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CHILDREN'S PERCEPTIONS OF AN ENVIRONMENTAL LEADERSHIP PROGRAM: *CAMP 2 GROW*

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Nature-deficit disorder has been highlighted as a concern for today's children. Organized camps for children have traditionally been associated with nature-based opportunities. However, the role that camps have in developing an appreciation for the outdoors and environmental stewardship has not been documented. The purpose of this study was to evaluate youths' perceived connections to nature resulting from a pilot test of a leadership and environmental stewardship program (i.e., *Camp 2 Grow*) undertaken at organized resident camps during the summer of 2009. Qualitative analyses of personal reflection journals were used. Campers recognized through this program that having the freedom to enjoy the outdoors also meant having a responsibility for environmental stewardship. Camp efforts can be focused on promoting nature abundance for children.

Keywords: environmental stewardship, leadership, nature abundance, nature deficit disorder, youth

Introduction

Richard Louv's (2005) book, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*, rallied the outdoor community and initiated a national dialogue about the importance of children's connections to the natural world. This connection included both contact with the outdoors as well as an understanding of how the natural environment impacts all aspects of life.

Organized camps for children traditionally have been considered synonymous with nature-based opportunities while contributing to positive youth development. Researchers have demonstrated that intentional programming in camps increases the likelihood of achieving youth development goals (Marsh, 1999). Researchers also found that people with stronger affective connections to nature demonstrated more environmentally responsible beliefs and behaviors (Berenguer, 2007; Kals, Schumacher, & Montada, 1999; Schultz, Shriver, Tabanico, & Khazian, 2004). However, just going to camp does not necessarily mean that children will develop a connection to nature that will enable them to appreciate the environment as it benefits them and the greater society.

The purpose of this study was to evaluate youths' perceived connections to nature resulting from a pilot test of a leadership and environmental stewardship program (i.e., *Camp 2 Grow*) undertaken at organized resident camps during the summer of 2009. Personal reflection journals were used as the data source for this paper.

Literature Review

The value of nature for healthy human development has been discussed widely in areas such as environmental psychology, geography, recreation, and leisure. Louv (2005) synthesized research and examples of common wisdom about the importance of the outdoors in children's lives not only as a means for development but for the cultural significance of nurturing people to care about the natural world. Louv discussed the dual aspects of children not having exposure to nature as they have in the past, and the concurrent need for awareness of the environmental crisis occurring on the planet. The potential value of nature lies in the way it feeds the body and soul as well as instills a sense of responsibility in people to preserve and conserve all aspects of the natural world.

Researchers have demonstrated the benefits and important contributions of nature to people's well-being (e.g., Kahn, 1999; Kaplan & Kaplan, 1989; Wells & Evans, 2003). Kahn tied humans' relationship to nature to Wilson's (1984) *biophilia theory* rooted in biology as well as to psycho-social developmental theories to outline how people's understanding of their place and role in the world contribute to a sense of identity and moral development. Nature also has a calming effect that improves concentration and creativity while reducing stress (Moore, 1997; Wells & Evans, 2003).

Gardner's (1983) concept of multiple intelligences, which argues against traditional definitions of intelligence that fail to encompass the variety of human abilities, favors a holistic multi-faceted theory of intelligence that recognizes the role of nature. Specifically, Gardner identified intelligence dimensions that include linguistic, logical-mathematic, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, and naturalist (i.e., nature smart). From this perspective, being *nature smart* is one dimension of being a knowledgeable and well functioning human being. McBeth and Volk (2010) also described a similar concept of environmental literacy.

In considering children and nature, Louv (2005) made a distinction between cognitive knowledge of environmental issues and tacit knowledge gained through direct experience. The latter leads to an affective connection and enduring bond with the natural world that contributes to healthy human development and the cultivation of compassion and empathy for the planet (Huttenmoser, 1995; Mayer & McPherson Frantz, 2004; Wells & Evans, 2003).

Connections Between Nature and Environmentalism

The aspects of children and nature related to both cognitive and tacit knowledge are important to consider in tandem. The 21st century reflects continued global population growth, technological advancement, and subsequent burdens on the natural world from consumer demands. A citizenry capable of appreciating the outdoors and understanding the complexity of environmental issues and actively participating in addressing the concerns is vital (Short, 2010).

Another way to think about how nature-based experiences and environmental issues are linked may be likened to Louv's (2005) advocacy that nature can bring together the inner and the outer selves. A personal connection is likely the prerequisite for environmental social activism. How these connections are developed has been the subject of environmental education programs for several decades regardless of whether those programs occur in schools, youth organizations, or camps.

