



Social Science Research Project: Forest Ecosystem Work and Youth Benefits

Numerous programs in American cities offer teens and adolescents opportunities to do service work in forest landscapes. Forest project locations range from wildland settings, to rural and suburban places, and extend into the inner city. Youth work may include tree planting, ecosystem and wildlife habitat restoration, and invasive species removal.

Youth program managers tell many engaging stories about how young people benefit from nature-based work experiences, as volunteers or as employees. Stories include youth successes, such as better life-skills, taking pride in one's neighborhood, better knowledge of the natural environment, and even claims of nature work being a turn-around event in a person's life.

There is little empirical evidence regarding these observed changes. Measureable outcomes can confirm the incidence (and expand understanding of) youth benefits, and help organizations improve their youth programs. Measures can demonstrate how nature work programs are important not only to the environment, but also to the positive development of all young people.

A pilot research project has been launched to better quantify and communicate the benefits gained by adolescents who are involved in nature work projects. This flyer introduces the pilot project, and describes additional studies that could dovetail with the initial research.

Research Goals for Pilot Study

Initial funding has been provided by the USDA Forest Service to conduct research in the Pacific Northwest region. Several regional NPOs offer young people (from elementary school to college age) opportunities to learn about forests and be involved in stewardship activities. Some experiences are as brief as an afternoon or Saturday morning, while others are residential programs of a longer time frame. The research funding will support development of benefits measures that will target teenagers who participate in longer duration activities or projects.

MEASURES FRAMEWORK - The measures will initially focus on these social and psychological concepts:

- 1) Personal and social development**, including identity formation, leadership capacity, self esteem and goal setting.
- 2) Life skills and employability**, including general workplace skills, planning approaches, project management and awareness of natural resources careers.
- 3) Civic affairs and community dynamics**, including communications skills, conflict resolution, leadership capacity, and interest in civic engagement.
- 4) Ecological literacy**, including knowledge of local ecological processes, understanding of ecosystem management and sustainability, and translation of such knowledge to lifestyle choices.

Psychometrics is the term for quantitative measures meant to assess the psychological and social response of people in specific situations. Developing assessment measures for something as complex as the psychosocial response of young people to nature is not easy! But the task is not impossible. First, an investigator carefully defines and details an observed behavior or outcome of interest. Preliminary information is collected from past research, informal observations or exploratory data collection. Then research questions are developed, and these guide the research design, including who will be studied, the context or place of the study, and the psychometric measures.

All science, including social science, is a process of exploration. The initial research will define a small set of outcomes measures. Future studies will expand the range of outcome concepts and potential measures. Below are additional questions:

Ecological Identity

Ecological identity, also described as green bonding, can be thought of as the degree to which nature and the environment are integrated into one's sense of self. The degree of ecological identity that any person experiences can influence their attitudes, values and behaviors. Examples of outcomes include the degree to which one cares about natural resources in policy and planning, ethical concerns about the environment, degree of political support of ecological concerns, and choices of volunteer action.

Lifestyle and Career

Career choice is influenced by many factors, as are the choices one makes about everyday activities and lifestyle. Research could begin to explore the relationship of nature experiences as a youth and the choices one makes as an adult. Such choices range in significance from whether or not one lives a life guided by sustainability practices (voluntary recycling or organic gardening), and whether one pursues a workplace dedicated to natural resources science, planning or management.

Physical Activity and Health

The U.S. Centers for Disease Control warn that Americans are less physically active than in past decades, and that there are extensive negative health consequences. The incidence of chronic diseases, such as diabetes, cardiovascular disease, and obesity have increased dramatically, and health costs are rising. Children and youth are at increased risk for the early onset of debilitating diseases because young people are now more prone to eat fatty foods and lead more sedentary lives. Another research opportunity is to explore the potential of nature-based projects to increase youth activity levels through community-based volunteer, service-learning, and environmental education opportunities.

National Impact & Expansion

The pilot research is being conducted in the Pacific Northwest region of the United States. Many organizations in other U.S. cities and regions also sponsor nature-based work programs. As measures are developed, tested and refined, a measurement "portfolio" could be implemented and shared with many other communities. A national program of benefits assessment would assist youth programs across the country.

Project and Contact Information:

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