



# AMERICAN CAMP ASSOCIATION

CAMP RESEARCH FORUM  
BOOK OF ABSTRACTS - 2026

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association®

January 23, 2026

Dear camp professionals, researchers, and colleagues,

The ACA Research Forum is an opportunity for researchers and camp professionals to share and discuss new research related to campers, camp staff, camp programs, and a wide variety of other camp related topics.

This book includes 20 abstracts that will be presented at the 2026 American Camp Association (ACA) Research Forum to be held during the ACA annual conference from February 17-20, 2026, in San Diego, California. Abstracts have been grouped into similar areas and will be presented across five verbal sessions (i.e., camper outcomes, specialty programming, camp staffing, camp administration, and medical/health for youth and families) and one poster session. All abstracts will be on display as posters.

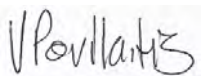
We are also pleased to recognize the recipients of two research awards this year:

- Marge Scanlin Award for Outstanding Student Research: *Alexandra Skrocki*
- Eleanor P. Eells Award for Excellence in Research in Practice: *Seacamp Association, Inc.*

Three external reviewers provided peer-reviewed evaluations for the selection of these abstracts. We thank these reviewers for their time, expertise, and energy. Thank you to Dr. Laurie Browne, Melany Irvin, and other staff at ACA for their continued stewardship and advocacy of camp research. Additionally, thank you to Dr. Ann Gillard who has led the ACA Camp Research Forum over the past decade. Your commitment to the growth of the forum and support for quality research is unparalleled. We appreciate all that you have done and continue to do for the field. Finally, thank you to ACA's Research and Evaluation Advisory Committee (REAC) and the previous Committee for the Advancement of Research and Evaluation (CARE) for your continued support of this work.

We look forward to presenting these papers at the 2026 Camp Research Forum, but also recognize that many people cannot attend the annual meeting. We hope these short abstracts and poster images will provide valuable information for those not able to join us in person at the conference. Please contact the authors if you have further questions.

Best wishes,



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## Table of Contents

<b>BRIDGING THE GAP: TARGETED STAFF TRAINING FOR CAMPS SERVING INDIVIDUALS WITH DISABILITIES</b> .....	<b>6</b>
Authors: Bill Joe Averitt, Jo An Zimmermann-Somoza, Texas State University .....	6
<b>BEYOND BORDERS: AN EXPLORATION OF CULTURAL PERCEPTIONS AND CROSSOVERS IN PEDIATRIC THERAPEUTIC RECREATION CAMPS IN JAPAN AND VIETNAM</b> .....	<b>10</b>
Authors: Isabel Nicole Bellon, Frank H. Netter, Quinnipiac University; Ann Gillard, SeriousFun Children's Network.....	10
<b>EXPLORING LEISURE ATTITUDES, WORK-LEISURE SIMILARITY, AND STAFF RESILIENCE</b> .....	<b>15</b>
Authors: Daniela Berry, Indiana University; C. Scott Shafer, Daniel Pilgreen, Texas A&M University .....	15
<b>CREATING SPACE FOR CHILDHOOD: CAMP AS A SOURCE OF PLAY AND BELONGING FOR YOUTH FROM FAMILIES WITH SUBSTANCE USE DISORDERS</b> .....	<b>19</b>
Authors: Edmond P. Bowers, Theresa N. Melton, Clemson University; Brian J. Maus, Eluna; Tori A. Garcia, Clemson University .....	19
<b>VALIDATING THE MY VIEW YOUTH CARE AND ENGAGEMENT SCALE FOR PRE-CAMP SCREENING</b> .....	<b>23</b>
Authors: Barry A. Garst, Alexandra Skrocki, Clemson University; John Hamilton, Tracey Gaslin, Alliance for Camp Health.....	23
<b>HOW CAMPERS WITH PROFOUND INTELLECTUAL AND MULTIPLE DISABILITIES AND THEIR CAMP COUNSELORS ATTUNE DURING A MEDICAL SPECIALTY CAMP</b> .....	<b>28</b>
Author: Jonathan Gerth .....	28
<b>EXPLORING THE CONCEPTUAL VALUE OF DIFFERENT PROGRAM MODELS IN SERIOUSFUN CHILDREN'S NETWORK</b> .....	<b>33</b>
Authors: Gemma Kiernan, Dublin City University; Suzanne Guerin, University College Dublin; Nina Meret Zumbrunn, Dublin City University; Monika Hernek, University College Dublin; Charles Normand, King's College London; Ann Gillard, SeriousFun Children's Network.....	33
<b>HIGH IMPACT SERVICE LEARNING: COLLEGE STUDENT REFLECTIONS ON OUT-OF-SCHOOL PROGRAMMING FOR YOUTH WITH TYPE 1 DIABETES</b> .....	<b>38</b>
Authors: Eddie Hill, Weber State University; Ron Ramsing, University of Utah; Rowan Williams, Old Dominion University .....	38
<b>ASSESSING THE BURDEN OF CARE FOR PARENTS WHOSE CHILDREN ATTEND DIABETES CAMP</b> .....	<b>43</b>
Authors: Eddie Hill, Weber State University; Justin Haegele, Old Dominion University; Xihe Zhu, Old Dominion University; Ron Ramsing, University of Utah; Carla Cox, Mountain Vista Medicine .....	43
<b>FROM FOREST AVERSION TO PRO-ENVIRONMENTAL ATTITUDES AND BEHAVIORS: IMPACTS OF A 3-DAY CULTURALLY INFORMED CAMP</b> .....	<b>48</b>
Authors: Candace Jones, Xiangyou Shen, Oregon State University.....	48
<b>“EVERYONE WAS LIKE ME”: SUMMER CAMP AS AN AFFINITY GROUP FOR YOUTH WITH ALBINISM</b> .....	<b>53</b>
Author: Maria Lepore-Stevens.....	53

<b>WHAT KEEPS COUNSELORS-IN-TRAINING ON THE PATHWAY TO CAMP COUNSELOR: EXAMINING INTENTION TO RETURN AND IDENTITY AT CULTURALLY RESPONSIVE CAMPS .....</b>	<b>58</b>
Authors: Lisa Meerts-Brandsma, Carly Knudson, Emily Millbrooke, Sasha Mader, and Paul Estabrooks, University of Utah; Bristol Posatko and Miray D. Seward, American Camp Association .58	
<b>DEVELOPING A SENSE OF COMMUNITY IN CAMP SETTINGS: INSIGHTS FROM OUTWARD BOUND PROGRAMS .....</b>	<b>63</b>
Authors: Theresa N. Melton, Clemson University; Sarah Wiley, Outward Bound International.....63	
<b>CREATING A CAMP WHERE EVERYONE BELONGS: COUNSELOR-LED GOAL SETTING TO IMPROVE CAMPER OUTCOMES .....</b>	<b>68</b>
Authors: Angela C. Miller, Amy M. Leman, University of Illinois Urbana-Champaign.....68	
<b>SHARED GOALS OR MIXED MESSAGES? STAFF AND CAMPER VIEWS OF TARGETED OUTCOMES.....</b>	<b>72</b>
Authors: Soumya J. Mitra, Jim Sibthorp, Bryn Spielvogel, University of Utah.....72	
<b>MANAGERIAL APPROACHES TO CAMP STAFF SELF-CARE: APPLICATION OF THE PERMA MODEL.....</b>	<b>77</b>
Authors: Megan H. Owens, Independent Scholar; Alexandra Skrocki, Clemson University; Melissa Van Scoy, Independent Scholar; Barry A. Garst, Clemson University; Tracey Gaslin, Alliance for Camp Health.....77	
<b>SUMMER STAFF BURNOUT, EMPATHY, AND BELONGINGNESS IN DISEASE-SPECIFIC CAMPS .....</b>	<b>81</b>
Authors: James Rujimora, Camp Boggy Creek; Amanda DeDiego, University of Wyoming; Ann Gillard, SeriousFun Children’s Network.....81	
<b>TICK INCIDENCE ACROSS MIDWESTERN SUMMER CAMPS: ASSOCIATIONS WITH LANDSCAPE CHARACTERISTICS IN YEAR 2 OF FIGHT THE BITE.....</b>	<b>86</b>
Authors: Alexandra Skrocki, Barry A. Garst, Clemson University; Tracey Gaslin, Alliance for Camp Health .....86	
<b>PRIMED” FOR CHARACTER AT CAMP: AN EVALUATION OF CHARACTER-SUPPORTIVE DESIGN PRINCIPLES.....</b>	<b>91</b>
Authors: Bryn Spielvogel, Jim Sibthorp, Soumya J. Mitra, University of Utah; Miray D. Seward, American Camp Association.....91	
<b>SUMMER CAMP ADDS UP: THE IMPACT OF STEM CAMPS ON MATH SELF-EFFICACY AND ACHIEVEMENT IN UNDERREPRESENTED K-12 CAMPERS.....</b>	<b>96</b>
Author: Joanna Vance, University of Redlands and Ocean Discovery Institute.....96	
<b>MARGE SCANLIN AWARD FOR OUTSTANDING STUDENT RESEARCH .....</b>	<b>101</b>
Recipient: Alexandra Skrocki (abstract on page 87).....101	
<b>ELEANOR P. EELLS AWARD FOR EXCELLENCE IN RESEARCH IN PRACTICE POSTERS .....</b>	<b>102</b>
EVERGLADES WATERSHED EDUCATION USING INDEX OF BIOTIC INTEGRITY TO EVALUATE IMPACTS OF FLORIDA KEYS ECOSYSTEMS .....	
Author: Judy Gregoire, Seacamp Association, Inc., .....	103

# **BRIDGING THE GAP: TARGETED STAFF TRAINING FOR CAMPS SERVING INDIVIDUALS WITH DISABILITIES**

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Camps should be a safe and welcoming place for everybody, and the stakes are even higher for camps serving individuals with disabilities. Staff training is one of the most critical investments a camp can make to ensure safe, inclusive, and high-quality experiences for both campers and staff alike. When working at a camp for individuals with disabilities, staff must be prepared to assist with personal care, foster inclusive social environments, and manage challenging behaviors.

Like newly trained teachers entering classrooms, many camp counselors begin their roles with limited preparation in behavior management or in supporting campers with diverse needs (McGuire et al., 2023). The lack of targeted preparation mirrors findings in special education, where both general and special educators often report inadequate training for managing significant behavioral challenges—resulting in inconsistent use of evidence-based interventions (Beam & Mueller, 2016). In a camp setting, these gaps can directly impact safety, inclusion, and camper well-being, underscoring the need for intentional, skill-based training that addresses the realities of working with individuals with disabilities.

This study is grounded in Kolb’s Experiential Learning Theory (1984), emphasizes learning as a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation (McLeod, 2025). Because disability-focused camps require staff to rapidly build complex caregiving and behavioral skills, experiential learning offers a strong foundation for understanding both the limitations of lecture-based training and the benefits of hands-on approaches. As one Easterseals Camp Director noted, “Many crucial skills DSPs [Direct Support Professionals] need to be successful take time to develop. A week orientation that typically takes 90 days, is a quick turnaround.” This reality highlights a fundamental challenge for seasonal camps: staff are expected to master essential skills in days, not months, making the design and delivery of training both critical and urgent.

The purpose of this study examined training needs at Easterseals Colorado Rocky Mountain Village (RMV) and explored national trends to address the overarching question: How can camps serving individuals with disabilities strengthen staff training to improve preparedness, safety, and inclusion?

## **Methods**

This study used a mixed-methods design combining three data sources: (1) seasonal staff surveys from 2022–2024 (N = 18; 56% response rate); (2) a national Easterseals Director/Manager survey (N = 7; 15% response rate); and (3) two internal interviews with RMV leadership. Participants were recruited via email and in-person during staff debriefs. Surveys included Likert-scale items and open-ended questions. Quantitative responses were analyzed descriptively (e.g., means, percentage change), and thematic analysis was used to code qualitative responses. No inferential statistics (e.g., t-tests) were used due to small sample sizes. Post-2025 training feedback (N = 10; 43% response rate) provided comparative data to assess improvements. RMV’s program was also evaluated for alignment with standards from the American Camp Association, Colorado Department of Early Childhood, and Colorado Department of Public Health and Environment.

## Results

In Study 1 (2022–2024), RMV staff consistently rated behavior management as the weakest area of training, averaging just 2.33 out of 5. Open-ended responses pointed to content being too vague and lacking practical, disability-specific strategies. Other areas—such as personal care, emergency preparedness, and working with individuals with disabilities—scored higher but still revealed gaps in hands-on practice and clarity of expectations. These results highlighted a need for a more immersive, scenario-based approach to training that could better prepare staff for the real-world demands of working with campers with diverse and complex needs.

In Study 2, a revised 2025 training program was implemented using insights from earlier surveys and interviews. Grounded in Kolb’s Experiential Learning Theory, the redesign prioritized scenario-based training, hands-on equipment practice, and camp-specific emergency drills. Post-training survey results showed meaningful improvement across all domains, especially in emergency preparedness (Mean = 4.50) and personal care (Mean = 4.10), demonstrating how immersive and iterative learning helped staff better retain and apply essential skills.

Table 1

*Comparison of staff training ratings before and after 2025 training redesign*

Training Area	Pre-Training Mean (2022–2024)	Post-Training Mean (2025)	Sample Size (N) Pre/Post	Change
Behavior Management	2.33	3.30	18 / 10	+0.97
Personal Care	3.50	4.10	18 / 10	+0.60
Working with Disabilities	3.39	3.50	18 / 10	+0.11
Emergency Preparedness	3.61	4.50	18 / 10	+0.89
Policies & Procedures	3.72	4.60	18 / 10	+0.88

*Note.* Data were self-reported using a 5-point Likert scale (1 = *poor*, 5 = *excellent*). Sample sizes reflect pre- and post-training response counts.

## Limitations

This study is limited by small sample sizes, particularly in the post-training survey (N = 10), which limits generalizability and precluded the use of inferential statistics such as t-tests. In addition, surveys were self-developed and not drawn from validated instruments. The open-ended responses provided rich insight, but thematic coding was conducted by a single researcher, which may introduce bias. Future studies would benefit from triangulation with external raters, longitudinal tracking of staff performance, and the use of standardized assessment tools.

## Discussion & Implementation

This study reinforces that staff training for camps serving individuals with disabilities must go far beyond basic compliance to be effective. RMV’s redesigned 2025 program, rooted in both operational realities and relevant research, produced measurable improvements across multiple domains—particularly in personal care and emergency preparedness. Notably, behavior management training, long considered the most challenging area, improved from a 2.33 to a 3.30 average rating after targeted, scenario-based instruction was introduced. This shift reflects

findings in the broader education literature that highlight the importance of intentional, skill-based learning in behavior support (Beam & Mueller, 2016; McGuire et al., 2023). However, feedback continued to reflect a strong desire for more preparation in supporting individuals with varied disabilities, suggesting that training must be approached as an ongoing cycle—reinforced through in-season coaching and hands-on refreshers. For camps looking to implement similar strategies, five key recommendations emerge: (1) prioritize facilitators with both disability and camp-specific expertise; (2) ensure learning is active through simulations, role-playing, and skill stations to improve retention (Totsika et al., 2008); (3) continuously integrate policy education into daily practices rather than relying on standalone sessions; (4) treat behavior management as a core competency, especially given the limited prior experience of many seasonal staff; and (5) develop staff empathy and adaptability, which directly supports inclusive environments and stronger camper relationships (Lazzaro et al., 2021). By embedding these strategies, camps can enhance staff confidence, improve camper safety, and better fulfill their mission and duty of care (Hansen-Stamp & Gregg, 2019).

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### Background & Framework

- Camps serving individuals with disabilities require rapid staff readiness
- Lecture-based training is insufficient for behavior and care challenges
- Kolbs Experiential Learning Theory (1984)

"Many crucial skills {Camp Counselors} need to be successful take time to develop. A week orientation that typically takes 90 days, is a quick turnaround."  
- *Eastersseals Camp Director*

### Research Question

*How can camps with disabilities strengthen staff training to improve preparedness, safety, and inclusion?*

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### RESULTS

#### STUDY 1 (2022-2024)

- Behavior management rated lowest area of training
- Staff sought more hands-on, scenario-based learning
- Staff reported feeling underprepared for real camp situations

#### STUDY 2 (2025)

- Redesign program led to significant improvements across all areas.
- Largest gains seen in personal care and emergency preparedness
- Experiential, hands-on learning improved skill application and retention

#### Comparison of Staff Training Ratings

Training Area	Pre-Mean	Post-Mean	Change
Behavior Management	2.33	3.30	+0.97
Personal Care	3.50	4.10	+0.60
Working w/ Disabilities	3.39	3.50	+0.11
Emergency Preparedness	3.61	4.50	+0.89
Policies / Procedures	3.72	4.60	+0.88

Note: Ratings reflect self-reported staff perceptions using a 5-point Likert scale (1 = Poor, 5 = Excellent). Pre-training data were collected from seasonal staff between 2022-2024 (N = 18), and post-training data were collected following the 2025 training redesign (N=10). Values represent mean scores. Changes reflect descriptive comparisons; inferential statistics were not conducted due to small sample sizes.



### Key Takeaways

- Improved preparedness across all areas
- Behavior management showed notable gains
- Experiential, hands-on learning proved effective

"The personal care training was **AMAZING** with the Regis nurses. Spending the whole day at different stations was so beneficial – it made asking questions easy and provided great hands-on experience."  
- *2025 RMV Staff Member*

- Recommendations
- Specialized Trainers
- Simulations & Role-Plays
- Policy Reinforcement
- Behavior Support Focus
- Build Empathy & Adaptability



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### Methods

- **Study 1: Staff Surveys (2022-2024, N=18)**  
Seasonal staff completed pre-training surveys measuring effectiveness in behavior management, personal care, emergency preparedness, policies, and working with individuals with disabilities
- **Study 2: Post-Training Survey (2025, N = 10)**  
After implementation of an experiential training redesign, staff completed follow-up surveys measuring changes in confidence, preparedness, and perceived training effectiveness
- **National Scan: Eastersseals Directors (N = 7)**  
Camp Directors and Program Managers across Eastersseals camps shared perspectives on common training gaps, challenges, and effective practices for camps serving individuals with disabilities

# **BEYOND BORDERS: AN EXPLORATION OF CULTURAL PERCEPTIONS AND CROSSOVERS IN PEDIATRIC THERAPEUTIC RECREATION CAMPS IN JAPAN AND VIETNAM**

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## **Introduction**

American summer camps, originating in the mid-1800s, now include medical specialty programs that provide intentional programming, accessible facilities, and medical support for children with serious illnesses (Yang et al., 2021). These camps can improve self-esteem, social connection, and emotional well-being (Gillard et al., 2023), yet little is known about how culture shapes these experiences outside the United States. Culture strongly influences psychosocial growth (Coll et al., 2000) and may weigh even more heavily on youth with chronic illness, who face added developmental challenges (Carlson & Cook, 2007). Camps themselves are rooted in American culture and historically reflect class power dynamics (Browne et al., 2019), underscoring the need for cultural awareness when adapting U.S. models internationally.

In Asia, where therapeutic camps have only recently begun to emerge (SeriousFun Children's Network, n.d.), research rarely examines their psychosocial effects or the role of culture. A literature search found no evidence of studies addressing these dimensions; existing work—largely on diabetes camps in Japan and Korea—focuses mainly on self-management and glycemic control (Chang & Ogihara, 2025; Kang et al., 2017). To address this gap, we studied two SeriousFun Children's Network camps—Camp Colors of Love in Vietnam and Solaputi Kids' Camp in Japan—serving children with HIV and other “incurable” medical conditions, populations that often face stigma and barriers to psychosocial development (Martinez et al., 2021; UNAIDS Data 2022).

Guided by Hofstede's Cultural Dimensions Theory (Hofstede, 2001), which compares societies on factors such as **Power Distance**, **Individualism vs. Collectivism**, and **Indulgence vs. Restraint**, we asked three questions: (1) What psychosocial benefits do these camps provide? (2) How are local cultural practices and American camp traditions integrated? (3) How are chronic illnesses perceived socially, and how do camps try to reshape those perceptions?

## **Methods**

Quinnipiac University's Institutional Review Board (IRB) and the participating camps—Solaputi Kids' Camp in Japan and Camp Colors of Love in Vietnam—granted study approval. Following informed consent, 10 semi-structured virtual interviews were completed—five from Solaputi Kids' Camp in Japan and five from Camp Colors of Love in Vietnam. For each camp, participants included the camp director, one additional staff member, and three former campers.

Interviews were conducted over Zoom with interpretation support and recorded with permission. Each interview lasted approximately 30–40 minutes. An interview guide covered topics surrounding camp life, psychosocial impacts, cultural integration, and societal views of illness and stigma.

Audio files were transcribed and analyzed using thematic analysis (Braun & Clarke, 2012). Initial codes were derived from the interview data and organized into themes; Hofstede's cultural dimensions provided a preliminary deductive framework. Comparative thematic analysis identified overarching patterns across both camps.

Neither researcher has lived experience with pediatric chronic illness or disability, but both bring commitment to children's emotional and social well-being. One researcher identifies as Filipino-American, which inspired an interest in how cultural context shapes child development. The second researcher has long-standing professional experience in therapeutic recreation and camp program development. Their combined perspectives supported a careful and culturally informed approach to data collection and interpretation.

## **Results**

Three themes emerged from interviews with campers and staff at Solaputi Kids' Camp and Camp Colors of Love, illustrating psychosocial growth and cultural integration.

### *Psychosocial Growth*

Participants described camp as “fun,” “high energy,” and “very safe,” noting a unique community where they felt accepted, shared experiences rarely voiced elsewhere, and formed lasting friendships. A staff member explained that meeting peers with similar illnesses allows children to form “a really strong bond...so they feel they share the same experience.” Independence grew as campers managed routines and their own medical care for the first time by themselves. Campers reported greater confidence through activities such as horseback riding and archery and noted many opportunities for leadership, with some taking on roles during camp and others later returning as counselors.

### *Confluence of Cultures*

Participants described camp life as shaped by both national traditions and American summer-camp practices. Japanese traditions (e.g., food appreciation, farm visits, and *onsen* gatherings (natural hot-spring bath)) and Vietnamese customs (e.g., shared meals and the camp values of “respect, love, and safety”) blended with American activities such as stargazing as well as frequent verbal encouragement and evening “tent chats.” Participants described this cultural combination as fostering inclusion, creating opportunities for experiences such as public dancing and hugging non-family members, and allowing more personal autonomy than they typically experienced.

### *Perceptions of Pediatric Chronic Disease*

Participants described societal views of pediatric chronic illnesses. Those from Camp Colors of Love reported exclusion due to visible signs of illness like scars, while participants from Solaputi Kids' Camp noted subtler pressures of conformity and inaccurate media portrayals of their illness. Across both countries, participants noted that education and advocacy were reducing misconceptions.

## **Discussion**

The camps in this study fostered psychosocial growth and cross-cultural exchange, enriching existing cultural strengths of community and mutual care while encouraging independence, confidence, and leadership. Participants described how supportive, yet structured environments helped children with chronic illness build autonomy and resilience.

Culture shaped these outcomes. Like two rivers converging, American summer-camp practices—open encouragement, group affirmation, and “tent chats”—merged with Japanese and Vietnamese traditions to create distinctive “third cultures.” These settings strengthened collectivist bonds while encouraging individual voice and choice. Hofstede's framework showed lowered power distance, a shift from restraint toward indulgence, and a blend of individualism and collectivism, illustrating how American camp practices were adapted rather than transplanted.

The camps also engaged—and at times challenged—societal views of illness. In Camp Colors of Love, the motto of “respect, love, and safety” appeared to be realized inside camp but not always beyond it. In Solaputi Kids’ Camp, camp enabled study participants to define their own narratives beyond norms of harmony and conformity. Across both sites, participants noted shifting attitudes, with “tent chat” discussions evolving from fears of dying young to aspirations such as becoming doctors or teachers.

### **Implications for Practitioners**

Programs should seek to embed camp life in local traditions (e.g., shared meals, regional foods, and nature-based activities) to build family trust and a sense of community ownership. Offering structured opportunities for autonomy and leadership, from managing aspects of medical care to serving as junior staff, can foster confidence and lasting psychosocial gains. Participants valued American-style practices that amplified group support and self-expression. Blending these practices with community traditions enables camps to foster lasting psychosocial growth rooted in the cultures they serve.

### **Limitations**

This qualitative study involved a small number of participants from two camps and limits generalizability to other Asian camps and populations. Findings rely on voluntary self-reports, which could introduce selection and recall bias.

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# Beyond Borders: An Exploration of Cultural Perceptions and Crossovers in Pediatric Therapeutic Recreation

**Quinnipiac**  
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**Camps in Japan and Vietnam**  
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**seriousfun**  
 children's network  
 founded by paul newman

## Project Aims

1. Address **significant research gaps** on therapeutic recreation camps in Asia by focusing on Camp Colors of Love (Vietnam) and Solepui Kids' Camp (Japan).
2. Explore the integration of American camp elements with local cultures and how these factors shape camp design.
3. Examine how camps influence perceptions of chronic illnesses and help mitigate stigma in their respective countries.

## Methods

- Qualitative, comparative thematic analysis using Braun and Clarke's approach.
- \$100 honorarium made to each camp as a gesture of gratitude for their participation.
- Camp training documents were reviewed, with a focus on cultural integration and sensitivity in camp programming.
- Semi-structured interviews were conducted via Zoom with camp directors, one additional full-time staff member, and three former campers over the age of 18 from each camp (N=10). Topics included **camp experiences, effectiveness of programs in addressing psychosocial challenges, cultural adaptations in programming, and perceptions of chronic illness stigma**.
- Interpreter services were used for Vietnamese and Japanese. Interviews were then transcribed using speech-to-text software.
- Interview responses were coded using Holmbeck's Cultural Dimensions as a preliminary framework and key themes were identified. Analysis consistency verified through interrater reliability.

## Implications for Practitioners

- Embed camp programming in local traditions (e.g., shared meals, regional foods, nature-based activities) to build family trust and community ownership
- Provide structured opportunities for autonomy and leadership (e.g., medical self-management, junior staff roles) to foster confidence and lasting psychosocial gains
- Incorporate American-style practices that emphasize group support and self-expression, as valued by participants
- Blend global and local approaches to promote sustainable psychosocial growth rooted in the cultures camps serve

## Results

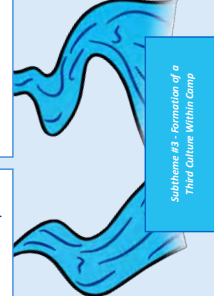
**Theme 1**  
 "The Power To Make Their Own Effort"; Positive Psychosocial Effects of Camp Experience



### Description

- **Unique Sense of Community:** Campers reported that they felt accepted and understood, forming lifelong bonds in an inclusive environment.
- **Overcoming Obstacles:** Camp experiences & activities encouraged campers to push their limits, fostering lasting courage, self-confidence and independence to face challenges beyond camp.
- **Lifelong Impact:** The camps provided essential life skills, leadership development, emotional support, and positively influenced campers' well-being both during and after their stay.

**Subtheme #1 - Thorough Representations of Country-Specific Culture Within Camp**



**Theme 2**  
 "There's Something Very Unique...": A Confluence of Cultures

**Subtheme #2 - Embracing American Influence**

- **Subtheme #1:** Camp activities, meals, and values thoroughly reflect campers' national cultures, often indistinguishable from their general cultural experiences.
- **Subtheme #2:** American influence is seen in facilities (fun activities, confidence-building, individualism), and open communication. Some campers experienced "cramming" for the first time through the lens of local cultures, symbolized by activities like dancing, water games, and nature-based experiences that foster community and freedom.
  - The camp's physical environment, such as Solepui's wide-rhth surroundings and large stable posing, shapes the culture.
  - Core values like "safety, love, and respect," which reflect local societal norms, are uniquely applied to marginalized children.
  - Holmbeck's Cultural Dimensions highlight lower power distance, indigenous, and a blend of collectivist and individualistic values within these camps, which differ from their broader societal norms.

**Subtheme #3 - Formation of a Third Culture Within Camp**

**Theme 3**  
 "What will you do after 10 years?"; Perceptions of Pediatric Chronic Disease in Society



### Stigmatization of Pediatric Chronic Disease:

- Strong stigma around HIV in Vietnam, driven by misconceptions of contagion, leading to social exclusion and lowered self-esteem.
- Little to no stigma for children with "invisible" diseases in Japan.
- Both camps highlight a lack of public knowledge about pediatric chronic diseases as a key issue.

### Shifting Perceptions:

- Media representation impacts public concern, with HIV receiving less attention than other diseases like cancer or diabetes.
- Both camps report positive changes in societal attitudes due to increased education, awareness, and government support.
- More positive self- outlook for children with chronic illnesses, reflecting growing acceptance in their communities.

"I still remember when we had the tent chat with the campers at that time... One group leader just asked, 'What do you think?' 'What will you do after 10 years?' And then someone else was having the tent chat and we also have the same question, but now the campers can say that 'I want to be the doctor, I want to be the psychologist, I want to be the teacher'..."



"The most important experience that the camp had taught me - the ability to become a leader, the risk to share about my opinion, present my opinions, teamwork and about my thinking... The camp taught me about love too."



## Acknowledgements

This work was supported by capstone project funding from the **Frank H. Netter School of Medicine at Quinnipiac University**. Thank you to the team at **SeriousFun** for their support and assistance with coordinating camp involvement and translation services. A special thank you to those at **Camp Colors of Love and Solepui Kids' Camp** for embracing me into their communities and generously sharing their stories, making this work possible.

**Questions?**  
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# EXPLORING LEISURE ATTITUDES, WORK-LEISURE SIMILARITY, AND STAFF RESILIENCE

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Seasonal camp staff work in short-term but demanding roles, driving burnout and retention challenges (Wahl-Alexander et al., 2017). Even with protective factors such as positive group cohesion, clear job expectations, and staff recognition, many report declining well-being over the summer (Bailey et al., 2012), a concern heightened by post-COVID-19 hiring shortages (ACA, 2023). One promising approach for promoting staff resilience is the concept of Work-Leisure Similarity (WLS), defined as the degree to which an individual's leisure activities resemble their work-related skills, tasks, or demands (Kelly et al., 2020). When work and leisure share similar cognitive, physical, or social elements, individuals may experience greater self-efficacy and resilience (Kelly et al., 2020). Though studied in adults and serious leisure settings (Stebbins, 1997), little is known about WLS among emerging adults or camp staff. Leisure participation and attitudes, which include cognitive (beliefs), affective (emotions), and behavioral (intentions) dimensions, are also linked to well-being (Ragheb & Beard, 1982). In camps where long hours limit personal time, understanding how leisure attitudes and behaviors relate to WLS can guide directors in recruiting and supporting resilient staff. This study explored whether leisure attitudes, participation, and the alignment of meaningful leisure with camp programming are associated with WLS.

