

**2018 American Camp Association**

**RESEARCH  
FORUM  
ABSTRACTS**



December 8, 2017

Dear Colleagues:

This book includes 20 abstracts that will be presented at the 2018 American Camp Association (ACA) Research Forum to be held during the ACA annual conference in Orlando, FL from February 20-23. 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. Sara Johnson, Jennifer Piatt, and Mat Duerden provided peer-reviewed external evaluations for the selection of these 20 abstracts.

We look forward to presenting these papers at the 2018 Research Forum, but also recognize that many people cannot attend the annual meeting. We hope these 1500-word abstracts will provide information for those not able to attend. Please contact the authors if you have further questions.

Best wishes,



Ann Gillard, Ph.D.  
2018 ACA Research Forum Coordinator

The proper way to cite these abstracts using APA 6<sup>th</sup> edition is:

Author name(s). (2018). Title of abstract. *2018 American Camp Association Research Forum Abstracts* (pp. x – x). Retrieved from <http://www.....>

Example:

Bennett, T. (2018). Investigating the effects of camp program quality on outcome achievement across gender and ethnicity. *2018 American Camp Association Research Forum Abstracts* (pp. 4 - 6). Retrieved from <http://www....>

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## **DEFINING ECOLOGICAL IDENTITY: A GIRL SCOUT CAMP CASE STUDY**

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This case study explores how campers relate, connect, and identify with nature, with the following research question guiding the research: How do girls describe their ecological identities? Ecological identity refers to how humans construe themselves in relationship and connection to the earth: their personality, perceptions, actions, beliefs, values, and sense of self (Næss, 1985; 1987; Thomashow, 1995) based on history, emotional attachment, and similarities with the nonhuman natural environment (Clayton, 2003). Ecological identity develops through a personal history of direct engagement with the natural world, and especially in childhood and adolescence, through nature-based play, recreation, discovery, and activities (Williams & Chawla, 2016).

### **Purpose and Rationale**

The purpose of this research was fourfold: (1) to introduce ecological identity work as a reflective bridge for living in nature; (2) to learn about youth connectedness to and identification with nature; (3) to actively involve youth in research meaning-making; and (4) to contribute to the scholarly field of girls in adventure education.

The rationale for this study is that ecological identity work is important, for personal development of ecological identity nourishes a commitment to environmental action and care (Thomashow, 1995). Nurturing ecological identity development may offer hope in a time of environmental calamity, in which the damage ranges from the devastating costs of pollution to the costs of alienation from the natural world. Louv (2008) coined the term *nature deficit disorder* to specifically name perceived consequences stemming from human's disassociation with nature, including diminished use of the senses, attention problems, physical illness and obesity, and emotional and mental health issues. Rootedness in nature through ecological identity work can promote wonder, joy, respect for nature, and sense of place (Hulmes, 2007; Faarlund, 2007).

### **Participants**

A total of 59 high school-aged campers attended a Girl Scouts of Southeastern New England (GSSNE) summer camp program in 2017 and were invited to participate in the study. Participation was voluntary and parent/guardian consent was required, in addition to minor assent. Twenty-five GSSNE campers participated in the study in the months of June, July, and August 2017. All participants were entering ninth through twelfth grades in fall 2017, ranging in age from 14 to 16.

### **Methods**

This research project included activities designed to gather both quantitative and qualitative data: surveys (the Nature Relatedness Scale) and art creation (place mapping). Importantly, the data collection methods used in this study gathered information from participants and also provided a language and context for participants to see themselves in the world. The Nature Relatedness scale was administered seven times at four different GSSNE camps to a total of 25 participants. Thirteen of the 25 campers participated in place mapping across five sessions at four different GSSNE camps. Research participants were provided with paper, pens, crayons, and markers for the place-mapping activity. Drawing wisdom from

Thomashow (1995) and Olsen (2002), participants were asked to draw a familiar or special place that evoked strong feelings, and to then provide a written description of their artwork.

## **Results**

### **Surveys**

Twenty-five campers completed the Nature Relatedness (NR) survey during summer 2017. The overall Nature Relatedness score (ranging from one to five) is calculated by averaging all twenty-one question items after reverse scoring appropriate items. Scores for the three NR dimensions of self, perspective, and experience are also calculated by averaging appropriate items after reverse scoring. Overall NR scores ranged from a low score of 2.3 to a high score of 4.7, with the mean overall score of 3.8. These study results closely mirror the results of Nisbet, Zelenski, and Murphy's (2009) research, where overall scores were normally distributed and ranged from 2.1 to 4.9, with a median of 3.7.

The NR-Self factor reflects the ecological self, or how strongly an individual identifies with the natural environment. Scores ranged from a low score of 2.1 to a high score of 4.9, with a mean score of 3.7. Respondents scoring highly in this dimension would likely consider themselves "to be a part of nature and live life in ways that reflect this," (Nisbet, 2011, p. 10).

The NR-Perspective factor indicates how an individual's attitudes or behaviors relate to the natural world. Perspective dimension scores ranged from a low score of 2.7 to a high score of 5, with a mean score of 4.0. Respondents scoring highly in this dimension of nature relatedness would likely demonstrate a sense of agency concerning their individual actions and their impact on the living and non-living world (Nisbet, 2011).

The NR-Experience factor refers to the physical familiarity and attraction an individual has to nature. Experience dimension scores ranged from a low score of 1.8 to a high score of 5, with a mean score of 3.7. A respondent scoring highly in this dimension would likely be someone who "seeks out nature, is drawn to the wilderness, and who is aware of and fascinated with nature everywhere in daily life" (Nisbet, 2011, p. 11).

### **Place Maps**

Thirteen total campers created place maps. Participants often affixed labels to notable features of their maps and described in writing why they chose a certain place or location. During analysis, four place maps locations emerged: Participant's own home/yard (four of 13 maps), home/yard of non-nuclear family member (two of 13 maps), participants' family's summer vacation spot (two of 13 maps), and Girl Scout summer camp (five of 13 maps). Connectedness to human others also was common across individual place maps. Eight of the 13 place maps refer to family connection (two of which refer to or imply deceased family), four place maps refer to friends, and two place maps do not refer to other human interaction. Written descriptions for the place maps ranged in length between 13 and 145 words, with an average length of 47 total words. Along with four research assistants, I coded individual written descriptions, and I ultimately created composite poems from participant contributions.

### **Implications**

Overall participant scores were lowest for the NR-Self dimension, which links most closely to the concept of ecological identity. Most of the chosen illustration locations were places that campers had primarily visited beginning as a younger child, and all place maps indicated an ongoing, continued connection with place. This supports the notion that formation of ecological identity begins early, and seeing oneself as a part of nature is crucial in promoting a future environmental ethic of care. With five of 13 artist-participants (38%) depicting a camp in their drawings, camp settings are clearly a significant place supporting youth nature-connectedness.

Summer camp programs should consider introducing varied reflective tools to foster ecological identity. Artistic cartography, journaling, dialogue, and anecdote circles allow for enhanced meaning-making. Ecological identity work is grounded in reflective learning and is a means for interpreting the experience of nature. Such efforts may enhance camper awareness of self in nature and also help campers articulate special, unique relationships with aspects of a certain place. Incorporating such reflective practice with even the youngest campers could build place familiarity and nature-connectedness.

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*With feminist adaptation to the APA*

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## **SPORT FOR DEVELOPMENT THEORY IN PRACTICE**

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The sport-for-development industry is a relatively new field that has received a significant amount of attention over the past 15 years not just by researchers, but government agencies and non-governmental organizations as well. In 1993, Nelson Mandela was quoted saying “Sport has the power to change the world, the power to inspire, the power to unite people in a way that little else can...” Mandela’s statement is commonly seen as the genesis of the sport-for-development industry (United Nations, 2003). In 2000, the Millennium Development Goal was commissioned by the United Nations. The Millennium Development Goals were a series of eight goals and objectives that were aimed at different global issues ranging from hunger and poverty to environmental sustainability, to gender equality and to universal primary education (Millennium Development Goal, n.d.). In 2004, the secretary-general of the United Nations stated that since sport is a universal language, sport has the potential to facilitate change around the world (Annan, n.d.).

### **Literature Review**

The sport-for-development field has been defined by numerous authors, with a consensus of sport being used to exert a positive influence on the public through socialization amongst social classes. With the newer rapid expansion of the sport-for-development field, there has yet to be a consensus as well around the best way to analyze development through sport. The sport-for-development (SFD) theory that was proposed by Lyras (2007) is one of the most widely used theoretical frameworks, being the fourth most utilized theory in an analysis by Schulenkorf, Sherry and Rowe (2016).

Sport-for-development theory suggests that sport programs can facilitate personal development and social change by implementing cutting-edge sport management practices through “an interdisciplinary framework blending sport with cultural enrichment,” (Lyras and Welty Peachey, 2011, p. 313). The SFD theory framework is composed of five unique domains: impacts assessment, organization, sport/physical activity, education, and culture enrichment. The theory suggests that a combination of sport, cultural enriching activities and education provides the framework for personal development, inter-cultural acceptance, and collaboration.

### **Methods**

After discussing various other theoretical frameworks to analyze how successful a summer camp is when it comes to using the sport programs to help facilitate development, we concluded that the SFD theory was the most accurate in gauging program development. We approached a few different sport-based camp programs but ultimately settled on a residential religion-based sport summer camp. After gaining approval from the summer camp’s parent organization we proceeded to have two phone calls to discuss our research and what all we needed as researchers to accurately analyze the camps policies. The camp provided us with copies of their camper evaluation forms, handbooks that are sent out to all staff and parents and answered our requests for clarification on some topics discussed in the handbooks.

Once we had all of the required documents we proceeded with our policy/content analysis of the camp. During our analysis we compared the language of both the parental and staff handbooks to ensure we understood both perspectives of the programming options. One additional fifteen-minute phone call was required following the initial analysis to clarify job

responsibilities, and various special programming that was offered. During our second analysis of the camp policies, we included a further analysis of the camp's social media page. Including the camp's social media page allowed us to analyze how the camp is marketing themselves to parents of current campers and parents to attract new campers. After analyzing the policies/content of the camp, we compared the results to the "Sport-for-development theory components of effective sport-for-development policy" table in Lyras and Welty Peacher (2011, p. 314).

### Results

We concluded that the summer camp was applying the sport for development theory in an acceptable manner. Our analysis did raise the concern that while the camp was considered a "sport plus" organization, they could have better evaluation methods as it relates to how the campers act with each other and not just base the camper evaluation on skill alone. Likewise, we also feel as though the camp could increase educational involvement in the campers' day. Currently, the camp does not have specific education hours that campers sit in; instead it is up to the coaching staff to implement educational components in their daily schedule. The camp did however, excel in the cultural impacts and sport/physical activity domains. Based off of previous literature involving the summer camp industry, the impacts assessment, educational, and cultural enrichment components are characteristically the domains that need the most development towards achieving the camp's mission.

Camp professionals have the opportunity to understand the impact that their programs have on their campers. Simply because the theory is called "sport-for-development" does not mean that an art based camp cannot apply the domains presented here, researchers/practitioners can go in and evaluate the program based on moral values and principles in art programs instead of in a sport/physical activity concept. In fact, Lyras and Welty Peachey (2011) state that the SFD theory "should not be considered a prescriptive framework, but rather, it should be adapted to local conditions and needs" (p. 324). We believe that the best way to view the SFD framework is when it is viewed a reference guide to help build and evaluate a program. We also believe that the most important domain of the SFD theory is the impacts assessment, because it is vital to know where not just the campers have progressed and regressed, but also the camp and their programming.

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## **INVESTIGATING PERCEPTIONS OF CHANGE IN FRIENDSHIP SKILLS ACROSS CAMPER GENDER AND TYPE OF CAMP**

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A common recognition in today's society is that individuals who are able to effectively meet and interact well with others are often more successful (Tough, 2012; Wagner, 2008). These types of skills can be developed through participation in camp programs. As camps position themselves as a place where youth learn the valuable interpersonal skills necessary for success, it is vitally important for camps to better understand how different youth acquire these skills, and under what circumstances. Applying this knowledge to camp programming can help camps to more effectively promote the achievement of these important outcomes.

### **Conceptual Foundations**

Measurable outcomes of the camp experience include the construct of Friendship Skills. Friendship Skills is defined in the Youth Outcomes Battery as skills related to making friends and maintaining relationships (Sibthorp, 2013). The development of outcomes such as friendship skills can be influenced by both the individual characteristics of youth, as well as by environmental aspects of the youth programs (Bronfenbrenner, & Morris, 2006; Eccles & Gootman, 2002). Previous research has indicated the potential for differences between male and female outcome scores when using the Youth Outcomes Battery (Bennett, 2017). Understanding differences that may exist between males and females in the development of friendship skills can help camps to more effectively design and implement targeted programs.

Research has also indicated that campers attending overnight camps typically exhibit higher levels of outcome achievement when compared to day camps (American Camp Association, 2006). Understanding if this relationship applies to the development of friendship skills can assist camps in creating environments conducive to the achievement of these skills. Therefore, the purpose of this study was to investigate if a camper's perception of change in friendship skills while at camp is related to a camper's gender. If a significant relationship was found, a secondary purpose was to investigate how much of this relationship can be explained by whether the camper attended an overnight camp or a day camp.

### **Method**

This study was conducted as a secondary analysis of data collected by the American Camp Association in the summer of 2015. For this study, a total of 1,466 surveys completed for campers ages 10-16 years from 27 different coed summer camps was analyzed. Fifty-two point six percent of campers indicated they were female. Four camps indicated that their survey respondents had attended day camps. The hypotheses for this study were that females will score higher than males on perceptions of change in Friendship Skills while at summer camp, and that the variability between male and female scores will be greater at overnight camps versus day camps.

Study hypotheses were tested using multilevel models that maximize our ability to detect associations between outcomes and the predictors, as well as to understand the nature of these potential associations. To test the influence of camper gender and the type of camp attended on perceptions of change in friendship skills, change in friendship skills was regressed onto camper gender at level 1 and type of camp at level 2.

Multilevel models were used because they adjust for sources of non-independence, such as including multiple measurements from members of the same camp, and allow for unbalanced

data (e.g., data from differently sized groups). Multilevel models are considered appropriate for use in outdoor programs for youth (Russell & Sibthorp, 2004), where participants are nested within programs that are similar in their overall approach, such as being a “summer camp,” but also contain differences in program length (e.g., day camp or an overnight camp), and approach, such as the unique programming and structure provided amongst individual camps. All analyses were run in HLM Version 7.00 (Raudenbush, Bryk, & Congdon, 2011).

### **Results**

In order to assess the percent of variance in perceptions of change in friendship skills that is explainable at a between- and within-camp level, a baseline model was run. Based on the results of this model, the intraclass correlation coefficient for change in friendship skills was 0.03. This finding indicates that approximately 97% of the variance is within-camps, at the individual camper level, and approximately 3% of the variance is between camps.

The significant within-in camp effect between camper gender and change in friendship skills ( $B = 4.68, p < .001$ ) indicates that the average female camper perceives more change in her friendship skills while at camp compared to the average male camper. The between-camp effect of overnight camps compared to day camps was negative, but non-significant ( $B = -.176, p = .119$ ), although female campers scored significantly higher than males at both types of camps ( $B = .140, p = .002$ ). The interaction of the effect of camp type and gender, however, was non-significant ( $B = -.245, p = .162$ ), meaning that the relationship between perceived change in friendship skills and camper gender did not significantly vary between overnight and day camps.

### **Implications for Camp Professionals**

The results of the study indicated that female campers scored significantly higher than male campers on perceptions of change in friendship skills at both day and overnight types of camps. Interestingly, no significant difference was found between day and overnight camps. This finding suggests that, for the camps in this sample, the main factor influencing differences in the development of friendship skills is the gender of the camper, and not the type of camp attended.

