

## Assessing Experiences of Children Who Attended a Camp for Children with Cancer and Their Siblings: A Preliminary Study

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**Abstract** Summer camps are commonly implemented as a psychosocial intervention for children with chronic illnesses; however, there have been few published consumer (parent and child) satisfaction evaluations of summer camps. Such evaluations are important both for improving existing services for children and families, as well as to build an empirical understanding of camp interventions. To illustrate the use of a program evaluation methodology within the context of a chronic illness summer camp, a program evaluation was conducted of a camp for children with cancer and their siblings. Results from the evaluation indicated that parents and children were highly satisfied with the camp experience, ranging from the food, staff, facilities, to campers' activities. Campers reported that the recreation opportunities, peer support, and respite from their lives at home were reasons they appreciated the camp experience. Parents reported that peer support for their children, respite for themselves and their children, and improvements to their child's behaviors and level of independence were helpful features of the camp experience.

**Keywords** Summer camp · Chronic illness · Pediatric · Oncology · Cancer · Sibling

Approximately 12,400 children and adolescents in the United States are diagnosed with cancer each year (CureSearch 2005). As a result of recent medical advances, death rates for childhood cancer have decreased significantly in the past several decades; however, the importance of addressing challenges faced by children with cancer, such as social impairment or elevated levels of distress, still remains critical (CureSearch 2005; Vannatta and Gerhardt 2003). Additionally, childhood cancer greatly affects the family members of the child who is diagnosed. For example, siblings of chronically ill children are at

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increased risk for developing mental health problems, such as anxiety or depression (Kiernan and MacLachlan 2002).

In addition to other psychosocial interventions, one response to the number of children and adolescents affected by chronic illness has been to develop therapeutic recreation camps. The goals of these camps vary from increasing disease-related knowledge (e.g., understanding the symptoms of the illness and the rationale for the treatment regimen) to improving self-esteem; however, the majority of camps embrace the basic mission of meeting the medical needs of campers and improving their psychosocial functioning while providing them with a fun, normalizing summer camp experience (Hunter et al. 2006). It is generally accepted, often due to anecdotal evidence, that therapeutic camps meet stated goals or are beneficial to campers' overall well-being (Brown 2005). Despite the perception that camps for chronically ill children and adolescents are an effective intervention, scientific investigation regarding the process and effectiveness outcomes of these camps is needed (Briery and Rabian 1999). One way to perform such an investigation is by conducting a program evaluation.

Program evaluations can be used to assess the effectiveness of programs (e.g., measurement of whether desired outcomes are achieved), to monitor the way services are delivered, and to identify key components or weaknesses of programs (Roberts and Steele 2005). Program evaluations necessarily differ from laboratory science or even controlled clinical trials of psychotherapy in that frequently, the evaluator is external to the program administration and may have little control or influence over numerous aspects of the evaluation. Thus, such evaluations often must accommodate the viewpoints of camp administrators, the individual camp's goals or foci, and the logistics of camp schedules. As a result of the real world aspects of program evaluation research and concomitant limitations, Cook and Shadish (1986) have called program evaluation "the worldly science" (p. 193).

Typically, program evaluations include the collection of demographic information and relevant history of the program's consumers, such as a child's medical history and prognosis. These data can assist in identification of individual differences among program participants which may influence outcomes. Program evaluations differ widely in design and measurement depending on the purpose of the evaluation. For example, evaluations designed to determine whether a program meets a specific goal, such as successfully increasing disease-related knowledge, are different from evaluations which aim to determine consumer satisfaction with the camp experience. Program evaluations may also use a variety of measurement methods, including quantitative ratings (e.g., closed-ended, likert-scale responses), open-ended questions, interviews, and focus groups. Evaluation measures may include assessments of the populations that programs are serving (e.g., to describe the characteristics of program participants), program outcomes (e.g., whether participants are benefiting from the program in the short- and long-term), whether programs are meeting their specified goals, satisfaction ratings from participants, and feedback from the individuals implementing the program (Roberts and Steele 2005). When a program has been evaluated through different means, the knowledge acquired has the potential to benefit other similar programs, inform consumers of effectiveness and outcomes, elucidate mechanisms of change, and provide feedback, which can be used to modify or expand programs.

