

Quantitative Paper

The Role of a Disability-Specific Camp in Promoting Social Acceptance and Quality of Life for Youth With Hearing Impairments

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Abstract: Social acceptance, a foundation for friendship development and social inclusion, occurs when there is equal status among individuals, regardless whether the individual has a disability or not. Disability-specific residential camps for youth with similar life experiences may be one environment where social acceptance occurs. The purpose of this study was to examine the relationship between social acceptance and health-related quality of life for youth attending a residential summer camp specifically designed for people with hearing impairments who have cochlear implants or hearing aids. Results indicated disability specific residential camps may have an impact on social acceptance and perceived health related quality of life.

Keywords: *disability-specific residential camp, social acceptance, health-related quality of life, youth with hearing impairments, therapeutic recreation process, ICF Model*

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Social acceptance has been described as equal status and valued treatment within peer groups (Schwartz, 1988). Gellman (1959) noted individuals with disabilities are socially accepted when they are perceived and treated as equals by their peers, regardless of their condition. Further, social acceptance has previously been identified as the basis for friendship development (Schleien & Heyne, 1997) and social inclusion (Devine & Dattilo, 2000; Devine & Lashua, 2002). Historically, individuals with disabilities, including those with hearing impairments, have experienced a lack of social acceptance by their peers without disabilities having a direct impact on their inclusion in many aspects of community life (Hahn, 1987; Olkin & Howson, 1994).

Inclusion in community life can mean equal participation of individuals with and without disabilities in housing, employment, education, and leisure (Devine & Piatt, 2013). Of all of these settings, leisure contexts are forums where social acceptance of individuals with disabilities is most likely to be evident (Devine & Koch, 2003; Rumrill, Koch, Murphy, & Jannarone, 1999).

A hallmark of social acceptance is the ease and enjoyment of social interaction between people, a sense of belonging, and the opportunity to create relationships of equal status (Schwartz, 1988). In addition, the World Health Organization (WHO, 2012) has identified social acceptance as an indicator of quality of life (QOL). Goffman (1963) noted social acceptance is dictated by different situations. For example, in one context, a person may perceive to be an outcast while in a different context the same person may perceive to be socially accepted. One leisure context in which social acceptance has been found to be evident is disability-specific

residential camps for youth (Devine & O'Brien, 2007). Leisure contexts are also environments where people express who they are through activity engagement and developing positive social relationships (Kleiber, Walker, & Mannell, 2011) with other community members.

Disability-specific residential camps offer unique therapeutic recreation experiences because campers interact with each other for an intense period of time (Dawson, Knapp, & Farmer, 2012; Goodwin, Leiberman, Johnston, & Leo, 2011). One unique experience within these types of camps is when youth with similar disabilities (i.e., youth with cochlear implants) have the opportunity to connect and bond through similar life experiences (Dawson et al.; Goodwin & Staples, 2005). This opportunity to connect with peers who have similar disability-related conditions can be a unique experience for these youths based on school and home peer groups (Dawson et al.).

The Role of Disability-Specific Residential Camps

Disability-specific residential camps based on the principles of therapeutic recreation are one context to examine perceptions of social acceptance. The residential camp experience and the broad choice of activities offered at camps aim to provide unique opportunities for campers to learn and improve skills for which they otherwise might not have a chance in a safe and supportive social setting. Specifically, camps offer the chance to learn independent living, communication, and social interaction skills as well as to improve health-related quality of life (HRQL).

One of the goals of residential camp experiences is to create a sense of community among campers. Gill (1997) found the community-building aspect of Camp and Youth with Hearing Impairment

disability-specific camps is perhaps the most influential component of these experiences on campers because it sets the stage for a sense of belonging and social acceptance. In particular, it is the community-building aspect that helps youth to connect and bond with others and understand what it means to live life with a disability (Dawson et al., 2012; Gill).

According to Gill (1997), being in contact with others who share similar life experiences provides youth with disabilities a respite from the notion of “disability isolation” often felt in their home communities. Goodwin and Staples (2005) noted this respite gives “social and cultural meaning to the segregated camp context” (p. 167). They conclude being in an environment “where disability [is] the norm and not the exception” (p. 168) can lead the youth involved to express “feelings of acceptance, understanding, and a sincere connection to the other campers” (p. 169). Similarly, Michalski, Mishna, Worthington, and Cummings (2003) found campers in disability-specific camps tend to display a connection with one another and fewer feelings of isolation and inadequacy. Lastly, Goodwin et al. (2011) suggested disability-specific physical activity contexts offer a sense of community based on the tenants of social acceptance such as a sense of belonging, perceptions of equal status among peers, and shared experiences.