Implications of the findings of this study include support of the recognition that males and females experience youth programs differently. These differences can potentially have an impact on considerations of activity designs and structure of camp programs. If female campers perceive higher levels of change in friendship skills, should camp programs focus more on providing increased activities promoting making friends and establishing relationships? And why are male campers scoring lower? Is it the types of activities and programs being offered, or is it something else?

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## **CAREER AND COLLEGE READINESS THROUGH CIT/LIT LEADERSHIP OPPORTUNITIES**

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As the complexity of education becomes apparent, college and career readiness are now thought to include a wide range of skills, abilities, and attitudes often developed outside the classroom. Recent research supports the importance of out-of-school-time (OST) contexts like camps as critical venues for learning, youth development, and advancing non-academic outcomes such as social and emotional skills (Smith et al., 2016). Research shows that quality program staff are essential to high quality OST programming (cf., Larson et al., 2009; Smith, et al., 2010), yet camps are challenged to find these staff. Camps often turn to counselor-in-training (CIT) or Leader-in-training (LIT) programs to “grow their own” and offer leadership development for older teen campers. The purpose of this paper is to share early findings from a multi-year study that explores the potential contributions of CIT/LIT programs to college and career readiness.

### **Conceptual Framework**

This study is influenced by much of the Positive Youth Development (PYD) research that suggests PYD exists in dynamic environments that build on the strengths of youth that empower them to reach their full potential. This orientation is present in the integrative framework from the National Research Council’s *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21<sup>st</sup> Century* (2012) that guides this project. This report was in response to growing interests in workforce development and concerns expressed by key leaders that young people were not prepared to enter the workforce and lacked 21<sup>st</sup> century skills (Casner-Lotto, Barrington, & Wright, 2006). The Council’s report synthesized several widely used readiness frameworks that offer a holistic approach to identifying constructs important to college and career success and the transfer of learning. Within this framework, competencies are organized into three domains: cognitive (i.e., knowledge, creativity), intrapersonal (i.e., intellectual openness, work ethic), and interpersonal (i.e., teamwork, leadership).

Larson and Walker (2006) suggested a critical question that emerges from the youth development research is how youth make successful transitions into adult life, which includes understanding youths’ active experiences in the adult real-world as well as how to successfully structure these learning experiences. For this paper the research questions center on CIT/LIT program logistics, desired outcomes, and best practices that contribute to college/career readiness.

### **Methods**

This first phase was focused on understanding the CIT/LIT programs offered by camps for their older campers. Twenty ACA accredited camps were selected from stratified sub-groups that represented major camp types such as day/overnight, non-profit/for-profit, girls/boys/co-ed, agency/religiously-affiliated/ independent, and region of the country. Semi-structured interviews lasting an hour were conducted by the co-investigators with directors and/or CIT/LIT directors. Guiding questions focused on CIT/LIT program logistics, outcomes, and best practices. Each phone interview was recorded and transcribed then analyzed through systematic coding for basic descriptive information as well as the development of themes. Ultimately, these qualitative data

findings will inform the development of a quantitative survey focused on these same issues to be administered to CIT/LIT youth in Phase 2.

### Results

Preliminary findings showed a range of responses existed in the camps' CIT/LIT program logistics, outcomes, and best practices that result in cognitive, intrapersonal, and interpersonal competencies.

*Program Logistics.* The programs varied most along three dimensions: length of program, program focus, and how CIT/LIT participants are viewed by the camp (see Table 1). For example, CIT/LIT programs ranged from one week to multi-year progressions with some programs focused on preparation of youth as camp staff while other camps used their program as a developmental mechanism to support future college or career aspirations. Lastly, CIT/LIT participants were primarily viewed as either campers or staff, which affected aspects such as paying registration and time worked with campers.

*Outcomes.* Leadership, communication, and self-confidence emerged as common outcomes across programs. These competencies were woven into their training curricula and practiced in their experiential work as CIT/LITs. For example, communication skills might be used formally when facilitating an activity or informally with campers when resolving a conflict.

*Best Practices.* Four best practices emerged: 1) delineate the role of CIT/LIT in camp's structure, 2) designate specific staff as CIT/LIT trainers, 3) offer progressions of formal learning and experiential components that maximize transfer of learning opportunities, and 4) combine camp specific skills with developmental outcomes to maximize growth potential for youth.

Table 1

*Continuum of LIT/CIT Program Characteristics Across the Interviewed Camps*

<b>Program Characteristic</b>	<b>Continuum Range</b>
Program Length	One Week – Multiple years
Age of Participants	13 – 18 years old
Number of Participants	5 – 50
Training Length	One Day – Two Weeks +
Program Focus	Training Specific As Future Staff – General Youth Development
Training Focus	Skill Specific (camp skills specific) – Developmental (Broader than camp)
Compensation	Pay to Participate – Paid (salary/stipend)
Conversion Rate (% who return as staff)	33% - 75%
Participant Outcomes	Technical Skills (how to write a lesson plan) – Intra/Interpersonal (e.g., leadership, self-confidence)

*N* = 20

### Implications

At the heart of training programs like CIT/LIT programs is a repositioning of the impact of camp as a practical and valuable experiential leadership training opportunity that contributes to career and college readiness. Preliminary findings seem to support the study's framework where cognitive, intrapersonal, and interpersonal competences that contribute to career/college

readiness are developed as a result of the CIT/LIT experience. While CIT/LIT programs reflect the camp's youth they serve and their particular needs, several implications for practice include examining a camp's: 1) current program logistics within a larger view of how other CIT/LIT programs operate for potential re-design considerations, 2) intentional outcomes for congruence within the domains of cognitive, interpersonal, and intrapersonal competencies, and 3) discussion and reflection opportunities with youth on how CIT/LIT experiences and outcomes transfer into other areas of their lives that support career/college readiness.

Perhaps this camp director quote sums it up best: "(...we prepare LITs to be) better employees and better humans when they leave because of their experiences working with us".

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## **MINDING THE GAP: AN EXPLORATION OF CAMP RESEARCHER AND CAMP PRACTITIONER APPROACHES TO ASSESS PARENT PERCEPTIONS OF DEVELOPMENTAL OUTCOMES**

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Many out-of-school-time (OST) organizations aim to provide the best available tools, resources, and context necessary to ensure the youth they serve advance in their socioemotional, physical, and cognitive development. These organizations must also examine both *how* and *if* their desired outcomes are achieved and identify areas for improvement. In this evidence-driven pursuit, OST organizations, such as summer camps, are experiencing escalating levels of pressure from internal (e.g., program staff and participants) and external stakeholders (e.g., accreditors and funders) to demonstrate program efficacy utilizing the best available methods (Bialeschki & Sibthorp, 2011; Preskill & Boyle, 2008). More simply, it is no longer enough for youth-serving organizations to simply say they are achieving their goals, they now must articulate how this success was realized. Such an explanation often includes assessment processes used to measure progression toward targeted goals, the rationale for specific evaluation approaches, how conclusions of success were reached, and (arguably more importantly) where the organization fell short in the pursuit of success (Powers, Maley, Purington, Schantz, & Dotterweich, 2015).

Correspondingly, an increase in the rigor of evaluation of camp programs is occurring, where the utilization of increasingly sophisticated analytic techniques is becoming normative (Roth & Brooks-Gunn, 2016). This intensification has enhanced camp researchers' and practitioners' understanding of their programmatic strengths and opportunities, the nuances of their programs, and how to better serve their constituents. Studies utilizing structural equation modeling (Garst & Gagnon, 2016), instrumental case studies (Povilatis & Tamminen, 2017), and photovoice elicitation (Bultas, Steurer, Balakas, Brooks, & Fields, 2015) have emerged within the camp literature. These studies have advanced our understanding of the programmatic and contextual factors that may influence developmental outcomes in youth. Paradoxically, the elevation in the sophistication of camp research has potentially expanded the gap between "researchers" and "practitioners," as training in evaluation, data analysis, and visualization techniques can put more sophisticated techniques out of reach for practitioners with limited time and resources. Given this emerging gap, *the purpose of this study was to compare a research based approach to a more practitioner friendly approach in addressing the same research question*. Specifically, this study compares two methodological approaches to assess parent observations of youth socioemotional skill development resulting from their child's camp participation.

The factors contributing to the "research and practice gap" are complex (e.g., competing funding demands, communication issues, lack of political support for research, trust); however, there are strategies to mitigate this divide. For example, training for early career researchers that reflects community centered approaches, "front-line" language (i.e., translation), and economic value communication can enhance the strength of research-practice partnerships (Mallonee, Fowler, & Istre, 2006). Furthermore, practitioner-centered toolkits with tailored resources to overcome common programmatic challenges and validated measurement tools can bridge the research-practice gap. However, a common toolbox deficit for many camp programs relates to the measurement tools available. Researchers have noted the ongoing need for valid "practitioner

friendly” outcomes measures reflecting both parent and camper perspectives (Gillard & Roark, 2016; Sibthorp, Bialeschki, Morgan, & Browne, 2013). Reflecting this need, the current study explores the usage of two techniques to understand an identical research question. First, in the more practitioner-centered approach, paired sample t-tests were utilized to examine parent observations of change before and after camp across five dimensions (i.e., responsibility, exploration, self-regulation, attitude, and communication) of the Parental Perceptions of Developmental Outcomes (PPDO) scale (Garst & Gagnon, 2016). In the second approach, a structural equation modelling technique (SEM) was utilized, also exploring the same five dimensions of the PPDO before and after their child’s camp experience. Importantly, if comparable results are found despite the difference in methodological approach, this study could illustrate the usefulness of the PPDO to mitigate some of the pressures on practitioners associated with more advanced approaches such as SEM.

### **Methods**

This study was conducted in the Summer of 2015 with two not-for-profit organizations operating 18 residential summer camps within the northeastern (12 camps) and southeastern (6 camps) United States. Both organizations were selected due to their history of program assessment utilizing parents of campers. Camp sessions were residential, co-educational, lasting 5-7 days, and targeted similar youth outcomes (i.e., responsibility, exploration, etc.) through the provision of activities including shooting sports, robotics, marine biology, and wilderness competence. Data were collected via an online survey administered through camper parent emails seven days after completion of their child’s camp experience which resulted in an overall response rate of 26.73% ( $N = 967$ ). Next, the data were explored for outliers and measurement<sup>1</sup> issues which indicated acceptable measurement model fit, reliability, and validity. After data screening and measurement property analysis, the sample was randomly assigned to one of two analysis conditions: (1) composite paired samples t-tests ( $n = 526$ ) or (2) latent (SEM) t-tests ( $n = 441$ ) to determine if the differing samples and techniques yielded similar findings.

### **Results**

The paired sample t-tests (composite) indicated statistically significant ( $p \leq .001$ ) increases in all dimensions of the PPDO pre- to post-camp. Of the five factors tested, exploration indicated a medium effect size ( $d = .302$ ), with self-regulation ( $d = .164$ ), responsibility ( $d = .157$ ), communication ( $d = .112$ ), and attitude ( $d = .105$ ) indicating small effect sizes (Cohen et al., 2003). Similarly, the latent paired sample t-tests (SEM) indicated significant ( $p \leq .001$ ) growth across all dimensions of the PPDO with responsibility ( $d = .135$ ), self-regulation ( $d = .123$ ), attitude ( $d = .073$ ), communication ( $d = .107$ ) indicating small effect sizes, and exploration ( $d = .329$ ) indicating a medium effect size. More simply, near identical results were found in *both* the composite and latent approaches.

### **Discussion**

The training and resources necessary for practitioners to evaluate the impact of the camp experience on youth outcomes continue to increase in their complexity. To support practitioner needs for valid measures requiring less analytical and interpretation resources, this study compared the results of two analytic approaches with the same research goal: To assess parent observations of youth socioemotional skill development resulting from their child’s camp participation utilizing the PPDO. Near-identical effect sizes were found across the five

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<sup>1</sup> The measures in both approaches were tested utilizing confirmatory factor analysis and indicated strong model fit [ $\chi^2(753) = 1574.856, p \leq .001, N-NFI = .957, CFI = .962, SRMR = .051, RMSEA = .055$  (90%, CI .051 - .058)], reliability ( $\alpha = .836$  to  $.920$ ), and convergent validity ( $\lambda = .647$  to  $.911$ ) across all items.

dimensions of the PPDO in both approaches, supporting the usefulness of the PPDO for practitioners interested in examining camp as a catalyst for growth within the five dimensions of interest. While in the context of this study similar effect sizes were indicated across the two approaches, these findings may be wholly due to the measurement reliability and validity of the PPDO as a measure of the five outcomes of interest. Put differently, both researchers and practitioners should cautiously undertake the utilization of composite approaches to measure program impact (i.e., the practitioner friendly approach described in the current study); only doing so with substantive prior evidence of the measures psychometric validity. Reflecting this more cautious approach, the researchers in the current study utilized a measure that was pre-established as valid within a camp setting, and further, they examined the psychometric properties of the measures through confirmatory factor analysis. More simply, composite t-tests are not a ready substitute for latent SEM based approaches without a high bar of evidence. While two independent sample examinations of the measurement properties of the PPDO are not necessarily reflective of a high bar of evidence (i.e., Garst & Gagnon, 2016; the current study), the similarity in model fit across these studies suggests the PPDO is promising as both a composite and latent parental observation measure within residential summer camps.

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## **TOUGH DECISIONS IN MEDICAL SPECIALTY CAMPS: EXPLORING THE RELATIONSHIP BETWEEN CAMP DOSAGE, CHANGES IN DIABETES MANAGEMENT BEHAVIOR, AND SCHOLARSHIP PROVISION**

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There is broad support for residential summer camp as a context to foster youth growth and development across physical, cognitive, social, and emotional domains (Thurber, Scanlin, Scheuler, & Henderson, 2007). Correspondingly, investigation into camps serving youth with chronic illnesses and disabilities suggests these “medical specialty camps” can foster growth across the same domains as “mainstream camps” (Guest, Balogh, Dogra, & Lloyd, 2017). While this similarity alone is substantive, there is also support for medical specialty camps as a mechanism to improve camper well-being (Gillard & Allsop, 2016) and camper management of disabilities or illnesses (Hill et al., 2015). Indeed, prior research indicates medical specialty camps can: enhance *camper social and relationship skills* (Allsop, Negley, & Sibthorp, 2013), provide *respite from feelings of isolation* (Goodwin & Staples, 2005), and increase *camper confidence levels* (Woods, Mayes, Bartley, Fedele, & Ryan, 2013). As nearly 15% of U.S. youth have special health care needs (Musumeci & Poindexter, 2017), the potential of medical specialty camps to foster developmental outcomes in youth illustrates the importance of investigating contextual- and resource-level factors that facilitate the best possible impact.

As with the broader field of out-of-school-time (OST) programs, funding for camps is often sparse, with many medical specialty camps providing full or partial scholarships to ensure camper attendance (Gillard & Allsop, 2016). With limited resources, administrators responsible for providing scholarships confront challenging decisions when faced with more campers than resources allow. Resultantly, there are emerging areas of research exploring the relationship between limited resources necessary for youth to attend OST programs and which campers may be best served (Roth & Brooks-Gunn, 2016), including the purpose of this study, *exploring the value of a camper attending multiple years of a medical specialty camp*.