Program evaluation might be particularly useful for evaluating summer camps. The evaluations can be tailored for individual camps in order to meet their needs and provide the camp directors and funders with feedback on areas of interest. For example, a camp may choose to focus the evaluation on whether they are meeting their stated goals or

mission statements (e.g., Hunter et al. 2006). These types of results may then be used to modify services or may support fundraising efforts. Logistically, evaluations can be individualized in order to accommodate pragmatic issues unique to specific camps, such as having limited time during camp sessions to collect evaluation data. And finally, program evaluations of summer camps help to build the empirical base supporting and justifying the services that summer camps provide.

Despite the potential utility of conducting program evaluations of summer camps, there have been a limited number of evaluations of camps for chronically ill children. This is surprising particularly in light of the number of chronic illness summer camps that exist. For example, in the U.S., there are more than 100 camps for children with cancer (Ped-Onc Resource Center 2008), and over 280 accredited camps for children with a variety of chronic illnesses (D. Swindle; personal communication, July 26, 2010). In particular, there are few evaluations that focus on parent and camper satisfaction with the camp experience.

This lack of evaluation may be for a variety of reasons, including the practical challenges of conducting an evaluation (e.g., deciding when, where, and how campers and/or families will be asked to complete the evaluation). Individual camps may also conduct evaluations that are used internally for decision-making, but the results are not disseminated externally. In addition, camps may not have the resources or knowledge needed to plan and implement an evaluation. Beyond the practical challenges and realities associated with individual camps, camps may also have varying needs related to an evaluation. For instance, because camps vary in the goals they set, measures and assessment methods will differ (e.g., Hunter et al. 2006; Meng et al. 1998). For these reasons, camps may benefit from partnering with outside personnel, such as applied researchers, who can help them create evaluations that will meet the camp's needs.

Previous camp evaluations have generally focused on desired outcomes which may be tied to camp-specific goals. For example, camps focused on illness self-management skills (e.g., for asthma or diabetes) have evaluated education efforts by assessing camper knowledge and abilities related to self-management and outcomes, such as number of emergency room visits related to illness exacerbations (Meng et al. 1998). Similarly, Hunter et al. (2006) examined whether a diabetes camp met its mission statement, which included the goals of increasing self-management skills, enhancing emotional adjustment, and enhancing self-esteem in campers. Other evaluations have focused on desired outcomes which are particularly relevant to the populations they serve. For instance, a camp for pediatric burn victims evaluated whether they successfully increased camper's self-esteem and decreased perceptions of alienation from others (Rimmer et al. 2007). Outside of chronic illness summer camps, evaluations have focused on a range of constructs. For example, an evaluation of randomly selected, accredited camps across the U.S. investigated parents' perceptions of child outcomes such as leadership abilities, social functioning, and self-esteem (Henderson et al. 2007). In addition, Kirschman et al. (in press) examined whether a summer camp for inner-city youth increased campers' sense of hope.

The results of existing evaluations for chronic illness summer camps generally suggest that the camp experience may be beneficial for children. For example, Briery and Rabian (1999) found that children with asthma, diabetes, or spina bifida reported more positive attitudes towards their illness at the end of camp than at the start. Results of other studies suggest benefits of camp include reduced isolation or alienation and increased self-esteem (Rimmer et al. 2007; Tiemens et al. 2007).

When considering the general findings of previous camp evaluations it is important to acknowledge that published camp evaluations have not always been able to assess both parent and camper perspectives of the camp experience. This may be because some camps

have limited funding to complete larger evaluations that include multiple reporters or that involve multiple mailings. Camps may also find it easier to have campers complete questionnaires while they are at camp. Alternatively, camps may be more interested in or give more weight to parents' perspectives on their children and the changes parents observe in their children pre- to post-camp. Obtaining different perspectives (i.e., parent and child), however, may be important so that camps can receive feedback and make modifications that address the concerns of different members of the family. Although some camp evaluations have assessed parent and camper satisfaction, most have not assessed this satisfaction upon campers' return to their daily lives. Satisfaction ratings after some period of time following camp (e.g., several months) might be different from ones immediately following or during camp sessions and may represent campers' and parents' long-term perceptions of the camp. In addition, while previous evaluations have focused on child outcomes following camp (e.g., increased self-esteem), the majority of evaluations were not able to assess what aspects of camp are helpful to campers or the reasons children enjoy attending camp. Investigating these perceptions of how helpful different aspects of a camp might be could provide insight into the mechanisms underlying the positive outcomes observed. Asking open-ended questions may also allow researchers and camps to identify specific areas where camps are benefiting children and families and areas where camps could improve.

