

RECREATION AS A RELATED SERVICE: FOCUSING ON THE QUALITY OF LIFE OF  
STUDENTS WITH DISABILITIES

by

Melissa R. Diodati

Bachelor of Elementary Education and Sociology  
University of Massachusetts Amherst, 1999

Masters of Special Education  
University of Massachusetts Boston, 2002

Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Education in

Educational Leadership

School of Education

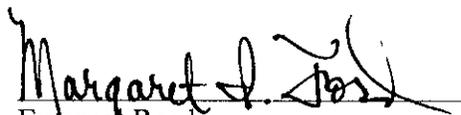
Southern New Hampshire University

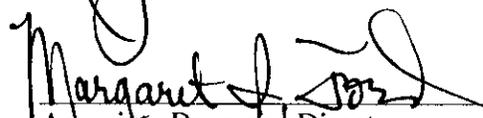
2017

  
Chair

  
Committee Member

  
Committee Member

  
External Reader

  
Associate Dean and Director  
Ed.D. in Educational Leadership

© Copyright by Melissa R. Diodati 2016

All Rights Reserved

### **Abstract**

Leisure participation is influential on the quality of life of individuals. Individuals with disabilities can face barriers in leisure participation, impacting their quality of life. IDEA (2004) recognizes recreation as a related service as one way to enhance the leisure experiences for students with disabilities. The purpose of this embedded case study was to explore how recreation as a related service contributed to the quality of life of students with disabilities in a public school setting. The scope of this study included six students and fifteen IEP TEAM members, including parents. Interviews, questionnaires, and document analysis were utilized to collect data on the perspectives of students and IEP Members, student outcomes, and the service delivery model used within a PreK-12 public school district in Northeastern United States. Findings from the data analysis suggested that students who received recreation as a related service demonstrated quality of life in the area of physical and emotional well-being, social participation, and independence. Currently, there is a lack of awareness of recreation as a related service and it is underutilized in the public school setting. Findings that emerged from this study identify the potential outcomes from the utilization of recreation as a related service in the public school setting. Identifying these outcomes can increase the awareness of this related service. More research is needed to identify how recreation as a related service contributes to the interpersonal relations of students with disabilities and their peers.

*Key Terms: recreation as a related service, quality of life, leisure participation, leisure activities, social participation, peer participation, and students with disabilities.*

This work is dedicated to my children Ian Patrick and Eileen Rose... you are my everything...and to all of my students... past, present and future: always take the time to find your strengths and let this be proof that with focus and determination you can accomplish anything.

## Acknowledgements

Thanks to my family and friends who supported me throughout this process, without you this dissertation would not be possible. A special thanks to my mother who taught me to work hard and persevere, my father who taught me it is okay to have fun no matter how much work there is to do, my husband for always encouraging me to follow my dreams, and Ian and Eileen for making me smile each day.

I am grateful for the guidance of my committee chair, Dr. Nancy Charron and committee members Dr. Dick Ayers and Dr. Beverley Evans. Your comments pushed my thinking and your dedication helped me achieve my goal of bringing awareness to a topic that I feel so passionate about. A big thanks to Dr. Peg Ford for believing in me and providing me with so many wonderful opportunities to share my voice.

## TABLE OF CONTENTS

Title Page .....	i
Copyright Page .....	ii
Abstract .....	iii
Dedication .....	iv
Acknowledgements .....	v
Table of Contents .....	vi
List of Figures .....	ix
Chapter I	
Introduction	1
Statement of the Problem	2
Theoretical Framework	5
Disability Theories	5
Theories of Well-Being	5
Health Protection/Health Promotion Model	6
Quality of Life Framework	8
Definition of Terms	11
Research Questions	14
Significance of the Study	15
General Procedures	16
Delimitations	18
Overview	18
Chapter II	
Introduction	20
Recreation as Therapy	21
Leisure Participation of Individuals with Disabilities	22
Leisure Needs of Individuals with Disabilities	27
Outcomes of Leisure Participation	29
Therapeutic Recreation in Schools	33
Underutilization of Therapeutic Recreation in Schools	35
Impact of Leisure Participation on Quality of Life	48
<b>Conclusion</b>	<b>47</b>
Chapter III	
Introduction	49
Rationale for Qualitative Research	50
Rationale for Case Study Methodology	51
Research Sample	51

High School Student Participants	53
Elementary Student Participants	53
IEP Team Member Participants	54
Overview of Information Needed	54
Research Design	56
Data Collection	62
Data Analysis and Synthesis	63
Ethical Considerations	65
Issues of Trustworthiness	67
Confirmability	67
Dependability	68
Credibility	68
Limitations and Delimitations	68
Chapter Summary	71
Chapter IV	
Introduction	73
Participant Overview	73
Key Findings	74
Finding 1	76
Finding 2	81
Finding 3	90
Finding 4	97
Finding 5	102
Summary	107
Chapter V	
Introduction	110
Discussion	111
Independence	112
Social Participation	115
Well-Being	120
Family Support	123
Cross-case Comparisons	125
Limitations	130
Conclusion	132
References	134
Appendices	
Appendix A: Superintendent/Principal Informed Consent Form	140
Appendix B: IEP Team Member Informed Consent Form	144
Appendix C: Parent Informed Consent Form	147
Appendix D: Student Informed Consent Form	151
Appendix E: KIDSCREEN-52 Questionnaire	154
Appendix F: IEP Team Member Questionnaire	162
Appendix G: Student Interview Protocol	170

Appendix H: Data Analysis Gathering Grid

## LIST OF FIGURES

Figure 1. Health Protection/Health Promotion Model .....	7
Figure 2. Quality of Life Framework .....	9
Figure 3. Research Proposition .....	10
Figure 4. IEP Member Participants Perceptions: Psychological Well-Being, Moods and Emotions, and Physical Well-Being of Students with Disabilities Who Receive Recreation as a Related Service .....	80
Figure 5. IEP Member Participant Perceptions: The Influence of Recreation as a Related Service on the Emotional Well-Being and Physical Well-Being of Students with Disabilities .....	81
Figure 6. IEP Member Participants Perceptions: Autonomy and School Environment of Students with Disabilities Who Receive Recreation as a Related Service .....	89
Figure 7. IEP Member Participant Perceptions: The Influence of Recreation as a Related Service on the Personal Development and Self-determination of Students with Disabilities .....	90
Figure 8. IEP Member Participant Perceptions: The Influence of Recreation as a Related Service on the Leisure Participation and Skill Development of Students with Disabilities.....	97
Figure 9. IEP Member Participants Perceptions: Social Acceptance of Students with Disabilities	

Who Receive Recreation as a Related Service.....101

Figure 10. IEP Member Participants Perceptions: Social Inclusion, Equal Rights, and

Interpersonal Relations of Students with Disabilities Who Receive Recreation as a  
Related Service .....102

Figure 11. IEP Member Participants Perceptions: Parent Relations and Home Life of Students

with Disabilities Who Receive Recreation as a Related Service .....104

Figure 12. IEP Member Participants Perceptions: Social Support and Peers of Students

with Disabilities Who Receive Recreation as a Related Service .....106

Figure 13. IEP Member Participant Perceptions: The Influence of Recreation as a Related

Service on the Interpersonal Relations of Students with Disabilities .....107

## Chapter I

### Introduction

An individual's quality of life is often dependent on the ability to make choices and utilize resources to live independently. Disabilities can impose challenges that impact the quality of life of individuals with disabilities. Special education services aim to provide a free and appropriate public education that can enhance the quality of life of students with disabilities by preparing them for future education, employment, and independent living (Turnbull, Turnbull, Wehmeyer, and Park, 2003).

Leisure and recreation activities are important aspects of independent living that can promote the quality of life of individuals. Accessibility and involvement of leisure and recreation activities is dependent on the physical, social, and behavioral skills needed for participation, as well as the awareness of resources. Recreation therapy as a related service has the potential to foster the leisure participation of students with disabilities, enhancing their quality of life (Shikako-Thomas et al., 2012).

Recreation, including therapeutic recreation is currently listed as a related service available to students with disabilities. The purpose of recreation as a related service is to provide support to students in the area of leisure and recreation in order for them to access information and learn skills needed to successfully participate in self-selected leisure and recreation activities. This can include before, during, and/or after school activities. The use of recreation as a related service is dependent on teacher and parent awareness of its availability to students with disabilities (Hawkins, Cory, McGuire, & Allen, 2012). The purpose of this research is to identify how recreation as a related service utilized in the public school setting contributes to the quality of life

of students with disabilities, the implementation of this service, and the outcomes of students receiving recreation as part of their IEP.

### **Statement of the Problem**

Up until the 1970s Special Education was not federally legislated within the country's public education system. People with disabilities were sent to custodial institutions and believed to be unable to access instruction within a public education setting. In 1972, high profile court cases *PARC v. Commonwealth of Pennsylvania* and *Mills v. Board of Education* brought attention to the special education population within the country. These cases highlighted clauses within the 14th Amendment and Equal Protection Act that called for people with disabilities to have a right to receive an education (Peterson, 2010).

In 1975, a bill was signed by President Gerald Ford making it a federal law for states to provide a free-appropriate education for all children with disabilities 3-21 (Peterson, 2010). This bill recognized The Education of All Handicapped Children Act. In addition to free-appropriate education for all children with disabilities, The Education of All Handicapped Children Act also ensured the right of due process, nondiscriminatory identification and evaluation, education in the least restrictive environment, parental participation and individualized education programs (Retrieved on November 12, 2015, taken from [http://college.cengage.com/education/resources/res\\_prof/students/spec\\_ed/legislation/pl\\_94-142.html](http://college.cengage.com/education/resources/res_prof/students/spec_ed/legislation/pl_94-142.html)).

The Individuals with Disabilities Act (IDEA) ensures that students with disabilities are offered individualized instruction through an Individualized Education Plan in the least restrictive environment. According to IDEA (1997), instruction can be offered by a regular

education teacher, a special education teacher, a para-professional with teacher guidance, or a related service provider listed on the Individualized Education Plan (IEP). Related services include: speech-language pathology and audiology services, interpreting services, psychological services, physical and occupational therapy, recreation, including therapeutic recreation, early identification and assessment of disabilities in children, counseling services, including rehabilitation counseling, orientation and mobility services, medical services for diagnostic or evaluation purposes, school health services and school nurse services, social work services in schools, parent counseling and training, and transportation.

Special education services have focused predominately on academic outcomes of students rather than their quality of life. The four goals of equal opportunity, full participation, independent living, and economic self sufficiency are often addressed through an academic lens. Through utilization of various service delivery models, quality of life outcomes can be addressed within the four goals addressed within IDEA (Turnbull, Turnbull, Wehmeyer, and Park, 2003).

There is limited research on recreation as a related service within the public schools and its role on the quality of life of students with disabilities (Badia, Orgaz, Verduga, Ullan, and Martinez, 2012; Garcia-Villamizar & Dattilo, 2010; Kolehmainen, Bult - Mulder, Bult, Law, Shikako-Thomas, & Ketelaar, 2014; Mc Manus, Corcoran, and Perry, 2008). Most research on recreation programs focuses on its use outside of the public school setting (Allsop, Negley, & Sibthorp, 2013; Devine & Dawson, 2010; Schleien, Green, & Stone, 2003). While this research offers important empirical data on the outcomes of recreation services, new research is needed to

promote the use of recreation as a related service within public school settings and its contribution to the quality of life of students with disabilities .

Palmer, Heyne, Montie, Abery, and Gaylord (2011) share that one benefit of recreation as a related service is that it promotes social skills and friendship opportunities for students with disabilities. Typically developing students often struggle with these two areas. For students with disabilities the difficulty acquiring these skills and opportunities is magnified due to their cognitive, social and/or physical disabilities. Garcia-Villmiser and Dattilo (2010) discuss that in order to improve the quality of life of individuals with disabilities, leisure programs that increase social skills need to be identified.

Despite being listed as an available related service, recreation is underutilized and rarely seen on students' Individualized Education Plans (Hawkins et al., 2012). Palmer et al. (2011) state that parents and school staff who work with students' with disabilities are unfamiliar with recreation as a related service and the potential benefits this type of service could provide. They state that the lack of familiarity and awareness of recreation as a related service creates a barrier where "few students receive leisure education at school, and many social and emotional needs go unmet (p. 16)." Researchers have identified the need to promote the benefits of recreation as a related service as a way to promote awareness and increase its use in the public schools (Allsop et al., 2013; Hawkins et al., 2012). Identifying the benefits of recreation as a related service will help promote recreation as an important related service on student IEPs (Allsop et al., 2013; Hawkins et al., 2012).

## Theoretical Framework

### *Disability Theories*

A disability interpretive lens was employed for this study. Creswell (2013) states; that “researchers using a disability interpretive lens focus on disability as a dimension of human difference and not as a defect” (p. 34). In order for disability to be looked at as a difference and not a defect, beliefs and assumptions in society must be altered. Devlin and Pothier (2005) also discussed the role of the critical disability theory stating that the goal of critical disability theory is to challenge “assumptions and presumptions so that persons with disabilities can more fully participate in contemporary society” (p. 2). Devine and Wilhite’s (1999) contact theory states that interactions between individuals can change the beliefs they have towards one another. It suggests that when interactions among individuals with and without disabilities occur under favorable conditions, common goals and interests are realized, while stereotyping, prejudice, and discrimination decrease (Devine and Wilhite, 1999).

### *Theories of Well-Being*

Heyne and Anderson (2012) differentiated theories of well-being into two categories: theories of well-being in the individual and theories of well-being in contexts and environments. The community building theory was categorized as a theory of well-being in contexts and environments. This theory supports findings that:

social relationships are the primary contributor to personal health and happiness. A lack of meaningful social relationships weakens psychological, emotional and physical health whereas strong social ties support overall well-being (Heyne and Anderson, 2012, p. 119). The happiness theory was categorized as a theory of well-being in the individual. Contributors to the happiness theory found that 60% of one’s happiness is determined by genetics (50%) and life circumstances (10%). The remaining 40% of one’s happiness is controlled

by the individual, and can be influenced positively from behaviors such as building relationships, exercising regularly, and developing leisure activities (Heyne and Anderson, 2012)

*Health Protection/Health Promotion Model*

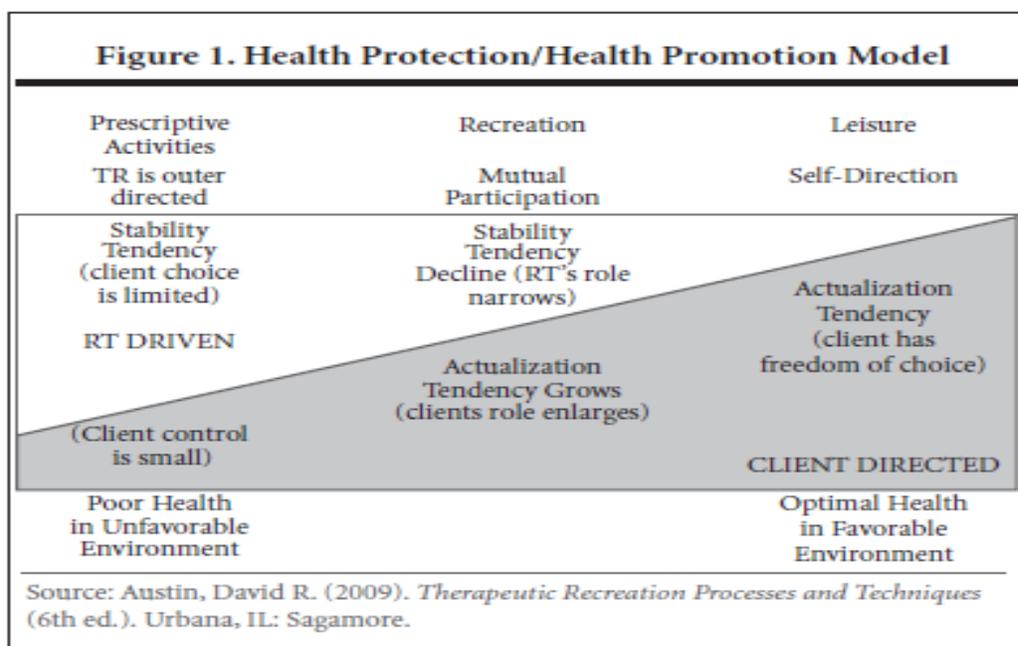
Austin's (1998) *Health Protection/Health Promotion Model* is a conceptual framework that acted as a guide for this study. The framework is often used for developing therapeutic recreation (TR) services within healthcare settings. The purpose of this model is to move individuals who face barriers to their health (i.e. age, disability, illness) towards stability and self-actualization. Therapeutic recreation specialists' play a specific role within this model, using recreation and leisure as the means to help individuals overcome obstacles which prevent them from reaching health and wellness. Within this model, the ending outcome is to promote client health and wellness as evidenced by client stability and self-actualization. To attain stability is to regain control. When a client reaches self-actualization they have reached their full potential by demonstrating their ability to independently and freely make leisure and recreation choices. In describing the Health Protection/Health Promotion Model, Austin (1998) shared that:

Through purposeful intervention using the TR process (i.e. assessment, planning, implementation, evaluation), therapeutic outcomes emphasize enhanced client functioning. Typical therapeutic outcomes include increasing personal awareness, improving social skills, enhancing leisure abilities, decreasing stress, improving physical functioning, and developing feelings of positive self-regard, self-efficiency and perceived control (p.115).

Clients move through three components along the continuum: prescriptive activities, recreation and leisure. Within each component the therapeutic recreation specialist provides a degree of services. Clients are moved through the components of the health protection/health promotion

model using a gradual release. Clients can enter the model at any point. The model's visual representation displays a rectangle which is split by a diagonal line. The diagonal line represents the continuum that the client moves along to reach the goal of health and wellness. The upper portion of the rectangle represents the therapeutic recreation therapists' control of the client. As the client moves along the continuum, this control is gradually released to the client as depicted by the decreasing wedge. The lower portion of the rectangle represents the client's control within the process. As the client moves through the components of the continuum, their control gradually increases (see Figure 1).

*Health Protection/Health Promotion Model:*



Prescriptive activities, help “clients begin to perceive themselves as being able to successfully interact with their environments, to start to experience feelings of success and mastery, and to take steps toward regaining a sense of control” (Austin, 1998, p. 112). The role of the therapeutic recreation specialist is to introduce activities and educate the client on skills and resources

needed for participation. In doing so, clients are able to practice utilizing these in protected environments.

Recreation follows prescriptive activities. During recreation, encouragement and guidance is provided from the therapeutic recreation specialists to help clients develop an awareness of the skills and resources available to help them. Clients begin to realize that barriers can be overcome and their stability and self-actualization begins to increase. The recreation component allows clients to practice skills and use resources more independently. Austin (1998) states that within this component of the continuum, “clients learn that they can be successful in their interactions with the world” (p. 113).

Leisure is the final component on the continuum. Austin (1998) states that within this model “leisure is a means to self-actualization because it allows people to have self-determined opportunities to expand themselves by successfully using their abilities to meet challenges (p. 113/4). At this point in the continuum, individuals are self-selecting activities based on their interests. The therapeutic recreation specialists’ role is non-existent as the services that were provided up to this point have allowed the individual to become self-directed.

### *Quality of Life Framework*

The Quality of Life Framework was developed to provide insight on the conceptualization and measurement of the quality of life of individuals (Schalock, Bonham, and Verdugo, 2008). The framework can be used for planning and evaluating programs used to promote the quality of life for individuals with disabilities. The framework includes three different components: factors, domains, and indicators.

There are three factors within the Quality of Life Framework: Independence, Social Participation and Well-Being (Figure 2). Factors act as the overarching constructs for the eight domains that comprise the quality of life of individuals. Within each factor there are a number of domains. The Independence Factor is comprised of the Personal Development and Self-Determination domains. The Social Participation factor is comprised of the domains Interpersonal Relations, Social Inclusion and Rights. The factor of Well-Being is comprised of Emotional Well-Being, Physical Well-Being, and Material Well-Being. Exemplary indicators are assigned for each domain. These indicators represent the beliefs, actions and conditions that signify well-being. Indicators encompass both subjective and objective quality of life outcomes (Schalock et al., 2008).

Factor	Domain	Exemplary indicators
Independence	Personal development	Education status, personal skills, adaptive behavior (ADLs & IADs)
	Self-determination	Choices/decisions, autonomy, personal control, personal goals
Social participation	Interpersonal relations	Social networks, friendships, social activities, interactions, relationships
	Social inclusion	Community integration/participation, community roles, supports
	Rights	Human (respect, dignity, equality) Legal (legal access, due process)
Well-being	Emotional well-being	Safety & security, positive experiences, contentment, self-concept, lack of stress
	Physical well-being	Health & nutrition status, recreation, Leisure
	Material well-being	Financial status, employment status, housing status, possessions

Figure 2: Quality of Life Framework

For the purpose of this study, the Health Protection/Health Promotion Model and the Quality of Life Framework were used as a lens to view the role of therapeutic recreation specialists and the student outcomes of participating in recreation as a related service in public school. It was hypothesized that utilizing recreation as a related service promotes students with disabilities leisure participation in and out of school. A second hypothesis was that as a result of this participation, students with disabilities will improve their quality of life across seven of the eight domains that constitute quality of life.

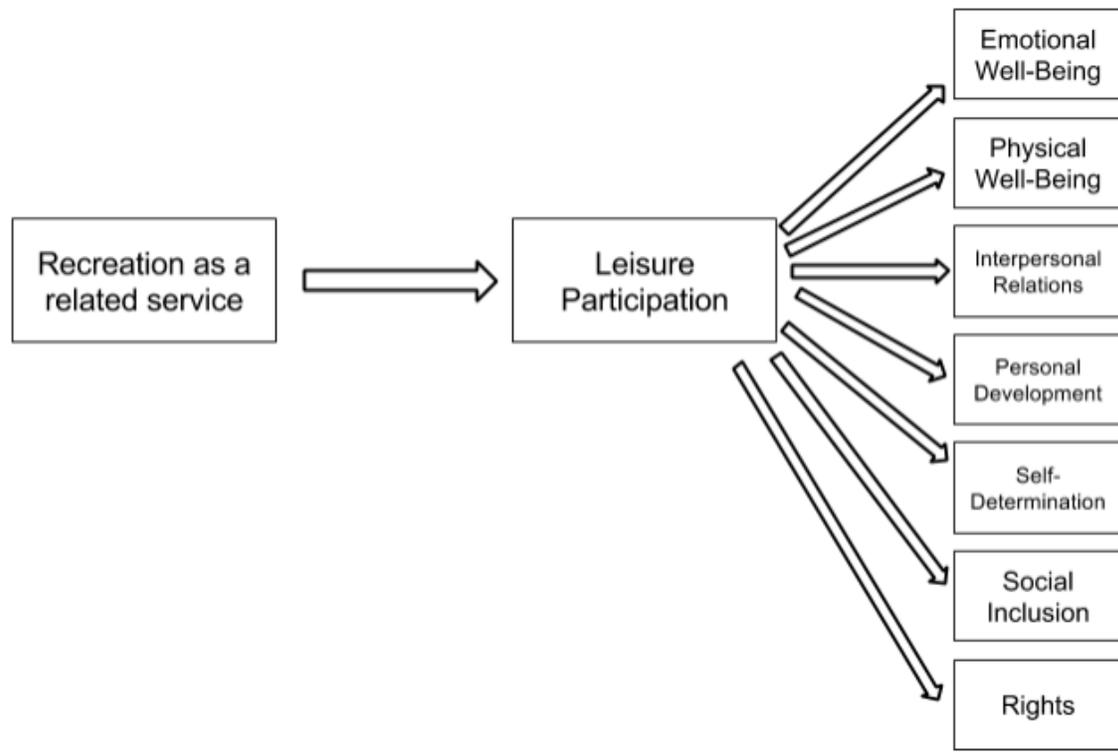


Figure 3: Research Proposition

**Definition of Terms**

*Structured Activities:* adult supervised activities that can occur in an out of school (i.e. clubs, community activities, volunteer activities, youth groups, sports, music, art, etc.) (Kolehmainen et al., 2014).