Many environmental education programs exist in schools where much of the learning occurs indoors. Regardless of where the learning takes place, the ultimate goal of environmental education is to facilitate the creation of an active citizenry. The means of achieving this goal are important. However, to date most evaluations of environmental education have focused on cognitive educational outcomes (Cachelin, Paisley, & Blanchard, 2009; Short, 2010) and not on changes in tacit knowledge or behavior. Evaluations of impacts to environmental quality linked to actions resulting from environmental leadership efforts will be necessary in a world facing great environmental challenges.

Even though the environmental education of young people is a high priority, its effect on children's environmental attitudes and awareness remains somewhat uncertain (Larson, Green, & Castleberry, 2008). Some researchers have measured both cognitive and affective outcomes of environmental and outdoor education. Cachelin et al. (2009), for example, examined how outdoor experiences in schools can foster pro-environmental outcomes. They found time spent outdoors was more frequently identified as the source of pro-environmental behavior than was structured education, suggesting that cognition may be less important than affect. Similarly, Ballantyne and Packer (2002) emphasized that learning in natural environments was attractive to students and had an important impact on their attitudes towards the environment, desire to look after the environment, behavior in natural areas, and household environmental practices.

The primary components of environmentally-focused education arising through intentional programs include content knowledge as well as eco-affinity (i.e., affinity for nature) and eco-awareness (i.e., environmental stewardship; Larson et al., 2008). Knowledge, attitudes, and behavior are complex characteristics and difficult to assess. More program models are needed coupled with subsequent evaluative research to verify the effectiveness of outdoor education programs in effecting social and environmental change (Kruse & Card, 2004). Organized camp experiences can be an important venue for addressing issues of affinity for nature and environmental stewardship.

Camps

Camps have traditionally been associated with nature-based activities and the outdoors. Although not every camp exists in a nature-based setting (e.g., the growing number of sports camps), camps have traditionally focused on developing skills in the outdoors among other goals. James, Henderson, and Garst (2009) found that three quarters of accredited camps had the words *outdoors*, *nature*, or *environment* in their mission statements. However, camp directors had mixed levels of commitment to environmental education even though most camps operated in nature-based environments. Nevertheless, James et al. also noted that three fourths of the camp directors surveyed said that their campers spent more than 7 hours each day in the open air (i.e., outdoors).

Camps, as well as other organizations, can provide a means for learning to enjoy the outdoors and developing an affinity for nature. However, just enjoying the outdoors does not mean that young people will develop a concern for environmental stewardship. While advocating for the benefits of organized camp experiences for youth, Louv (2005) suggested that camps today have shifted their programming focus from their *roots* in traditional outdoor experiences toward more contemporary interests. According to Louv, this shift has inadvertently contributed to this idea of *nature-deficit disorder* defined as disconnect between children and the environment:

The shift in our relationship to the natural world is startling, even in settings that one would assume are devoted to nature. Not that long ago, summer camp was a place where you camped, hiked in the woods, learned about plants and animals, or told firelight stories about ghosts or mountain lions. As likely as not today, "summer camp" is a weight-loss camp, or a computer camp. For a new generation, nature is more an abstraction than reality. (Louv, p.2)

Many camps face a growing challenge in getting children interested in the outdoors and concerned about the environment. Young people often feel more comfortable with indoor experiences centered on technology. For example, in a major study of youth aged 8-18 years, Roberts, Foehr, and Rideout (2005) found children and youth spent an average of nearly 6.5 hours a day with electronic media. Children grow up in a media-saturated environment. The good news is that since 1999, little change has occurred in the amount of time 8 to 18 year-olds spend using media. Perhaps young people have reached a limit regarding time they desire to devote to media use. However, when young people use media, about a quarter of the time they are using more than one medium at a time.

Despite the allure and convenience of technology, camps can offer an important apposition in addressing outdoor, nature, and environmental issues. For example, Kruse and Card (2004) examined the effects of a conservation education camp program using pre, post, and one-month follow-up data collection. Their results indicated that conservation knowledge scores increased as a result of the camp as did attitude and behavior measures, although patterns of change were varied. In another study at a camp in Canada, structured nature programs and unstructured free-play enabled campers to discover and increase their familiarity with common local animals (Watson, 2006). These interactions were proposed as important starting points to understanding more abstract aspects of the natural world for these children.

Camps also have the potential to provide opportunities for children to learn environmental stewardship. For example, a 2007 survey conducted by the American Camp Association® (ACA) found that 83% of camps actively recycled and 56% of camps taught youth about litter removal. Arnold, Cohen, and Warner (2009)

conducted interviews with young environmental leaders to discover the past influences that had contributed to their involvement in environmental concerns. The main self-identified influences were parents, experiences outdoors during childhood, friends, role models, teachers, and youth groups and conferences or gatherings. Although camps were not specifically mentioned, experiences in the outdoors as children and through youth groups can be directly linked to affinity for nature and environmental stewardship.

