

THE IMPACT OF OUTDOOR ADAPTIVE PLAY & LEISURE ON QUALITY OF
LIFE FOR YOUTH WITH DISABILITIES

A Thesis submitted to the faculty at Stanbridge University in partial fulfillment of the
requirements for the degree of Master of Science in Occupational Therapy

by

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Certification of Approval

I certify that I have read *The Impact of Outdoor Adaptive Play & Leisure on Quality of Life for Youth with Disabilities* by Caitlin Lee, Allen Rey Quinto, Emma Rogers, and Madeleine Togneri, and in my opinion, this work meets the criteria for approving a thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy at Stanbridge University.



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Abstract

Through a mixed-methods approach, this study observed and analyzed the impacts of organized outdoor adaptive activity on the quality of life (QoL) of children with various disabilities and their families. Four domains to measure QoL were identified through an extensive literature review highlighting (a) *self-efficacy*, (b) *performance skills*, (c) *social participation*, and (d) *family cohesion*. We partnered with Best Day Foundation (BDF) in order to recruit participants and perform data collection at their events. Quantitative data collection incorporated an 8-item questionnaire with two questions for each target domain of QoL that was administered before and after participation in an event. Qualitative data collection was conducted through semi-structured interviews with parents and caregivers during the events. Results showed high statistical significance ($p < 0.001$) in the categories of *self-efficacy*, *social participation*, and *family cohesion*, while still showing statistically significant values ($p < .050$) in the domains of *self-efficacy* and *performance skills*. Qualitative findings from the interview illustrated the profound effects the BDF event had among family members. Together, these results indicate that outdoor adaptive activities have a significant and positive influence on these four domains for youth with disabilities and their families, and ultimately a positive impact on QoL.

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The Impact of Outdoor Adaptive Play & Leisure on Quality of Life for Youth with
Disabilities

Best Day Foundation (BDF) is a non-profit organization that aims to provide children and young adults with special needs an opportunity to participate in adventure activities adapted for their specific needs (BDF, 2018). The organization serves children with a variety of diagnoses such as autism spectrum disorder (ASD), blindness, cancer, cerebral palsy (CP), cystic fibrosis, Down syndrome, muscular dystrophy, and other developmental challenges (BDF, 2018). BDF provides adaptive outdoor activities such as tandem surfing, bodyboarding, kayaking, stand up paddling (SUP), outrigger canoeing, beach activities, and snow sports. Through their adaptive approach, they strive to empower disabled communities across the country to safely participate in outdoor sports. The organization's goal is to support these individuals in building confidence and self-esteem through pushing boundaries, reinforcing achievement, and connecting with others (BDF, 2018). Through an occupational therapy perspective guided by the Person-Environment-Occupation (PEO) model (Law et al., 1996), we observed and analyzed the occupational impacts of participation in adaptive adventure activities for children with varying abilities.

The purpose of this study was to observe and analyze the impacts of adaptive outdoor recreation on the quality of life (QoL) of families of children with disabilities through a pre- and post-analysis of BDF event participation. Participants of the study included the parents and caregivers of the child participants registered for BDF events. Individuals registered for the events included children between the ages of 4-24 with various disabilities. The BDF staff is trained to work with the special needs of attendees,

which include children with ASD, Down syndrome, CP, blindness, vision disorders, cancer, spinal cord injuries, and other physical and developmental challenges.

Similar research on children engaged in therapeutic or adaptive recreation has found that psychosocial benefits linked to participation include improvements in social interaction, peer connections, self-esteem, confidence and coping skills (Moola, Faulkner, White, & Kirsh, 2014; Sendak, Schilstra, Tye, Brotkin, & Maslow, 2018). Meltzer et al. (2018) determined that condition-specific camps provide unique opportunities for the participants like peer-to-peer teaching about illness, treatment, and management strategies, as well as opportunities for success in activities typically inaccessible due to participants' conditions. Related research on parents and caregivers has found that inclusive outdoor recreation increased family satisfaction, improved perceptions in cohesion, and facilitated whole-family recreation (Scholl, McAvoy, Rynders, & Smith, 2003). A common theme in current literature is that the benefits of participation in therapeutic recreation for children and their caregivers are short-term and decrease after time away from the source of recreation and community environment (Meltzer et al., 2018; Moola et al., 2014).

There is limited research on the lasting long-term effects of therapeutic recreation for children with disabilities and their families. In an attempt to fill this gap, we aimed to investigate the short and long-term benefits of participation in adaptive outdoor occupations in four domains of QoL: *self-efficacy, performance skills development and transfer, social participation, and family cohesion*. In particular, we questioned a possible link between inclusive family-centered adaptive activities, like those coordinated by the BDF, and the improvement in QoL for individuals with physical and developmental

challenges and their families in the context of occupational performance.

We anticipated that participation in the aquatic recreational activities supported by BDF would lead to improved performance skills, increased social participation, and enhanced self-esteem and self-perception. We also sought to investigate whether adaptive family-centered activities would result in lasting improvements in family cohesion and family satisfaction. Much of the relevant research conducted thus far has supported various forms of adaptive outdoor recreation as a therapeutic outlet for children and adolescents with a wide range of disabilities (Sendak et al., 2018). Existing studies have highlighted some of the perceived outcomes, potential benefits, and limitations of other inclusive recreation programs that seek to empower individuals with special needs (Meltzer et al., 2018; Moola et al., 2014).

Literature Review

The anticipated outcomes of the present study were based on four overarching domains: *self-efficacy, performance skills, social participation and engagement, and family cohesion*. These were established after a review of current literature on outdoor recreational play and leisure for children with disabilities.

Self-Efficacy

The domain of self-efficacy within this study refers to an individual's belief that they can complete a task, achieve a goal, or overcome a challenge. Traits associated with self-efficacy include confidence, self-esteem, self-awareness, positive self-concept, and resilience. Various studies show that self-efficacy and its related traits have been found to increase through participation in outdoor occupations, risky play, and adaptive water sports. Brusoni et al. (2015), have defined risky play as any thrilling form of play that

includes the real or perceived risk of physical injury. Following an outdoor recreation program, Dorsch, Richards, Swain, and Maxey (2016) found that adolescents and young adult participants with congenital or acquired disabilities felt a sense of belonging and community through building self-efficacy and self-esteem by forming bonds with people with and without disabilities. Dorsch et al. (2016) found that participants in this study developed skills that transferred outside of the program and elevated their QoL.

Moxham, Leirsch-Sumskis, Taylor, Patterson, and Brighton (2015) found that participants living with a mental illness who engaged in a therapeutic recovery camp—one that involved activities such as rock climbing and Tai Chi—had improved self-perception and were more likely to reach expectations they created for themselves. The participants of this study demonstrated improvements in social connectedness, well-being, self-efficacy, and an improved ability to identify personal strengths after researchers compared their pre-camp and post-camp expectation surveys (Moxham et al., 2015). In studying leisure preferences for youth with severe disabilities, King et al. (2014) found that autonomy and the ability to choose activities were often valued more by the participants than the activities themselves. Providing a variety of inclusive activities in supportive environments is beneficial for children with disabilities because they are provided with more opportunities to exercise their autonomy and improve self-efficacy (King et al., 2014). In systematic reviews of literature concerning camps for children with chronic illness by Moola et al. (2014) and Sendak et al. (2018), the researchers determined that camp experiences promoted positive changes in self-efficacy for the participants. Although the outcome measurements varied across the literature, children who attended these inclusive camps consistently reported increases in self-

esteem, autonomy, and perceptions of control (Moola et al., 2014; Sendak et al., 2018).

