

American Camp Association

**American Camp
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Research Forum**

Abstracts

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Dear Colleagues:

This book includes 16 abstracts that will be presented at the 2015 American Camp Association (ACA) Research Forum to be held during the ACA annual conference in New Orleans, LA from February 3-6. Twelve of these abstracts have been grouped into logical areas and will be verbally presented in four sessions. All abstracts will be on display as posters.

The Research Forum has grown in quantity and quality over the past decade. ACA's Committee for the Advancement of Research and Evaluation (CARE) has been instrumental in pushing this forum forward. Staff at ACA have been enthusiastically supportive including Amy Katzenberger and Melany Irvin. Cass Morgan and Jenn Piatt provided external reviews for the selection of these 16 abstracts.

We look forward to presenting these papers at the 2015 Research Forum, but also recognize that many people cannot attend the annual meeting. We hope these 1000-word abstracts will provide information for those not able to attend. Please contact the authors if you have further questions.

Best wishes,

A handwritten signature in black ink, appearing to read "Karla Henderson". The signature is fluid and cursive, with a long horizontal stroke at the end.

Karla Henderson, 2015 Research Forum Coordinator

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CIT PROGRAM IMPROVEMENT PROJECT

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The Counselor-in-Training Program (CIT) of the Girl Scouts of Utah has experienced tremendous growth over the past 3 years. A new curriculum based on the Camp Program Quality Assessment (CPQA) was developed in 2013. The program implemented a mentoring framework, which included job shadowing, goal setting, and personal reflection. The curriculum was based on the CPQA Short Form Staff Checklist (American Camp Association, 2013).

The purpose of this qualitative study is to evaluate this new CIT curriculum in an effort to continue to improve the program. Based on the results of this study, program improvements implemented during the summer of 2014 include reducing the amount of paperwork, incorporating multiple learning styles, increasing opportunities for free choice, and increasing opportunities for leadership and responsibility.

Theoretical Foundation

A needs assessment conducted at the beginning of the program improvement process yielded three questions: a) How can the CIT program be improved to yield better outcomes, facilitate continuity, and meet expectations? b) How can the relationship between camp staff and CIT program participants be more clearly identified? and c) How can the CIT program promote the outcomes of the Girl Scout Transforming Leadership model?

Research on camp and youth development programs suggests that the quality of the experience is most important. Program quality has been shown to lead to increased outcomes for youth (American Camp Association, 2005; Garst, Browne, & Bialeschki, 2011). The relationship between staff and youth is viewed as one of the most important aspects of a quality experience (American Camp Association, 2006a; Larson, Eccles, & Gootman, 2004). This relationship between staff and youth can be thought of as a mentor and a mentee, where the program is intended to promote positive youth outcomes via relationships between young persons and specific non-parental adults (Dubois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Mentoring relationships are increasingly integrated into many programs that serve youth, including after-school programs, summer camps, competitive sports teams, and other positive youth development programs (Schwartz, Lowe & Rhodes, 2012). This strategy can be especially effective in camp settings that provide an environment in which young people develop supportive relationships with adults who offer guidance as well as emotional and practical support (American Camp Association, 2006b).

The Girl Scout Transforming Leadership model promotes outcomes including an increase in self-efficacy and an increased belief in one's ability to achieve personal goals (Girl Scouts of the USA, 2008). Goal development and competence building can lead to increased engagement and motivation for youth (Dawes & Larson, 2011). This process is enhanced when youth are able to observe and imitate the behavior of positive role models. (Aarts, Gollwitzer, & Hassin, 2004). Encouraging adolescents to develop clear and self-set achievable goals and then supporting them through the process of goal attainment can result in increased self-efficacy (Carroll et al., 2013).

Method

Questionnaires consisting of a series of open-ended questions were administered at the end of each CIT program. Participants provided anonymous written responses to the questions. The camp director overseeing the program facilitated the delivery and collection of the completed program questionnaires. Thirty-eight program participants completed evaluation questionnaires. Ages ranged from youth entering the 8th grade to youth entering 12th grade. Program length ranged from 10 days for (Leadership Enrichment Activity Program) LEAP to up to 4 weeks for CIT 3. The questionnaire asked general program wide descriptive questions followed by directed questions addressing specific program outcomes such as increasing the belief in one's ability to achieve personal goals and increasing confidence and leadership skills. The general *grand tour* questions were intended to elicit free responses describing participants' thoughts and feelings regarding the overall program and activities (Spradley, 1979). The specific program questions were listed on the second page in an effort to prevent any potential influence on the general question responses.

The participant responses to the questionnaire were transcribed word for word. Initial coding was conducted on the combined text of all of the participant responses. Descriptive codes were used to summarize the basic topic of a passage of the transcribed text (Saldaña, 2009). These codes were used as initial themes to group participant responses. In some cases, a passage of text was assigned in more than one thematic category based on the ideas that were presented. Table 1 displays a list of initial themes:

Table 1: CIT/LEAP End of Program Evaluation Participant Response Initial Themes

Ability to achieve goals	Camp activities
Confidence and leadership skills	Leadership opportunities
Paperwork	Perceptions and recommendations
Relationships	Shadowing

Second round focused coding (Saldaña, 2009) began by organizing the passages of participant responses by theme and by program level. The primary goal of this second round of coding was to develop a sense of the concepts that were represented within each thematic category at each different program level. Reports detailing the transcribed text assigned to each theme were printed according to program level. These reports were analyzed for concepts, and the ideas presented within each thematic category were listed.

The results of the second round focused coding were used in a process of axial coding (Saldaña, 2009). The concepts and ideas represented in each thematic category were organized into a program evaluation matrix around the axis of program level. This procedure allowed for both the analysis of each theme across different program levels as well as the analysis of the different concepts and ideas across themes within each level of the program.

Results

Results indicated that program participants had a positive experience and felt that they had increased in confidence, leadership, and their ability to set and achieve goals. Results across program levels indicated too much of a focus on paperwork, a desire for more freedom of choice,

and an interest in having more responsibility. The term “paperwork” was taken directly from many of the participant responses. Questionnaires indicated that participants recognized the value of the program and how the paperwork was helping them, but that there was just too much. This concept was also evident in a usage analysis of participant workbooks. At the beginning of the program, reflections on goals and quality areas were well filled. Over the course of the program, reflections became shorter in length and the workbook pages were not entirely completed. Questionnaire responses corroborated observations by the camp director that competitive comparing with others was occurring on ability to complete the paperwork, and that some participants were left feeling they were not measure up.

Implications

The CIT Program at the Girl Scouts of Utah is improving each year. The curriculum developed in 2013 helped to provide some structure and direction for the program. Based on the results of this study, program improvements for 2014 include: a) re-structuring the program curriculum, b) shortening and re-designing the participant workbook, c) increasing opportunities for leadership and responsibility, d) incorporating elements of choice and multiple learning styles into quality area reflections, and e) using an existing Girl Scouts survey instrument to quantitatively measure program outcomes. Ongoing evaluation and assessment is being used to continue to improve the program and make adjustments based on feedback from youth. For camps, the CPQA Short Form Checklist can be a valuable resource for program development.

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MAKING A CASE FOR UNIVERSITY-BASED CAMP WORK AS A “HIGH IMPACT PRACTICE”

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High impact practices (HIPs) are of growing interest among people working with college students because they represent effective ways to promote 21st Century skills. Based on research on the skills employers seek in college graduates, the Association of American Colleges and Universities (2008) defined 21st Century skills such as personal responsibility, problem solving, and perseverance. HIPs are structured learning experiences that target these outcomes (Kuh, 2008). Rooted in Astin’s (1999) theory of student involvement, HIPs promote development by engaging the whole student (e.g., cognitive, social, physical selves) in realistic and interconnected settings. In colleges, HIPs include study abroad, service learning, and other *deeper approaches to learning*, yet, despite the promise in these approaches, Brownell and Swaner (2009) reported that many barriers prevent widespread access to HIPs for college students.

This problem presents a unique opportunity for the growing number of university-based camp programs that employ college students. In general, working at camp provides benefits that might be considered 21st Century skills, including responsibility and problem solving (Duerden et al., 2014). The ways camp employment promotes personal growth are also well documented (e.g., Garst et al., 2009; Ferrari & Risch, 2013; McClain, 2014). Yet, it is possible these outcomes may vary when camp work is part of the degree process. Research on service learning programs (e.g., Seider, Rabinowicz, & Gillmor, 2012) and living-learning communities (Brower & Inkelas, 2010) suggests that out-of-classroom experiences that integrate real-life processes such as work and daily living are effective HIPs. Therefore, it is possible that summer camp work, particularly when it integrates classroom learning with work experience, might promote similar outcomes. Our study explores university camp work as a HIP by documenting students’ growth in 21st Century skills before, during, and after working at a university-based day camp.

Methods

Mixed methods were used to gather information from students hired as camp counselors at a university-based summer day camp offering traditional camp activities for children ages 4 to 17. A survey was used to assess change over time in three domains selected to represent 21st Century skills. This survey also included open-ended questions to triangulate the survey data.

Sample

The sample was comprised of 40 student-staff members (31 female and 9 male; 31 new and 9 returning staff) who participated in a 10-week, for-credit staff training course that met once a week and included homework and web-based training. Topics included child development, behavior management, health and safety, staff policies, and program planning.

Measurement

Staff members completed an anonymous online survey at the end of their 10-week staff training (Time 1), midway through the 10-week summer (Time 2), and again at the end of the

summer (Time 3). The survey included three measures: the Responsibility and Problem Solving Confidence Scales of the Youth Outcomes Battery (ACA, 2005) and the 12-Item Grit Scale (Duckworth, Peterson, Matthews, & Kelly, 2007). Students responded to the 28 items using a 5-point Likert scale anchored at 1 = “This does not represent me at all” and 5 = “This strongly represents me.” Open-ended questions included “Describe a time this during staff training/during your camp work this summer when you faced a challenge,” and “Describe what skills or abilities you used to overcome that challenge.” Survey results were analyzed using repeated measures across Times 1, 2, and 3. Open-ended responses were analyzed using Braun and Clarke’s (2006) recommendations for conducting thematic analysis.

Results

Survey response rates are as follows: $n_{T1} = 39$, $n_{T2} = 24$, and $n_{T3} = 34$. Twelve of the surveys were matched at Times 1, 2, and 3; 19 were matched at Times 1 and 3. Given these disparities, responses from Time 2 were not included in the repeated measures analysis. Results of a t-test analysis revealed significant change in responsibility ($t(18) = 4.14$, $p < .001$) and problem solving ($t(18) = 4.94$, $p < .001$). Grit was non-significant. Preliminary themes from the qualitative data revealed that grit, especially when it came to dealing with difficult camper circumstances, was an important outcome of the camp work experience.

Implications

The purpose of this study was to better understand a university-based camp as a HIP. Findings suggested that working at a university-based day camp fostered growth in problem solving confidence and responsibility. However, findings related to grit emerged only in the qualitative data. One way camp administrators might use these findings is to market camp work as an optimal choice for the growing number of students who work while in college. Nearly half of all full-time students work 20 or more hours a week on average (Perna, 2010). According to Salisbury and colleagues (2012), work tends to impact college student development in both positive and negative ways. Students seeking employment might be interested in these findings because they suggest that camp work promotes beneficial outcomes similar to study abroad (e.g., Dwyer & Peters, 2004) and service learning programs (e.g., Seider et al., 2012) while providing an income.

A second application of these findings is with university personnel. Many universities face structural barriers to HIPs, including budgetary constraints and mandates to graduate students within strict timeframes. A growing number of colleges and universities are starting to offer summer programs for youth, thus evidence that camp is a HIP might help position university-based camps within larger campus initiatives. There were several limitations to this study because it was the first year of a multi-year project. Additional research is necessary to better understand the specific mechanisms of camp work that foster 21st Century skills.

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DEVELOPMENT OF A COMPETENCY MODEL FOR A STATE 4-H CAMP COUNSELOR PROGRAM

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Camp counselors are one of the factors that contribute to a quality camping experience, and therefore understanding what contributes to their successful performance is crucial. Campers' interactions with counselors can make or break the camping experience. Camp counselors need to know how to perform their multi-faceted role, and those responsible for their training need to be able to evaluate their competencies. The 4-H program is well known for its use of teen camp counselors (Ferrari & McNeely, 2007; Ferrari & Risch, 2013). At present, no existing competency model identifies the skills and competencies that these 4-H camp counselors need. Such a model would provide guidelines to assist in having a better selection process, counselor training modules, and counselor evaluation.