The structure of camps may be important in providing youth with ways of thinking about issues including the environment. Ramsing and Sibthorp (2008) described the importance of addressing long-term lifestyle behavioral changes by designing camp programs that use more participant-centered leadership, de-emphasize competition, and include creative and cooperative activities allowing for more individual choice and options. They suggested that providing skills alone in camps may not be enough to change behaviors or address nature-deficit disorder (Louv, 2005) without an intentional focus on the importance of the outdoors.

Nature-Deficit Disorder

Nature deficit disorder is a conceptual rather than clinical term that explains the costs of children becoming alienated from nature. Nature-deficit disorder raises concerns for the healthy development of today's youth. Societal implications of nature-deficit disorder arise because people who have developed an affective connection to nature are more likely to demonstrate pro-environmental attitudes and behaviors (Chawla, 1999; Kals et al., 1999; Milton, 2002).

The opposite of nature deficit is *nature abundance* (Louv, 2005), which includes biological, cognitive, spiritual, and ethical benefits. The focus of camps, perhaps, should not be on what is deficient in children because of nature deficit disorder, but what can be gained with a *nature abundance* paradigm. Attention restoration theory (Berman, Jonides, & Kaplan, 2008), for example, might be considered a form of nature abundance that provides an analysis of the environments that lead to improvements in abilities.

Although the problem of nature-deficit disorder provided a rationale for our evaluation project, the idea of nature abundance describes the possibilities that camps can have in contributing to a connection between children and nature. Our study was framed to understand more about nurturing nature abundance and how it might relate to environmental stewardship. Although the primary objective of the *Camp 2 Grow* project was to focus on leadership and youth development, its implementation in camp provided an ideal way to also examine nature, the outdoors, and environmental issues as they related to the potential for environmental stewardship. Helping youth understand that with freedom to enjoy the outdoors also comes responsibility for environmental stewardship was a worthy goal.

Methods

Project Background

Camp 2 Grow is a program developed by ACA through funding from Lilly Endowment Inc. to promote leadership and environmental stewardship. The program was pilot tested during the 2009 summer season and focused on teaching middle and high-school aged youth leadership knowledge and skills in a nature-based setting. The nucleus of the program was LifeKnowledge®, which was developed by the National FFA Organization (formerly Future Farmers of America). The curriculum centered on 20 core lessons for developing youths' skills in the areas of leadership; character; teamwork; building positive relationships; service, citizenship, and community; taking risks and getting results; problem solving; and planning. ACA adapted LifeKnowledge® into *Camp 2 Grow* by including a focus on environmental stewardship applications that could be integrated into a typical camp schedule. An educational model for *Camp 2 Grow* progressed from awareness to stewardship as depicted in Figure 1. The curriculum included learning objectives and step-by-step instructions for program implementation and youth engagement. Further, the program was meant to be customized to achieve camp-specific goals for youth outcomes. A more detailed description of the entire program can be found at www.acacamps.org/camp2grow.

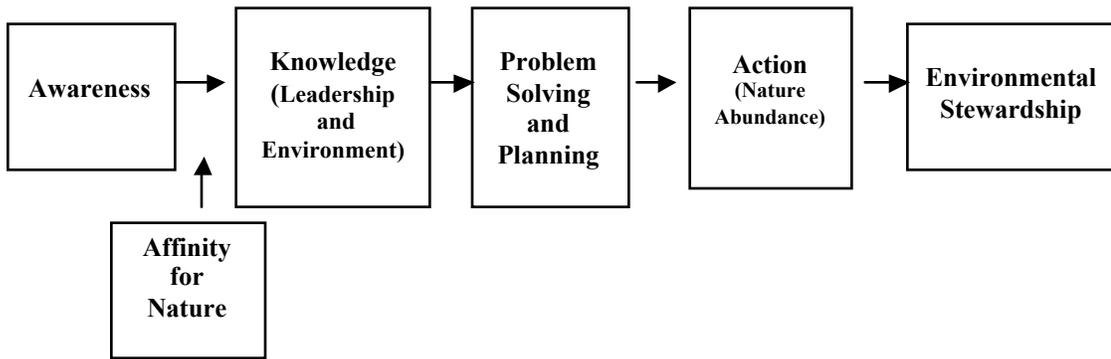


Figure 1. Camp 2 Grow Educational Model

The focus of our qualitative research project was to evaluate *Camp 2 Grow's* primary objective: Children will experience leadership outcomes in the areas of teamwork, responsibility, friendship skills, community citizenship, independence, and social problem solving. This focus on leadership outcomes was analyzed within its application to responsibility for environmental stewardship. An additional quantitative evaluation was undertaken, but this manuscript focuses only on the *personal reflection journals* as they related to perceptions about affinity for nature and environmental stewardship connected to the leadership program.