Beyond the aforementioned limitations of the existing camp literature, it is also notable that there have been few studies evaluating camps for children with cancer and camps for siblings of chronically ill children. Specifically, based on literature searches in PsycINFO and MEDLINE, and a review article (Martiniuk 2003), it appears that since the 1970s, at least 10 camps for children with cancer or their siblings have received some form of evaluation with most considering changes in self-esteem and self-concept or perceptions of camp and camp activities (e.g., Torok et al. 2006). The limited number of published evaluations of camps for children with cancer and their families is of concern given that a majority of the states in the U.S. have at least one pediatric oncology camp (Ped-Onc Resource Center 2008). Furthermore, no studies could be identified which focused on camper and parent satisfaction with the cancer camp experience.

The current program evaluation of a camp for children with cancer and their siblings (Camp Okizu) might serve as a model for how a camp evaluation can be tailored to meet the needs of a particular camp and assess multiple perspectives on the camp experience (parent and child perspectives). In addition to satisfaction ratings, the evaluation examined child- and parent-reported reasons that camp is helpful to them. The current project also aimed to determine whether mail-based surveys were a feasible method of assessment for families' perspectives following campers' return to their daily lives. Finally, the evaluation focused on a summer camp for pediatric oncology patients and their siblings, both populations which have received limited attention in the camp literature.

Camp Okizu aims to provide recreational, respite and peer support programs to meet the needs of all members of families affected by childhood cancer. Camp Okizu holds 7 1-week residential camp sessions during the summer (3 sessions for children with cancer, and 4 sessions for siblings of children with cancer). The residential camping sessions provide children affected by cancer with normal life experiences that they may not have otherwise due to cancer treatment or the effects of cancer. For example, campers are offered a variety of outdoor and recreational opportunities such as swimming, fishing, archery, arts and crafts, and completing ropes courses. In addition, Camp Okizu provides children with support around issues relating to cancer (e.g., a discussion group for bereaved siblings) and provides respite for parents. Based on the camp's mission of providing

recreational, respite, and peer support programs, we hypothesized that children and their parents would report a high level of satisfaction with the camp across these domains. We also hypothesized that campers and their parents would report that respite and peer support were reasons they liked camp or found camp to be helpful. Finally, we hypothesized that the mail-based survey would be a feasible method of gathering information from families about their perspectives on the camp after sessions had ended.

## Method

### Participants

Participants were children with cancer, siblings of children with cancer, and their parents (fathers or mothers). Children ranged in age from 5 to 18 (average age of children with cancer = 12.7 years,  $SD = 3.1$  years; average age of siblings = 11.6 years,  $SD = 2.9$  years). Participants were recruited from Camp Okizu, a camp for pediatric oncology patients and siblings of pediatric oncology patients. Campers are referred to Camp Okizu by medical treatment teams in Northern California medical centers. Children are eligible to attend Camp Okizu if they either currently have, or are survivors of cancer, as well as children who have a sibling with cancer or had a sibling who died from cancer.

Eighty-nine families participated in the current study (78 mothers, 9 fathers, 56 children with cancer, 73 siblings of children with cancer, 8 of whom were bereaved). All children participating in the study had attended a camp session during the previous summer. Fifty-eight male (45.0%) and 71 female (55.0%) campers participated in the study. The majority of participants were White (74.2%) and the remaining participants were Black (5.5%), American Indian (3.1%), Asian (4.7%), or identified as an ethnicity not listed (12.5%). Campers attended one of seven, 1-week long camp sessions (4 sessions for siblings, 3 sessions for oncology patients). The number of years that campers had attended Camp Okizu ranged from 1 (23.6%) to 11 (1.6%), with the average number of years being 3.4 ( $SD = 2.7$  years). The mean age of diagnosis for oncology patients was 6.9 years ( $SD = 4.2$  years) and the majority of patients underwent chemotherapy treatment (58.4%). The current health status for the majority of oncology patients was off treatment (89.3%), with the remaining participants on treatment (10.7%).