For youth with hearing impairments, disability-specific residential camps that facilitate the therapeutic recreation process may prove to be extremely beneficial. This specific environment may help these youth gain insight to address the social and functional challenges they face in mainstream society by providing a chance to explore and develop a sense of who they are through an environment rich in peer support. This may then have

carry-over effects when they re-enter a more inclusive setting in their home communities.

Quality of life and Persons with Hearing Impairments

Quality of life, defined by the WHO (2012) as “individuals’ perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns” (p. 405), has been a key component in examining cost-effective community-based services, including camps. More specifically, HRQL refers to the domains of health that the current health system can directly impact (Varni, Seid, & Kurtin, 1999). It is a concept that has been examined as it relates to persons with disabilities within leisure settings including camps (Devine & Dawson, 2010; Michalski et al., 2003), but has not been examined with youth who live with hearing impairments. This is problematic because it is unknown how these youth actually benefit from disability-specific camp experiences.

According to Martin and Bat-Chava (2003), “Living with a hearing loss affects many dimensions of someone’s experience, including social functioning.” (p. 511). Most youth with hearing impairments share environments with hearing children, both in educational and recreational settings (Martin & Bat-Chava). Borton, Mauze, and Lieu (2010) add in social environments shared with youth without disabling conditions where, “having assistive technology [is] viewed as a hindrance to being ‘normal’” (p. 67). Some individuals with hearing impairments have sought to use assistive devices, such as cochlear implants to make use of hearing abilities to improve quality of life (Edwards, Hill, & Mahon, 2012). In a society where there is a negative

stigma attached to being “different” (i.e., using assistive technology), Gill (1997) contends people with disabilities may be socially pressured to cover their differences and emphasize their normality. In such environments, youth with hearing impairments often have difficulties in social situations, showing “signs of greater isolation and psychological difficulty” (Martin & Bat Chava, 2003, p. 512) due to rejection by peers, social isolation, bullying, stereotyping, and stigma (Devine & Dattilo, 2000). These experiences can negatively impact HRQL for these youth (Borton et al., 2010).

One particular focus within residential disability-specific camps is to make the connection between community programs (i.e., camps) and the role it plays in healthcare. The International Classification of Functioning, Disability, and Health (ICF; WHO, 2012) shifts the focus of health care away from the standard medical model that relies on health as a diagnosis and moves toward health as a complex entity contingent on activity involvement and life participation, as well as medical condition. Different than the medical model, the ICF includes health-related domains based on individual and societal perspectives, in context of a specific disability and its functions and structure (WHO, 2012). In other words, the ICF views characteristics of the function and structure of a disability in relation to societal perspectives of functioning. Secondly, the ICF model has a life participation component that examines a person’s engagement in life activities from the perspective of age appropriateness, cultural experiences, family systems, community systems, and work/education opportunities. Disability specific camps may improve overall health of the individual by applying the participation component of

the ICF, an important consideration for therapeutic recreation practice.

According to Edwards, Hill, and Mahon (2012), numerous investigations have been conducted on educational, speech, and language outcomes of youth with deafness or hearing impairments, but few studies have examined their perceptions of social acceptance as a quality of life issue. Examining social acceptance with youth who have hearing impairments is important to understand their psycho-social development and the role it plays in their quality of life (Edwards et al.). Youth with hearing impairments have poorer social competence and perceptions of social acceptance compared to their peers without hearing impairments (Fellinger, Holzinger, Sattel, & Laucht, 2008; Hindley, Hill, McGuigan, & Kitson, 1994). This exploratory study sought to examine social acceptance and HRQL of youth with hearing impairments who attended a disability-specific residential camp. Therefore, this study examined the question is there a relationship between social acceptance and HRQL for youth with hearing impairments who have cochlear implants engaged in a disability specific recreation program (residential summer camp)? Subquestions included the following: (a) Did perceptions of social acceptance change from pre- to postcamp in youth with hearing impairments after participation in a week-long residential camp?, (b) Did social acceptance or HRQL change from pre- or postcamp, 10 weeks following the conclusion of camp?, and (c) Was there a correlation between social acceptance and HRQL in youth with hearing impairments after participation in a week-long residential camp?

