

8-28-2023

Critical Competencies of 4-H Camp Staff for Achieving High Performance

Laura S. Jeuck

Virginia Tech, sutphinl@vt.edu

K. S. U. Jayaratne

North Carolina State University, jay_jayaratne@ncsu.edu

Mitzi Stumpf-Downing

North Carolina State University, mitzi_downing@ncsu.edu

Harriett Edwards

North Carolina State University, haedward@ncsu.edu

Katherine McKee

North Carolina State University, kemckee@ncsu.edu



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Recommended Citation

Jeuck, L. S., Jayaratne, K. S., Stumpf-Downing, M., Edwards, H., & McKee, K. (2023). Critical Competencies of 4-H Camp Staff for Achieving High Performance. *The Journal of Extension*, 61(2), Article 7. <https://doi.org/10.34068/joe.61.02.07>

This Feature Article is brought to you for free and open access by the Conferences at TigerPrints. It has been accepted for inclusion in The Journal of Extension by an authorized editor of TigerPrints. For more information, please contact kokeefe@clemson.edu.

Critical Competencies of 4-H Camp Staff for Achieving High Performance

LAURA S. JEUCK¹, K.S.U. JAYARATNE², MITZI STUMPF-DOWNING²,
HARRIETT EDWARDS², AND KATHERINE MCKEE²

AUTHORS: ¹Virginia Tech. ²North Carolina State University.

Abstract. Camps provide a substantial opportunity for youth to develop important life skills. Identifying and training staff on critical competencies are essential to achieving the desired outcomes for camp participants. The purpose of this study was to determine the most critical competencies of the 4-H residential camp staff for achieving high staff performance. The modified Delphi technique was used to achieve study objectives. The Delphi panel of this study consisted of 23 4-H camping experts from across the United States. This three-round Delphi study led to identify 15 critical competencies that will be useful in standardizing 4-H camp staff training programs.

INTRODUCTION

Camping is an important part of 4-H youth development in the United States. Research shows that 4-H camp is a significant opportunity for positive youth development (Evenson, 2020; Wahle et al., 2019) and demonstrates the positive correlation between the quality of each program with the benefits of its impacts (Lile et al., 2021). A variety of factors contribute to the quality of a camping experience, including the staff's competency (Baldwin et al., n.d.), the felt atmosphere of the program, and the inclusion of a positive youth development framework (Hedrick et al., 2009; Roth & Brooks-Gunn, 2003; Taggart & Witt, 2016; Wahle et al., 2019). The atmosphere of the camp program consists of the social and environmental factors of the camp; for example, positive relationships with counselors can contribute to an increase in campers' self-esteem (Readdick & Schaller, 2005). In some instances, camp counselors perceive their ability to provide a safe camp environment as limited (Wahl-Alexander et al., 2016). These limitations could undermine the potential success of the camping program (Paver & Wahl-Alexander, 2018).

4-H develops programming using a positive youth development framework made up of eight elements for planning effective youth development programs (Samuel & Rose, 2011). These eight elements are: positive relationships with caring adults, an inclusive environment, a safe environment, an opportunity to see oneself as an

active participant in the future, an opportunity for self-determination, an engagement in learning, an opportunity for mastery, and an opportunity to value and practice service for others (Samuel & Rose, 2011; Scott & Krinke, 2018; VonDielingen, 2018). Each of these essential elements is heavily influenced by both paid 4-H camp staff and volunteer counselors that facilitate 4-H camping programs (Garst et al., 2011). The effective application of these elements often depends on the training and development provided to camp staff (Garst et al., 2008; Gillard & Warner, 2021).

Camps provide a substantial opportunity for youth to develop relationships with caring adults who offer guidance and emotional and practical support (American Camp Association, 2006a). Some credit this relationship with a caring adult as the most important aspect of a quality camp experience (American Camp Association, 2006b). Therefore, high-quality staff training is key in creating a quality camp environment where all youth are accepted and have the opportunity to thrive (Garst et al., 2011). Additionally, research says that staff training is critical to achieving desired outcomes in youth programs (Gillard & Warner, 2021; Larson et al., 2009).

