

Critical Analysis Paper

Human Deficit Disorder

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Abstract

The purpose of this paper is to identify and explain problems and solutions that have been proposed connected to the concept of nature-connectedness and its relation to social and academic problems that youth exhibit. Along with evaluation of this concept, the author intends to offer a critique of some of the current assumptions related to the topic and offer alternative areas of research that could lead to added solutions or be used as a building block to strengthen the existing models and concepts. Additionally, the author will attempt to introduce the concept of belonging (Baumeister & Leary, 1995) and link this concept to the behavioral issues that many have attributed to the lack of nature-connectedness.

Understanding Relevant Readings and/or Research

Children today face many issues that seemed not so prevalent in the past. Researchers today readily identify many problems facing our youth and are eager to find explanations and solutions to these issues. Obesity, declining emotional health, and increase in stress are some of the issues that youth strive to overcome in today's world. Drawing from research related to Attention Deficit Hyperactivity Disorder (ADHD), Richard Louv theorizes that these and other problems may stem from a lack of nature-connectedness that is unique to the current generation. He calls this theory nature-deficit disorder. Louv explains that, "some researchers now recommend that parents and educators make available more nature experiences—especially green places—to children with ADHD, and thereby support their attentional functioning and minimize their symptoms" (Louv, 2008, p. 101). With this concept in mind, many youth development professionals promote the benefit of time in green spaces where youth

can connect to nature. Could it be true that our brains are wired for a nature-oriented existence and our behaviors are outpacing our brains ability to adapt? More research is needed in this area to make that determination.

Research does, however, support the benefits of green spaces and nature-connectedness. For instance, Louv states, “a Swedish study shows that children and parents who live in places that allow for outdoor access have twice as many friends as those who have restricted outdoor access due to traffic” (Louv, 2008, p. 56). Also, there is a link between green space and a rise in personal autonomy, improved self-concept, a greater capacity for taking action, and improved interpersonal skills (Kellert & Derr, 1998). In one study that compared green space and built space, research showed that children in green spaces engaged in more creative forms of play than those in built spaces (Kirkby, 1989). With so much research linking nature to positive youth change, it can be tempting to think that research has identified the solution to many of the problems that youth face. While nature-connectedness likely plays a role in behavioral change, additional theories should be considered to form a more complete understanding of the issue.

Additional Concepts and Research

Much of the research in this area is centered on the concept of biophilia. Biophilia is defined as, “the urge to affiliate with other forms of life” (Louv, 2008, p. 50). Many researchers believe that humans carry an innate desire to connect to other life, however, one may wonder if the type of life form to which humans connects bears any significance. For instance, could the behavioral and physical issues that Louv addresses be equally impacted by human-to-human connectedness or is human-to-

nature connectedness essential for improvement? While studying the relevant research on nature-connectedness, one may notice that most of the research is based on the study of groups of children in differing outdoor scenarios. For example, Robin Moore says that, “Natural spaces and materials stimulate children’s limitless imaginations and serve as the medium of inventiveness and creativity observable in almost any group of children playing in a natural setting” (Louv, 2008, p. 89). It is this concept of group play that is of interest. Should all the benefit in this research be attributed to outdoor play, or is it possible that some of the benefit could be linked to the connectedness of the children to each other?

This question speaks to the concept of belonging. There is much research based on the fundamental need to belong. Baumeister and Leary (1995) state, “a need to belong is a fundamental human motivation” (p. 497). If belonging is fundamental to human motivation, it may be worthwhile to study the effects that human-to-human connectedness has on the same behavioral and physical issues that seem to be affected when researching nature-connectedness. It is possible that much of the nature-connectedness research is overlooking the fact that children are most often observed not only in nature, but also in groups.

Consider a different perspective. Many students appear to underachieve in traditional classroom settings, but show improvement when working in nature-based settings. However, nature-based education tends to offer many more opportunities for group interactions and is much less structured than traditional classroom settings. One could hypothesize that traditional classrooms create a hostile environment for students, in that while they are in close proximity to other students they are required to disconnect

from their peers and work independently. This forced solitude while in a group of other humans could contribute to many of the behavioral issues that are prominent in students. Perhaps their sense of belonging outweighs their desire to comply with the established rules. Additionally, research shows that people may perform better when others recognize their achievements and value their work (Baumeister & Leary, 1995). However, in a traditional classroom setting, students are often succeeding or failing independently, which could remove some of the incentive to comply. Conversely, in typical nature-based educational programming, students work together and see the success or failure of their peers. This is due to the fact that more often success is determined by completing a task instead of a written assignment and students have the ability to see their peers succeed and reward them accordingly.

If a traditional classroom setting does infringe on a student's need for belonging, then it stands to reason that students would look for additional ways to connect to each other and fulfill that need. Social media and other communication technologies may fulfill a human desire to remain connected and belong. In fact, one could argue that youth today have more simple ways to stay connected. As schools institute no talking policies at lunch and take away recess, the desire to belong struggles to remain connected. While adults are quick to blame the lack of interpersonal skills and soft skills on technology, it could be beneficial for youth development professionals to evaluate whether institutional systems are driving students toward these technologies to fulfill their sense of belonging. Louv (2008) states, "As electronic technology surrounds us, we long for nature" (p. 75). This statement may be true. However, it may also be true that as the systems we create separate us from each other, we find more creative ways

to reconnect. Perhaps the desire that so many researchers recognize as biophilia, is not only a need to connect to other life forms, but a stronger need to connect to human life forms, and nature-based settings provide the most natural environment in which these connections can occur.

A key issue that arises when reviewing nature-based research is whether the introduction of outdoor spaces can be solely responsible for positive youth outcomes that are measured. Kellert (2005) explains, “The human mind and body genetically emerged in a biocentric world, and the sparse data available suggests our most cherished capacities – physical health, emotional attachment, self-concept, personal identity, critical thinking, problem solving, curiosity, imagination, even culture – depends in myriad irreplaceable ways on our experience of nature” (p. 2). However, many of these capacities seemed to be affected by a change in belonging as well. For instance, Hensley’s research related to belonging reveals increased self-esteem and increased self-concept (Hensley, 2007). Also, physical health is linked to belonging (Baumeister & Leary, 1995). One could argue that many of the developmental outcomes that research shows can be improved by nature can also be improved by increased belonging.

It would be beneficial to modify studies surrounding green space and developmental outcomes to see if similar results could be achieved. For example, Taylor and Kuo reference a study in which 400 youth participated in outdoor challenge programs and showed improvement in self-concept, decisiveness, and other traits (Taylor & Kuo, 2006). It could be helpful to test subjects in a similar outdoor challenge program, but to isolate the subjects to determine if similar results could be achieved in a scenario where participants have no opportunity to experience belonging.

Conclusion

While nature-connectedness research is valuable, researchers in this field may need to focus on human-to human connectedness. It could be helpful to measure physical and behavioral changes among students in green areas without other human contact, and compare to existing research to determine if the outcomes would be similar. Studies show that much of what humans do is affected by their need for belonging (Baumeister & Leary, 1995). Perhaps youth are experiencing nature-deficit disorder, but without factoring in human-connectedness the research may be incomplete.

Additionally, it could be beneficial to couple nature-connectedness research with research surrounding alternative classroom settings. If students could learn in a way that would allow them to remain connected to each other, then the connectedness may meet their need for a sense of belonging and produce similar results to those observed when evaluating youth in nature. Considering many researchers understand the desire to connect to other life forms, it hardly seems unreasonable to think that connecting to other human life forms could be an even greater need than connecting to nature. Perhaps this phenomenon could be labeled human-deficit disorder.

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