Forty parents indicated that they were a college graduate (44.9%), 27 parents indicated that they were a high school graduate (30.3%), 17 parents indicated that they had attained a graduate degree (19.1%), 1 parent indicated that they had received some high school education (1.1%), and 1 parent indicated that they had received a 9th grade education or less (1.1%). The median income of participating families was in the range of \$75,000 to \$99,999 ( $SD = \$50,000$ ).

### Measures

Parents completed a Demographics form which included questions about socioeconomic status, ethnicity, parent education level, and number of years each child attended camp. Parents also answered questions about their child's oncology medical history, if applicable (e.g., past treatment, current health status, and child's age of diagnosis).

All campers (both siblings and children with cancer) completed the *Camp Evaluation Survey for Campers*. This questionnaire was created for the current study based on the camp's mission statement and with feedback from camp administration. The measure

consists of 26 items and assesses camper satisfaction with the camp experience and reasons campers like the camp (see Table 1). Campers were asked to rate camp activities (e.g., cabin group activities, waterfront activities, special events) and aspects of camp (e.g., food, counselors, and camp staff) on a 5-point Likert scale ranging from “really liked” to “really disliked.” Faces with varied expressions (e.g., smiling to frowning), in addition to word ratings, were used to illustrate response choices. Item scores were reverse coded so that higher scores indicated higher levels of satisfaction. Additionally, campers were asked open-ended questions about their friendships at camp and what could be done to improve the camp.

Based on the camp’s mission statement, three categories of items were created to assess camper satisfaction for specific camp components, in addition to an overall total score. The categories included satisfaction with Recreation, Peer Support, and Camp Features (e.g., food). The five Recreation items assessed events and activities (e.g., waterfront activities, special events, special interest activities, cabin group activities, and night time activities). The three Peer Support items assessed camper satisfaction with cabin group activities, bereaved siblings group activities, and a group inspiration activity. The three Camp Features items assessed satisfaction with the food, counselors, and staff at Camp Okizu.

Additionally, the *Camp Evaluation for Campers* assessed reasons why children like attending camp (Recreation, Respite, Peer Support, and Camp Features items). Children rated the reasons they liked attending camp on a 4-point scale from “not at all a reason I like camp” to “definitely a reason I like camp.” Faces with varied expressions again accompanied each response choice. Item scores were reverse coded so that higher scores indicated that the item was more strongly a reason that children liked camp. The Recreation item assessed whether campers viewed being outdoors as a reason for liking camp. The Respite item assessed whether campers viewed getting a break from medical treatments as a reason for liking camp. The six Peer Support items assessed whether social activities such as making new friends, being part of a bereaved siblings group, and meeting other children with cancer (or other siblings of children with cancer) were reasons they liked camp. The three Camp Features items assessed whether campers viewed the food, counselors, or other staff at camp as reasons for liking camp.

Parents completed a *Camp Evaluation Survey for Parents*. Similar to the *Camp Evaluation Survey for Campers*, the *Survey for Parents* was based on the camp mission statement and feedback from camp administration. The measure consists of 20 items rated on a 4-point likert scale ranging from “very dissatisfied” to “very satisfied” and assesses parent satisfaction with children’s camp experiences and the reasons the camp was helpful (see Table 1). In the *Camp Evaluation Survey for Parents*, parents rated their satisfaction with Camp Okizu in a range of areas. Based on the camp’s mission statement, three categories of items were created to assess parent satisfaction, in addition to an overall total score for parent satisfaction. The combinations of items included one item on satisfaction with Recreation (camp activities available to their children), three items on Respite (camp medical care, responsiveness of camp administration, transportation offered by camp), and three items on Camp Experience (food, counselors, camp facilities). Parents were also asked questions about how helpful different aspects of camp were to their child(ren) on a 4-point likert scale ranging from “not at all” to “very much.”

Based on the camp’s mission statement, three categories of items were created to assess reasons parents viewed camp as helpful. Items were rated on a 4-point likert scale ranging from “not at all a reason camp is helpful” to “very much a reason camp is helpful.” The combinations of items were Respite, Peer Support, and Child Improvements. The three Respite items assessed whether parents viewed knowing their children had adequate

**Table 1** Camp evaluation survey for campers and parents

## Items and categories

*Parent satisfaction*

## Recreation

- Activities available to your child

## Respite

- Medical care

- Responsiveness of camp office to your concerns or questions

- Transportation to and from camp

## Camp experience

- Counselors

- Facilities (cabins, dining hall, etc.)