*Unstructured Activities:* spontaneous activities that occur in and out of school that are not supervised by adults (i.e. talking and hanging out with friends, play, watching television, etc.) (Kolehmainen et al., 2014).

*Leisure Time:* an opportunity to engage in a type of activity outside of one's daily obligations that can be active or passive, individually or in a group (retrieved on March 4, 2015, taken from <http://www.csun.edu/~vcrec004/ls251/resources/VealRecDefinitions.pdf>).

*Leisure and Recreation Activities:* activities that are voluntarily chosen by the participant during leisure time, that bring pleasure and satisfaction and are perceived to provide personal and social value (retrieved on March 4, 2015, taken from <http://www.csun.edu/~vcrec004/ls251/resources/VealRecDefinitions.pdf>). Leisure and Recreation Activities include and do not exclude: socializing activities such as playing and hanging out with friends, lessons/classes such as swimming or arts and crafts, creative activities such as cooking or puzzles, indoor activities such as playing cards or listening to music, outdoor activities such as playing catch or gardening, winter activities such as playing in the snow or sledding, summer activities such as going to the beach or on a picnic, and sports (Henry, 2000).

*Social Events*: age-appropriate events that children participate in with others (i.e. school dances, play dates, parties, attending sports events, etc.) (Kleinert, Miracle, & Sheppard-Jones, 2007).

*Recreation as a related service*: “a process that utilizes functional intervention, education and recreation participation to enable persons with physical, cognitive, emotional and/or social limitations to acquire and/or maintain the skills, knowledge and behaviours that will allow them to enjoy their leisure optimally, function independently with the least amount of assistance and participate as fully as possible in society” (retrieved on March 4, 2015, taken from <https://www.trontario.org/about-therapeutic-recreation>).

*Well-Being*: an individual’s feeling of success, satisfaction, and productive engagement in life (Heyne & Anderson, 2012; Carruthers & Hood, 2007).

*Friendships*: a relationship between two or more people that have mutual feelings of like and trust, enjoy spending time with one another and may share similar interests (retrieved on March 4, 2015, taken from <http://www.merriam-webster.com/dictionary/friend>)

*Inclusion*: peer acceptance of an individual to participate physically, functionally, and socially in activities with peers that promote his/her sense of belonging (Schleien et al., 2003).

*Leisure Lifestyle*: the practice of wanting to participate in leisure activities and having the skills necessary to access the activities or resources needed to do so independently (Stumbo and Peterson, 1998).

*Certified Therapeutic Recreation Therapist:*

“An individual who, at a minimum, is a graduate of a baccalaureate degree program in recreational therapy accredited by a nationally recognized accreditation body; is currently a Certified Therapeutic Recreation Specialist (CTRS) by the National Council for Therapeutic Recreation Certification (NCTRC); meets any current legal requirement of licensure, registration, or certification; or has the documented equivalent in education, training and experience and is currently competent in the field

(para 35, taken from: <https://www.nctrc.org/aboutnctrc.htm>, retrieved on July 10, 2015).

*Quality of Life:* “an individuals’ perceptions of their position in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (*WHOQOL Group, 1995, p. 1403*).

*Components of Recreation as a related service:*

1. Assessment of Recreation and Leisure Functioning

Assessment of recreation and leisure functioning is a procedure to determine the current functional strengths and needs of students with disabilities in terms of skills, abilities, and attitudes relative to recreation and leisure.

2. Leisure Education

Leisure education provides students with recreational and educational instruction to promote positive attitudes toward leisure, recognition of the benefits of recreation involvement, the development of skills necessary for recreation participation (such as social, decision making, and planning skills), knowledge of recreation resources, and attitudes and skills that facilitate independent, satisfying leisure experiences.

### 3. Therapeutic Recreation

Therapeutic recreation is the use of recreation activities to habilitate or rehabilitate functional abilities, which contribute to behavioral change. Therapeutic recreation is a process involving assessment, development of goals and objectives, and the implementation, documentation, and evaluation of intervention strategies.

### 4. Recreation in Schools and Community Agencies

Recreation in schools and community agencies involves the provision of recreation services that facilitate the full participation of children and youths with disabilities in school and community programs. Activities are used to promote health, growth, development, and independence through self-rewarding leisure pursuits (Retrieved on January 11, 2015 from <http://www.ncrta.org/consumer/related.htm>).

#### **Research Questions**

How does recreation as a related service as part of students' Individualized Education Programs within a public school setting contribute to the quality of life of students with disabilities?

- What are IEP team members' perceptions of recreation as a related service as part of a student's Individualized Education Program?
- What are student perceptions of recreation as a related service as part of their Individualized Education Program?
- What are the delivery formats of recreation as a related service within a public school setting?
- What are student outcomes for those who receive recreation as a related service as part of their Individualized Education Program?

**Significance of the Study**

Carbone and Murphy (2008) stated that “participating in activities is the context in which people form friendships, develop skills and competencies, express creativity, achieve mental and physical health, and determine meaning and purpose in life (p. 1057). Youth with disabilities have fewer opportunities to engage in recreation. They are less likely to participate in structured and unstructured recreation activity or social activities. Youth with disabilities have fewer playmates and maintain fewer friendships compared to youth without disabilities (D’Eloia & Sibthrob, 2014).

Schools need to be equipped with a plan on how to engage and include students with disabilities in all aspects of leisure and recreation and how to increase their social interactions with peers. In doing so, schools have the opportunity to enhance the quality of life for students with disabilities. Services are needed to support students with disabilities and help them learn how to participate in leisure and recreation activities that occur as part of the educational experience. Carbone and Murphy (2008) discuss the importance of leisure and recreation stating; “the participation of children in sports and recreational activities promotes inclusion, minimizes deconditioning, optimizes physical functioning and enhances overall well-being” (p. 1057).

Recreation continues to be an underutilized related service in schools (Allsop et al., 2013; Ashton-Shaeffer, Johnson, & Bullock, 2000; Hawkins et al., 2012; Waller & Wozencroft, 2012). Researchers have identified the need to promote the benefits of recreation as a related service as a way to promote awareness and increase its use in public schools (Allsop et al., 2013; Hawkins, et al. 2012). Most research on therapeutic recreation programs is focused in settings other than the public school. While this research offers important empirical data on the outcomes of recreation services, more research is warranted to raise awareness of recreation as a related service

available to students with disabilities. Research is needed to explore how recreation as a related service is delivered within the public school setting and the student outcomes and perceptions that emerge from its utilization. Identifying the benefits of therapeutic recreation as a related service will help promote recreation as an important related service on student IEPs (Allsop et al., 2013; Hawkins et al., 2012). Interviews, questionnaires and document analysis offered insight on how recreation services are delivered within a public school setting, the perspectives on recreation as a related service and student outcomes.

### **General Procedures**

The purpose of this study was to explore how recreation as a related service contributed to the quality of life of students with disabilities, how it was implemented, and student outcomes that may emerged have as a result of this service. Data was collected using a combination of document analysis, semi-structured interviews, the parent/proxy *KIDSCREEN-52 Health Related Quality of Life Questionnaire for Children and Young People*, and a short researcher developed questionnaire called the *IEP Team Member Questionnaire* to gather data on the components of recreation therapy used within schools, the manner in which these services are provided, the time duration of services and educator and student perspectives of recreation therapy as a related service. Using a variety of data collection tools allowed the researcher to triangulate the data. According to Yin (2013), data triangulation helps strengthen the research being conducted.

Prior to gathering data, a meeting was held with a certified recreation therapist to identify school districts that utilize recreation as a related service. After obtaining IRB approval, the special education director of the school district was contacted via telephone to set up an appointment to discuss the possibility of conducting research within the school district. The special education director acted as the gatekeeper and approached the district superintendent, to share information regarding the study. Once written consent was received from the superintendent, the principals of

schools implementing recreation as a related service were given information of the study via email. A follow up phone call asked for the principals' permission to conduct research within their school. Once written consent was received, the researcher distributed consent forms to students and IEP Team Members who met participant criteria via email. Parents were also included as IEP Team Member participants as they are a part of the IEP team. The consent form sent to educators, students, and parents informed them of the research that was to be conducted. Students and educators were asked to give their written permission to be participants within the study. Parents were asked to give their written permission to be participants in the study, as well as provide written permission allowing their child to participate.

Once written permission was attained from parents and educators, Parents and educators were given electronic forms of the *KIDSCREEN-52* and the *IEP Team Member Questionnaire* to complete. IEP Member participants were asked to complete and return questionnaires within two weeks. Participants who did not complete the questionnaire within a two week time frame were sent a reminder via email asking them to complete the questionnaire. A third attempt was given to participants who did not complete the questionnaires in the allotted time frame. Reminders ceased after three emails were sent.

Student interviews were scheduled via phone. Students participated in one face to face interview that took place at their school. The recreation therapist and/or their one:one paraprofessional were present to assist with the communication needs of the students. Each interview lasted approximately 30 minutes. Student progress reports written on goals connected to recreation as a related service were collected at the time interviews were conducted.

*The Health Protection/Health Promotion Model, Quality of Life Framework*, and terms identified in classroom and extracurricular activities were used to develop questions for the interview and researcher developed questionnaire. Questions inquired about the different aspects of the educational experience and the quality of life of students who receive recreation as a related service. A priori codes based on therapeutic outcomes of the *Health Protection/Health Promotion Model, Quality of Life Indicators* and researcher hypotheses were used during analysis of interviews and documents. Though some codes were prefigured, the researcher was open to emerging codes when analyzing data in order to “reflect the views of participants in a traditional qualitative way” (Creswell, 2013). *KIDSCREEN-52* questionnaires were scored and analyzed according to the *KIDSCREEN-52* scoring procedures using SPSS software.

### **Delimitations**

Delimitations impose boundaries around participants. In order to minimize harm and protect the anonymity of individuals, identifiers were not be used. Only students receiving recreation as a related service on IEPs, and individuals on their IEP teams were included within this study. Students with 504 Accommodation Plans, and their educators were not be asked to participate because specific goals are not listed on these documents. Individuals outside of school who work with students with disabilities (i.e. outside therapists, coaches, etc.) were not be asked to participate in this study. Individuals outside the public school setting may not have knowledge of the special education services students receive during the school day, and therefore would be unable to offer insight on recreation services the student receives and/or student outcomes.

### **Overview**

This study explored the implementation of recreation as a related service within the public school and its contribution on the quality of life of students with disabilities. Quality of life

was highlighted as an important focus on student outcomes of special education services. Recreation was discussed as a related service within the public school setting with potential to contribute to the quality of life of students with disabilities. Theoretical and conceptual frameworks were shared as the lenses used within this research. Key terms were defined and general procedures were explained. The significance of the study discussed the need for research on recreation as a related service and the contribution research on this topic will make. Chapter 2 provides a comprehensive literature review on the topic. Empirical research that had been completed on the use of recreation as a therapy, leisure participation of students with disabilities, leisure needs of students with disabilities, outcomes of leisure participation, the impact of leisure participation on quality of life, and recreation services in schools was synthesized.

## Chapter II

### Introduction

Leisure and recreation activities play a significant role from childhood to adulthood. Participating in such activities fosters the cognitive, social, physical, and emotional skills of individuals. It is taken for granted that certain skill sets are required in order for individuals to participate in a majority of leisure and recreation activities. As a result, students with disabilities face barriers towards participating in recreation activities. Recreation therapy as a related service helps remove these barriers enabling students with disabilities to participate in recreation activities in and out of the classroom.

In 1975, the Individuals with Disabilities Act listed recreation as one of the related services available to students with disabilities [Section 300.34](IDEA, 1997). Despite being listed within IDEA, recreation is rarely seen on student Individualized Education Program in the public school setting. Parents and education staff are unfamiliar with recreation as a related service, and lack awareness of how the services are implemented and the potential benefits. This lack of awareness contributes to the underutilization of this service within the public school setting. Conducting research in this area will help promote awareness of the availability of recreation as a related service for students with disabilities as part of their individualized education plans.

This literature review served as a basis to examine recreation as a related service within the public school setting. Research on the use of recreation therapy in the public school setting is limited. The selection process yielded seventeen relevant publications. Thirteen of these publications involved empirical studies involving recreation as a related service. One dissertation and three informational articles made up the remainder of this review. Information gathered from these sources were categorized into five sections: recreation as therapy, leisure participation of

individuals with disabilities, leisure needs of individuals with disabilities, outcomes of leisure participation, and therapeutic recreation in schools.

### **Recreation as Therapy**

In the late 1800s, settlement houses were established to meet the needs of individuals who otherwise were outcasts. Individuals who were associated with the settlement houses included those with disabilities, addiction, and immigrants. One service that settlement houses provided to individuals was recreation. Settlement houses offered instruction in a variety of recreational activities to help individuals develop skills needed. At the same time, a need for safe play areas in urban settings emerged. Children within these settings had unique social and recreational needs as a result of their environment. In order to address these needs, playgrounds were developed. Like the settlement houses, playgrounds were meant to foster positive social behavior (Bedini, 1995).

The use of recreation to foster skills soon moved to schools. During the early 1900s, teachers often used recreation to support students with disabilities develop social skills or ease their conditions (i.e. breathing difficulties). Edith Wheeler, a superintendent of special education at the time began comparing the use of play and recreation in hospitals and supporting the use of play and recreation within schools for students with disabilities to increase confidence, leisure interests and decrease discomfort as a result of their disability. Play and recreation were viewed as a supplement to academics (Bedini, 1995)

Recreation has been used to support individuals since the late nineteenth century. In the early 1900s, Florence Nightingale recognized how uninviting and disengaging hospital environments were and the impact these environments had on patients. In response, Nightingale established a recreation center called the Inkerman Cafe within a British hospital. The intent was to

provide the sick with engaging activities. Patients' responded positively to these activities both mentally and physically (James, n.d.).

During the industrial revolution, social workers used recreation as a way to reform society. They believed that recreational activities paired with education and reform could lead to an increase in the morals and values of individuals. The role of trained recreation specialists was introduced to produce such changes. During World War I recreation specialists used games as treatment for wounded soldiers. When World War I ended, the use of recreation programs emerged as a way to treat individuals with psychiatric disorders and developmental disabilities (James, n.d.).

Recreation continued to be used to improve the well-being of patients in hospitals and psychiatric institutions throughout the late nineteenth century. During World War II, an additional aspect of recreation was introduced as therapists provided adapted equipment and activities for patients with physical disabilities. After the war ended, the demand of such services began to grow and recreation therapists began to provide services not only in hospital settings but also community centers and educational facilities (James, n.d.).

### **Leisure Participation of Individuals with Disabilities**

Kleinert, Miracle, and Sheppard-Jones (2007), used a sample of teachers of students with moderate and severe disabilities to determine the involvement of students in school, and community leisure and recreation activities. They were also interested in identifying any barriers to involvement students faced. The study took place in a southern state of the United States. Researchers used a statewide online survey to gather data on the involvement and barriers of students with moderate and severe disabilities, participation in school and community leisure, and recreation activities. Of the 317 completed surveys, researchers found that students participated

the most in activities with a peer. School clubs were the second most popular activity that students with moderate and severe disabilities participated in, followed by school sports and the 4-H club. Within the community, students were most likely to participate in church related activities. They also attended movies and shopping trips as a form of leisure and recreation. Kleinert et al.'s (2007) findings identified that there were contributing factors for involvement of students with moderate and severe needs in leisure and recreation activities. Contributing factors included the availability of personal assistance during attended activities from parents or teachers. Kleinert et al. (2007) pointed out the lack of individuals, programs, and services being utilized in order to foster involvement. A limitation to the study was that it was isolated to one state and the majority of completed surveys were from teachers within rural areas of the state.

Leisure participation was also studied by Palisano, Chiarello, Orln, Oeffinger, and Polansky (2011). Using a sample of 288 children with Cerebral Palsy (CP), researchers gathered data to test a model on how the child, family, and service determine the intensity of participation. The sample consisted of children with CP ranging in ages six to twelve years old from seven different children's hospitals. Between forty and seventy-four children fell in each of the five levels of the Gross Motor Function Classification System. Of the 288 children with CP, 166 were males and 122 were female. The study also included the parents of these children.

The children participated in an interview using questions from the *Children's Assessment of Participation and Enjoyment Interview*. Parents were given the *Pediatric Outcomes Data Collection Instrument*, *Family Environment Scale*, *Coping Inventory*, and *Measure of Processes of Care* to complete. They also completed two questionnaires. Using a structural equation model, Palisano et al.'s (2011) findings suggest children with CP that had higher gross motor functioning; higher enjoyment, more effective adaptive behavior, and at a younger age were more apt to

have a higher intensity of participation in leisure and recreation activities. Findings also suggested that the activity level of the family contributed to the higher intensity of participation in leisure and recreation activities of children with CP. Significant findings were not found between services received and participation in recreation activities. Palisano et al. (2011) discussed limitations of using the structural equation model and that it is not effective in demonstrating causation. They identified that further research is needed on how services address the participation needs of children with CP and how the service impacts participation in leisure and recreation activities. Further research was also suggested towards identifying what determines children's satisfaction in leisure and recreation activities that are self-selected, as data was not gathered on whether the activities chosen were preferred by the children themselves. Time was also identified as a limitation within this study. Certain measures could not be completed due to insufficient time.

Potvin, Snider, Prelock, Kehayia, and Wood-Dauphinee (2013) studied the recreational participation of children with high functioning autism (HFA) was by comparing the recreational engagement of children with and without HFA. The study was conducted in a small rural state, and used a representative sample of thirty children with HFA chosen over three years. Participants were recommended from a variety of service providers who were associated with children with high functioning autism. The comparison group was comprised of thirty-one typically developing peers referred to by the parents of children with HFA. Potvin et al. (2013) used the *Children's Assessment of Participation and Enjoyment (CAPE)* and the *Preferences of Activities for Children (PAC)* to collect data on the diversity, intensity, social aspect, setting, and individual preference in relation to the recreational engagement of the participants. Findings indicated that the number of activities children with HFA participated in was significantly less than their

typical peers. Children with HFA demonstrated a similar intensity of involvement with peers, as well as the type of social activity chosen. Differences were found in the areas of the settings and social aspects of recreation participation. Children with HFA frequented activities individually or with family members, while their typical peers participated more in activities involving non-family members. Children with HFA attended activities that were in close proximity to their homes, while their peers attended activities further away.

Limitations to this study included a small sample size, and the lack of causal relationships due to the nature of the descriptive study. Though the researchers took steps to choose a sample that was representative, it was found that participants came from families that had a higher education and income than the average family in the United States. In order to identify interventions, it was recommended that further research be done using a larger sample size to explore factors that affect the participation level of a child with HFA in recreation activities. Potvin et al. (2013) also recommended gathering parent reports on the recreation participation of their child with HFA.

Carter, Swedeen, Moss and Pesko (2010) examined the challenges students with disabilities face towards participating in extracurricular activities and what role schools could play in fostering more meaningful experiences for all students. They referred to the *Natural Supports Project's* strategies for increasing the meaningful participation of students with disabilities in extracurricular activities to develop recommendations for schools. Strategies included:

- (a) assessing extracurricular opportunities and barriers that exist in a school, (b) actively engaging students in identifying opportunities that build upon their interests, (c) equipping students to participate fully in these opportunities, (d) preparing staff and peers to provide

meaningful support to students, (e) keeping families informed about opportunities, and (f) expanding the roles and experiences of students over time (p. 276).

Carter et al. (2010) shared that participation in leisure and recreation activities provided many opportunities for students with disabilities, such as growing as learners and individuals by learning new skills, refining previously taught concepts, and meeting new people. They stated that participation in leisure and recreation activities allowed students to practice their social skills, generalize skills, explore interests, and apply everyday life skills. The importance of making the experience in participating in activities meaningful was also cited. According to Carter et al. (2010), a more meaningful experience in extracurricular activities allows relationships between students with disabilities and typically developing students grow, and promotes similarity awareness. They encouraged schools to increase efforts towards providing meaningful experiences for students in extracurricular activities. To do so, Carter et al. (2010) suggested that schools make participation and extracurricular activity planning a priority. They also stated the need for schools to develop strategies to address the challenges students with disabilities may face when joining activities, and “equip youth with disabilities to participate by focusing instructional efforts on social and other skills they will need to participate and benefit meaningfully in activities that align with their interests” (p. 282). They also discussed the role administrators have in ensuring accessibility for extracurricular activities.

### **Summary**

Certain factors contributed to individuals with disabilities participation in recreation activities including family involvement and personal support. Kleinert et al. (2007) found that by receiving personal assistance, students with disabilities were more able to access the activities. Palisano et al. (2011) had similar findings pointing to the impact family had on children with CP’s involvement in recreation activities. Potvin et al. (2013) found that children with HFA were

more apt to participate in recreation activities with their own family members rather than individuals outside of their family. The need for further research on how services impact students' with disabilities participation in leisure and recreation activities and student interest in an activity was highlighted within the literature (Carter et al., 2010; Palisano et al., 2011).

### **Leisure Needs of Individuals with Disabilities**

In 2010, Palisano, Almarsì, Chiarello, Orlin, Bagley, and Maggs conducted a study to identify the family needs of parents with children with Cerebral Palsy (CP). This study aimed to identify the different types of family needs based on the age and gross motor functioning of their child, the different number of family needs based on the age and gross motor functioning of their child, the most frequent family need, and how needs differ within the gross motor functioning levels. Participants included 501 parents of children with CP. Approximately 77% of these parents were mothers. Participants were asked to complete a modified version of a Family Needs Survey and a demographic questionnaire. Palisano et al. (2010) used the *Gross Motor Function Classification System* to determine each child's gross motor function level. Findings suggested that family needs were consistent across all ages. They differed based on the gross motor functioning of the child. The more mobile their child, the fewer the needs identified. Families whose child used wheeled mobility had the highest number of needs. The type of need also was dependent on gross motor functioning. Types of family needs included information, support, community services, and finances. The need for information on current and future services available for their child, future planning, community activities available, and increased personal time were identified by over 50% of the parents. Parents of children using wheeled mobility also identified needs including financial assistance for modifications to their home to increase accessibility, and purchasing equipment and services. They also stated needing assistance in finding caregivers and respite care, as well as community activities their child could participate in.