In pre- and post-test studies conducted by Bekesi et al. (2011), and Meltzer et al. (2018), the researchers observed that condition-specific summer camp programming improved self-efficacy by presenting opportunities for success in the form of enjoyable challenges. The challenges included activities that are typically avoided by families of children with disabilities due to their risky nature and included zip-lining, field games, and water play (Bekesi et al., 2011). In a study investigating the role of risky play during childhood by Brussoni et al. (2015), results revealed that children ages 3 to 11-years old engaging in risky play in supportive environments showed increased resiliency, social interactions, and creativity.

Performance Skills

The domain of performance skills refers to an individual's observable abilities and capacities that are used in combination to engage in a chosen occupation (American Occupational Therapy Association [AOTA], 2014). Zabriskie, Lundberg, and Groff (2005) found that participation in a community-based therapeutic recreation and adaptive sports program positively impacted the overall health, quality of social life, and quality of family life for individuals with disabilities. Many of the participants in this study also perceived that they gained proficiency in new skills, providing further options for independent leisure functioning in the community (Zabriskie et al., 2005). In a study by Lai et al. (2015), pediatric aquatic therapy was found to generate greater gains in gross motor function and physical activity enjoyment compared with conventional therapy practices. It was shown to be beneficial for children who are limited in their ability to perform land-based activities (Lai et al., 2015). However, beneficial effects on motor

function did not appear to transfer into activities of daily living and health related QoL, possibly due to short-term intervention periods (Lai et al., 2015). Ballington and Naidoo (2018) found that through an eight-week aquatic-based intervention, children with cerebral palsy had an increase in motor function and carry-over effect, including postural control and balance.

In their respective studies, Sendak et al. (2018), Meltzer et al. (2018), and Gillard and Bishop (2016) observed that inclusive recreation presented opportunities to challenge and build skills through activities that were novel, developmentally appropriate, and interesting to children with various disabilities. In a review by Sterman et al. (2016) on outdoor play, caregivers of children with disabilities reported that supportive outdoor play was a time when their child could explore and challenge themselves in ways that were not afforded to them in their typical routines. Sandseter and Kennair (2011) found that playing in environments with a dangerous element involves the use of perceptual competencies such as depth perception, movement-perception, and spatial orientation. The dangerous element involved in risky play helps children master important skills for survival in childhood, which will help them perform adaptive tasks in adulthood (Sandseter & Kennair, 2011).

Social Participation and Engagement

Qualities associated with the domain of social participation and engagement include a sense of belonging, healthy peer relationships, increased functioning in everyday activities, and enjoyment in social situations. Wozencroft, Scott, Waller, and Parsons (2019) examined the experiences among youth with disabilities participating in a weeklong outdoor therapeutic camp. The researchers found that along

with fostering a sense of individuality and self-confidence, participation in the camp increased opportunities for healthy social engagement (Wozencroft et al., 2019). Being a part of the camp exposed participants to various social situations not typically experienced in their everyday lives, and they were able to develop reciprocated positive bonds with others. Dawson, Knapp, and Farmer (2012) found that a summer oncology camp led to statistically significant improvements in independence, social skills, and self-esteem. However, the camp had the most profound effect for participants on social support. According to Flynn, Ricker, Dolezal, Kunin, and Mellins (2019), children with special needs, including developmental disabilities and behavioral challenges, who participated in a residential summer camp designed to improve communication, social, and self-help skills, had increases in communication and relationship building.

Social engagement was a significant and consistent theme across the condition-specific camp studies systematically reviewed by Moola et al. (2014) and Sendak et al. (2018), with participants reporting a positive sense of belonging, normalcy, friendships, support, and competent care. Gillard and Bishop (2016) and Meltzer et al. (2018) found that the positive impacts on the participant's social engagement factors faded after time away from the supportive community of camps and that participants anticipated the annual return to the camps. Brussoni et al. (2015), looked at 21 different studies involving risky play behavior and found that risky play increased social interactions among children, increased overall playtime, and found that rough and tumble play among boys increased social competence rather than increase aggression.

Family Cohesion

Family cohesion in the present study refers to changes in the relationships among

children with disabilities, their families, and their caregivers. Scholl et al. (2003) examined the influence of an inclusive outdoor recreation experience on the perceptions of families that have a child with a disability. The authors found that such experiences significantly enhanced feelings of family satisfaction and levels of cohesion. Inclusive outdoor recreation also led to a decrease in perceived constraints that they felt either inhibited or prohibited “whole-family” recreation. Additionally, participants gained beneficial family-based leisure education that contributed to their overall feelings of satisfaction. Townsend and Van Puymbroeck (2017) researched how the family of a child who has ASD could benefit from a family camp centered around challenging courses such as archery, swimming, and fishing. Qualitative analysis revealed families had improved perceptions of their family leisure involvement, functioning, and communication following the camp experience (Townsend & Van Puymbroeck, 2017).

Bekesi et al. (2011) found that relationships with caregivers and home life for children and adolescents with chronic conditions improved after attending a therapeutic recreation camp program. This improvement was related to positive changes in self-perception as well as the family’s perception of the child’s disability. In a systematic review conducted by Serman et al. (2016) of literature on outdoor play decisions for children with disabilities, caregivers reported that outdoor recreation strengthened the family as a whole by increasing closeness, communication and enjoyment between parents and children in an informal setting outside of their typical routines of home, school, therapy services, and medical appointments. In a study seeking to understand parents’ perceptions of their children’s participation in a therapeutic surf program, Moore, Clapham, and Deeny (2017) found that parents believed surf therapy led to

physical, social, and behavioral improvements in their children. Parents reported that their children showed improvements in attitude, self-regulation, self-confidence, and self-esteem (Moore et al., 2017). The inclusive environment fostered healthy social interactions and feelings of inclusion (Moore et al., 2017). They also reported that program benefits relating to physical and sensory improvements transferred to other areas of the children's lives (Moore et al., 2017).

Theoretical Framework

The current study uses the Person-Environment Occupation (PEO) model developed by Law et al., (1996) as a guiding framework. Designed for the profession of occupational therapy, the PEO model focuses on occupational performance resulting from the transactional interplay of the person, the environment in which performance occurs, and the occupations and roles performed (Brown, 2014). The person, as described by the model, is comprised of qualities such as the individual's biological and physical factors, values, interests, cognition, emotions, sensorimotor skills, and life experiences (Law et. al, 1996). In the PEO model, the person is a dynamic being that is constantly developing in response to the environment. The environment is just as broadly defined in the model and considers the cultural, socio-economic, institutional, physical, and social contexts of the person's surroundings (Law et al., 1996). Occupations are the person's chosen activities that they engage in over the course of their lives (Law et al., 1996). These activities are essential for the person's "intrinsic needs for self-maintenance, expression, and fulfillment" (Law et al. 1996, p. 16). The transactional relationship between the three components can be measured through the study of a particular event and the meaning of the event to the individual (Law et al., 1996).

Occupational performance as described by Law et al. (1996) is the outcome of the transaction among the person, environment, and occupation that can be objectively measured through observation and subjectively through self-report. As the relationship between the three components is interdependent, both interventions that target a single outcome and events that influence multiple components, will ultimately be reflected in an individual's occupational performance. The compatibility or goodness of fit between a person and their environment or their occupations can thus optimize or harm their occupational performance. The model assumes that when attempting to maximize fit and occupational performance, environmental and task modifications are often more efficient than attempting to change attributes of the person (Law et al., 1996). When applied to individuals with disabilities, the PEO model assumes that the disability is a part of an individual's identity and that dysfunction stems from incompatibilities between the person and their environment, rather than the person themselves.