Most existing research centers on the outcomes of camping programs, but the processes that lead to those outcomes are often under-represented in the literature (Dworkin et al., 2003; Gillard & Warner, 2021). This gap in the research is an important one to fill and could hinge

on a point of service that can be controlled or influenced by the camp's leadership team, such as the performance of camp staff (Garst, 2010). An atmosphere of positive youth development, created using the framework detailed above, is also an essential component of any youth development program (Roth & Brooks-Gunn, 2003; Vance, 2012).

The quality of out-of-school programming is typically assessed in two domains: structural and process. Structural quality provides a setting and context for the program model, whereas process quality refers to the features that influence the youth experience (Vandell et al., 2006). Structural quality includes—but is not limited to—staff training and experience, resources, child-staff ratios, and partnerships. Process quality includes factors such as the relationships between staff and youth, relationships among peers, and opportunities to build skills. These definitions show the variety of factors that influence the quality of a camping program; however, research most often reports the competency and training of staff as the key to successful programming (Bodilly & Beckett, 2005; Tolman et al., 2002; Wahle et al., 2019).

Competency can refer to a variety of elements that help to produce desired results (Rothwell & Graber, 2010). The competencies necessary for camp staff include the knowledge, skills, behaviors, and abilities used to provide youth with the best programming possible and can serve as standards to guide professional development and evaluate staff (Gillard & Warner, 2021; Starr et al., 2009; Stone et al., 2004). Camps across the nation employ a variety of staff training competency models, and although there are some similarities between models, there are few research-based rubrics available that specifically define camp staff competencies. The American Camp Association (2016) outlines seven required topics for staff training. These topics focus on the minimum required knowledge and skills necessary to facilitate risk management at any youth camp, but they do not cover specific competencies relating to program activities.

Determining critical competencies for staff at 4-H residential camps is necessary for planning effective camp staff selection and training (Epley et al., 2017). A knowledge of staff competencies can serve as a basis for appropriate decision-making regarding the content of 4-H camp staff training and development by pinpointing what qualities are most important to staff success, connecting training to behaviors and performance, and improving communication with staff regarding qualifications (Rothwell & Graber, 2010).

To develop effective and successful camp programs, it is important to identify the most important skills and behaviors for staff and train them accordingly. The time that is invested in training programs will also provide future benefits as staff members further develop their skill sets through practice and additional training opportunities (Galloway et al., 2013). Competency modeling is crucial to the development of

appropriate training strategies (Campion et al., 2019), as it ensures a basic level of training across the board, allowing leaders to make better hiring decisions, develop the best training activities, and properly evaluate the successes and failures of staff (Epley, 2014).

Despite the significance of determining the competencies critical for camp staff to deliver effective camping programs for 4-H youth, research identifying what these competencies are does not yet exist. The purpose of this study was to determine the most critical competencies for 4-H residential camp staff.

METHODS AND PROCEDURE

The authors used a modified three-round Delphi technique (Hsu & Sanford, 2007) to conduct the study, because this technique is effective in building consensus among a panel of experts. Dalkey and Helmer developed the Delphi technique at the Rand Corporation in the 1950s, and it is used for the purpose of “achieving convergence of opinion concerning real-world knowledge solicited from experts” (Hsu & Sanford, 2007, p. 2). Researchers use the Delphi method to build consensus among an intentionally selected panel of experts (Nasa et al., 2021; Niederberger & Spranger, 2020).

SELECTION OF DELPHI PANEL

The selection of subjects in a Delphi study is dependent upon the area of expertise required to answer the target issues (Hsu & Sanford, 2007; Nasa et al., 2021; Niederberger & Spranger, 2020). The panel for this study consisted of 4-H camping experts from across the United States, including 4-H camp researchers and academics, camping program directors, camp center directors, program directors, and others. The selection process resulted in a list of 34 potential experts. From that group, we determined 23 to be experts in camping who agreed to participate in the study. The selection of these participants assessed their experience in 4-H camping, educational background, geographic location, experience in camp research, and experience related to staff selection, development, and training. Each participant received an informed consent letter via electronic mail.