Research exploring the value of repeated program participation for promoting youth outcomes has provided mixed results. In a review of OST program research, Roth, Malone, and Brooks-Gunn (2010) found little positive support for the value of repeated program attendance across years to enhance outcomes. Similarly, Thurber et al. (2007) found no meaningful difference in change in socioemotional skills for campers who attended multiple years of camp. Conversely, Cushner-Weinstein et al. (2006) found a positive cumulative change in socioemotional skills for campers returning over multiple years. More simply, it is unclear if repeatedly attending a medical specialty camp influences camper health behaviors. Given this lack of clarity, the current study explores the influence of repeated camp attendance on changes in camper motivation to manage their Type 1 diabetes. Prior research in this area indicated camp can positively influence motivations to manage Type 1 diabetes, although the effect of repeated attendance on motivation was not studied (Hill et al., 2015). In the current study two dimensions of camper diabetes management behavior were explored using the 19-item Treatment Questionnaire Concerning Diabetes (TSRQ): (1) *autonomous regulation*, managing diabetes for intrinsic reasons (e.g., I take my medications for diabetes because I find it a personal challenge to do so) and (2) *controlled regulation*, managing diabetes for extrinsic reasons (e.g., The reason I exercise regularly is that other people would be upset with me if I didn't) (Williams, Freedman, & Deci, 1998). Two hypotheses were tested: H<sub>1</sub>, campers with higher levels (years) of camp

attendance will have higher scores in autonomous regulation than those with less attendance and H<sub>2</sub>, campers with higher levels years of camp attendance (number of years) will have lower scores in controlled regulation than their peers with less camp attendance.

### **Method and Results**

This study was conducted in the summer of 2017 in partnership with a nonprofit organization located in the southwest United States, which facilitated seven one-week residential camp sessions for youth with various chronic illnesses and/or disabilities. Camp sessions were intentionally designed to promote self-esteem, confidence, and empathy through the provision of activities including boating, adaptive sports, and horseback riding. Of the sessions provided, two specifically targeted youth with Type 1 diabetes. Data were collected by trained camp staff members via paper surveys on the last day of each session. The questionnaires asked campers to provide demographic information and to self-report changes in autonomous and controlled regulation utilizing the TSRQ. Out of 295 campers, 214 elected to participate in the study. The respondents were primarily female ( $n = 144$ , 67.3%), an average of 12.86 years old ( $SD = 1.73$  years), were primarily Caucasian (78.3%), and had attended camp for an average of 3.17 years ( $SD = 2.12$  years).

The data measurement properties were examined through confirmatory factor analyses (CFA) and the hypotheses were tested through a structural equation model (SEM). Data screening for outliers suggested three respondents were contributing to non-normality within the data set, which were removed from further analyses. Examination for missing data indicated patterns of missing responses were due to the negative skew of responses (i.e., non-normality), as such robust maximum likelihood technique was utilized to simulate missing values [no item in the data set had levels of missingness higher than 2.31% (5 respondents)]. The 19-item two-factor TSRQ scale initially exhibited poor CFA model fit (i.e., five items with poor loadings:  $\lambda \leq .400$ ). Examination of the initial factor structure also suggested the two-factor model did not fully reflect respondent choices; more precisely, the LaGrange multiplier test indicated the controlled regulation factor was two dimensional: *medical provider controlled regulation* and *diet and exercise controlled regulation*. A higher order cause of these new dimensions was also indicated, controlled regulation. The items comprising these new factors were separated due to responses suggesting differing interpretation of the questions due to the “controller of regulation,” with the higher common cause of both factors remaining controlled regulation. The final CFA indicated acceptable model fit [ $\chi^2(70) = 120.781$ ,  $p \leq .001$ , N-NFI = .944, CFI = .957, RMSEA = .057 (90%, CI .038 - .074)], composite reliability ( $\alpha = .791$  to .832), and convergent validity ( $\lambda = .519$  to .844). Given acceptable measurement properties, the two hypotheses were tested. The SEM indicated acceptable model fit [ $\chi^2(83) = 179.178$ ,  $p \leq .001$ , N-NFI = .897, CFI = .919, RMSEA = .072 (90%, CI .057 - .086)] and the results indicated years of camper experience had no significant ( $p \leq .05$ ) predictive effect on either autonomous ( $\beta = .030$ ,  $p = .657$ , SE = .039) or controlled ( $\beta = .030$ ,  $p = .627$ , SE = .034) regulation.

### **Discussion**

This study explored the effect of camp attendance on diabetes management motivations. As indicated by the lack of support for H<sub>1</sub> and H<sub>2</sub>, years of attendance did not significantly influence scores in the two dimensions of interest. In other words, repeated camp participation did not make for better outcomes within the narrow focus of the current study. While methodologically complex when compared with research examining duration of OST program attendance and outcomes (e.g., Roth et al., 2010), the model tested is unsophisticated, potentially missing confounds that may moderate the relationship between OST program attendance and

outcomes (e.g., unrelated programs, novelty of experience, family history), possibly suggesting in some cases more camp may be better for specific groups. It is also likely that additional unmeasured outcomes may be achieved from repeated camp experiences. While these unintended and/or unmeasured outcomes can be developmentally important for repeat campers, it may not matter when an OST program professes the achievement of specific targeted outcomes. Put differently, if a sports camp stated that it “made campers run the 100-yard dash faster, more so with repeated attendance” and an assessment team indicated that repeated experiences did not improve camper speed, but repeat campers could jump higher, the sports camp did not achieve their intended goal, running faster. When a camp is focused on a goal (e.g., diabetes management skills) and evidence suggests repeated attendance is unrelated to these goals, administrators must critically examine limited funding awards. While prevailing conventional wisdom suggests that more camp leads to better outcomes, this study’s null findings indicate otherwise.

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## EFFICACY OF ONLINE TRAINING FOR IMPROVING CAMP STAFF COMPETENCY

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A trend in camp staff training has been an emphasis on online training as a strategy for preparing staff prior to their arrival on-site to both facilitate staff access to training and provide repeated exposure to training content (Heidgerken et al., 2005). Providing training online can benefit organizations through cost-efficiency, reduced training time, increased availability of learning opportunities, and the opportunity to serve more learners (Marquart, Rizzi, & Parikh, 2010). While support for the efficacy of online camp staff training has been limited to studies of multi-module online courses, there is preliminary evidence of the value of online learning for camp staff (Heidgerken et al., 2005; Weaver et al., 2014).

Online training as a mechanism to prepare staff for their camp roles and responsibilities is relatively new as a research area within the context of camp, but online training may offer a new and more efficient mechanism to develop and prepare staff, especially when camps face increasingly limited resources (Means, Toyama, Murphy, Bakia, & Jones, 2009). Thus, the purpose of this study was to explore the efficacy of an online course for enhancing staff competency. Specifically, we hypothesized (H<sub>1</sub>) that working in camp would cause staff competency test scores associated with completion of an online course to increase over the course of the camp season, and (H<sub>2</sub>) staff competency test scores associated with completion of an online course would increase at a rate higher than a comparison groups.

### Method

This study used a quasi-experimental design (i.e., use of treatment and comparison groups without randomization to each group from the same population) to determine if completion of an online course influenced staff competency in a targeted subject matter area. Participants in the treatment group were 32 camp staff employed at a university-affiliated residential summer camp in the Southeastern United States (see Table 1). The treatment group was comprised of an equal number of male and female staff, with an average age of 20.38 years and an average of 2.42 years of college experience. The comparison group was comprised of 23 demographically comparable undergraduate students not working in a residential summer camp. The treatment group was on average more experienced in camp staff-like positions (average = 1,317 hours of group facilitation) than the comparison group (average = 734.65 hours), however this was not a statistically significant difference,  $t(53) = 1.44, p = .16$ .

Table 1: *Treatment and comparison group descriptive information*

	Treatment Group		Comparison Group	
Gender*	Male 50%	Female 50%	Male 34.8%	Female 65.2%
	$n = 16$	$n = 16$	$n = 8$	$n = 15$
Age	$M = 20.38$ Years ( $SD = 1.42$ )		$M = 20.74$ Years ( $SD = 1.42$ )	
Total Years of College	$M = 2.42$ Years ( $SD = 1.99$ )		$M = 2.67$ Years ( $SD = 1.01$ )	
Facilitation Hours	$M = 1,317.00$ Hours ( $SD = 1632.62$ )		$M = 734.65$ Hours ( $SD = 1232.03$ )	

\*Note: Participants did not provide gender data in some cases.

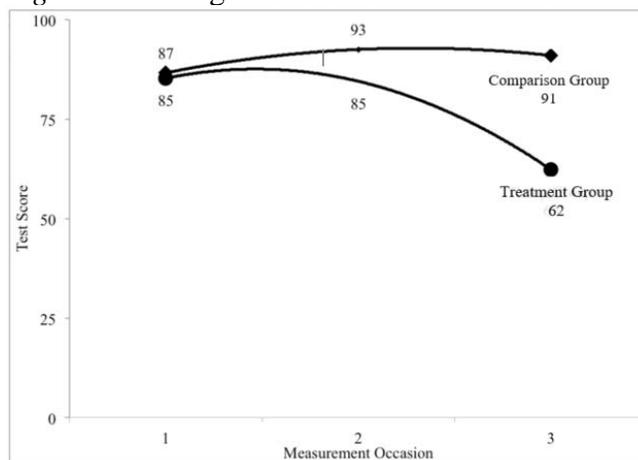
The 45-minute synchronous online course was designed to be completed as a part of preservice (i.e., prior to staff arrival on site) camp staff training. The course targeted: staff “duty to act” in the provision of camp healthcare, maintenance of personal health, role-modeling for youth, and staff interventions to improve youth health outcomes. The competency test included 10 multiple choice and 12 true/false questions that assessed competency related to: roles and responsibilities, self-care, scope of role, youth development, duty, risk management, and attitude.

Data were collected at three measurement occasions (M1, M2, and M3). Both the treatment and comparison groups completed a pretest of competency (M1), completed the online course, and within 48-72 hours of completing the course the treatment and comparison groups completed an identical test of competency (M2). Finally, both groups completed the same competency test 45-55 days later (M3). Hierarchical linear modeling (HLM) was used to analyze the cross-level effects of a between-individuals factor (i.e., treatment or comparison) and within-individuals effects over time (pre-test, post-test #1, and post-test #2) on online course test scores.

### Results

There was a significant non-linear trend in test scores over time,  $B = -7.92$  ( $SE = 1.38$ ), that was further moderated by the treatment group,  $B = -7.03$  ( $SE = 2.82$ ). Further, average test scores for individuals in the comparison group increased between M1 (pre-test) and M2 (post-test #1), then declined slightly at M3 (post-test #2). In contrast, average test scores for individuals in the treatment group remained the same from M1 and M2 (pre-test and post-test #1), then declined sharply at M3 (post-test #2). At M3, the difference in average test scores between groups was ~30 points (on a 100-point scale), with the treatment group scoring significantly lower on average than the comparison group. As shown in Figure 1, the treatment group performed significantly worse than the comparison group in their level of competency on the CRH assessment.

Figure 1. Average test scores at three measurement occasions (M1, M2, and M3).



### Implications

Our first hypothesis ( $H_1$ ), working in camp would cause competency test scores for the treatment group to increase, was unsupported; specifically, scores for the treatment group did not significantly ( $p \leq .05$ ) increase at the first post-test and were significantly lower at the second post-test. Our second hypothesis ( $H_2$ ), staff competency test scores associated with completion of an online course would increase at a higher rate than the comparison group’s competency test

scores, was also unsupported. Surprisingly, the treatment group's test scores were significantly lower than the comparison group's scores at both the first and second post-test measures. These findings contradict prior studies suggesting online education is an effective strategy for camp staff training (Heidgerken et al., 2005; Weaver et al., 2014). Possible explanations for the significant decline in test scores at the end of the summer for camp staff include fatigue (Pilcher & Huffcutt, 1996; Thomas, 2001), poor durability of training (i.e., maintenance of competency over time) (Browne & Sibthorp, 2014), lack of memory retention (Murre & Dros, 2015), and limited opportunities for staff to apply online course content within the camp environment.

Providers of online camp staff training should consider the necessity of such training, and if implemented, account for factors that may reduce online training effectiveness. For instance, to address fatigue, program providers could address staff workloads to ensure staff are mentally and physically prepared for work (Rogers, 2008). To address training durability, program providers could consider practices that enhance learning transfer, such as post-training feedback from peers and supervisors, opportunities to practice training content (Machin & Fogarty, 2004) and regularly scheduled in-service trainings (Leff, Retallick, & Franz, 2015). Additional research is needed to identify if, and under what conditions, online training is effective for producing and sustaining camp staff competency.

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## **HEALING HOMESICKNESS? THE IMPACT OF CELL PHONE USE ON SUMMER CAMPERS' REPORTS OF HOMESICKNESS**

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Homesickness is understood as an almost universal phenomenon that has been recognized since earliest times (Thurber and Weisz, 1997; Van Tilburg et al., 1996). It is viewed as complex and multifactorial with “diverse...correlates and consequences” (Stroebe and Schut, 2015) and can be defined in different ways. Researchers active in the study of camp homesickness use this definition - “distress or impairment caused by actual or anticipated separation from home” (Kerns et al., 2008; Krouner, 2013; Thurber and Sigman, 1998). With a reported incidence of over 90% in some populations, homesickness is widespread, but also an under-reported condition due to denial and the lack of a single, accepted definition (Thurber and Walton, 2007).

While anyone can experience homesickness during times of separation, certain groups, including refugees, international students, and summer campers are known to be at higher risk for its negative and debilitating effects (Thurber, Patterson, and Mount, 2007; Thurber and Walton, 2012). Homesickness is a recognized issue for the five million American children who attend overnight summer camp each year. Of that number, one in five campers may experience “quite distressing” homesickness effects that impact their overall camp experience, and one in twelve will develop debilitating, severe homesickness (Thurber, et al., 1999). Summer campers with high levels of homesickness exhibit a number of psychological, social, physical, and behavioral problems. For campers with severe homesickness, this can include social withdrawal, camp failure, “post-camp stress,” fear of future separations, and clinical depression (Thurber, 1995; Thurber, 1999).

To date, there are less than a dozen studies that have looked at ways to prevent or reduce camper homesickness and these have explored the effect of pre-arrival and at-camp interventions that include: pre-camp visits, counselor training, and medication use (Thurber and Walton, 2007; Thurber and Weisz, 1997; Verschuur, 2001). A few journals have published small studies concerning loneliness and personal electronics use in college and international students and these had equivocal results (*Cyberpsychology, Behavior and Social Networking, Telematics and Informatics*). Recently, psychologist Jean Twenge reported on the negative impact of cell phone use in children born between 1995 and 2012 and termed this current camp generation iGen. Writing in *The Atlantic*, she warned that “There is compelling evidence that the devices we’ve placed in young people’s hands are having profound effects on their lives—and making them seriously unhappy.” And she states, “A 2017 survey of more than 5,000 American teens found that three out of four owned an iPhone” (Twenge, 2017). As yet, no one has studied the question what impact does cell phone use have on camper homesickness. Does it help, does it harm, or is there no relationship? The intent of this study was to start to answer that question.

### **Theoretical Foundation**

This study was based on Thurber’s “homesickness disposition” theory (Thurber, 1999) that postulates that campers experience homesickness in response to a perceived lack of control of their situation. The study also made use of Flett et al.’s (Flett, 2009) association of separation anxiety and low perceived controllability with homesickness feelings. The primary research question of this project was: Do cell phone users report more homesickness (as defined by a score on one item of the Rate Your Day® questionnaire)? The scoring of this Rate Your Day®

(RYD) item ranges from 0 (Not at all) to 10 (Very much). The sub-question was: Does the cell phone using group have more reports of homesickness, as measured by scores on this one survey item labelled R18 “I felt homesick,” when compared to the non- cell phone using group?

### **Methods**

This study utilized a cross-sectional, non-experimental design. A two-part questionnaire was developed, IRB approved, and pilot-tested. In addition to eleven demographic items, the survey included the RYD 15-item mood checklist that assesses homesickness and positive and negative feelings (Thurber and Sigman, 1998). The RYD includes items such as “I am lonely,” “I feel calm,” and “I missed my family.” Respondents were asked to rate these items on an 11-point numerical scale on the day of the sampling. The RYD was selected as the measurement tool for this study because it has been previously validated and used in other studies of summer camp populations and homesickness.