Sample and Program Implementation

Twenty-four day and resident camps who met specific criteria received grant funding for the pilot project during 2009. The criteria were:

- Camps were currently accredited by the ACA
- Camps served campers from one of the following U.S. metro areas: Indianapolis, Los Angeles, New York, Boston, and Chicago
- Camp directors or their designees attended a regional face-to-face training to learn the delivery of the curriculum
- Camps agreed to conduct the Environmental Leadership Program during the summer of 2009.
- Camps had access to online information and resources while youth were at camp.
- Camps agreed to have both youth AND staff participate in the evaluation process.

Campers at five camps were selected to complete journals as a part of their environmental leadership training experience. A journal was defined as a diary that includes specific questions. Campers were given their own journal to keep. The campers were encouraged to write each day to address one or more of 11 questions about leadership, outdoors, and the environment. The six questions related to environmental leadership examined in this manuscript included:

1. If I had to identify the two most important environmental issues in my community, I would say...
2. The reason why I think it's important for kids to spend time in nature is...
3. How do you think young people like you can make a difference with some of the environmental issues facing the world?
4. When I think about things that prevent me and my FAMILY from spending time together outdoors, I think about...
5. When I think about things that prevent me and my FRIENDS from spending time together outdoors, I think about...
6. Being at camp has influenced the way I think about nature and being outdoors by...

Campers were instructed that journaling is a way to take a minute to focus and think about an idea. They were told not to worry about grammar, writing style, or things they normally would pay attention to at

school. Their thoughts and feelings were what counted in the journal. They were instructed to write how they felt and told that no judgments would be made about their writing or ideas. The journals were private and no one would be forced to share a journal entry. They were told the evaluation team would read their journals, but the camper names would not be linked to any of the material. The journals were stressed to camp staff as being an important part of learning what campers thought of the leadership training program, camp, and other larger social (i.e., environmental) issues.

The camp leaders were instructed to collect the journals at the end of the session, make copies, and return the originals to the campers to take home. Although five camps were randomly selected for the evaluation, only two camps returned copies of the journals. For this analysis, 27 journals from two camps were examined that represented about 250 separate entries. The campers participating ranged in ages from 11-15 years.

Six journals were randomly selected and open-coded by two researchers independently. These codes were then discussed and the independent codes were compared. Consensus for the open codes was negotiated and the remainder of the journals were coded regarding the topics addressed in each of the six questions. These open codes were further grouped by the two researchers into themes. Finally, selective coding was undertaken to summarize the conceptual results of the analysis and to determine the outcome patterns perceived by the campers.

Findings

Within the context of this environmental leadership program we examined important environmental issues, why nature is important, why families and friends are not more involved with outdoor and nature activities, how youth can make a difference regarding nature and environmental issues, and how nature-based camp experiences can make a difference to young people. From these findings we developed implications for better understanding *nature abundance* and how intentional camp programs can influence the behavior of young people regarding their relationship to the outdoors and concern for environmental stewardship. As evidenced in the descriptive quotes, the campers often did not distinguish between the outdoors and the environment and generally spoke about them as synonymous.

Before addressing the environmental issues, several brief summary observations are offered from the final report of this project, which included more detail about the specific leadership dimensions (Henderson & Santucci, 2009). Campers had positive attitudes toward the leadership program and indicated:

- The leadership training program was successful in addressing the techniques of working with others, developing responsibility, and acknowledging the traits needed to be an effective leader.
- Many of the campers were able to integrate the lessons from the leadership program into their camp experiences especially as they worked with younger campers.
- Participants saw their camp experience enhanced through a purposeful leadership training program that included developing environmental appreciation and stewardship skills.

The following topics and theme discussions related specifically to how the outdoors and environmental issues were interpreted by the campers participating in this leadership program.

Kids and Nature

The campers were asked to provide some reasons for why spending time in nature could be important to young people. Respondents saw value in nature and provided statements about the need to appreciate nature so that it can be preserved. We identified five themes that were described by the campers including the concepts of: cognitive knowledge (i.e., facts that are important to learn), affective knowledge (i.e., attitudes and awareness), saving the planet, new and different experiences, and connections to self development.

Nature was important to kids relative to aspects of **cognitive knowledge** including learning about plants and animals and a broader understanding of environmental impacts. One camper illustrated this idea by saying, "When kids are in nature they learn about which animals are nice and which are mean. For example, deer are nice and lions are mean." Another camper stated, "You can see animals in their natural habitat, whereas when you are in the city, the only place you can see animals is the zoo which isn't natural."