THREE-ROUND DELPHI PROCESS

We used the three-round modified Delphi technique to conduct the study. Schmidt (1997) defines three steps for “ranking-type” Delphi studies: first, brainstorming to identify answers; then, narrowing the original list; and third, ranking the answers. After the selected panel members agreed to participate, we sent them each the first-round questionnaire and a letter describing the objectives of the study and formally asking them to participate. The first-round questionnaire prompted participants to identify competencies that are critical to the success of residential

Critical Competencies of 4-H Camp Staff for Achieving High Performance

camp staff members and related behaviors. We also asked the experts to offer explanations for each response to help define the importance of each of their identified competencies. We then used these explanations to categorize and consolidate the various competencies for use in the next steps of the study.

During the analysis of data from the first questionnaire, we removed duplicate responses, recorded the number of experts that suggested each competency, and then grouped the suggested competencies into logical categories (as recommended by Okoli and Pawlowski (2004)). Twenty-two of the 23 selected panel members responded to the first-round questionnaire (indicating a 96% response rate), listing a total of 155 competencies (with much overlap). We closely analyzed this list and condensed it to 23 unique competencies, descriptions, and related behaviors. This list was then used to develop the second iteration survey instrument.

The 23 identified competencies were consolidated in a list in random order to cancel bias related to the order of the list. This second survey asked respondents to rank the competencies from 1 (most important) to 23 (least important) based on their importance to the success of 4-H camp staff. We also asked that they provide feedback on each competency to verify that we had correctly interpreted and categorized each term appropriately after the first round (Okoli & Pawlowski, 2004; Schmidt, 1997). Nineteen of the 23 panel members responded to the second iteration survey (an 83% response rate).

Additionally, this second iteration gave the experts an opportunity to list additional competencies and behaviors that may have been left off of the initial list. This step is necessary to ensure the validity of the study. The competencies that were ranked highly by over 50% of the panelists were retained for the final list, with a target of no more than 20–23 items (Okoli & Pawlowski, 2004).

The responses from the second iteration survey were used to further refine the consensus and identify the competencies and related behaviors. In round three, we asked participants to individually rate each competency and related behavior on a five-point Likert-scale (1=*extremely important*, 2=*very important*, 3=*moderately important*, 4=*slightly important*, and 5=*not at all important*). This additional rating was used to validate, build consensus, and further narrow the list of competencies.

Twenty-two panel members responded to the third iteration of the survey, maintaining a 96% response rate. Responses were analyzed by calculating the percentage of participants who rated each competency as *extremely important* or *very important*. Respondents also had the opportunity to comment to explain and justify their ratings, as well as comment on any thoughts or ideas that they felt may have been left out or needed modification.

We expected the first round of data collection to result in many duplications and overlap among responses. We sorted, categorized, and interpreted these responses into a unique list of competencies, descriptions, and related behaviors. This list was reviewed for accuracy by a 4-H expert who was not a participant in the study.

Data from the second and third iterations of this study were analyzed using mode and percentages from the ranking and rating of the competencies respectively. This analysis led to the identification of priority competencies. Judgments on the data set were made by including only those competencies ranked highly by over 50% of the panelists (Stewart, 2003). The final list of competencies was prioritized using the majority ranking from the second and third iteration responses.

RESULTS

We analyzed responses based on the percentage of respondents that ranked each competency within the highest two-thirds of the list. Table 1 displays a summarized analysis of overall results from the second iteration of the survey.

Responses were analyzed by using the percentage of participants who rated each competency as *extremely important* or *very important*. Table 2 summarizes the results from the third round.

Many comments in the third iteration pointed to the interconnectedness of the competencies and the overlap in the behaviors that reflect success within those competencies. The competencies identified as critical (summarized in Table 3) were based on analysis of the ranking of the competencies in the second round (Table 1) and the ratings of competencies in the third round (Table 2).