Theoretical Framework

The concepts used in Schippmann (1999)'s competency model provided a frame of reference for developing this study's conceptual framework. In Schippman's model, the available competencies are compared to the competencies required to perform a particular job or role. It is the overlap of the available and required competencies that is the focus of a competency model. Because many items affect the required competencies needed for a quality camping program, it was therefore necessary to describe the camp counselor's role and to review those factors. We also reviewed competency models developed for camp professionals (American Camp Association, 2010), youth workers (Starr, Yohalem & Gannett, 2009), and Extension professionals (Cochran, 2009) as they were most similar to the roles and responsibilities of 4-H teen camp counselors.

Methods and Analysis Procedures

The purpose of this study was to develop and validate a competency model for a statewide 4-H camp counselor program. There are many ways to develop a competency model (Rothwell & Lindholm, 1999). This study used a mixed method research approach similar to that described by Cochran (2009), with an emphasis on qualitative approaches including reviews of existing research and gathering data from 4-H educators through interviews and group processes. Peer debriefing and survey research were used to validate and further refine the results. The research design included data gathering, analysis, integration, and peer debriefing in four phases: (a) review of literature, document review, and idea generation; (b) new model development; (c) model validation; and (d) final refinement and confirmation.

The instruments we developed for the first three phases used open-ended questions to generate ideas. In the first phase, a group of 11 4-H educators with a camping specialization along with two administrators generated competencies and prioritized them using a modified nominal group technique. In response to a series of prompts, participants individually listed ideas, shared them in a round-robin fashion, and discussed the reasoning behind the ideas. The next part of this process was grouping similar ideas and voting on the top 20 of 91 in order of importance. After peer review and analysis of the data, a list of 13 competencies were identified. The second phase consisted of refining the competencies and generating behavioral indicators of the competencies. A series of three focus groups involving a total of 20 4-H professionals was used. The third phase involved going back to the initial group of 4-H educators and

administrators and having them identify any changes that needed to be made. Finally, in the fourth phase we developed a questionnaire based on data generated from the previous phases to validate the competencies and identify any needed refinements. This questionnaire used a five-point Likert-type scale ranging from not important to essential to rate the importance of each competency and key action. Open-ended questions were included so respondents could clarify their responses or provide additional comments. It was sent as an electronic survey to all 156 4-H professionals in the state (54.4% response rate). Validity was accomplished using member checks and peer review. Upon completion of these steps and referring to existing literature, we made a few minor changes to construct the final model. More detailed explanation of these procedures is described by Epley (2014).

Results

The findings of this study are represented by two documents, the *Roles and Responsibilities of Ohio 4-H Camp Counselors* and *Ohio 4-H Camp Counselor Competency Model*. Sixteen key points were identified as roles and responsibilities. The areas of these roles and responsibilities included caregiving, program management, and teaching. The Ohio 4-H Camp Counselor Competency Model identified and described a set of 15 core competencies that were relevant across Ohio 4-H camp counselors. The core competencies identified were: child and adolescent development knowledge; communication; cultural awareness; health, wellness, and risk management; personal commitment; professional development; professionalism; program planning; role model; self-direction; supportive relationships; teaching and facilitating; teamwork and leadership; thinking and problem solving; and understanding organizational and camp environment. Each competency was further described with a definition and three to seven key actions. An example follows:

Competency: Program planning

Description: designs, creates, and plans for appropriate programs and workshops to engage all participants; is prepared to implement these programs.

Key Actions:

- Contributes meaningfully to committees, brings ideas, and voices opinions when planning events.
- Generates ideas that are new or creative but incorporates an educational component to these activities or programs
- Thoughtfully plans lessons, generating and understanding a detailed list of steps while keeping in mind the ages of campers, available location and timeframe, and the finances and resources needed while relating activities to the goals of camp.
- Works plan and creates program with a team and includes resource people as needed.

Conclusions and Camp Applications

This study focused on developing and validating a competency model to use with Ohio 4-H camp counselors. These counselors have a multi-faceted role that involves supervising, leading, delivering, conducting, directing, and teaching a 4-H program for the campers who are learning and having the opportunity for positive youth development (McNeely, 2004). In doing so, counselors are integral to the success of a camping program. By identifying counselor competencies, the necessary performance of effective individuals is identified, which has an impact on the outcomes of an organization or program (McClelland, 1973).

The product of the research reported here was the *Ohio 4-H Camp Counselor Core Competency Model*, a model that identifies 15 core competencies, including definitions and key

actions that further illustrate each. The competency model represents organizational preferences, is customized to the organization, and has high face and content validity. This competency model will be used as a set of guidelines to assist in having a better counselor selection process, to develop counselor training modules, and to act as a benchmark for counselor evaluation.

The study extends the research in the field of camping by identifying a core competency model for 4-H camp counselors. This model was the first such model to be developed. This research documented a process from initial information gathering through validation that could serve as a model for other organizations with camping programs to use in creating, updating, or refining their own competency models.

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AN EVALUATION OF APPRECIATION, POSSIBILITY, AND FRIENDSHIP SKILLS AT A CAMP FOR YOUTH WITH SERIOUS ILLNESS

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The purpose of this study was to understand the outcomes of appreciation, possibility, and friendship skills in a traditional camp program for youth with serious and life threatening illnesses. A second purpose was to use American Camp Association's (ACA) Friendship Skills outcome measures with a specific population of campers: youth with serious illness. A third purpose was to explore potential relations between camper self-reports of appreciation, possibility, and friendship skills, and reports from parents/caregivers on these measures.

The Hole in the Wall Gang Camp is dedicated to providing "a different kind of healing" to seriously ill children and their families throughout the Northeast, free of charge. Campers were youth living with cancer, sickle cell, HIV/AIDS, metabolic disease, hemophilia, and other life-threatening illnesses, and their siblings. Nine camp sessions ran for seven days each, and Hole in the Wall served 1,061 youth aged 7-15 years in the summer of 2014. Hole in the Wall offered traditional camp activities such as arts and crafts, fishing, theater, and campfires. No specific medical or psychosocial educational activities were conducted.

Other studies have been done with Hole in the Wall (e.g., Carlson & Cook, 2007; Gillard, 2014), yet none have examined its core values of appreciation and possibility nor used standardized measures. Appreciation is defined by Hole in the Wall as "We recognize the generosity and gratitude of others and intend to exemplify that in all our decisions and actions." Possibility is defined as "All aspects of our community are designed to allow every individual inspired by Camp to believe that the impossible can be possible." The development of friendship skills (i.e., making friends and maintaining relationships; ACA, 2011) is not a core value, but members of Hole in the Wall believe friendship is an important potential outcome of camp.

Appreciation is important to consider at Hole in the Wall because it is one possible protective factor for campers living with serious illness needing resilience. Possibility is important because a driving philosophy of Hole in the Wall is that at camp, youth can do what they have been told they cannot do because of their illnesses. Serious illness affects friendships with others such as connecting with peers and disclosing their illnesses to others. Youth with serious illness typically lack many opportunities to develop friendship skills due to hospitalizations, bullying, and delays in meeting developmental milestones.

Theoretical Framework

Because of their life experiences, youth with disabilities such as chronic and serious illnesses can particularly benefit from supported camp experiences (e.g., Brannan, Arick, & Fullerton, 1996; Goodwin & Staples, 2005). Developmental Systems Theory was the foundation for understanding individual-context interactions. The essential process of development involves changing *relations* between the developing youth and their changing contexts, and acknowledges that youth are embedded in a larger social context (Lerner & Castellino, 2002). In a camp setting, the context created by counselors and other adults has bearing on campers' developmental progression, and in turn, campers' development helps shape the camp context. Hole in the Wall's program approach contained key elements of the Developmental Systems Theory notion of "fit:"

activities and experiences that were developmentally appropriate, interesting, and engaging, and that provided support via interactions with caring others and opportunities for building skills.

The purpose of this study was to explore from the two perspectives of campers and parents/caregivers the extent to which campers experienced appreciation and possibility and increased in friendship skills.

The evaluation questions were:

1. To what extent did campers experience appreciation and possibility?
2. Did campers' friendship skills increase?
3. How did parents/caregivers perceive changes in their children's friendship skills compared to campers' perceptions?

Methods

Parent or caregiver consent was obtained for camper study participants. Camper study participants completed questionnaires on their last afternoon at camp, using iPads with the iSurvey app. A collaborative approach toward scale creation included conversations and review of the camper survey with key program staff. Seven questions comprised the outcome scale of "appreciation." Examples of questions included "During Camp, I had a strong feeling of being thankful" and "I reflect on how important my friends at Camp are to me." Six questions comprised the outcome scale of "possibility." Examples of questions included "I'm good at doing the activities at Camp" and "Everyone at Camp could do all the activities." Six-hundred and forty-two camper study participants completed appreciation and possibility questions. Four-hundred and ten campers study participants aged 10 years and older also completed the 14-item friendship skills scale (ACA, 2011).

Two-hundred and twenty parents/caregivers completed online surveys after each session. Parents/caregivers answered one item each about their perceived changes in their children's appreciation and possibility, and completed the four-item ACA parent-perception friendship skills scale. Examples of questions were "My child makes friends," and "My child empathizes with friends." Camper and parent/caregiver data on the three outcomes were analyzed using descriptive statistics. Relationships between camper and parent data were explored using t-tests.

Results

Campers reported gains in all the outcomes measured. Appreciation ($M = 4.48$, $SD = .56$, $\alpha = .695$), and possibility ($M = 4.26$, $SD = .60$, $\alpha = .686$) were both out of 5. Friendship skills ($M = 2.49$, $SD = .58$, $\alpha = .943$) were measured from -1 to 3, and campers also had fun (scale of 0-3; $M = 2.49$, $SD = .59$, $\alpha = .975$). Regarding parent/caregiver and camper perceptions of friendship skills, there was a notable difference between camper ($M=1.38$) and parent/caregiver perceptions of friendship skills gained ($M = 2.01$). This difference between means of .63, $CI [.52, .75]$ was significant ($t(627)=10.8$, $p < .001$).

Discussion and Implications

Campers agreed that they experienced appreciation and possibility at camp, and reported that their friendship skills increased and they had fun during camp. That so many campers experienced such positive outcomes is important for youth with serious illnesses who typically struggle to develop social and personal outcomes because of their isolation and delays in development due to illness (Miauton et al., 2003; Woods, Mayes, Bartley, Fedele, & Ryan, 2013). The findings from this study provide evidence of alignment between camp's values and camper outcomes.

The finding that parents perceived that their children gained more than the campers thought they did was interesting, but not surprising. Initial psychometric testing of the parent perceptions tool (Sibthorp & Bennett, 2013) indicated low correlations between camper and parent reports-- what makes camp successful for campers is not always well-aligned with parents. Another reason for this difference is that in our study, the time between when campers completed their surveys (i.e., at the end of camp) might have magnified outcomes a few days or weeks later when parents/caregivers completed surveys. A third possibility is that parents/caregivers had an inflated perception of the effect of camp on children because they wanted to believe that their investment of time and effort in sending their children to camp was warranted.

This study contributes to the camp profession by sharing tested tools to examine the outcomes of appreciation and possibility, expanding the use of the friendship skills scale to a medical specialty camp, and providing encouragement to collect data from multiple perspectives. Future considerations include measuring campers' changes in appreciation, possibility, and friendship skills from the additional perspective of adult counselors and relating these data to data from campers and parents/caregivers. As camp professionals continue to find ways to "imagine, inspire, and impact" through the power of camp, this study provides additional documentation of the impact of camp from the perspectives of campers and parents/caregivers while providing inspiration for intentional and imaginative programming.

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MORE THAN JUST SERIOUSFUN: THE IMPACT OF CAMP ON RESILIENCE FOR CAMPERS WITH SERIOUS ILLNESS

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Children living with serious medical illnesses experience unique challenges and stressors, especially throughout the course of their illness and treatment. Experiencing this adversity can lead to psychosocial difficulties for children living with illness. However, having a strong capacity for resilience - the ability to thrive despite adversity - plays a critical role in their positive growth and development (Eilertsen, Rannestad, Indredavik, & Vik, 2011; Martinez, Carter, & Legato, 2011; Masten & Gewirtz, 2006). Research highlights that social support (i.e., having good friends) is one of the strongest predictors of children's capacities for resilience (Torres, Southwick, & Mayes, 2011). Children living with illness, however, may miss out on opportunities to make friends, which can have profound negative psychosocial impacts (Ishibashi, 2001). Residential summer camps for children living with illness have the potential to promote children's relationship skills by providing a unique opportunity for children to make friends with peers who have shared experiences.

The purpose of this study was to examine the potential impact of attending a residential summer camp on camper's social and psychosocial outcomes. Specifically, our research question was: What social and psychosocial changes did children living with serious illness experience following a one-week residential summer camp (e.g., psychosocial quality of life, relationship skills, ability to make friends)?