The assumption that dysfunction is a product of dissonance between a person and their environment can be observed in occupational therapy practice when therapists modify elements of a client's physical environment or educate a client with disabilities in the use of adaptive devices in order to optimize their occupational performance. In a community context, the assumption takes shape in the form of inclusive environments, accommodations, and activities for persons with disabilities that serve to optimize participation and engagement. From a PEO perspective, individuals with disabilities often experience occupational deprivation due to a lack of supportive environments. Furthermore, youth with disabilities in unsupported environments experience deprivation in the areas of leisure and play, key occupations of development (Missiuna & Pollock,

1991).

As previously mentioned, events and their impacts on the individual can be studied as points of measurement under the PEO model (Law et al., 1996). The present study uses BDF events as our temporal point of measurement for evaluating the multifaceted impacts of adaptive recreation for youth with disabilities. The four domains chosen as outcome measurements for the present study (self-efficacy, performance skills, social participation, and family cohesion) are factors that fall under the components of *person* and *environment*, and the main purpose of BDF is to engage the target population in the *occupation* of play and leisure. When applied to the study's target population, the PEO model provides an appropriate and comprehensive framework for evaluating the impact of BDF on occupational performance through a comparison between pre- and post-test participant reports.

Methodology

Researchers implemented a mixed-methods design in order to obtain data that warrants statistical analysis, as well as qualitative data that paints a holistic picture of the BDF events and implications for occupational therapy practitioners.

Data Collection

We utilized a triangulation mixed methods approach, integrating both quantitative and qualitative data gathered at different time intervals surrounding BDF events for interpretation in answering the research question (Creswell & Clark, 2011). We chose a mixed-methods design for the study under the assumption posited by Tariq and Woodman (2010), that integrating both types of data will produce results that accurately represent an outcome as complex and multifaceted as QoL, in comparison to relying on

either quantitative or qualitative collection alone. In designing the study, We adhered to the core characteristics of mixed-method design identified by the Agency for Healthcare Research and Quality (AHRQ). The AHRQ (2013) describes a mixed-methods study as one that possesses the following core characteristics:

1. Collects and analyzes both quantitative or closed-ended and qualitative or open-ended data.
2. Uses rigorous procedures in collecting and analyzing data appropriate to each method's tradition, such as ensuring the appropriate sample size for quantitative and qualitative analysis.
3. Integrates the data during data collection, analysis, or discussion.
4. Uses procedures that implement qualitative and quantitative components either concurrently or sequentially, with the same sample or with different samples.
5. Frames the procedures within philosophical/theoretical models of research, such as within a social constructionist model that seeks to understand multiple perspectives on a single issue (AHRQ, 2013).

For quantitative data collection, the participants recruited from event registration were invited to complete pre- and post- questionnaires with items pertaining to the study's four target domains. Prior to a BDF event, participants completed the questionnaire that described their or their child's experiences within the last week. Within a week following the event, participants completed the same questionnaire via SurveyMonkey, with follow-up reminder emails as needed starting immediately after the event. The ideal sample size to observe significant trends in quantitative data collection in the given study was 40 participants. For qualitative data collection, We conducted semi-

structured interviews with participants either during lunch or after the event's awards ceremony depending on the event schedule. Based on the timeline and number of events, We determined the ideal sample size for the qualitative collection was 10 participants. And lastly, in accordance with AHRQ's (2013) fifth core characteristic of the mixed-method design, We framed the study in the context of the previously discussed PEO model.

Different study designs exist within mixed methods research, but the most prominent and commonly used include triangulation, embedded, explanatory, and exploratory (Creswell & Clark, 2011). The primary differences between the forms of mixed method design lie in, 1) the role of support either data set plays to the other, and 2) the amount of data collection phases and their sequence. The chosen approach for the current study reflects what Creswell and Clark (2011) refer to as the triangulation design, in which both quantitative and qualitative data are collected in approximately the same phase to answer a single research question. In this study, qualitative data from parent and caregiver interviews was used to explain observed changes in objective quantitative data between pre and post collection stages, and quantitative data was used to support more subjective and qualitative reports from the semi-structured interviews.

The strengths of using a triangulation design in the current study include the benefit of having a multidimensional approach to a complex subject like QoL (Creswell & Clark, 2011). Triangulation design also provides the ability to collect quantitative and qualitative data within the same phase and simultaneously at multiple events, as well as the ability to capitalize on the various quantitative and qualitative expertise of different team members involved in the research (Creswell & Clark, 2011). The triangulation

design does have certain limitations, however. Almaki (2016), has noted the potential for discrepancies and lack of correlation between data sets as one main concern when utilizing this design. We took caution in selecting interview questions and questionnaire items that were appropriate to the research question without being non-leading to generate the most naturalistic data possible but were still prepared for the possible lack of correlation.

Quantitative Recruitment Procedures

The target sample size for the quantitative collection was 40 participants. Before excluding the surveys that were not completed, there were 106 pre-surveys filled out and 64 post-surveys. We were able to recruit the 59 participants who completed both the pre-survey and post-survey. Participants for each BDF event were contacted through the official email of the foundation and invited to join the study by filling out the surveys. Uninterested participants could simply disregard the email. If they expressed an interest, however, they were asked to complete the attached consent form and pre-event survey and informed about the follow up survey to be completed after the event. BDF also sent follow up emails for the pre-survey before the event and the post-survey after the event in an effort to boost the responses. To be included in the quantitative data collection, participants were required to have an active email address, access to the Internet, and be able to speak and read English.

Qualitative Recruitment Procedures

The target sample size for the qualitative collection was 10 interview participants; We successfully interviewed 13 parents and caregivers. Participants for qualitative data collection were recruited on-site at each BDF event. We approached potential interview

candidates while their child was engaged in an activity with their beach buddies or during lunch when they were settled. We were careful not to interview parents who were engaged with their child in an activity, to ensure we did not disrupt their experience of the event. Participants who agreed to be interviewed signed a consent form us to record audio of the interaction. The participants of the qualitative portion were not required to fill out the pre-post survey. To be included in qualitative data collection, the participants had to be a parent, family member, or caregiver to a child involved in the day's events.

Ethical and Legal Considerations

BDF is a non-profit organization that partnered with the investigating team purely on a research basis. We did not receive monetary compensation from the foundation or its founder to conduct the present study. This was a relatively low-risk study for participants.

However, as with all research involving human participants, we took steps to preserve participants' dignity and rights to confidentiality and privacy. These steps included secure data management to protect the identities of participants and their families. Contact information provided by the participants was used solely for exchanging pre- and post-surveys and providing reminders to complete them as needed. Participants did not receive any form of reimbursement for participation and were able to withdraw from data collection at any time.

Quantitative Results

We analyzed quantitative data collected from 5 BDF events between the months of September and October of 2019 through the use of SurveyMonkey result analysis and IBM SPSS Statistics software using a paired t-test. As previously stated, each of the four

domains under investigation had two corresponding items in the pre- and post-surveys. The surveys were scored on a Likert scale using the terms *never*, *rarely*, *sometimes*, *often*, and *always*. When coding the data, never represented the value 1, rarely represented 2, sometimes represented 3, often represented 4, and always represented the value of 5. Survey completion took participants 1 minute and 40 seconds on average.