The group- administered, pen and pencil questionnaire was administered one time to 220 girls, grades 3 to 9 attending three Girl Scout camps during July and August 2015. The Hudson Valley camp did not permit cell phones; two camps in Western PA permitted use one hour per day. This study employed a convenience sample of girls present in camp after lunch on Day 4 (one week campers) and Day 6 (two week campers). Campers were recruited using an informational packet for parents and campers distributed by counselors on move-in day. Written consent was obtained from parents that day; campers gave their consent just before questionnaire distribution. Counselors were provided with instructions for the distribution and collection of consents and questionnaires, allowed to ask questions about the process, but were never informed of the study’s purpose. This researcher was available at the camp during data collection to address any concerns.

### **Results**

Data of 220 participants were analyzed (response rate 97%). One participant was excluded from data analysis for not answering the RYD survey. The final sample size for the study was 219 with 31.1% using cell phones and 68.9% not using cell phones. Participants at all three camps ranged in grade from third to ninth ( $M = 5$ ,  $SD = 1.402$ ). They had spent 0 to 10 previous summers at camp ( $M = 3$ ,  $SD = 2.107$ ). Distance from home ranged from less than one hour to five hours ( $M = 1.6$ ,  $SD = 0.7891$ ). Among all participants, 84/220 (38%) did not bring a sibling or friend to camp, while 62% did. Data about ethnicity, parents, and socioeconomic status were not collected.

Among the non- cell phone using group, 51.7% were homesick; among the cell phone using group, 67.6% were homesick. The results of the chi-square test of independence indicated that there was a statistically significant association between cell phone using and homesickness ( $\chi^2 (1, N = 219) = 4.882, p = 0.027$ ). Cell phone users were more likely to be homesick than non-cell phone users.

### **Implications for Camp**

Camper homesickness is a well-recognized issue which camps address in a variety of ways. As cell phone use grows in popularity, questions regarding camp cell phone policies will likely increase. Studies that look at the impact of these devices on camper homesickness can add to our understanding of these issues. This study, while limited by size and scope, shows a positive association between reports of homesickness (as defined by a score on the RYD scale) and the use of cell phones by girls at sleepaway camp. As a first study investigating the impact of cell phone use on camper homesickness, this research adds to our understanding of factors affecting homesickness reports. It also suggests that more research into the impact of cell phone

use at camp is needed. More camp studies have looked at boys, so this study also adds to our knowledge of girl campers. It can help Girl Scout councils better understand the impact of cell phones at their camps and help all camp directors and parents to make more informed decisions about cell phone use. These results will add to the small, but growing literature on the impact of electronics in other groups at risk for homesickness such as international students, refugees, and hospitalized children. By incorporating Thurber's validated Rate Your Day® measurement instrument, this study can contribute to our understanding of this tool's value. Finally, the support of the Girl Scout Councils and Camp Directors involved in this study demonstrates how organizations can foster research relevant to camp policy as well as nurture young researchers.

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## **THE IMPACT OF UNIVERSITY DAY CAMPS ON YOUTH: PROGRAM ASSESSMENT USING THE ACA YOUTH OUTCOME BATTERY**

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The framework for positive youth development is an evolving model focused around transforming youth to be assets to society (Hill, Holt, Ramsing, & Goff, 2016). Children need guidance and support on their path to adulthood. The guidance and support they receive come from various groups of people and organizations that help to lay the foundation for children's perception and reality of the world around them. Day camps allow youth to engage with various individuals (e.g., college students) who provide varying supports that are generally related to academics or other essential skills needed for continued development. Those supports may include tutoring, athletics, music, environmental awareness, and other activities. More importantly, day camps provide essential services to families through academic support, mentorship, and a safe environment; which is key throughout the Out of School Time as students are transitioning from one grade or environment to another (Hill et al., 2016). With Positive Youth Development (PYD) being both a philosophy and an approach, organized camping has embraced the concept and has actively implemented programs that are prone to foster positive outcomes.

The American Camp Association (ACA) has been integral in supporting PYD by identifying and documenting outcomes associated with participation in organized camping. In their seminal outcomes study, four domains were comprised of ten constructs of PYD which included: positive identity (positive identity, independence), social skills (leadership, making friends, social anxiety, peer relationships), positive values and spiritual growth (positive values/decision making, spirituality), and thinking and physical skills (adventure/exploration, environmental awareness) (Henderson, Bialeschki, Scanlin, Thurber, Whitaker, & Marsh, 2007). The ACA sponsored research is salient in that it provides evidence of what many practitioners already know; organized camping is beneficial to the development of youth (American Camp Association, 2005; Henderson, Bialeschki, & James, 2007). Moreover, the ACA provides support for organized camping as a context for change, thereby helping justify and provide outcomes to stakeholders (Sibthorp, Bialeschki, Morgan, & Browne, 2013).

Using the Outcome-Focused Programming (OFP) model as a foundation for the study, the approach included four action steps: (1) outcome oriented, program goals should be identified and meaningful to the agency, the participants, and other stakeholders, (2) theory-based program components should be intentionally structured to address the stated goals, (3) progress toward desired goals must be assessed, and (4) an organization must publicize its outcomes (Brown, Hill, Shellman, & Gómez, 2012; Hill, Milliken, Goff, & Gregory, 2013). Through a summer undergraduate recreation class, college students were trained as staff on the OFP model and it was utilized to program activities that would intentionally meet the seven target areas, (i.e., Friendship, Family Citizenship, Teamwork, Perceived Competence, Independence, Interest in Exploration, and Responsibility) during the day camp. Therefore, the purpose of this study was to determine if collaboration between a university and private elementary school leadership camp was effective at improving campers' skills (e.g., friendship) and affinity for nature.

### **Methods**

In the summer of 2017, college students in a camp recreation programming class designed the camp using a daily activity plan form (similar to a lesson plan) to ensure daily objectives were being met. The camp took place from 9:00am-3:00 pm Monday-Friday. During the week, the campers participated in paddle boarding, rock climbing, Leave No Trace activities, and many other intentional recreation activities that promoted leadership opportunities. The participants were given choice time blocks, completed a service-learning experience, and completed a challenge course of low elements. Each day the ACA identified outcomes (e.g., teamwork) were addressed through OFP, using intentionally programmed recreational activities. To address all seven outcomes each day, the overarching theme for each day was *Friendship and Teamwork Skills*. The weekly outcomes that change daily address *Independence, Perceived Competence, Responsibility, Teamwork, Family Citizenship, and Interest in Exploration*. The ACA-YOB Camper Learning survey was used as a unidimensional measure of generalized camp learning.

Camp counselors administered the 14-item Camper Learning Scale (CLS) and the 5-item Affinity for Nature Scale (AFN) on the last day of camp (Friday). Both measures used a retrospective design, eliminating the need for a pretest. The CLS was based on the original seven outcomes (e.g., friendship) built into one scale specifically designed for young children. The questions were on a 4-point Likert-type scale ranging from 1 = *I didn't learn anything about this* to 4 = *I learned a lot about this* in regard to, for example, the question "At camp, did you learn how to be better at making friends?" The AFN scale was scored on a 5-point Likert scale ranging from 1 = Decreased to 5= Increased a lot. Each item (e.g., liking nature) was prefaced by, "How much if any, has your experience as a camper in this camp changed you in each of the following ways?"

As recommended by the ACA instructions, camp counselors and staff sat in a quiet area, in groups of 4-5 campers, to administer the Camper Learning Scale. Campers were given individual copies of the scale and a writing utensil. After an example was given, the scale was orally administered to small groups of 4-5 campers. After the data were collected, they were entered into a spreadsheet (available free from ACA at [www.ACAcamps.org/members/outcomes/tools](http://www.ACAcamps.org/members/outcomes/tools)). After the data were entered, it produced a calculated scale score by summing the scores for each item on that scale and finding the average of students who learned "a little or a lot" about the outcomes. Additionally, the ACA-YOB Staff Perception measure from the five counselors was used.

### **Results**

The CLS and AFN were administered 34 of the 35 campers (one parent did not consent to the study). All 34 campers with parental permission also signed an assent. The average age of participants was 8.67 years old, with 41.18% of them identifying as male and 52.82% of them identifying as female. On a scale of 1-10, campers scored a 9 on Level of Enjoyment. Findings suggest that 71% of the 34 campers "learned a little or a lot" about the seven dimensions of the CLS. Scoring the AFN scale, 79% of them said their knowledge "increased some, I am sure" or increased a lot, I am sure." These findings are higher than other camps using the ACA-YOB in similar settings (Hill, et al., 2016). Using the Staff Perceptions as a pilot study helped us learn the relationship between camper and counselor perceptions of the identified outcomes. Based on counselor observations, 81% identified the campers as having an average of 3.5 (out of 5) or better regarding the identified outcomes.

### **Implications**

University day camp programs have the potential to positively impact a great number of youth. In fact, university camps are more actively seeking ACA accreditation. This research study has the potential to provide evidence-based practices on the learning outcomes of different types of camps (e.g., outdoor adventure). The choice provision, team-based activities, and outdoor recreation introduced to the students during the camp provide a positive learning environment to the students. In 2016, the same camp only saw 68% of campers as having “learned a little or a lot.” Based on feedback from campers, parents, the private school teachers, and counselors, we made program changes for 2017. The increase from 68% from the university day camp in 2016 to 71% of campers learning “a little” or “a lot” about the desired outcomes show the impact that university day camps can have on the youth with more effective programming. In addition, piloting the ACA-YOB Staff Perceptions helped us determine if the self-reported camper perspectives are similar to those that the counselors observed. This study also highlights the importance of collaboration to reach new participants, share resources, and provide learning labs for college students.

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## HOW THEMING LEADS TO GREATER RETENTION, SATISFACTION, AND PROMOTION

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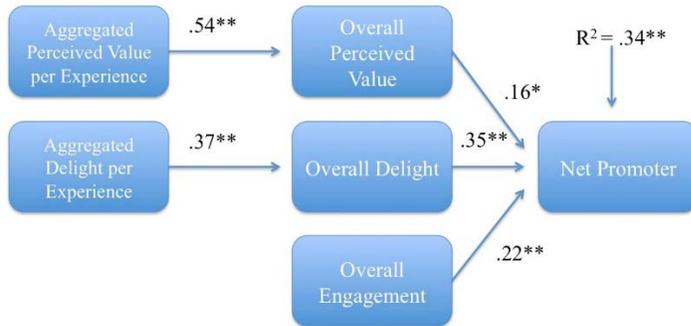
The quality of daily experiences of campers is imperative to the success of camps, particularly in the increasingly competitive (McCormack, 2016) camp industry. Campers who enjoy deep, valued, and meaningful experiences during their days and nights at camp will return as future opportunities allow, and will also become advocates for a camp. Advocacy through social media and word-of-mouth advertising is keenly important. Competition for campers can be intense, and camp managers are challenged to provide top-quality experiences that campers enthusiastically describe to friends and relatives after their days at camp end.

Camps use a variety of strategies to promote quality experiences. They recruit talented and enthusiastic staff, strive to provide exciting “experiencescapes,” and they ensure that camper comfort, safety, and voice are in place. Specialized strategies for promoting quality experiences in tourist attractions, restaurants, and interpretation contexts have also been identified (e.g., Ellis, Freeman, Jamal, & Jiang, 2016; Pine & Gilmore, 2011; Tilden, 2009). Many camps also use such techniques. Effective implementation can be pivotal to success of any organization in the highly competitive “experience industries” (Pine & Gilmore, 2011).

One of the strategies fully detailed by Pine and Gilmore (2011) in their highly influential book, *The Experience Economy*, is theming. Many camps (Merhige, 2014) and tourism attractions immerse visitors in clear, coherent, and pervasive themes. The pervasiveness of theme was of enormous importance to Walt Disney in designing visitor experiences in his theme parks. Disney once reprimanded an employee who, in the early hours before the park opened, drove a modern automobile into “Frontierland,” an 1800’s era themed area of Disneyland. “What is that automobile doing here in the 1800’s?” Disney demanded (Disney Corporation, 2011).

But research on the effect of theme in the camp setting is lacking. While the power of theme in tourist attractions and built environments may be evident, camps are extraordinary places in themselves. Nature-based camps expose campers to unique natural and built features that afford opportunities for diverse forms of recreation. Rich opportunities for co-creation of experiences (e.g., Prahalad & Ramaswamy, 2004) exist at camp due to the presence of large numbers of campers with similar ages and interests. All camps strive to fill campers’ days with exciting arrays of daily activities that present exciting challenges and build skills. Perhaps theme is of little consequence in such stimulus-rich settings. Thus, the purpose of this study was to address two questions: 1) What effect does theme have on the subjective quality of immediate experiences of youth campers and 2) through what causal linkages might theme affect intention to engage in advocacy (Figure 1)?

Figure 1. Causal model.



Note. \*p < .05, \*\*p < .01

## Methods

The sample included 1,847 experience observations from 231 youth in a 4-H summer camp. The camps met for three days and included eight core activities: archery, riflery, kayaking, fishing, crafts, challenge course, swimming, and dance. Participants’ ages ranged from 8 to 17 years old and 61.5 percent were female.

A questionnaire booklet was assembled, containing a) a set of “immediate experience” measures, repeated for each of the eight core activities, and b) measures of the overall camp experience. Immediate experience measures included the prevalence of deep structured experience (DSEe), delight (De), and perceived value (PVe) of the immediate experience. Overall (generalized) camp experience measures included perceived value (PVo), delight (Do), engagement (Eo), and net promoter scale (NPS; Schneider, Berent, Thomas, & Krosnick, 2008). NPS is a gauge of retention, ability to attract new customers, and satisfaction (Reichheld, 2003).

A quasi-experimental design was used. One camp session was not themed, a second was partially themed, and a third was fully themed. Theme was operationalized by creating a cohesive, imaginary context for each of the eight core activities. This was accomplished by training camp staff to use visual storyboarding techniques to create a theme. During the climbing experience, for example, campers in the themed treatment condition “became” gold miners. They had successfully mined a large pot of gold, but bandits were in hot pursuit. They had to climb a bluff (cargo net) and slide down the side of the bluff (zip-line) to escape. Campers in one of the camps participated in the same activities, but without a theme.

We tested a hypothesized causal sequence. First, we hypothesized that the presence of theme enhances the quality of experience during each of the eight activities. Some activities may lend themselves to theme better than others, so we modeled that possibility by examining the effect of theme, activity type, and their interaction on the three measures of quality of immediate experience (DSEe, PVe, and De), with “experience” as the unit of analysis. Next, we aggregated the data to test a causal model (Figure 1) with “camper” as the unit of analysis. We noted that campers whose *average* quality of immediate experience (i.e., De, and PVe) was high should report higher *overall* value (PVo) and delight (Do) than those whose average experience quality was low. NPS was hypothesized to covary with overall evaluations of camp (i.e., PVo, Do, and Eo.) We used path analysis to test those relations.

## Results

The mixed models analysis of the individual experience data showed a significant, theme-by-activity interaction effect on deep structured experience, delight, and perceived value

(Table 1). Themed activities provided greater deep structured experience prevalence for all activity types, but the magnitude of the effect differed by activity. Path analysis results are summarized in Figure 1. All hypotheses were supported. Coefficients ranged in magnitude from .16 (NPS and PVo) to .54 (PVe and PVo). The  $R^2$  in predicting proclivity to promote was .34. Ultimately, results conclude theme has a significant impact with deep structured experiences, delight, perceived value, and proclivity to promote for the camp.