Theoretical Foundations

A child's capacities for resilience – the ability to thrive in the face of adversity – are critical for positive growth and development (Masten & Gewirtz, 2006). Resilience plays an especially important role in the lives of SeriousFun campers and their families as children and adolescents living with serious medical illness experience challenges related to illness and treatment that can lead to serious stress and psychosocial difficulties (Eilertsen et al., 2011; Ishibashi, 2001; Martinez et al., 2011). A growing body of evidence suggests that friendships and social support play an especially important role in the lives of children and adolescents living with serious illness. Studies including children living with illness (e.g., cancer, atopic dermatitis, Duchenne muscular dystrophy) have found that social support (friendships) relates to self-reported resilience (Kim & Yoo, 2010), positive coping abilities, parent-rated psychological adjustment, and the ability to cope with family stress (Herzer, Umfress, Aljadeff, Ghai, & Zakowski, 2009), even after controlling for demographic variables such as age, gender, religion, number of siblings, and duration and type of illness. Studies have also found that children who have a strong network of support are better able to cope with illness.

Together, these findings highlight the critical role that social support plays in helping children and adolescents cope with the stresses associated with serious medical illness. Finding ways to help children living with serious illness develop the relationship skills critical to create networks of social support such as through attending camp, may help them feel comfortable developing friendships and coping with illness and illness-related challenges. Using this theoretical foundation, we examined the impact of attending a SeriousFun residential camp on children's psychosocial outcomes.

Methods

Participants and Procedure. Five camps in the SeriousFun Children's Network were selected to participate in a study during the 2014 camp season (3 camps in the United States, 1 in Italy, and 1 in Hungary). Caregivers of campers participating in one of two week-long camp sessions were selected to participate in phone surveys as part of the camp enrollment process. Families who agreed to participate were contacted via phone to answer questions on a survey lasting approximately 12-15 minutes. Invitations to participate in the surveys were distributed to approximately 850 parents/caregivers during the camp enrollment period. At pre-test, 645 surveys were completed, resulting in a 76% response rate. At post-test, 481 surveys were returned, representing a 57% response rate.

Measures. *Children's capacities for resilience.* The Connor- Davidson Resilience Scale (CD-RISC) was used to assess two aspects of children's capacities for resilience: emotional reactivity and relationship skills. The CD-RISC is a 25-item questionnaire rated on a 5-point scale from 0-4, with higher scores indicating greater resilience. This measure has been shown to demonstrate strong internal consistency (Cronbach's $\alpha = 0.89$) and convergent validity (Connor & Davidson, 2003). *Psychosocial difficulties.* Children's psychosocial difficulties was measured using the Pediatric Quality of Life Inventory (PedsQL; Varni, Seid & Kurtin, 2001). The PedsQL uses 15 items to assess problems associated with emotional, social, and school outcomes using a Likert scale. Higher scores imply more difficulties with psychosocial outcomes (e.g., more difficulty getting along with friends). The PedsQL also exhibits sound psychometric properties with a reported $\alpha = .90$ for the Total Score Self-Report.

Results

A summary of descriptive statistics revealed that the age range for campers was 6.1-18.1 years with a mean age of 12.8 years ($SD = 2.58$). Forty-eight percent of campers were male and 52% were female. Campers reported a range of diagnoses including leukemia, sickle cell anemia, Crohn's disease, and others. Sixty-one percent of respondents had attended camp before. Although not statistically significant, the group of children who had attended camp before had slightly lower scores on the psychosocial difficulties measure than children who had not been to camp before ($p = .08$). No other differences were detected across the two groups.

Following camp, parents reported noticing change in a range of camper attributes. For example, 66% of parents reported that their child demonstrated an increased interest in social activities following camp, 79% reported increased confidence, 77% reported increased self-esteem, and 64% reported an increased sense of belonging. Paired t-tests were used to investigate statistical differences in a range of social and psychosocial outcomes. Specifically, campers experienced significant decreases in psychosocial difficulties (PedsQL) following camp, $t(478)=6.68$, $p < .001$. Campers demonstrated significant increases in relationship skills (CD-RISC), and in their ability to make friends following camp, $t(478)=-6.53$, $p < .001$ and $t(478)=-4.93$, $p < .001$. Importantly, children's relationship skills one month after camp significantly predicted children's psychosocial difficulties at post-test, with children exhibiting higher relationship skills experiencing fewer psychosocial difficulties, even after controlling for children's age, gender, and scores at pre-test, $t=-5.83$, $p < .001$.

Implications

Results from our study highlight the impact that attending a residential summer camp can have in promoting psychosocial well-being and relationship-building skills for campers living with serious illness. Findings from the study provide evidence to support the role of the camp experience in promoting children's capacities for improved psychosocial quality of life. Changes

from pre-camp to post-camp are seen in a variety of factors including confidence, self-esteem, and a sense of belonging. Additionally, campers showed significant gains on a number of standardized assessments measuring relationship skills and decreased psychosocial difficulties. Although these results are promising, this study is limited in that we did not have a control group to compare against our sample, which limited our ability to attribute the findings solely to camp participation.

Our results indicated that camp may have a significant and lasting positive impact on children's lives. An important next step is to survey families again at six months after camp to investigate the lasting impact of these findings. The improvement in children's relationship skills and psychosocial quality of life and the consistency of these effects over time have implications for other camps working to promote growth and development for all children. These findings have the potential to inform camp programming to intentionally target opportunities for children to build relationship skills as a means for improving psychosocial quality of life.

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A MIXED-METHODS EVALUATION OF A PSYCHOSOCIAL CAMP PROGRAM FOR CHILDREN LIVING WITH HIV IN VIETNAM

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Camp programs often serve as interventions for children with health or social challenges. However, evaluations designed to understand how these interventions translate into campers' outcomes are needed to refine and improve camp programming. A team of camp program staff, sponsor organization representatives, and public health researchers from San Diego State University (SDSU) evaluated SeriousFun Children's Network Global Partnership Program (GPP) "Camp Colors of Love" in Vietnam. SeriousFun partners with Worldwide Orphans Foundation (WWO) to implement camp. GPP camps around the world host activities for children living with HIV (CLHIV) to promote positive attitudes, increase understanding of HIV and antiretroviral therapy (ART), and build resilience in a safe, accepting setting.

CLHIV face physical, emotional, and social development challenges. Many developing countries received pediatric ART regimens in 2004, causing lower morbidity and mortality. However, careful ART adherence is necessary to avoid opportunistic infections and drug resistance (Candiani et al., 2007; Secord & Cotronei-Cascardo, 2007). CLHIV may also experience anxiety, depression, developmental delays, and social isolation/stigmatization (Giannattasio et al., 2011; King et al., 2009). Strong social relationships and support are essential for emotional health and development for children with serious illnesses; deficiencies in these areas may impact illness severity and mortality (Cohen, Doyle, Gwaltney, & Skoner, 1997; Rozanski et al., 1999; Sapolsky, 2004).

This mixed methods study aimed to: (a) assess campers' pre- to post-camp changes in outcomes including: HIV knowledge, self-reported ART adherence, personal hygiene, attitudes about ART and living with HIV, and social relationships; and (b) use caregiver interviews to understand how quantitative outcomes relate to camp activities.

Theoretical Foundations

This study was grounded in the Social Ecological Model (SEM; Bronfenbrenner, 2009), adapted using an evidence-based pediatric ART adherence conceptual framework (Haberer & Mellins, 2009; Stokols, 1992). SEM recognizes the complex relationships between individuals and their environment pertaining to protective or risky health behaviors. According to SEM, the camp intervention may change outcomes by altering different levels of influence: individual (e.g., ART attitudes), interpersonal (e.g., peer relationships), community (e.g., HIV support resources), and societal (e.g., perceived stigma; Glanz et al., 2008; Stokols, 1992). For analysis, we identified covariates representing these influence levels.

Methods

Trained data collectors administered questionnaires to campers and caregivers before ($n = 78$) and three months after camp ($n = 57$). Questionnaires included items developed collaboratively with camp staff to reflect camp activities. We also included adapted measures used in other studies of CLHIV. Trained interviewers conducted interviews with caregivers ($n = 16$) three months after camp, discussing questionnaire domains to clarify how children's

outcomes related to camp activities. Data collection instruments were translated, back-translated, and checked by WWO staff.

We used random effects linear/logistic multivariate regression techniques to identify outcomes showing significant change over time after adjusting for covariates. To assess disparate effects of camp interventions among children most in need of help, we compared changes in means scores over time between the pre-camp lowest scoring quartile and the higher scoring three quartiles using Student's T-test, McNemar's Chi-square or Exact tests and Cohen's *d* effect size statistic. For the post-camp caregiver interviews, a coding scheme was developed to collate thematic segments of text; content analysis techniques were used to identify similarities and variations on themes caregivers discussed.

Results

After camp, children were three times less likely to report missing a dose of ART in the previous week ($p < 0.10$) and had statistically significant increases in the following mean outcome scores (out of 100 possible points): HIV knowledge (13.5 points, $p < .01$), attitudes towards taking ART (4.9 points; $p < .01$), peer relationships with other CLHIV (16.2 points; $p < .01$), and personal hygiene behaviors (3.5 points; $p < .10$), adjusting for covariates. Those in the lowest quartile improved more after camp than those in the highest 75%. Effect size calculations showed medium to large improvements in most outcomes among the lowest quartile, compared to small or negligible effects for the whole camp group. Children in the upper 75% before camp showed small to medium-sized improvements or losses in mean scores. Caregivers attributed their children's improved HIV knowledge, ART adherence, and hygiene behaviors to camp activities designed to teach and explore HIV-related topics. Caregivers linked positive changes in emotional/social outcomes to how children learned to relate to and care for others, and to spending time with other CLHIV.

Implications

Camp directors know each child's camp experience differs. This study elucidates an important dynamic between struggling and thriving children, especially important for camps serving children with special needs. After camp, multiple outcomes improved significantly averaged across all campers. However, evaluating the entire camp group's improvements may be insufficient in camps with diverse attendees, as different groups may negate each other's effects. Particularly, the lowest quartile group improved dramatically after camp, while the higher 75% experienced less improvement or diminished outcomes. Ceiling effects may explain these losses, as higher scoring children had less room for improvement. However, camp may also expose children to harsher realities of illness by meeting campers who are struggling. Camp serves as a supportive environment for this exchange to occur- both groups attending camp to learn from each other is important. Camp directors also understand that children benefit from camp, but may not have a clear understanding of which aspects of camp influence specific outcomes. In their interviews, caregivers attributed campers' behavioral improvements to knowledge gained from HIV-related camp activities, and psychosocial improvements to specific aspects of the camp's social environment. Limitations of this study include lack of a comparison group, high loss to follow up, and small sample size.

This study benefits camp staff demonstrating how stratified results for different groups and using both quantitative and qualitative data can link camper characteristics and specific

camp activities/attributes to outcomes. Next steps may include developing camp program logic models to reflect links between activities and outcomes, and using propensity scoring to develop *lowest quartile* camper profiles so that staff can predict which groups of children will need greater support and to ensure balanced recruitment of children who will benefit the most from camp.

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ASSESSING CREATIVITY VIA DIVERGENT THINKING IN RESIDENTIAL CAMP SETTINGS

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The American Camp Association National Board of Directors recently created a work group to focus on skills learned at camp, which included creativity (Sheets, 2013). Prior creativity research shows having choice and opportunities to try different activities enhances creativity and imagination (Amabile & Gitomer, 1984). Amabile (1984) found that giving children the opportunity to choose materials rather than assigned to materials resulted in more creative outcomes. Constraints to choice may be detrimental to creativity and imagination. Further research demonstrated that informal and semi-formal environments, as opposed to formal environments, supported growth in creativity (Thomas & Berk, 1981). Traditional camp is considered an informal educational environment (Goor, 1977) where children have choice, exposure to varied activities, and time for free play. Free play and pretend play have been empirically related to measures of creativity and divergent thinking (Russ, 2014). Meanwhile, creativity, pretend play, and imagination have been devalued in schools, which hinders children's abilities for self-expression and flexibility of thoughts. Creativity, specifically divergent thinking, has been on a decline among US children since 1990 (Kim, 2011).

Creativity "...is the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (Plucker, Beghetto, & Dow, 2004, p. 90). A key component of creativity, and more specifically creative problem solving, is divergent thinking. Divergent thinking is the cognitive process of developing multiple responses to open-ended questions compared to convergent thinking, which represents the process of developing one or a few correct solutions to problems (Kaufman, Plucker, & Baer, 2008). Conceptualized and developed by the creativity field's pioneering researchers (i.e., J.P. Guilford and Paul Torrance) divergent thinking has been linked to personality traits such as openness to new experiences (McCrae, 1987). Divergent thinking tests are continually used in today's research to assess creativity (Kaufman et al., 2008).

Creativity is in high demand both in educational settings and in the workplace (Russ, 2014). Research has indicated that certain environments and programs help to promote divergent thinking and creativity (Goor; 1977; Russ 2014). Many camp professionals, parents, and alumni, have long held beliefs that attending camp and taking part in creative activities at camp leads to growth in creativity. Yet, little research has demonstrated this via divergent thinking tasks. Our research aims to test those long held beliefs in exploring creativity, specifically divergent thinking, as an outcome of residential camp.