Based on their findings and the assumption that children with CP have limited knowledge and fewer opportunities to participate in leisure, Palisano et al. (2010) suggested that health professionals become more proactive in finding community services and leisure activities children with CP can participate in. This recommendation was also based on their knowledge that children with CP have low satisfaction with recreational services. Further research was also suggested in collecting data on the perceptions and beliefs of families and health professionals regarding family functioning.

Shattuck, Orsmond, Wagner, and Cooper (2011) conducted a study to gain insight on the social aspect of participating in recreation activities for students with disabilities. The study explored the participation in social activities among adolescents with Autism Spectrum Disorder (ASD). Using data from students who received special education services during wave 1 of the *National Longitudinal Transition Study 2*, Shattuck et al. (2011) collected estimates of social participation among students with ASD in the United States, compared the estimates with other groups of adolescents, and examined factors leading to limited social interactions from adolescents who received special education. The analysis of this measure found that when compared to other adolescents, adolescents with ASD's participation level in social activities was significantly lower. Factors that contributed to lower participation in social activities included low family income, difficulty maintaining conversations, deficits in social communication, and lower functional cognitive skills. Adolescents with ASD were more likely to never see friends out of school, never get called by friends, and never to be invited to social activities.

Shattuck et al. (2011) identified limitations within the study, stating that survey measures were reported by parents of adolescents with ASD, and not the students themselves. Also, survey questions focused on the number of social interactions among students rather than the quality of

the interactions. They also addressed the lack of a comparison group of typically developing students within their study. Their findings warranted the need for further research in prioritizing social communication skills, and the identification of how to increase social interactions for adolescents with ASD.

### **Summary**

The literature identified internal and external factors that hinder individuals with disabilities from accessing recreational activities. External factors included the lack of resources needed for participation. These included financial support, equipment, personal assistance, as well as activities offered (Palisano et al., 2010). Individuals' with disabilities deficits in social communication and cognitive skills were cited as internal factors that contributed to the lack of participation (Shattuck et al., 2011). Further research was warranted in finding how to increase the social skills of students with disabilities and resources needed to access recreation activities.

### **Outcomes of Leisure Participation**

In 2003, Schleien, Green, and Stone discussed the importance of social inclusion in community recreation, and how individuals with disabilities have difficulty gaining social inclusion. They defined social inclusion as the highest level of inclusion, and differentiated it with friendship. According to Schleien et al. (2003), social inclusion traits included social acceptance and positive interactions among peers. They stated that recreational therapists could foster the motivation that leads to social inclusion. Three approaches to increase social inclusion were discussed: Integration of existing recreation programs approach; reverse mainstreaming approach, and zero exclusion approach. The integration of existing recreation programs approach consisted of using an established recreation program/activity and preferably having a recreational therapist provide accommodations and modifications needed for the individual with disabilities to participate. In the reverse mainstreaming approach, segregated recreation activities for individuals with

disabilities were opened to all individuals. The zero exclusion approach involved recreational therapists working with other recreation personnel to develop programs with all abilities in mind. Researchers discussed the role of recreational therapists within each approach. They discussed using both intrinsic and extrinsic strategies to foster social inclusion during recreation. Extrinsic strategies included manipulating the environment to promote increased socialization and positive interactions. An example of an extrinsic strategy provided was to change a large group format to a small group format. When discussing intrinsic strategies, Schleien et al. (2003), highlighted the key role recreation therapists had was providing leisure education. The importance of family involvement was also discussed recommending that:

Parents and school staff work together to include recreation and friendship goals in Individualized Education Plans (IEPs). Including recreation, friendship, and social interaction goals and objectives in an IEP will ensure that the skills related to these goals will be taught, monitored, and evaluated regularly (p. 14).

Devine and Dawson (2010) explored how participation in a weeklong summer camp impacted self-esteem and social acceptance of youth with craniofacial differences. Their research sample included thirty-one individuals age nine to eighteen. Each participant had a craniofacial difference. Twelve males and nineteen females were included in the study. The camp was held at a university in the Midwest part of the United States. The director of the camp was a certified therapeutic recreation specialist. Staff included university students studying either special education or therapeutic recreation. The camp aimed to provide a traditional camp experience to individuals with a common disability.

This quantitative study utilized a single group repeated measures design. A pretest was administered to campers as they arrived at the camp, a post test was after the week long camp experience, and then a follow up posttest was given six weeks after. The Rosenberg Self Esteem Scale (1965) was used as a pre and posttest indicator. Participants used a 4 point Likert scale to answer ten questions to provide researchers with data on personal qualities, self-efficiency, pride, self-worth, and self-respect. Devine and Dawson (2010) also used a single item indicator of social acceptance for both the pre and posttest. Participants had to answer a question about how others felt to be around them.

Findings of this study indicated that campers experienced gains in their self-esteem and social acceptance after one week of camp, but that these outcomes did not last. Researchers attributed this to the camp experience being segregated. They felt that social acceptance increased during the camp because the participants all had the same disability and could relate to one another. When post tested six weeks later, participants did not carry over skills when placed in the general public. Other limitations cited by Devine and Dawson (2010) included the use of a small sample and one research site. They also cited that there was a lack of a comparison group and that they could not isolate the attributes of the camp that contributed to the increase of self-esteem in participants.

This study suggests that the participation in leisure activities can lead to an increase in self-esteem. Based on their findings, Devine and Dawson (2010) recommend that parent and caregivers promote leisure participation for youth with disabilities.

In their 2013 study, Allsop et al. assessed social effects a therapeutic recreation based summer camp had on adolescents with chronic illness. Their sample included two sets of campers

age eleven to twenty-two with diverse backgrounds and homes. The first set of thirty-five campers attended a traditional camp model for two weeks. The second set of forty-four campers attended a therapeutic recreation camp model. Using the *Muris Social Self-Efficacy Scale* (SSES, 2001), individual goals were developed for the Therapeutic Recreation campers, data on social efficacy and social skills of campers (those in the regular camp experience and those receiving therapeutic recreation) were collected through observations of counselors and reported using an adapted version of the Social Skills Questionnaire data. Findings demonstrated that campers in a TR program did not show a significant increase in self-efficacy skills compared to campers participating in a regular camp experience. Support was founded for the belief that campers who received therapeutic recreation experiences had an increase in their social performance with peers. Allsop et al. (2013) stated the need for continued research in exploring the benefits of Therapeutic Recreation, as well as the benefits of therapeutic recreation services combined with other related fields. Limitations to this study included using a convenience sample and employing non-certified therapeutic recreation staff for providing services.

### **Summary**

Social participation for school aged children with disabilities is limited (Schleien et al., 2003; Shattuck et al., 2011). This can impact students with disabilities self-esteem (Devine & Dawson, 2010). As a result of participating in recreation activities, students' with disabilities social communication and self-esteem can increase (Allsop et al., 2013; Devine & Dawson, 2010). Recommendations to explore the role therapeutic recreation could play towards fostering social inclusion for school aged children with disabilities was found within the literature.

### **Therapeutic Recreation in Schools**

In 1998, Stone sought to examine the effectiveness of therapeutic recreation as a related service in schools using a mixed methods design. The purpose of Stone's (1998) study was to determine how the related service impacts social and communication skills, community living skills, and problem behaviors of students with mild and moderate mental retardation. Her sample included elementary students with mild mental retardation aged five to eleven in three different classrooms. Classrooms were chosen at random. Two classrooms received an intervention two times a week, for one hour, for a duration of twelve weeks. One classroom received leisure education using the *School-Community Leisure Link* program; the other participated in supervised recreation activities. The third classroom did not receive an intervention. Data was collected using the *Inventory for Client and Agency Planning* as both a pre and posttest. The pretest was administered a week before the interventions began, and the posttest occurred one week after the interventions ceased. Semi-structured interviews were used to gather parent and teacher perspectives associated with the intervention groups. Interviews took place after the intervention and posttests were completed. Student observations of both intervention groups were completed one time per week during the intervention sessions, as well as during structured and unstructured times such as lunch and recess. A significant difference was not determined between the different interventions impact in students' social communication, and community living skills. Stone (1998) found that students who received leisure education and classroom recreation participation showed an increase in social communication skills and a decrease in problem behavior. There was no change in community living skills as a result of receiving either intervention. The random assignment of participants was a limitation to this study. Randomly assigning participants resulted in a sample that was not controlled across groups. Instructors used for recreation were also not controlled. Stone (1998) also cited limitations in the size of the sample used. She discussed

potential bias as her pretest questions may have precluded to what data she wished to gather. The length of the intervention was also questioned. The identification of these limitations warranted Stone's (1998) suggestion for additional research in the impact leisure education has on social, community living, and problem behavior.

A decade later, Waller and Wozencroft (2010) conducted a case study to explore the use of a partnership Therapeutic Recreation program between a public school and a university. The TRIPS program involved students within special education classrooms in the Knox County school district as well as University students from the University of Tennessee. The implementation of the program involved University students visiting the classrooms one hour per week to provide therapeutic recreation activities to students in the public school setting. The focus of the project TRIPS is to strengthen the skills that are needed for community transition including social, recreational, and behavior for students with disabilities. Fine and gross motor skills for students with physical limitations were also addressed in Project TRIPS. Waller and Wozencroft (2010) did not use specific measures to collect empirical evidence on the public school student outcomes as a result of receiving therapeutic recreation, but instead collected informal observations from teachers, parents and the university students involved in the program. Informal discussions and observations shared that public school students demonstrated positive behavioral and functional changes as a result of participating in project TRIPS. Researchers stated the need for further research of the TRIPS program and others like it, to gain evidence on the outcomes of these programs in a public school setting. In doing so, Waller and Wozencroft (2010) hope that other researchers will find supporting factors that can lead to a change in public policy to support and enhance programs like TRIPS within schools.

### **Underutilization of Therapeutic Recreation in Schools**

Ashton-Shaeffer, Johnson, and Bullock (2000) conducted a study to determine the extent therapeutic recreation is utilized as a related service within schools. Researchers sought to identify who provides the related service, how is the service provided, and where. Sixty respondents were chosen using a snowball sampling method over a period of four years. These respondents completed a survey questionnaire developed by the authors. Demographic questions began the survey and then led to more specific questions regarding service delivery and inclusion in student Individualized Education Programs (IEPs). Validity and Reliability were determined for the use of this instrument. Ashton-Shaeffer et al. (2000) found that 65% of the respondents worked in public school settings and that recreation therapists are more likely to work with students in self-contained classrooms with emotional and behavioral disabilities and multiple handicaps. Therapeutic Recreation services were utilized more at the elementary level compared to middle and high school. Of the four areas identified in IDEA for recreation as a related service, recreational therapists provided leisure education the most. Therapeutic recreation therapists were identified on 50% of student IEPs. Other service providers were identified as providing recreation services such as adapted physical education teachers, classroom teachers, occupational and physical therapists, and speech therapists. Authors recommended further research for monitoring the utilization of therapeutic recreation as a related service in schools and identifying the possible barriers to its utilization.

Etzel-Wise and Mears (2004) compared adapted physical education with therapeutic recreation in schools. They shared that according to IDEA, physical education is considered a direct service for students with disabilities, while therapeutic recreation is a related service. Benefits of physical education related to academic progress were discussed as was the need for an increase

in physical education for students. They felt that based on the brain benefits of movement, physical education should be offered every day. The identification of student need, assessment procedures, service delivery, and individualized goals and strategies were discussed comparing adapted physical education to therapeutic recreation. Etzel-Wise and Mears (2004) noted a distinction between physical educators and therapeutic recreation specialists in that therapeutic recreation specialists deliver services by connecting home, school, and community. They provide consultation to educators and facilitate partnerships between community and families working collaboratively with other educators including other related service providers. Etzel-Wise and Mears (2004) shared that very few recreational therapists working in schools are full-time. They discuss the issue of funding in school systems and how this could negatively impact the utilization of therapeutic recreation. They encouraged school systems to not view therapeutic recreation as extra, but as a necessity. Parents were recognized as the biggest advocates for Therapeutic Recreation in schools on students' IEPs.

The underutilization of recreation as a related service in schools was the focus of Hawkins et al.'s (2012) article, *Therapeutic Recreation in Education: Considerations for Therapeutic Recreation Practitioners, Schools Systems, and Policy Makers*. Within this article, Hawkins et al. (2012) noted the discrepancy between the number of therapeutic recreation therapists compared to other related service providers. They cited that in 2004, the U.S. Department of Education employed 442 recreation specialists compared to 47,843 speech pathologists, 15,892 occupational therapists, 7,564 physical therapists, and 1,436 audiologists. Explanations as to why therapeutic recreation was underrepresented within education were offered by the authors. Hawkins et al. (2012) shared one possible explanation as the lack of "support for recreation and leisure services by public school systems" (p. 136). Other explanations offered included the lack of awareness of

recreation as a related service among parents, teachers, therapists, and other school personnel. This lack of awareness then contributes to the lack of advocacy for therapeutic recreation to be listed on a students' IEP. Hawkins et al. (2012) also discussed that educational benefits and outcomes of therapeutic recreation go unknown and undifferentiated with other related services. Lastly, authors discussed the absence of policy to state the need for a licensed therapeutic recreation specialist to provide services.

Within Hawkins et al. (2012) article, the authors made suggestions on how to increase the use of therapeutic recreation in schools. These included: increasing the parent and school's awareness of therapeutic recreation as a related service, and highlighting the benefits and outcomes of therapeutic recreation. They also noted the need for schools to hire fully certified therapeutic recreation specialists and provide training to teachers regarding integrating therapeutic recreation into the school day.

### **Summary**

Ashton-Shaeffer et al. (2000), Etzel-Wise and Mears (2004), Stone (1998), and Waller and Wozencroft (2010) each explored therapeutic recreation used as a related service within a public school setting. Findings suggested that therapeutic recreation as a related service has a positive impact within schools (Etzel-Wise & Mears, 2004; Stone, 1998; Waller and Wozencroft, 2010). Stone (1998) found that when students with disabilities received therapeutic recreation, their social communication increased and their problem behaviors decreased. Like Stone (1998), Waller and Wozencroft (2010) found that a therapeutic recreation program in school positively impacted students with disabilities behavior and functioning. Etzel-Wise and Mears (2004) identified the connection that therapeutic recreation services foster between students with disabilities' home, school, and community. Consultation provided and partnerships established were also noted as a result of students receiving therapeutic recreation as a related service in school.

Continued research on the outcomes of students with disabilities receiving therapeutic recreation as a related service at school is needed (Stone, 1998; Waller and Wozencroft, 2010). Findings demonstrated the positive impact therapeutic recreation has on students with disabilities social and behavioral functioning (Ashton-Shaeffer et al., 2000; Etzel-Wise & Mears, 2004). The literature also suggested the need to monitor the use of therapeutic recreation and identify why it is an underutilized related service in schools. Hawkins et al. (2012) gave possible explanations of the underutilization of therapeutic recreation based on prior research, but did not provide empirical research on these findings.

### **Impact of Leisure Participation on Quality of Life**

The association between leisure participation and quality of life was examined by Shikako-Thomas et al., (2012) using a cross-sectional design. Participants included sixty-three children with CP receiving services in a variety of settings and their parents. Children and parents were each asked to complete the *CAPE* and the *Pediatric Quality of Life Survey (PQoL)*. The *CAPE* was administered to gather information on child participation within five dimensions (diversity, intensity, where, when, and enjoyment) and five types of activities (recreation, active/physical, social, skill-based, and self-improvement). For the purposes of their study, Shikako-Thomas et al. (2012) utilized scores from the diversity and intensity dimensions, with the five types of activities. The *PQoL* scores were broken down to four categories (physical, emotional, social, and school). Researchers used scores from the psycho-social well-being and physical domains. The psycho-social domain included social, emotional, and school findings). The physical domain included information regarding the mobility of children and their ability to do basic activities without pain and with good energy.

Shikako-Thomas et al.'s (2012) findings suggested that about half of the parent participants reported low well-being in their child's psycho-social and physical domains as measured

on the *PQoL*. Within the psycho-social domain, children participants fell within normal means for school functioning and emotional well-being. Researchers found a relationship between involvement in leisure activities and children with CP's quality of life. The physical well-being of children with CP correlated with intensity of participation, but not with the diversity of skill-based activities. Findings suggested that the intensity of the participation led to increased psycho-social well-being. The parent report showed that children with CP who had increased mobility, and were able to actively participate without pain and with good energy, felt better about their social life, school functioning, and emotions.

Researchers pointed out that as the age of children with CP increases, the amount of participation decreases and that it is important to keep children with CP motivated to participate in leisure activities. They also emphasized how autonomy in selecting enjoyable activities had a positive impact on well-being of children with CP. Recommendations were made for further research in how to adapt and provide leisure activities to match a child's skill and preference and how the accommodation could influence ones' quality of life.

The relationship between leisure participation and quality of life was also examined by Badia, Orgaz, Verduga, Ullan, and Martinez (2012) who conducted a study that explored the relationship between objective and subjective quality of life and leisure participation of adults. A cross-sectional design was used with a convenience sample of 125 individuals between the ages of seventeen and sixty-five with developmental disabilities was used for this study. Each participant was asked to complete the *Integral Quality Scale*, the *GENCAT*, and the *Leisure Assessment Inventory*. Researchers used a structured interview format to deliver the questions of *The Integral Quality Scale* as the subjective QoL measure. Using an interview format helped to ensure partici-

pant understanding. Questions and responses fell within eight domains including self-determination, social inclusion, job well-being, family well-being, emotional well-being, physical well-being and material well-being. The *GENCAT* was used to gather additional information regarding participant perspectives on social inclusion, rights, emotional, material, and physical well-being, interpersonal relations, and personal development. The *Leisure Assessment Inventory* was also given using a structured interview format to ensure that participants understood the questions being asked. Questions and responses fell under four categories: Leisure Activity Participation as an objective QoL measure, as well as, Leisure Preference, Leisure Interest, and Leisure Constraints as a subjective QoL measure. The Leisure Activity Participation gathered objective QoL information regarding the level of leisure participation and engagement. Activities that please and increase participation are identified within the Leisure Preference category. The Leisure Interest category identifies what activities participants are interested in and would like to participate in. Internal and external barriers to leisure participation are gleaned from the Leisure Constraint category.

Using these three measures, Badia et al. (2012) found that there was a predictive relationship between leisure and material, emotional, and physical well-being. Findings suggested that an individual's preference for leisure influenced the material, emotional, and physical well-being of that individual. Findings also suggested that when leisure constraints increased, individual's material, emotional, and physical well-being decreased. Based on these findings, researchers concluded that QoL was more connected to individuals' preferences and constraints rather than the activity. They found no relation between participation within leisure activities and self-determination and social interaction. Researchers felt that this was a result of the participants being from an inclusive and supportive environment.

Badia et al. (2012) discussed limitations of the study including using a small sample size and altering the delivery of the measurement tools used. They recommended the need to identify interventions that would diminish constraints and foster leisure participation of adults with disabilities in order to increase their QoL.

A cross-sectional study was also used by Mc Manus, Corcoran, and Perry (2008) to examine the frequency of activity and quality of life of children with and without CP within schools. They also sought to find if there was a relationship between participating in everyday activities and children's quality of life. Participants for the cross-sectional study included 120 children with CP and 98 parents of children with CP. Parents of 448 children without CP were also asked to complete questionnaires. Each was asked to complete questionnaires within their home with the researcher present. Data collection tools included a modified *Life Habit Questionnaire* to measure leisure participation, the *KIDSCREEN-52* to measure QoL, and the *Gross Motor Classification System* to measure the level of impairment. Participants completed the *Life Habit Questionnaire* using a six point Likert scale showing how frequently they participated in activities such as eating out, using the computer, joining school activities, etc. The *KIDSCREEN-52* gathered information on ten domains of quality of life including psychological well-being, moods/emotions, self perception, autonomy, parental relations, financial resources, social support/peers, school environment, social acceptance, and physical well-being. Data was analyzed using the SPSS program.

Findings suggested that the participation of children with CP decreases as the severity of their disability increases. Those with more severe CP have a lower quality of life. They found that children with high participation rates also exhibited a high quality of life score within the physical well-being, social support/peers, and mood/emotions domains. Like Badia et al. (2012),

Mc Manus et al. (2008) felt there needed to be further research on providing accommodations to help individuals access and participate in leisure activities as a means to improve their quality of life.

Kolehmainen, Bult - Mulder, Bult, Law, Shikako-Thomas, and Ketelaar, (2014) recognized that leisure participation contributed to the physical, mental, and social well-being of individuals. They stated that interventions for children with CP often disregard participation outcomes. The purpose of their article was to summarize what comprised leisure, the factors that impact children and youth with physical disabilities' participation in leisure activities, measurement tools for measuring leisure participation, and the types of interventions that can increase the leisure participation of children with physical disabilities.

In their research, authors found that leisure comprised of:

experiencing fun, enjoyment, suspension from reality and playfulness; freedom to choose, sense of control, and the right to be oneself and to express oneself; feelings of social interactions and inclusion; and a sense of challenge and achievement (p. 1126).

They found that leisure could be deemed as structured or unstructured. Structured leisure refers to activities that are planned and are facilitated by adults. Unstructured leisure includes activities that are unplanned and are not facilitated by an adult.

Factors that influenced or acted as barriers to participation in leisure were also identified within the article. Authors found that when children experienced difficulties with their gross motor ability, hearing, vision, and/or cognitive ability, leisure participation decreased. When individuals experienced high levels of family engagement and support, decreased behavior problems, and prosocial behavior, their participation level increased. Within their factor summary,

Kolehmainen et al. (2014) stated that the school environment played a part in the participation level of children.

When identifying interventions, the authors provided a three part approach. First, to identify outcomes. Second, identify preferences of the individual. Third, prioritize these preferences and provide resources needed to attain the desired outcomes. Kolehmainen et al. (2014) discussed that interventions should be geared at improving participation by looking at the functioning of the child and providing structure to meet the targeted activity.

Brajsa-Zganec, Merkas, and Sverko (2011) conducted a study to explore the role leisure participation plays towards the subjective well-being of individuals. Within their study they defined subjective well-being as individuals' emotional responses and satisfaction within life domains. Quality of life was determined as one's ability to have social relationships with others, positive emotions, and gain new skills and knowledge. The assumption of the researchers was that once individuals had their biological needs met, leisure activity could be used to meet their psychological needs. Two types of leisure were discussed by the researchers: person-centered regarding individual's participation, satisfaction, and attitude, and place-centered which included aspects of resources and environment. They noted that although literature highlighted a variety of ways to classify leisure activities, there was a consensus that leisure made a contribution to subjective well-being.