Table 1

*Linear Mixed Model Results, Immediate Experience Data:  
Effect of Theme and Activity on Deep Structured Experience,  
Perceived Value, and Delight*

	<i>F</i>	<i>df</i>	$\eta^2$
Deep structured experience			
Theme	1.75	226.46	0.01
Activity	8.53*	1543.57	0.02
Theme x Activity	2.22*	1543.61	0.01
Perceived value			
Theme	0.81	219.05	0.01
Activity	15.11*	1477.68	0.05
Theme x Activity	3.08*	1477.87	0.02
Delight			
Theme	0.2	224.22	<.01
Activity	10.87*	1545.11	0.04
Theme x Activity	2.11*	1545.37	0.01

\*  $p < .01$

### Implications

This study explored how theme in youth camp experiences may affect the quality of immediate experiences and, ultimately, proclivity to engage in advocacy for the camp. Findings support the hypothesized causal linkages. These results are noteworthy for camp directors and staff from a return-on-investment, growth, and quality perspective. The cost to theme a camp can be very modest, only a few dollars. In contrast, equipment needed for a new camp activity can cost several thousand dollars, and equipment must be installed and maintained. Net Promoter Scale results are particularly notable. The NPS reflects satisfaction and quality, both of which important to production of positive youth development outcomes (Silliman & Schumm, 2013). High NPS scores indicate loyalty, retention, and ability to grow. Campers who have quality experiences will likely return year after year, and they will help attract new campers.

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## HOW SUMMER CAMP INFLUENCES BOYS' EXPECTATIONS OF TOUGHNESS AND EXPRESSION OF WEAKNESS

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### Conceptual Foundations

Theodore Roosevelt encouraged the creation of summer camps so boys could connect with nature and remediate what he deemed a “crisis of masculinity” (Testi, 1995). Over the last century a few research teams have documented the positive developmental outcomes of summer camp (Burkhardt et. al., 2004; Hanes & Laguna, 2005; Thurber, Scanlin, Scheuler, & Henderson, 2007). However, there are little data on how camp influences self-perceived gender roles or whether camp provides a safe space for boys to escape from the social pressure to adhere to a masculine stereotype, such as being tough or stoic.

Research suggests that such gendered social pressures are detrimental to men’s mental health (O’Neil, Good, & Holmes, 1995). Moreover, masculine gender norms can impair the emotional and physical development of boys (Santos, 2010). These norms have been linked with negative social, developmental, and psychological outcomes such as violence, aggression, academic difficulties, substance use, neglect of personal health, homophobia, misogyny, and detached fathering (Kindlon & Thompson, 1999; Pleck, Sonenstein & Ku, 1993; Santos, 2010 in Levant, 2005). During Roosevelt’s time, “...remaking gender roles was integral to [the] process” of overnight summer camps (Ayres, 2010, pp. xxiv). Ironically, a more urgent focus of inquiry today is whether camps protect youth from hegemonic gender roles.

At the turn of the last century, researchers began to highlight the gender-role-based challenges that girls faced; studies of boys have lagged behind. As a result, society is less aware of boys’ problems, perhaps due to the widespread assumption that males should be self-sufficient and keep problems to themselves (Levant, 2005). In contrast with the crisis Roosevelt articulated—where boys were not as masculine as they “should have been,” boys in the US face a new crisis of masculinity. By the time many boys enter elementary school, they have learned to hide and feel ashamed of two important sets of emotions: those that express vulnerability in one way or another (e.g., fear, sadness, loneliness, hurt, shame, disappointment) and those that express attachment to others, (e.g., neediness, caring, love, connection) (Levant, 2005).

The purpose of this study was to investigate whether a traditional, overnight boys’ camp could provide an emotionally and physically safe space for boys to eschew gender role stereotypes. Specifically, this study sought to investigate whether boys would self-report lower levels of social pressure to exhibit a tough and emotional stoic persona when surrounded by their peers.

### Methods

The Institutional Review Board at Middlebury College reviewed and accepted the design of this study, including its survey to minors. Participants were 162 boys ages 8-16 years ( $M = 12.9$ ;  $SD = 1.4$ ; 88% white) who were attending the first two-week summer session at a traditional, non-profit overnight camp for boys, located in New England. Of the 287 campers enrolled, 172 were given parental permission to participate, and 162 actually completed the study questionnaire.

Self-report survey questions included demographic information, questions about camp culture, expectations of stoicism and toughness at camp and at school, and a query about instances in which participants may have seen, heard, or read the phrase “man up” or similar

vernacular. Sample questions included: “On a scale of 1 to 10, how strongly, if at all, do you feel like other people expect you to be tough and avoid showing weakness **at camp?**” [next question – “**ibid...at school?**”] and “On a scale from 1 to 10, how accepting and inclusive do you feel camp is?” and “In your life, have you ever been told to ‘be a man’ or ‘man up’ or ‘not to be a girl’ or ‘not to be a wuss?’”

Participants completed this 22-question survey during the one-hour, post-lunch rest period near the end of their second week at camp. They were able to read and answer all questions in the privacy of their own bunk bed. Campers who chose not to participate were also given paper and pencil and could write or draw and, if they wished, remain indistinguishable from participants. Informal, verbal polling of 10% of the study participants indicated that the questionnaire was easy to understand and completed with candour.

### **Results**

Preliminary analyses, conducted within a larger study on boys’ experiences at overnight summer camp, suggested that these 162 boys felt a higher expectation of stoicism and toughness at school versus at camp. Some 47% reported a negative feeling associated with the phrase “man up” (or similar expressions of male stereotypes), suggesting that boys were likely experiencing uncomfortable levels of social pressure to express toughness and stoicism. Twenty-five point nine percent reported a neutral feeling, such as “fine” or “I didn't care,” and 27% reported a positive feeling, such as “happy” or “motivated.”

Analyses by the five age cohorts at camp suggested that older boys generally felt greater expectations to be tough and avoid showing weakness at school versus camp. On the numerical rating scale from 1 to 10, with 10 being the highest perceived level of others’ expectations for toughness and the avoidance of showing weakness, the senior campers, (ages ~15-16) rated school 2.8 points higher than camp, on average ( $p < .00001$ ); the bessemer campers (age ~14) rated school 2.0 points higher than camp ( $p < .001$ ); the middler campers (age ~13) rated school 2.7 points higher than camp ( $p < .0001$ ); the junior campers (ages ~11-12) rated school 1.1 points higher than camp ( $p < .05$ ). Results suggested no significant school vs. camp differences for boys in the youngest division.

### **Discussion and Implications for Camp Professionals**

Preliminary findings and ongoing analyses indicate that boys felt significantly more comfortable and less pressured in the camp environment, as opposed to their schools. The larger differences for older campers could suggest that their experiences at camp serve as a place where boys are encouraged to be themselves, feel accepted, and relax, more so than at school.

Alternatively, perhaps the more years a boy returns to camp, the more he feels as if camp is a safe environment, one in which he feels less pressure to conform to a gender role stereotype.

These results might allow camps to promote themselves as retreats not only from the fast pace of daily life, but also from the social pressures to act tough or hide weakness. In a time where the concept of what it means to be masculine can be foggy and unclear for boys and young men, such a reprieve may be welcome. That said, it is important to note that roughly a quarter of the boys reported a positive association with masculine stereotypes and another quarter felt neutral on the topic. Given that adherence to a stoic or tough masculine stereotype is generally associated with negative outcomes, one wonders both about the social desirability bias of respondents, as well as the possibility of a healthy, ego-syntonic state of stoicism. Further data analysis of the current sample will investigate how group mean differences vary with regards to demographic information and how they co-vary with other questions on the survey.

Future research could compare school and camp experiences in greater depth and explore the broader societal implications of how boys are receiving, processing, and handling masculine norms and expectations of toughness. Future research could also investigate boys' experiences in other settings, such as families, sports teams, and peer groups. How boys' experiences compare to girls—who also experience pressure to live up to an unhealthy feminine stereotype—is also essential. Ultimately, such data can inform program improvement at camps, coursework at schools, and cultural enhancement in both settings. Surely, there is a way to realize Roosevelt's ideal of resilient youth without negating the innately human experiences of emotional pain and connection to others.

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## **GIRLS ONLY: CHALLENGE SEEKING BEHAVIORS AND SELF-EFFICACY GROWTH IN THE OUTDOORS**

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This study uses qualitative methods to seek evidence of challenge seeking behaviors and self-efficacy growth in girls participating in girls-only outdoor experiences. In 2014, Girl Scouts of the USA (GSUSA) published “More than S’mores: Successes and Surprises in Girls’ Outdoor Experiences” (GSUSA, 2014). One premise of the study is “Girls seek challenges in the world. They set challenging goals for themselves, and take appropriate risks” (GSUSA, 2014, p. 6). While the challenge seeking outcome was highest among outcomes, the study limitations could not place outdoor experiences as a predictor of challenge seeking outcomes.

In 2017, a research team at Simmons College presented a third phase of data of the “Dreaming Big: What’s Gender Got to Do With It?” at a statewide conference. In this research, confidence in girls was related to Bandura’s sources of self-efficacy information, specifically performance accomplishment mastery. This research suggests that for girls, confidence can be impacted via getting encouraging feedback, having an adult to talk to, failure at something, and getting exercise (Shapiro, Martin, Grossman, & Hammer, 2017), all of which support the theory that outdoor experiences directly impact challenge seeking and self-efficacy growth in girls.

The purpose of this study is to use videos of girls’ own experiences to seek further evidence of challenge seeking behaviors and self-efficacy growth in girls engaged in outdoor experiences.

### **Methods**

Researchers used video data of girls engaged in a variety of girls-only outdoor experiences in search of evidence that outdoor experiences are a key indicator of challenge seeking. Videos included recorded conversations led by a researcher or among girls with an opening question of “what did you do today?” or video journals recorded by girls were used. In this case, girls were given a camera and asked simply to talk to the camera at least once daily for the time that they were at camp. Additional video from videos of various activities within camp was also used to search for body language evidence.

Videos were coded by the researchers to seek indicators of challenge seeking and evidence of performance accomplishment mastery (self-efficacy) directly attributed to outdoor experiences. Girls ranged in age from 6-16; parental consent was obtained, as well as video release permission. Videos were coded independently by three researchers using pre-determined indicators, defined first by GSUSA’s national outcomes, and later by similarities noted by researchers among body stance and body confidence.

### **Results**

As girls’ confidence increases, the unique nature of the outdoor environment allows her to show that confidence. An unexpected finding when coding the video data was that girls who showed high confidence or self-efficacy skills around a particular activity often used body language and forms of expression that the researchers believe would be considered “unacceptable” or be limited in environments other than the outdoors. This was evident as:

- A girl talking about cooking over a fire confidently uses a knife in a way that begs correction;
- A girl talking about the flying squirrel acts out how it worked; her friend leans away, but allows her to continue talking loudly, and with expansive body language
- Teenage girls standing sturdily around a fire, taking up lots of space
- Girls scream, yell, and laugh loudly when talking about their experiences; often they throw their arms wide in descriptions.

While girls often describe their experiences as “fun,” fun is not a key indicator of challenge seeking for girls in the outdoors. Ninety-seven percent of girls in our videos use the word “fun” to describe their outdoor experience, however, it also describes experiences where girls talk about “being afraid”/“fear,” “a lot of spiders,” and “raining and cold.” In one video, two girls are counting off for a zipline. One girl shouts “3, 2, 1, zip!” while the next shouts “3” then pauses, her voice trailing off as she counts “2...1...” While she doesn’t say she is afraid or lacks confidence, her voice gives her away.

Girls also talk about failure as being fun, and this concept of failure becomes part of the process of challenge seeking.

- “In the challenge, we made this (pause) weird, crazy, not delicious, (pause) it might have been food thing – that we totally couldn’t eat. But it was fun.” (Age 13)
- “It was really fun, but I’m bad at archery. I mean, they taught me, but I didn’t hit the target. It was so fun.” (Age 9)

Many girls expressed their perception that other girls will help her or show her the skill she needs. Absent from the collected data is the idea that if they don’t know something, they will rely on someone else to do the skill – their expectation is that they themselves will learn the skill. The girls-only aspect of the outdoor activity may be a key indicator of “failure is still fun.” All girls had been in coed and girls only summer camp experiences, many citing differences.

- “It’s more fun when there are only girls. Like, if I mess up, other girls encourage me, or show me how to do something. Boys just take over.” (Age 11).
- “Even though we had to cook in a bowl [they had forgotten to pack a pan] we still made the bacon and ate it. I know my brother wouldn’t have eaten it, even if he was camping. I like that we figured it out, because I was really hungry.” (Age 15)

Additionally, as if to insulate themselves from the predicted failure, many girls downplay their skills at the start of the activity, then specifically reference the “teaching” or “learning” aspect and their improvement, saying “after they taught me I got better, lots better,” (age 9). This learning aspect is enforced by the actions of the adults present in the activities. While girls never reference an adult beyond “they taught me” or “they said go” in their descriptions, the videos of particular activities show adults encouraging girls.

- “Are you 100% proud of yourself? ... Good, that’s what I wanna hear!”
- “Are you ready? ... count 3, 2, 1, zip...”
- “Did you think you could do it? ... I always knew you would figure it out!”

While these results were not coded for this study, they do show girls have supportive adults at camp who provide encouraging feedback and are available to talk to.

### **Implications**

Using the basis of challenge seeking and self-efficacy measures for developing confidence, the video data shows evidence that girls attribute their gains in these outcomes directly to participation in outdoor experiences. Further, outdoor experiences seem to have an

unexpected outcome seen in girls' physical self-expression. While the researchers did not set out to measure this outcome, it raises another potential benefit of girls-only outdoor experiences.

For those working with girls in the outdoors, this study suggests some actionable insights. For camp professionals, the option to use video from participants to tell the story of their experiences is evident. An obvious extension of this research is a completed video of girls talking about the power of girls-only experiences in the outdoors, the benefits they gain from it, and their direct attribution to the outdoor experiences and leadership they found there.

The potential to use video to share these insights with decision makers outside the camp environment is powerful. Sharing zipline videos and data with funders who built the ropes course is a compelling way to show insight into camp experiences and the impact a donation has for girls. Showing girls at their highest confidence and talking about what they felt and experienced connects directly to alumni and parents. Using the videos to recruit camp staff effectively shows the impact they can make at a girls-only camp.

Finally, the videos can be used to train staff, or show examples of great encouragement to participants, and the expected results. When hiring and training staff, showing a video clip and asking the trainees "what next?" or "what would you say?" or showing how girls react to learning something for the first time, can be a valuable way of setting expectations with visible examples.

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## **CAMPER LEADERS' WORK-RELATED EXPERIENCES FOR SOCIAL-EMOTIONAL LEARNING**

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Camps can provide high quality experiences that enhance youth's growth and development (e.g., Garst, Browne, & Bialeschki, 2011; Thurber, Scanlin, Scheuler, & Henderson, 2006). Similarly, camp staff experience personal growth from their work, as they are still immersed in adolescent development (Duerden et al., 2014; Ferrari & McNeely, 2007). Previous studies examined camp counselor motivations (DeGraaf & Glover, 2003), quality of positive learning experiences (Ferrari & McNeely, 2007; Powell, Bixler, & Switzer, 2003), transfer of knowledge (Forsythe, Matysik, & Nelson, 2004), and workforce development (e.g. Digby & Ferrari, 2007). As camp stakeholders focus on youth's acquisition of 21<sup>st</sup> century skills, research is limited on camp leaders' enhancement of similar skills including the interpersonal and intrapersonal competencies of social-emotional learning (SEL): self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Social-emotional learning has been widely examined within academic settings, yet research on SEL enhancement within camp settings remains limited. Camp professionals seeking to enhance youth SEL should also consider staff SEL competencies, as previous research demonstrated a link between staff SEL self-efficacy and youth SEL acquisition (Jennings & Greenberg, 2009). Most SEL curriculums are designed to simultaneously enhance teachers and students SEL (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). Thus, camp staff may have greater impact when they possess an enhanced understanding (Gillard, Roark, Nyaga, & Bialeschki, 2011). The purpose of this study was to explore the current social-emotional learning growth experiences of camp staff. The objective of this study was to gather personal perspectives regarding specific skills generally learned through a camp work experience.

### **Conceptual Framework**

The conceptual frameworks of social learning theory (Bandura, 1978) and positive youth development (PYD) informed the study of camp staff's potential SEL lessons and skills. Camp leaders are distinctly responsible for modeling and teaching positive behaviors in a communal living environment. Social learning theory situates learning as a reciprocal experience with one's environment. Positive youth development suggests young people should be actively engaged in their skill development and experience opportunities to practice skills (Eccles, 1999; Larson, 2000). Camp programs allow individuals to acquire, practice, and enhance skills in a supportive environment (e.g., Henderson et al., 2007). This presentation describes staff lessons and skills learned on-site.