Methods

Data were collected at two residential camps in New England during the summer of 2014 using a modified version of Guilford's Alternate Uses Task (1967) and a short demographic questionnaire. The Alternate Uses Task is widely used in creativity research to assess divergent thinking.

The pre-test was administered during the first day of camp and the post-test was administered during the last full day of camp. A short demographic questionnaire was also administered after the pre-test, which included activities that each camper chose to take part in during the two-week session. The activities were designated, by the researchers, as either artistic

or not artistic. Activities designated as artistic were: arts and crafts, photography and woodworking. Non artistic activities were: basketball, archery, and tennis.

Repeated Measures ANOVA using SPSS was used to determine variance of responses from the campers. The responses were matched from the first assessment to the second assessment. Each assessment was scored based on number of responses. The assessments were identified and coded using the demographic surveys that were handed out during the initial pretest. Scoring for the creativity assessment was based on *fluency* (i.e., number of responses given per task), *flexibility* (i.e., number of categories), and *originality* (i.e., statistical infrequency of responses). Examples of questions asked from Guilford's Alternate Uses Task (1967) were: "Name all the uses for a brick" or "Name all the uses for a plate".

Results

A total of 189 campers 8-15 years old participated in this study. There were 89 boys (47.1%) and 100 (52.9%) girls. Most campers were 11 (18%), 12 (19%), or 13 (24.3%) years old. The sample consisted of 90.3% Caucasian children. 40.7% of campers were in their first year while 59.3% had been at camp for 2 or more years.

The overall sample (Table 1) shows a statistically significant increase in fluency scores between pre and post-tests. When separating gender, boys had significant increase for one item whereas girls showed significance across all items. If a camper took a more artistic activity their fluency score was higher than the campers who did not participate in any artistic activities (Table 2 & 3).

Overall Sample Fluency (Table 1)

Creativity Measure	Mean	N	SD	t –score	Sig.
Fluency Pre Test (Brick)	11.709	189	5.353	-6.375	.000
Fluency Post Test (Blanket)	14.423	189	6.687		
Fluency Pre Test (Fork)	11.571	189	5.867	-2.575	.011
Fluency Post Test (Plate)	12.672	189	7.005		
Overall Fluency Pre Test	11.640	189	5.110	-5.452	.000
Overall Fluency Post Test	13.547	189	6.268		

No Artistic ACTIVITY (Table 2)

Creativity Measure	Mean	N	SD	t –score	Sig.
Fluency Pre Test (Brick)	12.371	70	5.451	-2.111	.038
Fluency Post Test (Blanket)	13.900	70	6.536		
Fluency Pre Test (Fork)	11.471	70	6.678	-1.320	.191
Fluency Post Test (Plate)	12.428	70	6.987		
Overall Fluency Pre Test	11.921	70	5.592	-2.127	.037
Overall Fluency Post Test	13.164	70	6.165		

1 or More Artistic ACTIVITIES (Table 3)

Creativity Measure	Mean	N	SD	t –score	Sig.
Fluency Pre Test (Brick)	11.319	119	5.280	-6.600	.000
Fluency Post Test (Blanket)	14.731	119	6.783		
Fluency Pre Test (Fork)	11.630	119	5.362	-2.234	.027
Fluency Post Test (Plate)	12.815	119	7.121		
Overall Fluency Pre Test	11.474	119	4.820	-5.289	.000
Overall Fluency Post Test	13.773	119	6.342		

Implications

Results showed significant increases in mean fluency, flexibility, and originality scores

from the first day of camp compared to the last full day of camp. Further, campers' fluency scores increased more if they chose to take one or more artistic activities rather than no artistic activities. These findings relate to the influence of creativity enhancement within informal environments (Goor & Rapoport, 1977; Thomas & Berk, 1981) and the processes (i.e., activities) that Plucker et al. (2004) described in their definition of creativity. While clear declines in US children's creativity have occurred (Kim, 2011), participation in residential camp, and artistic programs at camp, may counter this trend and lead to growth in creativity. Before more definitive conclusions can be drawn, this research should be replicated across more residential camps as well as other types of camps (e.g., day camps, travel camps, sports camps).

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EXPLORING THE USE OF STRUCTURED COUNSELOR JOURNALS AS A CAMP IMPLEMENTATION EVALUATION TOOL

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Implementation evaluation aims to understand how well a program operates when delivered to participants (Rossi, Lipsey, & Freeman, 2004). The implementation literature has identified four main dimensions of implementation: fidelity (adherence to curriculum), quality of delivery (facilitators' skills), program adaptation (changes made to the program), and participant responsiveness (enthusiasm and participation; Berkel, Mauricio, Schoenfelder, & Sandler, 2011). A low percentage of studies address implementation evaluation in any way, let alone more than one of these dimensions in one evaluation (Berkel et al., 2011; Durlak & DuPre, 2008). Information provided by implementation evaluation methods can be used to make intentional program modifications.

Our study is a collaboration with two camps in a Girl Scout council (GSC) in the Midwest. This council is looking to revitalize and enhance its approach to both outcomes and implementation evaluation for its camp offerings. The Girl Scouts of the USA takes a research- and outcomes-based approach to their programs through the establishment of the Girl Scout Research Institute (Girl Scouts of the United States of America, 2014). The Girl Scouts of the USA has identified three main program processes important to the development of the outcomes in their programs: Girl Led, Cooperative Learning, and Learning by Doing. The organization has developed evaluation items to measure the presence of these Girl Scout processes in programs primarily from the participant or parent perspective.

Tools available to recreation and camp programmers to assess implementation factors are limited (Morgan, 2012). Implementation evaluation literature indicates that collecting data from the facilitators of experiences is a useful and convenient method of effective implementation evaluation (Morgan, 2012; Tucker & Rheingold, 2010). Currently, the tools available to measure the presence of the Girl Scout processes focus on the participant and parent perspectives, but not yet the counselor perspective. Consequently, the purpose of this study was to explore counselor journaling as a method of implementation evaluation for GSC summer camps.

Methodology

Participants for this research project were camp counselors employed to work directly with campers during Summer 2014 at two GSC summer camps--one resident camp and one day camp. A total of 14 counselors participated. All participants were females between 18 and 27 years in age (mean = 19.93 years old) with between 1 and 4 summers of experience working at the camp (mean = 1.79 summers).

Each participant completed a "Counselor Implementation Journal" during the final five weeks of Summer 2014. Participants completed one daily journal sheet at the end of each camp day. The journal sheets were modeled after the structured journal used by Morgan (2012). Each journal sheet asked questions about the types of activities counselors did with campers that day (i.e., "Please check all of the activities you engaged in with your campers today"); how frequently the Girl Scout processes were employed (i.e., "Please rate how frequently each of the following Girl Scout processes occurred today with your campers" – 13 items on a scale from 0

= Never, 1 = Some of the Time, 2 = Most of the Time, and 3 = Always); reasons for not employing the Girl Scout processes (i.e., “Please comment on any of the above items for which you answered *Never* and why those processes did not occur today”); and what activities campers most/least actively participated in and seemed most/least interested in. The journal was designed to capture information regarding three of the four implementation factors from the counselor perspective: quality of delivery (i.e., Girl Scout processes), adaptations, and participant responsiveness.

Additionally, the participating counselors took part in a focus group about the implementation of GSC camp programs and the journaling process at the end of Summer 2014. Focus group questions sought to understand the counselors’ experiences completing the journal sheets and their perceptions of the results of the journal items (use of Girl Scout processes, adaptations, and participant responsiveness). The researchers analyzed focus group data following Hycner’s (1985) guidelines for the analysis of qualitative data.

Findings

Counselors completed a total of 268 journal sheets out of a possible 382 journal sheets during the 5-week period (70.16% possible journal sheets completed). Only two counselors completed journal sheets on every day they worked with campers during the 5-week research period. Interestingly, counselors from the residential camp reported that they found completing the journal sheets on Sundays and Fridays to be extremely difficult, as these days were check in and check out days for campers during which they had little programming time with campers. As a result, all but two counselors actively chose not to complete journal sheets on Sunday and Fridays during the research period.

Counselors from both camps found that completing the daily journal sheets was a simple, useful process that did not take too much of their time--typically about 10 minutes each day. They reported that the two main barriers they experienced in completing the journals each day were the difficulty of remembering to do the journal sheet each day and that it was one more task to complete in an already exhausting job. Counselors at both camps said that they navigated these barriers by reminding each other to do the journal. Further, counselors at the residential camp said that they found it helpful to complete the journal together as a counselor unit. Counselors at the residential camp also stressed that it was important for them to find the time during the day that was most conducive to completing the journal, rather than simply completing them at the end of the day as suggested by the researcher.

Despite the barriers counselors experienced in completing the journals, all of the counselors expressed that they felt the benefits of the journaling process outweighed the inconveniences. The first benefit reported by the counselors was that completing the journals helped with future planning. For example, one counselor shared that the journal “...helps you adjust your programming, so what the girls don't like, especially if you're like doing the same things – over and over again. You can adjust either what you're doing, or just not do it and do something else.” The second benefit expressed by the counselors was that the journal provided them personal reflection time that gave them some perspective on their day. For example, one counselor said when she had a bad day, she would think, “...tomorrow's a new day, and I can fill up my [journal] sheet and have a much better day.”

The counselors had a variety of suggestions to improve the journal sheets for future use. First, the journal sheet included an additional comments section consisting of an open space for

counselors to record any thoughts they had about the day not covered by the other, more directed items. While a few counselors liked having open space, most expressed concern that they did not know what to write in that section. Many of the counselors reported struggling to differentiate between “actively participated in” and “interested in” in the participant responsiveness section and that they typically put the same answers for both. Third, the counselors from the day camp felt that a section on camper and counselor moods should be added to the journal sheet. They felt that their mood and their campers’ moods impacted how much they would employ some of the Girl Scout processes and the level of participant responsiveness. Finally, counselors from both camps suggested a more extensive training on how to complete the journal sheets, beyond the 20-minute research introduction the researcher offered.

Implications

Morgan (2012) argued that few tools are available for recreation practitioners to evaluate how their programs are delivered; therefore, she sought to “...describe and illustrate how to assess implementation efficacy within recreation programs” with her work (p. 130). This study built on Morgan’s (2012) efforts in the camp setting by exploring counselor journaling as a method of implementation evaluation for GSC summer camps. The structured journal used in this study provided data on three of the four dimensions of implementation suggested by Berkel and colleagues (2011). Counselors found that the journaling process was simple and useful and that the inconveniences associated with completing the journals were outweighed by the programmatic and reflective benefits they received. The findings of this study indicated that structured counselor journaling may be a feasible and beneficial process for implementation evaluation in the camp environment. Further, the findings provide information for specific modifications that can be made to the journal process that could increase the utility of evaluation data. Future iterations of the structured journal sheet will include a camper and counselor energy section, simplify the participant responsiveness section, and include a section that allows counselors to report how much time they felt in control of campers’ programming each day. Further, the researcher will offer a more specific counselor training about the items included in the daily journal sheets, both in person at the start of the summer and then, as expanded written instructions in the journal itself. While our study focused on creating a structured counselor journal specific to processes in Girl Scout camps, the findings of this study could support other camps interested in collecting similar evaluation data on their own processes and programs.

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AN EXPLORATORY STUDY: THE RELATIONSHIP BETWEEN DEVELOPMENTAL OUTCOMES AND SUMMER CAMP ACTIVITIES

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Researchers have identified program components such as high quality youth and staff relationships, or the opportunity to build new skills at summer camp as contributing to a positive youth development experience for campers (e.g., Garst, Browne, & Bialeschki, 2011; Henderson et al., 2007). Roth and Brooks-Gunn (2003) suggested programs focusing on youth development initiatives are most effective when clear program goals are established and the activities meet the varying interests and needs of the participants. Eccles and Gootman (2002) believed positive developmental settings provide “physical and psychological safety, appropriate structure, supportive relationships, opportunities to belong, positive social norms, support for efficacy and mattering, opportunities for skill building, and integration of family, school, and community efforts” (p. 90). While recent research has suggested summer camps can provide youth with a valuable developmental experience, further examination is necessary to identify the key areas where this development is occurring. One area to explore is programming with a particular focus on the potential developmental outcomes of these activities.