This three-round national Delphi led to a consensus among the expert panel on 15 competencies critical for 4-H residential camp staff to achieve high performance. The final list of 15 critical competencies was:

- Responsibility
- Work ethic, initiative, and independence
- Relationship building and compassion
- Teamwork
- Communication
- Judgement and maturity
- Leadership and role modeling
- Risk management and safety
- Respect and cultural competence
- Problem-solving and creativity
- Engaged and camper-centered

Table 1. Ranking of Competencies by Delphi Panel Members at the End of the Second Round (N=19)

Competencies	Number of Respondents Ranking in the Top 2/3	Percentage of Respondents Ranking in the Top 2/3	Ranking Order
Teamwork	19	100%	1 (Most important)
Work Ethic, Initiative, and Independence	19	100%	1
Communication	19	100%	1
Relationship Building and Compassion	19	100%	1
Problem Solving and Creativity	19	100%	1
Leadership and Role Modeling	18	95%	2
Judgment and Maturity	18	95%	2
Responsibility	18	95%	2
Respect and Cultural Competence	17	89%	3
Risk Management and Safety	17	89%	3
Organization and Time Management	15	79%	4
Knowledge of Youth Dev. Pedagogy	13	68%	5
Willingness to Learn and Accept Supervision	13	68%	5
Adaptability	13	68%	5
Engaged and Camper-Centered	12	63%	6
Program Planning	10	53%	7
Trustworthiness	10	53%	7
Positivity	5	26%	8
Enthusiasm	3	16%	9
Physical Health	2	11%	10
Teaching Ability	2	11%	10
Subject Matter Knowledge	2	11%	10
Passion for 4-H	2	11%	10 (Least important)

- Adaptability
- Willingness to learn and accept supervision
- Trustworthiness, and
- Organization and time management.

DISCUSSION

It is important to identify necessary competencies for camp counselors and to train camp counselors in these competencies so they can be effective in their roles (Gillard & Warner, 2021). This literature highlights the significance of the identification of these 15 competencies critical for camping staff to be effective in achieving desired outcomes for camping programs. Training camp counselors on critical competencies could enable staff to create a camp atmosphere conducive to the overall development of each camper (Epley et al., 2018). For instance, training in communication is necessary for counselors to create a positive experience for campers and promote a safe camp environment (Paver & Wahl-Alexander, 2018). Training in leadership and

role modeling is essential for preparing camp staff to take charge in group situations and leading campers to follow a camp counselor's instructions and shadow their behaviors, which can make their camp experience enjoyable, safe, and educational (Indeed Editorial Team, 2021).

Further review of the 15 identified critical competencies also indicates that training related to these competencies could prepare camping staff to contribute to the 4-H program's goal of positive youth development: many of these competencies are closely related to the eight-item framework of positive youth development (see introduction). For example, competency in 'risk management and safety' enables camp counselors to create a 'safe environment.' Competency in 'respect and cultural competence' contributes to creating an 'inclusive environment' (Samuel & Rose, 2011).

Epley et al. (2017) conducted a similar study with 4-H camp counselors in Ohio and also identified 15 competencies essential for camp counselors. Epley et al. (2017) identified the 15 competencies to be:

- health, wellness, and risk management
- supportive relationships

Critical Competencies of 4-H Camp Staff for Achieving High Performance

Table 2. Rating of Competencies by Delphi Panel Members at the End of the Third Round (N=22)

Competency	Number of Respondents Rated as Extremely Important (1) or Very Important (2)	Percentage of Respondents Rated as Extremely Important (1) or Very Important (2)	Rating Order
Responsibility	22	100%	1 (Most important)
Engaged and Camper-Centered	22	100%	1
Work Ethic, Initiative, and Independence	21	95%	2
Risk Management and Safety	21	95%	2
Relationship Building and Compassion	21	95%	2
Teamwork	21	95%	2
Communication	20	91%	3
Trustworthiness	20	91%	3
Adaptability	19	86%	4
Leadership and Role Modeling	19	86%	4
Judgment and Maturity	19	86%	4
Willingness to Learn and Accept Supervision	19	86%	4
Positivity	19	86%	4
Respect and Cultural Competence	18	82%	5
Health and Wellness	18	82%	5
Problem Solving and Creativity	16	76%	6
Enthusiasm	14	67%	7
Organization and Time Management	12	55%	8
Knowledge of Positive Youth Development Practices	11	50%	9
Teaching Ability	11	50%	9
Subject Matter Knowledge	8	36%	10
Passion for 4H	6	27%	11
Program Planning	4	18%	12 (Least important)

- professionalism
- role model
- teamwork and leadership
- child and adolescent development knowledge
- thinking and problem-solving
- cultural awareness
- program planning
- teaching and facilitating
- professional development
- personal commitment
- communication
- self-direction, and

- understanding the organizational and camp environment.