Of the eight items on the questionnaire, four were found to be highly statistically significant, and two were found statistically significant. Highly statistically significant results were found in three out of four domains of QoL with one in *self-efficacy*, one in *social participation*, and both items in *family cohesion*. Refer to *table 1* for results of a paired sample t-test.

Table 1

Paired Sample t-test

Paired Samples	Sig. (2-tailed) where p < .05	Level of significance
Q1 Pre and Post	.000	Highly statistically significant
Q2 Pre and Post	.047	Statistically significant
Q3 Pre and Post	.159	No significance
Q4 Pre and Post	.025	Statistically significant
Q5 Pre and Post	.000	Highly statistically significant
Q6 Pre and Post	.176	No significance
Q7 Pre and Post	.000	Highly statistically significant
Q8 Pre and Post	.000	Highly Statistically significant

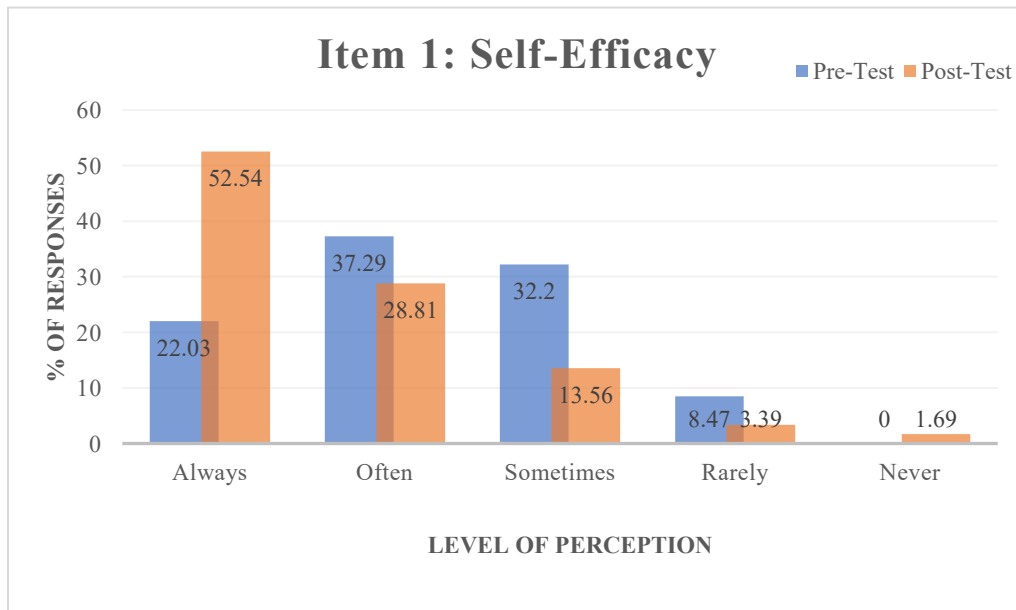
Self-efficacy

Items 1 and 2 on the surveys were tailored to reflect the domain of *self-efficacy*. The domain of *self-efficacy* focused on the child’s sense of accomplishment and independence. Item 1 on the survey stated, “My child exhibited a sense of

accomplishment after completing a task or activity.” Of the 59 participants, when looking at individual data, 30 participants (51%) reported an increase of at least one level from the pre to post-survey. Of the 30 participants who increased levels in their answers, 10 reported an increase of two levels and two participants reported an increase of three levels. When looking at the percentage differences, the pre-survey reported that 22.03% chose *always*, while in the post-survey this increased to 52.54%. This is an increase of 30.51% and 18 participants reporting their child always exhibited a sense of accomplishment after completing a task or activity. *Figure 1* demonstrates the results of parent/caregiver report for item one and was found to be highly statistically significant.

Figure 1

Item 1 Pre and Post Responses



Note. Item 1 asked “After participating in the event, my child exhibited a sense of accomplishment after completing a task or activity.”

Item 2 of the survey stated, “My child initiated a task or activity independently.”

When looking at the individual responses comparing pre and post-tests, 20 of the respondents (34%) reported an increase of at least one level, while 31 remained unchanged in their answers, and 8 reported a decrease of at least one level. Both selections of *always* and *often* increased from the pre-test to the post-test. In the category of *always*, there was an increase from 6.78% in the survey before the event, to 16.95% following the event. In the category of *often*, there was an increase from 38.98% to 42.37% following the event.

Performance Skills

Items 3 and 4 in the surveys focused on the child's engagement in physical activity and problem-solving abilities respectively and corresponded with the domain of *performance skills*. In the pre-event surveys for item 3, the majority of the participants scored *always* (35.59%) and *often* (37.29%) indicating that their children were frequently active and participated in physical activity within the last 7 days leading up to the event. Post-event, the number of parents reporting that their child was *often* physically active within the last 7 days increased to 49.15%.

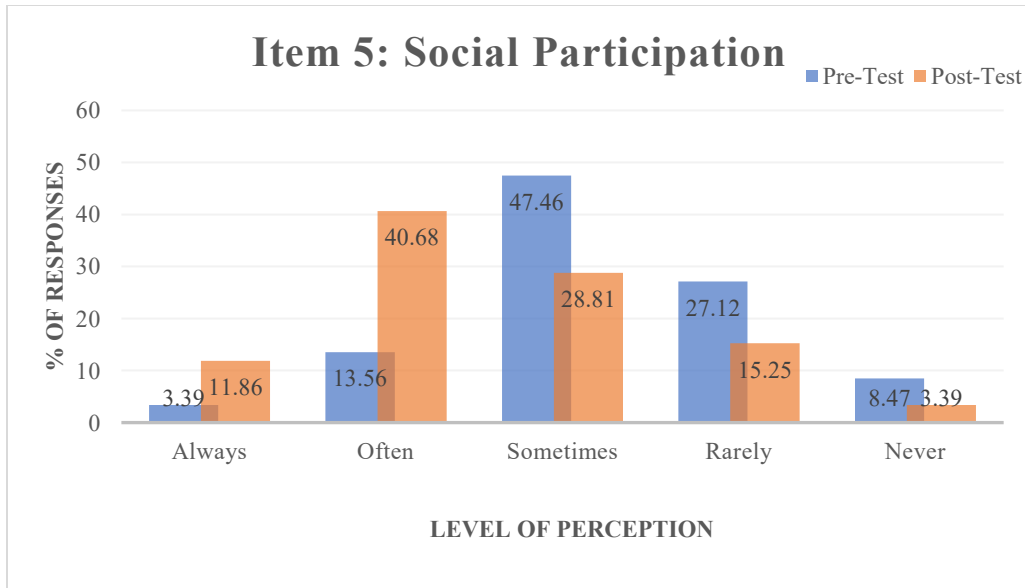
Regarding pre-event item 4, participant reports followed a typical bell curve, in which roughly half of the parents reported that their child *sometimes* (54.24%) demonstrated problem-solving skills in the last 7 days before the event. Post-event data for item 4 maintained a bell curve but indicated a shift towards more positive reports of problem-solving. Fewer parents reported *sometimes* (49.15%), and more parents reported *often* (37.29%) and *always* (6.78%) when compared with their pre-event responses.

