

Social and Environmental Connectivity

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Abstract

The PYCSP Feedback Survey development was grounded in practices for outdoor education programs. Our instrument consists of 18 items on an individual or parent form. It is intended to be issued to PYC participants and bookend school terms. Our instrument is tailored to the goals of the PYC Science Program.

Introduction

In this age of widespread technology, youths find themselves perpetually plugged in. To promote connectedness, reduce risk among children and young adults, and get adolescents back in touch with their physical environments and communities, the PEMI Youth Center (PYC) has partnered with the Squam Lake Science Center (SLSC) to provide engaging youth programming. Two weeks a month youth from the PYC participate in educational environmental programming from the SLSC, this consists of classroom and outdoor activities, animal encounters, and a combination of the three. We hypothesize that outdoor education promotes connectedness with peers and increases an individual's ability to empathize. Our research intends to inform the design of an instrument that will measure empathic growth of participants in the SLSC program.

Literature Review

Influences of Wilderness Therapy with Adolescents

Bettman, Olson-Morrison, and Jaspersen (2011) analyze attachment relationships formed through wilderness therapy. Adolescent participants ($n=13$) aged 14 to 17 engaged in a wilderness therapy program to explore their responses when isolated from their existing support networks. Participants demonstrated an improvement in openness, trust and feelings of security. Furthermore, a comparison of the intake data with closing reflections found that participants achieved greater personal insight and sought honesty and openness with caregivers as a result of the study.

Research explored improvements in self-efficacy and improved decision making on boarding school students involved in a wilderness-therapy intervention in Israel (Margalit & Ben-Ari, 2014). The intervention consisted of preparatory outdoor educational training and curricula meetings, a four-day backpacking trip, and debriefing meetings. Results indicate improvements in accordance with the amount of intervention participants experienced. Specific measures were Cognitive Autonomy (via CASE assessment) and Self-Efficacy (via Potency Scale).

Bettmann (2011) analyzed the effects of wilderness therapy on adolescent ($n=96$) attachment relationships, specifically to assess how peer and familial relationships are altered and the influence of gender on attachment development. Using a pre- and post-survey design, findings were mixed. Data suggested decreases in anger towards parents, and increased emotional connection. However, participants also reported feelings of alienation with their parents and a decrease in the perception that their parents would accommodate their emotional needs.

Combs, Hoag, Javorski, and Roberts (2014) noted an increase in youth participants in outdoor behavioral healthcare programs. Findings indicate large positive changes proportionate to the duration of a given program. Furthermore, the study revealed that variables such as diagnosis, gender, age, length of stay, and family factors had an effect on the lasting efficacy of treatment.

Literature Review (cont.)

Wilderness Intervention with Troubled Youth

Norton and Watt (2014) explored the impact of integrating wilderness into Positive Youth Development (PYD) programs. PYD programs are aimed to help youth reduce risk factors through positive experiences and meaningful relationships. Norton and Watts (2014) studied a PYD program that used "mentor-supported wilderness expeditions" (p. 336) for urban youth. Results showed the program had a pronounced positive impact on participants' positive sense of identity, ability to use time effectively, learning, and social/emotional understanding.

Russel (2006) differentiated wilderness therapy's theoretical foundation from the colloquial "Brat Camp" imagery associated with it (p. 51). Findings from an analysis of four separate, state-licensed programs show that wilderness therapy programming typically consists of three phases: cleansing, personal and social responsibility, and then aftercare/transition.

One study analyzed outcomes of youth participating in Outdoor Behavioral Health programs to treat emotional, behavioral and substance use issues (Russel, 2001). Of the 8 different programs serving 858 clients using the Youth Outcome Questionnaire (Burlingame, Wells & Lambert, 1995) in a pre-post design, results indicate improved mental health conditions, and reduced behavioral and substance abuse disorder symptoms.

PEMI Youth Center Science Program

The PYC partnership with the SLSC provides participants with science-oriented outdoor education through center visits and field trips. The three stated goals of the program are: 1) to engage participants in educational outdoor activities, 2) teach them about their local environment, and 3) provide science-oriented activities.

Instrument Development

The Pemi Youth Center Science Program (PYCS) Feedback Survey is modeled off the research that went into the Youth Outcome Questionnaire (Burlingame, Wells & Lambert, 1995). The YO-Q was used as a model because of how well it is tailored to assessing school aged youth participating in outdoor education. It has an ironclad reputation in the school counseling/psychology community. That said, in the development of the PYCSP Feedback Survey no items were directly pulled due to copyright concerns. Though the assessment has yet to be normed off a sample, it is intended to be normed from all attendees of the PEMI Youth Center. The individual form is intended for individuals 12 years and older. For younger participants, a Parent/Guardian form is to be completed.

The PYCS Feedback Surveys were developed with the convenience sample of the PYC participants in mind, regardless of their participation in the science programming. When administering the assessment, the primary concern is the participant's reading comprehension. Children under the age of 12 may have difficulty completing the Youth Questionnaire, hence the Parent/Guardian form was developed. This broadens the scope of our data, and also incorporates a systemic perspective into our assessment.

Discussion

A limitation of the PYCS Feedback Survey youth version is self report, although this is a common practice. Another limitation is the subjective nature of reporting on the PYCS Feedback survey for parents/guardians. are primarily the logistics associated with the parent/guardian form. The assessment is short, and so be a great inconvenience. We recommend that students who do not participate in the science program are included in the administration of our assessment; they will serve as a control that staff can use for comparison.

The items on both versions of the PYCS Feedback Survey are modeled after the Youth Outcome Questionnaire (Burlingame, Wells & Lambert, 1995), and tailored specifically to the goals of the PYC Science Program. Each of the goals is reflected directly in the items of the assessment. Further open-ended items provide more qualitative feedback, adding further detail to the assessment.

Conclusion

The purpose of this research project is to produce an instrument that assess outcomes of the PYC Science Program as outlined in the program's stated goals. PYC staff will receive insight on programming practices and could make data-based decisions for optimization. As this assessment is used more over time, PYC staff will develop a pool of data to draw upon, thereby allowing them to clearly identify trends. The results provided by this instrument will give the PYC the documented, measurable efficacy verification needed when applying for funding, ultimately allowing them to improve programming and the experiences of their participants.

The image displays two versions of the 'PYC WILDERNESS PROGRAMMING FEEDBACK ASSESSMENT' survey forms. The top form is the 'Individual Feedback Survey' for the PEMI Youth Center Squam Lake Science Program. It includes a header with the program name, a 'Today's Date' field, and a series of 12 Likert-scale items (8-12) with five response options (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree). Item 8 asks about recycling, item 9 about learning from the environment, item 10 about the importance of environmental care, item 11 about remembering things learned, and item 12 about the environment's importance. There are also two open-ended questions: 'What was your favorite field trip / visit with the Squam Lake Science Center?' and 'What has been your favorite activity with the Squam Lake Science Center?'. A footer note states: 'This instrument has yet to be validated through a trial research sample.' The bottom form is the 'Parent/Guardian Feedback Survey' for the same program. It follows a similar structure with a 'Today's Date' field and 7 Likert-scale items (8-12) regarding a child's behavior and engagement. Item 8 asks about recycling, item 9 about learning from the environment, item 10 about caring for the environment, item 11 about retaining information, and item 12 about interest in the natural environment. It also includes two open-ended questions: 'What do you value most about your child's participation in Squam Lake Science Center programming?' and 'What information about their environment did your child seem to retain the best?'. A footer note states: 'This instrument has yet to be validated through a trial research sample.'