A review of this list shows that seven of the 15 competencies identified by Epley et al. are closely aligned with the 15 competencies identified by our study.

American Camp Association (n.d.) specifies 13 core competencies for camp counselors. These 13 competencies are:

- business management and practices
- diversity, equity, and inclusion
- evaluation
- family and community connections
- health and wellness
- human resources management

- learning environment and curricula
- nature and environment
- professionalism and leadership
- program planning
- risk management
- site/facility management, and
- youth and adult growth and development.

A close comparison of these 13 core competencies with our results indicates that there are five overlapping core competencies.

The Indeed Editorial Team (2021) published 10 essential competencies of camp counselors, including:

- leadership
- communication
- teamwork
- creativity
- being a role model
- organization
- selflessness
- decision-making
- critical thinking, and
- patience.

The first six of these competencies are comparable with the results of our study.

Presley (2017) outlines 10 skills needed for camp counselors. These 10 skills include:

- being a good role model
- leadership
- communication skills
- problem-solving
- patience
- must like kids
- stamina
- being fair
- respect, and
- low maintenance.

The first four of these 10 camp counselor skills coincide with the results of our study.

The review of these literature sources (American Camp Association, n.d.b; Epley et al., 2017; Indeed Editorial

Team, 2021; Presley, 2017) further confirms that the 15 competencies identified by our study are critical for the success of 4-H camping staff.

Out of the 15 competencies we identified, some are highly critical. For instance, responsibility is a particularly critical competency for residential camping staff, because residential camping staff members are responsible for campers around the clock, have a significant impact on the camp environment, and contribute to the overall quality of the camping program (Epley et al., 2017; Garst et al., 2011).

CONCLUSIONS AND RECOMMENDATIONS

We identified 15 competencies that are critically important for the success of 4-H camp staff. 4-H camping programs vary greatly from state to state in both their structure and staffing; however, 4-H camping experts largely agree on the competencies that are important to the success of the staff in their programs. Since the skills and competency of 4-H camp staff are directly related to the quality of the camping program and the impact the program has on participants (Garst et al., 2011), it is important that staff hiring, development, and evaluation be related to these critical competencies. Programs such as 4-H camps can benefit from competency-based staff selection, recruitment, and performance evaluation (Epley et al., 2017). Competency-based training is effective in the professional development of camp staff (Wahl-Alexander et al., 2017).

This study identified 15 critical competencies that could be useful in standardizing 4-H camp staff training programs. This standardization will allow camp leaders to prioritize training related to competencies that will have the most significant impacts on campers. Using competency-based training will help ensure a basic level of training across the board, allow leadership to make better hiring decisions, spur development of effective training activities, and properly evaluate the successes and failures of staff (Epley, 2014). The competencies identified in this study can be used as the criteria for the evaluation of the effectiveness of camp counselor training programs (Epley et al., 2018). Further research is necessary to explore the effectiveness of these competencies in contributing to positive impacts and outcomes of 4-H camp participants.

We recommend adjusting the hiring practices of camp staff to account for these competencies, especially those that are difficult to train within a short period of time (such as responsibility and work ethic and initiative). It is important to use these critical competencies to develop interview questions and applicant screening criteria for selecting competent candidates for the job. Additionally, we recommend adjusting camp staff hiring practices—including job descriptions, interview questions, and applicant screening—to look for evidence of these competencies in

Critical Competencies of 4-H Camp Staff for Achieving High Performance

applicants when selecting individuals to be successful as 4-H camp staff (Athey & Orth, 1999; Epley, 2014; McClelland, 1973; Rothwell & Graber, 2010; United States Department of Agriculture, 2017). Determining which competencies are most important for hiring and which are most important for staff development will require additional research. This research can also be used to determine the competence of 4-H camp staff, write job descriptions, and plan and develop training programs (United States Department of Agriculture, 2017).