Affective knowledge included ways that children learned to become aware, appreciate, respect, and cherish nature. One camper stated the importance was "learning to have fun naturally." Other journal entries included, "Being in nature is peaceful and helps them [kids] learn and understand the world around them" and "Children should appreciate the beauty around them." A camper explained, "Kids who spend time in their environment will respect it and cherish it, rather than not care about nature and destroy it."

An outgrowth of cognitive and affective knowledge was an interest expressed in how young people could help with **saving the planet**. Knowing about nature was a prerequisite to saving the planet as expressed in, "They need to know how nature works, what's in your surroundings, and know everything about it so they can be aware of the bad things in the environment." Similarly, "it also helps them [kids] understand the problems in the world and what they can do to help solve the problems." One camper stated "We only have one earth and they should love it," while another noted, "When kids appreciate nature they stop polluting the earth and eventually pollution will end!"

Since nature was not necessarily an aspect of the young people's everyday lives, they saw nature as a place to do **activities**, primarily physical, that were different from sitting at home or staying in the city. Two campers remarked:

They [kids] need to get outside more. It's healthy to be active and go play outside. ...to be able to get fresh air...to be able to see the world they live in instead of sitting in front of the television all day... [being outdoors] forces them to think about things instead of just listening.

...because of global warming, I am aware that kids will not be able to enjoy real nature as much as I have. They need to be able to enjoy it while they can. Who knows how long it'll still be around?

A statement that summarized some of these notions was, "I think it [outdoors] opens their eyes to a new world that brings enjoyment without necessarily including technology."

Finally, youth saw nature as a way that could help them in their own **self development** as illustrated by "being in the environment can help people become closer and have a healthier relationship with ourselves." Some of the development associated with nature also related to the relationship with nature shared with family and friends.

Families and the Outdoors

The campers were asked to write about why their families did not spend more time together outdoors. As expected, many of the reasons related to **technology** (e.g., TV, computers, cell phones, movies, and internet use as well as computer games and electronic devices). The campers also described the demands at home, family interests that did not necessarily include the outdoors, and the community environment that did not facilitate being together in the outdoors including natural perils. Many of the respondents simply made lists of "things."

The issues regarding **home and family** concerned not having enough time, parents' jobs and being busy, and school work. One camper explained, "...my mom works late so we do not really have time to go outside as much as we should." Another camper observed that, "...many families have very small amounts of time together which causes not a lot of time spent outdoors."

Personal and **family interests** not related to the outdoors were mentioned in several ways. A camper explained that the family did things outdoors, but they also enjoyed "things we do inside such as playing games, watching movies..." One respondent indicated that he/she would rather be "doing stuff by myself like hangin'

out with friends.” Another camper indicated that other things were more “fun like movies and parties.”

The **community environment** responses suggested that nature was not close or not safe for some young people. Further, other options existed like malls and shopping centers that were more accessible. In addition, some issues related to weather and bugs and other perceived nuisances of nature. One camper remarked, “We can’t play in the streets because there’s a lot of cars and stuff.” From another perspective, an individual noted that “hazardous air pollution” was an issue. A camper explained, “Construction and new building. Workers knock down trees and build over forest areas that should be preserved. The only places that people can go to find and explore forest areas are farther away from city life.”

Friends and the Outdoors

Some of the reflections about what prevented campers and their friends from spending more time in the outdoors were similar to the family constraints. Technology was by far the biggest reason but the campers also described three other areas: different interests, personal attitudes and schoolwork, and environmental factors.

The statements about **technology** were generally listed similar to the issues with families. One camper summarized an example by writing, “I get addicted to the internet and I will sit on the computer for hours.” Another camper explained . . .”media like cell phones and computers are a distraction to go outdoors.”

Those ideas also related to **different interests** with friends, other than being in the outdoors, and included movies, shopping, talking, and “teenager stuff.” These different interests were also reflected in some of the **attitudinal** statements about the outdoors that related somewhat to **environmental** factors. Not all these statements were negative, however. One camper wrote, “My friends go out in nature all the time, so I think about all the great times we’ve had at the park.”

Other entries were not so positive. A camper discussed theaters and shopping and said, “Those places attract us and seem more fun than nature. Dirt and bugs turn us away from nature.” Similarly, another camper said, “At my age, we don’t really think going to a park or anything like this is very fun, probably because it wouldn’t seem ‘cool’.” Another attitude expressed was, “I think of things like being occupied/busy with more important things than hanging out outside.”