## Methods

Data were collected during summer 2024 from seasonal staff, ages 18 to 33 ( $m = 19.81$ ,  $SD = 3.34$ ), with an average of 2.01 years of camp employment ( $SD = 1.18$ ), at four overnight youth camps in the southern United States ( $n = 127$ ). Recruitment occurred during pre-camp training in partnership with full-time camp administrators.

Leisure attitudes were measured using the Leisure Attitude Scale-Short Form (Teixeira & Freire, 2013), which assesses cognitive, affective, and behavioral dimensions on a 5-point Likert scale. Leisure participation was captured through a leisure inventory where staff listed their five favorite free-time activities and reported frequency of participation, outside of camp employment. Participants then identified their most meaningful activity, which was coded for camp-activity alignment based on whether the activity was offered in camp programming. WLS was measured with a validated 4-item scale (Kelly et al., 2020) assessing similarity in skills, tasks, and physical and mental demands between the staff member's camp role and their chosen leisure activity.

A hierarchical linear regression model (HLM) examined the variance in WLS across four steps: demographics, leisure attitudes, leisure participation, and camp-activity alignment. Independent-samples t-tests compared mean WLS scores between (a) aligned vs. non-aligned activities and (b) first-year vs. returning staff.

## Results

Leisure attitudes were generally positive: cognitive ( $m = 4.56$ ,  $SD = 0.56$ ), affective ( $m = 4.34$ ,  $SD = 0.72$ ), and behavioral ( $m = 3.37$ ,  $SD = 0.80$ ). Mean WLS was moderate ( $m = 3.05$ ,  $SD = 1.28$ ). Roughly 46% of staff reported a most meaningful leisure activity that aligned with camp programming.

As shown in Table 1, the HLM was significant ( $F(11,79) = 5.73, p < .001$ ) and explained 44.4% of the variance in WLS. Within the model leisure attitudes and camp-activity alignment each explained a statistically significant portion of the model variance (8.9%,  $p < .05$ ; 23.3%,  $p < .001$ ; respectively).

Table 1  
*Hierarchical Linear Regression Coefficients for Model Predicting Work-Leisure Similarity*

Variable	<i>b</i> ( <i>SE</i> )	<i>B</i>	<i>p</i>	<i>r</i> <sup>2</sup>	<i>r</i> <sup>2</sup> $\Delta$
Staff Demographics				.032	.032
Age	-0.04 0.11	-0.04	0.72		
Years at camp	0.07 0.04	0.17	0.10		
Leisure Attitudes				.120	.089*
Cognitive	-0.71 0.35	-0.29	.04*		
Affective	0.61 0.31	0.29	.05		
Behavioral	0.29 0.20	0.17	0.16		
Leisure Participation				.210	.090
Activity 1	-0.05 0.13	-0.04	.711		
Activity 2	-0.07 0.15	-0.06	.62		
Activity 3	-0.09 0.13	-0.08	.48		
Activity 4	-0.25 0.14	-0.20	.80		
Activity 5	0.23 0.11	0.23	.04*		
Camp-Activity Alignment	-1.26 0.22	-0.51	<.001***	.444	.233***

Note. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Beyond the HLM, independent-samples t-tests revealed that staff whose meaningful leisure activity aligned with camp programming reported significantly higher WLS ( $M = 3.69, SD = 0.97$ ) than those whose activity did not align ( $m = 2.35, SD = 1.16$ ),  $p < .001$ . No significant difference emerged between first-year ( $M = 3.18, SD = 1.37$ ) and returning staff ( $m = 2.95, SD = 1.21$ ),  $p = .179$ , indicating that prior camp experience did not influence WLS.

### Discussion

This study demonstrates that leisure attitudes and camp-activity alignment are significant predictors of Work-Leisure Similarity among seasonal camp staff. The strongest predictor of WLS was whether a staff member's most meaningful leisure activity aligned with camp programming. Staff who engaged in leisure activities similar to camp activities, such as kayaking, hiking, or team sports, reported significantly higher WLS scores, accounting for nearly a quarter of the explained variance. Interestingly, neither staff age nor years of camp experience predicted WLS, and returning staff did not differ from first-year staff. These results suggest that WLS perceptions emerge early, even before staff begin their camp duties, reinforcing the potential utility of assessing leisure attitudes and alignment during the hiring process rather than relying on prior camp experience.

Future research should examine how WLS and resilience evolve over the course of a camp season. Incorporating established resilience measures or burnout screeners (e.g., Arkin et al., 2024) at mid- and end-summer intervals could reveal whether higher WLS at the start of summer indeed protects against burnout over time. Additional work is needed to explore gender

differences, given evidence that men and women experience and benefit from leisure differently (Codina & Pestana, 2019).

### **Practitioner Implications**

Camp leaders can apply these findings by incorporating leisure-based screening and alignment strategies into staff recruitment, training, and retention practices. During hiring, directors could use brief questionnaires or interview prompts to identify applicants whose most meaningful leisure activities naturally overlap with camp programming. Staff who engage in similar activities outside of work are more likely to experience higher Work-Leisure Similarity, which is associated with greater resilience and lower burnout risk. Pre-camp training can reinforce this alignment by highlighting how staff can transfer their personal leisure skills and passions into camp roles, strengthening both job satisfaction and program quality. In addition, supervisors can foster a culture that values leisure by modeling healthy attitudes toward downtime and encouraging staff to integrate personal interests into their daily routines. By intentionally recruiting and supporting staff with positive leisure attitudes and camp-activity alignment, camp leaders can enhance staff well-being, reduce turnover, and deliver a more engaging experience for campers.

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# Exploring Leisure Attitudes, Work-Leisure Similarity, and Staff Resilience

Daniela Berry<sup>1</sup>, C. Scott Shafer<sup>2</sup>, Dan Pilgreen<sup>3</sup>

## Introduction

Camp counselor burnout continues to be of concern for camp administrators. Work-Leisure Similarity (WLS) - the degree to which an individual's leisure activities resemble their work-related skills, tasks, or demands

**Greater WLS is linked to greater self-efficacy and resilience in the workplace.**

## Key Results

Leisure attitudes and camp-activity alignment each explained a statistically significant portion of the hierarchical linear model variance (8.9%,  $p < .05$ ; 23.3%,  $p < .001$ ; respectively).

Staff whose meaningful leisure activity aligned with camp programming reported significantly higher WLS ( $M = 3.69$ ,  $SD = 0.97$ ) than those whose activity did not align ( $m = 2.35$ ,  $SD = 1.16$ ),  $p < .001$ .

No significant difference emerged between first-year ( $M = 3.18$ ,  $SD = 1.37$ ) and returning staff ( $m = 2.95$ ,  $SD = 1.21$ ),  $p = .179$ , indicating that prior camp experience did not influence WLS.

## Practitioner Implications

Staff whose leisure participation aligns with work tasks are more likely to experience higher Work-Leisure Similarity, which is associated with greater resilience and lower burnout risk.

By intentionally recruiting and supporting staff with positive leisure attitudes and camp-activity alignment, camp leaders have the potential to enhance staff well-being, reduce turnover, and deliver a more engaging experience for campers.

## Study Variables

### Staff Demographics

- age ( $m = 19.81$ ,  $SD = 3.34$ )
- years at camp ( $m = 2.01$ ,  $SD = 1.18$ )

### Leisure Attitudes Scale

- (1 = strongly disagree, 5 = strongly agree; Teixeira & Freire, 2013)
- Cognitive ( $m = 4.56$ ,  $SD = 0.56$ )
- Affective ( $m = 4.34$ ,  $SD = 0.72$ ),
- Behavioral ( $m = 3.37$ ,  $SD = 0.80$ ).

### Leisure Participation

#### Work-Leisure Similarity

- (1 = strongly disagree, 5 = strongly agree; Kelly et al., 2020)
- ( $m = 3.05$ ,  $SD = 1.28$ )

### Camp-Activity Alignment

46% of staff reported a most meaningful leisure activity that aligned with camp programming.

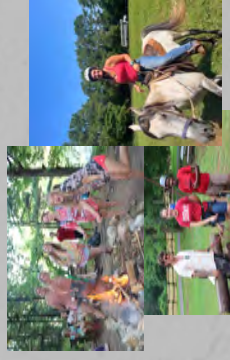
## Study Purpose

This study explored whether leisure attitudes, leisure participation, and the alignment of meaningful leisure with camp programming are associated with WLS.

## Methods

Summer 2024; survey at four overnight summer camps across the US South;  $n = 127$ ; ages 18-33; average camp employment 2.01 years

**Data Analysis** – Hierarchical Linear Model and Independent-samples t-tests



## Future Research

Future research should examine how WLS and resilience evolve over the course of a camp season and/or incorporate measures such as Camp Counselor Burnout Scale (Arkin et al., 2024)



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# **CREATING SPACE FOR CHILDHOOD: CAMP AS A SOURCE OF PLAY AND BELONGING FOR YOUTH FROM FAMILIES WITH SUBSTANCE USE DISORDERS**

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Each year in the U.S., around 19 million children (25%) live with at least one parent or primary caregiver with a substance use disorder (SUD) (McCabe et al., 2025). Growing up in a family that experience a SUD is often related to the parentification of youth; youth take on the parenting role for themselves and, often, the parenting role for their siblings (Tedgård et al., 2019). Although research points to both the potential positive and negative outcomes associated with parentification (Masiran et al., 2023), additional work on the buffers of the negative effects of parentification is needed. One area to consider is the important value play can have on youth development (Lai et al., 2018). Children who engage in play feel higher levels of life satisfaction and happiness (Gray et al. 2023). Play has been especially important for youth experiencing stress related to chronic disease (Nijhof et al., 2018), but little is known about the role of play in youth experiencing the stress that can be associated with having a parent with SUD. Perhaps the fun and childhood experiences of camp can relieve the stress of young people who take on parenting roles in families impacted by SUD.

Several theories regarding play may be relevant for exploring its benefits to youth impacted by familial SUD. Play may support the development of coping skills and subsequent mental health benefits by allowing youth to express frustration and anger within a safe context (Sutton-Smith, 2008). Co-constructed narratives in play can help youth to integrate positive and negative experiences and identity development (Habermas & Bluck, 2000). Erickson (1977) saw play as a means for youth to explore emotions, develop problem-solving skills, collaborate with others, and build their identities. Therefore, “play is a natural tool for children to develop resilience” (Nijhof et al., 2018, p. 422), and camp may be an opportune setting to provide play opportunities to youth who have a family member with a SUD.

Although a substantial proportion of children in the U.S. are impacted by familial SUD, few resources are available to support these youth. Camp Mariposa (CM) is a national addiction prevention and mentoring program specifically designed to serve youth ages 9–17 affected by the SUD of a family member. Although Camp has frequently been identified as a key setting that provides contextual resources linked to positive and healthy development in young people, there is little information on how camp can impact the development of youth experiencing SUD in their families (Phillippi et al., 2023). Thus, in this study, we explore the following research question: In what ways does residential camping provide youth impacted by familial SUD with the opportunity to experience play and fun?

## **Methods**

With 14 locations across the U.S., Camp Mariposa provides programming free of charge to youth from ages 9–17 who are affected by a family member's SUD. Camp Mariposa programming occurs year-round, typically taking place over the course of six camp weekends per calendar year with family events occurring between camp weekends. Through traditional camp activities and therapeutic/educational sessions, participants are expected to build skills and competencies in a number of domains while strengthening connections to adults and peers.

This study utilized data from a mixed-method evaluation of the Camp Mariposa program that was developed through a research-practice partnership. Researchers visited four Camp

Mariposa locations. During these visits, the research team interviewed caregivers (n = 27), camp staff (n = 31), and youth participants (n = 35). The format and setting for interviews were conducted in collaboration with camp staff in recognition of the unique needs of youth and caregiver participants. Questions focused on the benefits participants experienced or perceived from camp participation as well as what aspects of the camp experiences contributed to those outcomes. Data were analyzed using thematic analysis (Braun & Clarke, 2006). After familiarizing ourselves with the data, the research team agreed on additional codes, which were applied to all transcripts. Codes were used to develop themes, which were then evaluated and analyzed as a team.

## **Results**

Staff, caregivers, and youth all reported that one of the major benefits of Camp Mariposa related to the ability for youth to have fun. For example, one staff offered, “The ones that have started coming, they really enjoy coming. If their friends are going to be here and then just what all we get to do with them, and they love gaga ball.” Another staff member highlighted that the fun youth experience was important, especially having fun in a safe environment with other youth that have similar experiences. They shared,

They need somewhere to go [that] have safe adults, that have structure, and [where they] can have hard conversations with them, and they need somewhere to go where they can be around other kids their age and have fun, and they need somewhere where they can be around people going through some more things who are more open to talk about it.

This finding was also present in interviews with caregivers. Caregivers highlighted fun as an important experience for the youth, stating, “my oldest one, she has a hard time getting along with the kids and whenever she's here she seems like she's more open and has fun and if that makes sense.” Other caregivers reported their youth experiencing fun as an important outcome for themselves. One caregiver shared, “for her to come here and experience other children that went through the same thing and see them laughing and having fun, that is priceless.” Finally, interviews with the youth also pointed to the critical element of fun. When asked to describe their favorite part of Camp Mariposa, one youth reported “Laughing with them [other campers] and hanging out with them. Like activities or eat lunch with them and stuff...Like boating. When we go canoeing or something, we all get in one boat, and we all say funny things and we all laugh together.”

## **Discussion and Implications**

Results from other studies of Camp Mariposa have demonstrated a number of positive outcomes related to peer relationships, reliance, coping, and socio-emotional health. In examining the mechanisms that drive development within Camp Mariposa, findings point to a number of processes, including supportive adult relationships, evidence-based curriculum, and shared backgrounds with peers. However, one of the most influential factors that has emerged from interviews with campers, staff, and caregivers points to the important role of fun. Without fun, caregivers would be less likely to bring youth, youth would be less likely to engage, and relationships with supportive adults within the camp setting would be less impactful. Our results point to the role of camp in providing opportunities for fun that allowed youth to connect with others, co-construct narratives, and develop a shared identity.

In structured camp settings, it is often important for staff to ensure deliverables are met; youth must receive a certain number of hours of a specific curriculum, they must rotate through certain activities, and there is an increased emphasis on the skills and competencies youth gain from participation. However, it is important not to lose sight of the power of “fun” for campers.

Offering opportunities for play and fun are incredibly important and powerful, especially when working with youth who may experience stressors and responsibilities that come with familial SUD.

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**BACKGROUND**

- 25% of youth in U.S. live with at least one primary caregiver with a substance use disorder (SUD)
- These youth often take on parenting roles and have reduced opportunities for fun and play
- Play can help youth explore emotions, develop problem-solving skills, collaborate with others, and build their identities.

**PURPOSE**

Explore how camping may provide youth impacted by familial SUD with the opportunity to experience play and fun

**METHODS**

- Data from mixed-method evaluation of the Camp Mariposa program
- Interviews at four Camp Mariposa locations
  - 27 caregivers
  - 31 camp staff
  - 35 campers
- Data analyzed using thematic analysis

**CREATING SPACE FOR CHILDHOOD: CAMP AS A SOURCE OF PLAY AND BELONGING FOR YOUTH FROM FAMILIES WITH SUBSTANCE USE DISORDERS**  
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**Camp Mariposa Overview**

Group and peer mentoring model	6 free weekend camps a year	Traditional camp activities combined with education and support sessions
Junior counselor and teen program	Additional activities for families, youth and mentors	14 locations across US



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**FINDING #1**

- All respondents reported that having fun was a major benefit of Camp  
*"They need somewhere to go where they can be around other kids their age and have fun."*

**FINDING #2**

- Shared experiences were essential  
*"For her to come here and experience other children that went through the same thing and see them laughing and having fun, that is priceless."*

**IMPLICATIONS & FUTURE DIRECTIONS**

- Ensuring campers engaged in fun activities increases caregiver buy-in, camper engagement, and more impactful relationships
- Don't lose sight of the power of "fun" for campers
- Further study of play as a natural tool for children to develop resilience

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## VALIDATING THE MY VIEW YOUTH CARE AND ENGAGEMENT SCALE FOR PRE-CAMP SCREENING

Authors: Barry A. Garst, Alexandra Skrocki, Clemson University; John Hamilton, Tracey Gaslin, Alliance for Camp Health

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Comprehensive and well-implemented pre-camp screening offers camp administrators and front-line staff critical information necessary to support the individualized needs of young people, from specialized health care requirements (Flynn et al., 2021); mental, emotional, and social health supports (Garst, Skrocki, Owens et al., 2024); and youth anxieties and preferences (Kingery et al., 2012). Guidance from national camp intermediaries and pediatricians (ACA, 2019; ACH, 2023; Ambrose et al., 2019) recommends that providers collect pre-camp health information. However, these parent or caregiver-completed forms and electronic health records (Bunke et al., 2021) do not capture youth perspectives and often focus largely on physical health concerns (Kaufman et al., 2016). While screening tools to assess youth perceptions exist (Whitehouse et al., 2013), these tools have not been implemented in camps. In 2023, the Alliance for Camp Health pilot-tested a youth-focused online pre-camp screening tool called My View (Garst, Skrocki, Hamilton et al., 2024). Building off this exploratory work, the purpose of this study was to validate a pre-camp screening tool that captures youth perspectives prior to camp. This study contributes to the existing literature by bridging measurement development with practical application, offering camp providers a reliable way to better understand and support campers. The research question was, “How can a youth-centered, validated pre-camp screening tool be designed to elevate camper voices and inform practitioner support?”

This study was guided by digital empathy and MESH(+) frameworks. Digital empathy, as described by Malvini Redden and Way (2017), invites “questions and procedures that better get at the heart of the teen online experiences and the complexity of teen life” (p. 37). When applied to the camp experience, a digital empathy frame guides researchers in engaging youth within an online environment to better understand their camp experience. The MESH(+) framework provides a way to conceptualize holistic relational care for camper and staff mental, emotional, and social health and wellbeing by prioritizing camp experiences that help individuals feel “safe, supported, connected, and contributing” (Lubeznik-Warner et al., 2025, p. 8).

### Methods

Data for this study were analyzed from 802 youth aged 7–17 who completed My View prior to camp in the Summer of 2024. Respondents were 51% female, 39% male, and 2.4% non-binary. Forty residential summer camps were represented in the sample.

The My View Youth Care and Engagement Scale (My View-YCES), which measures how youth experience support, care, and engagement at camp, was adapted from existing research (Tiffany et al., 2012; Whitehouse et al., 2013). The 13-item scale has two dimensions: *Youth Support and Care* (YSC), which reflects how well youth feel supported, understood, and connected during camp experiences, and *Youth Voice and Engagement* (YVE), which reflects how well youth can share thoughts through the tool and how useful youth believed the tool was for expressing their needs. Items are rated on a 5-point scale from 1 (*not at all true for me*) to 5 (*very true for me*).

To examine the My View-YCES factor structure, an exploratory factor analysis (EFA) was conducted in SPSS 30 using principal axis factoring with oblique rotation. Sampling adequacy was confirmed ( $KMO = .90$ ), and Bartlett’s test of sphericity was significant,  $\chi^2(55) =$

3938.71,  $p < .001$ , indicating suitability for factor analysis. Scree plot inspection and eigenvalues  $>1$  suggested a two-factor solution, accounting for 61.54% of total variance (Factor 1 = 46.40%, Factor 2 = 15.14%). Items with loadings  $\geq .40$  were retained, resulting in a clear YSC (7 items) and YVE (4 items) structure, consistent with the prior pilot and exploratory findings. Prior to conducting confirmatory factor analysis (CFA), missing data were assessed. The missing completely at random (MCAR) assumption was violated; therefore, full information maximum likelihood (FIML) estimation was used in Mplus 8.10 to handle missing data (Enders, 2010). The CFA used robust maximum likelihood estimation (MLR) to test the hypothesized two-factor structure (Table 1).

Table 1.  
*Standardized Factor Loadings and Item Reliabilities for the My View Youth Care and Engagement Scale*

Factor	Item (abbreviated)	Std. Loading	R <sup>2</sup>
Youth Support & Care	Adults seemed to know me better because of the information I provided in My View	.79	.62
	Using My View helped me to communicate better with camp staff	.78	.61
	I feel the information I provided in My View helped others understand me better	.84	.71
	Staff at camp paid attention to what's going on in my life through my feedback in My View	.85	.73
	Information in My View impacted my camp activities	.84	.70
	Information shared in My View helped camp staff provide me with better care	.79	.62
	Using My View helped me develop a relationship with at least one staff member	.11	.01
Youth Voice & Engagement	It was easy for me to use My View	.74	.55
	I was able to give input using My View	.85	.71
	I enjoyed sharing about myself using My View	.75	.56
	Using My View was interesting	.33	.11

*Note.* The YSC factor was scaled so that higher scores reflect greater perceived support and care. Loadings are presented as positive for ease of interpretation.

## Results

The CFA supported the proposed two-factor structure, demonstrating acceptable model fit (meaning the two factors represented the data well):  $\chi^2(43) = 128.11$ ,  $p < .001$ , CFI = 0.953, TLI = 0.940, RMSEA = 0.050 (90% CI: 0.040–0.060), SRMR = 0.035, meeting recommended thresholds (Hu & Bentler, 1999). All items loaded significantly ( $p < .001$ ) on their respective factors. Standardized YSC loadings ranged from  $-0.788$  to  $-0.854$ , reflecting strong associations among most indicators, with one item (YSC2) showing a low loading (0.113,  $R^2 = 0.013$ ), indicating minimal contribution to the latent construct. Despite this, the item was retained due to its conceptual importance, with the low loading potentially reflecting sample-specific performance. YVE loadings ranged from 0.327 to 0.845; three items demonstrated strong loadings (0.742–0.845,  $R^2 = 0.551$ –0.714), while one item (YVE4) had a lower loading (0.327,  $R^2 = 0.107$ ). The correlation between YSC and YVE was  $r = -0.42$  ( $p < .001$ ), indicating a moderate inverse relationship between perceptions of support and expressions of voice and engagement, highlighting that feeling supported and being able to share your voice are connected, but not identical, experiences. Reliability for both factors was strong: YSC  $\omega = 0.84$  and YVE  $\omega = 0.77$ , suggesting good internal consistency and supporting the use of the scale to assess the targeted constructs in camp contexts.

## Discussion and Conclusions

CFA results provide promising evidence that the My View-YCES is a valid and reliable tool for measuring two related aspects of campers' experiences—support and engagement—with most items performing well. While a very small number of items contributed less variance, the overall scale provides a valuable measurement framework for understanding campers' experiences of support, care, voice, and engagement through My View utilization. As camps seek strategies to help all youth feel included, particularly diverse youth who may be new to the camp experience or for whom camp is not a part of their cultural or familial history, tools such as My View-YCES may be important for evaluating and strengthening camp practices related to camper support and engagement.

## Implications for Practice

The My View-YCES can help camp staff understand the extent to which youth feel safe, supported and connected, identify areas for programmatic or organizational improvement, and create more responsive, youth-centered experiences. This measure contributes to the growing number of youth-focused tools designed to improve health screening (Glasner et al., 2021) and provides camp administrators with a contextualized resource appropriate for assessing youth care, support and engagement within camp settings.

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## Validating the My View Youth Care and Engagement Scale for Pre-Camp Screening

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Tracey Gaslin & John Hamilton, Alliance for Camp Health

### Background and Purpose

- While pre-program screening tools to assess youth perceptions exist (Whitehouse et al., 2013), these tools have not been implemented in camps.
- Building off exploratory work by the Alliance for Camp Health (Garst et al., 2024), the study purpose was to validate a pre-camp measure of youth perspectives of care and engagement.
- This study bridges measure development and practical application, offering camp providers a reliable way to better understand and support campers.
- Theoretical frame included digital empathy (Redden & Way 2017) and MESH(+) (Lubeznik-Warner, Garst, et al., 2025).

### Research Question

- How can a youth-centered, validated pre-camp screening tool be designed to elevate camper voices and inform practitioner support?

### Method

- Data were collected from 802 youth (ages 7–17) across 40 residential camps in Summer 2024 (51% female, 39% male, 2.4% non-binary).
- Adapted from existing research (Tiffany et al., 2012; Whitehouse et al., 2013), the My View–Youth Care and Engagement Scale (My View–YCES) is a 11-item measure with two dimensions: **Youth Support & Care** (YSC) and **Youth Voice & Engagement** (YVE), rated on a 5-point scale (1 = not at all true; 5 = very true).
- Exploratory factor analysis (EFA; principal axis factoring, oblique rotation) supported a two-factor solution for the My View–YCES. Sampling adequacy was strong (KMO = .90; Bartlett's  $\chi^2(55) = 3938.71, p < .001$ ). The two factors (YSC and YCE) accounted for 61.5% of the variance.
- Confirmatory factor analysis (CFA) was conducted using MLR with FIML for missing data to explore the two-factor model.

**KEY FINDING:** The results provide promising evidence that the My View–YCES is a valid and reliable tool for measuring two related aspects of campers' experiences—support and engagement—with most scale items performing well, making it a useful resource for practitioners seeking to better understand and respond to camper needs.

Factor	Item (abbreviated)	Std. Loading	R <sup>2</sup>
Youth Support & Care	Adults seemed to know me better because of the information I provided in My View	.79	.62
	Using My View helped me to communicate better with camp staff	.78	.61
	I feel the information I provided in My View helped others understand me better	.84	.71
	Staff at camp paid attention to what's going on in my life through my My View feedback	.85	.73
Youth Voice & Engagement	Information in My View impacted my camp activities	.84	.70
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Youth Voice & Engagement	Using My View was interesting	.33	.11

### Results

- The CFA supported the proposed two-factor structure, demonstrating acceptable model fit (meaning the two factors represented the data well):  $\chi^2(43) = 128.11, p < .001$ , CFI = 0.953, TLI = 0.940, RMSEA = 0.050 (90% CI: 0.040–0.060), SRMR = 0.035, meeting recommended thresholds (Hu & Bentler, 1999).
- Most items loaded significantly ( $p < .001$ ) on their respective factors.
- Note: The YSC factor was scaled so that higher scores reflect greater perceived support and care. Loadings are presented as positive for ease of interpretation.

### Discussion and Conclusions

- CFA results provide preliminary support for the validity and reliability of the two-factor My View–YCES structure, with most items demonstrating strong standardized loadings on their intended factors
- While a small number of items contributed less variance, the overall scale provides a robust measurement framework for understanding campers' experiences of support, care, voice, and engagement through My View utilization.

### Implications for Practice

- The My View–YCES can help camp staff understand which youth feel supported and engaged, identify areas for improvement, and create more responsive, youth-centered experiences.
- This measure contributes to the growing number of youth-focused tools designed to improve health screening (Glasner et al., 2021) and provides camp administrators with a contextualized resource appropriate for assessing youth support and engagement within camp settings.



# **HOW CAMPERS WITH PROFOUND INTELLECTUAL AND MULTIPLE DISABILITIES AND THEIR CAMP COUNSELORS ATTUNE DURING A MEDICAL SPECIALTY CAMP**

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Across different camps and camper populations, researchers have found that youth with all kinds of diagnoses can benefit from attending medical specialty camps (MSCs) (Gillard et al., 2011; Lake et al., 2021). However, it is unknown how youth with profound intellectual and multiple disabilities (PIMD) are impacted by attending MSCs as they have rarely been directly included in research. Youth with PIMD require considerable care support (Tadema & Vlaskamp, 2010) and often rely on non-language forms of communication such as facial expressions, movements, and vocalizations (Stephenson & Dowrick, 2005) that are difficult for new caregivers to understand. This means youth with PIMD are rarely away from their immediate caregivers, usually family members (Nakken & Vlaskamp, 2007). Yet Shelton et al. (2006) described how caregivers of youth with disabilities saw MSCs as one of few safe opportunities they trusted for their child. This provides evidence that MSCs can provide the necessary support for youth with PIMD which is a prerequisite to having positive camp experiences but does not explain how it happens at camp.

Within a residential care setting, Griffiths and Smith (2016) developed a theory of attuning between individuals with PIMD and their caregivers. In it, attuning is the process by which communication partners move “towards or away from each other cognitively and emotionally (p. 130)” An individual with PIMD and their caregiver’s attunement is observable in the relationship between how each individual shows awareness of the other’s wants (Empathy) and how they cooperate toward those wants (Cooperation). Griffiths and Smith (2016) used recorded videos of interactions to code observable behaviors along the two continua of Empathy and Cooperation creating four dimensions as behaviors could be high or low on each.

In this theory, highly attuned individuals, high on both Empathy and Cooperation, are sharing the same focus such as a toy, or each other, and are engaging with that shared focus toward the same goal. An example would be one person directing a puppet while the other watches and laughs. This aligns with research on attunement in youth-adult mentor relationships which found highly attuned mentors focused on mutual sharing and attending to the mentee’s verbal and nonverbal signs (Pryce, 2012). When individuals are low on both Empathy and Cooperation, they are not aware of each other’s wants nor working cooperatively toward those wants. This is exemplified by non-engagement such as one person is trying to get the other’s attention, but their attempt is ignored as the other focuses on something else. As both individuals must attune to each other, individuals with PIMD have equal agency in interactions.

When youth with PIMD go to MSCs, camp staff become their temporary caregivers working to understand them and meet their needs, or said more simply, working to attune with them. This study sought to use video analysis to understand what attunement between youth with PIMD and their counselor looked like and how it happened during one program within an MSC.

## **Methods**

This project was part of a study on the impact of a residential camp session for youth with PIMD at a Midwestern MSC approved by Indiana University’s Institutional Review Board. The camp session lasted for six days and had summer camp activities such as recreation, pool, music, art, and climbing. The campers’ care needs meant the camper to counselor ratio was 1:1.

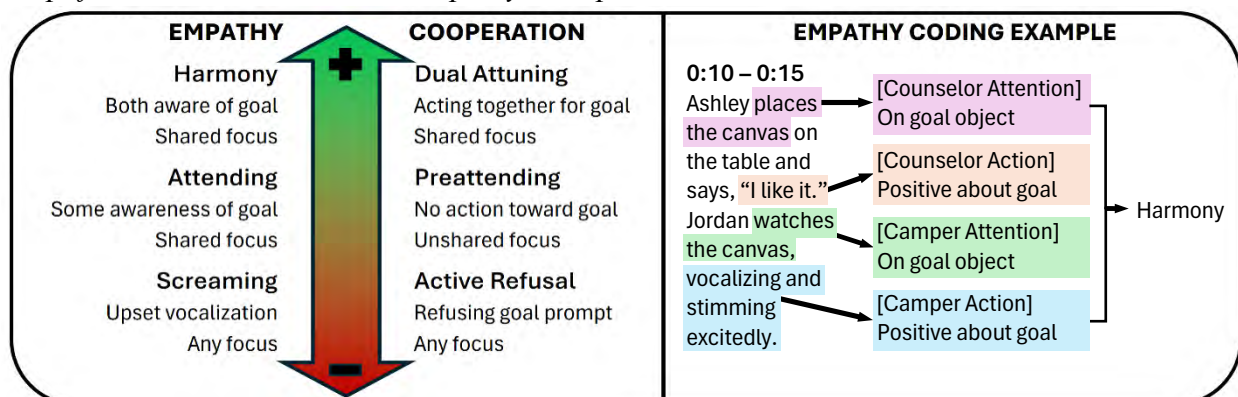
As a previous staff member, I was familiar with the camp structure session and flow. This allowed me to act as both researcher and camp counselor during the session, acting as a counselor when not collecting research data. Through this dual role I was emmeshed in the daily ongoings and developed a familiarity with the campers and staff which aided video analysis.