Conceptual Framework

Pittman, Irby, and Ferber (2000) believed the developmental outcomes of competence, confidence, connections, character, and contribution were key foci for any youth development program. Thurber et al. (2007) yielded findings showing, as a result of their time in camp, youth developed in four key outcome areas: positive identity, social skills, physical and thinking skills, and positive values. Some specialized camps have been found to use their activities and programs to enhance the developmental outcomes of their campers (e.g. Ramsing & Sibthorp, 2008). While some outcomes have been linked to the campers’ interpersonal relationships in a camp setting, organized activities have not been explored as thoroughly. The conceptual framework for this study was grounded in the previous research initiated by ACA that has identified key areas for developmental growth among campers. Seven developmental outcomes were created for this study based on the previous outcome research conducted by researchers such as Thurber et al. (2007). The purpose of this study was to gain a better understanding of the developmental outcomes that summer residential camps connect to their activities.

Method

My data come from a larger study examining summer residential camps’ operations in one state during 2013. These camps provided a range of services ranging from general activities to highly specialized programs.

A thorough online search of multiple camp association databases, the state department of public health database, and other generalized searches were conducted to identify the camps. Two criteria were required for participation in the general study: owning the property where the camp operated and offering an overnight camp program for a minimum of 3 days. One hundred and ten camps fulfilled these criteria and 36 camps completed the information related to developmental outcomes.

A survey was generated specifically for the general study and was distributed using an online survey system. All data were entered into SPSS, checked for outliers and completion, and descriptive statistics were computed.

Results

Camp organizations were asked to indicate their *primary desired outcome(s)* (i.e., life skills, interpersonal, leadership, activity skills, personal awareness, spirituality, or recreation) for each activity offered during their program. To allow for comparisons across camps, the percentage of activities offered by camps was calculated for each developmental outcome. Descriptive statistics are presented in Table 1.

Descriptive Statistics

Developmental Outcome (Percentage)	N	Min	Max	Mean	SD
Recreation & Enjoyment	34	7.14	100.00	46.32%	32.52
Activity Skills	30	2.38	100.00	44.87%	26.90
Leadership Skills	29	3.23	100.00	25.95%	30.46
Life Skills	26	3.85	100.00	32.46%	33.28
Interpersonal Skills	26	3.85	100.00	31.80%	28.29
Spiritual Development	26	3.23	100.00	27.27%	32.34
Personal Awareness	24	4.17	100.00	31.03%	28.79

An additional analysis was conducted by dividing the camps into two groups. Camps offering between 1 to 17 activities per session were considered the low activity group and the high activity group contained camps offering more than 19 activities. Examining the developmental outcomes in relation to the activity level of the camp did not produce any significant findings. The distribution of activities connected to the developmental outcomes was nearly identical for these two groups.

Implications

Summer camp has been noted to provide positive developmental experiences for campers. Multiple factors such as providing activities unique to the setting, the communal environment, or a focus on establishing positive youth-adult relationships may impact the positive growth and development of the campers (Garst, Browne, & Bialeschki, 2011). Camp administrators are tasked with establishing and implementing a program that is conducive to creating these positive developmental experiences. One area examined for this study was the targeted developmental outcomes sought from the campers' organized activities.

This examination has shown the range of activities camp administrators may use for specific developmental outcomes. A small number of camp administrators noted one or two particular developmental outcomes were linked to all of their programs. The remainder of the sample was split between indicating multiple outcomes were linked to individual activities or one outcome was identified per activity. The low percentage of activities connected to leadership skill development could be attributed to a targeted approach. For example, a Counselor-In-

Training program is an example of one activity potentially designed to target leadership skill development as an outcome. The high percentage of activities connected to recreation and enjoyment could be attributed to the type of activities offered at these camps as well as the camps' goals. Some camps may seek a balance between offering programs for fun versus those targeting specific skills. This possibility potentially explains the second highest frequency for activity skills.

It was anticipated that a greater focus of developmental outcomes would be found among the lower activity groups than the higher activity groups. One might anticipate camps providing a lower number of activities would maintain a targeted approach to developmental outcomes and their activities. This assumption was not the case for this study. There were no significant differences between the two groups due to organizations in both groups indicating multiple outcomes resulted from each activity.

This research has raised additional questions regarding the attribution of developmental outcomes to activities. Evidence is still needed to determine if one activity can provide an adequate experience to result in multiple developmental outcomes or if a targeted approach is superior. Previous researchers have noted the need for systematic and targeted programming when seeking specific developmental outcomes for other youth programs (e.g., Roth & Brooks-Dunn, 2003). Camp administrators may want to consider the specific purposes and desired benefits for all of their activities. This consideration would assist instructors with creating effective lesson plans and establishing appropriate developmental expectations for their campers upon activity completion. Further research examining the size and specialization of camps is also needed for understanding the connection between activities and developmental outcomes in these settings.

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A PEER PARADOX: ADULTS' ROLES IN SUPPORTING YOUTH TO LEARN FROM EACH OTHER

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Even as teenagers reorient more toward peers and less to family, other adults have the opportunity to impact adolescents positively. The manner in which teachers, youth workers, and mentors exert their influence in the context of the relationship, though, is crucial (Larson et al., 2004). While the research on how exactly adults can promote positive development in their day-to-day practice is developing (Mitra, 2008; Zeldin, Christen, & Powers, 2012), the idea of what it looks like for professionals to support youth learning *from each other* is relatively opaque to many practitioners and researchers (Fredricks & Simpson, 2013a).

How youth see adults contributing to their peer experiences is an important piece of this puzzle. In my study teenaged participants at camp were interviewed about how they learned teamwork and where adult leaders fit into constructive peer processes (Larson, Jensen, Kang, Griffith, & Rompala, 2012). Looking into the *black box* of youth programs (Yohalem & Wilson-Ahlstrom, 2010) and examining how youth learn to collaborate will inform camp professionals as they facilitate teamwork in their own programming.

Theoretical Foundations

The systematic understanding of program processes is pivotal for the developmental intentionality that effective camps seek (Walker, Marczak, Blyth, & Borden, 2005). Fredricks and Simpkins (2013b) recently established youth programs as ideal settings for the proliferation of positive peer relations. Meanwhile, Henderson (2012) urged camp professionals to understand and develop the capacity for teamwork and teambuilding among participants. Larson and colleagues' (2004) ongoing, in-depth work in after-school programs served as the most direct methodological and theoretical predecessor to this study. Their qualitative inquiry used youth perspectives to understand adults' role in supporting constructive peer processes and thus, laid the groundwork for my study (Larson, 2007; Larson et al., 2012).

Methods

In this project I collected data from 50 teen program participants at an overnight summer camp over two seasons. Youth were tenth graders and stayed for two- or three-week sessions. Supervised by college-aged leaders, the youth served meals, washed dishes, and cleaned facilities around the camp that most had previously attended as campers.

I conducted a semi-structured interview with each participant. At each step of the research process, modified grounded theory methods—including specific techniques such as coding, memos, and diagrams, in conjunction with broader strategies such as constant comparison and abductive logic—served as the basis of analysis, from informing the creation of the interview guide to analyzing and describing patterns in the data (Charmaz, 2014; Corbin & Strauss, 2008).

Results

From the analysis emerged two major ways that adults played into constructive peer processes. Youth's narratives of teamwork development showed positive adult influence through interactions around work and, less directly, in how they structured the programs. A separate

category emerged regarding how adults' roles in constructive peer processes were limited (and limiting).

Structure

The role of adults in shaping peer processes was tied to dynamic restructuring of the group work and to the positive atmosphere of prosocial values, which were aspects of the program that youth felt made it easier to do and learn teamwork. Several contributions constituted the structural category: program atmosphere, programming, and youth-adult relationships.

In reference to the program atmosphere, youth appreciated the leaders' efforts to make the youth's work enjoyable and to encourage both individual achievement and collaborative endeavors. This finding matched up with the ideas, reported in the youth program literature, that positive developmental settings are effective when experienced as fun (Hansen & Larson, 2007) and when promoting prosocial norms (Lerner, Phelps, Forman, & Bowers, 2009). Moreover, youth in this program saw their leaders adjusting task demands and team groupings in a responsive and dynamic way that set youth up for successful cooperation. Finally, leaders initiated and nurtured warm and supportive relationships, which youth felt were healthy foundations for confident engagement with others.

Interaction

Leaders' interactional efforts complemented structural ones. Youth recognized role modeling, advising, and direct intervention in peer matters as helping them to develop insights for teamwork. Youth spoke of how they drew from leaders' modeling in terms of assertiveness, communication, getting along, kindness, and social skills in general. Leader's advice-giving took a number of forms including whole-group discussions or lectures, and individual encouragement or correction. Youth tended to see these addresses to the group as important for *others* fixing bad behavior, rather than for their own learning. On the other hand, teens in the program appreciated leaders' "respectful" corrections of teamwork errors, advice and encouragement regarding collaboration, and particular strategies for navigating cooperative efforts. Teens sought out their leaders to intervene because of their finesse and when youth were unsure of how to successfully work through a situation with their co-workers. They mentioned how leaders could "prevent chaos" and restrain "out-of-control" youth.

Leaders' Limits

In telling how they experienced and learned teamwork, the teens also brought up times when adults made teamwork harder or otherwise failed to support learning. At times, leader interventions gave temporary solutions and youth themselves had to resolve the problem of a negligent peer. One leader expressed unjust anger at a teen's error without giving her a chance to explain. When such leader missteps were *not* used as examples of how to repair relationships, they were likely to be experienced negatively and cause frustration. Ill-considered attempts at fun could backfire and lead to divisions and tension among youth. Other times, youth simply felt their leaders could have prepared them more adequately for the social situations they would encounter. Some teens resisted the very language that adults could "help" them figure out teamwork, insisting instead, "It's something I can do by myself."

Camp Applications

Camp professionals know how much learning at camp happens among the young people themselves. Administrators train their staff to construct situations that enable prosocial learning and to provide ongoing facilitation. Seeing how youth experience this support grants a valuable perspective for considering adults' roles. The particular ways of modeling, advising, intervening, and structuring opportunities above inform camp practitioners about methods they could use. Even information about role limitations prove valuable for accounts of what may work in a given situation.

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CAMP'S SNEAKY POTENTIAL: LIFE SKILLS WRAPPED IN COMMUNITY

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Wrap HIV/AIDS prevention-education in fun and games, combine it with caring adults trained to help weave together threads of new information, feelings of insecurity, and the realities of children's daily struggles, and you have a powerful intervention known as "camp." This camp context allows youth to disconnect from their everyday lives and connect with possibilities for a different future--one where they are empowered to translate knowledge into action.

Theoretical Foundation and Context

Youth-development research suggests that locus of control and resiliency skills are important because they affect the perception of how much control people have to influence what happens in their lives. Youth with stronger skills in these areas would likely be more successful at staying HIV free after exposure to education if they believe that they play a large role in their future fate. The goal of Global Camps Africa (GCA) is to change the lives of South Africa's vulnerable children and youth by providing HIV/AIDS prevention education and training through high impact camp programs that equip young people with life-skills that will support them in becoming healthy and productive adults with hopes for the future. The purpose of this study is to document targeted outcomes delivered through a multi-site camp program that used the same camp curriculum model to infuse life skills into camp programs.

The work of Global Camps Africa is making an impact on the youth and staff who participate in the program. The evidence is clear on each face and in the warmth of each hug during camp. It is also clear in the quality of the discussions that occur about tough life issues the youth are facing. Our evaluation process was designed to show strengths and weaknesses of the program by documenting what campers reported before and after camp. It is common for life skills programs to document knowledge gains, but the knowledge is of little use if campers do not feel they have the ability to use that knowledge once camp is over. This evaluation process included measures to better understand the campers' outlook toward the future to determine whether those self-reports changed over time in addition to their knowledge.

The residential camp program revolved around a daily schedule with multiple activity periods where male and female campers participated in an activity rotation by age-group. Activities included sports, swimming, theater, arts and crafts, adventure, and nutrition. A specific activity period covered life skills and HIV and AIDS education, and these content areas were also infused into the activity areas.

Methods

In January 2014, 452 campers from eight South African provinces attended a 9-day residential camp at seven locations. A self-report pre-test and post-test questionnaire design was used with scales to assess Knowledge, Attitudes and Beliefs about HIV/AIDS (Hou, 2008; Hou, 2009; Hou & Evans, 2014; Hou & Luh, 2007) as well as scales to document resilience (Wagnild & Young, 1993) and goal orientation (Snyder et. al., 1997) among campers. Parental permission to conduct these surveys was included in the camp application that was completed by the parent/guardian. The pre-test was given as soon as campers arrived and the post-test was conducted on the last day of camp.

Results

Demographics. A total of 449 campers participated in the survey process with matching pre and post questionnaires. The distribution of the seven provinces was: Free State (11.8%), Limpopo (15.1%), KZN (10.2%), Northern Cape (8.9%), Gauteng (28.1%) with 12 campers from North West included), Western Cape (10.7%), and Eastern Cape (15.1%). Ninety-eight percent of the campers were between 10 and 18 years with a mean age of 15.19 years and 62.3% girls. The majority reported they were single and had no boyfriend or girlfriend (65.4%), about 30% indicated having boy or girl friends, and a small percentage (2.7%) reported having friends with benefits. Although the majority indicated they were heterosexual (62.8%), about 10.4% reported they were either bisexual or gay/lesbian, and 26.9% reported that they were not sure about their sexual orientation (26.9%). About 37% reported they knew someone with HIV/AIDS.