Method

The purpose of this study was to examine the relationship for differences between social acceptance and HRQL for youth with hearing impairments who have cochlear implants or hearing aids involved in a disability-specific residential camp program, at pre-/postassessment, and follow-up phases. This study used a nonexperimental, pre/post, and a 10-week follow-up design. Research participants and parents were provided with the consent and assent form and an informational sheet via email one month prior to data collection. Data were collected from a camp in the Midwest on the first and last day of the one-week residential experience. A follow-up email was sent 10 weeks postcamp with an electronic link to the same instrument used during the pre-/postphases of the study.

Participants

A convenience sample of research participants ($n = 46$) aged 8 to 18, with hearing impairments and utilizing cochlear implants attending a week-long residential camp were recruited for this study. All were Caucasian and used either cochlear implants or hearing aids; 20 were female, and 26 were males (see Table 1). No additional disabilities were noted. Thirty-one participants attended this camp in prior years, with the major-

ity of campers ($n = 25$) having attended for three years. Study participants used a combination of sign, written, and spoken language during and outside the camp setting. Using traditional camp activities (i.e., swimming, crafts, hiking, drama), this camp was designed to allow the campers to learn how to use spoken language more effectively, to advocate for themselves in the social settings, and to care for their assistive hearing technology so these skills could be generalized to home, school, and community life.

Instruments

The Social Acceptance Scale (SAS; Devine, 1997) and the Peds QL General Well-Being Scale (Hallstrand, Curtis, Aitken, & Sullivan, 2003; Varni et al., 1999) were used to collect data. SAS is a 12-question instrument that uses a five-point (1= *strongly disagree*; 5= *strongly agree*) Likert scale. Social acceptance is an indicator of quality of life and a construct addressed at camp, thus, the reason it was chosen for this examination. The intent is to quantify the perceptions of social acceptance individuals experience as they navigate in social settings and social interactions. Internal consistency of the SAS was reported as having a Cronbach's Alpha of .88; test-retest reliability was .85; and face validity was also established with this instrument in a previous study (Devine & Dattilo, 2000).

Table 1

Campers with Cochlear Implants or Hearing Aids

	Cochlear Implants	Hearing Aids
Females	6	14
Males	8	18

The Peds QL General Well-Being scale was used to measure HRQL in a children and adolescent population and consists of seven items on a four-point Likert-type scale ranging from 0 = *never*, to 4 = *almost always*. Examples of items include “I feel good about my health” and “I get support from my family and friends.” Internal consistency was reported as ranging from 0.70 to 0.92 as demonstrated in previous studies (Hallstrand et al., 2003; Varni et al., 1999). Construct validity has also been examined at both item-level and scale-level (Hallstrand et al.; Varni et al.). The child’s version was used for research participants between the ages of 8 years and 12 years, and the adolescent version of the Peds QL General Well-Being scale was used for research participants between the ages of 13 years and 18 years. There was no difference between the child’s and adolescent’s version of this instrument in questions, wording, or response scale. The parent proxy report format was not used for this study.

Setting

The study was conducted at an accessible residential camp for youth located at a university-based outdoor center in the Midwest. The camp session for this study was facilitated to children and teens who were Deaf or hard of hearing/hearing impairment. The therapeutic recreation process was used at the onset of camp, which included conducting an assessment, identifying psychosocial camper goals, facilitating camp activities to meet the camper’s goals, and evaluating goal achievement at the conclusion of camp for each camper.

Camp components. The camp is offered through a nonprofit organization and serves youth and families with hearing loss who communicate through and support the philosophy of *Listening*

and *Spoken Language* (LSL). The main thrust of the LSL philosophy is to provide services that empower individuals with hearing loss to mainstream into society by advocating for themselves when they are unable to hear or need adapted services while using the spoken word. Tenants of this approach are linked to social acceptance in that users are seeking equity, belonging, and valuable experiences. HRQL is also based on perceived social acceptance, thus LSL may be an integral component to social acceptance and HRQL.