The 75-minute art program on the third day of camp was recorded using one camcorder, two 360 cameras, and three audio recorders operated by the author and a research assistant. The program was led by the art director with five campers and six other staff present. In this study, three campers were included, Jordan, Thomas, and Robert who were male, white, aged 12 to 18, varied in diagnosis, and needed significant one-on-one support to participate. All seven staff were included: art director (Julie), recreational therapy intern (Maria), and five counselors (Ashley, Emily, Jolenne, Liz, and Chris). There were six female and one male (Chris) staff, aged 19 to 21, and only Julie had worked at the camp previously. All names are pseudonyms. The art program consisted of introductions and then painting taped canvases that revealed patterns once the tape was removed.

For analysis, two 10-minute segments were selected for each camper, one starting shortly after introductions finished and one from 30 minutes into the program. This captured two different parts of the program, different camper-counselor pairings, and served as a sample of the entire program. The segments were divided into five-second intervals to examine camper and counselor actions (what they did) and attentions (where they were focused). In four separate passes of the segment, one person’s action or attention would be noted for every five second interval. Actions consisted of all vocalizations and body movements within the interval. Attention was determined by where the person’s eye gaze was directed for most of the interval. When a person’s focus changed several times in an interval it was marked as no specific focus.

After all attentions and actions were listed, each interval was coded with a codebook developed according to Griffiths and Smith’s (2016) scales of Empathy and Cooperation. The combination of the camper and counselor’s actions and attention within each interval were plotted on the Empathy and Cooperation scales then compared to the codebook. When Empathy and Cooperation were both positive, the dyad was considered to be attuned. Figure 1 shows a simplified codebook with three Empathy and Cooperation codes and a coded interval example.

Figure 1  
*Simplified codebook and coded Empathy example*



## Results

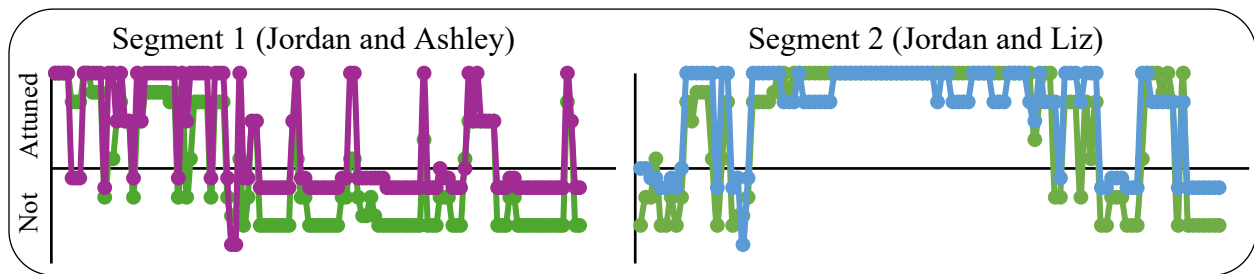
The six coded video segments yielded four themes related to attuning: variability, simple attuning, anti-attuning, and camper-first attuning. Collectively the total coded segments

demonstrate attunement variability while the different attunement types are seen in specific intervals.

Attunement was constantly changing for all camper-counselor dyads. While attunement could be stable, it could also change quickly in a short time. Using Jordan's two segments, shown in Figure 2, attuning's variability is apparent. During segment one, he painted with Ashley and they were initially attuned but attuned very little in the second half as her attention was directed away from him. In Jordan's second segment, Jordan and Liz painted, attuning for several minutes as Jordan expressed his preference for Liz to paint as he provided vocal encouragement and then she did so. The following themes offer explanations for this variability.

Figure 2

*Jordan's segments coded for Empathy (green) and Cooperation (blue)*



Simple attuning was dyads attuning by following the program instructions without adjustments. It's considered simple because there aren't any differences between how the dyads go about painting and mostly occurred at the beginning of each camper's first segment. Within the context of the program, this type of attunement wasn't sustainable as adjustments would become necessary according to campers' preferences.

Anti-attuning occurred when dyads were not focused and working together, occurring throughout the segments for three reasons: the counselor, camper, or activity. Counselor anti-attunement happened when the counselor would turn their attention away from the camper often due to someone else needing them. Camper anti-attunement often involved the camper refusing a prompt they did not want to do. Activity anti-attunement was when the structure of the activity meant dyads didn't have anything to do together. Examples of these reasons include Ashley turning her attention away from Jordan to answer a question, Robert refusing Emily's prompt to paint by turning away, or Thomas and Jolene sitting unfocused as they waited for materials.

Camper-first attuning demonstrated how counselors responded to their campers' wants through understanding and adapting. For example, after Robert turned away from Emily, she leaned in slightly and said, "Robert whenever you're ready to do it again you can just turn back." Robert briefly waited before he slowly turned to face straight again. Together they picked the paintbrush up and started painting. Emily gave Robert agency to decide which led him to reengage. Counselors also adapted painting methods which led to attunement as Jordan painted by giving vocal assistance to his counselor, Thomas painted by putting his canvas in a bag with paint and throwing it, and Robert toe-painted.

### **Discussion and Implications**

This study sought to understand how youth with PIMD and their counselors attuned during an MSC using video analysis. In this study, campers and counselors attuned as campers expressed their needs and counselors learned to understand and adapt to them. While attunement fluctuated and anti-attuning occurred, something natural in all interactions (Griffiths & Smith,

2016), there was the potential to re-attune when the camper's preferences were centered. Simple and campers first attunement demonstrated how attunement could vary even when going well.

Even as a case study, the small number of campers and utilization of a single program area limited the study's scope. Two of the five campers were not included in analysis as one did not stay in the program area for the majority of the time and the other was able to participate without counselor support. The developed codebook is contextual, based on these specific campers and program and would need adjusted for other contexts.

In practice, this study suggests the potential for conducting training on attunement, using videos in training, and having campers' caregivers provide video clips that demonstrate how to support their camper. For staff working with youth with any kind of diagnosis, including attunement in training could support their ability to attune with their campers. As attunement could be seen through observable behaviors, utilizing videos of attuned campers and counselors could supplement explanations by providing practical examples. Since counselors had to learn the camper's preferences to attune with them, there is the potential for caregivers to provide video clips as part of the check-in process to give counselors more information on campers.

These recommendations are meant to support youth with all kinds of support needs. Both in research and practice, our methods should be tailored to the specific needs of the campers we serve. Adaptive methodologies can ensure that all campers can be included in research and extend what we already know from practice into research. Every child deserves the opportunity to be included at camp, and our research improves when we include every camper's experience.

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# How Campers with Profound Intellectual and Multiple Disabilities and Their Camp Counselors Attune During a Medical Specialty Camp

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## STUDY AIM

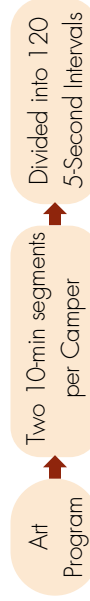
To understand how campers with PIMD and their counselors attune and what it looked like within a residential medical specialty camp in the Midwestern US.

## PARTICIPANTS

- **5 Campers** (featured here: *Jordan, Robert, Thomas*)
  - Male, white, 12-18 years old
  - Needed significant support to participate
- **7 Staff** (6 female and 1 male, 19-21 years old)
  - Art Director
  - Rec Therapy Intern
  - Five Counselors

## METHODS

The entire 75-minute art program for one cabin was video recorded. Interactions between campers and counselors were coded utilizing an attuning theory developed by Griffiths and Smith (2016).

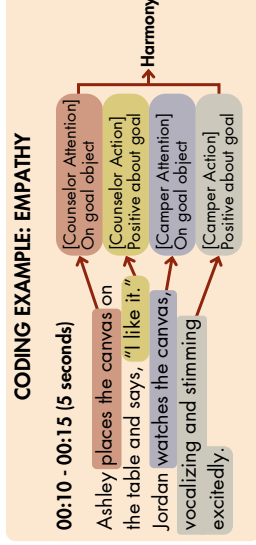
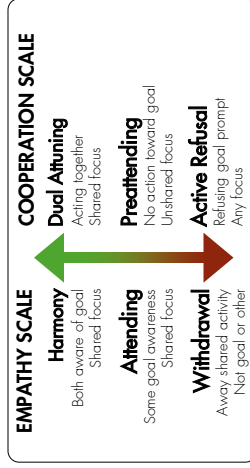


## Takeaways for Practice

- Campers with PIMD & counselors can ATTUNE
- Attuning is observable and so could be TAUGHT
- Individualizing programs gets campers ENGAGED

## ANALYSIS

Qualitative coding of camper/counselor actions & attention using:



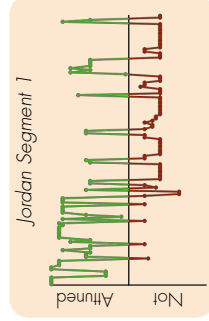
## FINDINGS

### Attuning Variability

Constantly changing throughout segments for each pair

### Simple Attuning

Attuning by following program plan without adjustments, exemplified by hand-over-hand painting at the start of the program



### Anti-Attuning

Attunement could be disrupted by:

- Programming**
  - Waiting for materials
  - Finishing task early
- Counselors**
  - Helping elsewhere
  - Distracted by someone
- Campers**
  - Want different method
  - Lost interest in program

### Campers' First Attuning

Attuning as campers communicated preferences and counselors acknowledged their preference

07:30 - 07:45

Robert turns away and Emily says, "Robert whenever you're ready to do it again you can just turn back." Robert pauses, then turns back to paint.

04:45 - 05:00

Robert's feet are above the canvas while Ashley and Julie hold it, moving the canvas so his foot is painting it.

05:55 - 06:10

Thomas is facing Chris as they look at Chris's jacket. Chris zips and unzips it repeatedly as Thomas excitedly vocalizes.

Griffiths, C., & Smith, M. (2016). Attuning: A communication process between people with severe and profound intellectual disabilities and their instruction partners. *Journal of Applied Research in Intellectual Disabilities*, 27(2), 124-138. <https://doi.org/10.1111/jar.12144>

## **EXPLORING THE CONCEPTUAL VALUE OF DIFFERENT PROGRAM MODELS IN SERIOUSFUN CHILDREN'S NETWORK**

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In pediatric healthcare, there is strong interest in value assessment frameworks designed to capture critical value elements relevant to specific interventions, including patient costs, convenience, time burden, impact on family, symptom burden, and quality of life (Doherty et al., 2019). One complementary intervention—medical specialty camp (MSCs)—faces increasing pressures to clearly define and measure their programs' worth and contribution. While MSC research has shown positive outcomes for children living with serious illnesses (e.g., Gillard et al., 2023), MSCs operate in a healthcare environment where limited resources require comprehensive consideration of cost effectiveness and impact (Bortoletto & Little, 2018).

This study aimed to identify value elements relevant to medical specialty camps for children with serious illness, and to specifically identify value elements related to the different program models in SeriousFun Children's Network, especially individual residential (overnight) camps, group residential (family camps), hospital outreach programs, and other outreach programs (e.g., school outreach). The research questions were: (1) What value elements are perceived as most important across different program models? (2) How do value elements differ across program models?

The study was grounded in relational developmental systems (RDS) theory (Lerner et al., 2014; Overton, 2013), which conceptualizes development as emerging from bidirectional coactions between individuals and their environments, where relationships serve as primary developmental mechanisms (Osher et al., 2020). For MSCs, the camp environment functions as a developmentally enabling context through supportive relational networks and medically appropriate programming. Examining the relational systems of children living with serious illnesses in different settings can increase understanding of what is valuable across settings.

The research team came from three countries: Hungary, Ireland, and United States which provided cross-cultural reflections on assumptions regarding "value." Most of the team has been strongly involved in camp communities for children living with serious illnesses, and most were women.

### **Methods**

The study included four phases. Phase 1 involved a rapid review of healthcare and MSC literature to develop possible value elements. Phase 2 involved stakeholder consultation via focus groups and interviews with camp staff, volunteers, parents and campers from two SeriousFun camps: Barretstown in Ireland and Bátor Tábör in Hungary. Phase 3 used online workshops to explore consensus about value elements most relevant to SeriousFun camps and specific program models. Phase 4 developed an online survey based on identified value elements to assess their relevance to different program models. Elements were retained if reported as very or extremely important by at least 80% of respondents.

### **Results**

Forty-five value elements were identified from rapid reviews. Focus groups and interviews with 39 participants added additional elements. Online workshops with 24 participants resulted in 24 broad value elements grouped into impact, design and organization,

and delivery. Participants weighted elements, resulting in 16 possible value elements for the online survey ( $N = 169$ ).

The rapid review and stakeholder consultation resulted in sets of value elements that informed the later phases of the study (Figure 1). Ten core elements across all camp programs were identified and grouped into program element types: program impact, program design and organization, and program delivery (Table 1).

Figure 1

*Value elements from rapid reviews and stakeholder consultation*

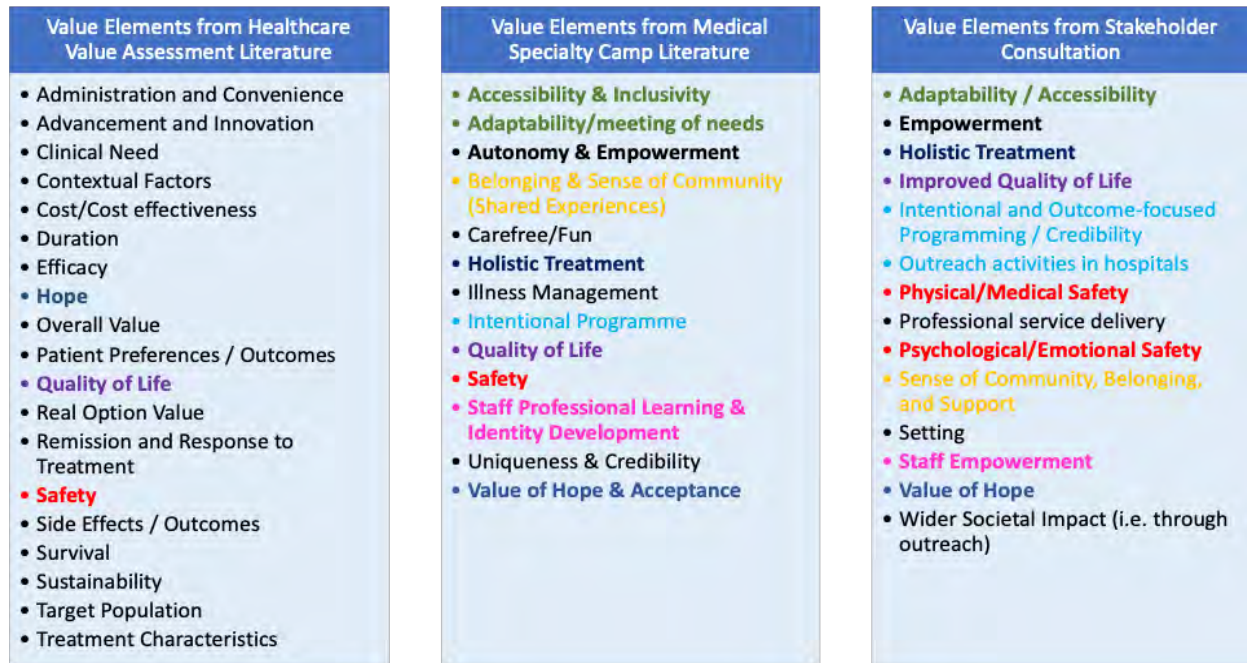


Table 1

*Identification of core value elements across all program types*

Core value elements across all program types	Program element
Promoting the psychological wellbeing of campers	Impact
Promoting campers' ability to manage the illness	Impact
Promoting camper empowerment, including independence, autonomy, and mastery	Impact
Promoting a sense of community and togetherness among campers and staff	Impact
Programs represent value for money	Design & Organization
Programs are available at no cost to the camper(s)	Design & Organization
Programs are delivered by skilled program staff who serve as role models for campers	Delivery
Programs are supported by high quality medical staff	Delivery
Programs are efficiently run	Delivery
Programs are delivered to a very high quality	Delivery

A small number of items were identified as relevant to outreach camps, beyond the core value elements. While hospital outreach aligned with residential camps as being perceived by respondents as promoting a sense of hope, it was the only program type where “being designed to offset the negative effects of illness” was highly rated. Similarly, outreach camps received high importance ratings for addressing campers' needs in a comprehensive manner, which could reflect these programs' ability to adapt to the various settings familiar to children living with serious illnesses.

Traditional overnight camp programs showed additional associated elements. Examples included the program impacts of promoting quality of life and a sense of hope. Examples of program design and organization included being designed with clear goals and targeting the needs of the camper. Examples of program delivery included focus on fun/enjoyment and support from high quality medical staff.

### **Discussion and Conclusions**

This study identified value elements relevant to MSCs for children with serious illness and specifically identified value elements related to the different program models in SeriousFun Children's Network: overnight camp, family camp, hospital outreach, and other outreach programs. Across four phases of this study, potential value elements were identified from healthcare and MSC literature, supplemented by stakeholder input. Little overlap existed between healthcare value assessment literature and camp literature, likely because healthcare frameworks target specific interventions while camps offer complementary benefits. The findings showed ten core value elements applicable to MSCs generally. Traditional overnight camp programs showed additional associated elements, while outreach programs have few unique elements, possibly reflecting their limited implementation beyond hospital settings.

Future research should explore further validation and comparative ranking of value elements. Researchers should develop value elements for outreach programs as these were less developed than for overnight and family camps. These findings were derived from two European camps, limiting generalizability.

This study identified core value elements applicable in the MSC setting, providing a foundation for future value assessment. By integrating healthcare frameworks with camp- and program-specific criteria and stakeholder experiences, MSCs can better articulate their unique contributions to children living with serious illnesses.

### **Implications for Practice**

The value elements generated from this study could be considered in program development, review, or evaluation. Value element assessment should draw from both literature foundations and lived experiences of participants. Camp organizations can adopt comprehensive approaches including traditional value assessment elements and program-specific criteria. The ten core value elements could be tested in other camps to establish their applicability across diverse medical specialty camp settings and cultural contexts. Camps can develop new value assessment criteria, articulate valued program features to interest holders, and inform priority setting for existing and new program models. Additionally, camp professionals should recognize that while core elements remain consistent across program types, different models might require tailored value assessments reflecting their unique contributions. By grounding value assessment in both healthcare frameworks and interest holder experiences, camp professionals can more effectively demonstrate their programs' worth to funders, healthcare partners, and families, while ensuring that program development remains responsive to the most important outcomes for children living with serious illnesses. This comprehensive approach to value assessment can

strengthen camps' positions within the broader healthcare ecosystem and support advocacy for sustained and expanded programming.

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# Exploring the Conceptual Value of Different Program Models in SeriousFun Children's Network

Gemma Kiernan, Suzanne Guerin, Nina Meret Zumbunn, Monika Hernek, Charles Normand, & Ann Gillard



1. What value elements are perceived as most important across different program models (e.g., overnight camp, family camp, hospital outreach, and other outreach programs)?
2. How do value elements differ across program models?

Value Elements from Healthcare Value Assessment Literature	Value Elements from Medical Specialty Camp Literature	Value Elements from Stakeholder Consultation
<ul style="list-style-type: none"> <li>Administration and Convenience</li> <li>Advancement and Innovation</li> <li>Clinical Need</li> <li>Contextual Factors</li> <li>Cost/Cost effectiveness</li> <li>Duration</li> <li>Efficacy</li> <li>Hope</li> <li>Overall Value</li> <li>Patient Preferences / Outcomes</li> <li>Quality of Life</li> <li>Real Option Value</li> <li>Remission and Response to Treatment</li> <li>Safety</li> <li>Side Effects / Outcomes</li> <li>Survival</li> <li>Sustainability</li> <li>Target Population</li> <li>Treatment Characteristics</li> </ul>	<ul style="list-style-type: none"> <li>Accessibility &amp; Inclusivity</li> <li>Adaptability/meeting of needs</li> <li>Autonomy &amp; Empowerment</li> <li>Belonging &amp; Sense of Community (Shared Experiences)</li> <li>Carefree/Fun</li> <li>Holistic Treatment</li> <li>Illness Management</li> <li>Intentional Programme</li> <li>Quality of Life</li> <li>Safety</li> <li>Staff Professional Learning &amp; Identity Development</li> <li>Uniqueness &amp; Credibility</li> <li>Value of Hope &amp; Acceptance</li> </ul>	<ul style="list-style-type: none"> <li>Adaptability / Accessibility</li> <li>Empowerment</li> <li>Holistic Treatment</li> <li>Improved Quality of Life</li> <li>Intentional and Outcome-focused Programming / Credibility</li> <li>Outreach activities in hospitals</li> <li>Physical/Medical Safety</li> <li>Professional service delivery</li> <li>Psychological/Emotional Safety</li> <li>Sense of Community, Belonging, and Support</li> <li>Setting</li> <li>Staff Empowerment</li> <li>Value of Hope</li> <li>Wider Societal Impact (i.e. through outreach)</li> </ul>

Core value elements across all program types	Program element
Promoting the psychological wellbeing of campers	Impact
Promoting campers' ability to manage the illness	Impact
Promoting camper empowerment, including independence, autonomy, and mastery	Impact
Promoting a sense of community and togetherness among campers and staff	Impact
Programs represent value for money	Design & Organization
Programs are available at no cost to the camper(s)	Design & Organization
Programs are delivered by skilled program staff serving as role models for campers	Delivery
Programs are supported by high quality medical staff	Delivery
Programs are efficiently run	Delivery
Programs are delivered to a very high quality	Delivery

This comprehensive approach to value assessment can strengthen camps' positions within the broader healthcare ecosystem and support advocacy for sustained and expanded programming.

## **HIGH IMPACT SERVICE LEARNING: COLLEGE STUDENT REFLECTIONS ON OUT-OF-SCHOOL PROGRAMMING FOR YOUTH WITH TYPE 1 DIABETES**

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Youth living with type 1 diabetes (T1D) experience distinct physical, emotional, and social challenges that shape daily functioning, psychosocial well-being, and overall development. In addition to the ongoing demands of diabetes self-management (i.e. glucose monitoring, adjustments, etc.), youth with T1D often navigate social stigma, feelings of difference, and anxiety related to disease management in school and community settings. Recreational programs, particularly those offered through medical specialty camps, have demonstrated positive effects on diabetes self-management, peer social support, and emotional well-being (Williams et al., 2024). These programs create medically safe environments in which youth can build confidence, reduce isolation, and develop independence while engaging in developmentally appropriate recreation (Bultas et al., 2016; Kietaibl et al., 2024; Nagl et al., 2022).

Developing impactful programs for youth with T1D requires not only innovative recreational models but also a well-prepared workforce capable of serving medically complex populations. One promising approach involves the intentional integration of High Impact Practices (HIPs) into undergraduate education. HIPs offer structured, experiential learning opportunities that enhance student learning while simultaneously addressing unmet community needs. Within recreation and allied disciplines, HIPs provide a pathway for students to translate theory into practice in real-world, community-based contexts.

The Association of American Colleges and Universities identifies several HIPs associated with increased student engagement and educational effectiveness, including learning communities, writing-intensive courses, collaborative assignments and projects, community-based learning, diversity and global learning, service-learning, internships, capstone projects, and undergraduate research experiences (AAC&U, n.d.). Learning communities foster shared inquiry and peer learning, while writing-intensive experiences promote synthesis of theory and reflection on practice. Collaborative projects develop teamwork, communication, and problem-solving skills essential to recreation programming, and community-based learning and service-learning extend learning beyond the classroom by positioning students to address real-world challenges alongside community partners.

Diversity and global learning experiences further encourage students to examine personal assumptions and sociocultural contexts that shape program design and delivery, particularly when working with medically vulnerable or marginalized populations. Undergraduate research experiences reinforce evidence-based practice by engaging students in systematic inquiry, evaluation, and reflection. Collectively, HIPs strengthen the integration of theory and practice and support the preparation of future professionals capable of addressing complex societal needs (Hill et al, 2023; Mahon & Smith, 2020).

Although HIPs are well established within higher education, limited research has examined their application within recreational programming designed specifically for youth with T1D. Integrating college students with camp professionals and medical staff may offer reciprocal benefits, enhancing program capacity for youth while providing students with meaningful, practice-based learning experiences. Therefore, the purpose of this study was to explore the

experiences of college students participating in a HIP-based course that designed, implemented, and evaluated a diabetes day camp, intentionally bridging service-learning and undergraduate research to address a pressing community need.

### **Methods**

This study was conducted as part of the Center for Community-Engaged Learning at a four-year Mountain West university designated as an Emerging Hispanic-Serving Institution. The institution prioritizes access and inclusion and serves a high proportion of first-generation college students. Participants were enrolled in an undergraduate recreation programming course in which students collaboratively designed, implemented, and evaluated a day camp tailored for youth with T1D. The course intentionally integrated multiple HIPs, including collaborative assignments, service-learning, and undergraduate research, within a single semester-long experience.

Across two academic semesters, eight (out of 10) students completed semi-structured written reflections at the conclusion of the course. Reflections prompted students to describe their experiences using HIPs throughout the planning, facilitation, and evaluation of the diabetes day camp, as well as their perceived learning outcomes, challenges, and personal growth. Responses were narrative in nature and demonstrated substantial depth and engagement.

Data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis approach. First, all reflections were read multiple times to promote data familiarization. Second, reflections were coded line by line to identify meaningful units of data. Third, related codes were clustered into candidate themes. Fourth, themes were reviewed and refined to ensure coherence and distinctiveness. Fifth, themes were clearly defined and named. Finally, findings were reported using exemplar quotations to illustrate themes and connect results to implications for recreation programming and pedagogy.

### **Results**

Using Braun and Clarke's (2006) six-phase framework, qualitative data were analyzed inductively to identify patterns in students' experiences, learning outcomes, and reflections on program delivery. Analysis revealed four overarching themes describing students' experiences and learning outcomes.

**Collaborative Experiential Learning.** Students emphasized the value of hands-on facilitation and teamwork throughout the planning, execution, and evaluation of the diabetes day camp. Many described the experience as more impactful than traditional classroom instruction. As one student noted, "It was really beneficial to implement a REAL plan and go through with it because we were able to learn by actually doing it." Students highlighted shared responsibility, problem-solving, and adaptability as central components of their learning.

**Understanding and Empathy for Youth with Type 1 Diabetes.** Participation deepened students' understanding of T1D and fostered empathy for the medical, emotional, and social realities faced by youth and their families. One participant reflected, "I was never very educated or aware of type 1 diabetes until this course... I did not realize how much these kids go through." Students reported increased awareness of the daily vigilance required to manage T1D and the importance of supportive, inclusive environments.

**Creating Belonging and Supportive Communities.** Students observed that the camp environment promoted connection, normalization, and social belonging among participants. Peer interaction and shared experiences helped youth feel less isolated. As one student explained, "My biggest takeaway was how important REACH actually is... Seeing how happy they were

and how normal the activities made them feel really opened my eyes.” Students recognized recreation as a powerful vehicle for psychosocial support.

**Professional Growth and Program Development.** Students described growth in leadership, communication, evaluation, and contingency-planning skills. Several reported increased confidence in working with medically complex populations. One student stated, “This experience taught me that I feel more comfortable in a leadership role.” These skills were frequently linked to future career aspirations in recreation, health, and youth development.

While reflections overwhelmingly emphasized positive outcomes, some students reported initial discomfort related to medical responsibility, navigating parent expectations, and managing program logistics. These minority perspectives underscored the emotional and cognitive demands of applied programming and highlighted the need for structured mentorship and support within HIP-based courses.

### **Discussion and Implications for Practice**

This project demonstrates the value of intentionally integrating multiple High-Impact Practices (HIPs) within an undergraduate recreation course to advance both student learning outcomes and community health goals (Hill et al., 2024). The coordinated use of service-learning, collaborative projects, and undergraduate research supported meaningful experiential learning, fostering students’ empathy, professional skill development, and capacity to design inclusive programs for youth with T1D. Sustained student engagement and rich reflective data suggest that HIP-based course design promotes deep investment in both academic learning and community service, particularly when experiential components are carefully scaffolded and explicitly connected to course content.

At the same time, student perspectives highlighting stress and uncertainty underscore important considerations for practice in medically sensitive contexts. These findings emphasize the need for clear role delineation, structured reflection, and ongoing mentorship to support student wellbeing and ethical practice in diabetes camp settings (Blaylock et al., 2024). Faculty and practitioners implementing similar models should prioritize strong supervision structures, explicit communication of expectations, and collaboration with medical professionals to ensure program safety while maximizing educational value. Such supports can help mitigate student anxiety while strengthening confidence and competence in applied settings.

Diabetes camps have long served as critical developmental contexts for youth with T1D by fostering peer connection, normalization, and self-management skill development (John, 1946). Higher education institutions are well positioned to sustain and expand these opportunities by preparing recreation professionals equipped to serve diverse and medically complex populations. Partnerships among universities, healthcare providers, and community agencies offer reciprocal benefits, providing youth with high-quality programming while giving students unparalleled experiential learning. Collectively, these findings offer a replicable model for leveraging HIPs to address societal needs through recreation and youth development, representing a sustainable approach to improving quality of life for youth with T1D while strengthening the preparation of an inclusive recreation workforce (Hill et al., 2023).

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## High impact service learning: College student reflections on out-of- school programming for youth with type 1 diabetes

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### INTRODUCTION

- Youth living with type 1 diabetes (T1D) face distinct physical, emotional, and social challenges that can impact their daily lives and overall development.
- Recreational programs, particularly those offered in medical specialty camps, have been shown to improve self-management skills, foster peer social support, and enhance emotional well-being for these youth (Williams et al., 2024).
- Medical specialty camps provide opportunities for youth to build confidence, reduce feelings of isolation, and develop independence in managing their diabetes, all within a medically safe and supportive environment (e.g., Kenabi et al., 2024).
- Developing impactful programs that produce positive outcomes for youth with T1D necessitates innovative approaches to programming and a pipeline for future practitioners.
- High Impact Practices (HIPs), such as service learning, offer college students to connect theoretical knowledge with practical application, resulting in rich and creative programming.
- HIPs are well-established techniques for teaching and engaged learning in higher education, offering valuable experiential learning opportunities for students in recreation-related fields (Hill et al., 2023).
  - By integrating college students with camp and medical professionals, unique support networks are created for youth with T1D, while students gain unparalleled experiential learning opportunities.
- Purpose to assess the experience of using a HIP, college class to host a diabetes day camp bridging service-learning and undergraduate research creating sustainable solutions, targeting societal needs.