REFERENCES

- American Camp Association (2006a). *Inspirations: Development supports and opportunities of youths' experiences at camp*. https://www.acacamps.org/sites/default/files/resource_library/Inspirations.pdf
- American Camp Association (2006b). *Innovations: Improving youth experiences in summer programs*. https://www.acacamps.org/sites/default/files/resource_library/Innovations.pdf
- American Camp Association. (2016). *ACA standards related to staff screening, supervision, and training*. <https://srfymca.org/wp-content/uploads/2021/02/ACA-Standards-staff-screening-supervision-training.pdf>
- American Camp Association. (n.d.). *Core competency toolkits*. <https://www.acacamps.org/staff-professionals/events-professional-development/core-competencies>
- Athey, T. R. & Orth, M. S. (1999). Emerging competency methods for the future. *Human Resource Management*, 38(3), 215–226. [www.doi.org/10.1002/\(SICI\)1099-050X\(199923\)38:3<215::AID-HRM4>3.0.CO;2-W](https://doi.org/10.1002/(SICI)1099-050X(199923)38:3<215::AID-HRM4>3.0.CO;2-W)
- Baldwin, J., Duerden, M. D., & Witt, P. A. (nd). *The impact of counselor training on new and returning camp counselors*. American Camp Association. <https://www.acacamps.org/article/camping-magazine/impact-counselor-training-new-returning-camp-counselors>
- Bodilly, S. & Beckett, M. (2005). *Making out-of-school time matter: Evidence for an action agenda*. Rand Corporation. <https://doi.org/10.7249/MG242>
- Campion, M. C., Schepker, D. J., Campion, M. A., & Sanchez, J. I. (2019). Competency modeling: A theoretical and empirical examination of the strategy dissemination process. *Human Resource Management*, 59(3), 291–306. <https://doi.org/10.1002/hrm.21994>
- Dworkin, J. B., Larson, R. W., & Hansen, D. M. (2003). Adolescents' accounts of growth experiences in youth activities. *Journal of Youth and Adolescence*, 32(1), 17–36. <https://digitalcommons.unomaha.edu/slceslgen/299/>
- Epley, H. K. (2014). *Defining and describing Ohio 4-H camp counselor core competencies* (Publication No. 3672167) [Doctoral dissertation, The Ohio State University-Ohio]. ProQuest Dissertation and Thesis Global.
- Epley, H. K., Ferrari, T. M., & Cochran, G. R. (2017). Development of a competency model for a state 4-H camp counselor program. *Journal of Park and Recreation Administration*, 35(2), 51–73. <https://doi.org/10.18666/JPra-2017-V35-I2-7211>
- Epley, H. K., Williams, J., Feldhues, K., & Hall, L. (2018). Making eXtreme counselors: A state 4-H camp counselor workshop. *Journal of Extension*, 56(6). <https://tigerprints.clemson.edu/joe/vol56/iss6/11>
- Evenson, J. C. (2020). *Significance of 4-H on the development of youth's coping skills* [Unpublished master's thesis, Montana State University]. <https://scholarworks.montana.edu/xmlui/bitstream/handle/1/15874/evenson-significance-of-4H-2020.pdf?sequence=3&isAllowed=y>
- Galloway, R., Bourdeau, V., Arnold, M., & Nott, B. D. (2013). Tying the design of your camp staff training to the delivery of desired youth outcomes. *Journal of Extension*, 51(4). <https://archives.joe.org/joe/2013august/iw3.php>
- Garst, B. (2010). From what to how: Targeting specific factors that influence outcomes. *Journal of Extension*, 48(6). <http://archives.joe.org/joe/2010december/comm1.php>
- Garst, B., Martz, J., McNeely, N., Bovitz, L., Frebertshauser, D., Garton, M., Lemenestral, S., Nichols, A., & Walahoski, J. (2008). *Measuring camp impacts: The national 4-H camp tool kit for program planning and evaluation*. National 4-H Camping Research Consortium. <https://ohio4h.org/sites/ohio4h/files/d6/files/NCRCNational4-HCampEvaluationToolkit2008Revision.pdf>
- Garst, B., Nichols, A., Martz, J., McNeely, N.N., Bovitz, L., Frebertshauser, D., Garton, M. Le Menestrel, S., & Walahoski, J. (2011) Examining youth camping outcomes across multiple states: The National 4-H Camping Research Consortium (NCRC). *Journal of Youth Development*, 6(1) Article 110601FA001. <https://doi.org/10.5195/jyd.2011.194>
- Gillard, A. & Warner, R. P. (2021). *Evidence-informed guidance for summer camp staff training*. The American Camp Association. https://www.acacamps.org/sites/default/files/resource_library/Evidence%20Informed%20Staff%20Training%20Guidance.pdf
- Hedrick, J., Homan, G., & Dick, J. (2009). Exploring the positive impact of 4-H camp on youth: Identifying differences based on a camper's gender, years of attendance, and age. *Journal of Extension*, 47(6). <https://archives.joe.org/joe/2009december/a5.php>
- Hsu, C.-C., & Sandford, B. A. (2007). The Delphi technique: Making sense of consensus. *Practical Assessment, Research, and Evaluation*, 12, 1–8. <https://doi.org/10.7275/pdz9-th90>