In keeping with the philosophy of the organization, the camp utilized spoken language and lip reading as well as encouraging the use of hearing devices such as cochlear implants and hearing aids. The camp is designed according to ADA least restrictive environment principles (<http://www.ada.gov/regs2010/titleII>) and is a safe environment for campers to build self-advocacy and assertiveness skills as well as to connect with others with similar life experiences for promotion of social acceptance. Camp goals include the promotion of friendship development, social connection to peers with hearing impairments, self-advocacy skills, and verbal and nonverbal communication skills.

Principles of therapeutic recreation in camp. The camp operates using principles of the therapeutic recreation process (APIE) including assessment, Camper Care Plan, camp activity implementation, and evaluation of Camper Care Plan. The Camper Care Plan is an assessment instrument developed specifically for this residential camp. This instrument was developed using data from camp research outcome studies at this same site (Dawson & Liddicoat, 2009; Devine & Dawson, 2010), then pilot tested over three years. This 10-question Likert-style

assessment is embedded in the application process, filled out at home by the camper and a parent, and returned prior to the start of camp. Information gleaned from the assessment is used to develop individual goals for each camper prior to their arrival at camp related to friendship development, connection to peers with similar impairments, social acceptance, independence, and healthy leisure lifestyle engagement. It is implemented with each camper through their camp application. Information gleaned from the assessment is used to develop individual goals for each camper related to friendship development, connection to peers with similar impairments, social acceptance, independence, and healthy leisure lifestyle engagement. Camp activities were designed to meet camper goals and to be purposeful in promoting health, well-being, and quality of life (Robertson & Long, 2008). Typical camp activities such as archery, horseback riding, aquatics, sports, nature, music, art, climbing, and canoeing were facilitated in addition to discussion groups, adventure therapy, guest speakers with hearing impairments, and psychoeducational groups. The role of the CTRS, therapeutic recreation interns, and adult counselors with hearing impairments was to facilitate discussions on issues related to living with a hearing loss such as social acceptance by hearing peers, social isolation, communicating with hearing people, and self-esteem. The staff also delivered activities that were consistent with therapeutic recreation philosophy (i.e., strength based, opportunities for self-determination, and those that were experiential and provided enjoyment). Camper goals were evaluated at the end of each day as well as at the end of the camp week. Evaluation included assessing whether campers progressed, regressed, or stayed the same on indi-

vidually identified goals. Camper engagement in activities and with peers, their enjoyment level, and activities of daily living were also documented daily. At the end of the week, a camper discharge plan was generated for parents/guardians and campers that summarized progress while at camp. It should be noted that while applying the therapeutic recreation process (APIE), there is a strong emphasis to maintain the nature of camp as an enjoyable and fun experience and not a *therapy* in the woods.

Data Collection

Data collection occurred precamp on the day of the campers' arrival, during the camper check-in period. This is a time-frame when campers had not yet met their fellow campers or participated in any camp activities. Campers, who chose to participate in the study, completed the instruments independently at a separate table in the check-in room. Instruments were completed using a paper/pencil method, taking between 10-16 minutes to complete, and returned to the researchers upon completion. No incentives were provided for participation in the study. On the last day of camp, the same campers completed the instruments during the camp check-out period in the same room where camp check-in occurred. Upon completion, campers returned the instruments to the researcher who was present during this time period at the camp. This process was repeated at the 10 week postcamp follow-up point via e-mail using an electronic survey link. The follow-up period lasted two weeks to collect all participant responses; thus, this period ended up being 10-12 weeks postcamp period. Neither the researchers, parents, nor the camp staff assisted the campers with instrument completion

at pre-, postcamp, or at follow-up data collection times.

Data Analysis

Data from the pre, post, and follow-up research questions were analyzed using descriptive statistics (means, standard deviations) and a repeated measure analysis of variance (ANOVA) using Statistical Package for Social Sciences (SPSS) 18.0 for Windows. Two one-way within-subjects repeated measure ANOVAs were used to measure difference between mean scores of social acceptance and HRQL (dependent variables) across the independent variable of three different times (pre, post, follow-up). Data analysis controlled for the number of years participants attended the camp, and analyses were conducted for gender, age, and race/ethnicity. Post hoc pairwise comparisons were done to determine differences between the three independent variables. Correlation analyses examining the relationship between social acceptance and HRQL using a Person Product Moment Correlation was also completed. The alpha rate was set at .05 for all comparisons.