- Food

*Reasons parents view camp as helpful*

## Respite

- I know that my child has adequate medical care at camp

- I know my child is in a safe environment at camp

- I have a break from my caretaking responsibilities for my child

## Peer support

- I know my child is with other people who understand their experience

## Child improvements

- Camp helps my child feel good about him/herself

- My child's behavior improves after camp

- My child is more independent after camp

*Camper satisfaction*

## Recreation

- Waterfront activities

- Special events (dance, outdoor dinner)

- Special interest activities

- All-camp activities

- Night-time activities (star-watching, night yoga)

## Peer support

- Cabin group activities

- Inspiration (opportunity for campers to share cancer-related experiences)

- Bereaved siblings group

## Camp features

- The food

- The counselors

- Other camp staff

*Why children like attending camp*

## Recreation

- Being outdoors

## Respite

- At camp, I get a break from my medical treatments

**Table 1** continued

## Items and categories

## Peer support

Camp is a safe place where I can trust people

Inspiration

Making new friends

Seeing old friends

Bereaved siblings group

Met other kids who have cancer or a sibling with cancer

## Camp features

The counselors

The food

The camp staff

medical care, taking a break from caretaking responsibilities, and knowing their children is/are safe at camp as reasons camp is helpful. The Peer Support item assessed whether parents viewed children being with others who understand their situation as a reason camp is helpful to their children. The three Child Improvements items assessed whether parents noticed improvements after camp in their children's feelings about themselves, behavior, or level of independence and if these improvements were a reason they considered camp to be helpful. Finally, parents were asked open-ended questions on suggested improvements to the camp, how camp is helpful to their children, and general comments and feedback. Copies of the evaluation questionnaires can be obtained from the corresponding author.

## Procedure

Recruitment occurred in two waves; the first wave of recruitment targeted the families of all children registered for camp during summer 2008 ( $n = 715$  children). Specifically, all families who registered for camp in the summer of 2008 were mailed a cover letter describing the study, consent form, and stamped return envelope. Parents were asked to sign the consent form and return it to study investigators. Both fathers and mothers, as well as legal guardians (if applicable) were eligible to participate in the study. Following the first mailing, 78 families returned signed consent forms. A second wave of recruitment mailings was conducted to ensure that all families were given an opportunity to participate. Following the second mailings, 11 families returned consent forms. Families who consented to participate in the study were mailed questionnaires after camp sessions had concluded, during the months of October and November. At this time, parents were also provided with an assent statement to read to children and a postage-paid return envelope for the questionnaires. Of those who returned consents, all families completed and returned the study questionnaires. This represented an overall camper participation rate of 18%. All procedures for the current study were approved by the first author's university institutional review board.

## Statistical and Qualitative Analyses

Mean and standard deviations for the categories of items and overall satisfaction scores were calculated across campers and across parents. In addition, a correlational analysis was



conducted to examine the relationship between sibling and oncology camper satisfaction. Qualitative data were analyzed via a content analysis in which categories of responses or themes were identified within responses to the open-ended questions (Miles and Huberman 1994; Patton 2002). Both inductive and deductive analyses were used to examine the data (Patton 2002). Specifically, inductive analyses were used to examine responses to the general feedback questions and deductive analyses were used to examine responses to questions about certain aspects of camp such as campers' friendships or how camp is helpful. Through the inductive and deductive analysis process, the open-ended responses were grouped into categories or themes that were relevant to the current study's research questions, namely obtaining feedback on the camp's services and features and suggestions for how the camp could be improved.

## Results

### Camper Evaluation

See Table 2 for campers' mean ratings for the satisfaction items and items focused on reasons they liked camp. The overall mean satisfaction rating indicated that campers were highly satisfied with the camp. On average, campers were highly satisfied with the recreation opportunities, camp features, and peer support. In terms of the reasons that campers liked camp, all items were highly endorsed. Specifically, campers reported that they "liked" to "really liked" camp because of the recreation opportunities, peer support, camp