Social Participation

Items 5 and 6 of the surveys corresponded with the domain of *social participation*, highlighting the child's engagement in age-appropriate social activities and interaction with non-family members. For item 5, "My child engages in age-appropriate social activities," the quantitative analysis resulted in a highly significant difference between pre- and post-event responses. There was a substantial increase in *often* and *always* responses from pre- to post-event surveys. Initially, only two participants (3.39%) selected *always* and eight participants (13.59%) selected *often*. These numbers subsequently increased to seven (11.86%) and twenty-four (40.68%) responses, respectively. There was a decrease the number of *sometimes*, *rarely*, and *never* responses for item 5. In the pre-event survey, twenty-eight participants (47.46%) indicated *sometimes*, sixteen (27.12%) indicated *rarely*, and five (8.47%) indicated *never*. These numbers were subsequently reduced to seventeen (28.81%), nine (15.25%) and two (3.39%). *Figure 2* demonstrates the results for item 5.

Figure 2

Item 5 Pre and Post Responses



Note. Item 5 asked, “After participating in the event, my child engaged in age-appropriate social activities.”

For item 6, “My child interacts with non-family members,” there was no significant difference found between pre- and post-event survey responses. No changes were observed in the number of *always* and *never* responses. In both pre- and post-event surveys, seventeen (28.81%) participants indicated *always* and no participants selected *never*. There was an increase of *often* responses, rising from nineteen (32.20%) to twenty-five (43.37%) responses. However, survey results showed a decrease in the number of *sometimes* and *rarely* responses. In the pre-event survey, eighteen (30.51%) participants marked *sometimes* and five (8.47%) marked *rarely*. In the post-event survey, the number of responses decreased to fifteen (25.42%) and two (3.39%), respectively.

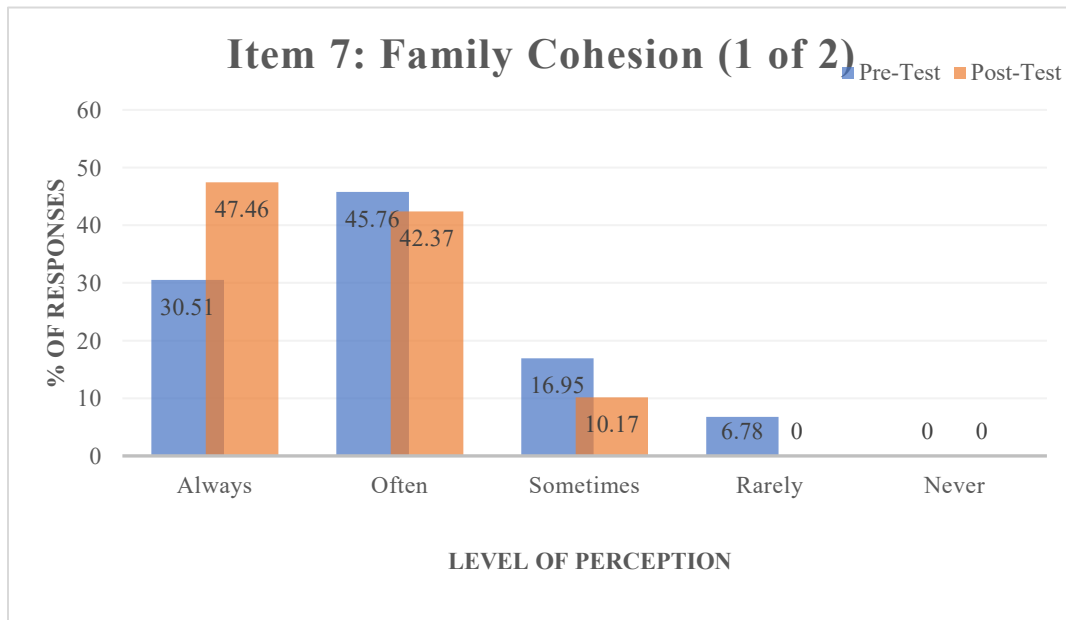
Family Cohesion

Items 7 and 8 corresponded to the domain of *family cohesion*. For item 7, “My child and I do fun things together,” 21 participants increased the rating of their response, 5 participants decreased their rating, and 33 participants felt there was no change seen in

the way they marked this question. All *rarely* responses became a higher response rating, and the *always* selection increased from 30.51% (18) in the pre-survey to 47.46% (28) in the post-survey. *Often* decreased from 45.76% (27) in the pre-survey to 42.37% (25) in the post-survey. *Sometimes* decreased from 16.95% (10) of responses to 10.17% (6) in the post-survey. *Never* remained at 0 in the pre- and post-survey. Four people marked *rarely* in the pre-survey, 6.78% of the responses, and zero marked *rarely* in the post-survey. Based on these outcomes, item 7 yielded highly statistically significant results. Refer to *Figure 3* for results of caregiver perception of *family cohesion* before and after the event.

Figure 3

Item 7 Pre and Post Responses

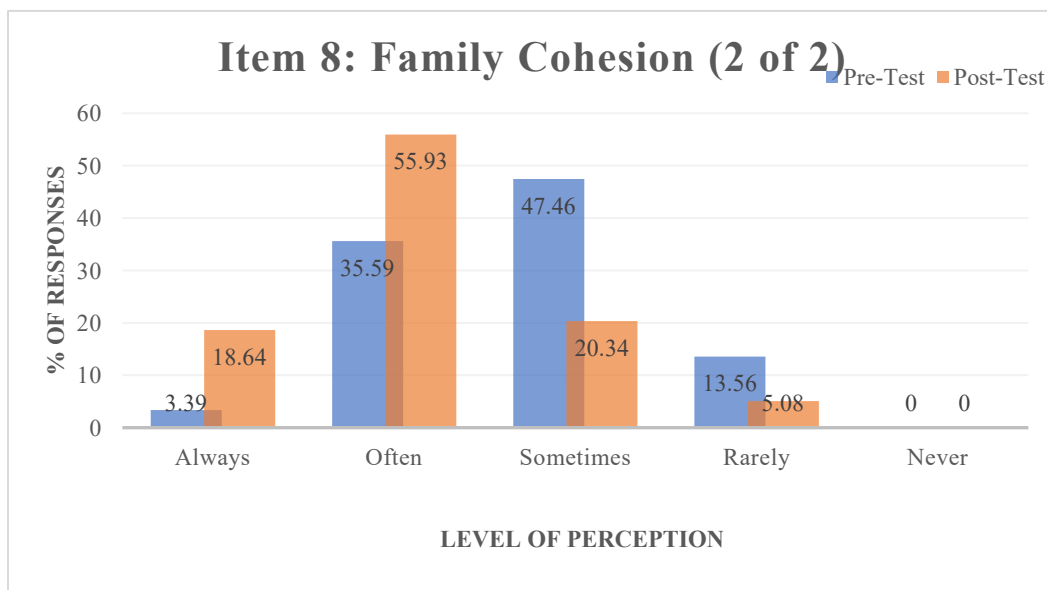


Note. Item 7 asked, “After participating in the event, my child and I did something fun together.”

Item 8 asked family members and caregivers “I feel confident in allowing my child to work through a problem.” Thirty-two participants increased their response ratings by at least one level, four decreased by one level, and 23 had no change. Increase in percentage changed between pre and post surveys were found in the answer response *always* and *often*. In the pre-survey, two or 3.39% of the family participant marked *always*, but this category increased to 16.64% with 11 respondents selecting this option following the BDF event in the post-survey. Twenty- one, or 35.59% of the respondents, marked *often* in the pre-survey and this increased to 55.93%, or 33 respondents, in the post-survey. Twenty-eight, or 47.46% of respondents, marked *sometimes* in the pre-survey and this decreased to 20.34%, or 12 respondents, in the post-survey. *Rarely* was selected by eight respondents, or 13.56%, in the pre-survey, which decreased to three respondents, or 5.08%. *Never* remained unmarked in the pre- and post-survey. Item 8 yielded highly statistically significant results.