Results

Overall, results from this investigation revealed a significant difference between scores on the SAS and Peds

QL General Well-Being Scale from pre/post to follow-up. Prior to data analysis, a Mauchley's test of Sphericity was conducted to determine whether the variance between repeated measures was equal (Huck, 2012). Sphericity analysis was not statistically significant [$\chi^2(2), 3.527, p = .181$]; this analysis was found to support the hypotheses that social acceptance and HRQL would increase from pretest to posttest and be maintained 10 weeks postcamp.

Social Acceptance

The mean score on the Social Acceptance Scale increased from pre- ($M = 4.23, SD = .96$) to posttest ($M = 4.46, SD = .41$) with a smaller standard deviation at posttest compared to pretest. From pretest to follow-up, descriptive statistics were similar to posttest ($M = 4.26, SD = .33$), although there was a smaller standard deviation at follow-up compared to posttest. Using a one-way within-subjects repeated measures ANOVA as seen in Table 2, statistically significant differences were found for social acceptance in that scores increased from pretest to posttest/follow-up tests ($F(2, 44) = 4.93; p = .039$). No statistical significance was found on social acceptance for the variables of gender, age, or race/ethnicity.

Table 2
Analysis of Variance for Social Acceptance

Source	Sum of Squares	df	Mean Square	F	p
Mode	54.74	2	27.37	4.93	.039
Participants	24.62	44			
Total	79.36	46			

p < .05

Peds Quality of Life General Well-Being

Mean scores demonstrated a change in Peds QL scores from pretest ($M = 4.15$, $SD = .84$) to posttest ($M = 4.37$, $SD = .44$) with a slight increase from post-test to follow-up ($M = 4.27$, $SD = .62$). A one-way within-subjects repeated measures ANOVA between pre/post/follow-up for Peds QL demonstrated a significant difference in perceptions of Peds QL ($F(2,44) = 2.05$; $p = .047$) demonstrated in Table 3. No statistical significance was found for Peds QL of the three independent variables, gender, age, or race/ethnicity.

Correlation between SAS and Peds QL

There was no statistically significant correlation between SAS and Peds QL at the precamp measure. However, a statistically significant correlation was found between post Peds QL and post SAS ($r = .71$; $p = .031$) (Table 4) and at the follow-up phase ($r = .62$; $p = .039$) (Table 5). This indicates a relationship between perceptions of social acceptance and quality of life. While data analysis was controlled for number of years the participants attended the camp, the sample size prevented analyses of additional factors (e.g., gender) from being analyzed as between subject factors.

Table 3

Analysis of Variance for Peds Quality of Life General Well-Being

Source	Sum of Squares	df	Mean Square	F	p
Mode	12.6	2	6.3	2.05	.047
Participants	8.54	44			
Total	21.14	46			

p < .05

Table 4

Analysis of Variance for Peds Quality of Life General Well-Being

Variables	Social Acceptance	Peds QL
Social Acceptance	-	
Peds QL	.71*	-

* p < .05

Table 5

Correlation between Follow-Up Social Acceptance and Posttest Peds Quality of Life General Well-Being

Variables	Social Acceptance	Peds QL
Social Acceptance	-	
Peds QL	.62*	-

* $p < .05$

Discussion

The purpose of this study was to examine the effects of participation in a disability-specific residential summer camp, on social acceptance and quality of life for youth with hearing impairments. It was based on the premise youth with hearing impairments who engage in a therapeutic recreation service together will experience the sense of peer camaraderie, which can increase their perceptions of their social acceptance and HRQL.

Social Acceptance

Results demonstrated higher perceptions of social acceptance at postcamp and at follow-up compared to precamp means. Maintenance of such gains is the goal of the camp and may be attributed to the segregated nature of the context. Specifically, a unique culture developed between campers with a similar health condition that may have fostered perceptions of increased social acceptance.