### **Method**

A qualitative methodology was utilized to explore camp staff skills and lessons acquired while working at a summer residential camp. The study involved three volunteer-led camps that operated 5-7 days for youth ages 8-16 in the Mid-Atlantic region. The co-ed camps provided traditional activities such as swimming, boating, crafts, and shooting sports. A total of ten ( $n = 10$ ) camp leaders, aged 18-19, participated in the study. Leaders were recruited and provided consent onsite. Three questions were formulated to elicit information about camp staff background, skills learned, and applicable lessons beyond camp. Questions were distributed beforehand and leaders video recorded their responses in a private area in the dining hall. The

researcher set-up the camera, left the room, and the leader recorded their response upon hearing the door close. All responses were transcribed verbatim with verbal and visual cues noted. Multiple rounds of coding occurred with the leaders' narratives. Initial coding identified statements generally related to the five SEL competencies. Subsequent coding schemes involved open and axial coding to illuminate the essence of the leaders' growth experiences (Creswell, 2014). Both researchers independently coded all data and discussed findings. Few coding differences emerged, as only three concepts required further discussion and agreement between the researchers.

### **Results**

Camp leaders described numerous lessons and skills learned from their experience. The findings suggested leaders enhanced SEL awareness, learned and practiced skills that resulted in some SEL behavioral changes. Results are presented according to the five SEL competencies.

*Self-Awareness:* Leaders described feeling "stretched," which enhanced self-awareness of personal behaviors. Several leaders grew from a shy individual to more outgoing.

*Self-Management:* Leaders increased knowledge of personal behaviors and reactions with the ability to adjust behaviors throughout camp work. Some leaders acknowledged their enhanced positive demeanor despite others' lackluster attitudes.

*Social Awareness:* Leaders' became more appreciative of others and learned to create an open, welcoming environment for all. Some leaders improved listening skills so campers' opinions were consistently recognized.

*Relationship Skills:* Leaders became aware of the benefits resulting from quality camp relationships and sought to maintain these positive relationships. Several leaders believed their supportive camp network would continue after camp concluded.

*Responsible Decision-Making:* Leaders recognized the importance of adaptability and adjusting personal reactions. Problem-solving techniques were enhanced throughout the program, as challenges surfaced with weather or campers' interpersonal conflicts. Some leaders described a transference of skills (e.g., risk management) beyond camp.

### **Discussion**

This study explored camp leaders' perceptions of SEL lessons and skills learned through camp work. The analysis revealed enhanced awareness, application opportunities, and some perceived behavioral changes. The findings support prior research on workforce development that suggest camp staff benefit from challenging work and being pushed beyond their "comfort zone" (Duerden et al., 2014). An examination of the skills acquired among Wisconsin 4-H camp counselors found similar skills were gained: people skills, communication, patience/tolerance, and responsibility (Forsythe et al., 2004). DeGraaf and Glover (2003) found camp staff gained self-confidence, and developed empathy and relationship-building skills through their work experience. These SEL-related skills are important soft skills for staff to personally understand when teaching similar concepts to youth. Social-emotional learning research suggests adults with enhanced SEL skills are better prepared to address and teach youth SEL (e.g., Jennings & Greenberg, 2009; Larsen & Samdal, 2012). Only a few camp staff linked their camp work to changed SEL behaviors. The personal growth described in this study supports prior evidence of PYD experiences through camp programs (e.g., Ferrari & McNeely, 2007; Garst, Browne, & Bialeschki, 2011). Despite the serendipitous skill enhancement of these leaders, growth is uncertain. For example, camp counselors' work motivations vary widely, which can impact the potential for learning (e.g. Gillard, Watts, & Witt, 2009). Therefore, understanding what camp staff may learn could impact youth learning at camp.

## Implications

When seeking to enhance camper outcomes, prior researchers suggested camps simultaneously address youth and staff skill development. This study suggested that some learning may naturally occur from camp work. Camp administrators could further enhance staff skills by understanding what is initially learned through the experience. Specific training on SEL may enhance personal understanding of SEL concepts when mentoring youth through their emotional and social challenges at camp.

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## AN eSTUDIO PROJECT DEVELOPED TO PROVIDE ADDITIONAL OPPORTUNITIES FOR CAMPERS' CONNECTEDNESS THROUGH A DIGITAL LANDSCAPE.

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Connectedness is defined as a concept that means to experience a sense of community, attachment, belonging, and commitment that encompasses ideas related to positive influences of institutes, policies, and practices (Janis, 2007). Researchers have not only found that a higher level of social connectedness contributes to adolescents' protection against an array of risk behaviors but also that it fosters better mental health outcomes (Wu, 2015). The unique educational experiences of camp serves as a positive force in youth development for campers which leads to connectedness (Catalano & Hawkins, 1996). However, research has shown that feelings of connectedness to camp gradually disappear due to temporal and geographical limitations for campers (Thurber, Scanlin, Scheuler & Henderson, 2007). For those youth experienced with technology, particularly those who use the Internet daily, it becomes an easy way for them to construct connectedness to camp. Despite these findings, instead of developing supportive opportunities through the utilization of online technology, current camp programs limit its use (i.e., Internet) to communicate with campers during the off-season (Gillard, Witt, & Watts, 2006). Connectedness to the camp community can be maintained through supportive online activities when providing campers with interpersonal interaction and intrapersonal involvement opportunities. The sense of connectedness needs further participant interaction and involvement, and both of them can be delivered with the use of online technology by adopting a Positive Technology Development (PTD) perspective.

The purpose of this study was to develop an online e-community extension activity utilizing the PTD framework to better engage campers during the off-season. Two research questions were explored: *Does the use of an online e-community in the digital landscape efficiently maintain adolescent's social connectedness? How can camp programs apply the online extension activity (eStudio) to engage campers during the off-season?*

### Theoretical Framework

Bers (2012) proposed a framework to describe the processes of how technology can promote positive youth development in alignment with identity construction environment and provides a model for how individual and social developmental assets can be enhanced. The creation of a playground in the digital landscape where adolescents can construct their developmental assets through technology-mediated behaviors by involving applied practice activities is key. Within the PTD framework, six technology behaviors that correspond with Lerner's 6C's can be facilitated through well-designed activities in the digital landscape for *interpersonal interaction* and *intrapersonal involvement* among adolescents (Bers, 2012). These six technology-mediated behaviors include: *Content creation, Creativity, Choices of conduct, Communication, Collaboration, and Community building*. Based on these mediated behaviors, the digital landscape allows adolescents to create content and develop competence in the technical domain; express their creativity through digital projects; build confidence in their ability with new technologies; communicate with others so they can build connections with peers and adults that extend beyond face-to-face boundaries; and collaborate in joint initiatives to show caring and empathy. The success of an extension activity supported by a camp program not only

has to be a formal educational curriculum, but it also has to be mandatory for campers to participate (Nicholas & Ng, 2009).

### Methods

A total 60 Asian American campers consisting of 25 males (42%) and 35 females (58%) from 11 to 18 years of age participated in a five-day residential camp in southern California. The objectives of the camp were to empower campers' sense of belonging to increase self-identity, cultural knowledge, and social skills. Campers were invited to participate in e-Community activities at the completion of their camp stay. A total of 36 campers joined the Facebook page and 20 campers the eStudio project.

The digital projects based on Bers' PTD framework included an eStudio and Facebook page for this study. The eStudio, a complimentary online extension activity for the original camp program, was developed by the researchers. Based on the six technology mediated behaviors, a project was developed that allowed campers to create a team music album as a substitute for the traditional camp book. The eStudio was active for four weeks after camp and no direct teaching occurred. Three weekly sessions led campers to undertake creative activities around Asian cultural knowledge in order to extend the camp goals. Team assignments required weekly group discussions via Facebook and were facilitated by campers themselves. The final music album was published on the site and shared among campers and their families. The Facebook group was constructed and managed by the camp director and the primary researcher. Camp videos and group pictures were uploaded to the Facebook page by camp staff to initiate community building and allow for continued content creation. Campers were encouraged to leave comments, pictures, and videos of their camp experience in accordance with the six technology-mediated behaviors.

Data collection included focus group interviews with campers and the camp staff 6 weeks after camp to gather campers' and camp staff viewpoints of using online technology to stay connected with camp community and perceptions of the online extension activities. Specific questions for camp staff and camp counselors included "What is your overall opinion of eStudio?" and "Was there anything on the Facebook page that caught your attention?" The narratives arising from these and related questions comprise the data for this study. After data collection and transcription, thematic framework identification was used to analyze the data and trustworthiness of data was examined.

### Results

In the study, **social media** becomes an essential online tool for campers to continually interact because of its convenience and multimedia support function. According to campers' response in focus groups, the primary considerations for adolescents to take the advantages of the digital landscape are **convenient paths** and **multimedia supports**. The limited access to the Internet and computer facility availability were not an issue. Most campers reflected that they prefer to participate in the online activity by focusing on **social interaction with their peers**. The theme of **sense of community** describes an essential foundation to prompt campers to use online technology to stay connected after camp. The same family culture background by all campers defined a distinct **social group** for them. They naturally bonded to each other with a shared emotional connection and same level of maturity.

Three keys to successfully engage campers were identified through the focus group among camp staff: (1) accessible path; (2) multimedia use; and (3) attractive incentive. The accessible path (i.e., Facebook, Instagram, etc.,) is the primary factor for camp programs to create the relationship with campers either in pre-camp recruitment or post-camp engagement. The focus group reflected that the camp online extension activity should be set up in the

campers' **daily routine** for optimum path to maximize participation. The **accessible path** to engage campers through online camp extension activity becomes a new avenue for the camp program. The **flexible option**, such as timing, control or personal choice might also be an attractive element. Camp staff and counselors in the focus group believe that **visual information** such as pictures and video provides a mediator to recall campers' memories for camp context and extend the positive interaction among campers after camp. The concept of digital playground was similar to the perspective of how **multimedia** provides **visual information** and online social **interactive action** for adolescents with the elements of image, videos, and team project (e.g., game play or online learning). With the rise of cell phone applications, the features of multimedia for photo sharing altered their perception and extended the camp experience to the digital landscape. The focus group also noted that an attractive incentive was critical (e.g., **trophy and awards**) to motivate campers to participate and complete the online extension activity because this was not demanding like school system.

### Implications

The results of this study have implications for researchers and youth practitioners who desire to take the advantages of online technology in delivering online extension activity. In particular, the discussions shared provided new insight on how adolescents cope with online technology to pursue connectedness to camp; and the keys of how camp program might better develop the camp online extension activity in the digital landscape. The challenges for youth practitioners and researchers to deliver online extension activities are not only about the content design, but also about setting the purpose of its use. Furthermore, additional considerations for youth practitioners to develop an online activity include adolescents' capacity, the social group, positive social interaction, parental negotiation, and the role of culture. Researchers may also need to explore the strategies needed to set up a formal learning session in daily camp routines and its impact on camp outcomes. Overall, camp programs need to take advantages of multimedia for visual information exchange and various interactive actions for increasing connectedness after camp.

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## **A SYSTEMATIC REVIEW OF THE LITERATURE ON CAMPS FOR YOUTH WITH CHILDHOOD ONSET CHRONIC ILLNESSES**

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Organized camping programs for youth in the United States began in the late 1800's, with camps that aimed to engage children in outdoor recreational activities. By the early 1900's, camps began incorporating intentional learning, specifically related to character development. During that time, the first illness-specific camps were offering opportunities for often isolated youth with childhood onset chronic illnesses (COCI) or disabilities to engage in social activities in non-medical environments, while still receiving adequate medical supervision (Gillard & Allsop, 2016; Ramsing, 2007). Over the 20<sup>th</sup> century, as medical and technological advancements increased the lifespan of children with various diseases, the number and types of illness-specific camps have expanded proportionally. Now there are camps for children with asthma, cancer, diabetes, HIV, inflammatory bowel disease, musculoskeletal diseases, skin diseases, and many more. The spread and success of these camps is a testament to their value.

In the past decade, there has been a significant increase in studies evaluating medical specialty camps in order to understand the age and illness-specific needs of campers, and to inform the broader community of camp's impact on youth with COCI. However, there has yet to be a large-scale review of what illness groups and age groups have been incorporated in research on camps for youth with COCI to date. Understanding what illness groups and age groups have been studied in existing camp research is critical to inform areas of focus for future camp programming and research. Therefore, this study aimed to systematically review the literature on camps for youth with COCI to understand what illness groups and age groups are being incorporated in studies on camps for youth with COCI.

### **Methods**

This review describes a unique dataset of 425 studies published over the last 70 years, and gives an overview of select camp demographics. The systematic review was carried out using the PRISMA framework (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009). A total of 1,292 titles were collected (after eliminating duplicates) from PubMed, SCOPUS, Psycinfo, EMBASE, CINAHL, and ERIC, without a date range restriction. From outside sources, 46 additional titles were included, for a total of 1,338 titles. From that total, 584 titles were eliminated, 288 abstracts were eliminated and 41 papers were eliminated based on strict exclusion and inclusion criteria at each level; leaving 425 total included studies. Exclusion criteria included: certain article types (thesis, advertisement, directory, language other than English, supply guidelines for camp, epidemiological reports of viral outbreaks at camps, abstract or poster only, camps with participants age less than 7 or greater than 22 only, camps lasting less than or equal to one day or greater than three months, camps not intentionally designed for children with COCI or their families, obesity camps, descriptions of staff members' professional growth only, medical observation studies measuring non-camp related variables, studies assessing participant disease knowledge only, and the testing of new drugs or medical treatment modalities at camps without descriptive specifics of camp implementation.

## Results

Of the 425 studies reviewed, 36% included diabetes camps, 15% included camps accepting multiple illnesses, 12% included cancer camps, and 11% included asthma camps. Table 1 displays the variety of illnesses addressed along with the total number of studies focusing on each one. It is important to note that a study is not necessarily directly proportional to a single camp. Several studies involved multiple camps, with each camp serving different medical conditions, and occasionally a single camp provided the research site for multiple studies.

Table 1  
*Number of Studies On Camps that Address Identified Conditions*

<u>Type Of Condition</u>	<u>Total Number of Studies on Camps that Address Identified Conditions</u>
Diabetes	152
Multiple Illnesses	64
Other	51
Cancer	49
Asthma	48
Burns	21
Visual Impairment	9
Arthritis	8
Cystic Fibrosis	6
Hearing Impairment	6
Skin Disease	4
Inflammatory Bowel	3
Seizure Disorder	3
Celiac Disease	2
Muscular Dystrophy	0

The total number of camp participants in the studies reviewed was 28,402. Many studies did not report the number of participants, so this is an underestimation of the total number of participants. Forty-four percent recorded their oldest campers between the ages of 14 and 18, with 16 being the most common age cut-off. Overall, very few studies addressed campers in the

transition between adolescence to young adulthood. Only 7% of studies in the sample addressed campers of any age above 18, and just 5.5% of studies contained data on young adult participants between the ages of 19-24.

### **Implications:**

Thousands of children with a wide range of childhood-onset chronic illnesses attend medical specialty camps each year. Studies of youth at these medical specialty summer camps have been published for almost 70 years and the number of camps and related studies is increasing. This comprehensive study provides important information to guide camp program leaders, as well as researchers interested in evaluating such camps in the future.