Goals, Resilience, & Hope. Three previously validated scales were used to measure campers' goal-orientation (Goals = 6 item), resilience level (Resilience = 14 items), and sense of hope (Hope = 14 items). Data showed statistically significant improvement after the camp program. The scores of all three scales increased after the camp programs. The before and after scores were 26.36 vs. 27.28 for the Goals scale ($p < .01$), 72.92 vs. 76.52 for the Resilience scale ($p < .01$), and 48.10 vs. 49.12 for the Hope scale ($p < .05$).

HIV Knowledge. The section of the questionnaire to measure knowledge about HIV and AIDS had 11 questions. The overall HIV knowledge scores of the campers reported after the camp were statistically significant in their improvement. The campers scored an average of 5.52 out of 11 knowledge questions correctly before the camp, and 6.33 questions correctly after the camp ($p < .001$). Although knowledge scores increased after camp, there is room for improvement on educating youth campers regarding HIV related knowledge and transmission. The five knowledge items with below 50% of the campers answering correctly were mostly about how HIV/AIDS could or could not be transmitted. Overall, campers perceived increased levels of knowledge towards HIV/AIDS in general as (3.54 vs. 3.20; $p < .001$) well as HIV testing specifically (3.34 vs. 2.95; $p < .001$) after the camp program.

Campers' HIV Stigma Related Beliefs and Disclosure Issues. Five scales were used to measure campers' beliefs of HIV related stigma: a) negative beliefs towards people living with HIV/AIDS, b) negative beliefs towards self if infected with HIV/AIDS, c) comfort level of being around People Living with HIV/AIDS (PLWHA), d) discrimination towards PLWHA, and e) disclosure concerns. In general, although some negative beliefs, the level of HIV related stigma beliefs was not high, and campers generally felt comfortable being around PLWHA. The disclosure concerns were about average among these youth campers.

All the stigma related beliefs measured were statistically significant in their decrease at the end of the camp program (i.e., all $p < .05$). Specifically, campers' negative beliefs about people living with HIV and AIDS were greatly reduced. After the camp they were less likely to agree that people with HIV/AIDS are unclean, or HIV is a punishment for things they had done. The negative beliefs towards self if they were infected with HIV/AIDS were also significantly decreased. At the end of camp, youths disagreed more with thinking that they would feel ashamed, unclean, cursed, and not as good as other people if they were to have HIV. They also disagreed more that they would think HIV was a punishment for things they have done and that their family would be ashamed of them.

Implications and Conclusion

Overall, the pre-test, post-test evaluation documented that Camp Sizanani had a statistically significant impact among youth campers on almost all of the measures. At the end of

the camp, campers showed increased scores on goals, resilience towards life, and a sense of hope. In addition, HIV knowledge scores were significantly increased. HIV related stigma beliefs and disclosure concerns were significantly decreased. Intentions towards HIV testing also increased despite that beliefs towards testing remained the same.

It was interesting to note that campers perceived increased confidence on convincing partners to use condoms; yet, reported decreased intention of using condoms in the near future. One explanation could be that campers felt overall less likely to engage in sexual behavior at all, and were therefore, less likely to need to use a condom in the next six months. Specific underlying reasons and interpretation of the question need to be further explored.

Finally, at post-test, although campers scored significantly higher on HIV/AIDS knowledge, and perceived higher knowledge levels on both HIV/AIDS in general and testing specifically, the overall knowledge scores were lower than expected after the camp. The findings regarding change in goals, resilience, and hope were particularly heartening in that these psychological measure are difficult to measure in a short period of time. However, when change was found it was linked to the ability to implement the new knowledge gained.

The results of this study demonstrated that serious outcomes such as life skills associated with risky sexual behavior can be infused in a camp program and those desired outcomes can be documented. The improvements in camper perceptions of outlook for the future offers encouragement that if campers more easily see a positive future for themselves, they are more likely to use the newfound knowledge about HIV/AIDS prevention.

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TRACKING PARTICIPANT GAINS IN PROBLEM SOLVING CONFIDENCE, RESPONSIBILITY, AND TEAMWORK OVER A 32-WEEK PROGRAM

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The purpose of this evaluation was to collect data about three American Camp Association (ACA) outcomes three times during a program to provide a practical example for camp organizations to model when assessing outcomes multiple times. This evaluation displays the impact the program had on participants' problem solving confidence, responsibility, and teamwork skills during a 32-week experiential education-based program for adolescents. This evaluation adds to the camp literature as a new way to show how to track and display outcomes that demonstrate the difference camps make regardless of the number of participants in a program. It is important to account for all participants as camps imagine affecting 20 million participants by the year 2020 with traditional camp, municipal, and school-based programming (ACA, 2014).

Theoretical Framework

While the ACA battery of outcome measures has gained popularity in one-time measures at the end of programs (e.g., Roark, 2012; Roark, Gillard, Evans, Wells, & Blauer, 2012 & 2014), to the authors' knowledge, there is yet to be a study that has documented measures multiple times during a program. Multiple collections are important because it allows practitioners to monitor on-going progress of participants in programs. Considering that participants have an array of meaningful social interactions with one another that inform their acquisition of developmental outcomes, documenting outcomes at multiple times allows for pinpointing what may be producing participant gains at particular moments in a program.

Symbolic Interaction Theory (SIT) informed this study because participants gained meanings from their experience through social interactions and interpretations of interactions with others within contexts (Denzin, 2009; Kuhn, 1964). The program also used a Kolbian (1984) experiential education model in which participants cyclically had an experience, reflected upon it, conceptualized new ideas, and experimented with their learning throughout the program.

Methods

The program served adolescent teenagers who experientially learned about water resources engineering over a 32-week period during the traditional school year at a university in the mountain west (Bear River Fellows, 2014). Participants ($n=6$) were selected through an application process. The inaugural meeting of the program was a 5-day, 4-night river trip. The flat-water river trip included activities such as paddling canoes, setting up camp, cooking meals, measuring river flow and depth, surveying stream bank vegetation and beaver activity, and engaging with guest speakers. Activities were provided under the leadership of the program director and leaders from a university outdoor recreation program (ORP). At the end of the river trip, the participants returned to the ORP facility, debriefed, and completed a 22-item questionnaire.

The questionnaire included the ACA developmental outcomes and definitions of problem solving confidence (i.e., campers' personal appraisals of their abilities to resolve problems), responsibility (i.e., a habit of owning and accepting consequences of personal actions), and teamwork (i.e., beliefs that one can be an effective and productive group member; ACA, 2011). The following stem preceded the items: "How much if any, has your experience as a participant in the Bear River Program changed you in each of the following ways." The instrument response

scale was designed to measure outcome gains. Accordingly, outcomes were measured on a 5-point scale as follows: 1 = decreased, 2 = did not increase or decrease, 3 = increase a little, 4 = increased some, and 5 = increased a lot. Any score greater than 2 indicated a participant gain based on the program.

Participants completed the same questionnaire after completing 1, 16, and 32 weeks of the program, which included participants choosing water-resource projects to investigate and independently solve under the support of their university instructor. The group met weekly on campus to discuss successes and challenges with their projects. The program culminated with participants presenting their projects to one another. Data analysis of mean scores were computed, charted, and compared after weeks 1, 16, and 32, to determine trends between weeks for each outcome.

Results

Overall, the acquisition of the participants' outcomes after weeks 1, 16, and 32 increased for all three outcomes based on their experience with the program. Participant outcome scores ranged from $M = 2.64$ in responsibility to $M = 3.96$ in teamwork. The minimum (i.e., 2) and maximum (i.e., 5) scores were the same for all outcomes each time collected. Of particular interest, the problem solving confidence and responsibility scores increased as the weeks of participation increased in the program. It is reasonable to contribute this gradual gain to the continual increase of participants' responsibility and need to solve problems with their projects over the length of the program.

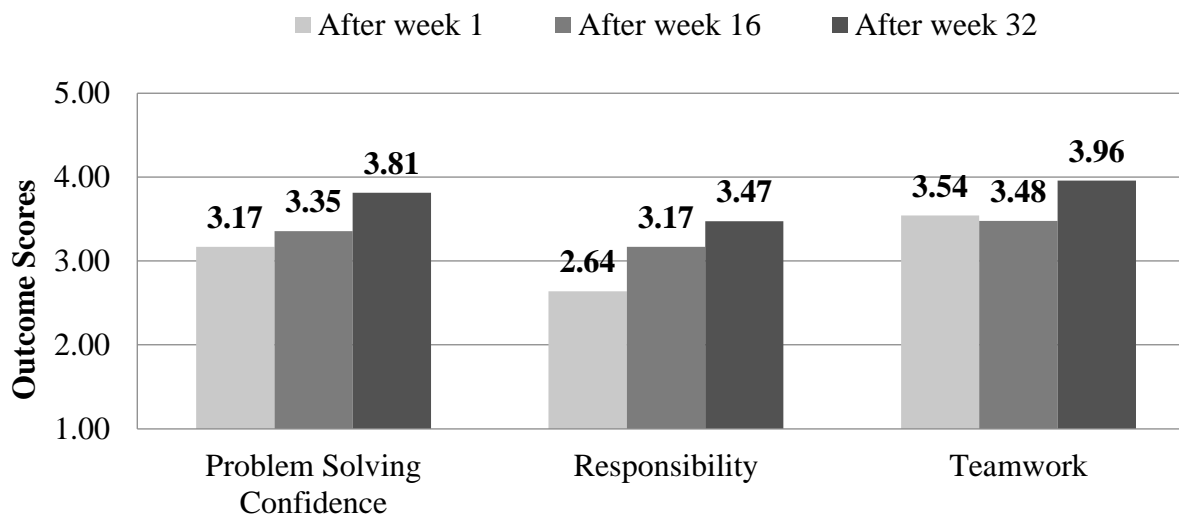


Figure 1. Outcome scores over time.

The highest group average at the end of week 1 was on teamwork ($M=3.54$), indicating that the nature of the river trip had a greater impact on the participants' immediate teamwork gains than the other two outcomes because of the amount of group work required on the river. Participants' teamwork scores stayed about the same with only a .06 decrease as their program experiences moved from a team focus on the river to an individual focus on their projects. After week 16, the program structure included more collaborative group work as well as the sharing of their projects. This group work resulted in teamwork scores increasing between weeks 16 and 32 ($M=3.96$). The above chart shows the participants' gains at week 1, 16, and 32 for problem solving confidence, responsibility, and teamwork, and shows the increasing program impacts over time.

Camp Applications

This study adds to an understanding of how to use the ACA outcome measures to document participant gains. In particular, this study demonstrated how the use of multiple collection points in a program could track the progress of participant outcomes. Directors can use multiple collections during seasonal programming (e.g., fall, summer) when participants are present each week, similar to this evaluation, or can also continue to collect after participants leave seasonal program experiences. The study also provided simple, intuitive, and descriptive evidence of the program's impact on participants. For instance, the above figure is what stakeholders (e.g., funders and director) requested to provide evidence of the program's impact. Programmers can use this study as an example of how to collect participant responses and present them to stakeholders. In this case, the charts used the concept of a single divergent color scheme (e.g., green) that increased in darkness to indicate the length of time in the program (University of Oregon, 2014). Programmers can use the outcomes measured in this study or choose from other ACA measures such as friendship skills, affinity for nature, independence, or family citizenship. The questionnaire can be administered at multiple points of a program, especially camp programs lasting several weeks such as counselor-in-training programs, after-school programs, and day camps.

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**EFFECTS OF A STRUCTURED READING PROGRAM ON CHILDREN'S
ATTITUDES ABOUT READING IN ACADEMIC AND RECREATIONAL SETTINGS**

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Sherwood Forest is a St. Louis-area, year-round youth development agency with programs anchored in a residential summer camp experience. Sherwood Forest serves low-income and economically disadvantaged youth in Missouri and Illinois, with 80 percent of youth living at, or below, the federal poverty line as defined by the USDA Summer Food Service Program.

A structured reading program was implemented for the first time in 2010 at Sherwood Forest to address the issue of summer learning loss. Over the past three years, campers who had completed third or fourth grades took part in the reading program. Therefore, the purpose of this study is to examine the impact of this structured reading program.

Theoretical Foundations

Reading proficiency is difficult for youth to maintain during summer months. While all youth experience summer learning loss, it disproportionately affects low-income youth. According to Terzian, Moore, and Hamilton (2009), low-income youth were more likely to lose an additional two months in reading achievement, even while their middle and upper-income peers maintained or made slight gains over the summer. Additionally, summer learning loss has been found to be cumulative. The researchers indicated that over half of the achievement gap can be attributed to unequal summer learning opportunities. Reading proficiency is linked to later success, including financial stability and graduation rates. Terzian et al. also suggested that the phenomenon of summer learning loss has a greater impact on students who are already struggling in school.