The purpose of the study was to explain which types of leisure activity men and women of different ages participated in and how participation in these leisure activities contributed to their subjective well-being. Brajsa-Zganec et al. (2011) used both the activity theory and need theory as frameworks to their research. Using the activity theory, Brajsa-Zganec et al. (2011) proposed that an increase in participation in selected activities would lead to an increased rating

of subjective well-being. Based on the need theory, researchers hypothesized that when individuals had their needs satisfied, their rating of subjective well-being would increase.

The participants of this study included 4,000 Croatian citizens ages eighteen and over. Researchers used the *Life Satisfaction Scale* to measure cognitive aspects of subjective well-being and the *Happiness Scale* to measure affective aspects of subjective well-being. The *Personal Well-Being Index* was used to measure seven life domains including, marital status, personal health, life achievements, relationships with others, physical safety, community acceptance, and security in the future (p. 84). A researcher developed instrument was used to measure participants' leisure ability. Leisure items included on the scale were those common to the Croatian culture such as playing sports and going to a cafe.

Data collected showed that well-being was similar for both men and women and that it decreased with age. Researchers found that active socializing and going out were more frequent activities for men and younger participants. Leisure activities such as attending cultural events and family activities were more common among women and younger participants. Findings suggested that participation in leisure activities contributed to the subjective well-being of participants between the ages of thirty-one and sixty years old. Researchers found that participants over the age of sixty visited cultural and family events as their leisure activity and that their participation contributed to their subjective well-being. Participants who were between the ages of eighteen and thirty years old attended family events most often. This type of leisure activity contributed to their subjective well-being. Leisure activities such as active socializing and going out did not seem to contribute to participants' subjective well-being, except for participants who were young women.

The impact of leisure activity on subjective well-being for Croatian citizens was significant, and confirmed the researchers' hypothesis that there was a positive relationship between participating in leisure activities and subjective well-being. Researchers suggested further research was needed to examine the relationship between leisure and subjective well-being and the types of leisure that contributed to an individual's QoL.

Garcia-Villamizar and Dattilo (2010) shared that individuals with ASD are in need of interventions that will increase QoL. Using a pre/post test experimental design, researchers examined the outcomes of a leisure intervention program on the QoL and stress level of individuals with ASD. An experimental group consisted of thirty-seven participants between the ages of seventeen to thirty-nine who were diagnosed with ASD. The control group included thirty-four participants between the ages of twenty-four and thirty-eight who were diagnosed with ASD. Participants within the experimental group received an individualized leisure program five days a week, two hours each day. The program was implemented for twelve months. The individualized program was based on the leisure profiles of participants. The control group did not receive the leisure program during the study.

Based on their leisure profile, participants were given a list of activities that were comprehensible, reinforcing, attainable, and provided constant variety. Once participants chose an activity, supervision and structure was provided. Individuals were allowed flexibility in that if they wanted to cease their participation or change their mind on an activity, they were allowed to do so. The activities were done both within the setting in which services were provided to individuals or within the community.

Data collection tools were administered before and after the implementation of the leisure program. The *Quality of Life Questionnaire* was used to measure the overall quality of individuals. It was administered using an interview style format. Domains included within the questionnaire scores included “satisfaction, competence/productivity, empowerment/independence, and social belonging/community integration” (p. 614). The *Stress Survey for Persons with Autism and other Pervasive Developmental Disabilities* was used to measure the stress of participants. Participants were expected to complete the survey individually, unless they had a weakness in expressive and receptive language, in which two people close to the individual were asked to complete the survey.

Garcia-Villamisar and Dattilo’s (2010) findings suggested that participation within a leisure program led to a decrease in stress levels and increase in QoL. Researchers also found that individuals with ASD who participated within the program experienced less distress and more satisfaction during leisure activities. Quality of Life domains that did not show a significant increase were social integration and empowerment/independence. Researchers felt that this was directly a result of the individuals’ disability and that the finding supported the need for leisure programming to incorporate social skills and stress reduction techniques. Based on the findings, further research was recommended to identify leisure programs to increase social skills. Researchers also felt there was a need to further examine the meaning individuals place on their participation within activities and how it impacts their perspectives.

### **Summary**

Leisure participation has been found to contribute to the QoL of individuals with and without disabilities (Badia et al., 2012; Brajsa-Zganec et al., 2011; Garcia-Villamisar and Dattilo, 2010; Mc Manus et al., 2008; Shikako-Thomas et al., 2012). There is a need for further research on how to influence the leisure participation of individuals in order to improve their QoL.

Shikako-Thomas et al. (2012) suggested that there is a need to find ways to promote leisure and provide adaptations to foster participation. Mc Manus et al. (2008) and Badia et al. (2012) discussed the need for interventions that worked to remove constraints to leisure activities and allow individuals to participate. Researchers also discussed the need to identify interventions that provided structure to participating in leisure activities and focused on the functional skills individuals needed to participate successfully (Garcia-Villamizar and Dattilo, 2010; Kolehmainen et al., 2014).

### **Conclusion**

Studies have been conducted exploring individuals with disabilities participation in recreation activities and the impact participation in leisure activities has on the QoL of individuals. These studies yielded findings that showed low participation rates, and the need for further research into services to help promote participation in recreation activities among individuals with disabilities in order to improve their QoL. The purpose of this study is to explore how recreation as a related service within a public school setting contributes to the quality of life of students with disabilities.

The challenges and benefits of leisure participation of students with disabilities was highlighted within the literature reviewed. The underutilization of recreation as a related service in the public schools was identified. There is a need to promote awareness of recreation as a related service as a means to increase the leisure participation of students with disabilities and improve their QoL. Stone (1998), and Waller and Wozencroft (2010), conducted research to explore therapeutic recreation within schools and found that therapeutic recreation is one service that enhances students' with disabilities social skills.

Allsop et al. (2013) recognized the need to identify the beneficial outcomes as a result of receiving therapeutic recreation. More research is warranted to determine how recreation as a related service contributes to the QoL of students with disabilities, additional student outcomes of recreation as a related service, how this service is delivered within the public school setting, and perceptions regarding its implementation as part of student Individual Education Plans. In doing so, researchers can help raise awareness of this underutilized related service.

## Chapter III

### Introduction

The purpose of this qualitative study was to explore how recreation as a related service in a public school contributed to the quality of life of students with disabilities. The scope of this study included IEP team member and student perspectives of recreation as a related service and student outcomes. By interviewing IEP team members of students receiving recreation as a related service within a public school setting, the researcher hoped to raise awareness of this related service and help individuals identify a rationale for its utilization for students with disabilities. This study addressed five research questions:

- How does recreation as a related service as part of students' Individualized Education Programs within a public school setting contribute to the quality of life of students with disabilities?
- What are IEP team members' perceptions of recreation as a related service as part of a student's Individualized Education Program?
- What are student perceptions of recreation as a related service as part of their Individualized Education Program?
- What are the delivery formats of recreation as a related service within a public school setting?
- What are student outcomes for those who receive recreation as a related service as part of their Individualized Education Program?

This chapter begins by introducing the research approach for this study and the rationale of why this particular approach was chosen. Next, the sampling strategy used to select participants is shared as well as a description of the research sample. Following this, an overview of the

contextual, demographic, perceptual, and theoretical information needed to conduct this study is provided. After an overview of information has been provided, the researcher outlines the research design of this study. The chapter goes on to include descriptions of data collection tools and the methods used for analyzing and synthesizing data. Ethical considerations, the trustworthiness of this study, and any limitations and delimitations are addressed in the final portion of this chapter, followed by a brief summary.

### **Rationale for Qualitative Research Design**

A qualitative research design was chosen for this study. Creswell (2013) defined qualitative research as:

...an approach to inquiry that begins with assumptions, an interpretive/theoretical lens, and the study of research problems exploring the meaning individuals or groups ascribe to a social or human problem. Researchers collect data in natural settings with a sensitivity to the people under study, and they analyze their data both inductively and deductively to establish patterns or themes. The final report provides for the voices of participants, a reflexivity of the researchers, a complex description and interpretation of the problem, and a study that adds to the literature or provides a call for action (p. 64/5).

Researchers often choose qualitative research to explore a problem or an issue. A better understanding was needed to identify how recreation therapy as a related service is contributed the quality of life of students with disabilities within the public school setting (Allsop et al., 2013; Hawkins et al., 2012; Heyne & Anderson, 2012). A qualitative research design allowed the researcher to share personal assumptions of recreation as a related service, identify the lens that was employed within the study, and identify recreation therapy as a related service in the context of public schools through interactions with participants.

### **Rationale for Case Study Methodology**

Yin (2013) defines a case study as “a study that investigates a contemporary phenomenon in depth and in its real world context” (p. 237). Within this study, recreation therapy as a related service was the common case. Yin (2013) rationalized that selecting a common case enables the researcher to “capture the circumstances and conditions of an everyday situation....” By using the common case of recreation as a related service, the researcher described its implementation within the everyday context of a public school.

An embedded single case study design was selected for this research. Three different units of analysis were embedded within the case: an elementary school, a middle school, and a high school. Utilizing an embedded design assisted the researcher towards establishing how recreation as a related service was implemented at each school level. Perspectives and student outcomes were also highlighted within each unit. Collecting data from these three units allowed for data triangulation. When discussing triangulation within case studies, Yin (2013) stated that “data triangulation helps to strengthen the content validity...” (p. 120).

### **Research Sample**

A purposive sample was used to select participants for this study. Bloomberg and Volpe (2012) state that by utilizing a purposive sample, the researcher can gain “insight and understanding of the phenomenon under investigation” (p. 104). Utilizing a criterion sample, the researcher was able to select participants with specific characteristics needed for this study (Bloomberg & Volpe, 2012). Characteristics included that:

- All participants were from/associated with a New Hampshire public school that utilizes recreation as a related service as defined by IDEA (2004)

- All IEP team member participants were directly involved with students with disabilities who receive recreation services delivered by a certified Therapeutic Recreation Specialist as part of their IEP.
- All student participants were students with disabilities who receive recreation services delivered by a certified Therapeutic Recreation Specialist as part of their IEP.

The researcher developed a list of public schools within the New England area that met this criteria. A convenience sample was used to select a regional school district located in rural New England that utilized recreation therapy as a related service PreK-12. The district included seven elementary schools, three middle schools, and one high school with a student population of approximately 1,557 students. One-third of the student population qualified for free and reduced lunch. 19% of the student population received special education services. An inclusive setting was utilized for most students receiving special education within the district. Students with disabilities were either fully included with support, partially included receiving some of their services in a separate setting, or placed in a substantially separate program. Student placement was determined based on student needs and the establishment of least restrictive environment.

At the time of data collection, forty students were receiving recreation as a related service as part of their individualized education program. Eligibility for recreation as a related service was determined by the IEP team based on student profiles. No formal evaluation protocols were used to determine eligibility for recreation as a related service. Six out of the forty students receiving recreation as a related service agreed to be student participants in this study. Three student participants attended the high school and three students attended elementary school. Student participants at the elementary level each attended a different elementary school within the district.

*High School Student Participants*

'Greg' was a 10th grade high school student with Autism who had been receiving recreation as a related service for six years. He received special education services within a substantially separate setting with four other students, and was integrated with his typical peers during electives with the support of his one on one paraprofessional. Greg's verbal ability consisted of scripting and perseverating on topics of his choice. He had a token economy system to help him exhibit expected behaviors throughout the day.

'Peter' was also a 10th grade high school student with Autism who had been receiving recreation as a related service for four years. He received special education services within a substantially separate setting with four other students and was integrated with his typical peers during electives and job placement sites with the support of his one on one paraprofessional. Peter's verbal ability was limited, consisting of one word responses using vocabulary familiar to him.

'Marcia' was a 12th grade high school student with multiple disabilities who had been receiving recreation as a related service for six years. She received special education services within a substantially separate setting with four other students, and was integrated with her typical peers during electives with the support of her one on one paraprofessional. Marcia was non-verbal and used vocalizations and an iPad communication board to communicate her needs.

*Elementary Student Participants*

'Jan' was a first grade student with multiple disabilities who had been receiving recreation as a related service for nine months. She received special education services in a substantially separate setting with five other students, and was integrated with her typical peers during specialists such as gym, music, and art with support from her one on one paraprofessional. Cindy's verbal ability was limited.

‘Bobby’ was a fourth grade student with Autism who had been receiving recreation as a related service for five years. He was included with his typical peers for the majority of his day with the exception of related services such as occupational therapy and speech and language therapy. A paraprofessional supported Bobby along with other students with disabilities that were placed in the classroom. Bobby had relatively strong verbal abilities that were at times compromised due to his inability to regulate his emotions.

‘Cindy’ was a fourth grade student with multiple disabilities who had been receiving recreation as a related service for five years. She was included with her typical peers for the majority of the day with support from a one to one paraprofessional. Jan received some academic support as well as related services such as speech and language and occupational therapy outside of the classroom. She had relatively strong verbal skills, but at times could be unintelligible.

#### *IEP Team Member Participants*

Six parents agreed to participate in this study as IEP Team Member participants. Nine educators who worked with students receiving recreation as a related service also agreed to be IEP Team Member participants. Two special education teachers, one counselor, two case managers, and one occupational therapy assistant were used as educator participants at the elementary level. A psychologist and speech pathologist at the middle school level and an occupational therapist at the high school level were also used as educator participants.

#### **Overview of Information Needed**

Demographic, contextual, perceptual, and theoretical information was needed in order to explore how recreation therapy as a related service was implemented within the public school setting. Obtaining demographic information allowed the researcher to describe the participants and sites used within the study (Bloomberg & Volpe, 2012). Demographic information was collected from IEP team member participants using introductory questions on the researcher-made

questionnaire. The researcher incorporated questions to gain information regarding their role on the IEP team, the nature of student disabilities who received recreation as a related service, and the general leisure participation of these students. Informal discussions with the district therapeutic recreation specialist and special education director helped gather information of the student participants' mode of communication. This information allowed the researcher to deliver interview questions using students' primary mode of communication (i.e. PECS system, iPad communication board, etc.). This information also determined if a familiar adult would be needed during student participants' one-to-one interviews. Student participants had the opportunity to provide demographic information to the best of their ability during introductory questions during the interviews. One piece of demographic information that students were unable to specify is the nature of their disability and its potential impact on leisure and recreation.

Contextual information was collected using the school information provided on the Department of Education website, as well as through conversations with gatekeepers such as the district special education director, and the therapeutic recreation specialist, as well as paraprofessionals and teachers working within the schools. The researcher inquired about the special education service philosophy and delivery model of the school, the nature of the interactions among students with and without disabilities, and the overall school climate. Gathering contextual information assisted the researcher to gain information regarding the "...culture and environment..." of each school (Bloomberg & Volpe, 2012, p. 105).

Two research questions sought to gain perceptual information from participants. Bloomberg and Volpe (2012) refer to perceptual information as "...the most critical of the kinds of information needed" when utilizing interviews and focus groups as data collection tools (p. 106). This study used interviews to collect perceptual information from student participants. The *IEP*

*Team Member Questionnaire* and the *KIDSCREEN-52* questionnaire were used to gather educator perceptions from each level of schooling (elementary, middle, high school).

The literature reviewed assisted the researcher in the development of the five research questions to be explored and the conceptual framework that was used for this study. The conceptual framework served as a guide for the development of questions asked within interviews and questionnaires. The researcher also referred to the conceptual framework when analyzing and synthesizing the data collected from the questionnaires, interview responses and document analysis. Referring to the conceptual framework during analysis allowed the researcher to gather information to answer the research questions that were guiding this study.

### **Research Design**

Prior to data collection, a comprehensive review of literature was conducted. The review examined empirical sources including journals, books, monographs, and dissertations to gain insight on the use of therapeutic recreation as related service in public schools. Sources selected explored the use of therapeutic recreation with individuals with disabilities and the role of recreation in skill acquisition for these students. Therapeutic recreation, recreation therapy, special education, related services, public schools, and students with disabilities were included as keywords when conducting the search for relevant studies. Extracurricular activities, inclusion, friendships, peer relationships, self esteem, leisure, education, recreation and service delivery were also used as keywords. The search included two databases: ProQuest and EBSCO Host. In an effort to collect the most up to date information, studies selected had publication dates that fell between the years 2000 and 2015. Exceptions were made due to the relevance of a publication. Abstracts were used to identify articles that focused on therapeutic recreation or recreation

therapy with school-aged individuals with disabilities or discussed recreation participation of students with disabilities. Studies that focused on the use of therapeutic recreation or recreation therapy with individuals younger or older than school age were not included.

Themes that emerged from the literature review were outlined and summarized in chapter two. The literature review contributed towards the development of background information, the statement of the problem, the significance of the study and the research questions within this study. Chapter one provided readers with the purpose of the study. Chapter two discussed and summarized the publications reviewed in preparation for this study. Once chapters one and two were complete, a study design, research sample and data collection tools were selected and included in chapter three. The purpose of chapter three was to outline the methodology that was used in this study and describe the protocols used to collect data. The researcher presented these protocols along with information from chapters one, two and three to the dissertation committee for approval. When approval was granted, the researcher completed the required IRB paperwork asking for permission to conduct research.

Upon receiving IRB approval, meetings with contact people were scheduled to identify potential research sites. A combination of phone conversations and email messages were used during this process. The researcher kept an ongoing list of public schools that offered recreation as a related service provided by a CTRS within New England based on these conversations. This list was housed in the researcher's research journal. Once the list was complete, the researcher contacted special education directors of districts and schools identified via telephone. During this conversation, the researcher informed the special education director of the research topic and the data collection tools that would be used. The purpose of the conversation was to inform the special education director in order for him/her to share the information with the superintendent.

Once this information was shared, the superintendent was asked permission to allow the researcher to access schools within the district as research sites. Written consent was sought upon receiving verbal permission from the superintendent (Appendix A).

Upon receiving written consent from the superintendent, the researcher contacted school principals within the district via email. The email stated that the superintendent consented to schools within the district to be used as research sites within the study, as well as a summary outlining the research plan. Principals were asked for their permission to use students and educators within their schools as participants for the study. When permission was granted, the researcher asked the principal to provide written consent via email (Appendix A). At this time the researcher also asked the therapeutic recreation specialist to identify students that met the criteria for this study. Educators who directly worked with these students were approached via email and provided information regarding the research topic and asking them to participate in this study.

Educators who were willing to participate were asked to provide written consent (Appendix B). Once consent was given, the therapeutic recreation specialist was asked to send parents of students who received recreation as a related service on their IEPs an information sheet describing the study to be conducted and asking them and their child to participate in the study (Appendix C). Parents who were interested in the study were asked to sign a form granting permission for the researcher to access to the accommodation and modification pages of their child's IEP, as well as progress reports from the time their child began receiving recreation as a related service to present. The accommodation and modification pages of student IEPs were used to inform the researcher of modifications or accommodations needed during the interview to ensure questions were accessible to students. By signing the form, parents also granted permission for their child to participate in one-on-one interviews with the researcher during school hours.

Parents were also asked to read the information sheet to their child explaining the study and the role of student participants (Appendix D). Students were then asked to sign this information sheet to give consent to be participants within this study. Once parents and students gave their consent, the therapeutic recreation therapist provided the accommodation and modification sheets of student IEPs to the researcher.

Permission was also sought to obtain and administer the *KIDSCREEN-52 Health Quality of Life Questionnaire-Parent/Proxy* version. A collaboration form was completed by the researcher and provided to the owners of the questionnaire. The information within the collaboration form included a summary of the study along with a general description of the research design, duration and participants. The collaboration form was emailed to Prof. Dr. phil. Ulrike Ravens-Sieberer, MPH, Head of Research - Professor for Child Public Health at the University Medical Center Hamburg-Eppendorf. Once permission was granted, the researcher acquired login information to access materials needed for administration.

Once consent was obtained from all parties involved, student interviews were scheduled at each school site and questionnaires were distributed. Arrangements were made for student progress reports to be given to the researcher upon arrival for student interviews at each site. The interviews were scheduled to last no more than thirty minutes. Interviews at each school site were scheduled to ensure the least amount of disruption to student schedules. Students were provided with a familiar educator during the scheduled interviews at each school site.

IEP team members were asked to complete and return questionnaires to the researcher within two weeks time. A reminder was sent via email after one week. After two weeks, the researcher contacted participants who had not yet returned their questionnaires via email, asking if

another questionnaire was needed, and reminded them to please complete and return the questionnaires as soon as possible. After one week from the first reminder, the researcher sent a second reminder to return questionnaires within one week's time. Questionnaires that were not returned by the time allotted, were recorded as incomplete.

### **Data Collection Methods**

Using an embedded case study design, the researcher sought to explore how recreation as a related service in a public school setting contributed to the quality of life of students with disabilities. One on one student interviews, questionnaires, and document analysis were used to collect the data.

In order to gather information from IEP team members regarding their experiences working with students who receive this related service and its impact on student quality of life two questionnaires were used. The *KIDSCREEN-52 Health Related Quality of Life Questionnaire* (HRQoL) (Appendix E) allowed the researcher to collect data on the quality of life of students who received recreation as a related service. The second questionnaire utilized to collect data was the *IEP Team Member Questionnaire*, developed by the researcher (Appendix F). This questionnaire allowed the researcher to collect information regarding the implementation of recreation as a related service within a public school setting and perspectives of its role on the leisure participation and quality of life of students with disabilities.

The *KIDSCREEN-52* is a normed questionnaire designed to assess the subjective quality of life of children ages 8-18. Its intended use was for both healthy and chronically ill youth. The measurement tool was developed through a literature review, a delphi study and focus groups. Items were pilot tested with a multinational sample of 3,977 children to determine the reliability and validity of the measurement tool. The *KIDSCREEN-52* can be completed through children self-reports or by parents/primary caregivers. Administration of the tool can occur in a variety of

settings including schools. The time allotted for the completion of the *KIDSCREEN-52* is 15-20 minutes. Ten dimensions of HRQoL are measured by the *KIDSCREEN-52* including: Physical Well-Being, Psychological Well-Being, Moods and Emotions, Self- Perception, Autonomy, Parent Relations and Home Life, Social Support and Peers, School Environment, Social Acceptance, and Financial Resources. Scores can be calculated for each dimension of quality of life measured (KIDSCREEN Group, 2004).

Along with the *KIDSCREEN-52* questionnaire, educators were also asked to complete a short researcher developed questionnaire. Beginning questions determined the demographics of the participants. Participants responded using a nominal-level response format. Questions designed sought information regarding components of recreation as a related service defined by IDEA implemented with a public school setting. These questions were posed using a multiple choice format allowing participants to select all answers that apply (Trochim & Donnelly, 2008). Other questions were used to identify student outcomes and perspectives on the role recreation as a related service has towards these outcomes. Participants answered these questions using a 5-point Likert Scale response format.

