkins, S. S. (2004). Creating and teaching a course in ecotherapy: We went to the woods. *Journal of Humanistic Counseling, Education and Development*, 43(2), 211. Retrieved from [http://go.galegroup.com.ezproxy.uvm.edu/ps/i.do?id=GALE%7CA125956051&v=2.1&u=vol\\_b92b&it=r&p=ITOF&sid=923051e1d4bdb01b10b094bd7455c288](http://go.galegroup.com.ezproxy.uvm.edu/ps/i.do?id=GALE%7CA125956051&v=2.1&u=vol_b92b&it=r&p=ITOF&sid=923051e1d4bdb01b10b094bd7455c288)
- Deluca, K., and Demo, A.(2001). Imagining naturing and erasing class and race: Carleton Watkins, John Muir, and the construction of the wilderness. *Environmental history* 6(4): 541-560.
- Finney, C. (2014). *Black Faces: White Spaces*. Chapel Hill, NC: The University of North Carolina Press.
- Grinde, B., & Patil, G.G. (2009). Biophilia: Does visual contact with nature impact health and well-being? *Environmental Research and Public Health* 6(9), 2332-2343. doi:10.3390/ijerph6092332
- Hartig, T. (2004). Restorative environments. *Encyclopedia of Applied Psychology*, 3, 273–279. Hartig, T., & Staats, H. 2006. The need for psychological restoration as a determinant of environmental preference. *Journal of Environmental Psychology*, 26(3), 215-226. Doi: 10.1016/j.jenvp.2006.07.007
- Hillman, J., & Ventura, M. (1992). *We've had a hundred years of psychotherapy and the world's getting worse*. San Francisco: Harper San Francisco.
- Kashima, Y. (2000). Conceptions of culture and person for psychology. *Journal of Cross-Cultural Psychology*, 31(1) 14-32. doi: 10.1177/00220022100031001003
- Kashima, Y. (2015). Culture and psychology in the 21<sup>st</sup> century: Conceptions of culture and person for psychology revisited. *Journal of Cross-Cultural Psychology*. Advance online publication. doi:10.1177/0022022112466700
- Louv, R. (2005). *Last child in the woods*. Chapel Hill, NC: Algonquin Books of Chapel Hill.



- Malik, S. (2014). Plants in offices increase happiness and productivity. *The Guardian*. Retrieved from <http://www.theguardian.com/money/2014/aug/31/plants-offices-workers-productive-minimalist-employees>
- Outka, P. (2008). *Race and nature from transcendentalism to the Harlem renaissance*. New York: Palgrave Macmillan.
- Park, S.H., Mattson, R.H., Kim, E. (2004). Pain tolerance effects of ornamental plants in a simulated hospital patient room. *Acta Horticulturae*, 639(nd). 241-247. doi:10.17660/ActaHortic.2004.639.31
- Perlman, M. (1994). *The power of trees*. Dallas, TX: Spring Publications.
- PR Newswire. (2003). *University research indicates flowers and plants promote innovation ideas; Key findings shed light on environmental psychology of the work place*. Retrieved from <http://www.prnewswire.com/news-releases/university-research-indicates-flowers-and-plants-promote-innovation-ideas-72917182.html>
- Reynolds, A.L. (2009). *Helping college students*. San Francisco, CA: Jossey-Bass.
- Robinson, L. (2009). Psychotherapy as if the world mattered. In L. Buzzell, & C. Chalquist (Eds.), (2009). *Ecotherapy*. San Francisco, CA: Sierra Club Books.
- Schuh, J.H., Jones, S.R., and Harper, S.R. (2011). *Student services: A handbook for the profession*. San Francisco, CA: Jossey-Bass.
- Smith, L. 2005. Psychotherapy, Classism, and the Poor. *American Psychologist*, 60(7). 687-696. doi:10.1037/0003-066x.60.7.687
- Solop, F.I., Hagen, K.K., Ostergren, D. (2003). *Ethnic and racial diversity of national park system visitors and non-visitors* (National Park Service Social Science Program Technical Report). Retrieved from Northern Arizona University, Social Research Laboratory: <https://www.nature.nps.gov/socialscience/docs/archive/EthnicAndRacialDiversity.pdf>
- Stamps, A.E. (1999). Demographic effects in environmental aesthetics: a meta-analysis. *Journal of Planning Literature*, 14(2). 155-175. Doi 10.1177/08854129922092630
- Stanfield, R., Manning, R., Budruk, M., Floyd, M. (2005). *Racial discrimination in parks and outdoor recreation*. Northeast Recreational Research Symposium. Retrieved from [http://www.fs.fed.us/ne/newtown\\_square/publications/technical\\_reports/pdfs/2006/341%20papers/stanfield341.pdf](http://www.fs.fed.us/ne/newtown_square/publications/technical_reports/pdfs/2006/341%20papers/stanfield341.pdf)
- Thompson, M.N., Cole, O.D., & Nizarim, R.S. 2012. Recognizing social class in the psychotherapy relationship: a grounded theory exploration of low-income clients. *Journal of Counseling Psychology*, 59(2). 208-221. Doi: 10/1037/a0027534.
- United States Department of Labor. 2006. American Time Use Survey (ATUS) Retrieved from <http://www.bls.gov.ezproxy.uvm.edu/tus/>.
- Wolsko, C. & Hoyt, K. (2012). Employing the restorative capacity of nature: pathways to practicing ecotherapy among mental health professionals. *Ecopsychology*, 4(10), 10-24. Doi:10.1089/eco.2012.0002.
- Zhang, N., Brandel, I.W., McCoy, V.A. (2011). Counseling Centers. In N. Zhang, (Ed.), *Rentz's student affairs practice in higher education* (pp.11-187). Springfield, IL: Charles C. Thomas.