- Indeed Editorial Team. (2021, March 1). *Skills that can help you succeed as a camp counselor*. Indeed. <https://www.indeed.com/career-advice/resumes-cover-letters/skills-of-a-camp-counselor>
- Larson, R., Rickman, A., Gibbons, C., & Walker, K. (2009). Practitioner expertise: Creating quality within the daily tumble of events in youth settings. *New Directions for Student Leadership*, 2009(121), 71–88. [www.doi.org/10.1002/yd.297](https://doi.org/10.1002/yd.297)
- Lile, J. R., Weybright, E. H., & Watson, P. (2021). Using the 4-H essential elements to evaluate teen programming. *Journal of Youth Development*, 16(1). [www.doi.org/10.5195/jyd.2021.906](https://doi.org/10.5195/jyd.2021.906)
- McClelland, D. C. (1973). Testing for competence rather than for “intelligence.” *American Psychologist*, 28(1), 1–14. <https://doi.org/10.1037/h0034092>
- Nasa, P., Jain, R., & Juneja, D. (2021). Delphi methodology in healthcare research: How to decide its appropriateness. *World Journal of Methodology*, 11(4), 116–129. [www.doi.org/10.5662/wjm.v11.i4.116](https://doi.org/10.5662/wjm.v11.i4.116)
- Niederberger, N., & Spranger, J. (2020). Delphi technique in health sciences: A map. *Frontiers in Public Health*, 8, article 457. [www.doi.org/10.3389/fpubh.2020.00457](https://doi.org/10.3389/fpubh.2020.00457)
- Okoli, C. & Pawlowski, S. (2004). The Delphi method as a research tool: An example, design considerations, and applications. *Information and Management*, 42(1), 15–29. [www.doi.org/10.1016/j.im.2003.11.002](https://doi.org/10.1016/j.im.2003.11.002)
- Paver, S. & Wahl-Alexander, Z. (2018, March 1). *Communication strategies to create a positive and safe camp environment*. American Camp Association. <https://www.acacamps.org/article/camping-magazine/communication-strategies-create-positive-safe-camp-environment>
- Presley, B. (2017, May 30). *Top 10 skills needed to be a good camp counselor*. Pittsburgh Parent. <https://www.pittsburghparent.com/top-10-skills-needed-to-be-a-good-camp-counselor/>
- Readdick, C. A. & Schaller, G. R. (2005). Summer camp and self-esteem of school-age inner-city children. *Perceptual and Motor Skills*, 101(1), 121–130. [www.doi.org/10.2466/pms.101.1.121-130](https://doi.org/10.2466/pms.101.1.121-130)
- Roth, J. L. & Brooks-Gunn, J. (2003). What exactly is a youth development program? Answers from research and practice. *Applied Developmental Science*, 24(2), 94–111. [www.doi.org/10.1207/S1532480XADS0702_6](https://doi.org/10.1207/S1532480XADS0702_6)
- Rothwell, W., & Graber, J. (2010). *Competency-Based Training Basics*. Association for Talent Development.
- Samuel, J. & Rose, P. (2011). *4-H National Headquarters fact sheet: Essential elements*. National Institute of Food and Agriculture, USDA. <https://www.nifa.usda.gov/sites/default/files/resource/Essential%20Elements%20of%204-H%20v.2011.pdf>
- Schmidt, R. C. (1997). Managing Delphi surveys using nonparametric statistical techniques. *Decision Sciences*, 28(3), 763–774. <https://doi.org/10.1111/j.1540-5915.1997.tb01330.x>
- Scott, M. & Krinke, C. (2018). *Essential elements for positive youth development*. NDSU Extension. <https://www.ndsu.edu/agriculture/sites/default/files/2022-08/yd1482.pdf>