A meta-analysis conducted by Cooper, Nye, Charlton, Lindsay, and Greathouse (1996) found that the effect of summer learning loss varied. When controlling for ethnicity and family economics, reading loss was found to be directly related to family socio-economic status. On some measures, middle-class children made actual gains in reading over the summer, while disadvantaged children showed losses.

The reviewed research suggests a need to address summer learning loss for low-income youth from urban environments. Additionally, research relates the need to assess not only reading skill, but youth attitudes, which are better predictors of long-term reading gains. (Terzian et al., 2009).

Methods

In 2012 campers who had completed fourth grade participated in the first structured reading program called “The Book Club.” Participants in the 2013 and 2014 Book Club had completed third grade. In all three years campers in the Book Club attended a 26-day single gender resident camp session. The Book Club met for 1 ¼ hour sessions on a total of 19 days. The girls focused their reading on *Belle Prater’s Boy* by Ruth White in 2012 and *Nature Girl* by Jane Kelley in 2013 and 2014. In all three years the boys read *Hatchet* by Gary Paulsen. During the course of the session campers read their book and participated in a series of related activities. Reading aloud was done by campers, the Book Club instructors, and cabin counselors. Campers also had periods of time when they read to themselves. Other activities included word games and writing exercises. In addition to these more typical classroom activities, in 2013 and 2014

campers learned their outdoor living skills such as fire building, outdoor cooking, and shelter building as the main characters in the book also learned similar skills.

To assess changes in camper attitudes toward reading after participation in Sherwood Forest Camp's reading program, the Elementary Reading Attitude Survey (ERAS; McKenna & Kear, 1990) was used to measure campers' attitudes at the beginning and end of the reading program. The ERAS demonstrates high reliability (with Cronbach's alpha coefficients for individual items ranging from .74 to .89) and tests of validity indicated that the ERAS was able to detect differences between groups of readers.

The survey consists of twenty items: the first 10 assess campers' recreational reading attitudes and the last 10 assess campers' academic reading attitudes. Questions included "How do you feel about reading in class?" and "How do you feel about reading for fun at home?" Survey responses were scored on a four point Likert scale: Very happy = 4, A little happy = 3, A little upset = 2, and Very upset = 1.

Results

To assess the sustained impact of the reading program over time, post academic and recreation reading scores in 2014 were compared for third grade campers (current participants), fourth grade campers (2013 participants), fifth grade campers (never participated), and sixth grade campers (2012 participants). Tables 1 and 2 show the means and standard deviations on the ERAS post-test for each of these groups in 2014.

Table 1. Recreational reading attitudes by grade level

Grade in School	Year Participated	N	Mean	SD
3rd Grade	2014	45	32.11	4.99
4th Grade	2013	41	31.88	5.91
5th Grade	Never	45	28.40	6.69
6th Grade	2012	31	30.55	7.25

Table 2. Academic reading attitudes by grade level

Grade in School	Year Participated	N	Mean	SD
3rd Grade	2014	44	30.95	6.31
4th Grade	2013	42	30.88	6.24
5th Grade	Never	43	26.95	7.88
6th Grade	2012	30	29.96	7.25

For recreational reading attitudes as well as academic reading attitudes, the group of campers that never participated in the program had the lowest mean scores. A nonparametric analysis was used to compare the groups. A statistically significant difference was found between groups, with the fifth grade campers (i.e., those who never participated in the reading program) reporting significantly lower recreational ($X^2=8.837$, $p<.05$) and academic reading attitudes ($X^2=11.77$, $p<.05$) than those who had participated.

Implications for Camp Professionals

The structured reading program at Sherwood Forest has a sustained impact on campers, as seen in the comparisons of the fifth grade control group who never participated in the program. The program leadership and staff show a commitment to continual program improvement and reflection on the goals of the program. Each summer, reading becomes more a part of camp. On a visit to Sherwood Forest Camp, you may see a child sitting on a cabin porch

reading during siesta, a child might talk excitedly about something he read over lunch in the dining hall, and a group of third graders may sit quietly together and listen to the next chapter of an engaging story.

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ASSESSING CAMPER OUTCOMES AND PROGRAM QUALITY WITH ACA TOOLS: DATA AND IMPLICATIONS FROM 2014

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The ACA Youth Outcomes Battery (YOB) has been embraced by both domestic and international camps as a versatile tool for outcome assessment. Yet, little is known about the utility of the counselor perceptions version, normative data is not available for the detailed versions, and empirical links between camper outcomes and program quality are lacking. Therefore, the purpose of this study is to further investigate these aspects of camp evaluation and assessment. In the current versions, evaluators select a subset of the 11 outcomes as appropriate for their camp's needs. They then select a format, either basic or detailed. The basic format includes change only assessment and is recommended for younger campers because it is simpler. The detailed format assesses both status of each construct as well as perceived changes at camp. Finally, the evaluation team selects from camper, parent, and counselor perception versions of the YOB and crafts their questionnaire by combining the subscales, formats, and versions of interest into a single tool (cf., American Camp Association, 2011).

One of the challenges with camp outcome assessment has been the lack of a control or comparison group for interpretation. One alternative to control group designs is to compare camp specific outcome achievement to subscale norms. The process of norming the ACA YOB began in 2009, but was limited to the basic format of the student perception version, which was most popular with camps. In addition, preliminary data on the parent and counselor perception versions raised questions about the consistency in how parents and counselors viewed camper growth at camp (Sibthorp, Bennett, & Bialeschki, 2014). While the qualitative data showed that both parents and counselors perceived camper gains in confidence, independence, and social skills, the correlations between the similar subscales across the two groups (i.e., parents and counselors) were low, and we speculated that part of this challenge might be due to the counselor inability to detangle changes at camp from preexisting levels of each outcome (e.g., changes in social skills at camp from social skills in general).

Given the lack of normative data for the detailed format of the YOB and interest in further understanding the potential utility and limitations of counselor versions of the YOB, in the summer of 2014 we began data collection on a new two-year study. This study has three primary purposes: a) provide normative data for the detailed format of the YOB, b) determine if the counselor perceptions versions are related to the camper perception version, c) offer empirical support for the hypothesized links between camper outcomes and indicators of camp program quality.

Methods

Forty three randomly selected ACA accredited summer camps committed to provide data for the norming portion of this study. At the conclusion of the data collection window, we received complete data sets from 23 of these camps including 15 overnight and 8 day camps. To address the second purpose, a subset of nine camps provided matched counselor perceptions data and camper perceptions data on the detailed format YOB. For year 1 of the study (2014), we

collected YOB data only on seven subscales: Teamwork Skills (TW), Family Citizenship Behavior (FCB), Perceived Competence (PC), Responsibility (RESP), Affinity for Exploration (AE), and Camp Connectedness (CC). This approach was done primarily to make the outcome assessment more typical of what a camp might use (i.e., a subset of the YOB outcomes) given the unwieldy length of all 11 subscales. The year 1 and year 2 subscales sets were intentionally chosen to isolate the more conceptually similar subscales. Each camp was sent a packet and asked to have ~50 campers complete the camper perception versions. The subset of camps also providing counselor perception data were asked to have counselors complete the corresponding subscales for their campers. In the fall, one of the authors followed up with each camp director and interviewed them using a modified version of the Camp Program Quality Assessment Checklist, where camp directors were asked to score and justify their camp's program quality. Data from the director interview portion of the study are currently being analyzed.

Results

A total of 1185 campers from 23 different camps completed the seven subscales of the YOB in the 2014 norming sample. The campers in this sample were 65% female and averaged 12.3 years of age. They reported attending their camp, on average, 1.7 weeks/year. The average camper had attended their camp 2.9 years. Thirty-six percent of the sample self-reported an ethnicity other than Caucasian. As seen in past versions of the YOB subscales, each subscale was internally consistent (Cronbach's $\alpha > .70$).

From the status data (see Table 1) it is clear that most of the campers believe that they are highly adept in each of the subscale areas. Only SWB consistently has a mean less than 5.0 (i.e., somewhat true). This finding makes sense, as SWB was not explicitly targeted by secular camps. However, the ceiling effects present in the other six subscales result in a negatively skewed distribution and, thus, the median for the sample is greater than the mean. As camps are mostly interested in the changes attributed to camp (i.e., the change scores), this discrepancy between the mean and the median should be considered for certain analyses using the status subscale scores.

The change normative scores (see Table 1) show that most campers believe that they learn at camp, as a score of four represents "a little more" and a score of five represents "somewhat more" true today than before camp. As we have seen in previous data, day camps had slightly lower change means than overnight camps. We have always considered this fact appropriate given the different amount of time campers spend at overnight camps compared to day camps. The distributions of the change scores are approximately normal, and thus, meet the assumption of normality necessary for parametric inferential statistical analyses. The means, ranges, and standard deviations appear to be relatively stable across the entire sample of camps. Further analyses were run on the total sample of campers including both day and overnight.

Table 1. Normative Statistics for 2014 Outcomes, All Campers

	TW	FCB	PC	RESP	AE	SWB	CC
Status Mean	5.19	5.22	5.17	5.40	5.51	4.77	5.42
Status Median	5.38	5.50	5.38	5.67	5.75	5.00	5.67
Change Mean	4.55	4.62	4.64	4.72	4.89	4.48	
Change Median	4.63	4.50	4.63	4.83	5.00	4.50	

To further understand the relationship between counselor and camper perceptions version, we analyzed matched data from 469 campers representing nine different ACA accredited camps (i.e., 4 day and 5 overnight). These campers were 62% female with an average age of 12 years. YOB subscales within a version (camper or counselor) remained moderately correlated. The between version correlations were lower than we anticipated and indicated inconsistency in how campers and counselors perceived both status, or level, and change of the seven YOB subscales assessed in year 1. The most efficient way to see these patterns in the data was to examine the subscale scores through an exploratory factor analysis. As we were measuring constructs and knew that the subscales were correlated, we used principal axis factoring with an oblique rotation. The factor loading matrix showed that the first factor represented all the camper change scores, the second factor represented counselor status scores, the third factor represented camper status, and fourth factor represented counselor change scores. The highest factor correlation was between the counselor status and change scores ($r = .56$), providing further evidence that counselors had trouble detangling status and change for campers. The correlation between the first and third factors ($r = .38$) provided some evidence that the campers were better able to distinguish their own status on the subscale from their changes attributable to camp. The factor correlation between the second and third factors indicated that counselors and campers were not especially adept at consistently agreeing on the status of the outcomes ($r = .28$), but were, nonetheless, better at agreeing on status than change ($r = .11$).

Conclusion

Given the relative stability of the outcome means, these normative results can be considered viable estimates for ACA accredited camps. As with previous studies, the YOB subscales appeared internally consistent and the change scores were normally distributed. Campers believed they learn valuable lessons at camp.

Regarding the comparison of versions, we expected the status correlations to be higher than the change metrics across versions. Both were lower than hoped. These results raise concerns about the validity of using counselor reports on campers. Camper and counselors both have their own perceptions of status and growth, yet counselors seem especially challenged when asked to assess changes at camp. This finding is most likely because they were not as familiar with campers when the camp sessions began. Thus, campers that perform better are also perceived to have more positive change. However, better performance might also be attributed to higher status levels before the camp session began. Likewise, poor performance seems conflated with no/negative growth.

These preliminary findings suggest that counselors are not necessarily the most accurate at assessing youth outcome' changes that occur as a result of the camp experience. The case for collecting self-report data from campers as well as staff and/or parent perceptions is an important strategy in the program's evaluation efforts. Training staff to be more proficient in understanding the difference between status (performance) and change is also a critical consideration if camps desire to employ this evaluation strategy. Regarding the final study purpose, the relationship between outcomes and program quality indicators are currently being assessed.

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WHAT KEEPS US OUT OF THE OUTDOORS? GIRL SCOUTS SPEAK OUT ON BARRIERS TO OUTDOOR PARTICIPATION

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Outdoor experiences provide young people with many benefits, and programs such as Girl Scouts play an important role in getting kids outdoors. For example, a recent Girl Scout study found that girls who participated in frequent outdoor activities in Girl Scouting were stronger challenge seekers, better problem solvers, and more committed environmental stewards. However, only about 40% of girls experienced the outdoors regularly in Girl Scouts.

The purpose of the current research was to better understand barriers to girls' outdoor participation in Girl Scouts and the extent to which these barriers were associated with girls' grade level and level of outdoor activity.