### METHODS

- As part of the Center for Community Engaged Learning at a four-year Mountain West university, students enrolled in a recreation programming course designed, implemented, and evaluated a day camp tailored for youth with T1D.
- Undergraduate cohort successfully integrated a collaborative project, service-learning, and research in a single course experience.
- Eight semi-structured reflections were collected from students of the Adventure Recreation course, completed at the end of each term. These reflections focused on the students' experiences using HIPs in the development of the diabetes day camp.
- A thematic analysis was conducted following Braun and Clarke's (2006) six-phase approach.
  1. Data were familiarized by reading all reflection documents.
  2. Data segments were coded by line to generate initial codes.
  3. Related codes were grouped into candidate themes.
  4. Themes were reviewed and refined for coherence and distinctiveness.
  5. Clear, concise definitions were developed to define and name themes.
  6. Report of themes with quotes, linking them to program insights.



### Main Takeaway

The coordinated use of [HIPs] service-learning, collaborative projects, and undergraduate research supported meaningful experiential learning, fostering students' empathy, professional skill development, and capacity to design inclusive programs for youth with T1D.



### RESULTS:

Using Braun and Clarke's (2006) six-phase framework, qualitative data were analyzed inductively to identify patterns in students' experiences, learning outcomes, and reflections on program delivery. **Four overarching themes emerged.**

- **Collaborative Experiential Learning.** Students emphasized the importance of hands-on facilitation and collaborative teamwork during the planning, execution, and evaluation of a year-round out-of-school time camp for youth with T1D. *"It was really beneficial to implement a REAL plan and go through with it because we were able to learn by actually doing it"* (Student A).
- **Understanding and Empathy for Youth with Type 1 Diabetes (T1D).** The program deepened students' understanding of T1D and fostered greater empathy for the medical, emotional, and social challenges youth face. *"I was never very educated or aware of Type 1 diabetes until this course... I did not realize how much these kids go through"* (Student B).
- **Creating Belonging and Supportive Communities.** Students observed that REACH provided participants with a sense of connection, inclusion, and normalization, helping them feel less isolated. *"My biggest takeaway was how important REACH actually is... Seeing how happy they were and how normal life activities made them feel really opened my eyes"* (Student C).
- **Professional Growth and Program Development.** Students reported significant growth in leadership, communication, evaluation, and contingency-planning skills. *"This experience taught me that I feel more comfortable in a leadership role"* (Student D).



### DISCUSSION AND IMPLICATIONS

- The impetus for this project was to use HIPs within an undergraduate recreation class to create a diabetes day camp experience.
- This application fosters experiential learning in a real-world setting, reinforcing evidence-based practice concerning societal challenges such as T1D.
- This diabetes camp served a dual purpose: it allowed college students to bridge theory and practice through HIPs, while also targeting the unmet needs of families lacking access to such recreation services.
- The current results demonstrate the college student had professional growth, improved ways to create safe spaces, and empathy for our youth with T1D.
- Diabetes camps served as critical experiences for youth with T1D, helping them connect with others and learning management skills (John, 1994).
- HIPs offer the unique advantage of providing a safe, structured, and meaningful program for these youth, while also playing a key role in preparing professional students to serve diverse communities through inclusive programming.
- By integrating college students with camp and medical professionals, unique support networks for youth with T1D were established, offering unmet and unparalleled opportunities.

## ASSESSING THE BURDEN OF CARE FOR PARENTS WHOSE CHILDREN ATTEND DIABETES CAMP

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The incidence of T1D among children has and continues to rise globally, resulting in a need to understand the experiences of parenting children with T1D. That is, according to the American Diabetes Association, more than 24,000 children are diagnosed with T1D every year. Pediatric T1D is considered a "family disease," and factors contributing to caregiver burden include adjusting to new situations, emotional and physical overload, working with health care professionals, and maintaining normality (Fitch, 2024). As such, parental support is a vital component of a child's development (Candel, 2022). Parenting is often described as a stress-inducing experience, which can be further complicated and made more stressful and anxiety-inducing when parenting children with chronic conditions such as type 1 diabetes (T1D). In terms of parental support, parenting with autonomy can foster a child's sense of willingness and volition, as opposed to obligation and pressure associated with control parenting styles (Froiland, 2015; Haegele et al., 2022). Parenting children with T1D can involve a multitude of stressors that influence differentiated parenting styles (Hill et al., 2019).

Caregivers of children with T1D have a higher sense of loneliness associated with a higher burden of care (Fitch, 2024). Advocacy may also foster feelings of acceptance within families, schools, and among peers. Engaging family members alongside youth can be an effective way to improve self-management skills (Haegele et al., 2022). Parenting a child with T1D involves creating a safe, inclusive environment where the child can thrive and learn to manage their diabetes. Despite these benefits, there is limited empirical evidence for interventions that support parents of youth with T1D and their children. Given the cumulative emotional, social, and practical demands placed on caregivers, there is a growing need for supportive, family-centered interventions that address both child self-management and parental well-being. Diabetes camps represent one such intervention, offering structured education, peer connection, and reassurance for parents while providing children with a safe environment to build independence and confidence in managing T1D. The purpose of this study was to determine the level and factors of burden of care among parents of youth with T1D who have attended diabetes camp.

### Methods

Parents of children with T1D who participated in diabetes camps were invited to participate in the study. Participants ( $n = 173$ ) completed a demographic questionnaire (e.g., age, gender, ethnicity, diabetes history) and the Zarit Burden Interview (ZBI; Bédard et al., 2001; Zarit et al., 1980). The revised ZBI is a 22-item scale that assesses subjectively experienced burden by caregivers/relatives of chronically disabled/ill persons (Zarit et al., 1980). Each item contains a question with five response options anchored from "never" = 0 to "nearly always" = 4. For example, an item states, "Are you afraid of what the future holds for your *child with T1D*?" The total score for all 22 items, ranging from 0 to 88, was aggregated to measure the level of caregiver burden. The cutoffs for the total score include (a) 0–20: "no to mild burden," (b) 21–40: "mild to moderate burden," (c) 41–60: "moderate to severe burden," and (d) > 60: "severe burden." We aggregated the total score for ZBI, conducted descriptive and frequency analyses on

participant demographic variables and levels of caregiver burden, and ran a hierarchical regression analysis using demographic variables, child T1D history, and diabetes camp participation to predict parent caregiver burden.

### Results

The participants were, on average, middle-aged parents ( $M = 44.31 \pm 7.16$  years old) of children ( $12.57 \pm 3.73$  years old) with T1D. A majority of the participants were female (82.6%) and Caucasian (87.4%). All children except one were reported to be insulin dependent and had T1D for about five years ( $M = 5.33 \pm 4.09$ ), ranging from 0 to 16 years. The participants reported that their children with T1D had, on average, attended about three diabetes camps ( $M = 3.46 \pm 3.11$ ), with a wide range from 0 previously to 16.

Overall, while the participants reported mild to moderate caregiver burden ( $M = 25.30 \pm 13.67$ ), almost 45% of them reported no to mild burden (44.83%), 40.23% reported mild to moderate, 14.37% reported moderate to severe, and 0.57% reported severe burden. Regression analyses showed that the number of diabetes camps ( $\beta = -.19, t = -2.42, p < .05$ ) attended, confounded with years of children diagnosed with diabetes ( $\beta = -.20, t = -2.48, p < .05$ ), was a significant negative predictor for parent caregiver burden. In other words, the higher the number of diabetes camps they attended, the lower the caregiver burden. The regression model was only able to explain about 6% of the variance in parent caregiver burden from the reported demographic variables and camp attendance.

Table 1  
*Multiple Regression Models Predicting Parent Caregiver Burden*

Variable	$B^*$	$\beta$	$t$	$p$	VIF
Model 1: $F_{5,167} = 2.93, R^2 = 0.05, p = 0.05$					
Parent gender	-3.78	-.13	-1.59	.11	1.08
Parent age	.15	.08	.98	.33	1.09
Parent ethnicity	.64	.04	.54	.59	1.05
# of years child with T1D	<b>-.64</b>	-.19	-2.42	<b>.02</b>	1.06
Child gender	-.09	.00	-.05	.96	1.00
Model 2: $F_{5,168} = 3.09, R^2 = 0.04, p = 0.03,$					
Parent gender	-3.84	-.13	-1.61	.11	1.09
Parent age	.19	.10	1.21	.23	1.16
Parent ethnicity	.63	.04	.53	.59	1.05
Child gender	.18	.01	.08	.93	1.01
# of diabetes camps attended	<b>-.91</b>	-.20	-2.48	<b>.01</b>	1.14
Model 3: $F_{6,166} = 2.04, R^2 = 0.06, p = 0.01,$					
Parent gender	-4.15	-.14	-1.74	.08	1.10
Parent age	.20	.11	1.30	.20	1.16

Parent ethnicity	.66	.04	.56	.58	1.05
# of years child with T1D	-.40	-.12	-1.26	.21	<b>1.51</b>
Child gender	.24	.01	.12	.91	1.02
# of diabetes camps attended	-.62	-.14	-1.43	.15	<b>1.62</b>

\*  $p < 0.05$ ; ^ unstandardized beta values; VIF = variance inflation factor.

### Discussion and Implications for Practice

Parenting children with T1D can introduce a multitude of stressors, arguably more so than parents of youth without T1D. With T1D diagnoses expected to double worldwide by 2040, parents of youth with T1D might need additional resources to mitigate the additional challenges. This study measured the level and factors of burden of care among parents of youth with T1D who have attended a diabetes camp. Results from the current study suggest that attending more diabetes camps decreases the burden of care. The goal is to use these data to better support parents through diabetes camp-related programming. Through such programming as family diabetes camps, practitioners can engage family members alongside youth and other families to learn and improve self-management skills (Haegele et al., 2022). Despite these findings, several limitations exist. First, the study employed a cross-sectional design, which precludes causal inference. Second, the regression model explained a relatively small proportion of variance in caregiver burden (approximately 6%). Third, the reliance on self-reported data introduces the potential for recall bias and social desirability bias, particularly in reporting burden and camp participation. Finally, the sample lacked demographic diversity, with a predominance of female and Caucasian participants, which limited the generalizability of the findings to more diverse populations and underscored the need for future research to be inclusive of underrepresented racial, ethnic, and socioeconomic groups.

Research surrounding families' diabetes camp supports its ability to assist in parenting (Collins et al., 2021a; Hill et al., 2022). Additional parents' frustrations stem from school-related challenges, but families with diabetes can offer forums to discuss solutions among other parents, healthcare professionals, and educators (Haegele et al., 2025). Data support practitioners in focusing on family-centered models, including siblings, the integration of peer support to let them know they are not alone, and the inclusion of diabetes education within family recreation programming (e.g., camps). Each of these components can be valuable complements to clinical care, particularly for improving confidence, coping, and family functioning. The current study supports the notion that diabetes camp experiences lead to improved well-being in parents, thereby likely resulting in a higher quality of life. Family recreation programs have the potential to enhance self-management skills, reduce psychosocial burden, and strengthen family resilience (Collins et al., 2021a). Family recreation programming, such as diabetes camps, may also serve as a forum for addressing common challenges related to school advocacy, healthcare coordination, and emotional fatigue, allowing families to exchange strategies with peers, healthcare professionals, and educators (Collins et al., 2021b; Haegele et al., 2025). Collectively, these findings support the integration of diabetes camp experiences as a complementary resource to clinical care, with the potential to enhance caregiver quality of life, strengthen family resilience, and promote long-term well-being for families affected by T1D.

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## ASSESSING THE BURDEN OF CARE FOR PARENTS WHOSE CHILDREN ATTEND DIABETES CAMP

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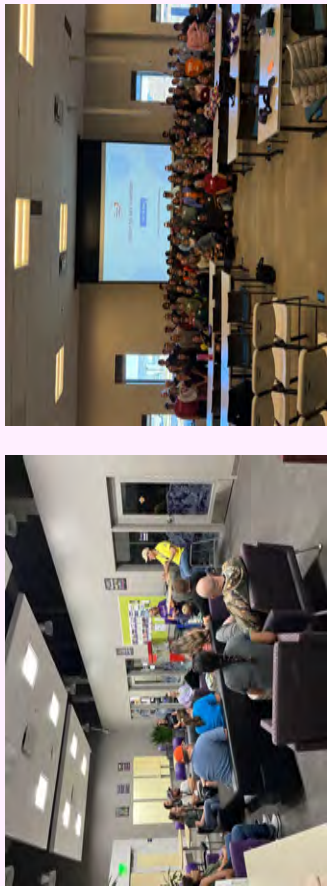
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### INTRODUCTION

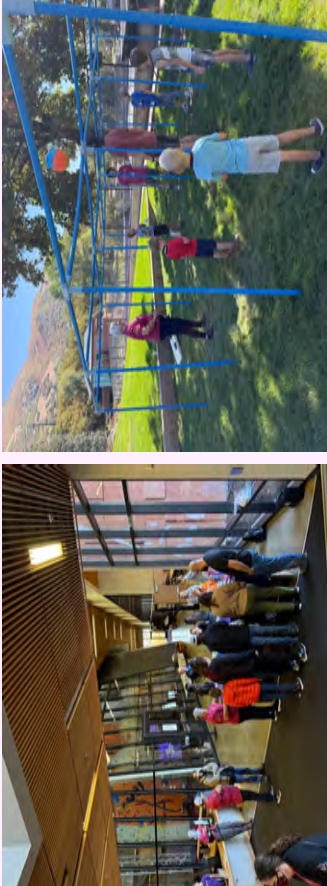
- Parenting is often described as a stress-inducing experience, which can be further complicated and made more stressful and anxiety-producing when parenting children with chronic conditions such as T1D.
- The incidence of T1D among children continues to rise globally, including in a new children with T1D.
- More than 24,000 children are diagnosed with T1D every year.
- Parenting with autonomy can engage a child in a sense of willingness and volition, opposed to obligation and pressure through control parenting styles (Haegeler et al., 2022).
- Parenting children with T1D, specifically, can consist of a number of stressors that can influence differentiated parenting styles (Hill et al., 2019).
- Caregivers of children with T1D have a higher sense of loneliness associated with a higher burden of care (Fitch, 2024). Advocacy may also mitigate feelings of acceptance in families, schools, and amongst peers.
- Individual evidence-based interventions to support parents of youth with T1D. Pediatric T1D is considered a family disease, and factors contributing to caregiver burden include adjusting to new situations, emotional and physical overload, working with health care professionals, and maintaining normality (Fitch, 2024).
- The purpose of this study was to determine the level and the loss of burden of care among parents of youth with T1D who have attended diabetes camp.

### METHODS

- Parents of children with T1D who participated in diabetes camps were invited to partake in the study.
- Participants (n=173) completed an online demographic questionnaire (e.g., age, gender, ethnicity, diabetes history) and the Zarit Burden Interview (ZBI, Zarit et al., 1980; Beard et al., 2001). The revised ZBI is a 22-item scale that assesses subjectively experienced burden by caregivers relatives of chronically disabled/ill persons (Zarit et al., 1980, 2001).
- Each item contains a question with five response options anchored from "never" = 0 to "nearly always" = 4. For example, an item states, "Are you afraid of what the future holds for your child with T1D?" The total score for all 22 items, ranging from 0 to 88, was aggregated to measure the level of caregiver burden.
- The cutoffs for the total score include (a) 0-20: "no to mild burden," (b) 21-40: "mild to moderate burden," (c) 41-60: "moderate to severe burden," and (d) 61-88: "severe burden." We aggregated the total score for ZBI, conducted descriptive and frequency analyses on participant demographic variables and levels of caregiver burden, and ran a hierarchical regression analysis using demographic variables, child T1D history, and diabetes camp.



**Main Takeaway**  
The higher the number of diabetes camps youth attended, the lower the caregiver burden.



### RESULTS:

- Participants were middle-aged parents ( $M = 44.3$  [ $SD = 7.6$ ], 6 years of age) of children (2.57-13.73 years old) with T1D.
- Female (82.6%) and Caucasian (87.4%)
- All children reported to be insulin dependent and had T1D for about five years ( $M = 3.33 \pm 4.09$ ), ranging from 0 to 16 years.
- Attended about three diabetes camps ( $M = 3.46 \pm 3.11$ ), with a wide range from 0 previously to 16.
- Participants reported mild to moderate caregiver burden ( $M = 25.30 \pm 13.67$ ), almost 45% of them reported no to mild burden (44.83%), 40.23% reported mild to moderate, 14.37% reported moderate to severe, and 0.57% reported severe burden.
- Regression analyses showed that the number of diabetes camps ( $\beta = -19$ ,  $t = -2.42$ ,  $p < .05$ ) attended, confounded with years of children diagnosed with diabetes ( $\beta = -.20$ ,  $t = -2.48$ ,  $p < .05$ ), was a significant negative predictor for parent caregiver burden. The higher the number of diabetes camps they attended, the lower the caregiver burden.
- Regression model was only able to explain about 6% of the variance in parent caregiver burden from the reported demographic variables and camp attendance.



### DISCUSSION AND IMPLICATIONS

- T1D diagnoses, expected to double worldwide by 2040.
- Parenting children with T1D has a multitude of stressors, arguably more so than parents of youth without T1D.
- Results from the current study suggest that more diabetes camp attended, the burden of care decreases.
- The goal is to use these data to better support parents through diabetes camp-related programming.
- Through such programming as family diabetes camps, practitioners can engage family members alongside youth and other families to learn and improve self-management skills (Haegeler et al., 2022).
- Research surrounding families' diabetes camp support and its ability to assist in parenting (Collins et al., 2021). Additional parents' frustration stem from school-related challenges, but families with diabetes can offer forums to discuss solutions among other parents, healthcare professionals, and educators (Haegeler et al., 2023).
- Data support practitioners to focus on family-centered models, including siblings, integrate peer support to let them know they are not alone, and include diabetes education.
- Family recreation programming can be a valuable complement to clinical care, particularly for improving confidence, coping, and family functioning. Family recreation programs have the potential to enhance self-management skills, reduce psychosocial burden, and strengthen family resilience (Collins et al., 2021).

# **FROM FOREST AVERSION TO PRO-ENVIRONMENTAL ATTITUDES AND BEHAVIORS: IMPACTS OF A 3-DAY CULTURALLY INFORMED CAMP**

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Current research on pro-environmental attitudes and behaviors (PEAB) suggests that the time youths spend outdoors is proportional to the emotional, behavioral, and cognitive gains they experience (DeVillie, 2021). Observational studies measuring exposure to nature and individual impact report that longer nature contact is positively associated with stronger pro-environmental behavior (Ferreira, 2011). However, Collado and Evans (2019) suggest that contact time is only one variable contributing to PEAB. For instance, both “wild” (e.g., forest play, hikes) and “domesticated” (e.g., gardening, planting trees) nature experiences are positively associated with pro-environmental attitudes, but wild experiences demonstrate stronger impact on pro-environmental behaviors (Wells, 2006). The forementioned studies are not representative of economically and ethnically marginalized individuals for whom accessibility, affordability, and forest aversions may be obstacles (Ibes, 2021). This observational study examines whether a short-term experiential environmental education (EEE) camp has a positive impact on economically marginalized Black youths’ PEAB.

Cultural ecology, a broad approach to understanding how human beliefs, values, and practices co-evolve alongside their environments (Lapka, 2012), was used to explore Black youths’ relationship with their community forest. The intersection between food security and ecosystem balance is carefully navigated to address community needs while simultaneously implanting sustainable ecological ideals for social, environmental, and cultural resilience. This observational study is taken from a more detailed ethnographic case study which narrates the evolution of a neglected and vandalized forest into a community EEE site and sanctuary (Sponsel, 1987) in response to positive shifts in ecological values and behaviors (Frake, 1962). Here, we present a brief narrative of how a 3-day Summer Vacation Bible School (VBS) camp influenced environmental attitudes and behaviors through observations before, during, and after “wild” and “domesticated” nature experiences. The observed positive shift in participants’ perceptions of the forest and PEAB indicate a need for replicating short-term EEE programs and evaluations (Mittelstaedt, 1999) designed for culturally diverse and otherwise marginalized populations.

## **Positionality Statement**

The lead author is a Black woman who lived and worked in the community observed while co-developing the Land Mentoring Program (LMP), a bi-weekly agriculture and environmental family education workshop, alongside community partners. She served as a volunteer facilitator during the VBS camp and conducted ethnographic observations from this embedded role. This positionality afforded relational access, trust, and cultural fluency that shaped both the facilitation of activities and interpretation of youths’ responses. She continues to serve as a non-profit advisor for community land stewarding projects but is not a member of the host church or any religious organization. Reflexive attention was given throughout data collection and analysis to carefully consider how insider proximity and facilitator roles informed her observations and meaning-making.

## **Methods**

**Camp Programming Design.** This study reports on a three-day Vacation Bible School (VBS) camp designed as a short-term experiential environmental education (EEE) program in a

low-income Black church community. The camp was offered free of charge and ran from 8:00 a.m. to noon each day, with outdoor experiential education activities beginning at 9:00 a.m. and concluding with lunch.

The original lesson plan emphasized forest-based activities intended to take advantage of tree canopy for shade during the hot Florida summer and included identifying plants, animal tracks, bird calls, and a scavenger hunt. When these activities were introduced, only five of the twelve participants expressed eagerness to engage, while the remaining seven expressed fear or concern about forest-based activities. These early reactions informed adaptive programming decisions, including adjustments to the pacing of activities and the use of scripture-based discussions to support emotional comfort and participation.

Across Days 1 and 2, programming focused on “domesticated” outdoor spaces where food is cultivated, including plant identification and care (Day 1) and aquaponics and poultry care (Day 2). From 9:00 a.m. to 11:30 a.m., participants engaged in guided activities, followed by thirty minutes of free play in a mowed meadow adjacent to the forest. This transitional space was intentionally used to introduce outdoor play and exploration in a non-threatening context before entering the forest. On Day 3, an invited local artist introduced natural watercolor paints made from foraged plants. This activity prompted forest exploration for plant materials and served as the primary entry point into the church’s nine-acre forest. Participants who remained apprehensive were offered the option of entering the forest with a trusted caregiver present.

**Participants.** The study included twelve youth participants attending the three-day VBS camp. Participants ranged in age from 3 to 15 years (PreK = 5, elementary = 5, middle school = 2), with a majority identifying as male ( $n = 7$ ). Attendance varied slightly across days, with one adolescent participant absent on Day 2.

**Data Collection.** Multiple qualitative data sources were used to document participant experiences and changes over time. The lead author collected daily field observations across approximately 15 total hours of contact time, including informal participant commentary during lunch and caregiver conversations at pick-up. Photographs taken by support staff were reviewed to capture demonstrative attitudes and behaviors. To further understand participants’ perceptions of their outdoor experiences, daily drawings were prompted using three open-ended questions: (1) “What did your experience outdoors teach you about God today?” (2) “Did you catch a memory that you would like to draw?” (3) “Draw or talk about what you would like to do tomorrow.”

## Results

**Theme 1: Initial Fear and Hesitation Toward Outdoor and Forest Spaces.** Field observations and participant commentary collected prior to and during Day 1 revealed widespread apprehension toward outdoor and forest environments. Seven of the twelve participants expressed safety concerns, including fear of chickens, snakes, insects, and getting dirty. Younger participants (ages 3–4) voiced fears of being bitten by wild animals or pecked by chickens, while older participants (ages 10–15) expressed concern about heat exposure. Across age groups, mosquitoes, snakes, and spiders were commonly cited as aversive.

These early observations, documented through field notes and informal verbal responses, prompted adaptive changes to the camp’s planned activities and the integration of scripture-based discussions emphasizing care for creation as a source of comfort and meaning.

**Theme 2: Gradual Engagement and Reduced Apprehension.** By the end of Day 1, increased engagement was evident across multiple data sources. Caregiver reports at pick-up indicated that eight participants verbally expressed enjoyment of the day’s activities and

referenced gardening, fish, and chickens when describing their experiences. Participant drawings from Day 1 reflected emerging interest in animals and outdoor spaces, though affective responses among the youngest participants remained muted.

On Day 2, field observations and photographic evidence suggested a noticeable shift toward playfulness and comfort. Participants aged ten and younger actively engaged in watering plants, trees, and themselves, and verbal expressions of enjoyment were observed among nearly all attendees. Drawings from Day 2 included greater detail and use of color, suggesting increased emotional engagement. One participant (age 12) remarked, “I did not think I was going to enjoy the animal game, but that was fun...are we going to do the same thing tomorrow?”

**Theme 3: Increased Motivation, Autonomy, and Joyful Exploration.** By Day 3, eleven of the twelve participants expressed a desire to engage in caretaking behaviors, including feeding animals, watering plants, collecting trash, and exploring the forest. All participants engaged enthusiastically in nature-based art-making, as documented through field notes, photographs, and drawings. During the two-hour forest exploration, participants set the pace of movement and inquiry, responding to sensory prompts such as noticing motion, sounds, and variations in color. As fear decreased, autonomous exploration increased, with several children moving ahead of adult facilitators within twenty minutes of entering the forest.

One adolescent participant (age 15) remained reserved throughout much of the program, primarily supporting younger siblings. However, field observations noted visible positive effects during the final watercolor activity, suggesting that age-appropriate engagement strategies may be particularly important for older youth in similar settings.

**Summary.** Across the three-day camp, data from field observations, participant drawings, caregiver reports, and photographic documentation converged to indicate a pattern of reduced fear, increased engagement, and growing motivation for environmental interaction. These findings align with observations from the broader Land Mentoring Program (LMP) case study and suggest that short-term, culturally responsive experiential environmental education may support positive shifts in pro-environmental attitudes and behaviors among youth in marginalized communities.

### **Discussion and Implications**

There were notable shifts in PEAB with eight of the twelve participants. The four neutral observations included three siblings who regularly attend LMP and a 15-year-old female who was only able to attend two of the three days offered. Novel characteristics of the 3-day VBS minicamp that may have contributed to observed PEAB impact and therefore potentially beneficial for broader application include: (1) proactive cultural sensitivity, (2) leveraging domesticated spaces to facilitate gradual introduction to feared wild spaces, (3) adaptive programming with attention to the participants’ capacity for engagement, (4) weaving cultural values of prayer and devotion into the curriculum to foster feelings of security and comfort. This study is based on qualitative, observational data collected within a specific community over a short 3-day period. As such, the findings are not intended to establish causal relationships between program components and observed shifts in pro-environmental attitudes and behaviors. Rather, they offer situated insights into how children engaged with and responded to short-term experiential environmental education within a culturally and spiritually grounded setting. Interpretations are shaped by the relational and contextual nature of the research design, and findings should be understood as illustrative rather than generalizable. Future research may build on these insights using complementary designs to further examine underlying processes and mechanisms. Cultural and social insights may offer deeper understanding towards navigating

preconceived fearful perceptions and responses to forest engagement (Leatherberry, 2000; Peterson, 2017).

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# FROM FOREST AVERSION TO PRO ENVIRONMENTAL ATTITUDES AND BEHAVIOR: IMPACTS OF A 3-DAY CULTURALLY INFORMED CAMP



**Site:** 13-acre church owned property, including a 9-acre forest with trails, in an economically marginalized community.

**Participants:** Participants ranged in age from 3 to 15 years (PreK = 5, elementary = 5, middle school = 2), majority identifying as male (n = 7). Attendance varied slightly across days.

**Methods:** 3-day Vacation Bible School (VBS) camp designed as a short-term experiential environmental education (EEE) program in a low-income Black church community. The camp was offered free of charge and ran from 8:00 a.m. to noon each day, with outdoor activities beginning at 9:00 a.m.

**Data Collection:** Daily field observations across approximately 15 total hours of contact time. Photographs taken by support staff, informal participant commentary during lunch discussions and daily drawings offered insights to participants shifting perceptions and attitudes



## Implications for Practitioners

Novel characteristics of the 3-day VBS minicamp (1) **proactive cultural sensitivity**, (2) leveraged domesticated spaces to facilitate **gradual introduction to feared wild spaces**, (3) **adaptive programming** with attention to the participants' capacity for engagement, (4) weaved **cultural values of prayer and devotion** into the curriculum to foster feelings of security and comfort.

The **positive shifts in participants' perceptions** of the forest and adaption of pro-environmental behaviors **after 3 days of outdoor environmental education** indicate a need for replicating short-term experiential environmental education programs and evaluations **designed for culturally diverse and otherwise marginalized populations.**

	Observed Environmental Perceptions, Attitudes, and Behaviors	Participant Comments Before, During, and After Outdoor Experiences
<b>DAY 1</b>	Fear and Hesitation Towards Environmental Engagement and Forest Spaces	"What if a wild animal tries to eat me?" "Will the chickens hurt me?" "Are there any snakes in the forest?"
<b>DAY 2</b>	Gradual Engagement in Domesticated Outdoor Spaces and Reduced Apprehension	"This was fun I like playing animal games, can I be a cheetah next time?" "Can I feed the fish?" "Can I water the baby trees?"
<b>DAY 3</b>	Increased Motivation, Autonomy, and Joyful Exploration of Wild Forest Space	"Look at what I found?" "Have you ever seen anything like this?" "Today was the best day!"



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## **“EVERYONE WAS LIKE ME”: SUMMER CAMP AS AN AFFINITY GROUP FOR YOUTH WITH ALBINISM**

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For children with albinism (CWA), finding a sense of belonging even with other visually impaired peers may be difficult due to the nature of their disability. Albinism is a genetic condition caused by a little to no melanin production in the eyes, resulting in visual acuity loss, nystagmus, and photophobia (Federico & Krishnamurthy, 2023). While ocular albinism particularly impacts the eyes, oculocutaneous albinism (OCA) also affects hair and skin. People with OCA generally have blonde, yellow, or white hair and light to white skin, which is associated with higher risk of skin cancer (Federico & Krishnamurthy, 2023). Albinism impacts between 1 in 3,900 and 1 in 20,000 people (Federico & Krishnamurthy, 2023). Visual impairment (VI) is considered a low-incidence disability, and CWA are an even smaller subset of that group. As a result, young people with albinism may not have opportunities to interact with others who have albinism in the school setting. Within school systems, CWA may experience forms of *academic ableism*, or stigmatization by educational professionals, due to the visible nature of their disability (Gibson, 2024). In prior studies, parents of children with albinism (PCWA) indicated that they were concerned about their children struggling both emotionally and socially in school (Lepore-Stevens & Sosland, 2025). These experiences can result in CWA lacking community within their own schools and needing to look elsewhere to discover a sense of identity and belonging. Alternatively, being around others who share one’s disability status can allow for identity exploration and self-definition (Goodwin & Staples, 2005).