Peer review was used to help increase the reliability and validity of the data collected on the researcher-developed questionnaire. Educators outside of the research sites examined the protocols prior to administering them to participants. This enabled the researcher to receive feedback on the clarity, wording and placement of questionnaire items, as well as determine if response formats appropriately addressed the research questions (Creswell, 2013).

One on one interviews were used to gain student perspectives within the study. The interview format followed Yin's (2013) *shorter case study interview* model. Each interview lasted ap-

proximately thirty minutes. According to Yin (2013), researchers play two roles when conducting case study interviews: to ensure the comfort of your participants by asking “friendly and non-threatening,” questions while at the same time, “...satisfying the needs of your line of inquiry...” (p. 110). In order to fulfill these roles, the researcher followed an interview protocol (Appendix G) that contained a series of open ended questions that were asked in a conversational manner.

The interview protocol began with Yin’s (2013) level 1 questions. These questions were specific to the interviewees, and were asked with the intention of establishing a comfort level between the participant and researcher. After answering a series of level 1 questions, student participants were asked level 2 questions from the interview protocol. Level 2 questions were open ended questions that sought information about the individual case within the study. Using an open ended interview protocol with students often elicited brief responses, in order to counter these responses, the researcher included a list of probes that could be used as follow up questions to invoke a more detailed response. Probes included: the silent probe, overt encouragement, elaboration, asking for clarification, and reflection (Trochim & Donnelly, 2008, p.117). A visual probe was also used during interviews as needed.

The *Echo Livescribe Pen* was used for note taking during student interviews. The use of this pen enabled the researcher to audio record the participant responses, while simultaneously taking notes. The researcher then transcribed the responses verbatim on a word document in order to analyze and synthesize the data.

Document analysis was the third data collection tool utilized in this study allowing the researcher to establish triangulation. Student progress reports and delivery grids were collected and analyzed by the researcher using a gathering template (Appendix H). Document analysis offered insight on the delivery of recreation as a related service and student outcomes. Yin (2013)

discussed the strengths of using document analysis with a case study stating that “this source of evidence is stable in that it can be viewed repeatedly, unobtrusive as it is not created as a result of the case study, specific in that it can contain the exact names of an event, and broad as it covers longer spans of time, many events and many settings” (p. 106).

### **Data Analysis and Synthesis**

Assigning pseudonyms to students participants was the first step in data analysis. Schools used as study sites were referred to as elementary, middle, and high school. IEP team members were referred to as a group and therefore could not be individually identified. The same pseudonyms and key words were used when coding and analyzing interview transcripts, questionnaires, and documents. A master sheet containing names of IEP team members, schools and students names along with their pseudonyms were kept in a secure computer file to ensure privacy and confidentiality of the participants.

Data collected from questionnaires were analyzed first. The researcher obtained results from the researcher-developed questionnaire using Google Forms as they were submitted. The *KIDSCREEN-52* data was analyzed using procedures, tables, and SPSS software as outlined within the administration manual and login information provided. Bar graphs were created for both questionnaires to display the results to be analyzed. Results displayed on the bar graph highlighted the frequency of responses that described the components of recreation as a related service used at each research site, the format of how recreation as a related service was implemented within the research site, the quality of life of students with disabilities who received recreation as a related service within the ten domains of the *KIDSCREEN-52*, student outcomes that emerged at each research site, and how recreation as a related service contributed to these outcomes. The researcher described the similarities and differences of the data within each case. Data from each case was then combined in a matrix table in order for the researcher to identify

the frequency of educator and student responses across all research sites and make note of similarities and differences of the data. The researcher also used this information to identify horizontal patterns within research sites and vertical patterns across research sites.

Qualitative data was analyzed using Yin's (2013) pattern matching analysis where researchers compare their initial predictions with the patterns found in the study. Yin (2013) states that "[i]f the the empirical and predicted patterns appear to be similar, the results can help case study to strengthen its *internal validity*" (p. 143).

The researcher used a combination of deductive and inductive coding to analyze the qualitative data within this study. Miles, Huberman, and Saldana (2013) state that deductive coding is an initial list of codes that the researcher brings to the study. Codes used in this study stemmed from the frameworks used, the research questions, and the research proposition. Inductive coding is referred to as codes that emerge during the study. Inductive codes are codes that are not pre-established. In order to identify this type of code, the researcher was flexible and accepted new codes as they emerged during the analyzing process.

The researcher input interview transcripts and text from document analysis into a matrix using a computer. The documents were saved in folders using their research site pseudonyms on the computer. Miles et al. (2013) suggested that two cycles of coding take place when analyzing qualitative data. During the first cycle, they suggest that the researcher use a combination of descriptive and in vivo coding. For the purpose of this study, the researcher began with 'in vivo' coding by reading passages of text and assigning a code using a specific quotation from the participants' responses (Miles et al., 2013). Using a word documentation program, the researcher highlighted text and assigned it a code. A new color highlight was designated for each new code that emerged. The researcher extracted the highlighted text according to color and saved this text

in a new document. The process of extracting text was done in preparation for the second coding cycle.

During the second cycle of coding the researcher looked for patterns. The researcher referred to the codes created during the first cycle of coding and manipulated these into themes or categories. The categories/themes established were entered into a document on the computer in a table format to show the category/theme, the codes attached, and the text from which the codes were developed from. A narrative was then written to describe the information shown within the table.

After analysis for each data collection tool was complete, the researcher synthesized the results across data collection tools in an attempt to triangulate the data (Yin, 2013). A matrix table was used to incorporate data collected from all data collection methods. Another cycle of coding was added in order to identify if pre-established themes would be kept, changed or if new themes would be added. Categories and themes were used to establish the findings of this study. Findings derived from quantitative and qualitative data were then summarized in narrative form. Summaries were used to conduct a cross-case comparison among elementary, middle, and high school. The researcher paid special attention to identify outliers that were found within the data. Miles et al., (2013) believed that attending to outliers within a study helped to strengthen the findings.

### **Ethical Considerations**

Conducting a qualitative study involved collecting data from individuals within their natural setting. The vulnerability of participants within qualitative research increases the need for researchers to take the necessary steps to ensure that the research is representative of their participants. By considering any ethical issues that may arise throughout the study and how to resolve them, researchers can demonstrate an attempt to protect their participants.

Competence boundaries were noted within the study. The researcher did not have a professional background with recreation therapy and therefore lacked knowledge on the topic. In order to address competence boundaries the researcher sought the expertise of two professionals within the field of recreation therapy. These professionals were used to provide the researcher with on-going consultation and feedback throughout the study.

Prior to conducting research, the researcher ensured that participants had the opportunity to give their informed consent. Participants were provided with information regarding the study such as: the study's focus, questions, data collection procedures, the role of the participants within the research, and confidentiality (Miles & Huberman, 1994). Providing this information ensured that IEP team members and student participants were aware of what the study involved and their role within it. IEP team members of students were asked to provide written consent for participation. The students themselves were also asked to provide written consent to establish that they were participating voluntarily.

Considerations were made for the privacy, confidentiality and anonymity of participants of this study. Identifiers were not used to identify participants. IEP team members were referred to as a collective and students were referred to by a pseudonym. The researcher omitted the names on progress reports to ensure that the documents being used for document analysis were protected and could not be traced back to students. The researcher kept field notes and documents in a confidential folders on her personal computer to ensure that participant privacy was protected.

Miles et al. (2013) stated that vulnerable populations include those who are in the public eye and those who are unable to make their own choices. Participants used for this study are part of a vulnerable population. Precautions were put in place to minimize the harm and risk of these

participants. It is inevitable that educators are within the public eye. In the hope to protect educators reputation within the community and job placement, educators and the research sites were not referred to by name at any point during the study. The intellectual ability of some of the study participants put them at risk within the community or among their peers. In an effort to ensure responses could not be traced back to individual students or research sites, pseudonyms were used. A familiar person was present during student interviews to ensure students' safety, comfort level and understanding.

Even though the study was built on the assumption that disabilities are a difference, and not a defect, the researcher needed to take into account the sensitivity students may have towards being different from their peers. To minimize risk and harm to students with disabilities, special attention was given in the development of the questions for each data collection tool. Also, a familiar environment was used to conduct student interviews. Providing a comfortable atmosphere allowed student participants to relax and feel comfortable to share their ideas.

### **Issues of Trustworthiness**

#### *Confirmability*

Creswell (2013) stated that qualitative researchers should share potential bias and assumptions that could impact the research. As a special education teacher and former student within a Recreation Management and Policy Program with a therapeutic recreation concentration, the researcher brought personal assumptions, beliefs and values on the use of recreation as a related service. Identifying these assumptions, beliefs and values within the first chapter helped increase the trustworthiness of the study.

### *Dependability*

By using a convenience sample, there was the potential for sampling bias within this study. In order to counter this bias, the researcher included two different perspectives of individuals directly involved with recreation as a related service from each of the selected sites: the IEP team member and the student. By including multiple perspectives and research sites, the researcher demonstrated an attempt to include different sources of information, increasing the reliability of the potential findings (Miles et al., 2013).

### *Credibility*

Collecting participant perspectives through interviews caused a potential risk for researcher bias. Miles et al. (2013) state that during qualitative research, researchers are more likely to find participant comments that match their original beliefs. In order to ensure credibility in the study, the researcher employed member checks, ensuring that participants had the opportunity to validate the truthfulness of the information provided during interviews (Miles et al., 2013). By including multiple data collection methods the researcher triangulated the data in an effort to help to increase the credibility of the study (Creswell, 2013).

### **Limitations and Delimitations**

Delimitations imposed boundaries around participants and data collection tools. The researcher was selective when choosing research sites. Selected sites were required to meet the criteria that they were: a public elementary, middle or high school, offered recreation as a related service as part of a student's IEP, and that recreation as a related service was delivered by a certified therapeutic recreation specialist. Criteria was also set for selecting participants. Only students receiving recreation as a related service on IEPs, and members of their IEP team were asked to participate in the study. Individuals working with students with 504 Accommodation Plans and individuals who provide support to students with disabilities outside of school (i.e. outside therapists, coaches, etc.) were not included within this study.

The research conducted was not without limitations. Data collection tools, methodology and the research sample all posed potential limitations that must be acknowledged. The *KIDSCREEN-52* has shown reliability and validity when used with children ages 8-18. The research sample used within this study was taken from elementary, middle and high schools leaving a possibility that the measurement tool was used with ages prior to eight years old. The parent/proxy version of the *KIDSCREEN-52* was used with all members of the IEP team. Members of the IEP team were not all caregivers of the student, some were service providers, which may have caused difficulty for IEP team member participants answering certain questions on the *KIDSCREEN-52* questionnaire. These factors are limitations to the study as there is no research that states the reliability and validity of the *KIDSCREEN-52* when used with ages 5-7 and/or completed by educators in addition to parent/caregivers.

Participation within this case study was voluntary. Educators and students were not compensated monetarily for their time. Participants' time was not flexible, making it difficult to schedule one-to-one interviews or provide questionnaires and documents in a timely manner. Though the researcher made every effort to adjust communication modes to ensure the understanding of student participants, students' disabilities could have impacted their ability to understand and respond to interview questions. This limitation may have potentially impacted the data that collected from student participants. IEP team members were asked to complete questionnaires individually and not to share their responses with others on their IEP team. Without the researcher present during the completion of these questionnaires, IEP team members may have shared responses and could have been influenced by their peers' impacting data collection.

Recreation as a related service is underutilized, and therefore limited the amount of research sites available for conducting research. The researcher had to use a site based on availability. This impacted the researcher's the ability to generalize findings.

The interview protocol and researcher-developed questionnaire posed limitations to the study. The underutilization of recreation as a related service limited the availability of public schools that implemented recreation as a related service, which made it difficult for the pilot testing of protocols to occur. There was the potential that questions may have been unclear or failed to emit responses needed to help answer the research questions.

Yin's (2013) *shorter case study interview* method called for one interview per participant lasting approximately one hour long. Interviews for this study lasted approximately thirty minutes long to allow for the least amount of disruption to students schedules. This amount of time may not have allowed for familiarity between the student and researcher to be established and could have impacted the amount of detail in student responses. At the research sites request, the students were interviewed with a familiar educator present. The familiar educator present was the certified therapeutic recreation specialist (CTRS) the students worked with. Having the CTRS present may have caused students to be hesitant in sharing their true feelings when answering interview questions.

As a way to organize, protect, and store data, the researcher relied on technology. There was the chance that computer hard drives could have crashed during the process of this study, therefore the researcher used a flash drive to backup all data pertaining to this study. Technology was used to record responses during student interviews. This technology could have become faulty during an interview, and limited the notes that could have been taken by the researcher.

The researcher had a backup means of technology in order to record responses and write field notes if the initial technology failed during the data collection process.

### **Chapter Summary**

This chapter provided a detailed description of how a mixed-method case study was used to answer five research questions:

How does recreation as a related service as part of students' Individualized Education Programs within a public school setting contribute to the quality of life of students with disabilities?

- What are IEP team members' perceptions of recreation as a related service as part of students' Individualized Education Programs?
- What are student perceptions of recreation as a related service as part of their Individualized Education Programs?
- What are the delivery formats of recreation as a related service within a public school setting?
- What are student outcomes for those who receive recreation as a related service as part of their Individualized Education Programs?

An embedded case study was used to allow in depth research of how recreation as a related service was implemented at the elementary, middle and high school as well as the perspectives IEP team members and students have towards this related service. Participants included IEP team members of students with disabilities (including their parents) who received recreation as a related service in a public elementary, middle, or high school. The students with disabilities who received recreation as a related service were also included as participants. Participant experi-

ences were gathered through one on one interviews, questionnaires, and document analysis. Multiple data collection tools allowed for triangulation as a means to increase the trustworthiness of the study.

The literature reviewed and conceptual framework contributed to the research design. Questions developed on the questionnaire and protocol stemmed from information obtained from the literature review and the conceptual framework. The first cycle of coding utilized the conceptual framework as a guide in the development of initial codes during the analysis process. Comparisons among the data collected allowed the researcher to draw conclusions. Procedures for providing informed consent and privacy and confidentiality were described in detail to acknowledge the ethical considerations made within the study. Delimitations involving criteria needed for participants and research sites were stated. Limitations the criteria placed on the study were also stated. Including potential bias within the chapter brought consideration towards the confirmability of the chapter. Dependability was established through the different perspectives and settings included during the research. The use of data triangulation increased the credibility of the research conducted. Establishing that the study was trustworthy was essential for the researcher to make a meaningful contribution regarding the implementation of recreation as a related service in public school settings.

## Chapter IV

### Introduction

Recreation as a related service utilizes leisure and recreation as a platform to provide interventions to individuals with disabilities. Its aim is to enhance the leisure experience of individuals with disabilities by developing the functional, physical, social and behavioral skills they will need to participate. (retrieved on March 4, 2015, taken from <https://www.trontario.org/about-therapeutic-recreation>). The purpose of this embedded case study was to explore how recreation as a related service contributes to the quality of life of students with disabilities as part of their Individualized Education Program in a public school setting. Research questions sought to explore how recreation as a related service was implemented, the perspectives of students and IEP members involved with this related service, and student outcomes that emerge.

Data was collected using a combination of document analysis, semi-structured interviews, the parent/proxy *KIDSCREEN-52 Health Related Quality of Life Questionnaire for Children and Young People*, and the *IEP Team Member Questionnaire*, a short researcher developed questionnaire. The researcher believed that gathering data on recreation as a related service, would raise awareness among students, parents and educators of the availability of recreation as a related service to students with disabilities, and provide information needed in order to make informed decisions towards ensuring the quality of life of students with disabilities in a public school setting.

### Participant Overview

Six student participants and fifteen IEP member participants were used in this study. Student participants included Greg, Peter, and Marcia from the high school level and Cindy, Bobby, and Jan from the elementary school level. Greg was a 10th grade student with Autism whose verbal communication involved scripting or perseverating on topics of his choice. Peter was a 10th grade student with Autism who communicated using one word responses. Marcia was a 12th

grade student with multiple disabilities who was categorized as non-verbal and used vocalizations and an iPad as the means to communicate. Jan was a first grade student with multiple disabilities including Down Syndrome who had significantly limited verbal communication skills. Bobby was a fourth grade student with Autism with relatively strong verbal communication skills, but could perseverate on a topic of his choice rather than stay on topic. Cindy was a fourth grade student with multiple disabilities including Down Syndrome who had relatively strong verbal skills, but at times could be unintelligible.

IEP member participants were made up of individuals serving on IEP teams of students with disabilities receiving recreation as a related service. IEP member participants included: six parents, two elementary level special education teachers, one elementary level counselor, two elementary level case managers, one elementary level occupational therapy assistant, a middle school psychologist, a middle school speech and language pathologist, and a high school occupational therapist.

### **Key Findings**

Key findings from six student participant interviews, fifteen IEP member participant questionnaires and document analysis of six student participant progress reports (start date of recreation as a related service to present day) will be presented within this chapter. Five major findings emerged from this case study:

- i. Students with disabilities who participated in recreation as a related service demonstrate positive emotional and physical well-being.
- ii. Students with disabilities who participated in recreation as a related service can be independent in leisure and recreation activities.
- iii. Recreation as a related service uses a variety of service delivery models that students and IEP members find helpful for leisure and recreation participation.

- iv. Students with disabilities who receive recreation as a related service participate in leisure and recreation activities with peers during school.
- v. Students with disabilities who receive recreation as a related service participate in leisure and recreation activities primarily with family members rather than peers outside of the school setting.

Multiple rounds of analysis and coding were used to arrive at these findings. First, quantitative data was converted to percentages and placed within matrices that were organized by each questionnaires' key terms. Next, the researcher transcribed each student interview into an electronic text document. Student interviews and progress reports were previewed once and then coded using In Vivo coding. Different color highlighting tools were utilized to signal reoccurring In Vivo codes during first round coding. A qualitative matrix was created for each participant using the data collection tools as key terms. In Vivo codes were organized according to these terms. Descriptive and Emotion coding were then used to create categories from the In Vivo codes identified. A second matrix was created using key terms from each research question. Categories were organized according to these key terms. A third matrix was then created using the key terms from both Austin (1998)'s Health Protection/Health Promotion Framework and Schalock et al.'s (2008) Quality of Life Framework. The categories derived from qualitative coding and the quantitative data collected were then organized according to these terms in order to conduct second cycle coding. Once themes were determined, one more matrix was created to demonstrate how the themes connected to this study's frameworks and research questions.

Each of the five findings will be discussed individually within this chapter. Each finding will be identified and then followed by detailed description of the data. Quotes derived from interviews and document analysis will be used as primary supports to the findings, followed by supplemental data derived from the questionnaires.

**Finding 1:** *Students with disabilities who participated in recreation as a related service demonstrated positive physical and emotional well-being.*

One significant finding of this study was that students with disabilities who participated in recreation as a related service demonstrated positive emotional and physical well-being. Evidence from over half of the IEP member participants and six out of six student participants supported this finding. This finding was also reflected within 6 out of 6 progress reports that were analyzed.

According to Austin's (1998) Health Protection/Health Promotion Framework, roles of the recreation therapist include enhancing leisure abilities, improving physical functioning, decreasing stress and improving physical and emotional well-being. Schalock et al.'s (2008) Quality of Life Framework highlights that individuals with emotional well-being are those who demonstrate feelings of safety, happiness and calmness, and those with physical well-being have good health and the ability to participate in leisure and recreation activities. Responses from IEP member participants suggested that students with disabilities who participated in recreation as related service were happy, had a positive outlook on life, were in a good mood the majority of the time, and felt self-confident. These students were also reported as being active and having a variety of leisure interests.

Students highlighted their interest and involvement in many leisure and recreation activities during the interview process. They also shared how they felt about participating in these activities. Leisure and recreation interests that were mentioned during student interviews included

biking, hiking, playing with a ball, playing hide and seek, going to the playground, roller skating, playing tag, going to the beach, camping, taking care of pets, going to the movies, going out to eat, going shopping, visiting the library, gardening, doing a picnic, cooking, horseback riding, playing soccer, playing frisbee, playing cards, caring for a pet, fishing, dancing, drawing, painting and swimming. At least half of the student participants stated going to the beach, swimming, playing cards, dancing, cooking, playing ball, riding a bike, and playing on the playground during their leisure and recreation time makes them happy. Swimming, cooking, playing ball and playing on the playground were all activities student participants stated they had done with the recreation therapist.

When presented with a visual prompt, students voiced that they enjoyed playing on the playground. Greg independently stopped at this prompt stating that he felt “happy” on the playground. Peter stated, “yes” to playing on the playground. He also elaborated on what he enjoyed doing on the playground verbalizing one word responses such as, “ring the bell,” “slides”, and “swing.” Peter used a one word response, “happy” to describe how he felt when on the playground. A paraprofessional answered for Jan stating, “She could be heard singing and smiling” while swinging on the playground. Bobby responded that playing on the playground made him feel “excited.”

Swimming was also a preferred leisure and recreation activity that made student participants happy. Greg exhibited a high pitched voice and used the word, “happy” to describe how he felt about swimming. “Happy,” was also the response used by Peter to describe his feelings towards swimming.

Another leisure interest that brought happiness to students was cooking. When watching the visual prompts Greg exclaimed “cooking!” in response to the screen showing a visual prompt

for cooking. He smiled and nodded his head yes. When asked if he liked cooking, Greg quickly replied, “mmm-hmmm.” When shown the visual prompt for cooking, Peter was asked if he cooked. He quickly responded “yes” and was able to give a response “crack em” to share that he cracked eggs during cooking. He also stated “happy” to name how he felt when cooking.

Playing ball was also mentioned as a preferred activity that students enjoyed. Jan’s paraprofessional indicated that she “loves throwing and kicking the ball.” Cindy stated “I feel...nice... I play even nicer” and “I feel glad (quickly and clearly)” when describing how she feels when playing ball.

When asked if they felt happy on most days, half of the students indicated “yes.” Greg answered “uh-huh” in response to whether he feels happy most of the time. Bobby said he felt “happy” working with the recreation therapist, and stated that he and the recreation therapist have “fun together.” Marcia was unable to provide a verbal response to interview questions or the visual prompts presented, but throughout the interview regarding her leisure and recreation interests and recreation as a related service she made numerous high-pitched vocalizations and smiled. Her paraprofessional who was present within the interview stated that, “9 times out of 10 Marcia was happy.”

Student participant progress reports described them as being flexible thinkers in terms of leisure and recreation. Marcia’s progress report stated that during a snowshoeing activity she “did not fuss when putting the snowshoes on and was very willing to walk with only a couple verbal cues.” She was referred to always having a “great attitude!!” and “always smiling and willing to participate in most activities.” According to Cindy’s progress report she “always has a smile on her face and really enjoys the different warm up activities at the beginning of class.”

It was also stated that students enjoyed participating in leisure and recreation activities with their peers. Marcia's report stated that she "enjoys playing tag games during warm up" and when participating with peers "she often responds with a high pitched sound when excited and will respond with one word approximations." Bobby's progress report stated that he "really enjoys participating in warm up activities that we do during group." It was written that "he loves to be 'it' and "he loves running away from other kids in the classroom who are it." Jan was described as one who "enjoys watching her peers during gym and loves to run with them."