According to the WHO (2012), social acceptance is an important component of friendship development and social bonding, both of which are linked to quality of life. Social acceptance is based on an individual's perceptions of their experiences navigating social contexts and interactions. In addition to being a foundation of friendship development, it is also a building block for social identity (Schleien &

Heyne, 1997; Schwartz, 1988). Findings from this investigation showed an increase in perceptions of social acceptance from pre to post test and at follow-up. One explanation of this finding could be the supportive nature of this camp. For instance, staff and volunteers have the same or similar diagnosis as the campers and all used listening devices, (e.g., hearing aids or cochlear implants). This finding is supported by previous inquiries that found within a segregated environment, participants with similar disabilities experience a form of *segregated inclusion* (Goodwin et al., 2011). This form of inclusion supported "positive identity development, shared and safe emotional connections, and fulfillment of needs within a disability or segregated setting" (Goodwin et al., p. 50).

Social Capital

Another explanation for the increase in perceptions of social acceptance from pre- to posttests and at follow-up tests can be framed using social capital theory. This theory asserts the ability of people to garner benefits by virtue of membership in a social network or other social structures (Portes, 1998). Benefits can take the form of human, physical, cultural, or symbolic benefits (Devine & Parr, 2008). In this camp context, benefits may be knowledge of camp resources (human capital), access to fishing equipment (physical

capital), knowledge of norms of the Deaf community (cultural capital), or leadership position (symbolic capital). Social capital is based on the norms of reciprocity and trust. Relationships become capital when trust and reciprocity are present and they provide access to desired benefits. The results from this study may be explained in part to social capital that developed among and between campers and staff. While social capital was not examined directly in this inquiry, trust and reciprocity could be indicative of perceptions of social acceptance. Several questions on the SAS asked the campers to respond to issues related to trust (e.g., “I feel I can count on the people here to be my friend”) and reciprocity (e.g., “People here include me in conversations”), thus social capital may explain the increase in the perceptions of social acceptance.

Peds QL

In addition to camp having impacted social acceptance, results indicate camp also influences Peds QL on youth with hearing impairments as indicated by the increase in Peds QL scores from pre- to posttest and follow-up scores compared to pretest. HRQL relates specifically to domains of health that are influenced by services within and outside of health care systems (Varni et al., 1999). The WHO defines HRQL as “a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity” (WHO, 1948; as stated in Varni et al.). This includes the concept of social acceptance and friendship development. Since therapeutic recreation camps address issues and conditions related to the nature of the disability and can serve as a health care intervention outside of the typical clinical setting, it stands to reason HRQL could change after youth engage in a disability-specific residential camp.

The Peds QL examines how individuals view their general HRQL within a specific timeframe. When relating these findings to the ICF (WHO, 2012), viewing the disability-specific camp as an extension of traditional health care interventions, such as therapeutic recreation, is appropriate, especially since the ICF defines disability more broadly than just a medical condition. The ICF goes beyond explaining disability as only medical condition and includes activity, participation, personal, and environmental factors as playing a critical role in health. Further, recreation is identified as a component of the ICF under community, social and civic life (WHO) re-emphasizing the role that camp can play within the health care system and impacting quality of life during and after events such as camp (WHO, 2012).

During the camp experience, individuals with hearing impairments had the opportunity to build friendships, develop social supports, and engage with others who had similar abilities, and experience a form of normalcy. Specifically, the goal of camp activities (e.g., team-building activities, unstructured time, guest speakers, climbing tower) was to promote friendship development, support systems, and perceptions of healthy living with a disability. The increase in HRQL from pre- to posttest may be an indication that social supports, rather than medical services, may play a more significant role when examining quality of life (Varni et al., 1999). Further, HRQL is an important health outcome that has a direct impact on how the individual’s limitations are viewed by the person (Hallstrand et al., 2003). Therefore, it seems these results support the notion that disability specific residential camps play a role in health care delivery through the participation component of the ICF.

Relationship between Social Acceptance and HRQL

Another finding of this study was the relationship between social acceptance and HRQL at posttest and follow-up. HRQL has a strong component of social well-being for which social acceptance can be a foundation, particularly with social bonding. An element of this camp was the daily discussions among campers, counselors, and volunteers who addressed living with a hearing loss, using hearing technology, and general experiences living with a hearing impairment in a hearing world. Those discussions may have been an important part of the link between social acceptance and HRQL in that they highlighted common experiences, were an opportunity to talk about barriers, a time to address self-advocacy, and a means for developing a social identity. The relationship between social acceptance and quality of life is consistent with previous studies that indicated the positive role of shared experiences with others that have the same diagnosis while attending a disability specific residential camp (i.e., Dawson et al., 2012; Goodwin et al., 2011). Campers with hearing impairments may have felt a sense of normalcy in being around similar others thus increasing their perceptions of quality of life.