### **Affinity Groups**

Affinity groups are opportunities for individuals to gather and connect over shared identities (Steen et al., 2022). For people with disabilities in outdoor recreation settings, affinity groups can create safe spaces, spaces that provide participants opportunities to challenge exclusion and build community (Rushing, 2024). Affinity groups can be spaces in which historically marginalized groups can share experiences and find community (Steen et al., 2022). While research on affinity groups for individuals with disabilities is limited, evidence suggests that disability identity formation can happen in disability-specific environments (Lepore-Stevens & Schugar, 2023; Goodwin et al., 2011). Students with disabilities are half as likely as their nondisabled peers to feel belonging and acceptance at school, and many of experiences of belonging occur in disability-specific environments (Hall, 2010; Hogan et al., 2000). Within environments designed for disabled people, individuals may feel “a form of *segregated inclusion* emerging from affirming group membership that supported inclusion through positive identity development, shared and safe emotional connections, and fulfillment of needs within a disability only or segregated setting” (Goodwin et al., 2011, p. 50).

### **Summer Camps for Youth with Disabilities**

Participants in the current study were all attendees at a summer camp for CWA and their families. Summer camps for youth with VI can facilitate peer interactions and relationship development (Maher et al., 2024). Lepore-Stevens and Schugar (2023) found that at a summer camp for youth with VI, participants experienced meaningful inclusion through normalization of disability. Summer camps programs for youth with VI that promote open discussion of disability and create an environment that allows participants to interact with staff and older children who

share their disability status can promote social inclusion, social engagement, and emotional safety (Lepore-Stevens & Foster, 2024). This research investigated the qualities of an identity-specific summer camp which made it an affinity group to promote inclusion and belonging.

### Methods

Data collection occurred at a summer camp for CWA and their families in the northeastern USA. Families had to have at least one CWA in order to attend camp. CWA and their siblings lived in mixed-gender, age-grouped cabins, with parents in separate cabins. Campers spent mornings in activities with their cabin-mates, and afternoons in the care of their parents. Counselors with albinism (n = 4, ages 25-55), campers with albinism (n = 17, ages 10-18, and PCWA (n = 19) responded to anonymous written questionnaires and/ or participated in semi-structured interviews that produced qualitative data. Two of the parents who completed questionnaires had multiple CWA, and all of the parents had children between 6 and 22 years of age. Questionnaires were created by the primary researcher to answer the research question after an extensive literature review and were approved by the leadership of an albinism advocacy organization. None of the parents had albinism themselves. Youth participants ranged in age from 10 to 18 years old. Campers were not required to participate in data collection if their parents did and vice versa. Data was coded using a general inductive approach until a point of saturation. The researcher utilized a code-recode method in order to establish trustworthiness and triangulated data through data collection across several groups.

### Definitions of Inclusion and Belonging

Sixteen parents, eight campers, and four counselors differentiated between the two terms. Participants identified that *inclusion* means being present, while *belonging* means being accepted. One camper defined *inclusion* as “being allowed to do stuff that everyone else is doing,” while another camper wrote that inclusion means “allowing you to participate.” Parents gave comparable definitions, such as “being part of things” and “given the opportunity.” Counselors defined inclusion with phrases like “made felt welcome” and “allowed to participate.” One camper explained belonging meant “people accept you for who you are” while another wrote “belonging is feeling you’re loved and accepted.” Parents wrote that belonging means “a sense of being ‘at home’ where no explanation or aggravation of ‘fitting in/adapting’ is needed” and “you 100% feel you are part of whatever you are actively participating in.”

### Results

Themes of all the time, same needs, looking like others, staff as facilitators of inclusion and belonging, specific activities, and developmental level arose from interview and questionnaire data. Table 1 further details themes related to inclusion and belonging.

**Table 1.** Inclusion and Belonging Themes

Theme	n	Quotes
<b>All the Time</b>	7 campers	<b>Campers:</b> Included and belonged “kind of the whole time.” <b>Parents:</b> “All the time! Because everyone here is educated and understanding. Very little is done different [sic] on the macro-level; it is all of the little things in interactions that make him feel normal/included,” “This is our first camp. I don’t see my son isolated like I usually do in a group of his peers,” “Everything is so awesome!!” “They feel included and accepted completely,” “I cannot think of a moment when she felt anything but welcome.”
	18 parents	
	3 counselors	

<b>Same Needs</b>	6 campers 6 parents 3 counselors	<b>Campers:</b> “Everyone understood,” “Everybody understands low vision,” “When we had conversations about shared experiences relating to albinism,” “All of us had similar experiences.” <b>Parents:</b> “Everyone puts on sunscreen, everyone has hats and/or sunglasses.” <b>Counselors:</b> “I love being in a place where I can just ‘be’ and not have to explain myself. So much of my adult life involves explaining myself and it feels so freeing to not have to.”
<b>Looking Like Others</b>	5 campers 4 parents 3 counselors	<b>Campers:</b> “Everyone was like me,” “I saw myself in everyone.” <b>Parents:</b> “People with albinism are the majority and we, those of us that don’t have any kind of visual impairments or albinism, were the minority. So it really turns the tables on the situation for them and they feel much more empowered and they feel much more comfortable.” <b>Counselors:</b> “I love being in a place where I can just ‘be’ and not have to explain myself. So much of my adult life involves explaining myself and it feels so freeing to not have to.”
<b>Specific Activities</b>	5 campers 6 parents	<b>Campers:</b> “I felt included when playing all the games. It was really fun and interesting,” “We all loved art, and had albinism, so we understood each other.” <b>Parents:</b> “There are accommodations that are made for them, there are special, you know, equipment that they can use. But they can still participate. And so sports, huge.”
<b>Staff as Facilitators of Inclusion and Belonging</b>	4 parents	<b>Parents:</b> Heard staff “calling out [my daughter’s] name and greeting her by stating who you are. This happens frequently at camp but is harder for people in her daily life to remember.”
<b>Developmental Level</b>	5 parents 7 campers	<b>Campers:</b> “People make fun of me bc [sic] I’m small.” <b>Parents:</b> “More the usual social stuff,” “NOT related to albinism, but more of a growth and change due to age/maturity.”

### **Discussion and Implications**

In prior research, parents identified access to visual accommodations and sun protection as barriers to inclusion and belonging in school (Lepore-Stevens & Sosland, 2025). At the camp in this research, participants with albinism had the opportunity to be in a setting where most people shared their needs, or at the very least, understood those needs. CWA, PCWA, and counselors in attendance all noted that being around people who had the same needs was a significant part of the experience. While most of the activities at camp were typical summer camp activities, all activities were designed to support the vision and sun protection needs of CWA. Adapted equipment, such as auditory balls and targets, and explicit verbal instruction can support inclusion in physical activity and recreation for CWA. Additionally, regular and normalized opportunities to apply sunscreen and encouragement to wear sun protection items can support belonging and inclusion for youth with albinism. When creating summer camps that serve as affinity groups for children with disabilities, staff should be aware of the barriers to recreation participation experienced by that group and be prepared to adapt for those needs.

As albinism is a low incidence disability, CWA may have never met someone who looks like them in person unless their families have sought out those connections. At the camp in the current research, many staff members and children had albinism and all individuals without albinism had a connection to the albinism community in some way. This created an environment in which young people with albinism could see themselves in their peers and role models in a

unique way that is unlikely to occur in everyday life. Summer camp created a place where awareness and lack of awareness of one's own disability identity could exist simultaneously, as participants could be with others who looked like them but not be concerned about exclusion based on identity. This is a key feature of an affinity group; absence of oppressive culture and presence of others with shared identity (Rushing, 2024). The present research supports the idea that summer camps can be used as affinity groups to promote belonging and inclusion for youth with disabilities. The camp in the present research created an environment in which participants had the same needs with respect to disability status, benefitted from similar accommodations, and looked like others, experiences that CWA and their parents do not report occurring at school. These characteristics are similar to those of an affinity group: shared identity, community, and experiences. For those who have low-incidence disabilities, disability-specific programs may be the only place children can meet others who share their identity.

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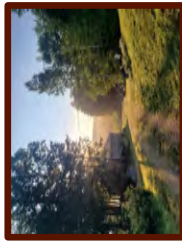
# “Everyone Was Like Me”: Summer Camp as an Affinity Group for Youth with Albinism



**Research Question:** What do people with albinism and parents of children with albinism perceive about experiences of inclusion and belonging at an identity-specific summer camp?

## Setting

- Data collection occurred at a summer camp for children with albinism (CWA) and their families in the northeastern United States.
- Families had to have at least one CWA in order to attend camp.
- CWA and their siblings lived in mixed-gender, age-grouped cabins, with parents in separate cabins.
- Campers spent mornings in activities with their cabin-mates, and the afternoons in the care of their parents.



## Methods

- 4 counselors with albinism, 13 CWA, and 18 parents of CWA responded to anonymous written questionnaires while 4 campers and 3 parents participated in semi-structured interviews. CWA ranged in age from 10 to 18 years old. Parents had children between 6 and 22 years of age. Counselors were between 23 and 55 years old.
- In total, 40 individuals (17 campers, 19 parents, and 4 counselors) provided qualitative data for this study.
- Questionnaires were created to answer the research question, after an extensive literature review. They were not validated, but were approved by the leadership of an albinism advocacy organization.
- Qualitative data was coded using a general inductive approach until a point of saturation resulting in themes of all the time, same needs, looking like others, staff as facilitators of inclusion and belonging, specific activities, and developmental level arising from the data.

## Albinism

- Genetic condition caused by a little to no melanin production in the eyes.
- Ocular albinism particularly impacts the eyes, while oculocutaneous albinism (OCA) also affects hair and skin.
- People with OCA generally have blonde, yellow, or white hair and light to white skin.
- Both ocular albinism and OCA result in visual impairment, including acuity loss, strabismus, and photophobia.
- Impacts between 1 in 4,000 and 1 in 15,000 people, with greater underestimation error among people of European descent.



## Affinity Groups

- Opportunities for individuals to gather and connect over shared identity.
- Can support a sense of belonging and diminish feelings of isolation for members of the group
- Common in workplace and school counseling settings, but have broader applicability.
- In recreation settings, affinity groups can create safe spaces that provide participants with disabilities opportunities to challenge exclusion and build community.

## Findings

“When you feel like you’re being included in something you’re just like... getting invited to do something and it might be your first time instead of feeling at home while belonging means you feel home there. Feel safe.”

### All the Time

- “Everyone here is excited and understanding. Very little is done different on the macro-level; it is all of the little things, interactions that make him feel normal/individual.”
- “I don’t see my son isolated like I usually do in a group of his peers.”
- “They feel included and accepted completely.”

### Specific Activities

- “I felt included when playing all the games. It was really fun and interesting.”
- “Games with audible clues.”
- “There are accommodations that are made for them, there are special, you know, equipment that they can use. But they can still participate. And so sports, hugs.”

### Staff as Facilitators of Inclusion and Belonging

- Staff “calling out my daughter’s name and greeting her by stating who you are. This happens frequently at camp but is harder for people in her daily life to remember.”
- “Listening to the two para-athletes that are here and seeing them as the role models, that it can be done and it’s not out of reach. Because it’s one thing to know that there’s a Paralympics and it’s a whole ‘nother [sic] to actually meet Paralympians”

“Being included simply means being invited/involved, but belonging implies that you are embraced and accepted.”

### Same Needs

- “Everybody understands low vision.”
- “All of us had similar experiences to talk about.”
- “Everyone puts on sunscreen, everyone has hats and/or sunglasses.”
- “I love being in a place where I can just ‘be’ and not have to explain myself. So much of my adult life involves explaining myself and it feels so freeing to not have to.”

### Looking Like Others

- “Everyone was like me.”
- “There are other people with albinism... Like a lot!”
- “There’s not usually that many people with albinism near us.”
- “People with albinism are the majority and we, those of us that don’t have any kind of visual impairments or albinism, were the minority. So I really felt embraced and they feel much more comfortable.”
- “You do not have to explain or be self-conscious about your differences, there is no comparison, you feel empowered and embraced... you feel home.”

### Developmental Level (Age, Size, and Social Skills)

- “NOT related to albinism, but more of a growth and change due to age/maturity.”
- “People make fun of me bc [sic] I’m small.”
- “Am I a camper that should worry about counselor staff or am I a counselor who should, that’s kind of meant to do camper stuff.”
- “Her secondary dx (ADHD) does present problems/difficulties for her when making and maintaining friendships.”

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## Implications for Practitioners

The camp in the present research created an environment in which participants had the same needs with respect to disability status, benefited from similar accommodations, and looked like others. Experiences that CWA and their parents do not report occurring at school. Summer camp created a place where awareness and lack of awareness of one’s own disability identity could exist simultaneously, as participants could be with others who looked like them but not be concerned about exclusion based on identity. These characteristics correspond to those of an affinity group: shared identity, community, and shared experiences.

### Normalization of Disability

- At the camp in this research, CWA had the opportunity to be in a setting where most people shared their needs.
- Normalization of disability, mobility aids, assistive technology, and other disability-related accommodations at camp can support an affinity group environment

### Adapted Activities

- People with disabilities are “often isolated and discriminated against through physical barriers, exclusionary criteria, as well as societal and community standards” when participating in physical activity (Weston, 2017).

When creating summer camps that serve as affinity groups for children with disabilities, staff should be aware of the barriers to sport, physical activity, and recreation participation experienced by that group and be prepared to adapt for those needs. Common physical activity adaptations for people with disabilities may include modifying the color, size, or weight of equipment; decreasing team sizes or field space; increasing the size of targets or goals; and disregarding time limits.

### Affinity Group Role Models

- Disability-specific settings allow young disabled people opportunities for “learning from each other in order to combat disabling barriers to success and fulfillment” that may not exist in inclusive settings (Shah et al., 2004).
- Summer camps for youth with visual impairments should hire blind and visually impaired staff as “allowing young people to interact with role models who share their disability status can promote social inclusion and social engagement” (Lepore-Stevens & Foster, 2024).
- The current research highlights the importance of hiring disabled adults in camps that serve as affinity groups.

### Supporting Multiple Disabilities

- Chronic illnesses like Heremansky-Pudlak and Chediak-Higashi syndromes are associated with albinism, and prior research (DeCarlo et al., 2014; Kutzbach et al., 2007) indicates that rates of ADHD may be higher among individuals with albinism than in the general population. Approximately 65% of children with visual impairments live with multiple disabilities (Hatton et al., 2013).
- For organizations looking to create disability-specific summer camps, staff should be aware of disabilities and medical conditions commonly co-occurring in that group and be prepared to accommodate those needs.
- Communication with families about individual needs can also support the accommodation process.

# WHAT KEEPS COUNSELORS-IN-TRAINING ON THE PATHWAY TO CAMP COUNSELOR: EXAMINING INTENTION TO RETURN AND IDENTITY AT CULTURALLY RESPONSIVE CAMPS

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Camps use counselor-in-training (CIT) programs to prepare youth to become camp counselors and to maintain their connection to camp during the years when they are too old to be campers but too young to work as staff (Riley et al., 2021). Although almost three quarters of camps offer CIT programs (McClain et al., 2024), few research studies have examined them, and to our knowledge, none have identified what factors influence CITs' intention to return as they progress from CIT to counselor. Intention is a critical outcome because, according to the Theory of Planned Behavior (TPB), it predicts behavior and is shaped by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991).

Beyond its theoretical importance, intention also matters for practice, given ongoing staffing needs and equity goals. Hiring and training staff is part of the annual camp cycle, as each year former campers, CITs, and staff move on to new opportunities (American Camp Association [ACA], 2023). While turnover is expected, retaining CITs year over year strengthens the camper-to-staff pathway and helps build staff teams drawn from the camp's own camper population, a recognized strategy for improving cultural responsiveness (Simpkins & Riggs, 2014). This is particularly important as camps serve increasingly diverse youth, while youth from marginalized backgrounds remain underrepresented in camp staffing (ACA, 2023). Retaining CITs from marginalized backgrounds is therefore central not only to staffing pathways but also to creating inclusive environments where youth feel they can be their authentic selves.

Guided by these concerns, this study draws on the TPB to examine the factors that shape CITs' intention to return to camp in a leadership role, either a CIT, or if they have aged out, a camp counselor. While the TPB is widely used, it has not been applied in this context. The purpose of this study was to follow Ajzen's procedures to develop measures for attitudes, subjective norms, and perceived behavioral control, and to examine whether they predict intention to return. We also sought to explore whether these relationships vary by marginalized identity, recognizing that the extent to which perceived benefits from CIT programs, experiences of encouragement, and perceptions of barriers may play different roles in shaping intentions across groups.

This led to the following research questions.

RQ1: To what extent do attitudes, subjective norms and perceived behavioral control predict CIT's intention to return to camp in a leadership role?

RQ2: Do these relationships vary by marginalized identity?

## Methods

Data were collected as part of a program evaluation, conducted with the ACA, that examined how CIT programs can strengthen leadership pathways for marginalized youth. To develop the survey, we conducted semi-structured interviews with CITs in fall 2024 to elicit salient beliefs (Ajzen, 2019). The resulting survey included direct and indirect measures of attitudes (e.g., whether returning would allow them to gain new skills, step into leadership, or be their true self, paired with how important each outcome was), subjective norms (e.g., whether

family, friends at home and camp, campers, or camp leaders thought they should return, paired with how important each group's opinions were), and perceived behavioral control (e.g., whether it would be difficult to return without enough money, downtime, or ability to connect with family and friends, paired with beliefs that they could overcome these barriers). Additional items assessed intention to return as a CIT or camp counselor and demographic information.

CITs completed the survey during summer 2025 at camps ( $n = 20$ ) selected by the ACA for their capacity to expand or develop culturally responsive CIT programming. Surveys were administered after the CITs' camp season. Composite scores for attitudes, subjective norms, and perceived behavioral control were calculated by multiplying direct and indirect measures. Internal consistency of items was assessed with Cronbach's alpha ( $\alpha = .756$  to  $.794$ ). Linear regression was then used to examine how these constructs predicted intention to return, and moderation analysis explored whether marginalized identity altered the strength of these relationships.

### **Results**

Participants included  $N = 277$  CITs (mean age = 16.2). Thirty-five percent identified as White, 23% as Multiracial, 22% as Black, 11% as Hispanic, 3% as Asian, 1% as Indigenous or Native American, and 1% as Native Hawaiian or Pacific Islander. Fifty-five of participants identified as female, 36% as male, and 6% as nonbinary or another gender. Fifty-nine percent of participants self-identified as members of a marginalized group.

A linear regression was conducted to examine whether attitudes, subjective norms, and perceived behavioral control predicted CITs' intention to return. The overall model was significant,  $F(3, 264) = 18.40$ ,  $p < .001$ , with an adjusted  $R^2 = .163$ . Among the predictors, subjective norms ( $\beta = .273$ ,  $p < .001$ ) and attitudes were significant ( $\beta = .214$ ,  $p < .001$ ), while perceived behavioral control ( $\beta = -.025$ ,  $p = .664$ ) was not.

A moderation analysis tested whether marginalized identity influenced the relationships between TPB constructs and intention to return. None of the interaction terms were significant, suggesting that the effects of attitudes, norms and control were statistically consistent across groups.

### **Discussion and Implications**

CIT intention to return was driven most strongly by subjective norms and attitudes, but not by perceived behavioral control, and that this pattern did not vary by marginalized identity. Among CITs, these findings are consistent with research on adolescent development showing that young people are highly attuned to the opinions of significant others (Steinberg, 2014), and align with prior camp research documenting that relationships are among the most rewarding aspects of the CIT experience (Froehly et al., 2024). The results also suggest that youth need to believe that continued participation as a CIT or future staff member will provide opportunities for growth that they value—attitudinal components. Taken together, these results highlight the central role of relationships in shaping decisions to return and show that, across marginalized and non-marginalized identities, youth who view the CIT program as valuable are more likely to intend to return.

For camps, these findings indicate that retention efforts should focus both on engaging the social networks that matter most to youth and on ensuring that CIT programs are perceived as valuable. Because subjective norms were the strongest predictor of intention to return and norms can influence attitudes, it may be more valuable to engage the social networks that matter most to youth. Strategies could include strengthening relationships with parents and caregivers so they encourage youth to return because they value CIT programs for their child, creating opportunities

for campers to express appreciation to CITs, letting CITs know which of their friends are returning, and ensuring that camp leaders communicate clearly that CITs are wanted back. At the same time, attitudes toward the program also significantly predicted intention, pointing to the importance of providing meaningful opportunities for growth that increase each year the CIT returns and making explicit how continued participation allows youth to access these benefits.

The finding that PBC was not predictive of intention may not be surprising. That is, there are many factors outside a CIT's control that contribute to the potential return to camp.

Additionally, while the measure combined elements CITs identified as barriers in interviews, future work may benefit from distinguishing between structural barriers (e.g., finances) and programmatic ones (e.g., downtime). At the same time, past research shows that youth who love camp have a resilient desire to return (Wilson & Sibthorp, 2019), suggesting that barriers may be substantial but that commitment to camp leads them to believe they can overcome challenges.

In addition, we examined whether effects varied by marginalized identity. The data indicated they did not. This may reflect the camps that participated in the evaluation, which were identified for their capacity for culturally responsive work. However, it likely also suggests that both relationships and positive attitudes toward the CIT program matter for youth of all identities when deciding whether to return. This does not mean that experiences are the same across all identities; rather, in light of longstanding critiques of camp as historically centered on white, affluent youth (Browne et al., 2019), these findings suggest that CIT programs can hold value for youth from other communities when they are culturally responsive. Because CITs almost always begin as campers, camps must serve them well at that stage or they may never enroll in CIT programs. Once youth cross that hurdle, however, retention appears to hinge on ensuring that key relationships actively encourage their return, and that youth recognize the value of continued participation.

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# What Keeps Counselors-in-Training on the Pathway to Camp Counselor: Examining Intention to Return and Identity at Culturally Responsive Camps



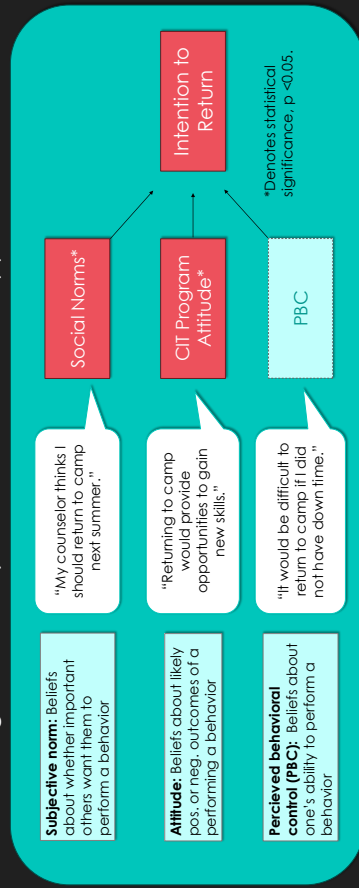
Lisa Meerts-Brandtsma, Ph.D., Carly Knudson, Emily Millbrooke, Sasha Mader, and Paul Estabrooks, Ph.D., University of Utah  
 Bristol Posatko and Miray Seward, Ph.D. American Camp Association

When CITs feel **encouraged and recognized** and see **real growth opportunities** within the CIT program, they are more likely to want to return to next year.



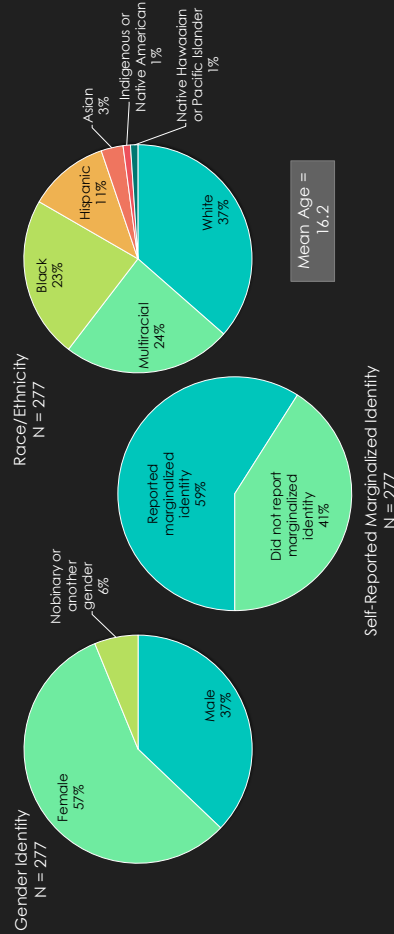
Use the QR code to read the research abstract

Figure 1. Theory of Planned Behavior Applied to CITs



Our data suggests these practices are promising. **Which are part of your CIT program?**

- Build skills and professional development in & beyond camp.
- Create new opportunities for leadership progression each year.
- Send personal notes and shoutouts to CITs from campers and staff.
- Share feedback 1:1 between CITs and camp leadership.
- Incorporate youth voice when designing CIT programs.
- Provide engaging engagement and programming outside of camp.
- Connect and collaborate with community organizations.



Questions or want more information? Contact Lisa Meerts-Brandtsma at [lisa.meerts@utah.edu](mailto:lisa.meerts@utah.edu)

## **DEVELOPING A SENSE OF COMMUNITY IN CAMP SETTINGS: INSIGHTS FROM OUTWARD BOUND PROGRAMS**

Authors: Theresa N. Melton, Clemson University; Sarah Wiley, Outward Bound International

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Organized camp experiences have been associated with a number of positive outcomes for youth, including educational readiness, academic performance, social competencies, personal skills, (Nielsen, 2023) and social-emotional skills (Spielvogel et al., 2024). These benefits are especially present when camps create a supportive environment, including supporting relationships with adults and peers (Garst et al., 2011; Spielvogel et al., 2024). Despite evidence that camp program quality and safe and supportive settings can promote better outcomes (Sibthorp et al., 2020), little information is known about how staff can promote collaborative and supportive communities during camp. Therefore, this study examines the following question: How do participants develop a sense of community in camp settings?

### **Study Population**

Data from this study come from participants in Outward Bound programming, which aligns closely with the American Camp Association's definition of camp as a "sustained camp experience that ...utilizes trained leadership and the resources of natural surroundings to contribute to each camper's mental, physical, social, and spiritual growth" (American Camp Association, 2025). Outward Bound provides authentic and intense outdoor experiential learning utilized to prepare young people to deal with life's challenges and the complex, changing realities of their world. Within this model, youth engage in expeditions with adult instructors and peers, where they are met with physical, mental, and emotional challenges that they overcome as a collective group (Schijf et al., 2017). Although originating in the United Kingdom, the innovative OB pedagogy has spread to a diversity of geographic regions and cultures (Orson et al., 2020). To date, OB has reached over 1.2 million youth and is currently operating in 35 countries across six continents (Outward Bound International, 2021). OB is successfully implemented across different languages, cultures, geographies, and political systems; positive outcomes of participation have been reported by youth in Vietnam, Singapore, Oman, Canada, South Africa, the United Kingdom, Malaysia, the United States, and many others. Despite the vast differences in the socio-cultural political contexts in which OB is implemented, the foundation for the program remains consistent: experiential learning is utilized for character training within outdoor settings.

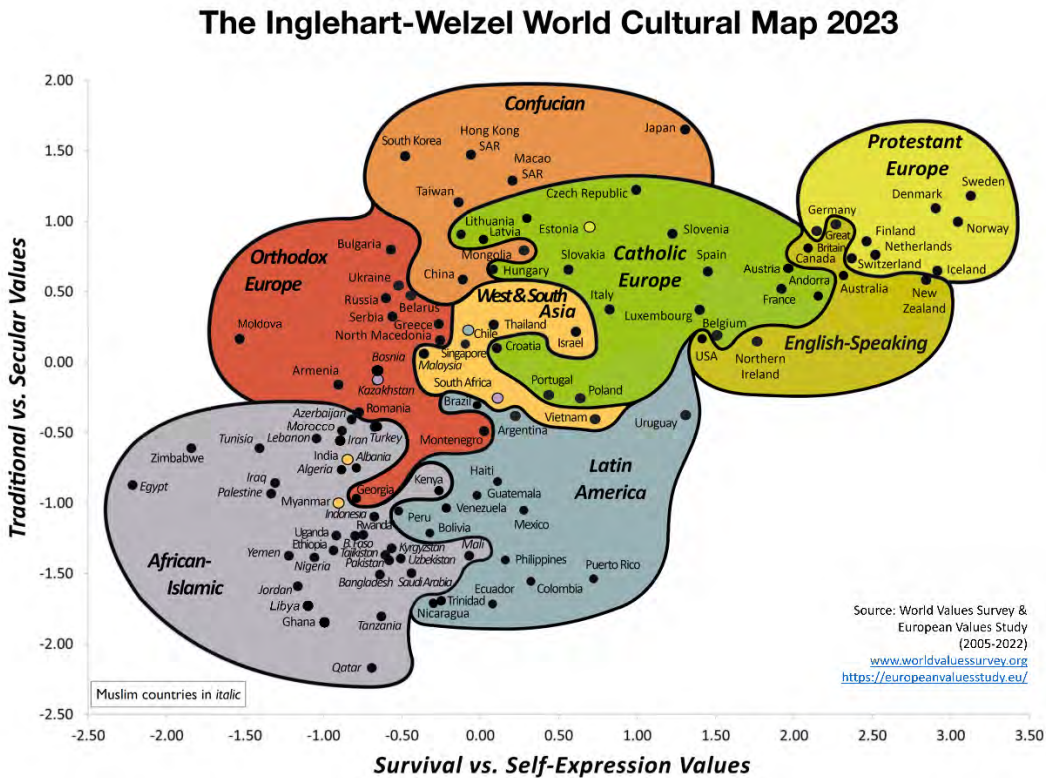
### **Methods**

This study engaged Outward Bound sites in an explanatory mixed-methods sequential design (Creswell, 2014), employing a survey to guide purposeful sampling for a multi-site case study. Eleven Outward Bound schools were purposefully sampled to represent different cultural regions as defined by the World Values Survey (See Figure 1). This cultural variation was intended to ensure that researchers were able to identify practices that were consistent across Schools regardless of culture but were also able to examine how broader cultural contexts contributed to program adaptation.

Data for this study come from Singapore, Romania, Vietnam, Hong Kong, Oman, New Zealand, the United Kingdom, the United States of America, Brazil, Croatia, and Germany. Once Schools were selected, researchers observed between five and seven days of programming. During this time, they also interviewed staff and leadership. To ensure that youth voice was reflected in local conceptualizations of character, photovoice interviews were facilitated with

youth during case study site visits. Interviews took place in English when the course was administered in English, and in their local language when it was not. Interviews were then transcribed and translated (when needed).

Figure 1  
*Cultural regions as presented by the (updated) World Values Survey*



Researchers developed case studies for each visit, and qualitative analysis was conducted within and across cases. To analyze the multiple case studies, researchers utilized the “Eisenhardt Method” of cross-case analysis (Eisenhardt, 2021). This approach is characterized by 1) clear questions with multiple potential answers, 2) careful selection of cases, 3) well-identified constructs and relationships, 4) theoretical arguments, and 5) boundary conditions (clarifying the scope of the theory; Eisenhardt, 2021 p. 151-152). Utilizing this framework positioned researchers well to develop theories that can be beneficial in ensuring results advance both practice and research.