As shown in figure 4, data collected from the *KIDSCREEN-52* questionnaire indicated that eight out of eleven (72.7%) IEP member participants felt that students had a good quality of life in regards to psychological well-being and five out of 11 (45%) IEP members felt that students had a good quality of life in regards to moods and emotions and physical well-being. Figure 5 represents data collected from the *IEP Team Member* questionnaire, suggesting that over half (approx. 73%) of the IEP member participants felt that recreation therapy influenced the emotional well-being. Over half (approx. 86%) of the IEP member participants also felt that recreation therapy influenced the physical well-being of students with disabilities.

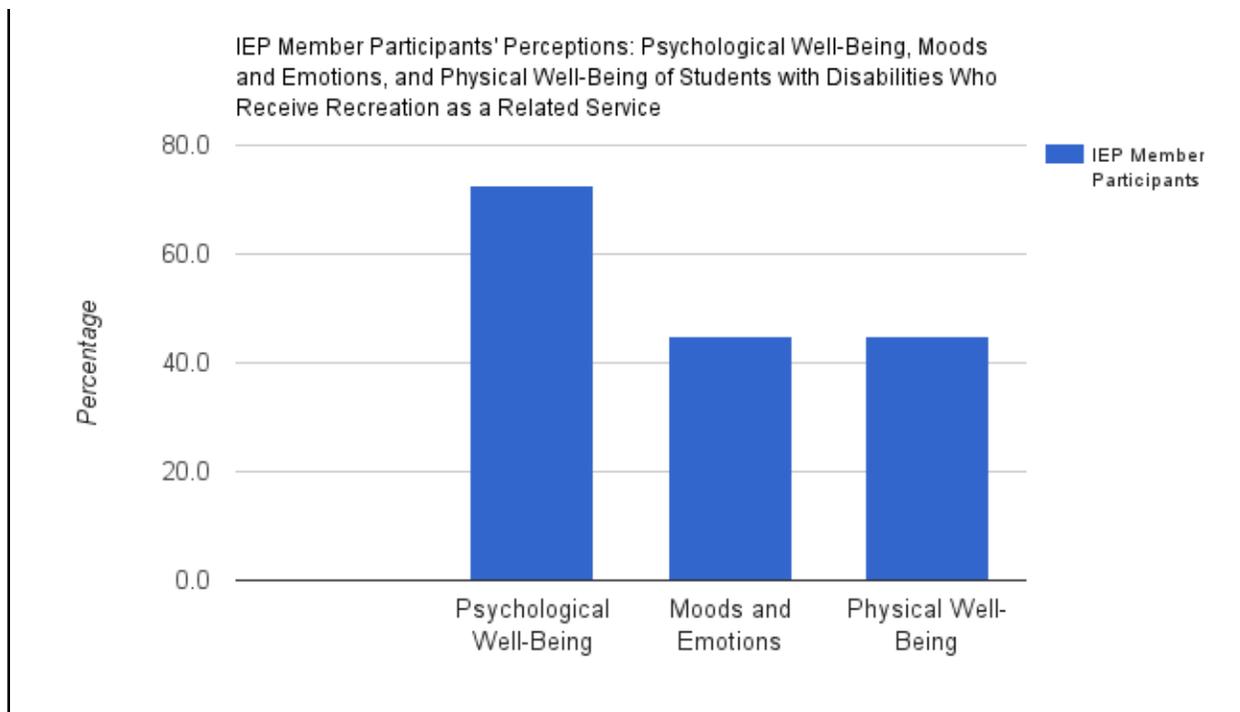


Figure 4: Percentage of IEP Member Participants who felt students with disabilities who received recreation therapy displayed quality of life in the area of psychological well-being, moods and emotions, and physical well-being.

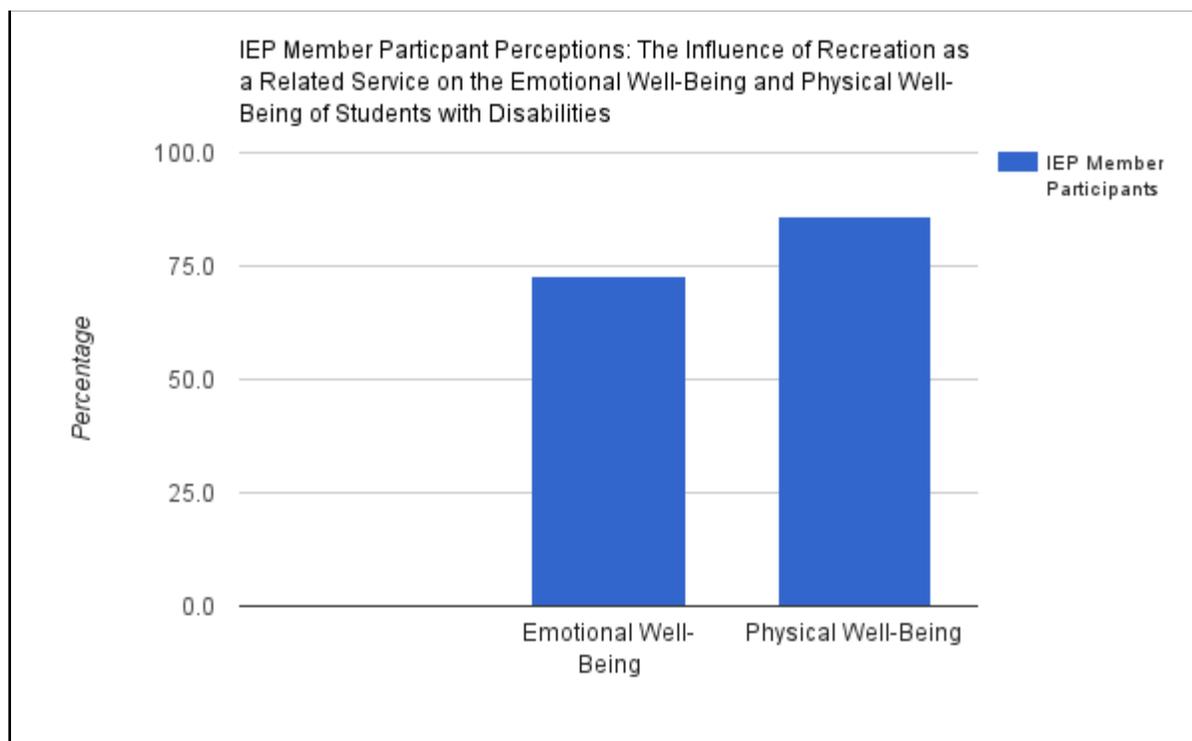


Figure 5: Percentage of IEP Participants who felt recreation as a related service influenced the quality of life of students with disabilities in the areas of emotional and physical well-being.

**Finding 2:** *Students with disabilities who participated in recreation as a related service have increased independence in leisure and recreation activities.*

Data collected from this case study suggested that student participants felt independent within the context of leisure and recreation activities. Five out of six student participants interviewed stated they felt they could do things independently. All six progress reports of student participants highlighted independent skills students were able to demonstrate during leisure and recreation activities. Questionnaire findings indicated that IEP member participants felt that recreation as a related service supported the students' ability to be independent within leisure and recreation activities.

Fostering independence is a focus area for recreation therapy within Austin's (1998) Health Protection/Health Promotion Model. Within this focus area, an individual strives to increase their personal awareness and develop feelings of positive self-regard, self-efficacy and perceived control. Personal development and self-determination represent the Independence category within Schalock et al.'s (2008) Quality of Life Framework. Within this framework, personal development comprises activities of daily living, belief of success, cognitive skills, social skills, and educational performance. Self-determination consists of an individual's ability to have control, make choices and set goals independently.

In the interview process, student participants were asked if they felt they could do a lot of things by themselves. Greg replied "yes, like library, marching band, and zoo!" Cindy stated, "I know how to play dodgeball." Bobby also stated that he felt he could do things independently. When he elaborated on his response, his intonation became high pitched and took on a sing song rhythm. He stated that he could do "angry birds in real life...annnd, read...annnd, paint, painting is my favorite thing...actually I have a kit called wonder paint where the paint, where the colors magically appears... no mess... it's kind of like gel."

Student participants also shared their ability to make choices in regards to leisure and recreation. Though Jan could not verbalize what she could do independently, throughout the interview she demonstrated her ability to independently manipulate her iPad to make choices of the music she wanted to listen to. Her paraprofessional stated that "(regarding iPad) she can click and do whatever she wants... to listen to songs and stuff." Marcia's paraprofessional stated that Marcia could do leisure and recreation activities such as matching cards, doing puzzles and initiate playing basketball in the morning. Bobby demonstrating his ability to independently make

choices stating that if he could choose whatever he wanted to do in school, he would do “recess and read and make some art.”

Data collected from the document analysis of student progress reports supported student participant responses pertaining to independence. They highlighted the leisure and recreation focus skills students were working on with the recreation therapist, and the students’ progress towards achieving these skills. Student progress reports showed the development of gross motor skills in student participants. Greg’s progress report stated that “he performs many skills during warm up time such as running, galloping, and hopping... overall, he is doing a very good job working on gross motor skills.” In terms of group activities, it was stated that:

he has been working on many different skills such as rolling a ball, dribbling a basketball and soccer ball, shooting hoops, hitting a volleyball, and striking a ball with a bat and a racquet. He has been working in the weight room using the stationary bike, the ab lounge, the elliptical and several weight machines.

Bobby’s progress report also suggested an increase in gross motor skills that lead to independent participation in leisure activities stating that the student’s “locomotor skills have improved since preschool. He is able to run, gallop, slide, hop on one foot and jump. He is able to perform 10 jumping jacks without losing the pattern.” Jan’s progress report suggested her independence in performing gross motor skills when participating in basketball stating “Jan is able to dribble a ball 2 times when the dribble is started for her.” Cindy’s progress report shared that the student was able to independently participate in a yoga activity “where she learned different yoga poses.” The progress report stated that Cindy’s “endurance had improved dramatically this year and she is able to run for longer periods of time before getting tired/needing a break. Her catching, throwing, and locomotor skills have greatly improved. Her hand-eye coordination has also

greatly improved. ” The progress report specifically mentioned Cindy’s ability to independently participate in activities such as basketball and soccer stating she:

did a good job during the basketball unit and was able to dribble while moving several times before losing control of the ball. She is also able to bounce the ball back and forth between her right and left hands. She does a good job with skill based activities such as kicking or dribbling during a soccer unit.

The progress report also highlighted independent skills Cindy demonstrated during warm up activities stating that during warm up activities, she participates in “activities that include a variety of different skills such as skipping, sliding, galloping, push-ups and sit ups.”

Marcia’s progress report also reported the student’s ability to perform skills independently. The progress report stated that Marcia was able to participate in activities within gym class such as snowshoeing, baseball, soccer and hockey. Progress report comments specified that Marcia, “participated in snowshoeing 2 times and was able to get  $\frac{1}{4}$  of the way around the field on her second try!” It also stated that:

Marcia is able to hit a ball off of a tee with no cuing or assistance. During the soccer unit she was able to independently kick a soccer ball and pass the ball to a peer with no verbal or physical cues. Marcia was able to independently get the puck across the gym floor and score a goal! She is able to independently hit a ball but it does not travel far.

Cindy’s progress report also reported a number of skills the student could perform independently as a result of receiving recreation therapy. The progress reports stated that Cindy’s “endurance has increased and she is able to run, walk, gallop, etc. for much longer than in the past. An example of increased endurance was given reporting that Cindy was able to “run (at her own

pace) approximately 1-2 laps around the gym before getting tired.” Cindy was able to “demonstrate on several different occasions the ability to skip which is a newly acquired skill” and during a soccer unit she “was able to pass the ball to her peers, do kick offs and throw ins during small soccer games.” One progress report highlighted that Cindy was “becoming more and more independent with participating in the activities” and that “she is able to do all of the exercises to the best of her ability when given a reminder of how to do it.” The progress report went on to say that even when things are difficult for Cindy “she does make an attempt every time.” More recent progress reports documented how Cindy’s endurance increased allowing her “to keep up with her peers while playing a variety of games. Cindy is able to run for longer periods of time before getting tired or needing a break” and that “she typically does not need to take breaks anymore during the 1 hour class.” One progress report concluded that Cindy “participates in all activities to the best of her ability with only little adaptations/modifications.”

Student progress reports also suggested students’ abilities to perform life skills needed to independently participate in leisure and recreation activities. Greg’s and Peter’s progress reports stated that during recreation therapy the students “worked a lot on hygiene and money skills.” Greg and Peter also participated in community outings with the recreation therapist where they demonstrated their ability to enter a public place, order their own food, and pay for a purchase. Both Greg and Peter’s progress reports stated “[w]e also took a trip to Diamond Pizza where ‘student’ was able to order his own food, pay for it and pick it up at the counter.” Peter’s progress report went on to comment on Peter’s independence within this environment stating that “[w]hen Peter is ordering a food item (when in public), he will typically order a familiar item that he has ordered previously.”

Greg's progress report demonstrated his ability to be independent within the community setting stating "we also took a trip to Ramunto's where Greg was able to order his food from a waitress and read a receipt to figure out how much his bill was." The progress report concluded that within his participation in recreation therapy, "the most exciting improvements are his cooperation and communication." Greg also demonstrated his ability to independently create a shopping list in preparation to go food shopping within the community. His progress report shared that "Greg used an iPad to construct his weekly shopping list for his lunches he makes at school. Once he begins typing a word he will look at the word prediction list and choose the correct one."

A number of independent skills were documented within Peter's progress report when discussing meal preparation activities. The progress report stated that "Peter will independently set timers for a correct amount of time when making his own meals. He no longer looks for confirmation when cooking his meals." Peter also was independently able to manage his schedule for his placement program. His progress report spoke about his ability to independently follow a schedule stating "He knows when his job sites are and when he has a class outside the room... he is able to identify what day is on the calendar, when an activity or job site is happening. He can identify what day certain job sites take place."

Greg's and Peter's progress report also spoke of the students' ability to independently demonstrate expected behaviors needed to participate within the community. Progress reports shared that students have "taken two trips out into the community so far with the life skills group which were to the apple orchard and general store. Greg/Peter used appropriate behavior in both places and needed few verbal cues to do what he was told." Greg's progress report went on to say that "[h]e is able to distinguish which behaviors are things he should do and which behaviors he

should not do.” Peter’s progress report was similar stating that Peter “seemed to grasp the concept of expected and unexpected behavior nicely.”

Bobby’s progress report also discussed an increase in independence within the context of behavior and social skills. The progress report stated that Bobby:

has been working on a variety of social skills during his recreation therapy time. Lately he has been working on being able to take turns and play games appropriately with an adult. Bobby has been doing much better with handling defeat in a one-on-one situation. He has been able to lose and win gracefully without getting upset or bragging when playing games with the recreation therapist.

One progress report gave a specific example of how Bobby could independently apply skills directly taught within his recreation therapy session stating that

During Candyland, Bobby drew a card that sent him back to the beginning of the game. He was very unhappy with this. In order to calm him down, I said “Oh, it’s part of the game, sometimes we have to go back to the beginning, but it’s okay.” Then several turns later, I drew a card that sent me back to the beginning and Bobby said “Don’t be upset, it’s part of the game!” It was great to see that he was able to help me through the process too.”

Progress reports also reported Bobby’s ability to independently follow the rules and play fair. It was reported that:

[o]ver the last year, Bobby has been able to really focus on each game and play by the rules...he is able to show he is aware of what good sportsmanship means by participating in matching and fill in the blank activities for a variety of games he will experience during PE class.

Bobby's progress reports also discussed an increase in the student's ability to initiate informal conversations with peers reporting that "During the first 6 weeks of school, Bobby has been learning about conversation starters. Bobby's communication with peers has significantly improved. He has learned that sometimes when we have conversations with people, we have to keep the topics focused on what both people like not just one person."

Qualitative data collected from IEP member participants also supported the finding that students who receive recreation as a related service had increased independence. The *KIDSCREEN-52* discusses autonomy as the importance of an individual being able to engage in freedom of choice regarding day to day decisions. A high score within this dimension demonstrates the individual is able to make decisions independently regarding leisure and recreation. Figure 6 shows that 4 out of the 11 (36%) IEP member participants felt that students who received recreation as a related service had good quality of life in the area of autonomy. The school environment dimension of the *KIDSCREEN-52* questionnaire looks at the individual's capacity to learn and make decisions in the school environment. It also looks at the student's feelings towards school. 7 out of 11 IEP member participants (63%) reported that students receiving recreation as a related service had good quality of life in the area of school environment.

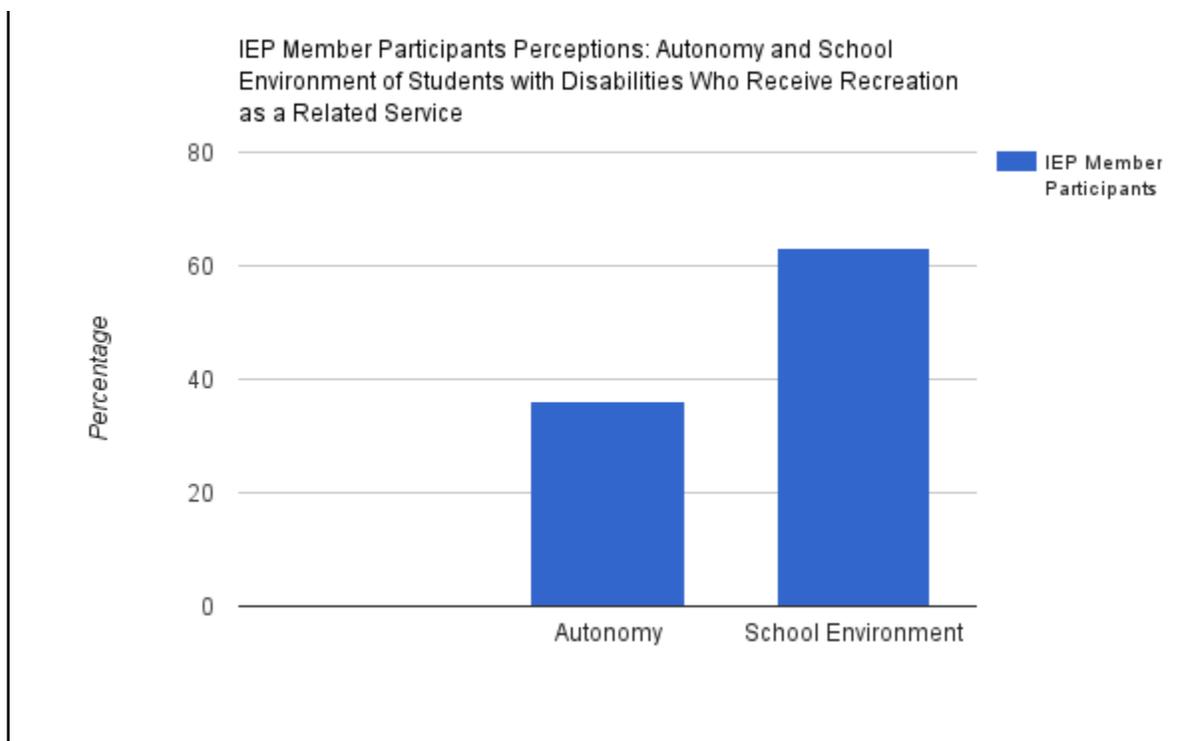


Figure 6: Percentage of IEP Member Participants who felt students with disabilities who received recreation therapy displayed quality of life in autonomy and school environment

As shown in figure 7, the recreation as a related service questionnaire stated that approximately 73% of IEP member participants felt that recreation therapy influenced students' personal development and approximately 80% of IEP member participants felt that recreation therapy influenced students' self-determination. The questionnaire also found that 60% of IEP member participants believed that recreation therapy provided leisure education to help students recognize the importance of recreation and develop an awareness of resources and a positive attitude.

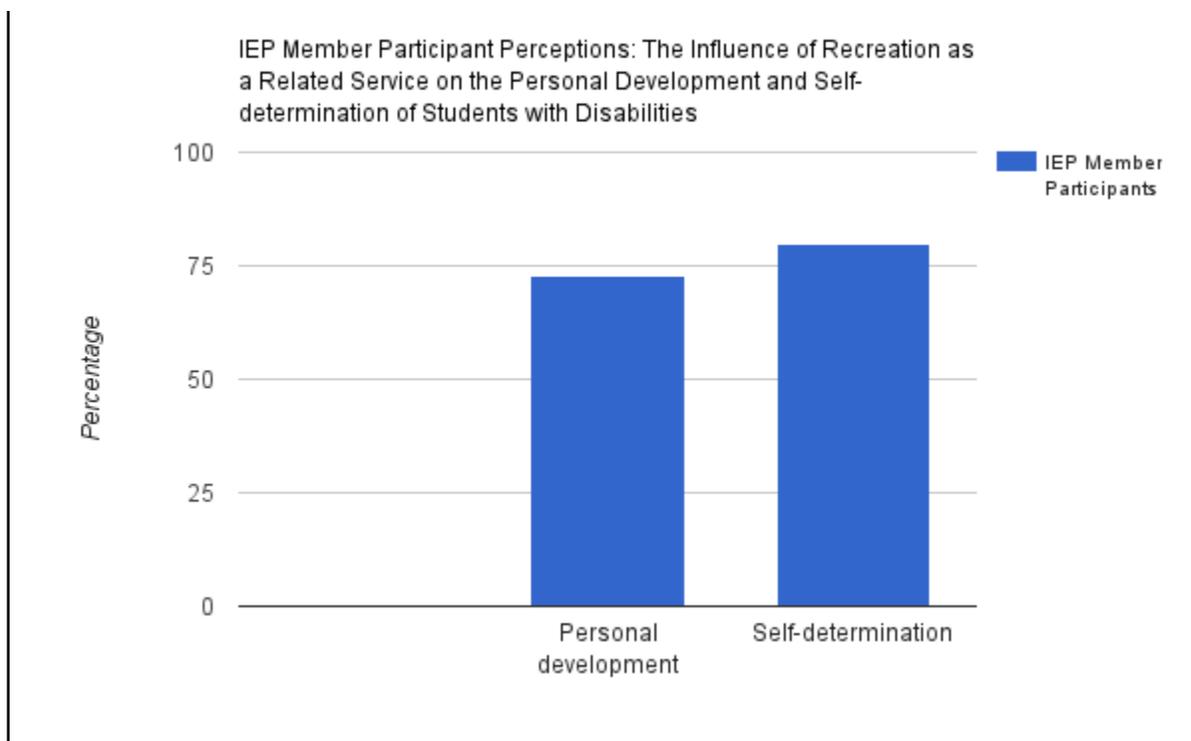


Figure 7: Percentage of IEP Member Participants who felt recreation as a related service influenced the quality of life of students with disabilities in the areas of personal development and self-determination.