Figure 4

Item 8 Pre and Post Response



Note. Item 8 asked, “After participating in the event, I felt confident in allowing my child to work through a problem.”

Paired Samples Test Results

In addition to SurveyMonkey result analysis, we used paired t-tests through IBM SPSS Statistics to compare each participant’s responses for corresponding items in both pre- and post- surveys. The results are shown in the following table:

Table 2

SPSS Paired Samples Test

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Q1-PRE # - Q1-POST #	-.603	1.107	.145	-.895	-.312	-4.151	57	.000
Pair 2	Q2-Pre # - Q2-Post #	-.241	.904	.119	-.479	-.004	-2.033	57	.047
Pair 3	Q3-PRE # - Q3-POST #	-.138	.736	.097	-.332	.056	-1.427	57	.159
Pair 4	Q4-PRE # - Q4-POST #	-.276	.914	.120	-.516	-.036	-2.299	57	.025
Pair 5	Q5-PRE # - Q5-POST #	-.552	1.095	.144	-.840	-.264	-3.837	57	.000
Pair 6	Q6-PRE # - Q6-POST #	-.172	.958	.126	-.424	.079	-1.371	57	.176
Pair 7	Q7-PRE # - Q7-POST #	-.397	.748	.098	-.593	-.200	-4.038	57	.000
Pair 8	Q8-PRE # - Q8-POST #	-.603	.917	.120	-.844	-.362	-5.014	57	.000

We hypothesized that there would be a significant difference ($p < 0.05$) between each participant’s pre- and post- responses; our null hypothesis was that there would be no significant difference ($p > 0.05$). The results indicate a highly statistically significant result in items 1, 5, 7, and 8, a statistically significant difference in items 2 and 4, and no significant difference in items 3 and 6 between the two surveys. These results indicated a statistical significance in all four domains tested.

Qualitative Results

We interviewed 13 parents and caregivers at three BDF events between the months of September and October 2019 to gather qualitative data. Coding the results

from data collection revealed common themes reported by parents and caregivers across multiple events. In addition to the emerging themes, we found a pattern of key phrases that aligned the themes with one or multiple QoL domains in question.

Self-Efficacy

In the domain of *self-efficacy*, multiple parents reported that BDF provided their child with opportunities to build self-confidence through participating in novel experiences and experiences that were designed for their success. During the interviews, the participants were asked a question which aimed to gain insight into *self-efficacy*: “How do you think participation in today’s activities will affect your child’s self-esteem and self-confidence?” When coding for responses, researchers looked for words such as empowering, challenging, independence, and phrases relating to trying something new and conquering fears.

Five participants directly spoke to how the activities at BDF impacted their child’s self-esteem and self-confidence. Participant 6 discussed how trying new things can make their child feel better about themselves:

Trying something new and maybe a little bit scary is going to give them a little more confidence and their self-esteem obviously if they accomplish it, and then they’re going to feel better about themselves too, and not be afraid to try new things.

Participant 7 spoke to how the one on one volunteer system promoted self-confidence and *social participation* in her daughter:

This helped her build her self-confidence, definitely. I think just being in the water and having somebody with her to hold her just kind of empowered her to

want to keep doing it. She went like 12 different times at least. So, she really enjoyed it. And every time she was done, she would say “One more time! One more time!”

Participant 8 spoke to how her daughter tried new things, “She’s actually done a lot today, even, just kind of challenged herself to get out there and go out on the paddleboard.” Participant 10 discussed how seeing peers participate impacted her child’s self-efficacy, “She sees other people doing it, atypical people, and so it’s like ‘oh I can do that too.’ And just overcoming fears that make her feel like ‘I’ve never tried that before.’” Lastly, participant 11 said:

My child does not lack self-esteem or self-confidence, I will say, but it absolutely gives him an opportunity that he otherwise wouldn’t have. So, it just gives him a new experience and a chance to do something and get out and have fun, a chance to exercise that confidence.

In summary, multiple parents spoke to how the structure of the events allowed their children to try new activities and overcome their fears. The events also allowed them to gain or improve self-confidence through working with the volunteers and their atypical peers by getting out of their comfort zone.

Performance Skills

Parents and caregivers lauded BDF for providing structured non-typical experiences outside of their usual routines that allowed their children to exercise *performance skills*, particularly the motor and processing skills required for beach recreation. In response to the question “What are you and your family members hoping to gain from this experience?” participant 8 replied, “This chance for her to try some stuff

that's different. She's in an environment where it's really well-coordinated—it's protected. So, there's less risk than if you were trying to do this stuff on your own."

Several parents described participating in BDF as a chance for their children to broaden their recreational horizons. Participant 9 stated:

He likes computer coding, he's more of a homebody. He doesn't like to do physical activity, so this is why we like to do this. When we were coming, he said he didn't want to do any of it, but once we got here, he went right for the surfing sign up.

Others discussed BDF as a source of opportunities for their child to learn from peers and volunteers. Participant 10 commented on her child's paddle boarding experience: "On the last run they showed her how to hold the paddle, and let her do it. They gave her the experience of 'this is how it's done, and you can do it too.'" Participant 7 commented on the ability of BDF and other adaptive recreation organizations to introduce children to risky play options that have the potential to develop into hobbies:

We had her in hippotherapy for a while, and she loved it. It's like a hobby for her now; we put her in a horse-riding class now so it's not just therapy. And then swimming. Big swimmer. She loves being out here today.

Social Participation

Much of the qualitative responses reflected upon the meaningful social opportunities that BDF events facilitated for their child. Participants discussed the positive impact that social interactions and feelings of inclusion had on their child. When asked "What has your child enjoyed most about today?" participant 2 stated "The people. Making friends." Participant 11 reported, "He's really enjoying his buddies that are out

there. Both the ones that are doing the activities and the buddies that are assigned to him. He loves interaction.” Many parents and caregivers also expressed their own joy that stemmed from watching their child socialize. When asked what she enjoyed most about the day, participant 2 reported “Watching him be able to socialize with other people and working on his sandcastle.” When asked the same question, participant 9 said “The whole setup is a great thing for them. They feel included, they don’t feel like outcasts, so it’s nice that everybody understands how they are.”

Of the 12 participants interviewed, five respondents indicated that from this experience, they hoped their child would gain opportunities to socialize with others. When asked “What are you and your family members hoping to gain from this experience?” participant 1 stated, “I’m hoping he can make some connections with other kids with special needs.” Participant 11 said “Probably the biggest thing is he loves meeting people, he loves interacting with his typical peers. You know, this is a good chance to get out and also have fun with his typical peers.”

Family Cohesion

Of the 12 participants, 9 described the BDF event as positive for family cohesion, and also an enjoyable occasion for those who attended with the participant. When asked “what are you and your family members hoping to gain from this experience?” participant 2 responded that BDF was “an experience that we can’t necessarily provide,” participant 5 responded “for him to have fun . . . enjoy life,” and participant 6 stated “for all of us to get to meet people and just experience new experiences together as a family.” Multiple family members and caregivers also described family satisfaction while watching their participant when asked “what have you enjoyed most about today?”

participant 6 said she enjoyed “watching the kids,” and participant 7 went into further detail saying:

She was just full of joy. I mean from the moment we got here, and she saw the beach and we were walking towards it. Because on the way this morning it was kind of rough getting her going, and then we had an hour drive here. She didn't know what we were doing, she's just in the car like “it's early.” And then we got here and I held her and we're walking down 11th and she saw the beach and she just smiled really big and she's like “beach!” And then the whole time she was just saying “I want surfing, I want boogie, I want one more.”