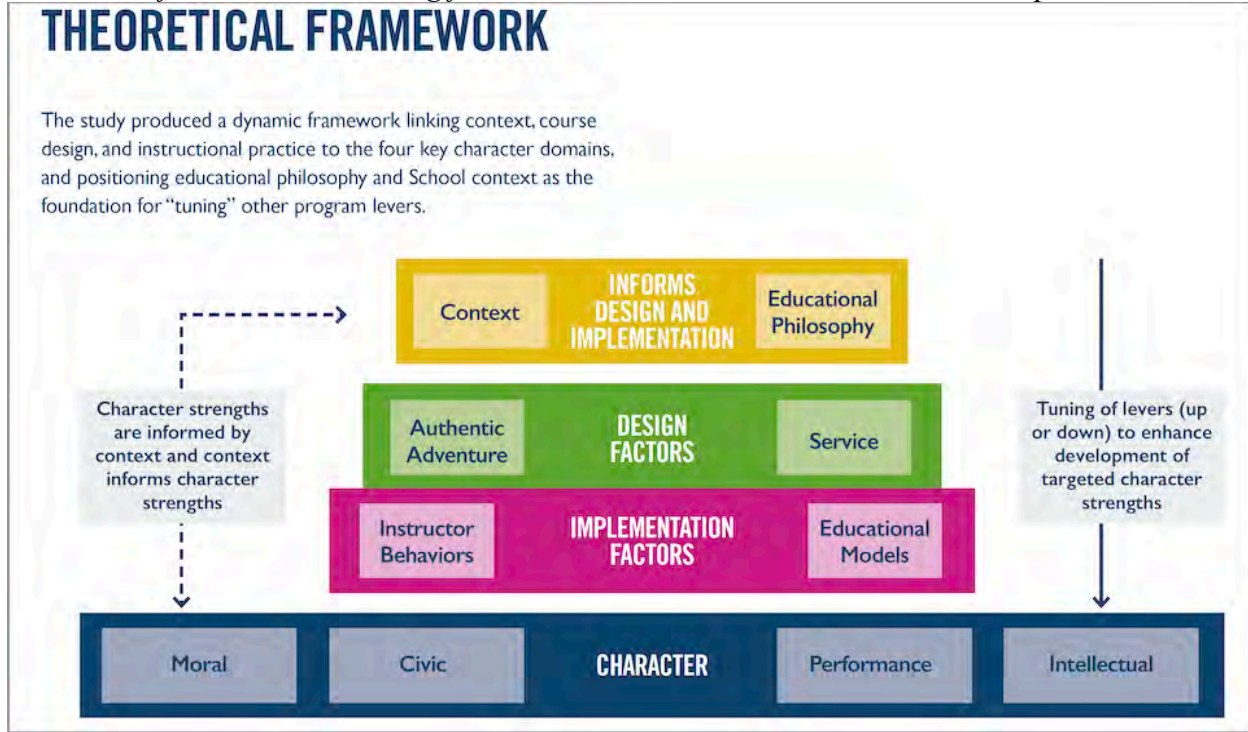
Researchers examined cases to explore how programs were implemented to drive youth outcomes. Given that the research team represented white North American and European perspectives, individuals from each Outward Bound location also joined the research team, reviewing results and assisting the team in making meaning of the findings.

### Results

Researchers identified five interconnected levers that offered practical strategies for youth development professionals to enhance participant development (Figure 2).

Figure 2

*Theoretical framework describing five levers that contribute to character development*



One of the findings emphasized that intentional framing of common practices within the camp site could promote acts of service to the larger community, creating a strong sense of community and stronger relationships. This framing did not require a heavy lift or coordinated volunteer activity; instead, providing participants with small tasks, such as cleaning tables, picking up trash around camp, and helping to serve food, created a sense of community and view of self as part of the group. More specifically, experiences that were integrated as part of the course, meaningful, and transferrable contributed positively to youth outcomes.

### **Discussion and Conclusion**

Literature on the effective elements of camp settings highlight the value of a strong environment of community and safety. Results from this study highlight that developing this sense of community within camps can be accomplished through intentional framing and participant contribution to daily tasks.

### **Implications for Practice**

The results from this study demonstrate the value instructor framing can have on developing a sense of community within group settings, especially within camp settings. This can be done through intentional framing, discussion, and debriefing of everyday tasks and interactions that are common within the camp community. Specific and concrete examples will be shared, with ideas on how camp settings can be utilized to support development.

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# How do Participants Develop a Sense of Community in Camp Settings?

## Developing a Sense of Community in Camp Settings: Insights from Outward Bound Programs

Theresa N. Melton, Clemson University  
Sarah Wiley, Outward Bound International

### BACKGROUND

- Important to create a supportive environment within expedition and camp settings
- Supportive relationships with peers and adult staff critical for youth experience

### PURPOSE

Examine how staff can promote collaborative and supportive communities during camp

### METHODS

- Multi-Site Ethnographic Case Study
- Purposive Sampling Based on World Cultural Map
- Observations, Interviews, Photo Voice



OUTWARD BOUND INTERNATIONAL

## THEORETICAL FRAMEWORK

The study produced a dynamic framework linking context, course design, and instructional practice to the four key character domains, and positioning educational philosophy and school context as the foundation for “tuning” other program levers.

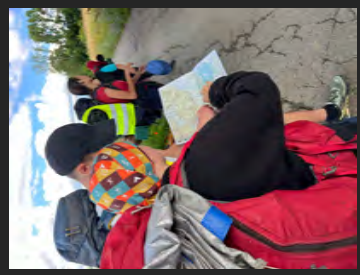


**Finding #1**  
Five key “levers” emerged that leadership/staff can adjust to emphasize character development for youth participants, although some aspects are easier to adjust than others.

**Finding #2**  
Opportunities for acts of service during the experience created a strong sense of community and stronger relationships across participants.

**Finding #3**  
Acts of service did not need to take significant time or involve community partners, although they sometimes did. Staff intentional framing and debriefing acts of service within the camp setting, such as empowering participants to help one another pitch tents, cook, clean up, etc., created a sense of community.

**Implications for Practice**  
Staff can strengthen community even in short ways. Acts of service should be integrated, meaningful, and transferable.



Take a picture to learn more about Outward Bound International and this project



# **CREATING A CAMP WHERE EVERYONE BELONGS: COUNSELOR-LED GOAL SETTING TO IMPROVE CAMPER OUTCOMES**

Authors: Angela C. Miller, Amy M. Leman, University of Illinois Urbana-Champaign

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Camp counselors are widely recognized as the “face” of camp programs—central figures who shape campers’ experiences and leave lasting impressions (American Camp Association, 2006; Halsall et al., 2016). Their influence extends beyond daily activities, playing a critical role in campers’ social-emotional development and sense of belonging (Sibthorp et al., 2020; Warner et al., 2021). When asked which attributes are important for transformative learning, counselors in Minnesota included having a “safe” place where campers feel accepted, belong, and can trust others (Leff et al., 2015). Schelbe et al. (2018) also found that camp counselors believed that providing a “safe” space was vital for positive camper experiences.

Allowing counselors to develop camp goals and evaluate them provides opportunities to practice essential workforce skills. 4-H camps in Ohio integrated counselor training geared to reinforce job market skills, including critical thinking, communication, teamwork, and leadership, and utilized camp counseling to practice these skills (Ferrari & Arnett, 2011).

This study explores a participatory research initiative at a five-day, four-night residential 4-H camp located in northern Illinois. The research evaluates the impact of counselor-led goal setting on camper outcomes. Specifically, it examines whether targeted counselor training and intentional engagement result in improved social-emotional outcomes and a sense of belonging among campers, while enhancing counselors' adherence to inclusive goals.

## **Methods**

In 2025, 24 teen counselors, aged 15 to 20, at the 4-H Camp engaged in a multi-phase training program facilitated by 4-H Extension staff. The training, delivered over several months, focused on modules related to (1) leadership and mentorship, (2) behavior management and emotional regulation, (3) mindfulness and reflection, and (4) communication strategies for diverse campers. The counselors also reviewed the final evaluation survey results from the previous year's campers.

After training and discussions, the counselors developed a shared goal for camp: “Create a Camp Where Everyone Belongs.” They decided to use daily reflections to gain insight into the campers' experiences throughout the week. Each day, they facilitated camper reflections using the “What? So What? Now What?” model (American Camping Association, 2013), designed to promote growth in leadership, empathy, and preparedness.

Data was collected daily from all 154 campers, ages 8 to 14, although not all campers completed the reflection each day. Campers could answer the questions using either drawings or written reflections. These artifacts provided insight into campers’ emotional engagement, social connections, and participation in inclusive programming. Counselors planned to encourage campers to express themselves freely, build relationships, and engage in activities that fostered a sense of belonging and emotional wellness. In addition, the 24 camp counselors completed nightly reflections answering questions about how they felt they did at including and connecting their campers each day with both ranking and open-ended questions.

## **Results**

To explore the social-emotional outcomes and sense of belonging among campers, we collected data on the number of campers who felt included each day, as well as whether they reported making or trying to make a new friend. Data is displayed in Table 1. The percentage of

campers who felt included rose slightly from the first day of camp to the last day of camp, with 80.7% feeling included on the first day and 86.2% feeling included on the last day. The number of campers who made new friends during camp decreased from the first day to the last day, with the number of campers trying to make friends remaining fairly consistent. Campers were given the opportunity to explain why they felt part of the group. A theme among the responses related to time with friends. Others who did not use the word friends talked about people who talked to them or included them.

**Table 1.** Comparison of Campers’ Responses Each Day of Camp

Day	Did you feel included and part of the group today?		Did you make a new friend or help someone today?			
	Yes	%	Yes	%	<i>I Tried</i>	%
Sunday ( <i>n</i> =150)	121	80.7%	119	79.3%	13	8.7%
Monday ( <i>n</i> =153)	126	82.4%	94	61.4%	21	13.7%
Tuesday ( <i>n</i> =153)	130	85.0%	92	60.1%	19	12.4%
Wednesday ( <i>n</i> =124/123)	114	91.9%	78	63.4%	11	8.9%
Thursday ( <i>n</i> =116)	100	86.2%	61	52.6%	12	10.3%

Camp counselors reflected each day if they worked to make their groups feel included and build connections between campers. Data is in Table 2. Talking to campers was a common theme across all questions, as well as calling campers by name. The mean responses were similar each day except for modeling empathy and patience on the last day of camp. Comments about their patience and empathy on the last day on whether they worked to make their groups feel included “I got a little mad” and “I was exhausted.”

**Table 2.** Camp Counselor Responses to Daily Reflections

Day	Did every camper in my group feel seen, heard, and included today?*		How well did I build or strengthen connections between campers today?*		Did I model empathy, patience and inclusivity in my interactions?*	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sunday ( <i>n</i> =24)	4.2	.53	4.3	.79	4.2	.69
Monday ( <i>n</i> =21)	4.2	.98	4.1	.72	4.1	.76
Tuesday ( <i>n</i> =22)	4.3	.58	4.3	.71	4.1	.81
Wednesday ( <i>n</i> =11)	4.5	.52	4.5	.82	4.5	.69
Thursday ( <i>n</i> =13)	4.2	.80	4.1	.95	3.9	1.00

Note. \*Scales of 5=High to 1=Low

## Discussion and Implications

The camp counselors chose a goal for camp (belonging) that fits with past research on attributes that camp counselors feel are important. Campers reported high levels of belonging throughout the camp. Counselors seemed to comment frequently about spending time talking to campers and calling them by name. While simple in practice, it is an important aspect of belonging and can be easily emphasized in counselor training. While campers were slightly less likely to make friends as the camp went on, this could be because they already knew the other campers in their groups. The collected data can be used by counselors to revise their processes for belonging next year.

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# Creating a Camp Where Everyone Belongs: Counselor-Led Goal Setting to Improve Camper Outcomes

Angela C. Miller and Amy M. Leman

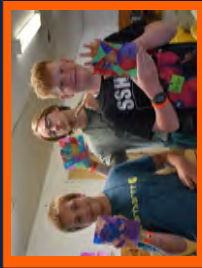
College of Agricultural, Consumer, and Environmental Sciences, University of Illinois Urbana-Champaign

## INTRODUCTION

Camp counselors are widely recognized as the "face" of camp programs, central figures who shape campers' experiences and leave lasting impressions (American Camp Association, 2006; Halsall et al., 2016). Their influence extends beyond daily activities, playing a critical role in campers' social-emotional development and sense of belonging (Stithorp et al., 2020; Warner et al., 2021). When camp counselors were asked which attributes are important for transformative learning, counselors in Minnesota included having a "safe" place where campers feel accepted, belong, and can trust others (Leff et al., 2015). Schelbe et al. (2018) also found that camp counselors believed that providing a "safe" space was vital for positive camper experiences.

## RESEARCH QUESTIONS

1. Does targeted counselor training combined with intentional engagement improve campers' social-emotional learning outcomes?
2. Does counselor-led goal setting increase campers' sense of belonging at camp?
3. Does the intervention (training + goal setting + reflection) increase counselors' follow-through on inclusive goals?



## RESULTS

The percentage of campers who felt included rose slightly from the first day to the last day of camp, with 80.7% feeling included on the first day and 86.2% on the last day. The number of campers who made a new friend during camp decreased from the first day to the last day, with the number of campers trying to make friends remaining fairly consistent. Campers were given the opportunity to explain why they felt part of the group. A recurring theme among the responses was time spent with friends. Others who did not use the word friends talked about people who talked to them or included them.

Camper's Responses Each Day of Camp

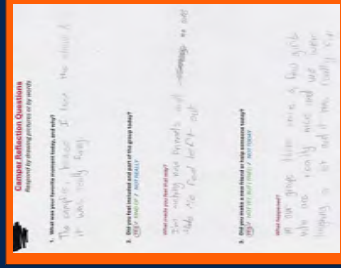
Day	Did you include someone or help someone?			Did you make a new friend or help someone?			
	Yes	No	%	Yes	No	%	
Sunday (n=150)	121	29	80.7%	119	29.3%	13	8.7%
Monday (n=153)	136	17	82.4%	94	61.4%	21	13.7%
Tuesday (n=175)	130	45	83.0%	92	68.1%	19	12.4%
Wednesday (n=141/123)	114	27	91.9%	78	61.4%	11	8.9%
Thursday (n=116)	100	16	86.2%	61	52.6%	12	10.3%

## METHODS

In 2025, 24 teen counselors, aged 15 to 20, completed a multi-phase training program, which included a review of the prior year's camper evaluation results.

Together, counselors developed a shared goal for camp: "Create a Camp Where Everyone Belongs," and a list of supporting activities to help encourage a sense of belonging when interacting with campers as well as self-expression and relationship building. To measure their outcomes during camp, data was also collected daily from all 154 campers, ages 8 to 14, through written or drawn daily reflections using the "What? So What? Now What?" model (American Camping Association, 2019). Each day they ranked and describing their success in connecting with and including campers in camp activities.

The camp counselors completed nightly reflections answering questions about how they felt they did at including and connecting their campers each day, with both ranking and open-ended questions. At the end of the camp, the counselors completed a comprehensive reflection about their experiences implementing practices to engage with their campers based on their goals. Camp counselors then met after the completion of camp to review the data and make recommendations for the next year of camp programming.



## CONCLUSIONS

The camp counselors chose a goal for camp (belonging) that fits with past research on attributes camp counselors feel are important. Campers reported high levels of belonging throughout the camp. Counselors frequently commented on spending time talking to campers and calling them by name. While simple in practice, it is an important aspect of belonging and can be easily emphasized in training. While campers were slightly less likely to make friends as camp went on, this could be because they already knew the other campers by then. The data can be used by counselors to revise goals for belonging next year.

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ILLINOIS

## SHARED GOALS OR MIXED MESSAGES? STAFF AND CAMPER VIEWS OF TARGETED OUTCOMES

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Summer camps provide a platform for fostering diverse learning outcomes, often framed as social-emotional learning, character development, or mission-specific goals such as arts, religion, or science (Richmond et al., 2019). Research highlights the importance of coherence (Darling-Hammond, 2016) between what programs intend for young people to learn and what youth perceive and experience (Biggs, 1996). For purposes of this study, we conceptualized coherence as alignment in targeted outcomes as reported by staff and campers, indicating that the camp environment reliably cues the prioritized developmental goals (Biggs, 1996; Newmann et al., 2001). When staff and camper reports lack of coherence, it may indicate that the intended curriculum is actually hidden rather than explicit, where implicit norms shape what youth learn in ways that depart from the camp's stated aims (Rossouw & Frick, 2023).

Despite the importance of coherence, the extent to which targeted outcomes are reliably interpreted and communicated by staff, and subsequently perceived by campers, remains an open question. Lack of coherence may dilute the targeted impact or produce a diffuse environment in which youth internalize messages that differ from the camp's stated goals. To explore this dynamic, we used qualitative content analysis to compare staff- and camper-reported perceptions of what their camp wanted campers to learn. Research on youth programs (Silliman & Schumm, 2013) shows that campers' perceptions provide a critical lens on how targeted program quality and goals are experienced. By comparing staff and camper data, we assess whether camps effectively convey a coherent mission in practice and identify where untargeted lessons may be influencing what campers learn. This study addressed two research questions: R1: What learning outcomes appear in staff and camper reports, and how coherent are they across groups? R2: What trends or patterns emerge in coherence and lack of coherence between staff and camper perceptions?

### Methods

Camps were recruited from a larger multi-site study across multiple U.S. regions and represented a mix of overnight/day, secular/faith-based, and general/specialty programs. The sample included responses from 188 staff and 465 campers across 13 camps. Staff/campers were predominantly female (63%/58%) and White (69%/48%), with mean ages of 22 and 12 years, respectively. To understand staff and camper perceptions of camp learning outcomes, Staff were asked, "What is the main thing this camp wanted campers to learn?" and campers were asked, "What is the main thing this camp wanted you to learn this week?"

Because our focus was on how participants articulated priorities in their own words, we used qualitative content analysis to identify types of learning outcomes, then undertook a comparison of staff and camper responses. This was a multistage process. First, we conducted open coding to identify discrete concepts (e.g., kindness, teamwork). Second, we aggregated codes into axial categories for higher-order interpretation (e.g., agency and identity, nature and outdoors, prosocial and relationships). Third, for each camp, we ranked axial codes by frequency for campers and staff to identify the camp's top three priorities. Coherence was assessed by comparing staff and camper rankings: (a) whether the most frequent code matched for both groups, and (b) whether a code appeared in both groups' top three. Comparisons were visualized in Table 1 (see Table Note for color codes).

Table 1

*Staff–camper coherence on top-ranked targeted learning outcomes by camp (n = 13)*

Camp	Reporter	N	Most Frequent	Second Most Frequent	Third Most Frequent
A	Staff	27	Agency & Identity	Prosocial & Relationships	Community & Citizenship
	Camper	61	Cognitive & Academic	Prosocial & Relationships	Agency & Identity
B	Staff	3	Agency & Identity	Prosocial & Relationships	-
	Camper	28	Cognitive & Academic	Prosocial & Relationships	Agency & Identity
C	Staff	4	Prosocial & Relationships	Cognitive & Academic	Enjoyment & Play Agency & Identity,
	Camper	23	Prosocial & Relationships	Community & Citizenship	Cognitive & Academic, Enjoyment & Play
D	Staff	4	Prosocial & Relationships	Nature & Outdoors	-
	Camper	18	Nature & Outdoors	Prosocial & Relationships	Community & Citizenship, Enjoyment & Play, Safety & Wellbeing
E	Staff	21	Nature & Outdoors	Community & Citizenship	Prosocial & Relationships
	Camper	74	Cognitive & Academic	Nature & Outdoors	Prosocial & Relationships
F	Staff	6	Agency & Identity	Community & Citizenship	Prosocial & Relationships / Self-Management & Resilience
	Camper	46	Prosocial & Relationships	Agency & Identity	Enjoyment & Play
G	Staff	26	Spirituality	Community & Citizenship	Prosocial & Relationships
	Camper	41	Spirituality	Prosocial & Relationships	Self-Management & Resilience
H	Staff	7	Prosocial & Relationships	Cognitive & Academic	Community & Citizenship
	Camper	29	Cognitive & Academic	Prosocial & Relationships	Nature & Outdoors
I	Staff	41	Agency & Identity	Prosocial & Relationships	Community & Citizenship
	Camper	119	Spirituality	Prosocial & Relationships	Self-Management & Resilience
J	Staff	32	Agency & Identity	Prosocial & Relationships	Nature & Outdoors
	Camper	33	Agency & Identity	Nature & Outdoors	Cognitive & Academic
K	Staff	19	Cognitive & Academic	Prosocial & Relationships	Agency & Identity, Enjoyment & Play
	Camper	49	Cognitive & Academic	Enjoyment & Play	Prosocial & Relationships
L	Staff	7	Prosocial & Relationships	Cognitive & Academic	Enjoyment & Play
	Camper	36	Prosocial & Relationships	Cognitive & Academic	Enjoyment & Play
M	Staff	9	Prosocial & Relationships	Agency & Identity	Community & Citizenship
	Camper	9	Prosocial & Relationships	Agency & Identity	Cognitive & Academic

*Note.* Cell colors represent coherence between staff and camper reports. Dark green indicates identical frequency ranks. Light green indicates the same top-three codes with different ranks. White indicates a top-three code for only one group.

### Findings

Our analysis revealed the degree of coherence between staff and camper reports of targeted learning outcomes. Collectively, staff most frequently emphasized prosocial and relationships (e.g., belonging, compassion, respect), agency and identity (e.g., authenticity, leadership), and community and citizenship (e.g., responsibility, service). Campers most frequently highlighted prosocial and relationships, cognitive and academic (e.g., creativity, curiosity, STEM), and nature and outdoors (e.g., recreational activity, affinity for nature). Coherence was strong for prosocial and relationships outcomes, which appeared in the top three

for both groups in 12 of 13 camps, with exact top-ranked matches at Camps C, L, and M. Other domains showed less coherence: staff often prioritized agency and identity along with community and citizenship, yet campers recognized these less frequently, and campers reported enjoyment and play more often than staff. Partial coherence also appeared when both groups identified the same codes within their top three but ranked them differently. Overall, prosocial and relationships functioned as a shared throughline, while coherence around other outcomes varied across camps.

### **Discussion and Implications for Practice**

Findings indicate that staff and campers often share broad understandings of camp priorities, though the degree of coherence varied. Prosocial outcomes emerged as a shared throughline across camps, suggesting that some mission elements are effectively communicated and recognized by both groups. By contrast, weak coherence around community and self-management implies that certain targeted outcomes may remain implicit or are overshadowed by what campers experience as more salient, such as enjoyment and play or cognitive and academics. Cases in which campers emphasized outcomes not foregrounded by staff, such as cognitive and academics (Camps A, B, E) or spirituality (Camp I), highlight the possibility that hidden or emergent curricula can shape campers' interpretations even when these outcomes are not explicitly emphasized. These patterns suggest that camps may communicate some goals clearly while others emerge more informally through daily practices. A key limitation is the reliance on self-reported perceptions; it may be challenging for young campers to identify nuanced outcomes, such as prioritizing self-management, where explicit activities, like art, are readily visible. Future research should investigate how intentional practices impact the coherence of targeted learning outcomes across various groups and how coherence may vary across more diverse populations.

Lack of coherence can dilute targeted impact by creating diffuse or competing messages about what the camp values. Leaders may need to decide whether to incorporate camper-interpreted outcomes into the formal mission or adjust staff messaging and program design so that campers more clearly perceive the targeted learning outcomes. These findings suggest three actionable strategies: (a) explicitly articulate two-to-three priority learning outcomes using shared language across staff training, camp activities, and daily rituals; (b) support staff in translating mission language into developmentally appropriate phrases and post-activity reflection prompts that campers can easily recall; and (c) regularly seek camper feedback on what they believe the camp wants them to learn to identify emerging lack of coherence. When staff and campers share a coherent understanding of camp priorities, program leaders can be more confident that training and activity design produce the targeted developmental experiences.

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# Camps often achieve coherence around **prosocial learning**, but not across all targeted outcomes

## SHARED GOALS OR MIXED MESSAGES? STAFF AND CAMPER VIEWS OF TARGETED OUTCOMES

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### BACKGROUND

- Camps aim to foster diverse learning outcomes, but impact depends on whether targeted outcomes are clearly communicated and experienced by youth (Richmond et al., 2019).
- Learning environments are strongest when targeted outcomes, staff practices, and youth interpretations align around shared priorities (Biggs, 1996; Newmann et al., 2001).
- When staff and camper narratives diverge, lack of coherence can act as a hidden curriculum shaping unintended outcomes (Rossouw & Frick, 2023).
- Campers' perceptions are a critical indicator of how program goals are enacted in practice (Silliman & Schumm, 2013).

### METHODS

- Data from 13 U.S. camps, including 188 staff and 465 campers across diverse camp types.
- Staff and campers answered parallel open-ended questions about what the camp wanted campers to learn, capturing priorities in participants' own words.
- Responses were analyzed using qualitative content analysis. Coherence was assessed by ranking the top three learning outcomes for staff and campers.

### IMPLICATIONS

- Articulate two to three targeted outcomes using shared language across staff training, camp activities, and daily rituals.
- Support staff in translating mission language into developmentally appropriate phrases and post-activity reflection prompts that campers can easily recall.
- Seek camper feedback on what they believe the camp wants them to learn to identify emerging lack of coherence.

### FINDINGS

Camp	Reporter	Most Frequent	Second Most Frequent	Third Most Frequent
A	Staff	Agency & Identity	Prosocial & Relationships	Community & Citizenship
	Camper	Cognitive & Academic	Prosocial & Relationships	Agency & Identity
B	Staff	Agency & Identity	Prosocial & Relationships	-
	Camper	Cognitive & Academic	Prosocial & Relationships	Agency & Identity
C	Staff	Prosocial & Relationships	Cognitive & Academic	Enjoyment & Play
	Camper	Prosocial & Relationships	Community & Citizenship	Agency & Identity, Cognitive & Academic, Enjoyment & Play
D	Staff	Prosocial & Relationships	Nature & Outdoors	-
	Camper	Nature & Outdoors	Prosocial & Relationships	Community & Citizenship, Enjoyment & Play, Safety & Wellbeing
E	Staff	Nature & Outdoors	Community & Citizenship	Prosocial & Relationships
	Camper	Cognitive & Academic	Nature & Outdoors	Prosocial & Relationships
F	Staff	Agency & Identity	Community & Citizenship	Relationships / Self-Management & Resilience
	Camper	Prosocial & Relationships	Agency & Identity	Enjoyment & Play
G	Staff	Spirituality	Community & Citizenship	Prosocial & Relationships
	Camper	Spirituality	Prosocial & Relationships	Self-Management & Resilience
H	Staff	Prosocial & Relationships	Cognitive & Academic	Community & Citizenship
	Camper	Cognitive & Academic	Prosocial & Relationships	Nature & Outdoors
I	Staff	Agency & Identity	Prosocial & Relationships	Community & Citizenship
	Camper	Spirituality	Prosocial & Relationships	Self-Management & Resilience
J	Staff	Agency & Identity	Prosocial & Relationships	Nature & Outdoors
	Camper	Agency & Identity	Nature & Outdoors	Cognitive & Academic
K	Staff	Cognitive & Academic	Prosocial & Relationships	Agency & Identity, Enjoyment & Play
	Camper	Cognitive & Academic	Enjoyment & Play	Prosocial & Relationships
L	Staff	Prosocial & Relationships	Cognitive & Academic	Enjoyment & Play
	Camper	Prosocial & Relationships	Cognitive & Academic	Enjoyment & Play
M	Staff	Prosocial & Relationships	Agency & Identity	Community & Citizenship
	Camper	Prosocial & Relationships	Agency & Identity	Cognitive & Academic

## MANAGERIAL APPROACHES TO CAMP STAFF SELF-CARE: APPLICATION OF THE PERMA MODEL

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Summer camp employment presents opportunities for growth and learning. While positive skill trajectories occur, many staff experience mental, emotional, and social health (MESH) challenges (Garst et al., 2024). A mechanism to address camp staff's MESH needs is to understand how staff engage in well-being practices such as self-care.

Self-care practice research is person-centric. Healthcare literature addresses patients' ability to care for themselves after chronic illnesses or disease diagnoses (e.g., McCormack, 2003), while behavioral literature examines self-care as a mitigation strategy for stress, negative emotions, and burnout (Najm & Morelen, 2025). Helping professions are susceptible to negative outcomes. For example, social workers experienced lower compassion fatigue when engaged in more self-care practices (Cuartero & Campos-Vidal, 2019). Camp staff fulfill similar caring roles, but possess less experience balancing work with personal needs (Lubeznik-Warner & Rosen, 2023).

This study explored how administrative decisions may inform staff self-care practices. The research questions were (1) How do camp administrators support self-care practices with camp staff?, and (2) To what degree do administrators' approaches to addressing staff self-care support a model of well-being applicable to camp work environments?

The theoretical framework of this study was the PERMA Theory of Well-Being (Seligman, 2011). This theory posits that human flourishing is attributed to well-being, which is comprised of five factors: *positive emotion* (experiencing happiness and life satisfaction), *engagement* (involvement while in a state of flow), *relationships* (connection to supportive and uplifting individuals), *meaning* (a part of something greater than self), and *accomplishment* (achieving something of personal value). As the PERMA model has been used to explore well-being among college students (Kovich et al., 2023) and employees (Kim et al., 2017), it is well-suited for examining camp staff well-being.

### Method

This study was part of a broader health care research initiative conducted by the Alliance for Camp Health and was approved by Clemson University Institutional Review Board. An online survey was administered through Qualtrics and distributed to the membership during Fall 2024 to examine camp staff self-care practices. An analysis of the open-ended question, "What strategies, if any, has your camp implemented to support or address staff self-care?", is presented here. Two research team members analyzed the data using a thematic coding process built from the PERMA model. Intercoder reliability was established through a systematic coding process involving "text segmentation, codebook creation, coding, assessment of reliability, codebook modification, and final coding" (Hruschk et al., 2004, p. 310). Data validation involved an audit trail of codes and debriefing the results with a third research team member.

Participant recruitment occurred through weekly e-newsletter messages directly emailed to the ACH membership listserv. Members received three email invitations to participate. A total of 116 participants from 28 states completed the survey. Of this total, 24 respondents provided no response to the question used for this examination, therefore 92 responses were analyzed for

this study. Most respondents identified as a camp director/other leader ( $n = 41$ , 45%) or camp nurse ( $n = 34$ , 37%). Respondents predominantly represented residential camps ( $n = 72$ , 78%), with 32 (35%) respondents representing independent not-for-profit camps. Respondents reported serving between 50 to 5,000 campers and reported operating for an average of eight weeks in 2024.

## Results

Prevalent managerial approaches addressed two PERMA factors: Positive Emotion ( $n = 36$ , 42%), Relationships ( $n = 45$ , 52%), or both factors ( $n = 5$ , 6%). No response items connected to the PERMA factors of *engagement*, *meaning*, or *accomplishment*. Self-care approach themes were also identified.