**Finding 3:** *Recreation as a related service uses a variety of service delivery models that students and IEP members find helpful for leisure and recreation participation.*

Within this case study, 4 out of 6 student participants viewed their recreation therapist as helpful within a variety of settings. According to the data collected, IEP member and student participants felt the recreation therapist provided support that enabled students to participate in leisure and recreation activities successfully. The support provided by the recreation therapist was delivered in a variety of settings and with various service delivery models that were specific to individual student needs. For example, document analysis showed that Greg, Peter, and Marcia were provided support in a small group setting on a weekly basis to work on skills such as community outings and cooking. Greg stated “in the kitchen” to identify where he works with the recreation therapist. Jan and Cindy’s services occurred in an inclusive setting during gym class.

Cindy was able to name jump roping as a specific activity she did in gym with the recreation therapist.

Bobby's services involved a combination of services. One time per week, he worked with the recreation therapist individually to preview skills. The recreation therapist then met with Bobby a second time in an inclusive setting during gym. When asked to describe what he did during his time with the recreation therapist, Bobby pointed to games on a shelf and said "those games...board games... we draw too." When asked what other things he worked on with the recreation therapist he stated "ummm, feelings" and then mumbled "the rules." Bobby stated that he works on these things "in here (the shared gym/cafeteria)." When given a prompt to identify another time that he worked with the recreation therapist, Bobby stated "snack and lunch." He went on to identify that he took his friends "to lunch group... we'd talk and eat, and sometimes drink!...we'd talk about things."

A variety of approaches were used during recreation therapy sessions. One type of support the recreation therapist used was direct instruction. According to Greg's progress report, Greg worked with his small group "on hygiene going over in detail on how to brush your teeth correctly, why it's important to brush and how to floss. We also talked about washing your face, how to use deodorant, when to use a nail brush and a nail file." Both Greg and Peter's progress reports stated that the small group "did several different exercises where the students had a certain amount of money and wanted to buy an item and they would have to give the correct dollar amount." The report went on to state that the students "did well with this but needed help to walk through each scenario."

Within Bobby's progress report the use of direct instruction was highlighted through statements such as "next year it may be helpful to pre teach Bobby the skills so that he can more

fully participate with his peers.” The reports also stated that “seeing Bobby in a one-on-one setting outside of gym has been very helpful in allowing him to pick up the skills and perform well during PE.” Another report stated that “[i]t has also been helpful to work on the skills on an individual basis outside of PE so that Bobby is able to participate fully and knows what to expect during every activity.” A third report from Bobby stated that “[e]ach week Bobby spends a half hour going over expected behavior for PE. He also reviews rules of a variety of games and how to treat Mr. Brady and his peers with respect.”

Visual prompting was another form of support used throughout the recreation therapy sessions. When sharing progress about Greg’s ability to form a grocery list it was stated that “A list is made based on a conversation about what ---- would like to have for lunches at school. A list is then made on paper. Then Greg looks at the list as he types on the iPad. He will use the return key once shown.”

The use of visual prompting by the recreation therapist was also evident in Bobby’s progress report stating that “It has been extremely helpful to use a colored spot to designate the area where Bobby’s body needs to be for the activity.” Visual cues were also referred to in the statement “Visual cues paired with his behavior plan have also been very effective for keeping Bobby on task...It has been helpful for Bobby to see written out the things we will be doing in gym class and checking them off as they are completed.”

Within the progress reports, the recreation therapist would often refer to talking scripts used to support students. When reporting on Greg’s and Peter’s progress ordering from a menu at a restaurant it was stated that both “did quite well but needed to read off a script.” Peter’s report discussed his utilization of the script within the school setting in order to practice ordering from a menu stating that “he continues to practice using menus from area restaurants.”

Verbal prompting was another form of support utilized by the recreation therapist during group sessions. Greg's progress report stated that "he does need ongoing verbal prompting and supervision to modify his behavior and keep him focused" during cooking activities. When reporting progress in regards to paying for his orders during community outings to nearby restaurants it was stated that "When talking Greg through his total and how much money he had with him he was able to give the correct amount of money to the waitress." Peter's progress report also mentioned the use of verbal prompting stating "Peter still continues to need verbal prompting."

The use of verbal prompting was also discussed within Marcia's progress report when discussing learning to play ball with a peer. The progress report stated that "[s]he has begun to learn to hit a beach ball back to staff when given a couple of verbal cues."

Bobby's progress report stated how he benefited from verbal prompting during leisure and recreation activities stating "[h]e needs several verbal cues when participating in different locomotor/manipulative activities, especially when the activity is not interesting to him." In reference to participating in gym with his peers the progress report stated "Bobby continues to need verbal cues during most tasks and activities" and that "Bobby is able to play games and stay on task with some verbal prompting." A separate report also discussed the use of verbal prompting stating that "it has been helpful to give Bobby a countdown of how many more minutes are left in gym class and having him repeat it."

Verbal prompting was referred to in Jan's progress report as well stating "during the fishy fishy game, she requires some verbal prompting and a physical demonstration when she needs to become 'seaweed.'" In reference to participating in the inclusive gym class, Jan's progress report stated "she needs a lot of verbal and occasional physical prompting and then I use visuals with her too that is helpful."

Progress reports written for Cindy also discussed the use of verbal prompting to assist the student with participation in activities during gym class. It was stated that “Cindy is doing a good job following directions and participating in activities but does need some verbal cues to return her attention to the activity or to get her to participate.” Another report stated “Cindy is able to follow the directions but does need assistance from the recreation therapist to ensure she understands and follows directions.” The report goes on to state the importance of directions being repeated for Cindy “especially if the game is fast paced.”

Verbal prompting was also used to ensure that Cindy understood the directions of leisure and recreation activities. It was stated that Cindy was “able to participate in all activities but does need directions to be repeated to her” and that “Cindy has benefited from repeating directions after the PE teacher has stated them to the class.”

Another form of support provided during the recreation therapy sessions was physical prompting. Peter required physical prompting when learning how to use the timer during a cooking activity. His report stated that “[w]hen asked to set the timer for another purpose Peter looks for guidance from staff” and “when using an unfamiliar appliance, he continues to need assistance to set the timer.” It was also stated that Peter “continues to need support and instruction on what time to place on the timer and how to do it.”

One of Marcia’s progress reports documented the gradual release of the recreation therapist from physical to verbal support. It was stated that “Marcia requires hand-over-hand assistance to manipulate the objects, but once she knows what is expected of her during the activity she is typically able to do it with some verbal prompting.”

Student participants recognized the support they received from the recreation therapist. When presented with visual prompts, they were able to identify leisure and recreation activities

the recreation therapist helped them with, and at times could identify what this help looked like. Greg verbalized that the recreation therapist helped him play cards and play dress up. He clearly answered “yes” when asked if the recreation therapist helped him play cards. When asked to identify who helped him with dress up he pointed directly at the recreation therapist. During Marcia’s interview, it was stated that the recreation therapist’s role was to make sure Marcia was an “active participant in things like that (referring to gym activities).”

Bobby was able to directly state how the recreation therapist helped him to “calm down” during gym class. He smiled and closed his eyes as he stated the steps he has learned to calm down, “I close my eyes and imagine some birds flying in circles around me.” When he opened his eyes he looked at the recreation therapist and stated “she helps me.” Bobby shared that he and the recreation therapist do games together and “practice to treat everyone nice.” When discussing occasions when the recreation therapist was not in gym with him Bobby shared, “yeah sometimes I feel sad.” When asked to elaborate why he felt this way Bobby responded, “cause she’s my friend.”

Cindy referred to the recreation therapist as her “helper.” When asked what she did during her time with the recreation therapist, Cindy responded with “she helps me... she’s my helper in gym.” Cindy was then able to name specifics of how the recreation therapist supported her in participating and accessing the leisure and recreation activities during gym class. When referring to visual prompts presented, Cindy was able to identify activities she did with the recreation therapist and elaborate on how the recreation therapist helped her during gym responding “like reminding” and “listen.”

Cindy recognized how the recreation therapist helped her play catch stating “cause we throw and catch.” When presented with the dodgeball slide the student apprehensively stated that

the recreation therapist helped her “a little.” She shared “mostly I use my energy shield (putting both hands up) with my horns... and it blocks all the balls, even my friends.” When shown the jump roping visual prompt, Cindy was able to share how the recreation therapist helped her “with numbers” to do this activity. When asked if the recreation therapist counted for her she replied “yeah” with a smile and looked directly at the recreation therapist.

Figure 8 displays data collected from the researcher developed questionnaire showing that 86.6% of IEP member participants felt that recreation as a related service was very or extremely influential to student’s leisure participation during structured activities at school. 73.3% of IEP members felt that recreation as related service was very or extremely influential to student’s leisure participation during unstructured activities at school. 86.7% of IEP member participants felt that recreation as a related service was very or extremely helpful towards removing barriers for participating in structured and unstructured leisure and recreation activities for students with disabilities in school. 73.3% of IEP member participants stated that recreation as a related service provided therapeutic recreation services to develop skills students with disabilities needed in order to participate in leisure activities. 53.3% of the IEP member participants stated that recreation as a related service provided an assessment of leisure functioning prior to developing the treatment plan for students to participate in leisure and recreation activities.

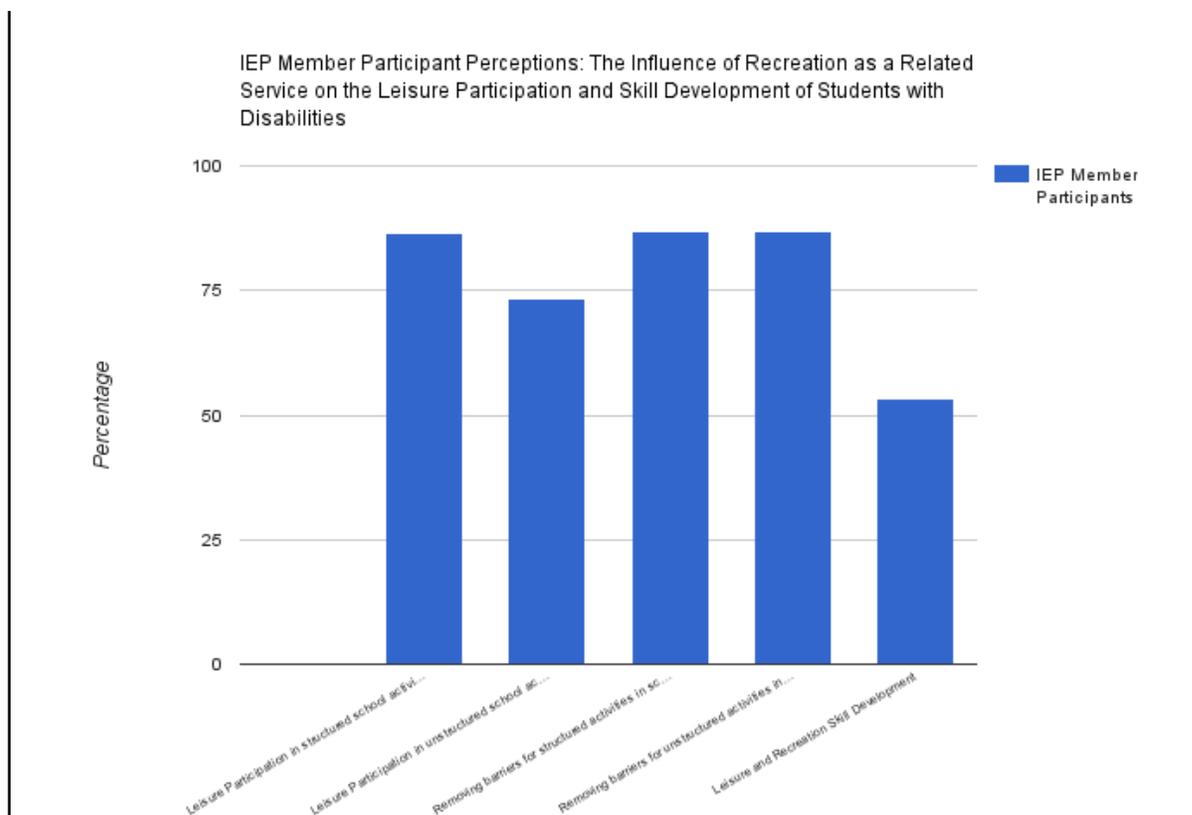


Figure 8: Percentage of IEP Member Participants who felt recreation as a related service influenced the leisure and recreation participation of students with disabilities during structured and unstructured activities

**Finding 4:** *Students with disabilities who receive recreation as a related service participate in leisure and recreation activities with their peers during school.*

A fourth finding suggests that students with disabilities who receive recreation as a related service participate in leisure and recreation activities with their peers during school. Three out of six student participants and five out of six of their progress reports suggest that the support provided by the recreation therapist enables students with disabilities to interact with others, be socially included, and have equal access to activities during school.

Austin's (1998)'s Health Protection/Health Promotion Framework, stated that one role of the recreation therapist is to support individuals to improve social skills needed to participate in leisure and recreation activities. Schalock et al.'s (2008) Quality of Life Framework highlights

that interpersonal relations, social inclusion and accessing one's rights, are three components of a healthy quality of life. Within this framework, interpersonal relations was defined as the formation of friendships and interactions with others, social inclusion was defined as an individual's participation within the community, and rights was defined as being provided with equal access.

Marcia participated with her peers during chorus. Her paraprofessional stated that "she was in chorus... she liked that... she loves music and singing and all of that umm... she really enjoys that a lot." The paraprofessional went on to say that Marcia was "very curious about people, so any opportunity she gets that she can be with people and be social... she is really happy."

Another example of peer participation was identified when a paraprofessional described Jan's experience in gym class with the recreation therapist. Jan's paraprofessional stated that "if the kids are running laps she'll run alongside them, she won't do the whole lap, but she'll try to keep up with them." The paraprofessional went on to say that the student became interested in things from suggestions the recreation therapist gave in terms of leisure and recreation activities to do at recess. She stated "yeah Jan's getting better at that, like she's playing with friends now with the ball where before she wasn't having that." The paraprofessional highlighted peer interactions between Jan and her peers stating:

the peers in her class are awesome... and they are really... like if we are doing a game that involves throwing they are really good about getting you know if they have a bunch of balls they will give her a couple and they are really very aware of her... they won't throw them at her. They are fantastic!

She went on to say that "she (Jan) definitely tries to push herself in the corner and play by herself, but she has improved with that this year, from what I have noticed with her... like even in gym class she'll seek them (her peers) out."

Bobby also made comments that supported this finding. He shared that he liked to play and talk with people in his class. He shared that he liked to talk about “magnets and weather conditions” with the students in his class during science.

Data collected through document analysis also suggested that students with disabilities who receive recreation as a related service participate with their peers during school. Greg’s progress report stated “[a] couple of times a peer has joined Greg during group which was very successful” and that “Greg was very willing to participate in all activities when a peer was present.” The progress report went on to report that Greg is “able to communicate with peers and effectively take turns, participate in the activities with minimal objection, and has really improved his abilities to share equipment and take turns with peers.”

Marcia’s progress reports also supported that a level of peer participation occurred during school. One comment stated that Marcia was “able to do stretches and warm up activities along with her peers.” Another stated that “[s]he (Marcia) does a great job when she plays tag games during warm up” and that “she loves to help classmates get back in the game.” Peer participation during leisure times outside of gym were also discussed within Marcia’s progress report. One progress report stated that, “Marcia has been participating in a girl’s group this year with a couple other female students in her class and participating in exercise groups such as yoga.”

Bobby’s progress report described peer participation within gym class, as well as recess. In reference to gym class, the progress report stated that “[h]e was able to participate more often with several breaks throughout the 30-minute class” and that “PE inside the cafeteria has gone much smoother and Bobby has been participating wonderfully.” When reporting on Bobby’s social participation during unstructured times within the school day, the progress report shared that “[d]ue to his diagnosis, he is always going to want to talk about topics that interest him, however,

he is doing a much better job with talking about other things with peers.” The progress report also commented on specific activities Bobby participated in with his peers stating that “[w]e are also working with his peers on letting Bobby be independent during the board and card games because he is capable and doesn’t need anyone’s help to play.”

Comments within Jan’s progress report also discussed peer participation. One progress report stated that Jan will “participate in the warm up laps around the gym” sharing that “her peers in both PE and the gross motor group are very willing to help and include her in all activities” and that “she does a great job throwing to a peer when she is motivated.”

Cindy’s peer participation was highlighted in progress report comments such as:

Cindy is able to participate in all activities and gets along well with her peers. She has a wonderful group of students in her class that are also always willing to help her out and include her in everything.”

The progress report also stated that during gym class “peers are having fun and participating and Cindy wants to be right there with them...her peers are helping her when she needs it which has been really nice to see.”

On the *KIDSCREEN-52* questionnaire, social inclusion was measured by the social acceptance score. According to this measurement tool, a person who has high social acceptance is one who feels accepted and respected by their peers. One’s feeling of social acceptance may play a part in their motivation to join in with peers. As shown in figure 9, 54% of IEP members felt that the students who received recreation as a related service had a high quality of life in the area of social acceptance.

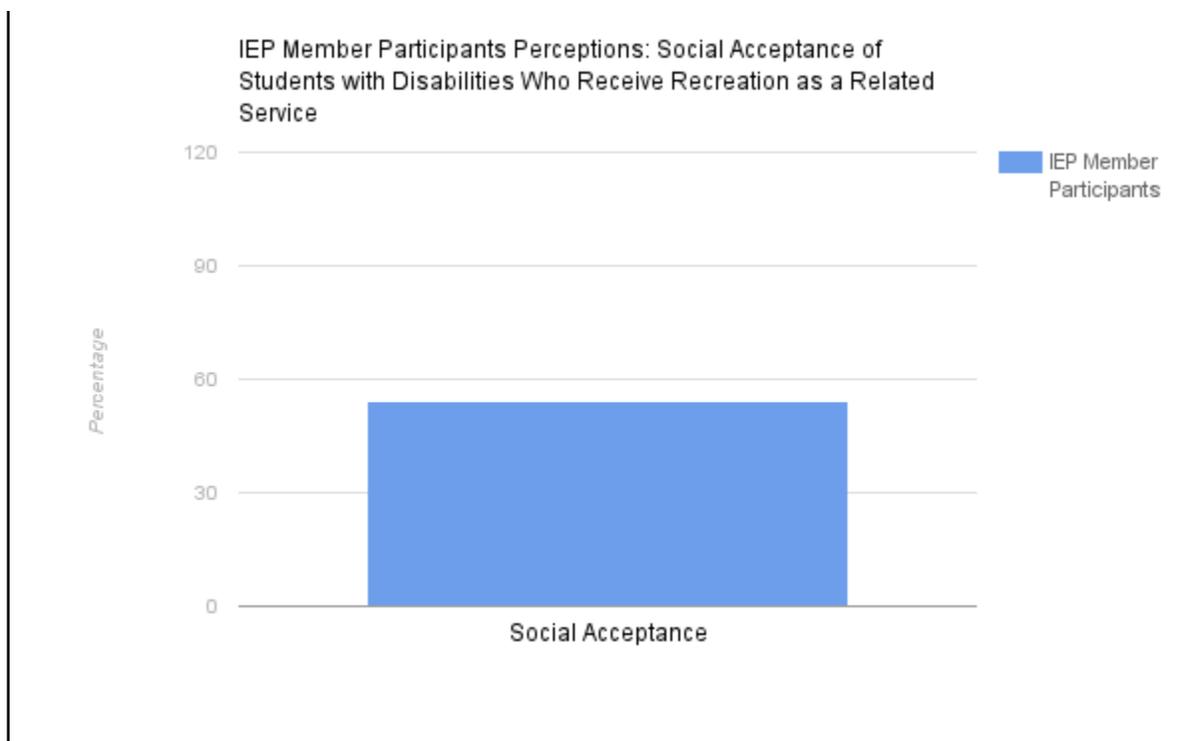


Figure 9: Percentage of IEP Member Participants who felt students displayed quality of life in the area of social acceptance.

The IEP Member Questionnaire supported the data from the *KIDSCREEN-52*. As figure 10 shows, this questionnaire found that 80% of IEP member participants felt that recreation as a related service influenced the social inclusion and equal rights of students with disabilities. 60% of the IEP members stated that recreation as a related service played a role in developing school and community modifications and accommodations to help ensure access for all in the areas of leisure and recreation. 60% of IEP members also reported that recreation therapy provided a form of leisure education to help students recognize the importance of recreation and develop an awareness of resources and a positive attitude towards leisure and recreation. The IEP Member Questionnaire also identified that 60% of IEP members felt that recreation therapy influenced students' interpersonal relations.

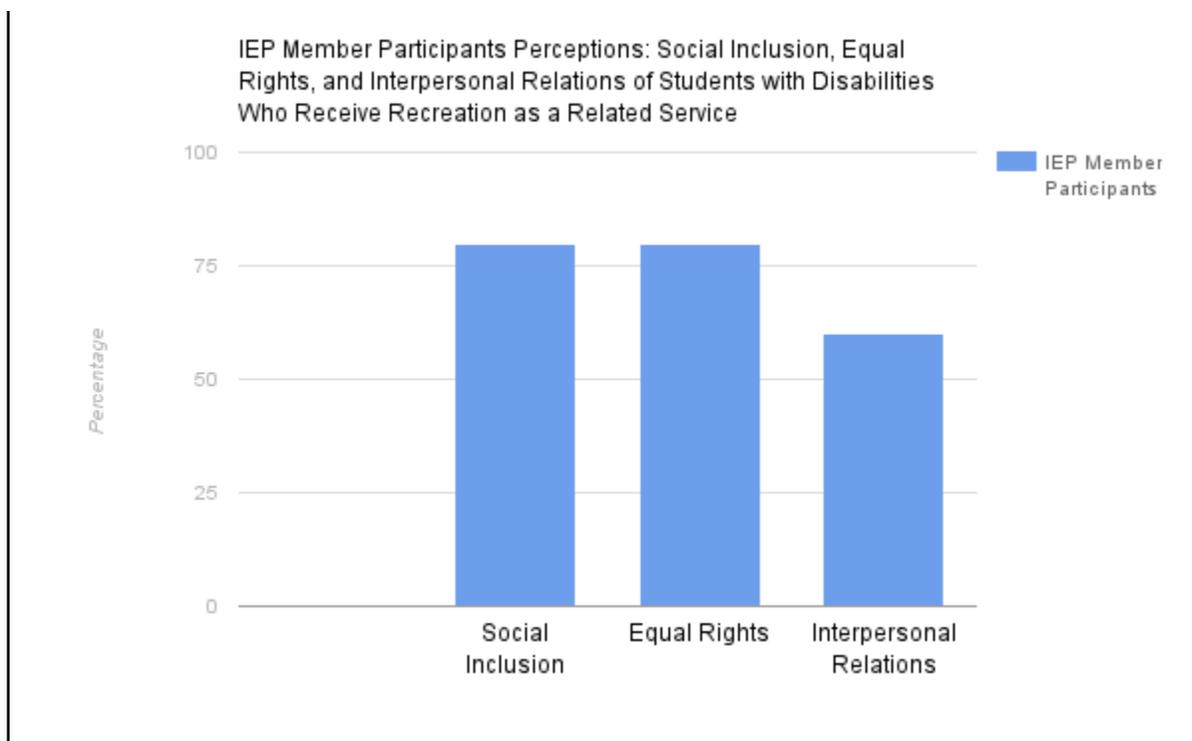


Figure 10: Percentage of IEP Member Participants who felt recreation as a related service influenced the quality of life of students with disabilities in the areas of social inclusion, equal rights, and interpersonal relations.