Participant 8 added, “Definitely in a place it's a little more well-designed, well laid out for people that have these kinds of challenges. Takes a lot of the stress off.” Participant 10 reported that she also benefited from the trip outdoors:

Me getting to be outside too. My other daughter is chronically ill and bedridden, so I'm home most of the time with her. So, it's like, you guys are on duty at the house, and [my daughter] and I are going to go have a little mental health day. It's not like another therapy, another class, like this is something really fun.

Participant 11 also felt a high sense of relief towards the management of her child's disability:

Honestly, the break of him being able to get out and have a good time that I'm not immediately having to facilitate. I know he's safe. I know he's having fun. I know he's making friends. And I've had 20 minutes to just do my own thing.

Discussion

From a PEO perspective, BDF is a measurable event in that each component

(person, environment, and occupation) and the impact on occupational performance can be measured and analyzed after objective observation and subjective self-report. Due to this potential for two paths for data collection, we determined that a mixed method approach utilizing both quantitative and qualitative paths would be most appropriate for data collection. In this study, the person in question was each participant's child, the environment was the physical, social and cultural context of the beach, and the occupations were outdoor play and leisure.

Self-Efficacy

The results of the pre-and post- test surveys and the data gathered from the semi-structured interviews supported the initial hypothesis that adaptive outdoor adventure activities have a beneficial impact on self-efficacy. The events provided by BDF such as surfing, SUP, kayaking, and more are adapted for the children to be able to feel the risky elements of the activities in a safe and supported way. Through experiencing these activities parents reported that their children increased their self-confidence and felt empowered to go out of their comfort zones and face challenges. The literature discusses how important risky play is in the development of children, and this is an area that is severely lacking in children with disabilities. The events at BDF give the children the unique ability to have access to risky play in a supported manner that promotes success. Being able to work through a new challenge or activity promotes self-efficacy, and the results of this study showed highly significant statistical results that the participants' children felt more accomplished after participating in the event.

Performance Skills

The occupation of play in a beach setting demands a combination of several *performance skills*. Motor skills recruited for a day at the beach include walking on uneven and shifting surfaces, coordination and dynamic balance moving against the resistance of water, postural control when standing or sitting on a board or beach wheelchair, and manipulation and use of play equipment. Process skills used in beach play and leisure include attending to and navigating a dynamic environment, processing and tolerating a variety of sensory stimuli.

The data indicates an overall positive impact of BDF on many participants' perspective of their child's performance skills. Participants felt that BDF fostered an environment in which their child could develop new performance skills by exposure to new activities or practice existing skills by applying them in a new setting. One parent reported that she enjoyed watching all the children participate because "some kids may never get this experience of being able to go out in the water, but they're able to do it here." For some parents, the appeal of getting their child out of the home and interacting with typical and non-typical peers in an environment that did not feel like therapy was worth signing up for the event:

It's just a different experience for him. He did this last year, and he really enjoyed being in the water and having a buddy. He loves to touch and play with the sand. He likes going to the beach, and there's other kids like him here.

Social Participation

For item 5, "my child engaged in age-appropriate social activities," results showed that 31 participants selected a Likert-scale score on the post-event survey that was at least one level higher than their pre-event survey response. Of these participants,

six individuals had a score increase of two levels (e.g., *never* to *sometimes*) while two others showed a score increase of three levels (e.g., *never* to *often*). Six participants showed a decrease in at least one score level, while 22 participants exhibited no change in their responses. One individual's pre- to post-event response of item 5 showed a large decrease of four levels. The result could have been due to a number of variables including time of post-event survey response or other personal factors.

Prior to participating in a BDF event, only 3.39% of parents and caregivers reported that their child always engaged in age-appropriate social activities. A possible explanation for this may be the occupational deprivation that children with disabilities often face in terms of normal play and socialization opportunities. In contrast, BDF events are tailored to provide inclusivity for this population through safe and fun adventure activities. A typical event provides its participants with countless opportunities to socialize with peers, paired "beach buddies," and staff members while engaging in developmentally-appropriate activities. Participation in these events led to an 8.47% increase in *always* responses and a 27.09% increase in *often* responses for this item.

Through quantitative analysis, item 6 "my child interacted with non-family members," was found to have no significant change from pre- to post-event survey responses. Results showed that on the post-event surveys, thirty participants had no change in response and thirteen selected a Likert-scale score that was at least one level lower. However, sixteen participants selected a score on the post-event survey that was at least one level higher and of these individuals, seven displayed an increase of two levels.

Other than healthcare professionals, children and adolescents with disabilities typically do not get as much opportunity to interact with non-family members in leisure

contexts compared to typically developing children. The limited change seen in survey responses for this item may reflect a family's personal choices or barriers to community participation such as lack of inclusivity or negative societal attitudes towards disabilities.

Family Cohesion

From the statistically significant results in items 7 and 8, attending the BDF event yielded positive impacts on family cohesion. According to the family responses taken prior to participating in the BDF activities, 30.51% felt they always did fun things together. After attending the event, this increased to 47.46%. The increase could be due to the engagement they felt with their participant. When asked if they felt they were confident in having their child work through a problem, ratings increased significantly in *always* and *often* responses. 32 respondents increased their score by at least one level, and 23 felt there was no change in their answers. Quantitative and qualitative results indicate a statistically significant and overall positive impact of outdoor recreation on family cohesion. A day at the beach is a welcome intermission for families that generally juggle their time between home, health care, and school settings. Collectively BDF participants reported that this supportive break from the norm is a great source of respite and bonding between them and their child that ultimately improves family cohesion.

Occupational Therapy Research Agenda

The Occupational Therapy Research Agenda (OTRA) recognizes the major goals and priorities for research in occupational therapy (AOTA, 2011). The aim and implications of this current study align closely with two of the five research categories—Intervention Research and Basic Research. Results of the current study contribute to the Intervention Research goal of creating novel, theory-based interventions that

promote engagement in occupations and improve quality of life of participants. Using the PEO model as a guiding framework and a mixed-methods approach to gather and evaluate outcomes, researchers were able to determine that participation in adaptive outdoor recreation can have a multidimensional positive impact on the quality of life of a priority population (i.e., children with disabilities and their families). This unique form of intervention can be applied as both restorative and compensatory and may work to effectively address various domains of function and well-being.

This study is also aligned with the OTRA Basic Research goal of examining relationships among impairment, activity and participation and how they impact individuals with disabilities and their families across the lifespan (AOTA, 2011). The PEO model was chosen as a guiding framework for this study as the most appropriate fit for the participants as well as this OTRA goal.

Strengths and Limitations

One strength of the present study was the large sample size for quantitative data collection. We had more success in full recruitment than expected (i.e. completion of both pre- and post- surveys), and obtained a sample size large enough to display easily observable trends in data. Another strength was the use of an embedded mixed methods approach to measure and describe a complex, multifaceted theme like QoL. Qualitative data reported from semi-structured interviews with caregivers and parents supplemented the findings from quantitative statistical analysis. Together these two data sets present a more holistic picture of the experiences of the participants and their children. One factor that was both a strength and limitation was the custom, non-standardized questionnaire that we created for the pre- and post-survey. The non-standardized nature of the questions

lowered the study's methodological rigor; however, the customization allowed us to investigate the specific domains of interest in a way that existing questionnaires or measures would not have allowed.