- Starr, B., Yohalem, N., & Gannett, E. (2009). *Youth worker core competencies: A review of existing frameworks and purposes*. Next Generation Youth Work Coalition. https://www.niost.org/pdf/Core_Competencies_Review_October_2009.pdf
- Stewart, R. (2003). *Emerging educational and agricultural trends and their impact on the secondary agricultural education program* (Unpublished doctoral dissertation). NC State University Libraries. <http://www.lib.ncsu.edu/resolver/1840.16/5757>
- Stone, B., Garza, P., & Borden, L. (2004, November 16–18). *Attracting, developing & retaining youth workers for the next generation*. [Report on conference proceedings]. Wingspread Conference, Racine, Wisconsin. <https://cyfar.org/sites/default/files/Stone%202004.pdf>
- Taggart, A., & Witt, P. A., (2016). *Essential elements of effective youth development programs, report number 36*. Sequor Youth Development Initiative, Texas A&M AgriLife Extension. [www.doi.org/10.13140/RG.2.2.12109.03046](https://doi.org/10.13140/RG.2.2.12109.03046)
- Tolman, J., Pittman, K., Yohalem, N., Thomas, J., & Trammel, M. (2002). *Moving and Out-of-School Agenda: Lessons and challenges across cities*. Forum for Youth Investment. <https://search.issueelab.org/resource/moving-an-out-of-school-agenda-lessons-and-challenges-across-cities.html>
- United States Department of Agriculture NIFA (2017). *Growing together: 4-H professional, research, knowledge and competencies 2017*. <https://nifa.usda.gov/sites/default/files/resources/4-H%20PRKC%202017%20Guide.pdf>
- Vance, F. (2012). An emerging model of knowledge for youth development professionals. *Journal of Youth Development*, 7(1). <https://jyd.pitt.edu/ojs/jyd/article/viewFile/151/137>
- Vandell, D. L., Reisner, E. R., Pierce, K. M., Brown, B. B., Lee, D., Bolt, D., & Pechman, E. M. (2006). *The study of promising after-school programs: Examination of longer-term outcomes after two years of program experiences*. Madison, WI: Wisconsin Center for Education Research. https://www.researchgate.net/publication/237570724_The_Study_of_Promising_After-School_Programs_Examination_of_Longer_Term_Outcomes_After_Two_Years_of_Program_Experiences
- VonDielingen, H. (2018). The essential elements of positive youth development. *The Tribune*, December 1, 2018.

Critical Competencies of 4-H Camp Staff for Achieving High Performance

http://tribtown.com/2018/12/01/the_essential_elements_of_positive_youth_development/

- Wahl-Alexander, Z., Howell, S., & Donahue, K. (2016). *Summer camp counselors' self-perceived competency prior to, and following staff training*. American Camping Association 2016 National Conference, Atlanta, GA.
- Wahl-Alexander, Z., Howell, S., & Richards, K. A. R. (2017). Influence of a training program on camp counselors' perceived competency when accounting for prior camp experience. *Journal of Outdoor Recreation, Education, and Leadership*, 9(3). <https://doi.org/10.18666/JOREL-2017-V9-I3-7866>
- Wahle, A., Owens, M. H., & Garst, B. A. (2019). Strengthening the 4-H Essential Elements of Positive Youth Development at Camp. *The Journal of Extension*, 57(5). <https://tigerprints.clemson.edu/joe/vol57/iss5/8>