**Table 2** Mean scores (satisfaction, reasons children like camp and parents find camp to be helpful)

	Mean	SD
<i>Child</i>		
Satisfaction		
Recreation	4.6	0.4
Peer support	4.3	0.7
Camp features	4.6	0.4
Total	4.5	0.4
Reasons child likes camp		
Recreation	3.6	0.6
Respite	3.4	0.7
Peer support	3.6	0.5
Camp features	3.6	0.5
<i>Parent</i>		
Satisfaction		
Recreation	3.6	0.9
Respite	3.5	0.9
Camp experience	3.5	0.9
Total	3.5	0.9
Reasons camp is helpful to parent		
Respite	3.6	0.5
Peer support	4.0	0.2
Child improvements	3.6	0.5

features, and respite. There was a significant correlation between sibling camper and oncology camper overall mean satisfaction scores ( $r = .31, p < .001$ ).

### Parent Evaluation

See Table 2 for parents' mean ratings for the satisfaction items and items focused on reasons camp is helpful for their children. The overall mean satisfaction rating indicated that parents were generally "satisfied" to "very satisfied" with the camp. Specifically, parents were "satisfied" to "very satisfied" with the recreation opportunities their children received at camp, camp features, and the respite parents received. Parents viewed peer support, respite, and child improvements ( $M = 3.6, SD = 0.5$ ) as "somewhat" to "very much" reasons why camp is helpful.

### Qualitative Data

A large majority of the campers ( $n = 103, 80%$ ) and their parents ( $n = 81, 91%$ ) who participated in the study provided answers to the open-ended questions. Seven categories of responses or themes emerged within the participants' responses based on the open-ended data including: structure of sessions, treatment of older campers, length of sessions, food, activities, services to families, and counselor services. Open-ended responses indicated that campers appreciated the camp experience for a number of reasons, including having a break from their home lives, the supportive and understanding atmosphere of camp (counselor services) and the feeling of belonging while they were at camp. Campers reported that they learned new skills at camp ranging from making friendship bracelets and kayaking (activities) to acquiring leadership skills and learning to be more open to others. Campers also proposed ideas for new activities to be offered at camp (e.g., cooking, fishing, dance or yoga, drama) and requested more teen-specific activities (treatment of older campers). Echoing children's responses, parents reported that camp was helpful to their children because of the level of peer support and understanding their children received, the confidence and independence boost children received, and the escape from stressful daily life. Parents also proposed a variety of ways that the camp might be altered or improved: longer sessions, offering a winter session, separating groups by type of cancer and school grade (structure of session), making healthier food available, and helping families stay in contact during and after camp (services to families).

### Discussion

The current study provides an example of how program evaluation methodology can be tailored to meet the needs of a pediatric chronic illness summer camp. In particular, the current evaluation assessed multiple perspectives on the camp experience, including reasons that campers like camp and parents perceive camp to be helpful for their children. The current study was able to assess these perspectives several months following the camp sessions, after children had returned to their daily lives. Consistent with our hypotheses, the results suggest that parents and children were highly satisfied with the camp experience, including on domains directly related to the camp's mission to provide recreation, respite, and peer support. In addition, the current results indicate that satisfaction scores for oncology and sibling campers were positively correlated and specifically, appear to be high for both groups. Also consistent with the hypotheses, campers and parents highly endorsed

respite and peer support as reasons that they liked camp or found it to be helpful for their children. In addition, campers reported liking camp for the recreation opportunities and parents reported finding camp to be helpful for their children because of improvements to their child's behaviors and level of independence. The qualitative responses that participants provided echoed these quantitative findings. Campers reported that they learned new skills while they were at camp and that they particularly appreciated the supportive environment. Parents also noted that peer support was an essential component of why camp is helpful to their children and they noted that camp provided their children with respite from stresses in their lives outside of camp. Based on the current evaluation, it appears that Camp Okizu is meeting its goal of providing respite, peer support, and recreation opportunities to children and their families.

The current study's findings of high levels of satisfaction are consistent with the few published satisfaction evaluations of other chronic illness summer camps (Hunter et al. 2006; Kiernan et al. 2005). However, previous studies have not always been able to evaluate whether camps are meeting their mission statements, as the current study did. An exception to this is an evaluation by Hunter et al. (2006), which indicated that a camp for children with diabetes was not fully meeting its goals to increase camper self-management skills and self-esteem.