Liminality

While social acceptance and Peds QL scores increased from pre- to posttest and at follow-up, the reason behind this change is not clear. Some studies have found the comradery between people who have similar disabilities may explain increases in psychosocial factors (Devine & Dawson, 2010; Knapp et al., 2015), this may also be plausible for this study. The increase in social acceptance and HRQL may be understood using the framework

of liminality. Liminality assumes the reason people are not fully accepted in society is due to their social marginality; they are close to desired groups, but yet not authentically part of that group (Murphy, Scheer, Murphy, & Mack, 1988; Willett, & Deegan, 2001). Willett and Deegan further posit that liminality may be an issue for those experiencing disability due to feelings of ambiguity, alienation, and social isolation related to their health condition and social status. Others have identified the psychosocial impact of liminality with health conditions such as cancer (Little, Jordens, Paul, Montgomery, & Philipson, 1998) physical disability (Murphy et al.), cystic fibrosis (Tierney et al., 2013) and hearing youth who have Deaf parents (Preston, 1995). Examples of liminality in these studies included: feeling alienated, at an in-between status, loss of control, uncertainty, experiencing difficulty in transitioning from pediatric to adult health care services, having a body that is well yet not fully functioning according to societal norms, a body that houses both the self and the illness concurrently, and difficulty in articulating fully the illness experience with those that are without the health condition. In the current study, the majority of campers have parents and peers who are hearing, thus creating the potential for feeling marginalized or liminality.

Vohr (2011) reported that up to 40% of youth with hearing impairments are in need of mental health support services. Specific interventions are needed to help youth with hearing impairments to integrate into social groups, to feel less marginalized, and to improve perceptions of social acceptance (Bat-Chava & Deignan, 2001). This camp may be acting as a support intervention by providing opportunities to address liminality through the supportive social milieu that is created.

For example, the setting is unique in that it may be one of the only times each year that it is normal to use a cochlear implant or hearing aid. This is created by surrounding each camper with a peer group of similar others as well as having a majority of counselors that have a hearing impairment. Liminality may then be mitigated by creating a clearly defined social milieu of those who experience hearing impairment, which provides a contrasting perspective from the day-to-day integrated setting to which they are accustomed.

Statistically Significant Follow-up Scores

Follow-up scores were statistically significant 10 weeks after the conclusion of camp. This is a unique finding relative to other studies in that others have found that camp improves psychosocial domains but loses significance following the conclusion of camp (Devine & Dawson, 2010; Knapp, et al., 2015). This finding may indicate a unique aspect about campers who are not fully in the Deaf community and yet, not fully in the hearing community. More research is needed to further clarify if this is a consistent phenomenon and if so, what is contributing to the lasting psychosocial impact postcamp. A qualitative phenomenological design may help elucidate further why this may be taking place and should be considered in future studies.

Implications for Practice

Therapeutic recreation specialists concerned with offering therapeutic and meaningful experiences for youth who have hearing impairments may consider a few key points drawn from this study. First, social support type interventions that are disability specific may be a useful approach to designing therapeutic

recreation services. Involvement with others who have similar disabilities and life experiences could provide opportunities for enhanced discussion, friendship development, and feeling of camaraderie that may counter the effects of liminality. It is recommended therapeutic recreation specialists facilitate specific and meaningful opportunities for discussion on disability related issues, such as those experienced by people with hearing impairments, during programs to promote social acceptance and HRQL. Residential or extended length program models may also be considered rather than programs short in duration to assist in building lasting social capital. For example, programs that bring people with similar disabilities together for a day-long experience may yield perceptions of social acceptance and contribute to improved quality of life through social bonding.

Mentoring opportunities with adults or staff persons who have similar disabilities may provide positive role modeling opportunities to promote social acceptance. Those concerned with tracking outcomes and designing purposeful programs could apply the ICF model as a useful guide to capture improvements seen in clients' participation domains. Given the design of the ICF as an international method of documenting outcomes across therapeutic approaches, this appears to be a viable option to guide community based practice. Finally, practitioners should consider the therapeutic support goals mentioned in this study but remember the value of camp as a non-medical environment. In other words, blending therapeutic approaches while not becoming a hospital in the woods is an important component to therapeutic recreation camps and should not be underestimated.