Most Important Environmental Issues

Moving beyond the direct personal connection, the responses in the journals also indicated an awareness of global environmental issues by the campers. We grouped the responses into five themes: pollution/littering, global warming/energy, waste/recycling, apathetic people, and issues. Many of the responses to the question also were written in list form by the campers, but the descriptions provided some sense of how the campers thought about environmental issues.

Pollution included general pollution, air pollution, littering, and ocean pollution. One individual noted that pollution could be fixed by recycling, and not littering, as well as using less fuel and more green materials. Several campers were concerned about “how to deal with trash building up at the beaches.” Another insight included, “Pollution. . . It’s really more than an environmental issue since its affecting human health. It’s really a horrible thing because it can be corrected and no one is doing anything about it.”

Global warming themes related to issues that caused it such as oil consumption and wasting energy. One camper noted that pollution was an issue and then stated, “The second one is how we damage the ozone layer overall. The damage is horrifying and there seems to be no reliable solution.” Similarly, another camper described specific consequences:

Global warming. . . causing the ozone layer to disintegrate which then the sun will get hotter and melt all the ice in Antarctica which then will kill the polar bears. Also, if the ozone layer continues to disintegrate, UV rays will come in and harm us that will lead to skin cancer.

Waste/recycling represented areas that could be addressed specifically by the campers, their families, and their friends. One camper described, "People aren't recycling everything they can and should. When you don't recycle, the item you are throwing away goes into a landfill, and that takes up space on this lovely planet we call earth." Another camper noted that, "If we keep throwing trash...there will be piles of trash all over the world." Similarly, "...there's garbage everywhere and it's hard to pick everything up because NYC is so big."

Apathetic people was an example of how campers were concerned about who would care about the environment. One comment was, "People don't even care about the environment. They throw trash everywhere and don't clean up." Another respondent attributed the problem of trash to "because they are too lazy to put in the extra effort [to recycle]." Another camper explained further:

I know lazy and able people doesn't sound like it has anything to do with the environment but I say the more people who don't work and are able-bodied means more people on the street doing things that could possibly hurt, destroy, or harm the environment.

Habitat areas related to the destruction of places for animals to live as well as the impact of the built environment. One camper explained, "Many animals are being driven out of their home because man keeps cutting down forests and paving over the ground to create houses, road, hotels, malls, buildings, stadiums, and mega stores." These concerns about the environment illustrated how the outdoors and nature might be protected and changed.

Kids Making a Difference

Although previous statements about the environment were not always optimistic regarding the solutions, the young people listed and wrote about possibilities for making a difference in some of the environmental issues facing the world. Several campers talked about how they as young people were the future for the environment: "Young people like me can make a difference by learning about the environmental issues and telling everyone around..." and "If kids at younger ages are educated about the Earth, they will keep it in mind as they grow older." Another journalist stated, "...we are young and have more time to change the world and come up with ideas."

In addition to these broad thoughts, the campers also wrote about two major themes related to community service and what they personally could do with regard to consumption and recycling. Part of the focus of the *Camp 2 Grow* project was on using leadership to address issues of environmental stewardship. Therefore, seeing examples of possible **community initiatives** showed how leadership could be applied. One respondent indicated, "When young people learn about environmental issues, they learn to take an active action." Examples of community projects included organizing "beach cleanups and recycling programs at schools," "create clubs inside or outside schools," and "do fundraisers ... to save money for environmental charities." The idea of "getting together to change the environment" was explained as "one friend is powerful, or millions of friends can be unstoppable."

The second theme included **personal consumption and recycling**. This theme was a compilation of examples to make the young people's lives more "eco-friendly." The most common examples included recycling more, composting, shorter showers, using car pools, conserving water, turning off lights, picking up trash, driving eco-friendly cars, and walking more. A camper remarked, "The simplest things can make a huge impact. From recycling to picking up at least 3 pieces of trash each day to volunteer at least once a month at beach clean-ups." An explanation of a possible action and its results was explained:

Making compost out of fruits, veggies, paper and manure to create eco-friendly compost reducing the number of landfills we create which will reduce the number of children likely to develop cancer and increase the number of forests left untouched and increase the number of homes left for animals.

Camp and the Outdoors and Nature

Regardless of the reasons why campers were not more involved with the outdoors with their families

or friends, being at camp was an outdoor experience. The influence of camp on campers' perceptions of the outdoors was of interest. Camp seemed to be important in three ways: better or different attitudes, opportunities to experience the outdoors, and need for social action.