The vast majority of participants who attended the camps described in this study were younger than 16, and camps serving youth of this age group are unlikely to focus on the transition to adulthood and adult responsibility. Given the various struggles of adolescents and young adults with COCI (Newacheck et al., 1998; Van Dyck, Kogan, McPherson, Weissman & Newacheck, 2004), this seems to be a missed opportunity. Camps for youth with COCI have already established supportive mentoring relationships with youth to promote their positive development, but the relationship ends just when youth are most in need of this connection and support. There is an opportunity for camp programs to consider expanding their reach to serve young adults. Diabetes camps provide an example of the missed opportunity, as over 1,500 young adults with diabetes serve as counselors at diabetes camps each year, but are not typically a focus of the camp programming (McAuliffe-Fogarty, Ramsing, & Hill, 2007) This report may provide camp leadership an opportunity to examine how incorporating older adolescents and young adults into their programming can help this age group deal with the many struggles they face, during a pivotal time in developmental transition.

In addition, this study shows that while substantial research has been conducted on diabetes, cancer, and asthma camps, there is a gap in the literature with respect to camps serving participants with other diseases—such as muscular dystrophy, seizure disorders, and inflammatory bowel disease. To the authors' knowledge, this review is the most comprehensive summary of existing chronic illness camp studies, and it may serve as a starting point for informing future research and implementation of chronic illness camp programming.

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## **BEYOND SPIRITUALITY: MEASURING FAITH OUTCOMES AT RELIGIOUSLY AFFILIATED CAMPS**

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Summer camp as a whole has seen a tremendous increase in research during the past two decades, though there has been a tendency to generalize the industry in order to prioritize inclusiveness. There are tremendous benefits to this approach, but it is also important to examine the particular priorities of certain camp types. Spirituality, in particular, has proven a difficult outcome to generalize in camp research because it is defined differently among various scholars and camp professionals. Heintzman (2010) writes about the different understandings of spirituality related to outdoor recreation experiences. Henderson, Oakleaf, and Bialeschki (2009) note the difficulties of defining and measuring spiritual growth, but they also provide evidence that religiously affiliated camps are more effective at facilitating spiritual growth than non-religious camps.

Religiously affiliated camps share many of the same priorities as secular camps, but their theological emphases and connections to communities of faith should also be taken into account. They are less concerned with general notions of spirituality than they are with specifics of their faith tradition, which often infuse every aspect of their camp programming and may be their primary missional concern (Venable & Joy, 1998). A major study on Jewish camping in the United States has demonstrated the unique characteristics and outcomes of religiously affiliated camps (Sales & Saxe, 2004). Among religious scholars, camp is often overlooked because it is dismissed as theologically shallow or little more than fun and games (e.g., Root, 2014; Yust, 2006). The Effective Camp Research Project sought to fill a gap in the research on religious camping, specifically focusing on weeklong Christian residential camps, which account for nearly a quarter of all residential camps in the United States.

### **Methodology**

The project asked, *what is the impact of the one-week Christian summer camp experience on the lives of the primary participants and their supporting networks?* Researchers adopted a sequential exploratory methodology in order to establish theory in the context of a very specific model of Christian camping and, subsequently, work to test and generalize through survey research. Researchers were careful to obtain parental consent for minors who participated, along with both implied and informed consent from participants themselves, in compliance with the ethical guidelines of the Institutional Review Board at Luther Seminary (MN).

The initial qualitative phase in summer 2015 involved three Lutheran camps in Wisconsin that had similar program goals, clientele, and session lengths. Researchers adopted a grounded theory approach to allow an understanding about the camp experience to emerge from the data themselves. Researchers interviewed the director, conducted a four-day site visit, surveyed camper parents using open-ended questions, and led four semi-structured focus groups at each camp: a male camper group, female camper group, summer staff group, and visiting church professional group. Recordings were transcribed and coded along with the parent responses and field notes using Charmaz's (2005) method of grounded theory coding. Three researchers separately coded each transcript to ensure inter-rater reliability. Findings from this initial qualitative phase contributed to the creation of a survey instrument to test the theories generated.

The quantitative phase of the study, which began in summer 2016, expanded the sample to six Lutheran camps in Wisconsin, including the original three. Paper surveys were

administered to summer campers ages 10 to 15 on the first day of camp during the registration process and again on the last day of camp. A follow-up survey was sent via electronic mail two months after campers returned home. Each camp had a goal of surveying 200 summer campers, and among all six camps, a total of 1,056 campers had matching first day and last day surveys. A pseudonymous code allowed researchers to match 86% of first day surveys with a last day survey, and more than 25% with a follow-up survey.

### **Findings**

The Christian summer camp experience at these six camps had positive and lasting impacts extending beyond the temporary high of the camp week, affecting family devotional practices, church participation, personal well-being, and faith commitment. Impacts were clear and recognizable when camps attended to certain characteristics that appeared fundamental to the Christian camp model. Five such characteristics emerged from the data in the qualitative research phase. They included: relational, participatory, safe space, different from home, and faith-centered. It was apparent that these fundamental characteristics interacted in a dynamic interplay, having no set order or direction of influence. The presence of these five characteristics gave rise to the camp experience. Furthermore, there was strong evidence that when one aspect of the model broke down, the model as a whole broke down, causing participants and their supporting networks to characterize the experience in largely negative terms. Impacts evident in the research were associated with one or more of these five fundamental characteristics.

Researchers noted the similarity of four of these characteristics with the camping industry as a whole. This was not altogether unexpected. It is important to note, however, that *faith-centered* emerged as a characteristic fundamental to these camps. That is, the campers, parents, and staff members could not envision their camp experience without the centrality of faith. Moreover, faith was not compartmentalized but rather impacted all aspects of the camp experience.

The quantitative phase in summer 2016 confirmed that the five fundamental characteristics were essential for the camp experience, and this phase deepened the understanding of the impacts of camp. The test-retest methodology allowed researchers to track growth in numerous survey items during and after the camp experience. Most survey items included 5-point Likert scales. There were 17 identical items on all three surveys measuring camper agreement, and t-tests were used to determine growth over time. Examples of these survey items are included below.

The study found different types of camp outcomes, not all of which were meant to be long lasting. Themes like cognitive belief in God (e.g., “God created the world”), increased positivity (“I am happy about my life and who I am”), and increased interest in worship services (“Worship services are usually boring”) were associated with temporary outcomes. That is, there were significant increases from the first day of camp to the last day, but this growth largely regressed to pre-camp levels by the two-month follow-up. Though these temporary outcomes are often pejoratively characterized as a *camp high* among church professionals, they were understood as positive and beneficial among both the campers and their parents. Even the temporary outcomes had subsequent impacts on families and congregations in the weeks after campers returned home. For example, numerous parents noted that their children were more positive and respectful after returning home from camp, and many noted that they had increased conversations with their children about faith or morality.

Though some outcomes were temporary, there was compelling evidence that many outcomes persisted more than two months after the campers returned home. These lasting

outcomes included increases in self-confidence (e.g., “I like going out of my comfort zone and trying new things”), the perception that faith matters in daily life (e.g. “Faith in God helps me in daily life”), connection with Christian community (e.g., “It is important to belong to my church or congregation”), and devotional practices (determined by post-camp increases in frequency of prayer and Bible reading).

The vast majority of campers (in excess of 97%) had positive experiences at camp and claimed that the experience had an impact on their lives, but some showed evidence of negative experiences. These negative experiences were directly related to a breakdown in one or more of the fundamental characteristics of Christian camp. Most clearly, a breakdown in the safe space of camp had an overall negative effect. Campers who acknowledged being picked on or left out at camp were far less likely to exhibit the pattern of growth evident in the larger sample. Similarly, those who showed a breakdown in the relational element of camp (by indicating they did not get along with their cabin mates or did not enjoy their counselor) were far less likely to show the pattern of growth.

### **Ongoing Research**

The research of the Effective Camp Research Project is ongoing. Five additional camps participated in the project in summer 2017, adding more than eight hundred additional campers and two hundred additional parents to the data pool. These camps expanded the sample outside of Wisconsin, including four additional states. Researchers hope to continue expanding the data set to other areas of the country and other Christian denominations.

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## **STRUCTURING YOUTH EXPERIENCES FOR QUALITY: EFFECT OF THEME, PERSONALIZATION, MULTISENSORY APPEAL, AND MEMORABILIA**

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Quality point-of-service experiences for youth are the heart and soul of camps and out-of-school time programs. The range of these point-of-service experiences (e.g., Smith, Akiva, Arrieux, & Jones, 2006) is vast. Examples include daily ceremonies, rituals, instruction, and active performance sessions involving sport, art, culture, educational, and nature-based activities. Rigorous design and implementation of structured, point-of-service experiences is essential to both program quality and achieving targeted positive youth development (PYD) outcomes (e.g., Silliman & Schumm, 2013). Poorly structured experiences may yield disengagement and disruptive behavior as well as program attrition (Chilek, 2012; Harder, Lamm, Lamm, Rose & Rask, 2005). As one example of the consequences of poor quality, almost half of newly enrolled 4-H members drop out after only one year (Hamilton, Northern, & Neff, 2014). For PYD to result from youth programs, youth must be present and positively engaged in quality structured experiences (Weiss, Little, & Bouffard, 2005).

An expansive body of literature related to Pine and Gilmore's (2011) *experience economy* concept (e.g., Bulencea & Egger, 2015) points to four features of point-of-service encounters that successful organizations use to engage visitors: theme, multi-sensory appeal, personalization, and memorabilia. We posit these engaging features can also play a pivotal role in reducing attrition and increasing engagement in structured experiences for youth. Research addressing the applicability and efficacy of these strategies in the context of PYD is lacking. Thus, this study examined the effect of select experience-industry techniques on quality of experience and retention of participants in a 4-H club.

### **Method**

#### **Sample**

The sample included 164 experience observations from 30 participants in a 4-H youth Special Interest Club (SPIN). The club met for eight sessions over a period of 10 weeks. Seven sessions were designed to introduce participants to outdoor recreation activities that are typical of camp experiences: archery, canoeing and kayaking, challenge course, map and compass, outdoor cooking, plant and insect identification, and rock climbing. Consistent with 4-H practice, the eighth session was a service project. Participants between 8 and 18 years old were recruited via email and social media. Ninety-one observations (55.5%) were from girls.

#### **Measurement**

Retention was measured by counting the club members present per session and dividing by the total number of club members. Experience quality per session was measured through repeated administration of a questionnaire. At the end of each session, participants secured their bound questionnaire booklets containing eight copies of the questionnaire (one per session). The questionnaires measured engagement, delight, perceived value, meaningfulness, and the prevalence of deep structured experience during each session (Ellis, Taggart, Martz, Lepley, & Jamal, 2016; Ellis, Freeman, Jamal, & Jiang, 2017). One page of the booklet included questions about participants' age and sex.

## Design

To evaluate retention, the State 4-H office recommended four benchmark clubs with which to make comparisons. To evaluate the effects of theme, multisensory appeal, personalization, and memorabilia, a field experiment was conducted. Using an orthogonal array, a unique profile of treatment conditions was calculated and randomly assigned to each activity session. Each profile was comprised of the presence or absence of the four factors. The challenge course session, for example, was themed and included memorabilia, but did not include additional multisensory appeal or personalization.

## Procedure

Following an orientation session, the club met for eight sessions over a 10-week period. A different activity specialist facilitated each session. The research team worked with each specialist to integrate the four structuring elements, based on relevant profile of treatment conditions for each session. Sessions were approximately three hours in duration. Each session included an orientation and instruction phase, followed by participation in the activity. At the conclusion of the participation phase, participants secured their questionnaire booklets and completed the questionnaire for that session.

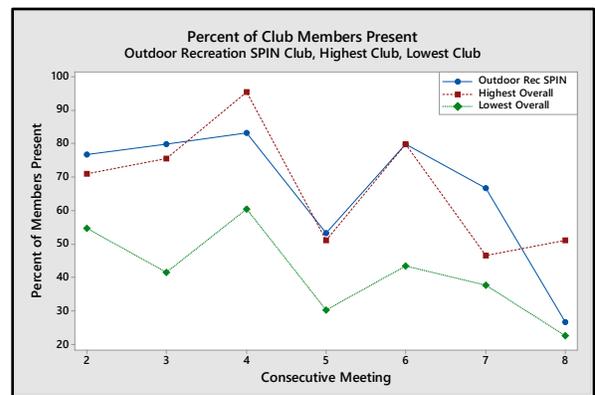
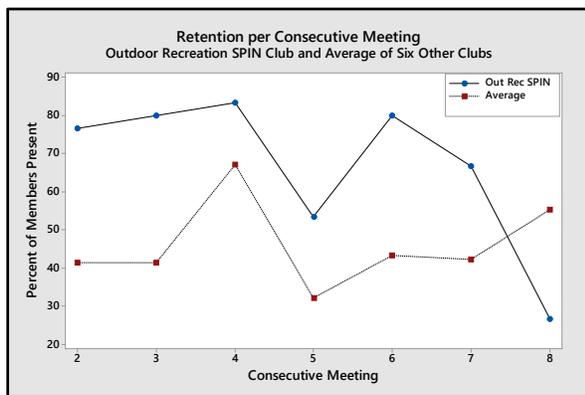
## Data Analysis

Retention data were plotted per consecutive session for the SPIN club and the four benchmark clubs. Experience quality data were analyzed through multi-level modeling procedures, reflecting the repeated measures design. The effect of memorabilia was not included in the linear models of engagement and prevalence of deep structured experience because, of course, an effect cannot precede a cause in time.

## Results

Figure 1 provides a summary of attrition over time for the outdoor recreation SPIN club and the four benchmark 4-H clubs. The plots begin with Session 2 because that is the first session that would be impacted by the quality of members' experience in a previous session. As Figure 1 shows, SPIN club retention was consistently and substantially higher than the average for all sessions other than the final (service project) session. The SPIN club also had higher retention than the benchmark club with highest overall retention, on four of the seven sessions.

*Figure 1.* Retention of members over time: Outdoor recreation SPIN club vs. average and clubs with highest and lowest retention.



Results of the multi-level modeling analysis are presented in Table 1. The effect of theme was significant in the models for four of the five dependent variables: engagement, prevalence of deep structured experience, perceived value, and delight. Provision of memorabilia had a significant effect on perceived value and delight. Multisensory appeal was found to have a significant effect on meaningfulness. Personalization had no significant effect on any of the indicators of experience quality.

Table 1  
*Hypothesis Test Results (F-ratios)*

Source	Engagement	Prevalence of Deep Structured Experience	Perceived Value	Delight	Meaningfulness
Theme Quality	<b>5.44**</b>	<b>5.02**</b>	<b>5.01**</b>	<b>8.59**</b>	.94
Multi-Sensory Appeal	1.38	.23	1.96	1.80	<b>5.35**</b>
Personalization	.07	0.01	.03	.94	.12
Memorabilia	--	--	<b>7.02**</b>	<b>23.16**</b>	.83

\* $p < .05$

\*\* $p < .01$

### Implications

This study addressed the pivotal issue of retention in youth programs. The fundamental premise was that select experience industry strategies elevate experience quality, resulting in increased retention. Three of the strategies (theme quality, multisensory appeal, and memorabilia) had a significant effect on at least one of the five indicators of experience quality. Theme in particular had a significant effect on four of the five indicators of quality. From this research it is important to note that when these strategies are implemented well (e.g., theme), program quality may increase and thereby reduce attrition in youth programs. Practitioners and researchers should consider using these strategies in planning and implementing programs for youth to increase program quality and retention.

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## **SUPPORTING GIRLS' RESILIENCE: ONE CAMP AT A TIME**

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Prior research has noted the potential impact camp can have on developing resilience skills in children and adolescents (Allen, Cox, & Cooper, 2006; Merryman, Mezei, Bush, & Weinsten, 2012). The very structure of camp – developing new relationships, taking risks, failing and learning through failure, building self-esteem and confidence, developing problem-solving skills (Haber, 2014; Ungar, 2012) are a few of the many ways camp can offer children the opportunity to practice resilience. The purpose of this study was to examine if Camp Newaygo (an all-female residential camp program), promoted resilience in girls. Further analysis was conducted to examine what components of resilience were most strongly supported (approach to challenge, self-efficacy and/or relationship building). Using the Adolescent Girls' Resilience Scale (AGRS, Whittington, Aspelmeier, & Budbill, 2015) girls reported pre- and post-participation resilience scores before and after their camp participation. Conducting this study allowed Camp Newaygo to examine if their camp offered girls the opportunity to develop resilience skills and allowed them to evaluate outcomes and determine weaknesses. From these findings, Camp Newaygo implemented programmatic changes to better support girls' opportunities to develop resilience skills.