Limitations and Recommendations for Future Inquiries

Several limitations of this study should be noted. One limitation is the narrow range of scores for social acceptance and HRQL pre/post and follow-up creating a possible ceiling effect for the scores. Although there were statistically significant differences between the means from pre to post and post to follow-up, pre-data collection still may have been skewed due to when the data were collected, creating a ceiling effect. Additionally, while the results were statistically significant, the range in mean scores was fairly narrow. The slight difference in scores from pre- to posttest and follow-up suggests caution in interpretation. For the majority of campers, the “camp experience” ultimately starts one to two weeks before arriving at camp. Anticipation of leaving home, packing for the camp experience, and preparing to engage in the camp experience may make the first day of camp not the ideal time to collect pre-data. The researchers believe if data had been collected approximately three weeks prior to attending camp, or as a retrospective data collection method (pre and post collected immediately at the end of camp) results may have been stronger than those found. In addition, collecting post data the last day of camp may not have been ideal as campers are engaged in the finality of the week of camp, rather than focusing on completion of the research instruments. Due to logistical issues, including cost and time, these three data collection points were the most appropriate for this exploratory study, but it should be examined for future studies.

HRQL increased from pre- to post-camp and, while decreasing from post-camp to follow-up, the follow-up scores were higher than precamp scores. While

this is an important finding, these results must be examined with caution given the duration of the camp experience. Since quality of life is a global concept and can take on several different meanings, a one-week residential camp experience may not be long enough to have a long-term impact on quality of life. Examining future data on HRQL over time as well as number of years individuals have attended camp may lend itself to more reliable data. Conducting a long-range study with the same campers over a number of years may be useful in examining a cumulative effect of camp on constructs such as quality of life.

While there was a relationship between social acceptance and quality of life, it is unclear as to the specific elements of the camp that promoted this relationship. Based on previous studies (Dawson et al., 2012; Goodwin et al., 2011), it was speculated discussions of living with a hearing impairment in a hearing world could have been the source of the correlation. In addition, if this study used a control group for comparison, it would have strengthened the role of camp on social acceptance and HRQL. Future studies should examine components of camps to determine aspects that have certain outcomes on campers through comparative studies or experimental design. Additionally, findings from studies examining the relationship between HRQL and social acceptance may support using community based rather than medically based services to address HRQL issues with individuals with disabilities.

Social capital theory can be used as a framework for future studies. Disability-specific residential camps provide a unique opportunity for social ties to be developed between peers with similar life experiences that do not occur in daily life experiences for this population. Engaging

with others who have similar abilities is when equal power is formed among one another and a common experience (i.e., living with a disability) is shared. This is at the root of social capital theory; forming social ties, equality of power; and sharing a common interest (Bourdieu, 1986; Glover & Hemingway, 2005). In the notion of camp, social capital can have one agency that is facilitated to build social support or social acceptance in this case, among others (Coleman, 1994). Then, when this social acceptance occurs, this can be transferred to other parts of an individual's life, for example, developing a stronger perception of HRQL.

Finally, intentional programming to increase overall health and community participation has direct ramifications for health care delivery outside of the clinical setting. The ICF model is an ideal framework to use for future studies. Since the new health care plan within the United States focuses on prevention and community services, camps can be seen as a cost-effective venue to develop skills and resources to increase ability and decrease disabling conditions.

Conclusions

Residential camps offer a unique leisure experience where campers interact with each other for an intense period of time. In particular, disability-specific residential camps offer a distinctive experience for youth with similar disabilities through the bonding and sharing of similar life experiences (Dawson et al., 2012), which should be considered in therapeutic recreation contexts. This study found that social acceptance and HRQL scores were higher at postcamp and follow-up compared to precamp for youth with hearing impairments. In addition, a correlation between social acceptance and HRQL was found at postcamp and follow-up. Possible explanation for these findings could be the friendships built, social supports developed, and opportunities to engage in recreation with others who had similar abilities (including camp counselors) and experience a form of normalcy during camp. It is recommended that Deaf and hard of hearing participants who use listening devices be provided opportunities to socially interact and develop bonds that can contribute to perceptions of social acceptance and an increased quality of life through recreation.

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