Gaining new perspectives and **different attitudes** about the outdoors was most often attributed to becoming aware, enjoying/having fun, and appreciating nature. For example, a statement was made, "It [camp] makes me want to spend more time outdoors. It also makes me more nature friendly." A camper seemed surprised to find that "...trees and flowers are crawling with life in them!" A new attitude was illustrated in this quote, "Smelling flowers, looking at ponds, seeing all the little ecosystems in a tide pool, and walking around in a beautiful forest are examples of enjoying nature. Camp has changed the way I think about nature." Another camper added that camp was "helping me acknowledge my compassionate side towards nature." Being at camp influenced one individual to say, "...no matter what kind of person you are you can enjoy the outdoors and nature."

Part of those different attitudes related to the **opportunities for outdoor experiences** the young people had while at camp. A camper noted that "...you can have fun at camp doing really fun activities." Another camper stated, "It has made me realize that spending time outdoors could be fun if you are really into it and make it fun." One individual reflected:

At camp, I realized that my TV, my phone and my computer aren't as important as saving the natural parts of the earth. By just being outdoors and not being able to use those objects, camp has influenced the way I think about nature.

Another stated, "Camp has taught me things that I can do outside instead of playing inside all the time."

The need for **social action** was an aspect of the camp's leadership training program that was important to several young people and related to their outdoor experiences. One camper noted, "...when we actually try to help it [the earth] we could enjoy it also."

Conclusions and Recommendations

The purpose of this study was to evaluate youths' perceived connections to nature resulting from a pilot test of a leadership and environmental stewardship program (i.e., *Camp 2 Grow*) undertaken at organized resident camps during the summer of 2009. The youth wrote about issues related to nature, the outdoors, and the environment and expressed mainly positive responses to the importance of nature and the role they had in addressing environmental issues. Many of the responses reflected an internalization of the knowledge focused *Camp 2 Grow* lessons as well as the campers' experiences in nature while they were at camp. They articulated that aspects of pollution, global warming, and habitat destruction were all important environmental issues in their communities that needed to be addressed. They described that being outdoors was important because of the cognitive as well as affective knowledge they gained. Further, the campers indicated that camp enabled them to have new experiences in the outdoors, which helped them to appreciate the outdoors more. They believed that young people could make a difference regarding leadership for the environment by considering opportunities for community service as well as undertaking personal behaviors to help "save the planet."

The campers articulated challenges to getting outside and developing their personal affinity to nature that included the predominate influence and availability of media (e.g., cell phones, computers, gaming, TV), the busy lifestyles they and their families led, and the perception of family and friends that other things were "more fun" than being outside. In summary, the environmental leadership program at camp seemed to allow campers to consider further why the outdoors was important and the possible steps they could take to assure that the environment is maintained for the future health of children as well as adults.

The *Camp 2 Grow* curriculum offered a way to address both the possibilities that Louv (2005) described for learning about nature at camp as well as the need for environmental stewardship so that future generations can also have the environmental quality that will enable them to enjoy outdoor activities. Based on the research,

we offer the three ideas that help to theorize these descriptive data.

1. Young people can recognize through an intentional environmental leadership and stewardship curriculum that having the freedom to be in the outdoors also means having responsibility to take a leadership role in making the environment better.
2. Young people can articulate ways to combine community stewardship to address environmental problems and take personal responsibility for doing their part to solve environmental problems in the future.
3. Camps can focus on their role in promoting nature abundance as a pro-active means of connecting young people to the outdoors for personal as well as stewardship benefits.

The results of this study reinforced research that suggests a relationship between affinity for nature and potential environmental stewardship exists (e.g., Chawla, 1999; Kruse & Card, 2004; Short, 2010). Student autonomy in issue investigations and action planning can supplant coercive, advocacy programs (Ramsing & Sibthorp, 2008) if a rising generation of critical thinkers is to solve new environmental problems and maintain or improve environmental quality on both the local and global scales (Short, 2010).

The method used in this study is also interesting. Journaling can be encouraged as a way to help campers think about their experiences. It can serve as a means for debriefing the experiences young people have at camp whether as a part of a training program or in their efforts to learn about themselves as future leaders. Reflection through writing also allows youth opportunities to synthesize the concepts in a personal framework that makes sense to them. Camp leaders should be prompted to assure that they are enabling campers to write in their journals both for the benefits to the campers as well as a means for assessing learning that occurs.

We acknowledge some limitations to this study. First, the conclusions are based on 27 journals analyzed from only two camps. More camp participation and more journals may have provided additional insights. Second, we present patterns that emerged. Our focus was on the strength of the comments more than on the frequency of responses. Finally, some of the copying of the journals was not readable and sometimes handwriting was difficult to decipher so a few ideas may have been lost.