### Positive Emotion: Operational and Service Approach

Positive emotion factor responses were activities with the potential to elicit feelings of happiness. Respondents listed approaches such as adapting staff operational structures (e.g., time off), providing staff-only experiences (e.g., staff lounges, fitness classes), addressing staff physiological needs (e.g., providing healthy snacks and hydration options), or wellness education (e.g., MESH training).

### Relationships: Personnel Support

Respondents provided staff with both informal and formal interpersonal support. Informal support relied on peer networks, general encouragement to practice self-care, or stating that supervisors could assist when needed. Formal support involved camps employing a support staff member, contracting a third-party provider (e.g., Dear Scout), or instructing supervisors to directly address staff's mental health needs. Respondents listed multiple support position titles that did not align with regulated terms for mental health professionals. Thus, formal support included both credentialed and non-credentialed positions.

### Multi-Pronged Approach

Some responses ( $n = 17$ ) identified multiple approaches. Responses listing three or more distinct approaches were coded here. Common self-care approaches reflected operational structure adaptations ( $n = 12$ ), formal interpersonal support ( $n = 12$ ), and informal interpersonal support ( $n = 9$ ). Specified techniques were adjusting programmatic or staff schedules, having a dedicated staff member address staff wellness, and encouraging/facilitating staff-peer activities during time off. Notably these respondents reported not relying on a single strategy for supporting staff self-care.

## Discussion

Utilizing the PERMA model to examine staff self-care practices presented a new opportunity to understand the intersection of staff MESH needs and camp policies. Relationships are quintessential to camp (Garst et al., 2011), thus attributing nearly half of responses to the PERMA factor of relationships aligns with workplace well-being. Beyond positive emotion, opportunities remain available for connecting other aspects of camp staff experience to well-being, such as feeling accomplished after teaching campers new skills or feeling a part of a broader community (Lubeznik-Warner & Rosen, 2023).

### Implications for Practice

Camp providers are encouraged to consider these recommendations to support camp staff self-care.

1. *Intentional Program Structure Decisions*: Administrative decisions can influence staff well-being. Scheduling rest and program planning periods separately supports staff agency in their self-care (e.g., fitness, telehealth appointments, or planning).

2. *Engage Credentialed Staff Support*: Providing therapeutic support may necessitate credentials, whereas senior staff can mentor or create bonding activities for staff.
3. *Add Staff Responsibilities Mindfully*: Adding well-being support to a supervisor's responsibilities may appear cost effective, but the cost may be emotional or mental fatigue. Consider expertise, responsibilities, and time to reduce the chances that supervisory staff experience burnout.
4. *Think Beyond Relationships and Fun*: Incorporate staff reflection to identify experiences filled with meaning, engagement, and accomplishment. This expands staff's knowledge about addressing personal well-being.
5. *Address Well-Being Practices Holistically*: Staff arrive to their positions with the desire to grow professionally and personally. This growth will be enhanced when camp staff well-being practices are holistic and personal (i.e., inclusive, diverse, and equitable) rather than only addressing self-care from the perspective of what is needed to fulfill staff responsibilities.

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**Managerial Approaches to Camp Staff Self-Care: Application of the PERMA Model**

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**STUDY AIM**

This study explored how administrative decisions may inform camp staff self-care practices while employed.

**RQ1:** How do camp administrators support self-care practices with camp staff?

**RQ2:** To what degree do administrators' approaches to addressing staff self-care support a model of well-being applicable to camp work environments?

**PERMA Model of Well-Being**

- (Seligman, 2011)
- P** = Positive Emotion
- E** = Engagement
- R** = Relationships
- M** = Meaning
- A** = Accomplishment

**METHODS**

2024 Alliance for Camp Health member survey question: **"What strategies, if any, has your camp implemented to support or address staff self-care?"**

- 92 responses thematically analyzed
- Camp director/other leader (n = 41, 45%)
- Camp nurse (n = 34, 37%)
- Residential camps (n = 72, 78%)
- 32 (35%) respondents representing independent not-for-profit camps
- Respondents served between 50 to 5,000 campers in 2024
- Respondents operated for average of eight weeks in 2024

**KEY FINDING:** Managerial approaches to self-care appeared to address only two of the five PERMA factors leaving room for camp administrators to expand staff self-care practices across other aspects of their employment experience.



**Positive Emotion**

*Experiencing happiness and life satisfaction*

- Adapting staff operational structures
  - ◆ Time off, scheduling
- Staff-only provisions
  - ◆ Staff lounges, peer bonding experiences, facilitating transportation
- Addressing staff physiological needs
  - ◆ Providing healthy snacks, hydration options, rest, & exercise options
- Wellness education
  - ◆ MESH training or similar topics discussed at staff training

**Multi-Pronged**

*Some respondents identified multiple approaches to addressing staff self-care.*

- Operational structure adaptations (n = 12)
- Formal interpersonal support (n = 12)
- Informal interpersonal support (n = 9)

**For example, one camp may:**

Adjust programmatic or staff schedules

AND

Have a dedicated staff person address wellness

AND

Encourage/facilitate staff-peer activities during time off

**Relationships**

*Connecting to supportive individuals*

- Informal interpersonal support
  - ◆ Peer networks, general encouragement to practice self-care, or stating that supervisors could assist when needed
- Formal interpersonal support
  - ◆ Camps employing a support staff member, contracting a third-party provider (e.g., Dear Scout), or instructing supervisors to directly address staff's mental health needs.

**IMPLICATIONS FOR PRACTICE**

- 1. Intentional Program Structure Decisions:** Scheduling rest and program planning periods separately supports staff agency in their self-care (e.g., fitness, telehealth appointments, or planning).
- 2. Engage Credentialed Staff Support:** Providing therapeutic support may require credentials, whereas senior staff can mentor or create bonding activities for staff.
- 3. Add Staff Responsibilities Mindfully:** Adding well-being support to a supervisor's responsibilities may appear cost effective, but the cost may be emotional or mental fatigue. Consider expertise, responsibilities, and time to reduce the chances that supervisory staff experience burnout.
- 4. Think Beyond Relationships and Fun:** Incorporate staff reflection to identify experiences filled with meaning, engagement, and accomplishment.
- 5. Address Well-Being Practices Holistically:** Staff arrive to their positions with the desire to grow professionally and personally. This growth will be enhanced when camp staff well-being practices are holistic and personal (i.e., inclusive, diverse, and equitable).

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## SUMMER STAFF BURNOUT, EMPATHY, AND BELONGINGNESS IN DISEASE-SPECIFIC CAMPS

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In the United States, about one million camp staff serve 26 million campers each summer (American Camp Association, 2024). Residential camp staff provide 24-hour care to campers (Epley et al., 2017), which can be physically and emotionally demanding (Lubeznik-Warner et al., 2025). The responsibility of camp staff increases when they support children with serious illnesses. Medical specialty camps designed to support children with serious illnesses have demonstrated benefits to children's psychological and social well-being (Meltzer et al., 2018). Supporting the well-being of staff who care for these children is critical to avoid burnout (Bailey et al., 2012).

SeriousFun Children's Network provides medical specialty camps for children with serious illnesses. Our aim was to explore well-being in seasonal camp staff at U.S. SeriousFun camps. An additional aim was to validate the Camp Counselor Burnout Scale (CCBS; Arkin et al., 2025), which was specifically designed for use with summer camp staff. This scale has not been validated for residential staff at medical specialty camps. The research questions included: (1) What are the levels of empathy, workplace belongingness, and burnout among medical specialty camp staff at the conclusion of staff training?, (2) What are the relationships among empathy, workplace belongingness, and burnout among medical specialty camp staff at the conclusion of staff training?, and (3) Do the Toronto Empathy Questionnaire and the Workplace Belongingness Scale demonstrate adequate internal consistency and construct validity when used with a population of medical specialty camp staff?

### Methods

This paper presents preliminary results from a longitudinal, panel study of seasonal summer staff in SeriousFun's U.S. camps. The current results demonstrate the profile of staff who seek employment in medical specialty summer camps as well as validation of two instruments, the CCBS (Arkin et al., 2025) and the Toronto Empathy Questionnaire (TEQ; Spreng et al., 2009), with the population of medical specialty camp staff. The initial survey included 153 staff from seven different camps in the United States. Analysis focused on a holistic consideration of staff from the SeriousFun network rather than comparing camps within the network. The majority of the staff were under the age of 25 ( $n = 136$ , 88.9%), who identified as female ( $n = 107$ , 69.9%). Most respondents had less than five years of camp staff experience ( $n = 131$ , 85.6%), with nearly half being in their first year as camp staff ( $n = 75$ , 49.0%). Despite the limited experience as staff, 60.1% ( $n = 91$ ) of staff had been a camper in some type of camp prior to working as staff. Many staff had medical credentials ( $n = 85$ , 55.6%) based on relevant experience outside their camp role. Camp roles included cabin staff ( $n = 83$ , 54.2%), activity staff ( $n = 48$ , 31.4%), medical team ( $n = 2$ , 1.3%), seasonal leadership ( $n = 14$ , 9.2%), and other roles ( $n = 5$ , 3.3%).

Data were collected via online survey software, and surveys included demographic information in addition to the CCBS (Arkin et al., 2025), the TEQ (Spreng et al., 2009), and the Workplace Belongingness Scale (WBS; Jena & Pradhan, 2018). The survey was completed by camp staff at the completion of staff training before the start of the first camp session at all participating camps. For preliminary findings, the analysis included data cleaning and median

imputation for a total of four data points in the dataset. Then, after assessments were scored according to the author manuals, including reverse scoring for designated items, population descriptive statistics were calculated. Correlation statistics were used to determine relationships between construct variables. Then, population validation was calculated for the CCBS (Arkin et al., 2025) and TEQ (Spreng et al., 2009) with medical specialty camp staff as a population.

### Results

Descriptive statistics yielded the general level of empathy, belongingness, and burnout for staff at the end of staff training before the first session of camp began. For TEQ ( $M = 52.1$ ,  $SD = 7.39$ ), the cutoff score indicating the presence of empathy for staff is a score of 45. The mean TEQ score for survey participants on average was 52.1. That is 7.12 points above the cutoff score for average empathy levels. These results indicate that camp counselors within the SeriousFun Children's Network begin the summer with above average empathy levels. The CCBS has a total Burnout score ( $M = 20.28$ ,  $SD = 3.13$ ) and three subscales: Exhaustion ( $M = 6.16$ ,  $SD = 2.31$ ), Distancing/Cynicism ( $M = 7.53$ ,  $SD = 1.15$ ), and Reduced Efficiency ( $M = 6.57$ ,  $SD = 1.08$ ). For CCBS, a total score of 36 would indicate a staff member is as burned out as possible, and a score of 12 on a subscale would indicate a staff member is experiencing the maximum level of exhaustion, distancing/cynicism, or reduced efficacy. At the end of camp orientation, staff, on average, were already showing signs of burnout.

The average overall score across camps was 20.28. Of the three subscales, the exhaustion scale showed the highest scores with an average of 7.54, indicating higher levels of self-reported exhaustion. Finally, WBS indicated belongingness ( $M = 51.12$ ,  $SD = 6.25$ ) scores indicated high levels of belonging across camps, with a score of 60 indicating the highest possible amount of belongingness. There was a moderate, significant correlation between empathy and workplace belongingness,  $r(151) = .38$ ,  $p < .001$ . Within the dimensions of burnout, distancing/cynicism has a positive correlation with empathy ( $r = .21$ ,  $p = .01$ ) and workplace belongingness ( $r = .30$ ,  $p < .001$ ). Reduced efficacy has a negative correlation with workplace belongingness ( $r = -.20$ ,  $p = .01$ ). Exhaustion did not have a significant correlation with either variable.

Researchers used Exploratory Factor Analysis (EFA) to determine validity of using TEQ with medical specialty camp staff. Reliability for the 16 items was calculated at  $\alpha = .772$ , which is in an acceptable range. Item statistics show good correlation between items, with the weakest correlation for Question 2 on the scale (.101); however, the alpha level if this item was deleted was not significantly different ( $\alpha = .787$ ). Thus, for the use of TEQ with the population of medical specialty camp staff, the instrument has acceptable internal consistency with this population, with no individual items undermining the validity of the scale. TEQ behaves coherently with this population as a unidimensional measure with no subscales, and so the current research further supports the reliability of the TEQ instrument overall.

The subscales of CCBS, Exhaustion, demonstrated no indicators of skew or kurtosis. The three-item Exhaustion subscale demonstrated acceptable internal consistency of  $\alpha = .708$  with the population of medical specialty camp staff. There were no weak items identified in the item correlations, nor would consistency be improved by deleting any items. The Distancing/Cynicism subscale demonstrated some indicators of mild skew and ceiling effects with items clustering in the lower end of the scale; however, there was no violation of assumptions of normality. The Distancing/Cynicism subscale had acceptable internal ( $\alpha = .641$ ) consistency with the population of medical specialty camp staff. Inter-item correlations were all strong, and consistency would decrease if any items were removed. For the WBS scale, there were some items with a slight skew and higher kurtosis, but non-violated assumptions of normal

distribution. The instrument had an excellent Cronbach's  $\alpha = .886$  with the population of medical specialty camp staff.

### **Discussion and Implications**

The aim of the current study was to explore constructs of empathy, burnout, and workplace belongingness for seasonal staff at medical specialty camps in the United States. Workplace fatigue is a documented challenge for summer camp staff in general (Dubin et al., 2020) without the added stress of supporting children with serious illnesses. Results indicated that staff were beginning to show signs of burnout at the end of staff training, before children even arrived at camp. There are several factors that could contribute to this in the design and content of training. Camp staff training is likely intensive over multiple days, which can be physically, mentally, and emotionally draining. In medical specialty camp settings, there are likely additional training factors that can add to this sense of overwhelm, including skills to attend to the physical and behavioral health needs of various campers.

To address these indicators of early burnout, camp leadership may critically examine their training approach for new and returning camp staff. Leadership may consider whether some content-focused training materials can be completed asynchronously, either prior to coming to camp facilities or during less structured time at the camp facilities. Then, synchronous training time could focus on more applied training approaches, such as role play, demonstration, and practical skills like CPR or first aid training. Further, scheduling opportunities for rest or unstructured time at camp facilities could support personal wellness while continuing to support workplace belongingness.

Results demonstrated that empathy and workplace belongingness were important factors that could burnout with staff. As both empathy and burnout are multifaceted, there was a need to look at these constructs in a more detailed and nuanced manner to build on previous work (Delgado et al., 2023). Belongingness in the workplace has been shown to reduce feelings of burnout (Shay & Rauhaus, 2025). Exhaustion was not a factor that had significant correlation to empathy or workplace belongingness. These findings suggest that feeling tired or physically depleted does not necessarily diminish relational capacity or perceived connection to the camp community. In contrast, distancing/cynicism demonstrated positive associations with both empathy and belongingness. These findings may indicate that emotional distancing, or even humorous sarcasm, is a coping strategy to protect staff from the emotional toll of caring for children with serious illnesses. This protective factor is present even before children arrive at camp. Emotional distancing has been a noted factor to protect against burnout for various medical professionals (Adelsberger, 2025; Fischer et al., 2013; Reutimann et al., 2025). Activities that support bonding among the staff and promote the culture of the camp could help to address the sense of emotional distancing for camp staff during training. Also, demonstration of empathy rather than cynicism from leadership could help to support a climate of care and connection.

The study is limited to seasonal summer staff at seven U.S. camps within the SeriousFun network, which could limit the generalizability of findings to other types of residential camps or camp staff in different organizational contexts. The current study provides a more dynamic analysis of the factors that comprise the constructs of empathy and burnout, aiming to better understand the contributors and relationships between the two.

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# SUMMER STAFF BURNOUT, EMPATHY, AND BELONGINGNESS IN DISEASE-SPECIFIC CAMPS

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UNIVERSITY OF WYOMING

## About SeriousFun Children's Network

Together, we empower children with serious illnesses and their families to reimagine what is possible by creating inclusive camp and recreational experiences, inspiring confidence and joy, and building community and connection.

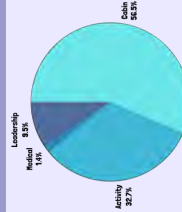
## Current Study

- Online Survey
- End of Staff Training
- Seven SeriousFun Children's Network camps
- Demographics plus assessments
  - Toronto Empathy Questionnaire (TEQ)
  - Camp Counselor Burnout Scale (CCBS)
  - Workplace Belongingness Scale (WBS)

## Research Questions

- (1) What are the levels of empathy, workplace belongingness, and burnout among medical specialty camp staff at the conclusion of staff training?
- (2) What are the relationships among empathy, workplace belongingness, and burnout among medical specialty camp staff at the conclusion of staff training?
- (3) Do the Toronto Empathy Questionnaire and the Workplace Belongingness Scale demonstrate adequate internal consistency and construct validity when used with a population of medical specialty camp staff?

## 153 Seasonal Staff



Under the age of 25  
(n = 52, 34.3%)  
Predominant gender  
(n = 107, 69.9%)  
Less than five years of camp staff experience  
(n = 121, 78.8%)  
Had been a camper in this type of camp  
(n = 91, 59.7%)  
Many staff had minor/graduate credentials  
(n = 65, 55.5%)

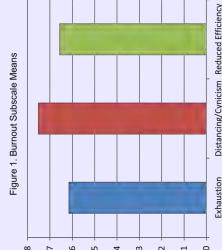


Figure 1. Burnout Subscale Means

## Instrument Validation

Validation with population of medical specialty camp staff using Exploratory Factor Analysis (EFA).  
**WBS and TEQ had strong validity with population.**

## Results

- Empathy above average (TEQ, M = 52.1)
- Burnout present at end of training (CCBS, M = 20.28)
- Exhaustion highest burnout dimension (WBS, M = 51.12)
- Empathy → Belongingness:  $r = .36, p < .001$
- Cynicism → Belongingness:  $r = .30, p < .001$
- Exhaustion → Belongingness:  $r = -.20, p = .014$

## Implications

- Training intensity may contribute to early burnout
- Asynchronous training and rest may reduce fatigue
- Staff bonding and empathetic leadership may mitigate cynicism
- Modeling connection from leadership creates positive work culture
- Further research about positive workplaces and staff longevity is needed

## Participating Camps



**WBS**  
 $\alpha = .886$   
Excellent

**TEQ**  
 $\alpha = .772$   
Strong

## **TICK INCIDENCE ACROSS MIDWESTERN SUMMER CAMPS: ASSOCIATIONS WITH LANDSCAPE CHARACTERISTICS IN YEAR 2 OF FIGHT THE BITE**

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Tick incidences and tick-borne diseases represent a growing concern in the United States, particularly in the Midwest, where they have become increasingly prevalent (Alkishe et al., 2021; Kugeler et al., 2015). Individuals interacting within human-nature settings, such as summer camps, are at heightened risk due to prolonged exposure within these environments (Garst et al., 2025; Lyons et al., 2022). Ward and Brown (2004) identified landscape factors that influence tick prevalence (i.e., vegetation density, site risks). While these factors have been studied in diverse human-nature settings, limited research has examined their impact within summer camps. Further, it has been documented that tick incidences can vary depending on landscape characteristics, underscoring the importance of understanding these factors. To address this gap, the multi-year Fight the Bite program (FtB) was established in 2024 to educate camp health care providers and frontline staff about ticks, tick response practices, and tick-borne diseases (Garst et al., 2025). Using Anderson and McFarlane's (2018) Community-as-Partner Model, this study approached tick-borne illness prevention by engaging camps and their surrounding communities as an active partner to develop strategies that enhance local capacity for protecting youth and families from tick exposure. Programs like FtB highlight the need for data on tick incidences, as understanding encounters and bites at summer camp is critical for targeting durable educational and prevention efforts resulting in sustained and transferable outcomes.

The purpose of this study was to assess tick incidence and landscape characteristics across Midwestern summer camps. The Year 2 research questions were: (RQ1) How many tick encounters and bites did FtB camps experience in Year 2?, (RQ2) What are the landscape characteristics of FtB camps?, and (RQ3) What is the relation between tick incidences and camp landscape characteristics for FtB camps?

### **Methods**

Conducted in collaboration with the Alliance for Camp Health and the Centers for Disease Control and Prevention, and funded by S.C. Johnson, Year 2 of the three-year FtB study occurred across 10 states in the Midwest of the United States and was approved by Clemson University's Institutional Review Board. Replicating the Year 1 approach (Garst et al., 2025), Year 2 utilized a weekly report form to enable monitoring of tick encounters and tick bite incidence. In 2024, a new data collection tool was introduced and included a camp characteristics survey that each participating camp used to document specific landscape features. Items for the characteristics survey were modified from Ward and Brown (2004) and addressed *landscape features*, *site risk*, and *vegetation density*. Data for this study were compiled from the FtB weekly report forms ("weekly") and camp characteristics ("characteristic") surveys.

### **Results**

Weekly and characteristic data were cleaned based on completeness (i.e., filling out the survey beyond camp characteristic information) and for duplication (i.e., the first entry was kept). Of the 66 sites initially recruited, 17 did not participate in any aspect of Year 2. Among the 49 sites that actively engaged, 38 completed both the weekly report forms and the camp characteristics survey, excluding 11 sites from the analysis due to data missingness. An average

of 5 weekly forms were submitted per site over the course of the summer (range of 1-10). Across participating states, Wisconsin had the highest number of sites (9, 24%), followed by Ohio and Minnesota (7, 18%). Overnight or residential camps were the most prominent camp type (23, 60%), with 16 (42%) indicating independent not-for-profit camps as their camp sponsorship type.

Tick incidence for Year 2 was examined in RQ1. A total of 3,041 tick encounters and 1,420 tick bites were reported in Summer 2025, corresponding to an average of 11 encounters and five bites per site per week. Tick incidences across the Midwest were further characterized using K-means cluster analysis based on the sum of tick encounters and tick bites per site. Six sites exhibiting extreme values for tick encounters or bites (>100) were treated as outliers and were excluded for this analysis (n = 32). A three-cluster solution emerged, describing distinct incidence profiles (See Table 1).

Table 1  
*Three-cluster Solution for Tick Incidence*

Cluster	n(%)	Encounters	Bites
Low encounters/Low bites	24(75%)	4	3
Low encounters/High bites	2(6%)	5	27
High encounters/Moderate bites	6(19%)	30	10

Landscape characteristics of participating camps were examined in RQ2. Site representatives were asked, “*What landscape features are present at your camp where camp participants (youth and staff) spend time?* (Ward & Brown, 2004)” The most prevalent landscape characteristics were “property size is 1 acre or larger” (37, 97%), “white-tailed deer in the area” (35, 92%), “places with many forest edges” (35, 92%), and “average temperature above 27°C (80°F) for two weeks or more” (29, 76%). Based on these characteristics, site representatives were then asked to self-assess their site’s overall risk level (Ward & Brown, 2004). As shown in Figure 1, the majority (29, 76%) of sites reported being in the moderate risk category. Site representatives also reported vegetation density (Ward & Brown, 2004). Of the 38 sites, 15 (40%) reported 51–75% of their property being covered by dense vegetation (e.g., forests, thick brush, tall grass).

The relation between tick incidences and landscape characteristics (i.e., vegetation density) was examined in RQ3. Initial chi-square analyses were not appropriate due to some cells having a count less than 5. Therefore, clusters within tick incidence and vegetation density collapsed into two categories, and a 2x2 analysis was conducted. Fisher’s Exact Test indicated no statistically significant association between vegetation density (0–50% vs. 51–100%) and tick incidence (low vs. high),  $p = .394$  (see Table 2).

Figure 1  
Site Risk Classifications

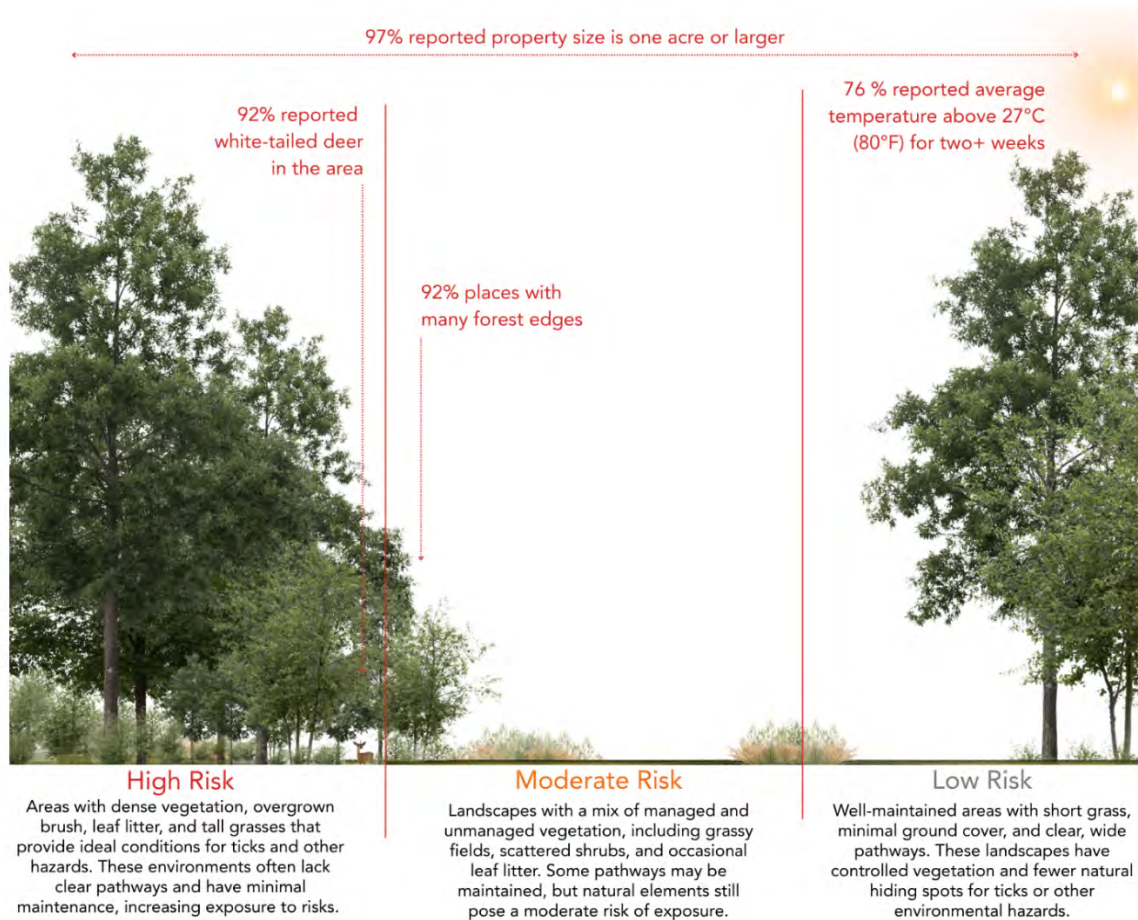


Table 2  
Cross-tabulation and Fisher's Exact Test Results for Tick Incidence and Vegetation Density

Tick Incidence	Percent of Dense Vegetation		
	0-50%	51-100%	Total
Low Incidence	14(56%)	11(44%)	25(100%)
High Incidence	2(33%)	4(67%)	6(100%)
Total	16(53%)	15(48%)	31(100%)
Fisher's Exact Test	$p = .394$		
Odds Ratio	2.55		

Note. Low Incidence = Low Encounters/Low Bites + Low Encounters/High Bites; High Incidence = High Encounters/Moderate Bites

### Discussion and Conclusions

Research findings from Year 2 provide important insights into identifying areas of elevated tick incidence risk and informing targeted tick prevention strategies within the summer camp setting. Benchmarking tick incidence over time will inform trends and patterns, offering

camp providers a deeper understanding of how landscape factors (i.e., vegetation density) may influence exposure. These findings underscore the importance of integrating weekly surveillance with landscape information to better characterize site-level tick risks and inform ongoing research efforts.

Study limitations include the absence of a control group and potential biases, such as social desirability bias, in which participants might overstate improvements to match perceived expectations. In addition, weekly counts of tick encounters and bites were self-reported, so these numbers may vary depending on participants' recall or how a particular camp defines a "week." The study was also likely underpowered due to the small sample size, underscoring the need to increase participation in future years to strengthen the reliability of outcome estimates. Building on Year 2 results, our Year 3 plans include a nationwide expansion of the FtB program.

### **Implications for Practice**

Monitoring tick incidence and landscape characteristics allows summer camps to:

- Examine tick monitoring and prevention practices across diverse, geographically representative summer camps to better understand variation in risk mitigation strategies.
- Identify high-risk areas on camp property based on tick encounter and bite data.
- Implement targeted tick prevention strategies, such as vegetation management, activity modifications, and effective post-exposure practices.
- Tailor staff training and educational efforts to address site-specific tick risks.
- Engage in ongoing self-assessment of tick-related risks by regularly reviewing encounter and bite trends, mapping activity locations, and evaluating environmental features that may elevate exposure.

These efforts also ensure that all youth and staff are considered and help promote equitable access to safe outdoor opportunities by providing the supports needed to implement prevention strategies effectively and sustainably across camp settings.

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**Tick Incidence Across Midwestern Summer Camps: Associations With Landscape Characteristics In Year 2 of Fight The Bite**  
Alexandra Skrocki & Barry A. Garst; Clemson University Tracey Gaslin; Alliance for Camp Health

**Key Findings:**

- A total of 3,041 tick encounters and 1,420 tick bites were reported in Summer 2025, corresponding to an average of 11 encounters and five bites per site per week.
- Highlights important insights into identifying areas of elevated tick incidence risk and informing targeted tick prevention strategies within the summer camp setting.

**Background**  
Individuals interacting within human-nature settings, such as summer camps, are at heightened risk for tick-borne disease due to prolonged exposure within these natural environments. It has also been documented that tick incidences can vary depending on landscape characteristics, underscoring the importance of understanding these factors. Programs like Fight the Bite (FTB) highlight the need for data on tick incidences, as understanding encounters and bites at summer camp is critical for targeting durable educational and prevention efforts resulting in sustained and transferable outcomes.

**Purpose**  
To assess tick incidence and landscape characteristics across Midwestern summer camps.

**Research Questions**

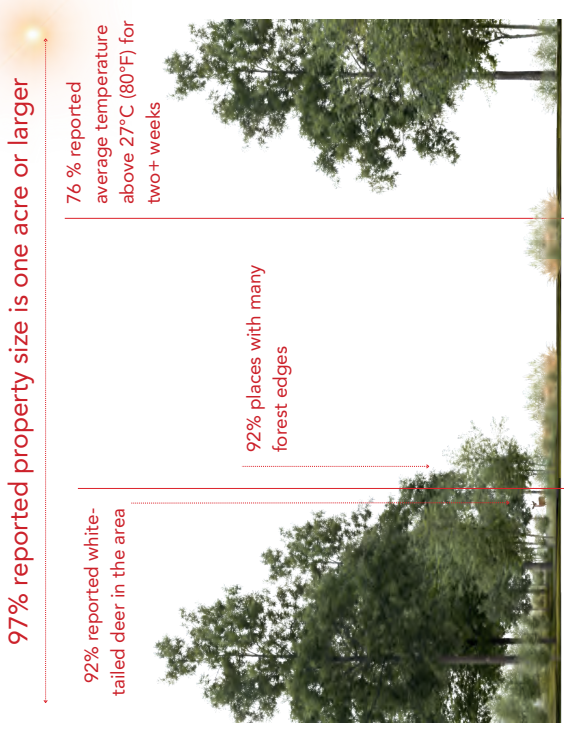
- RQ1: How many tick encounters and bites did FTB camps experience in Year 2?
- RQ2: What are the landscape characteristics of FTB camps?
- RQ3: What is the relation between tick incidences and camp landscape characteristics for FTB camps?