One major limitation was the impact of confounding variables on the intent and final design of the study. We set out to measure long term effects of BDF on families, but relegated to collecting quantitative data on more short-term effects due to a number of confounding variables that included the availability of events, event cancellation due to weather, participant drop off for post-event data collection. Another limitation was that we relied solely on parent reports for post-event data and were not able to observe occupational performance and potential transfer of skills, improvements in self-efficacy, social participation, or family cohesion firsthand.

For quantitative data collection, one limitation was the non-specific time window allotted for post-event responses. Some parents completed the post-survey at the event, others may have had more time to reflect when they completed it days following the event within the week limit. The extra time could also allow for more opportunities for parents to observe their child exhibiting any changes in behavior following the event.

Regarding qualitative data collection, the semi-structured approach meant that we had no assigned time for interviewing caregivers or no specific time for how long interviews would last. There was variation in the thoroughness of responses depending on when we approached the interviewee during the event. For example, if the child was present and most of the day's events were concluded, some parents rushed through their responses. The only specific criteria for being interviewed was having a child who was participating in the day's events, and we only approached caregivers who looked inviting

and unoccupied. As for the interview itself, we prepared a set of five questions for one interviewee, but did not factor in parents talking over each other or children providing input to the interview as well. Location of the interview may have influenced interviewees comfort levels when speaking with us. For example, some participants were interviewed standing on the beach, others were interviewed seated in the shade. One miscellaneous factor that may have influenced data collection is that some participants had attended previous BDF events or similar adaptive beach recreation programs.

Conclusion

According to the results, there were several benefits discovered in the four domains of a participant's QoL: *self-efficacy*, *performance skills*, *social participation* and *family cohesion*. In the domain of *self-efficacy*, we found significant increases in family reports of their child's independent initiation and sense of accomplishment when completing tasks. In terms of *performance skills*, children who participated in a BDF event were reported demonstrating more problem-solving skills than they did prior to the event. Regarding *social participation*, children who attended BDF events were shown to engage in more age-appropriate social activities and interact with non-family members more often. In the domain of *family cohesion*, parents reported feeling more confident in their child's ability to work through a challenge and reported engagement in more enjoyable family activities after BDF participation.

Through the current study, we observed the variety of benefits that adaptive outdoor recreation, particularly beach-based events organized by BDF, can produce in QoL among children with disabilities and their families. We found statistically significant

changes in the domains of *self-efficacy*, *performance skills*, *social participation*, and *family cohesion* after participation in adaptive outdoor recreation. Based on these findings, future researchers can examine the efficacy of adaptive recreation and leisure in other specific outdoor settings: forest, desert, mountain, etc. One primary limitation of the present study arose from its reliance on parent report rather than objective observations of the children's occupational performance. Further research can examine the participant's children in such a way that allows for observation of long-term gains or transfer in the four domains in contexts away from the adaptive outdoor events.

Clinical implications of this study could involve practitioners incorporating adaptive recreational outings and elements of risky play as part of a child's intervention plan in order to gain the observed benefits recorded in the present study. Such interventions could be implemented on an individual basis or as a group facilitated by clinics or community programs designed specifically for clients who would otherwise have challenges accessing typical recreational outings.

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Appendix A

Consent Form

Stanbridge University Research Consent Form**Description:**

You are invited to participate in a research study on the benefits of the Best Day Foundation (BDF). We ask that you respond to a series of questions on a survey before the event, provided through e-mail or paper, and another survey one week after the event, through e-mail. In addition, you are invited to share your experience with your child at BDF through an interview, which will be audio-recorded.

Your Time Involvement: Your time will approximately take twenty minutes.

Risks and Benefits: There are no known risks to this study. The benefits to this study are contributing to the success and advancement of BDF to host more events.

Payment: There will be no payment for participation in this study

Participant rights: If you have read and signed this form you are consenting to participate in this study. Participation in this study is voluntary and you have the right to withdraw at any point without penalty. Your alternative is not to participate in this study. You have the right to refuse to answer specific questions. Your identity will not be disclosed at any time. The results of this study may be disseminated at professional meetings.

Contact information: If you have any questions about this research you may contact the Faculty Advisor or research team

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Phone Number: 213-270-4590

E-mail: bestday008a@my.stanbridge.edu

Independent contact: if you are in some way dissatisfied with this research and how it is conducted, you may contact the Stanbridge University Vice President of Instruction at VP.instruction@stanbridge.edu.

Indicate yes or no:

I give consent to have my responses from this survey used in this research study.

_____ yes _____ no

I give consent to be audiotaped and photographed during this study and for my photographs to be used in research dissemination materials (poster, video, etc.) resulting from this study.

_____ yes _____ no

Signature: _____ **Date:** _____

Appendix B

Pre- Event Survey

Best Day Foundation Pre-Test Survey
Stanbridge University

Please choose ONE answer only.

1. Within the last 7 days, my child exhibited a sense of accomplishment after completing a task or activity
 Always Often Sometimes Rarely Never
2. Within the last 7 days, my child-initiated, or started, a task or activity independently
 Always Often Sometimes Rarely Never
3. Within the last 7 days, my child engaged in physical activity
 Always Often Sometimes Rarely Never
4. Within the last 7 days, my child demonstrated an ability to problem solve when faced with a challenge
 Always Often Sometimes Rarely Never
5. Within the last 7 days, my child engaged in age-appropriate social activities
 Always Often Sometimes Rarely Never
6. Within the last 7 days, my child interacted with non-family members
 Always Often Sometimes Rarely Never
7. Within the last 7 days, my child and I did something fun together
 Always Often Sometimes Rarely Never
8. Within the last 7 days, I felt confident in allowing my child to work through a problem
 Always Often Sometimes Rarely Never

Please provide your name and email (for the follow-up survey only, **not** for solicitation or marketing purposes)

Name: _____

Email: _____

Appendix C

Post- Event Survey

Best Day Foundation Post-Test Survey
Stanbridge University

Please choose ONE answer only.

1. After participating in the event, my child exhibited a sense of accomplishment after completing a task or activity
 Always Often Sometimes Rarely Never
2. After participating in the event, my child-initiated, or started, a task or activity independently
 Always Often Sometimes Rarely Never
3. After participating in the event, my child engaged in physical activity
 Always Often Sometimes Rarely Never
4. After participating in the event, my child demonstrated an ability to problem solve when faced with a challenge
 Always Often Sometimes Rarely Never
5. After participating in the event, my child engaged in age-appropriate social activities
 Always Often Sometimes Rarely Never
6. After participating in the event, my child interacted with non-family members
 Always Often Sometimes Rarely Never
7. After participating in the event, my child and I did something fun together
 Always Often Sometimes Rarely Never
8. After participating in the event, I felt confident in allowing my child to work through a problem
 Always Often Sometimes Rarely Never

Name: _____

- I would like to be e-mailed the results of this study.

Appendix D

Interview Open-ended Questions

1. How do you think participation in today's activities will affect your child's self-esteem and self-confidence?
2. What are you and your family members hoping to gain from this experience?
3. What has your child enjoyed most about today?
4. What have you enjoyed most about today?
5. What does your child typically do for fun outside?