In summary, camps have long provided a means for helping people learn valuable life skills. Leadership and environmental stewardship through programs such as *Camp 2 Grow* can be key areas for intentional focus in camps. An emphasis on how camps can use the concept of *nature abundance* is a means to nurture outdoor skills, environmental attitudes, and connecting camp to broader social issues. Being with other campers at camp often develops personal skills, but a purposeful environmental leadership program can further enhance these efforts. In addition, camps focus on the enjoyment of the outdoors but just enjoying does not necessarily mean that stewardship will be undertaken by campers unless it is facilitated. This *Camp 2 Grow* curriculum offered a way to address both leadership and stewardship that promotes social action by the young people who will not need to wait for *tomorrow* to become the advocates needed today.

References

- Arnold, H., Cohen, F., & Warner, A. (2009). Youth and environmental action: Perspectives of young environmental leaders on their formative influences. *Journal of Environmental Education, 40*(3), 27-36.
- Ballantyne, R. & Packer, J. (2002). Nature-based excursions: school students' perceptions of learning in natural environments. *International Research in Geographical and Environmental Education, 12*(1), 1-19.
- Berenguer, J. (2007). The effect of empathy in proenvironmental attitudes and behaviors. *Environment and Behavior, 39*(2), 269-283.
- Berman, M., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science, 19*(12), 1207-1212.

- Cachelin, A., Paisley, K., & Blanchard, A. (2009). Using the significant life experience framework to inform program evaluation: The nature conservancy's wings & water wetlands education program. *Journal of Environmental Education, 40*(2), 2-14.
- Chawla, L. (1999). Life paths into effective environmental action. *Journal of Environmental Education, 31*(1), 15-27.
- Gardner, H. (1983). *Frames of mind. The theory of multiple intelligences*. New York: BasicBooks.
- Henderson, K.A., & Santucci, D. (2009, December). *Report to ACA on an Analysis of the Camp Reflection Journals Completed by Youth in Camp 2 Grow Pilot Project*. Bradford Woods, IN: American Camp Association.
- Huttenmoser, M. (1995). Children and their living surroundings: Empirical investigations into the significance of living surroundings for the everyday life and development of children. *Children's Environments, 12*(4), 403-413.
- James, P. A., Henderson, K.A., & Garst, B. (2009). An exploration of camp directors' affective connection to nature and camp programming. *Research in Outdoor Education, 9*.
- Kahn, Jr., P. H. (1999). *The human relationship with nature. Development and culture*. Cambridge, MA: The MIT Press.
- Kals, E., Schumacher, D., & Montada, L. (1999). Emotional affinity toward nature as a motivational basis to protect nature. *Environment and Behavior, 31*(2), 178-202.
- Kaplan, R. & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. New York: Cambridge University Press.
- Kruse, C., & Card, J. (2004). Effects of a conservation education camp program on campers' self-reported knowledge, attitude, and behavior. *Journal of Environmental Education, 35*(4), 33-45.
- Larson, L.R., Green, G. T., & Castleberry, S. B. (2008). The impact of a summer education program on the environmental attitudes and awareness of minority children. *Proceedings of the 2008 Northeastern Recreation Research Symposium*. GTR-NRS-P-42.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.
- Marsh, P. (1999). Does camp enhance self-esteem? *Camping Magazine, 72*(6), 36-40.
- Mayer, F. S., & McPherson Frantz, C. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*, 503-515.
- McBeth, W., & Volk, T. (2010). The national environmental literacy project: a baseline study of middle grade students in the United States. *Journal of Environmental Education, 41*(1), 55-67
- Milton, K. (2002). *Loving nature: Towards an ecology of emotion*. London: Routledge.
- Moore, R. C. (1997). The need for nature: A childhood right. *Social Justice, 24*(3), 203-220.
- Ramsing, R., & Sibthorp, J. (2008). The role of autonomy support in summer camp programs: Preparing youth for productive behaviors. *Journal of Park and Recreation Administration 26*(2), 61-77.
- Roberts, D. F., Foehr, U., & Rideout, V. (2005). *Generation M: Media in the lives of 8-18 year olds*. Kaiser Family Foundation.
- Schultz, P. W., Shriver, C., Tabanico, J. J., & Khazian, A. M. (2004). Implicit connections with nature. *Journal of Environmental Psychology, 24*, 31-42.
- Short, P. (2010). Responsible environmental action: Its role and status in environmental education and environmental quality. *Journal of Environmental Education, 41*(1), 7-21.
- Watson, G. P. L. (2006). Wild becomings: How the everyday experience of common wild animals at summer camp acts as an entrance to the more-than-human world. *Canadian Journal of Environmental Education, 11*, 127-142.

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Wells, N., & Evans, G. (2003). Nearby nature: A buffer of life stress among rural children. *Environment and Behavior*, 35(3), 311-330.
Wilson, E. O. (1984). *Biophilia*. Cambridge, MA: Harvard University Press.

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