Theoretical Foundations

The findings reported here are part of a larger study investigating girls' outdoor experiences in Girl Scouts. For this aspect of the research, we collaborated with evaluation and outdoor program staff at 15 partner councils to construct a typology of barriers to girls' outdoor participation. This typology builds upon previous research about barriers (e.g., Bocarro, Greenwood, & Henderson, 2008; Cooky, 2009; The Outdoor Foundation, 2013, 2014) and borrows from Bandura's (1986) concept of Reciprocal Determinism, in which personal, behavioral, and environmental factors operate interactively as determinant factors of each other. The model we constructed examines *personal* (enjoyment/interest, concerns, knowledge), *social* (peer, parental, and troop leader influence—including leader interest and allotment of troop time), and *material* (cost, transportation, access to a variety of pre-organized activities) factors as determinants of each other and girls' outdoor participation in Girl Scouts.

Methods

Our study involved a single online survey administered to Girl Scouts in grades four through twelve during the summer of 2014. A random sample of girls nation-wide was invited to take the survey. Over 2,000 girls responded to the survey, yielding an overall response rate of 22%. For this presentation, we focus on Girl Scouts in grades four through eight ($n=1,442$). Of these respondents, 70% indicated they were White, 7% Black, 8% Asian, and 10% Hispanic. Most lived in urban or suburban areas with about one-quarter were from rural communities.

The survey probed several topics, including girls' current level of activity in Girl Scouts, their interest in a range of outdoor activities, barriers to outdoor participation, and suggestions for increasing outdoor participation. Of most relevance to this presentation are measures for:

- *Level of Outdoor Exposure.* Girls rated how often they participated in outdoor activities (e.g., camp, outdoor field trips, playing outdoors) in Girl Scouts in the last 12 months. Those who responded *Never* or *1-4 times* during the year were coded as having "Low Outdoor Exposure in Girl Scouts." Those who responded five times or more were coded as having "High Outdoor Exposure."
- *Barriers.* From a list of fourteen closed-ended options related to personal, social, and material and no barriers to outdoor participation in Girl Scouts, girls ranked their top

three. Response ratings were consolidated such that each barrier was coded as being *Among Top 3* or *Unranked* for each girl.

Quantitative data from these fourteen dichotomous items and for factor sum scores were first analyzed using simple descriptive statistics. Next, we used chi-squared tests to compare barriers across grade-levels and levels of outdoor activity in Girl Scouts and to identify which barriers were most associated. In chi-squared analyses, the value for statistical significance was set at $p < .05$. Finally, we used factor analyses to examine the underlying structure of barriers.

Results

Material barriers were most prevalent among respondents—45% of girls indicating these as key obstacles to their outdoor participation: Twenty percent (20%) reported that outdoor activities were too expensive, and 19% marked that it was too hard to get to the outdoor places they wanted to go. However, social barriers were also highly ranked: 22% indicated their troop did not have enough time to do outdoor activities, and 21% reported that most of the girls in their troop/group were not interested in outdoor activities.

Personal barriers such as interest/enjoyment and safety concerns were *not* key obstacles for most girls, but lack of knowledge about outdoor options available in Girl Scouts was a primary barrier. It ranked third most important among all listed, with 21% of girls reporting. Interestingly, in both factor and chi-squared analyses, lack of knowledge was most strongly associated with cost and access to pre-organized options. Strikingly, one-third of girls said that they had *no barriers* to getting outdoors in Girl Scouting: They got out as much as they wanted.

Significant differences between elementary and middle school girls were found in four areas. Fourth and fifth graders were more likely to report experiencing no barriers to outdoor participation in Girl Scouts. In contrast, middle school girls were more likely to barriers related to peer influence (i.e., most of the girls not interested in outdoor activities) and transportation issues. These differences ranged from 5 – 10%, and all were significant at the $p < .05$ level

Additionally, we saw significant differences in the barriers reported related to girls' level of outdoor activity, even though roughly the same proportion of older and younger girls had High Outdoor Exposure in Girl Scouts (56% of elementary and 58% of middle school girls). Table 1 presents these findings.

Table 1: Differences in Barriers by Girls' Grade and Outdoor Exposure

Barrier	4 th and 5 th Grade Girls		Middle School Girls	
	Low Exposure	High Exposure	Low Exposure	High Exposure
I don't know what outdoor options are available in Girl Scouts	29%	17%	23%	16%
My troop leader(s) does not like to do outdoor activities	12%	3%	11%	5%
Our troop doesn't have enough time to do outdoor activities	26%	16%	Non-significant	
Most of the girls in my troop are not interested in outdoor activities	Non-significant		30%	22%

Across both age groups, the barriers that most differentiated girls with high and low outdoor exposure were lack of knowledge and troop leader influence, as reflected by perceptions of troop leader enjoyment of the outdoors and time available in troop meetings for outdoor activities. Analyses also suggested that these two troop leader barriers were strongly and significantly associated with peer influences. Interestingly, cost was *not* a barrier that differentiated girls, which was consistent across girls' grade and level of outdoor activity.

In addition to indicating their top barriers to participation, girls provided hundreds of comments about how to increase their outdoor involvement. Among key themes were: reducing cost, providing additional options for camping and outdoor experiences, allowing their families to participate with them, providing more and different types of support for their troop leaders, and changing the flow of information about outdoor events. Examples of girls' comments about additional options were: offer more weekend camps, not just the two week summer program; offer more one time experiences at local GS camps, like Saturday activities; organize trips where one can sign up with friends [not just my GS troop]; and help us start a new group of girls and leaders that like to go outdoors and do things.

Implications

Findings from this study suggest important material and social dimensions underpinning girls' reduced participation in outdoor activities in Girl Scouts. The most salient of these dimensions were girls' knowledge of options for outdoor participation and troop leaders as gatekeepers of girls' outdoor experiences. These dimensions are clearly intertwined, and their interaction warrants more attention.

With regard to the camp experience, information about camp opportunities primarily flows in one direction – from camps to adults/parents (including Girl Scout volunteers) to girls. Imbued with details about cost and convenience (e.g., time and transportation), this information may get lost before it gets to the girls and before they have a chance to advocate for participation. Three options might circumvent this obstacle: a) promote the value of camp through messaging related to broader outcomes (e.g., challenge seeking, problem solving, environmental stewardship) rather than specific programs in order to attract adults who may not enjoy or feel comfortable in the outdoors; b) encourage peer to peer information sharing between girls by involving them in planning and promotion of outdoor activities and acknowledging the types of information likely to influence them; and c) offer different constellations of pre-organized outdoor activities for girls such as short term or one-time events that make it possible for a girl to connect to a cause and attend by herself, or to convince a friend to participate as well.

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MEASURING OUTCOMES OF GIRLS' EXPERIENCES AT CAMP

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Camp professionals readily recognize the positive impact camp has on girls' lives. It is common practice to highlight favorite stories and conveniently collect useful "nuggets" to frame the benefits of the camp experience. However, the collection of data to accurately assess program outcomes must be more systematic in nature. The American Camp Association (2011) has purposefully directed national attention to the significance and need for quality program evaluation. Sibthorp, Bialeschki, Morgan, and Browne (2013) emphasized the importance of program documentation through reliable and valid measures that are easy to administer and analyze.

The purpose of the study was twofold: a) to measure the outcomes of girls' experiences at camp, and b) to develop a valid and reliable instrument to measure these outcomes. To accomplish this goal we developed a 34-item survey that measured areas of girls' resilience most amenable to change. We named this scale the Adolescent Girls' Resilience Scale (AGRS). The AGRS includes three subscales: Approach to Challenge, Self-Efficacy and Relationship Building that collectively measure girls' resilience. One thousand and seventy two girls completed the survey pre and post- experience (i.e., on the first and last day of the program) at eight different organizations throughout the United States. A comparison scale, the Resiliency Scale for Children and Adolescents RSCA®, was also completed to validate the AGRS created. A subset of girls ($n=464$) completed the comparison scale on the last day of their program participation. Results suggest that the AGRS is a valid and reliable tool to measure outcomes of girls' experiences. When comparing pre and post assessment of resilience for girls' from all eight camps combined, small but significant increases in resilience were found. When the camps were analyzed individually the results varied from program to program with some programs showing larger increases in resilience.

Theoretical Foundations

Research has been conducted on the positive impact camp can have on youth development (American Camp Association, 2005; Bialeschki, Henderson, & James, 2007). Ungar (2012) argued that camps promote resiliency in youth by: shaping the environment around them, fostering new relationships with peers and trusted adults; helping youth feel in control of their lives, supporting young people as they develop physically, offering opportunities to feel like they belong, and learning more about their culture. The concept of resilience has been extensively debated and defined in the literature. Simply defined, resilience is a combination of a set of traits (Olsson, Bond, Burns, Vella-Brodrick, & Sawyer, 2003); the ability to effectively cope with challenges, stress, or adversity (Short & Russell-Mayhew, 2008); and the internal and external factors that shape and/or support an individual (Prince-Embury, 2007). While survey instruments have been created that measure resilience, many are expensive, are challenging to interpret, focus on both boys and girls, and are designed for a clinical setting. For example, the comparison scale used for this study, RSCA®, asks a total of 64 questions, costs approximately \$6.00 per participant to implement (Pearson, 2012), and requires someone with extensive knowledge in statistical software to analyze.

Programs focused on youth development (e.g., camps for girls) need to have efficient and effective ways to measure outcomes. Pressure for youth programs to document change and provide evidence of program effectiveness is increasing (Sibthorp et al., 2013) as program

funding becomes more competitive. Practitioners need survey methods and instruments that are easy to use, implement, and analyze. Sibthorp et al. surveyed youth work professionals on opinions relating to beneficial assessment methods. Professionals indicated “surveys that were short, customizable, easy to administer and analyze, were age and setting appropriate, and ultimately produced data they could trust” (p. 529) would be the most beneficial to improving their future programming. The AGRS met these goals-- it is easy to administer, developed for girls 10 to 16 years old, targeted for a camp setting, and was tested for its reliability and validity. Additionally, the survey measures outcomes of girls’ resiliency most amendable to change.

Methods

To measure the outcomes of girls’ experiences, the researchers first created a 44-item survey, which was piloted with 197 girls at two different organizations. The distributions of individual items were reviewed and 10 items with extreme skewness and kurtosis and limited range were dropped. The remaining 34 items corresponded to three subscales: Approach to Challenge (10 items), Self-Efficacy (12 items), and Relationship Building (12 items). The AGRS 34-item scale was implemented again with 1072 girls at eight different organizations. Participants rated each question using a 5-point scale labeled with the following anchors: strongly disagree, disagree, neither, agree, and strongly agree. The AGRS was administered pre- and post-participation (i.e., on the first and last day of the girls’ experience). To examine the validity of the AGRS, it was compared with the Resiliency Scale for Children and Adolescents RSCA® (Prince-Embury, 2007). The RSCA® was administered to girls ($n=464$) on the last day of their experience. The RSCA® consists of three self-report subscales: Sense of Mastery (20 items), Sense of Relatedness (24 items), and Emotional Reactivity (20 items).

Results

Scale Reliability and Validity

The AGRS showed exemplary internal reliability with Cronbach’s Alphas ranging between .79 and .96 for all scales assessed pre and post-participation. Convergent Validity was evaluated by correlating the AGRS with the RSCA®. Approach to Challenge and Self Efficacy converged most strongly with the RSCA® Sense of Mastery scale, $r(431) = .56, p < .001$; $r(428) = .74, p < .001$; respectively. The Relationship Building scale was most strongly related to the RSCA® Relatedness scale, $r(427) = .68, p < .001$.

Outcomes of Girls’ Participation

Paired-Samples *t*-tests measured pre and post-participation change among girls. Across the eight camps, changes in total resilience showed a small but significant increase after participating in a camp program ($t(788) = -2.99, p = .003, d = -.12$). Similar results were found among the individual subscales: Approach to Challenge, Self-Efficacy, and Relationship Building. Changes were all small but significant with *t* values ranging between -2.07 and -3.96 and effect sizes ranging between -.09 and -.12. When data from all eight camps were analyzed collectively the results showed modest improvements in resilience. However, when analyzed individually, results from each camp varied widely. Some camps showed substantial improvement in resilience scores, while other camps demonstrated little to no meaningful change in resilience. It is evident that program goals, objectives, characteristics of the girls’ served in each program, and other factors not yet identified all impact individual results. Additional data analyses will examine what factors most influenced change and what programs were most suited to using the AGRS for program evaluation.

Implications

The camp experience provides many opportunities for girls to develop and grow. This study showed evidence that small, yet significant change results in girls' participation in camp programming. However, these changes varied from program to program and further analysis must be conducted to examine what causes these differences. This study did meet its goal of creating a valid and reliable tool to measure outcomes of girls' experience. The AGRS can aid camps in their ability to analyze outcomes of girls' experiences and can be used in its entirety (34 items) or separated into three subscales (8-12 items/subscale) to measure specific constructs. The long-term intent is to provide the instrument free of charge, along with a manual and spreadsheet that provides basic analyses of outcomes for program administrators to use.

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