### **Theoretical Foundations**

Girls today face a variety of issues: increased poverty rates and homelessness, physical violence (rape and sexual assault), low self-esteem and body image, bullying or aggression, lack of leadership opportunities, and feelings of depression and suicide (Girl Scouts of USA, 2013), increased suicidal thoughts, increased cyberbullying, increase of single-family homes and low-income families, increased obesity, and a decrease in physical activity (Girl Scouts Research Institute, 2017). Issues that girls who attend Camp Newaygo experience in their everyday lives include: depression, decreased self-confidence, disordered eating, self-harm (specifically cutting), peer pressure, bullying (especially cyberbullying), constant stress of self-image and status among peers, substance use at a young age, sexual abuse & pressure, engaging in regretful sexual experiences and questions about sexual orientation (J. Danhof. personal communication, August 30, 2016). With all these challenges, offering girls the opportunity to develop resilience skills may aid in supporting positive development.

Adolescent resilience is a “dynamic concept that can change with time” (Ahern, 2006, p. 176) and includes “some type of risk or risks in the adolescent’s life that triggers a protective mechanism” (Ahern, 2006, p. 181). Research on girls suggests that girls’ resilience is further strengthened when they develop positive relationships with others (Jordan, 2012). For the purposes of this study the researchers define resilience (for girls) as the ability to negotiate and successfully cope with risks, challenges, and/or disadvantages. This includes having feelings of confidence, self-efficacy, being able to approach challenges in a positive manner and developing positive relationships with others.

### **Methods**

A total of 366 girls, ages 10-16 (mean age = 11.6) who attended Camp Newaygo participated in this study during one summer season. Camp staff administered the AGRS on the first and last day of the girls’ camp experience. The AGRS was designed to measure girls’ resilience most amenable to change in adventure, experiential, and camp programs (Whittington,

Aspelmeier, & Budbill, 2015). Participants rated 34 statements using a 5-point scale of agreement, which were averaged to form a total resilience score as well as scores for three subscales (approach to challenge, self-efficacy, and relationship building). Parental permission, child assent and IRB approval was conducted. A total of 174 girls completed both the pre- and post-scale resulting in a completion rate of 47.5%.

Camp Newaygo is a residential girls’ camp focused on a mixed-method approach to camp experiences. A mixed method approach includes a traditional camp with elements of experiential or adventure programming such as wilderness trips (i.e., overnight backpacking/canoeing trips), adventure activities (i.e., ropes courses) and/or experiential education activities (i.e., environmental education). Intentional strategies Camp Newaygo uses to support girls’ resilience include: Wilderness Tripping Program (that is a progression), Outdoor Cooking, Survival Skills, Safe & Managed Risks, Camper Choice (Not Parent Choice), and a Leader-In-Training Program.

### Results

Results were analyzed using both SPSS and Excel. The AGRS offers an Excel scoring sheet which allows programs to enter their data and obtain basic results. Using SPSS, mean average scores were obtained pre- and post- participation (Table 1) showing small but significant increases after participation. When using the Excel spreadsheet (Table 2) a small increase was observed in relationship building, while medium increases were observed in approach to challenge, self-efficacy, and overall total resilience score.

Figure 1. Mean pre- and post- category scores.



Table 2  
Camp Newaygo Results Simplified

Scale Category	Percentage Increase	Size of Increase
Approach to Challenge	40%	Medium
Self-Efficacy	39%	Medium
Relationship Building	32%	Small
Total Resilience Score	40%	Medium

## Implications

This study helped Camp Newaygo determine if their camp supports girls' resilience. Outcomes suggest small to medium change in girls' resilience from the start of camp to the end of camp with medium changes in all areas except relationship building (32%). Research on girls' development suggests that positive relationships with others can strengthen girls' resilience (Jordan, 2012). Administrative staff at Camp Newaygo grew concerned that campers did not develop more significant relationships with other girls at camp. Due to this finding, they incorporated programmatic strategies to address this concern and during staff training developed and practiced activities to support relationship building. These activities were guided by an article written by Aron et al., (1997) on developing interpersonal closeness and included guided discussions, self-disclosure and relationship-building tasks.

Other lessons learned from this research included the challenge of collecting data from all campers. This was an optimistic goal which was evident in the fact that less than 50% of the girls actually completed both the pre- and post- AGRS. Perhaps working with a smaller subset would have allowed for meaningful analysis such as examining whether different programs at Camp Newaygo (i.e., wilderness tripping program vs. traditional camp setting), age, or program duration had more meaningful impacts on the girls' ability to develop resilience skills.

Overall results suggest that Camp Newaygo supports resilience in girls and adds to the body of literature on how camp promotes resilience in girls. Future research should be conducted to determine what programmatic strategies most support girls' resilience.

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## **EXAMINING THE ROLE OF SUMMER CAMPS IN DEVELOPING COLLEGE AND CAREER READINESS**

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In today's society, there is an increased demand for young people who are adequately prepared for college and career. *College- and career-readiness* can be defined as "the knowledge, skills, and behaviors essential for high school graduates to enter college and the workforce and to compete in the global economy" (Colorado State Board of Education & Colorado Commission on Higher Education, 2009, p.1). Individuals who are college- and career-ready possess a multitude of competencies such as interpersonal skills and teamwork – often referred to as *21<sup>st</sup> century skills* (Dede, 2010). The benefits for young people who are college- and career-ready are clear; they are more likely to succeed in academics and have higher employment rates and wages upon graduation (Sambolt & Blumenthal, 2013).

However, there is widespread concern that young people in the United States are not college- and career-ready (Casner-Lotto & Barrington, 2006). Only one in four high school seniors are ready for college (ACT, 2010) and employers struggle to hire workers with 21<sup>st</sup> century skills (Manpower, 2010). As a result, policymakers and education organizations are progressively encouraged to remedy this issue by implementing ways to foster college and career readiness in youth. Youth programs such as summer camps are an effective setting for youngsters to develop skills necessary to be college- and career-ready but are often not recognized as such. While there is an abundance of short-term outcomes studies (e.g., American Camp Association, 2005), few studies investigate the learning most pertinent to college and career readiness long after camp ends. Additionally, research that links program mechanisms at camp to college and career readiness learning outcomes is rare (Yohalem & Wilson-Ahlstrom, 2010). Therefore, the primary aim of this study was to investigate learning outcomes from camp most applicable to college and career readiness. As a secondary aim, the researchers sought to identify the mechanisms at camp that support this learning. These aims inform our larger, multiyear project on the impacts of summer camps on youth.

### **Conceptual Framework**

The National Research Council offers a robust and holistic framework on college- and career-readiness which identifies the diversity of 21<sup>st</sup> century constructs that prepare an individual for college and career success (National Research Council, 2012). Clusters of skills include cognitive processes and strategies (e.g., problem solving), knowledge (e.g., information literacy), creativity (e.g., innovation), intellectual openness (e.g., appreciation for diversity), work ethic and conscientiousness (e.g., responsibility), positive core self-evaluations (e.g., self-confidence), and teamwork and collaboration (e.g., interpersonal skills).

### **Methods**

The sample for this study included 64 former campers between the age of 16 and 23; each participant had attended camp in the United States as a camper for at least three weeks during childhood. All participants were recruited by an intentionally stratified sample of camps accredited by the American Camp Association. The former campers had applied for summer employment but had not yet worked at a camp when they were interviewed.

Semi-structured interviews were conducted via phone and recorded. The interviews were then transcribed and analyzed using open and axial coding (Marshall & Rossman, 2011). Two coders independently coded the interviews; the percent of agreement was approximately 99%.

## Results

Youths' primary learning outcomes fall under three higher-order themes that align with the National Research Council's framework on clusters of 21<sup>st</sup> century skills that support college and career readiness; teamwork and collaboration (relationship skills, teamwork, and how to live with peers), work ethic and conscientiousness (organization, responsibility, independence, perseverance, and career orientation), and positive core self-evaluations (emotion regulation and self-confidence). In general, mechanisms that supported participants' learning of outcomes are outlined in Figure 1.

*Figure 1. Key mechanisms linked to college and career readiness outcomes.*

<b>Mechanism Code</b>	<b>Definition</b>	<b>Linked to Outcomes</b>
Experiential Learning	Learned it by doing	Relationship skills, teamwork, how to live with peers, organization, responsibility, independence, perseverance, career orientation, emotion regulation, and self-confidence
Separate Time and Space	Camp as a space that is separated in time and space from "life"	Relationship skills, how to live with peers, organization, responsibility, and independence
Camp Schedule	Structure of camp activities and flow	Organization, responsibility, independence, perseverance, and emotion regulation
Counselors	Camp staff as near peer role models, caring and compassionate adults, and facilitators/teachers	Relationship skills, career orientation, emotion regulation, and self-confidence
Communal Living	Living in a confined space with a group of peers	Relationship skills, how to live with peers, responsibility, independence, and emotion regulation
Safe and Supportive Environment	Safe space to be yourself, feel accepted/respected, and try new things	Relationship skills, independence, and self-confidence
Diversity of People	Beyond superficial interactions with people who are qualitatively different	Relationship skills

### Discussion and Implications for Camp

Policy makers and educators with an invested interest in identifying ways for young people to develop skills so they are college- and career-ready may want to embrace summer camps as valuable developmental contexts. This study provides additional evidence that 21<sup>st</sup> century skills are learned at camp and may be transferred to academics and the workplace at least a year after the program ends.

Some mechanisms are inherent in a summer camp setting while others can be intentionally incorporated into camp programming to target and elicit specific college and career readiness outcomes. Camps are rich mediums for high quality *experiential learning* (e.g., Bialeschki, Fine, & Bennett, 2015). Camp professionals should continue to prioritize lessons

with application and practice despite pushes for academic accountability. Camps are *separate in time and space*; the merits of the remote nature of many camps (e.g., Johnson, Goldman, Garey, Britner, & Weaver, 2011) and the lack of technology allow campers to access a space unfettered by outside noise. A *camp schedule* that supports program flow allow campers to be responsible for waking up early and getting ready, following a schedule on their own, and effectively organizing their time. High quality *counselors* and front-line staff remain the essential ingredient to a successful camp program and campers learn important lessons from counselors. *Communal living* is a hallmark of overnight camps and teaches campers how to live with a group of peers in a confined space for a week which is parallel to most college housing options and necessitates communication among peers. *Safe and supportive environments* help campers feel comfortable reaching out to make connections and being away from home. Camps should continue to hire counselors who fit with the camps supportive culture. Lastly, *diversity of people* at camp allowed campers to interact with individuals different than themselves by being in close contact with people beyond the campers' normal social circles. The primary limitation of this study is that the sample, selected to represent a cross-section of ACA accredited camps, is likely biased toward camp. With intentional effort, summer camp can be an important setting for youth to learn skills that contribute to college and career readiness.

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## **RELIABILITY AND VALIDITY OF THE DIGITAL YOUTH OUTCOMES BATTERY 2.0**

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The constructs of reliability and validity are paramount in determining the psychometric properties of any assessment used in summative or formative evaluation of people and programs. Consistency of an instrument (a.k.a. reliability) across differing testing environments or conditions allows for the inference of stability of scores. Even more essential is the determination of accuracy in assessment (e.g., validity) and the determination of whether the instrument measures what it intends to measure. The presence of both are vital to the ability to generalize results across different contexts or settings, which is a key concern for directors and administrators when trying to determine the effectiveness of practices and/or programming on the outcomes and experiences of summer camp participants.

The current study used both the paper and digital basic versions of the American Camp Association Youth Outcome Battery (YOB) – Second Edition to determine the reliability and validity of the new digital version as compared to the previous paper format. The friendship, perceived competence, interest in exploration, problem solving confidence, and teamwork subscales of both versions were used as a basis for comparison.

### **Theoretical Foundation**

With the trend in data collection moving towards an entirely electronic platform, the assumption is that the validity and reliability of these electronic measures should not change (Meade, Michels, & Lautenschlager, 2007). However, this assumption beckons for data to support its claim. Generally, research has been in favor of the equitability of the two forms. Corff, Gingras, and Busque-Carrier (2017) have demonstrated this in personality tests both online and on paper. Additionally, comprehensive meta-analysis of other studies revealed no practical significant differences between electronic and paper and pencil forms (Dwight & Feigelson, 2000). That being said, each test behaves differently when converted from paper to digital forms and requires its own validation. Even within a single test, certain measures can be more or less valid than others (Yovanoff, Squires, & McManus, 2013).

Therefore, this study aimed to determine the validity of the new digital form of the YOB 2.0 on a measure-by-measure basis. Through this study, researchers sought answers to the following research question: Do the paper and electronic forms of the YOB 2.0 significantly differ in the domains of friendship skills, perceived competence, interest in exploration, problem-solving confidence, and teamwork?

### **Methods**

#### *Participants*

One hundred and forty-four participants (66 boys and 78 girls) aged from 12-17 years ( $M = 14.94$ ,  $SD = 1.43$ ), were recruited from the Youth Adventure Program (YAP) residential academic summer camp that is held on the campus of Texas A&M University. YAP is designed for academically minded middle school and high school students and allows participants to explore college majors and career options in a college setting.

#### *Measures*

The basic version of the American Camp Association Youth Outcome Battery (ACA YOB) – Second Edition (American Camp Association, 2013) was administered to gauge camp connectedness and assess changes in participants based on their camp experience. The paper

version was administered to participants in the second session ( $n = 69$ ) and the digital version was administered to participants in the third session ( $n = 75$ ). These sessions were purposefully selected for comparison due to the similarity of the groups used for sampling from an age, gender, and demographic standpoint.

### Results

To answer our research question, between-groups t-tests were run and results showed that there were no significant differences between versions in friendship ( $t(142) = .177$ ), interest in exploration ( $t(142) = -.863$ ), or teamwork ( $t(142) = -.766$ ). However, for the subscales of perceived competence ( $t(142) = -3.769$ ), and problem solving confidence ( $t(142) = -2.430$ ) the digital version were determined to be significantly lower at the  $p < .001$  and  $p < .05$  levels respectively.

### Implications

The results from above might raise questions about the consistency and accuracy of the two forms in measuring positive youth development outcomes across certain subscales of the YOB 2.0. While several showed minimal differences across the two forms (friendship, teamwork, and interest in exploration), perceived competence and problem solving confidence were significantly different at the most stringent of statistical levels, with those taking the electronic form for those two subscales seeing their means falling well short of those from the paper version. Ideally, there would have been no significant difference found across any of the subscales we assessed, providing ample evidence for the concurrent validity of this new electronic version. However, our data for this sample fell short of conclusively making this determination. This could in part be due to the administration procedures of the electronic form, with the ability to administer it to a large group in a single session being impacted by log-in instructions, server overload, and website interface issues. However, this could also be due to differences between the two samples used to make this comparison.

Using a t-test comparison of these groups against residential camper norms, we found that the paper group scored significantly lower ( $p < .001$ ) on both perceived competence and problem solving confidence. This is in contrast to the electronic version group which scored slightly above the mean on those same categories. Despite our attempt to control for population variables, these findings could suggest that non-equivalency of groups could be driving the results we found instead of form or format. In addition, it is noted that these findings are based on two samples that did not include all of the subscales of the Y.O.B. 2.0 so more research is needed to conclusively determine whether these findings are isolated or indicative of a more general trend. Confirmatory factor analysis could also reveal more driving influences of what the data is showing. However, with all of this said, researchers note high concurrent validity across many of the subscales and support the notion that there is great potential for the new digital iteration of the YOB 2.0.

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