There are several notable features of the current study which may inform future research on summer camps. This study was one of the first to include both parent and camper perspectives on satisfaction with the camp. The method of incorporating both parent and camper evaluations may be particularly important for chronic illness summer camps, which often strive to meet the needs of all members of the family. Moreover, multisource data assists in reducing the possibility of biased responses and enables investigators to generate or rule out alternative explanations for results (Holmbeck et al. 2002). In addition, consistent with our hypothesis, the current study demonstrated the feasibility of assessing parent and camper satisfaction via mail-based surveys after families return to their daily lives. This method may be particularly useful for assessing the long-term impact of summer camps on the outcomes of chronically ill children and their families. Finally, the results of the current study suggest that camps for children with cancer and their siblings may be perceived as helpful to children and their parents. As a result, future studies should continue to examine the utility of such camps for this chronic illness population.

The results of the current study should be interpreted with several limitations in mind. First, some measurement items (e.g., Peer Support) were unique to either the parent or child evaluation forms, depending on who was expected to be the more accurate reporter. For example, we expected campers to be the best reporters on their perceived level of peer support at camp. However, future research might also incorporate quantitative assessments of parental satisfaction with peer support at camp. Second, the specific results of the current study may not be fully generalizable to the larger population of pediatric oncology patients, because the current participants attended a particular camp, were predominantly Caucasian, and included parents who were well-educated. Third, although the current study's participation rate was consistent with those of previous studies using mail-based surveys following camp completion (e.g., Hunter et al. 2006), families who have more positive perceptions of the camp may have been more willing to participate. However, it is also possible that families who had very negative experiences would have been likely to respond. Thus, the overwhelmingly positive feedback that participants provided further supports the notion that families were highly satisfied with the experience children received at Camp Okizu. Interestingly, there is some evidence that suggests that parents

who provide negative feedback on children's camp experiences still report (in qualitative interviews) that their children benefited from the camp experience (Michalski et al. 2003).

Program evaluations such as the current one can provide camp administration with feedback on what they are doing well and ideas for how they can more effectively meet camp goals. Although participants in the current study were generally satisfied with the camp, parents and campers offered suggestions to enhance particular components of camp (e.g., offer more diverse activities or activities that fit the interests of campers of different ages). This particular suggestion might be important for the camp to address given its aim to provide recreational opportunities to campers. Parents also suggested a variety of changes that could be made, ranging from length of camp sessions to methods of facilitating communication between family members during camp. Camps may find that the extent to which they address parent and camper concerns or suggestions may lead to increases in satisfaction ratings and a greater fulfillment of their mission statements. However, as might be expected with any feedback process, camps might not be able to address all suggestions provided due to logistical or funding challenges.

Future research should aim to replicate the current evaluation with other camps focused on similar illness populations. Researchers will also want to establish the validity and reliability of the outcomes they assess and any evaluative measures they use with camp populations. Given that camps serving special populations, such as children with chronic illness, may offer more limited opportunities for measure design and testing (e.g., due to smaller sample sizes, and that they serve families experiencing ongoing stress related to coping with a chronic illness), researchers might focus initially on developing measures for camps targeting children without special needs.

Importantly, the current results suggest that there may be numerous aspects of camps which families find to be helpful. A key next step will be to examine whether these characteristics of camp (e.g., peer support) account for the positive outcomes that have previously been reported in the literature (e.g., increased self-esteem, more positive attitudes towards the illness). For example, it may be useful to investigate what factors differentiate campers who reported a positive experience from those who did not. Identification of these factors may lead to targeted efforts to maximize positive experiences and outcomes for a greater number of campers. Future studies will also need to replicate the current results in more economically and ethnically diverse samples. Finally, due to the fact that the current sample was restricted in its economic and ethnic diversity, it will be important to determine possible barriers to recruiting more diverse populations. For example, the study methodology might be revised in order to increase recruitment of a more diverse population.

In sum, the current study demonstrated that it is feasible to assess both camper and parent perspectives on a chronic illness summer camp using a mail-based survey. The results indicated that families are highly satisfied with the camp experience, and that families perceive the camp experience to be useful and enjoyable to children for a variety of reasons. Future evaluations should continue to systematically evaluate camp outcomes and consumer satisfaction. It will be important to continue building the empirical base justifying the use of summer camps as a psychosocial intervention. In addition, evaluations will allow camps to build upon existing components which families identify as beneficial and continually improve their services.

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