**Method**  
Year 2 utilized a weekly report form to monitor tick encounters and tick bite incidence and a camp characteristics survey to document specific landscape features across the participating sites located in the Midwest.

- Of the 66 sites recruited, 38 completed both the weekly report forms and the camp characteristics survey.
- Among the 10 participating states Wisconsin had the highest number of sites (9, 24%), followed by Ohio and Minnesota (7, 18%).

**Discussion and Implications**  
Year 2 demonstrated...  
...important insights into identifying areas of elevated tick incidence risk and informing targeted tick prevention strategies within the summer camp setting  
...offered camp providers a deeper understanding of how landscape factors (i.e., vegetation density) may influence exposure.

Building on the Year 2 results, in Year 3 we hope to engage a nationwide network of camps in Fight the Bite and increase the generalizable nature of the research findings.



**High Risk**  
Areas with dense vegetation, overgrown brush, leaf litter, and tall grasses that provide ideal conditions for ticks and other hazards. These environments often lack clear pathways and have minimal maintenance, increasing exposure to risks.

**Moderate Risk**  
Landscapes with a mix of managed and unmanaged vegetation, including grassy fields, scattered shrubs, and occasional leaf litter. Some pathways may be maintained, but natural elements still pose a moderate risk of exposure.

**Low Risk**  
Well-maintained areas with short grass, minimal ground cover, and clear, wide pathways. These landscapes have controlled vegetation and fewer natural hiding spots for ticks or other environmental hazards.

**76% OF SITES REPORTED BEING IN THE MODERATE RISK CATEGORY**

# PRIMED” FOR CHARACTER AT CAMP: AN EVALUATION OF CHARACTER-SUPPORTIVE DESIGN PRINCIPLES

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## Introduction

Largely due to an influx of funding for character work in summer camps and out-of-school time, interest in character development is surging. Research in this space is not new; in fact, some of the earliest camp research squarely centers on how character development occurs in summer camps (Dimock & Hendry, 1931). Yet, the science of character has greatly evolved since 1931. The present study applies these developments to contemporary camp contexts.

Berkowitz, Bier, and McCauley define character as “a complex set of psychological characteristics that motivate and enable one to function as a moral agent, to perform optimally, to effectively pursue knowledge and intellectual flourishing, and to be an effective member of society” (2017, p. 34). According to Urban and Buckley (2025), there are three primary ways that camps can foster character, so defined: (1) providing a value framework to guide when and how to draw on character strengths, (2) creating opportunities for youth to develop their own value frameworks, and (3) helping youth increase access to character strengths. While numerous studies have documented the development of character strengths at camp (often framed as social-emotional learning, e.g., Richmond et al., 2019), little is known about how camps are supporting other aspects of character development. Additionally, no unified model explains how camps can intentionally structure operations and programming to support character development.

To this end, we drew on the PRIMED model of character education (Berkowitz & Bier, 2024). This evidence-based framework, which was developed from research in schools, proposes that character development can be fostered through an organizational focus on six key design principles: **P**rioritization, **R**elationships, **I**ntrinsic Motivation/Internalization (hereafter referred to as Internalization), **M**odeling, **E**mpowerment, and **D**evelopmental Pedagogy. Although PRIMED has primarily been applied to school improvement efforts, these principles are relevant to other youth-serving contexts such as camps (see Table 1 for adapted definitions). Building from this framework, the present study sought to address three research questions: (1) How are camps working to shape character? (2) To what degree are camps prioritizing and implementing PRIMED principles in the design and operation of camp? (3) What evidence-based strategies are camps using to enact PRIMED principles?

Table 1  
*PRIMED Principles as Adapted for Camp*

Principle	Definition for Camp
Prioritization	Making character development an authentic and salient priority in the mission, vision, policy, and practice of the camp.
Relationships <i>within camp</i>	Nurturing healthy relationships within and between all groups of camp participants (campers, counselors, administrative staff, leadership staff).

<i>beyond camp</i>	Building meaningful relationships with individuals and organizations beyond camp with a shared interest in participants' development (e.g., families, schools).
Internalization	Nurturing participants' internal motivation to act in ways that benefit others as well as themselves.
Modeling	Ensuring that all adults and other role models present at camp embody the type of character that camp seeks to develop in youth.
Empowerment	Creating a culture and governance structure that authentically empowers all parties (youth/families, staff, leadership) to shape the conditions that affect them.
Developmental pedagogy	Providing experiences that support participants' long-term learning and development.

### Methods

Data were collected from leadership and staff at 17 camps as part of an evaluation of character-supportive practices. Camps varied in their session offerings, organizational affiliations, program emphases, and populations served. The staff sample (N = 226) was predominantly female (63%), with most identifying as White (69%). The average staff age was 22 years. Most were counselors, activity leaders, or program staff, with a near-even split between first-time and returning employees.

Prior to the start of camp sessions, camp leadership (typically directors) completed an online survey on their camp's approach to character development, the priority given to PRIMED principles (1 = *low priority* to 7 = *top priority*), and the consistency with which PRIMED principles were implemented at camp (1 = *none of the time* to 7 = *all of the time*). These surveys were often completed collaboratively by multiple senior staff. Later in the summer, directors also completed an inventory of evidence-based strategies aligned with PRIMED. Staff surveys asked how often camper-facing staff enacted PRIMED principles at the point of service (1 = *never* to 7 = *all the time*). Because of role differences, items on prioritization and relationships beyond camp were excluded from staff surveys. Reliability was acceptable for all scales ( $\alpha = .70-.82$ ).

Given the small sample of camps, analysis consisted of descriptive examination of data pertaining to camps' character approach, their prioritization and implementation of PRIMED principles, and their use of evidence-based strategies. For scales, we report mean scores and the relative frequency with which low (1-3), moderate (3-5), and high (5-7) scores were reported for the given scale. For evidence-based strategies, we calculated the percentage of camps using each strategy. For the sake of brevity, the most and least commonly used strategies are reported.

### Results

#### Character Approach (RQ1)

All camp directors reported that their camp supports the development of character strengths, with most also reporting that camp helps participants learn when and how to apply character strengths in alignment with camp values (76%) or personal values (71%). A smaller percentage (59%) reported that their camp helps youth reflect on their own values. When asked about the language they use to talk about character at camp, over half (59%) reported that camp primarily talks about specific character strengths (e.g., leadership), while a quarter reported using the language of social-emotional skills. The remaining 3 camps used a mix of language.

#### Prioritization and Implementation of PRIMED (RQ2)

Director-reported prioritization of PRIMED principles ranged from a low of M = 4.59 (empowerment; relationships beyond camp) to a high of M = 5.82 (developmental pedagogy).

Developmental pedagogy was the only principle rated as a high priority across nearly all camps. Prioritization, relationships within camp, internalization, and modeling were generally rated as moderate or high priority. Empowerment and relationships beyond camp were more variable, with several camps reporting these as relatively low priority.

Director-reported implementation of PRIMED principles ranged from M = 4.59 (empowerment) to M = 5.27 (modeling). Most principles were implemented at moderate levels, with internalization and modeling split between moderate and high. Staff-reported implementation ranged from M = 5.57 (empowerment) to M = 6.02 (developmental pedagogy), with most reporting high implementation across principles. This contrast may reflect differing vantage points: leaders’ awareness of system-level inconsistencies versus staff perceptions of daily practice.

### Evidence-Based Strategies (RQ3)

Results indicate that most camps used a wide range of evidence-based strategies to enact PRIMED principles. Nearly all camps reported establishing a safe, supportive culture, training counselors to be nurturing, and fostering mentoring relationships. Some strategies were used more sparingly, such as strengthening adult relationships, regularly assessing progress toward character goals, and providing youth with leadership opportunities. The most- and least-commonly used strategies within each PRIMED principle are presented in Table 2.

Table 2

*Most and Least Commonly Used Evidenced-Based Strategies*

Principle	Most Common Strategies	Least Common Strategies
Prioritization	<ul style="list-style-type: none"> <li>Focus on making camp a safe place (100%)</li> <li>Have clear rules about appropriate behavior (100%)</li> </ul>	<ul style="list-style-type: none"> <li>Regularly assess progress towards character goals (35%)</li> </ul>
Relationships within camp	<ul style="list-style-type: none"> <li>Train counselors to be nurturing and supportive (100%)</li> </ul>	<ul style="list-style-type: none"> <li>Have explicit emphasis on improving relationships among adults at camp (59%)</li> </ul>
Relationships beyond camp	<ul style="list-style-type: none"> <li>Partner with 1+ outside organization to support character development (76%)</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Internalization	<ul style="list-style-type: none"> <li>Train staff to encourage youth to improve on efforts or “try again” (94%)</li> </ul>	<ul style="list-style-type: none"> <li>Youth encouraged to set personal goals and imagine future selves (53%)</li> </ul>
Modeling	<ul style="list-style-type: none"> <li>Focus on hiring positive role models (100%)</li> </ul>	<ul style="list-style-type: none"> <li>Use mentorship programs (65%)</li> </ul>
Empowerment	<ul style="list-style-type: none"> <li>Train all staff to be fair and respectful of youth (100%)</li> </ul>	<ul style="list-style-type: none"> <li>Afford youth many opportunities to take on leadership roles (47%)</li> </ul>
Developmental pedagogy	<ul style="list-style-type: none"> <li>Structure camp to provide youth with opportunities to practice acting with character (82%)</li> </ul>	<ul style="list-style-type: none"> <li>Provide opportunities for youth and staff to grapple with moral issues (59%)</li> </ul>

### Discussion and Implications

Findings offer early evidence that camps support youth character development through intentional design and practice. Directors consistently reported that camps not only cultivate

character strengths but also guide youth in applying them within camp and personal value frameworks (RQ1). This emphasis on values highlights an important but underexplored pathway for character development in camps. Results also suggest that while PRIMED principles were prioritized and implemented at relatively high levels across camps, on average, camps varied to some degree in their focus and stage of implementation (RQ2). Directors rarely reported high implementation across all principles, with scores most often falling in the moderate range. Staff, by contrast, reported high levels of implementation across all principles, suggesting stronger practice at the point of service or potential overconfidence. Empowerment and relationships beyond camp were lower priority and less consistently implemented than other principles. Finally, camps were found to be using many evidence-based strategies to actualize PRIMED principles, especially those tied to building safe and supportive environments and nurturing relationships (RQ3). However, areas for growth were also evident.

A key limitation of this study is a reliance on self-report data. It can be challenging for camp professionals to accurately assess their camp environment, especially without experience at other camps. Given this, more work must be done to establish the reliability of these measures. Still, results suggest that the PRIMED framework, though developed for schools, translates effectively to camp contexts. It provides both a conceptual foundation and a diagnostic tool for identifying strengths, gaps, and areas for targeted improvement related to character development.

#### **Implications for Practice**

- The PRIMED framework can serve as a useful lens for organizational reflection and continuous improvement in camp settings. Camp professionals can apply it as a diagnostic tool to identify strengths and gaps across principles.
- Discrepancies between leadership and staff perceptions of implementation highlight the need for improved alignment. Mid-season check-ins or anonymous feedback loops can help surface gaps and inform targeted training.
- Empowerment was rated lowest in priority and implementation. Camps can explore strategies such as youth advisory boards, rotating leadership roles in daily activities, and staff-led committees to enhance authentic influence on culture and decision-making.
- Camps need not rely exclusively on “character” terminology; diverse language frameworks (e.g., SEL, leadership) can still foster character development.

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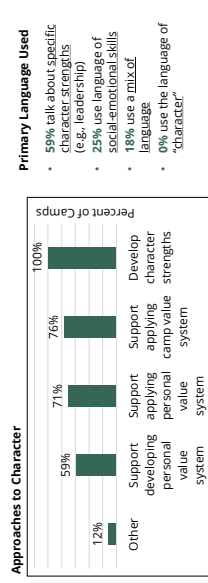
# The PRIMED framework for character education provides a practical lens for assessing and improving use of character-supportive practices at camp.

## PRIMED for Character at Camp: An Evaluation of Character-Supportive Design Principles

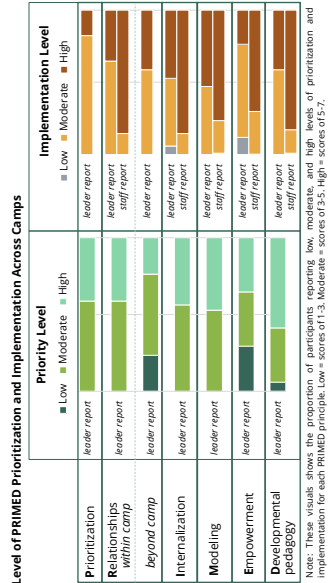
Bryn Spielvogel, Jim Sibthorp, & SJ Mitra  
(University of Utah) & Miray Seward (ACA)



Aim 1 To understand how camps are working to shape character.



Aim 2 To understand the degree to which camps are prioritizing and implementing PRIMED principles.



Aim 3 To identify the evidence-based strategies camps are using to enact PRIMED principles.

**Most and Least Commonly Used Evidence-Based Strategies**

Category	Least Used Strategies	%	Most Used Strategies	%
Prioritization	Regularly assesses progress toward character goals	35	Focus on making camp a safe place	100
	Have explicit emphasis on improving relationships among adults at camp	59	Have clear rules about appropriate behavior	100
Relationships within camp	None	-	Train counselors to be nurturing and supportive	100
	Partner with 1+ outside organization to support character development	76		
Internalization	Youth encouraged to set personal goals and imagine future selves	53	Partner with 1+ outside organization to support character development	76
	Use mentorship programs	65	Focus on hiring positive role models	100
Modeling	Afford youth many opportunities to take on leadership roles	47	Train all staff to be fair and respectful of youth	100
	Provide opportunities for youth and staff to grapple with moral issues	59	Structure camp to provide youth with opportunities to practice acting with character	82

Note: Leadership were provided an inventory of evidence-based practices that support character development. Percentages indicate the proportion of camps in the sample that use the given practice, according to the camp leader report.

## Background

The **PRIMED model of character education** suggests that organizations can foster character development through a focus on six key design principles. The **PRIMED strategies** that camps use to actualize these principles will depend on the goals and unique context of each camp.

- Prioritization**
  - Making character development an authentic part of a camp's mission, vision, policy, and practice of the camp.
- Relationships within camp beyond camp**
  - Nurturing healthy relationships within and beyond camp (e.g., camp staff, counselors, leadership staff).
  - Building meaningful relationships with diverse stakeholders (e.g., parents, family, camp (families, schools) with a shared interest in participants' development.
- Internalization**
  - Nurturing participants' internal motivation to act in ways that benefit others as well as themselves.
- Modeling**
  - Ensuring that all adults and other role models present at camp embody the type of character that camp seeks to develop in youth.
- Empowerment**
  - Creating a culture and governance structure that authentically empowers all parties to shape the conditions that affect them.
- Developmental pedagogy**
  - Providing experiences that support participants' long-term learning and development.

## Methods

- Sample** included leadership (N=17) and staff (N=226) from 17 camps representing a range of offerings and foci.
- Measures** tapped into camps' approach to character, prioritization of PRIMED principles, implementation of PRIMED principles at a structural level (via leaders) and at the point of service (via staff), and use of evidence-based strategies.

## Implications

- The PRIMED framework offers a **lens for organizational reflection and continuous improvement** in camp settings.
- Camp professionals can use PRIMED as a **diagnostic tool to identify strengths and gaps** across principles.
- Discrepancies between leader and staff reports of implementation suggests a **need for improved alignment at different levels of camp**; feedback loops or mid-season check-ins may help.
- Empowerment was least prioritized**; strategies such as youth advisory boards or rotating leadership roles could enhance authentic influence.
- Diverse language frameworks** (e.g., SEL, leadership) can support character development without relying solely on "character" terminology.

## **SUMMER CAMP ADDS UP: THE IMPACT OF STEM CAMPS ON MATH SELF-EFFICACY AND ACHIEVEMENT IN UNDERREPRESENTED K-12 CAMPERS**

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Summer camp plays a critical role in campers' development as students; programs support academic growth and engagement in learning, foster key foundational skills, improve well-being, set youth up for post-high school success, and develop a positive STEM mindset (Afterschool Alliance, 2021; Allen et al., 2019). What happens outside of school is as important as what happens in school in terms of motivating students' interest in STEM beyond school subjects (Afterschool Alliance, 2021; Krishnamurthi et al., 2014).

While many barriers are encountered along an underrepresented student's pathway to STEM achievement, mathematics comprehension and self-efficacy are considered significant barriers in the pursuit of advanced STEM coursework, degrees, and professional careers (Gutierrez, 2002; Williams et al., 2016). Mathematics is widely considered to be the most marginalizing subject within STEM. As a field, it prioritizes "merit" and individual accomplishment, discounts the collective and community-based culture of URM students, and subsequently, further diminishes students' sense of math self-efficacy (Gutierrez, 2013).

A student's levels of math identity and math self-efficacy are critical persistence predictors since individuals who demonstrate higher levels are more likely to remain engaged in math throughout their K–12 and higher education academic pathway (Flores et al., 2014; Lin et al., 2018). Importantly, research has demonstrated a correlation between math achievement and self-efficacy, which indicates that math self-efficacy is a strong contributor to STEM achievement throughout every level of education (Williams et al., 2016).

To examine how STEM summer camps provide supplemental learning opportunities that support math self-efficacy and STEM achievement for underrepresented K-12 students facing inequitable access to STEM experiences, this study used the following questions: RQ1) Is there a significant change in 3rd -8th grade camper math self-efficacy after participating in a 5-day STEM program? RQ2) What is the relationship between campers' mathematics self-efficacy and mathematics achievement? RQ3) What are the campers' experiences in these summer STEM programs?

### **Methods**

This mixed-methods study utilized pre- and post-test surveys, San Diego Unified School District longitudinal achievement data, and semi-structured interviews to investigate the relationship between third- through eighth-grade student mathematics self-efficacy in a five-day STEM summer camp program, the relationship between students' mathematics self-efficacy and achievement, and to learn more about camper and staff experiences during math-infused STEM programs. The sampling frame was narrowed to include 60 third- through eighth-grade students (approximately 8–12 years old) who were enrolled in school within the City Heights Hoover Cluster and also participated in a weeklong after-school program at Ocean Discovery Institute; 95% of the students are eligible for free or reduced lunch. While this study considers K-12 participants as both students and campers, the term students will be used to encompass the duality of participant identity in the following sections.

Students' math self-efficacy was operationalized using five categories of survey questions: expectancy beliefs, growth mindset, utility value, student mindset, and motivational beliefs. Paired sample *t*-tests were utilized to determine if significant differences existed between

the pre- and post-survey results for each criterion group of the survey questions. Linear correlation was used to analyze the strength of the relationship between students' achievement levels and their level of positive pre- and post-survey responses. Qualitative analysis for this study was conducted for five staff and five students through semi-structured, face-to-face interviews during the final day of the 5-day program. The interviews were comprised of ten questions, with total interview time averaging 20 minutes. This inductive analysis used descriptive, versus, and in vivo coding techniques to identify themes (Saldana, 2012).

### Results

Paired sample *t*-test results indicated that students had significantly more positive responses to the post-survey versus the pre-survey questions regarding utility value ( $p < 0.001$ ). The increase demonstrated between utility value (i.e., "I use math every day in my life") pre- and post-survey questions was the most significant improvement compared to other question categories. Comparison of expectancy belief positive scores (i.e., "I can do hard math") demonstrated significantly higher post-survey scores in comparison to pre-survey scores ( $p < 0.01$ ; Table 1).

Table 1  
*Differences in Pre- and Post-Survey Self-Efficacy Question Groups*

Question Type	Mean	SD	Std. Error	95% Confidence Interval		<i>t</i>	<i>df</i>	Significance
				Lower	Upper			Two-Sided <i>p</i>
Expectancy Beliefs	0.348	1.518	0.12	-0.584	-0.112	2.908	160	**0.004
Growth Mindset	0.241	1.546	0.149	-0.536	0.054	1.618	107	0.109
Utility Value	0.414	0.176	0.122	-0.654	-0.174	3.403	161	***<.001
Student Mindset	-0.37	0.174	0.176	-0.72	-0.021	2.101	107	*0.038
Motivational Beliefs	0.343	1.804	0.174	-0.687	0.002	1.973	107	0.054

*Note.* Groups represent two to three survey questions. \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ . Linear correlation was used to analyze the strength of the relationship between students' achievement levels and their level of positive pre- and post-survey responses. The Pearson's coefficient in the pre-survey was 0.59 and indicated a moderately strong correlation between students' achievement scores and self-efficacy responses in the pre-survey, while the Pearson's coefficient was 0.12 when examining the relationship between achievement scores and post-survey student self-efficacy scores indicating a low degree of correlation between the two variables (Table 2). This result indicates that after participation in a 5-day STEM program students' math self-efficacy and belief in their abilities is no longer correlate to their academic grades.

Table 2  
*Correlation Between \*Achievement Levels and Self-Efficacy*

Predictor		Pre-Survey Responses	Post-Survey Responses
*Achievement Scores	Pearson Correlation	0.59	0.12
	Sig. (2-tailed)	*<.001	0.836
	$r^2$	0.49	0.029

*Note.* Linear regression analysis for student \*achievement scores between pre- and post-survey self-efficacy results.

Both student and staff participants detailed a diverse array of experiences. The six primary themes were (a) the complexity of math identity, (b) experiencing math anxiety and challenges, (c) STEM experiences, (d) diverse instructor experiences, (e) student understanding, and (f) community in math principles. Interestingly, these six themes were presented uniquely within each participant’s experience, which underscored the known diversity of both math experiences prior to and during the 5-day after-school STEM program. Critically, the themes often demonstrated interdependence or caused other themes to emerge within a participant’s story. For example, an instructor who described “math not always being their favorite subject” demonstrated some significant growth mindset development while preparing for and instructing the program. In addition to causal relationships, these themes also demonstrated the duality of students’ math experience both inside and outside the classroom. For example, students who described their feelings about math were mostly positive while also mentioning how anxious they felt before a test or when answering questions in front of peers.

#### **Implications for Practice**

This study identified several key opportunities for practice, including the continued development of STEM curricula that humanize students through culturally responsive practices, strong learning communities, and experiences grounded in joy and curiosity. These approaches affirm students’ identities, build belonging, and position learners as capable STEM thinkers. The lessons learned in this study can be transferred to any camp program; what area of camper self-efficacy are you interested in building?

Importantly, the findings highlight the critical role of summer STEM camps in bridging opportunity gaps for students who have historically had limited access to high-quality STEM learning experiences. Summer STEM participation creates a significant and sustained positive impact for campers, particularly over time, by providing consistent exposure to hands-on, engaging STEM activities that strengthen math confidence, self-efficacy, and interest in STEM pathways. For underrepresented students, these camps serve as an essential supplement to the academic year, mitigating inequities in access to enrichment, fostering supportive peer and mentor relationships, and reinforcing the belief that they belong in STEM spaces. Collectively, these experiences demonstrate how STEM camps can function as powerful levers for equity, promoting both immediate learning gains and longer-term STEM persistence.

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Poster PDF



References & Contact Info

# SUMMER CAMP ADDS UP: THE IMPACT OF STEM CAMPS ON MATH SELF-EFFICACY AND ACHIEVEMENT IN UNDERREPRESENTED K-12 CAMPERS



Dr. Jo Vance

## Overview

- Mathematics is widely considered to be the most marginalizing subject within STEM (Gutierrez, 2013).
- A strong foundation in math education and a high level of competency are critical to students' long-term success in the STEM field (Chen, 2013).

## Purpose

To examine how STEM camps provide supplemental learning opportunities that support math self-efficacy and STEM achievement, particularly for underrepresented K-12 students facing inequitable access to STEM experiences.

### Research Goal 1:

Examine how participation in STEM camp programs supports math self-efficacy in underrepresented students.

### Research Goal 2:

Explore the impact of STEM camp experiences on students' mathematics achievement and continued interest in STEM fields.

## Theoretical Frameworks

### Socially Transformative Curriculum

Encompasses previous theories of social justice and culture in mathematics & tangible action items in curriculum.

### Ethnomathematics

Different ethnic groups use mathematics to solve problems.



## Research Questions

How does participation in a summer STEM program influence campers' mathematics self-efficacy, growth mindset, and achievement?

RQ1: Is there a significant change in 3rd-8th grade camper math self-efficacy after participating in a 5-day STEM program?

RQ2: What is the relationship between campers' mathematics self-efficacy and mathematics achievement?

RQ3: What are the campers' and staffs' experiences in these summer STEM programs?

## Methodology

Mixed methods; convergent parallel design.

This study used:

- Pre and post-survey data from 3rd-8th grade participants (Likert Scale).
- A large district-wide dataset that tracks student achievement in the San Diego Unified School District.
- 5-7 semi-structured interviews with students & staff.

## Findings

*"The experience really helped me just open up my mind a lot and be more accepting and open to math."* - Alyssa, Instructor

*"Yes, but sometimes I need help in math. When I needed help in math class, I did get it. I figured out how to divide the percents. I didn't understand the first time, but now I do."* - Lisa, 7th grade



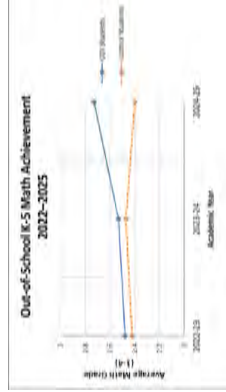
## Results

### Differences in Student Self-Efficacy Scores

Question Type	Mean	SD	Error	95% Confidence Interval		t	df	Two-Sided p	Significance
				Lower	Upper				
Expectancy Beliefs	0.348	1.518	0.12	-0.584	-0.112	2.908	160	**0.004	
Growth Mindset	0.241	1.546	0.149	-0.536	0.054	1.618	107	0.109	
Utility Value	0.414	0.176	0.122	-0.654	-0.174	3.403	161	***<.001	
Student Mindset	-0.37	0.174	0.176	-0.72	-0.021	2.101	107	*0.038	
Motivational Beliefs	0.343	1.804	0.174	-0.687	0.002	1.973	107	0.054	

### Correlation Between Achievement Levels and Self-Efficacy

Predictor	Pre-Survey Responses	Post-Survey Responses
Pre-Survey Correlation	0.59	0.12
*Achievement Scores	Sig. (2-tailed) <*.001	0.836
r <sup>2</sup>	0.49	0.029



## Implications for Practitioners

- This study identified several opportunities for practice, including continuing to develop a curriculum that humanizes students through practice, community, and joy. This can be transferable to any area program.
- Summer camp STEM participation creates a significant positive impact for campers, especially over time.

# **Marge Scanlin Award for Outstanding Student Research**

Recipient: Alexandra Skrocki (abstract on page 87)

**Eleanor P. Eells Award for  
Excellence in Research in  
Practice Poster**

Recipient: Seacamp Association

# EVERGLADES WATERSHED EDUCATION USING INDEX OF BIOTIC INTEGRITY TO EVALUATE IMPACTS OF FLORIDA KEYS ECOSYSTEMS

Author: Judy Gregoire, Seacamp Association, Inc.,

Contact: info(at)nhmi.org

## Everglades Watershed Education using Index of Biotic Integrity to Evaluate Impacts of Florida Keys Ecosystems



**Study Aim/Purpose**

- Seacamp received funding through NOAA's Bay Watershed Education Training (B-WET) program to provide Everglades watershed education programs to 202 Broward County, FL 5<sup>th</sup> grade students from Title I schools.
- The purpose of this program was to provide a strong source of professional development for teachers coupled with multiple Meaningful Watershed Education Experiences (MWEEs) for students that are fully supported in the classroom by their teachers and that will ensure that the concepts of watershed education are fully reinforced throughout the school year. The project included a 24-month project period focusing on teacher professional development in year one and implementation of student MWEEs in year two.
- Many of the classroom lesson plans were provided by the Everglades Foundation and they provided guidance for new field experiences.
- Participating students experienced hands-on classroom activities prior to a 3 day/2 night field experience at Seacamp. The field experiences included snorkeling, kayaking, and hands-on laboratory programs exploring the impacts of Everglades water flow upon the health of Florida Keys ecosystems.

**Project Lead:** Judy Gregoire  
These research findings and ACA National Award would not be possible without the hard work of the project's Outside Evaluators:  
Dr. Tom Marcinkowski & Amanda Taylor

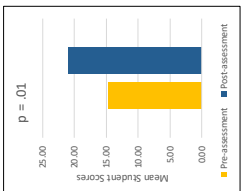


**Methods**

Program learning objectives were established and used to develop research tools to examine:

- Part 1: Knowledge** - Pre/post instrument consisting of 20 true/false items and 20 multiple choice items to assess students' knowledge in four determined science topic areas (Climate Change, Ocean Literacy, Index of Biotic Integrity, and the Everglades Watershed).
- Part 2: Disposition** - Pre/post instrument using a six-point Likert scale consisting of six sections to assess 'dispositions' related to each of the four science topics: prior experiences with, interest in, confidence in their ability to learn about, and perceived value of learning about.
- An **open-ended assessment** to be filled out by students at the end of the Seacamp field experience.
- Teacher Focus Group** - Each teachers' report on, reflections on, and evaluation of the implementation of lessons/activities in each participating middle school to be use for program evaluation purposes.

**Finding #1: Part 1: Knowledge Gain**



Assessment Type	Mean Student Score
Pre-assessment	~12.50
Post-assessment	~20.00

p = .01



**Finding #2: Part 2: Dispositions**

Of the six pre/post student dispositions explored, the greatest gains were observed in students' self-reflection of **Value of Learning About These Topics and Learning Opportunities in School**. It can be inferred that without field-based experiences, students would not appreciate the value of, or seek out additional field experiences.

**Implications for Practitioners**

Summer camps and short-term residential programs foster the essential elements of the NOAA B-WET MWEE principles in youth. Hands-on environmental programs have significant, positive impacts on youth knowledge and appreciation for learning. There is great potential for summer camps to think outside the box and partner with outside agencies for funding, program delivery, and evaluation. All project partners had Seacamp alumni employed with them which helped to strengthen the partnerships and, we feel, the overall student program experience. We hope this project will inspire others that it is possible to conduct and apply meaningful, quality research and evaluation to existing programs to highlight both their value and areas for growth.

**Thank you to our project partners**



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