**Finding 5:** *Students with disabilities who receive recreation as a related service participate in leisure and recreation activities primarily with family members rather than peers outside of the school setting.*

Six out of six student participants indicated that they participated in a number of leisure and recreation activities outside of the school setting with their family. When presented with a visual prompt of a leisure activity, each student was able to identify the family member they completed the activity with. Greg did the majority of his leisure and recreation activities with his mother outside of school. Activities that resonated with the student when looking at the visual prompts included playing hide and seek, roller skating, playing tag, hiking, taking care of his two dogs, going out to eat at McDonald's, and food shopping. When shown the visual prompt for shopping Greg exclaimed, "shopping! I like to shop!" in a high pitched tone. When asked who he

goes shopping with he was able to provide a quick response stating, “my mom.” Greg also mentioned that he rode bikes and went to the movies with “Dad.” When asked if he liked riding bikes with Dad he exclaimed, “yes!” and that it makes him “happy.”

Peter also reported doing a number of leisure and recreation activities outside of school with his family. He predominately mentioned doing activities with his mom. Activities included going to the river, going on a picnic, and going swimming. When presented with the plant a garden visual prompt, Peter said “garden.” When asked if he does gardening he was able to respond, “yes” and quietly and quickly respond “mom” when asked who he worked in the garden with.

Bobby also discussed doing leisure and recreation activities outside of school with his family. When asked who he does space, science, nature, and art with, Bobby smiled and he stated “my parents.” When sharing his interest in reading, he stated “I’ve been teacheded to read by my Dad.” He also identified “mom and my brother” as other family members he read with. When discussing his interest in art, Bobby stated that he does art with his “parents and grandparents.” Bobby was especially descriptive about making tie-dye shirts stating:

uh, I make tie-dye shirts with my Dad. To make tie-dye t-shirts you need rubber bands, a white t-shirt and some fabric dye... its a special kind of paint that you can use on fabric (confident) and it’s funny when you make tie-dye pants!”

Cindy spoke of participating in leisure and recreation activities with not only her parents, but also her brother. She identified that she did soccer, catch, bike riding, frisbee, hide and seek, playground and dance with her brother. Her response when shown these visual prompts was consistent responding, “with my brother.” She spoke in a sing song rhythm when discussing playing hide and seek with her brother stating, “yeah with my brother and he tried to catch me.” Cindy stated that she participated in other activities with her entire family. When shown the visual

prompt for beach she smiled and stated, “Mostly I like to go to the beach and build sandcastles with my family.” When shown visual prompts such as camping and hiking, Cindy clearly and quickly responded, “My family” or “I do that with my family.” Cindy also responded to the visual prompt for fishing stating “at a lake and I do it with my family.” In response to the visual prompt for playing cards, Cindy clearly and quickly stated “oh yeah I do that with my family at my house.” Art was also identified by Cindy as an activity she did with her family.

Quantitative data from the *KIDSCREEN-52* showed that 8 out of 11 (72%) IEP member participants reported that students with disabilities who received recreation as a related service had a high quality of life in regards to parent relations and home life (figure 11). This data supports the finding that students with disabilities who receive recreation as a related service are more apt to participate in leisure and recreation activities outside of school with their family.

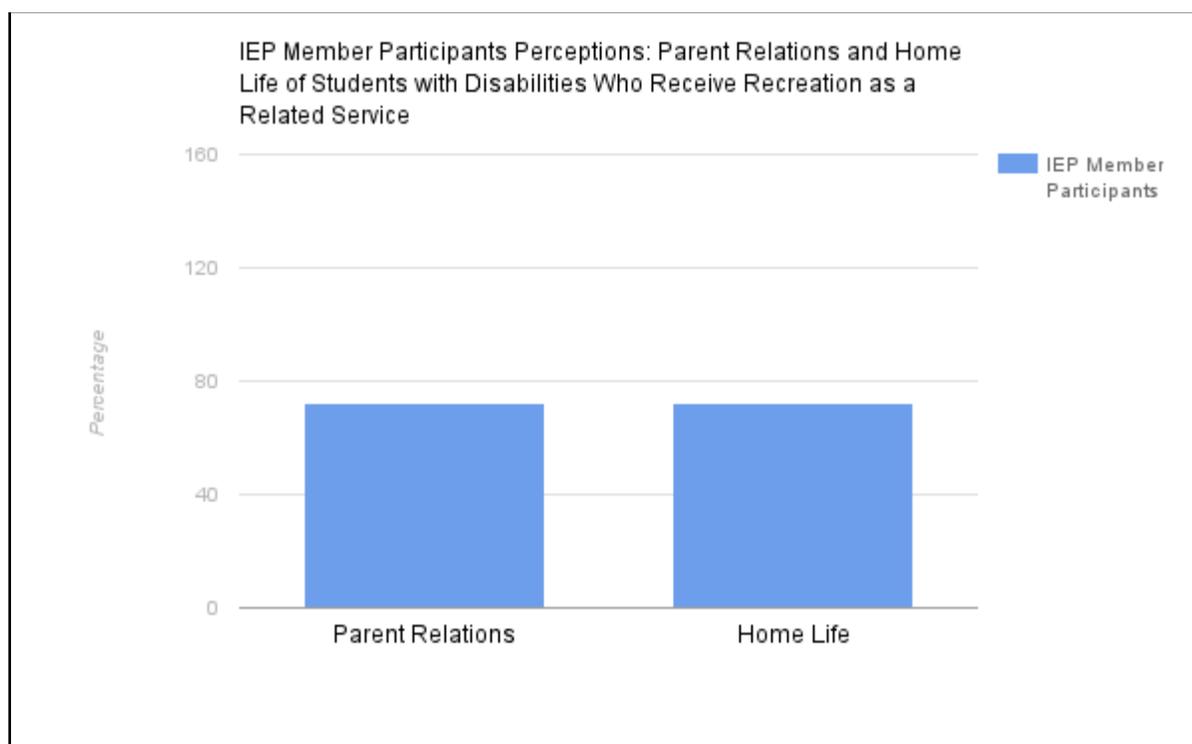


Figure 11: Percentage of IEP Member Participants who felt students displayed quality of life in the area of parent relations and home life

Cindy was one of the five student participants who identified participating in the majority of leisure and recreation activities outside of school with her family. Cindy also was the sole student participant who mentioned participating in leisure and recreation activities with peers outside of school. When presented with the visual prompt 'hanging with friends' with a follow up question, Cindy responded "my friends Margaret and Cindy, they come to visit, we do dancing and catching." Cindy also spoke about her friendships when presented with the horseback riding visual prompt. She stated that she goes horseback riding with "Vivian." When prompted to tell more about this topic, Cindy stated "yeah, Vivian is my best friend." Cindy also referred to her friends when asked if she felt she could do things on her own. At this point in the interview, she sat straight up, smiled and stated, "I have friends, friends and family."

Quantitative data presented within the *KIDSCREEN-52* questionnaire found that only 3 out of 11 (27%) of the IEP member participants felt that students with disabilities had a high quality of life within the dimension of social support and peers (figure 12). Social support and peers was the lowest category measured within the *KIDSCREEN-52*. Social support and peers was defined as an individual's relationship with others. A high score within this dimension marks an individual's feelings of inclusion within a peer group.

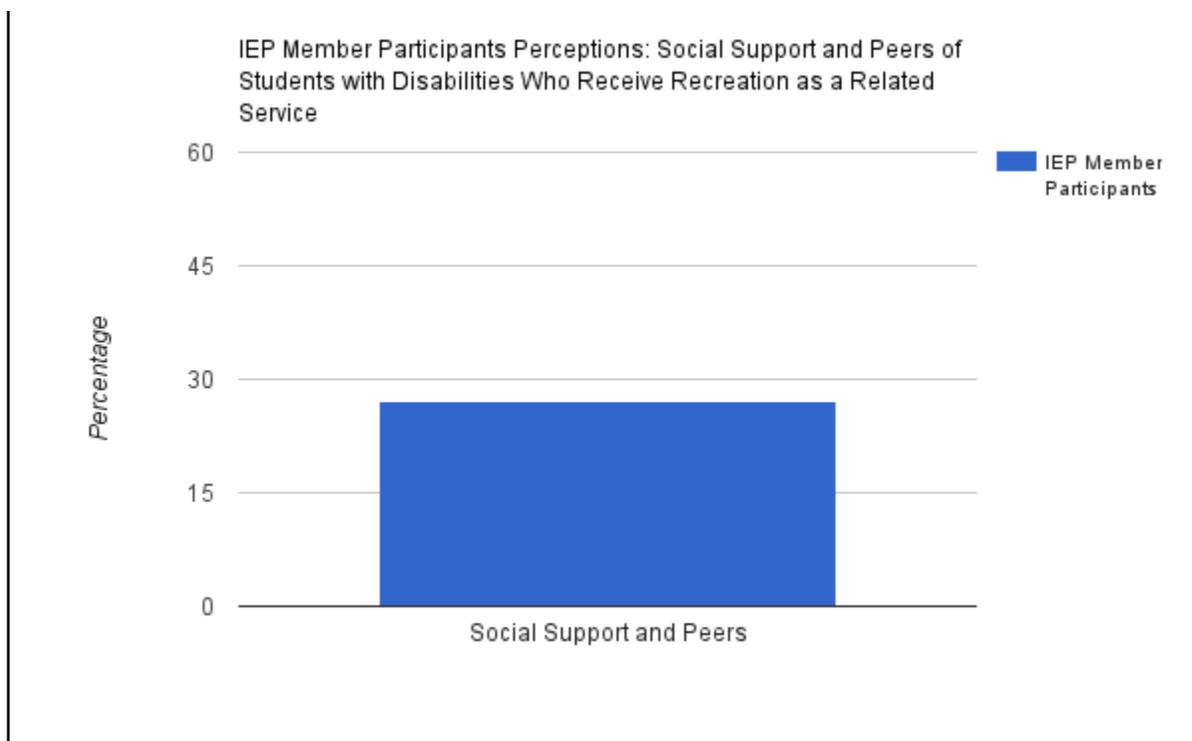


Figure 12: Percentage of IEP Member Participants who felt students displayed quality of life in the area of social support and peers.

On the other hand, as shown in Figure 13, the IEP Member Questionnaire identified that 60% of IEP members felt that recreation therapy influenced students' interpersonal relations.

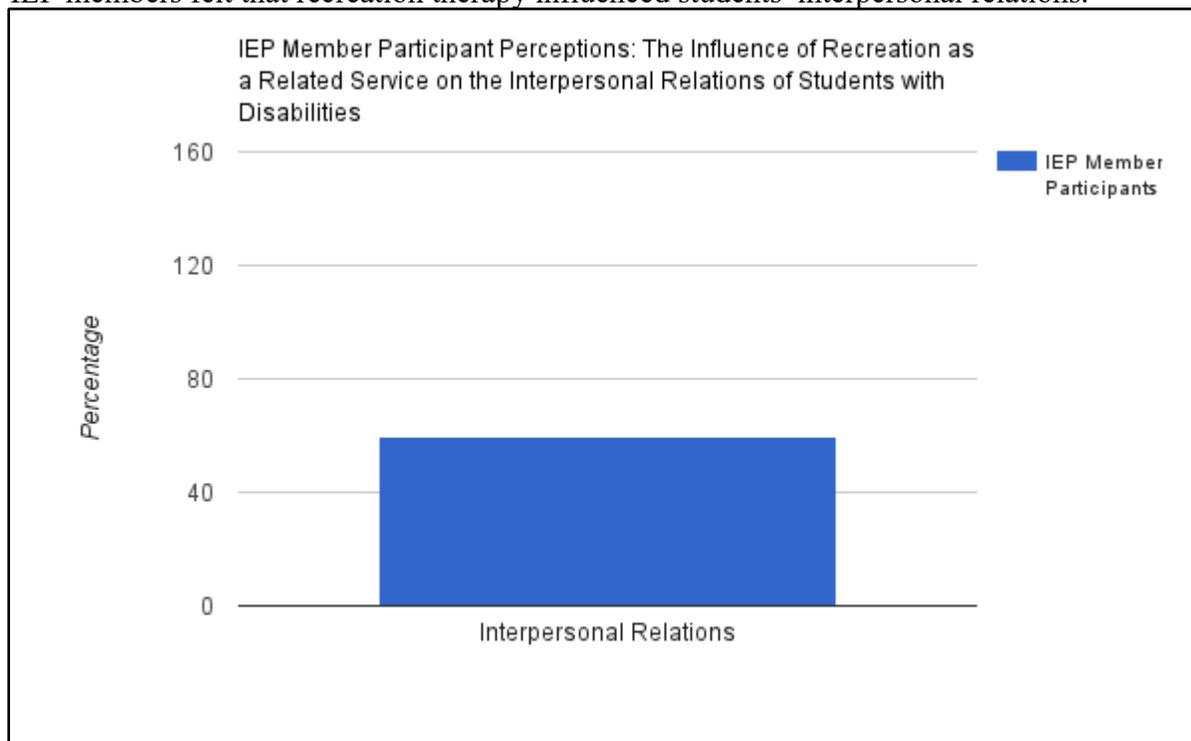


Figure 13: Percentage of IEP Member Participants who felt Recreation as a Related Service influenced the interpersonal relations of students with disabilities.

### Summary

The purpose of this embedded case study was to explore how recreation as a related service within a public school setting contributes to the quality of life of students with disabilities. The case study also sought to explore how recreation as a related service is implemented, and student outcomes that may emerge as a result of this related service. Five key findings were presented within this chapter. Findings were organized in terms of their significance in reference to the qualitative data. Direct quotes gathered from student interviews and progress reports were used to provide support for each finding. Data collected from IEP member questionnaires were used to support what was suggested within the qualitative data.

The first finding of this study suggested that students with disabilities who participate in recreation as a related service in the public school setting have a high quality of life in the areas

of physical and emotional well-being. During interviews, student participants expressed their feelings of happiness and their ability to participate in leisure and recreation activities. When presented with visual prompts, many student participants stated their enjoyment for participating in activities such as cooking, swimming, going to the beach, playing ball, and playing on the playground. IEP Member participant questionnaires corroborated with these statements. The *KIDSCREEN-52* Questionnaire data suggested that IEP member participants felt that students had a good quality of life in regards to psychological well-being, moods and emotions and physical well-being. Over half of the IEP member participants felt that recreation therapy influenced the emotional and physical well-being of students with disabilities.

The second finding of this study was that students with disabilities who receive recreation as a related service in the public school setting can be independent in leisure and recreation activities. Student participants interviewed stated they felt they could do things independently and their progress reports highlighted independent skills they were able to demonstrate during leisure and recreation activities. IEP member questionnaires indicated that recreation as a related service supported the students' ability to be independent and make choices within leisure and recreation activities within the school environment.

The third finding that emerged from the study was that recreation as a related service uses a variety of service delivery models that students and IEP members find helpful for leisure and recreation participation. Over half of the student participants stated that the recreation therapist helps them during leisure and recreation activities. They also spoke of the help occurring in a variety of settings. Within the questionnaires, IEP member participants shared that they felt recreation therapy was influential to students in the area of leisure participation during structured and

unstructured activities at school. They also believed that recreation therapy was helpful for removing barriers to leisure participation at school.

The fourth finding that surfaced from the data was that students with disabilities who receive recreation as a related service participate in leisure and recreation activities with their peers during school. Half of the student participants and over half of their progress reports stated that student participants interacted with others, were socially included, and had equal access to activities during school. Over half of IEP Member participants felt that students with disabilities felt socially accepted by their peers. IEP Member participants shared that recreation as a related service influenced the social inclusion, interpersonal relations, and equal rights of students with disabilities. They also shared that recreation as a related service played a role in developing school and community modifications and accommodations to help ensure access for all in the areas of leisure and recreation.

The fifth finding was that students with disabilities who receive recreation as a related service participate in leisure and recreation activities primarily with family members rather than peers outside of the school setting.. All of the student participants shared leisure and recreation experiences they engaged in with their families outside of school. Only one of the student participants discussed participating in leisure and recreation activities with a friend.

Each of the findings that emerged from this case study will be further analyzed in the following chapter in order to answer the research questions presented. Cross-case comparisons will be made across the elementary, middle, and high school levels pertaining to recreation as a related service and its contribution to the quality of life of students with disabilities. Comparisons will also be made between the findings of this case study and the literature reviewed within chapter two.

## Chapter V

### Introduction

The purpose of this embedded case study was to explore the contribution of recreation as a related service on students with disabilities quality of life within a public school setting. Six student participants and fifteen IEP team member participants (including parents) participated in this study. IEP team member participants were previously defined in chapter 3 as parents and educators who served on an IEP team, of a student with disabilities, who received recreation as a related service. As previously stated in chapter 3, The IEP team member participants within this study (with the exception of parent members) may not have served on the IEP team of student participants. Data was collected through student interviews, document analysis of student progress reports, and two IEP team member questionnaires. Data was coded, analyzed, and organized into categories guided by Austin's (1998) Health Protection/Health Promotion Framework and Schalock et al.'s (2008) Quality of Life Framework. Through data analysis, five primary findings emerged:

- i. Students with disabilities who participated in recreation as a related service have positive emotional and physical well-being.
- ii. Students with disabilities who participated in recreation as a related service can be independent in leisure and recreation activities.
- iii. Recreation as a related service uses a variety of service delivery models that students and IEP members find helpful for leisure and recreation participation.
- iv. Students with disabilities who receive recreation as a related service participate in leisure and recreation activities with peers during school.

- v. Students with disabilities who receive recreation as a related service participate in leisure and recreation activities primarily with family members rather than peers outside of the school setting.

Five research questions guided the data collection for this study:

How does recreation as a related service as part of students' Individualized Education Programs within a public school setting contribute to the quality of life of students with disabilities?

- What are IEP team members' perceptions of recreation as a related service as part of a student's Individualized Education Program?
- What are student perceptions of recreation as a related service as part of their Individualized Education Program?
- What is the delivery format of recreation as a related service within a public school setting?
- What are student outcomes for those who receive recreation as a related service as part of their Individualized Education Program?

Schalock et al.'s (2008) three factors of quality of life were utilized to create synthesizing matrices to connect the research questions, findings, and literature reviewed. Responses to each research question were formulated based on these synthesizing matrices and are presented within this chapter. Research findings and how they connect to previous research, cross case comparisons, and recommendations for further research will also be discussed.

## **Discussion**

Four out of the five findings that emerged from this study suggested that recreation as a related service contributes to the quality of life of students with disabilities within a public school. Findings contributed to all three factors of Schalock et al.'s (2008) Quality of Life

Framework, targeting six out of seven quality of life domains. These domains included: personal development and self-determination (finding 2), social inclusion and rights (finding 4), and emotional and physical well-being (finding 1). Outcomes that emerged from the analysis of student participants' progress reports included the development of life skills (social, fine motor, gross motor), participation with peers (finding 4), and independence (finding 2). It was found that recreation as a related service utilized a variety of approaches to foster these outcomes (finding 3). Each of the three data collection tools highlighted that recreation as a related service was influential, helpful, and used a variety of service delivery models. This study suggests that recreation as a related service influences the independence, social participation and well-being of students with disabilities by enhancing their leisure participation.

### **Independence**

Approximately 73% of IEP members felt that recreation as a related service influenced the personal development of students with disabilities. Within Schalock et al.'s (2008) Quality of Life Framework, the personal development domain refers to the daily living skills, social skills, cognitive skills, academic skills and self-efficacy an individual possesses. Development in daily living skills such as "cutting with a knife, scooping with a spoon, beading, cutting with scissors and following simple one step directions" as well as "making an English muffin with peanut butter (cutting the muffin, putting it in the toaster, spreading the peanut butter, making fruit salad (washing and cutting different types of fruit)..." were noted within Marcia's progress report. Bobby's progress report demonstrated his development of social skills stating "Bobby has been working on a variety of social skills during his recreation therapy time...[I]ately he has been working on being able to take turns and play games appropriately with an adult...[B]obby has been doing much better with handling defeat in a one on one situation. He has been able to lose and win gracefully without getting upset or bragging when playing games with the recreation

therapist. Support for these narratives was revealed on the *KIDSCREEN-52* School Environment domain. Scores within this domain indicating that IEP member participants felt students were satisfied at school and perceived themselves as learners.

In previous research on recreation as a related service within a public school setting, Stone (1998) found that students who received recreation services showed an increase in social communication skills and a decrease in problem behavior. Student progress reports from the current study demonstrate how recreation as a related service promotes the social skills of students with disabilities, allowing them to participate in leisure and recreation activities with decreased problem behaviors. This case study differs from Stone's (1998) findings in regards to the influence recreation as a related service has on community living skills (life skills). While Stone's (1998) study found that student participants who received recreation services did not develop community living skills, this case study found the opposite. Progress reports noted that student participants developed life skills. Other research conducted by Garcia-Villamizar and Dattilo (2010) recommended finding leisure programs that increased an individual's' social skills. Finding 2 of this case study suggests that recreation as a related service influences the social skills of students with disabilities in a public school setting.

The self-determination domain within Schalock et al.'s (2008) Quality of Life Framework refers to an individual's ability to demonstrate autonomy and self-control. Approximately 80% of IEP member participants felt that recreation as a related service influenced the self-determination of students with disabilities. Greg's progress report indicated a sense of autonomy when making food choices during community outings. It was stated that Greg took a trip to a pizza shop, "where Greg was able to order his own food, pay for it and pick it up at the counter... Greg used

an iPad to construct his weekly shopping list for his lunches he makes at school.” This demonstration of autonomy was also noted within the *KIDSCREEN-52* responses. A little over half of the IEP member participants felt students demonstrated autonomy. The importance of autonomy was emphasized within Shikako-Thomas et al.’s (2012) research. Shikako-Thomas et al.’s (2012) emphasized how autonomy in selecting enjoyable activities had a positive impact on well-being of children with CP.

The ability to control oneself was also a characteristic of the self-determination domain within Schalock et al.’s (2008) Quality of Life Framework. Progress reports within this case study indicated student participant’s ability to demonstrate self-control. Greg’s progress report shared that when he visited a restaurant and a farm within the community “[h]e used appropriate behavior in both places and needed few verbal cues to do what he was told.”

Student interviews also demonstrated that student participants demonstrated independence choosing and participating in leisure activities. During Greg’s interview, he shared that he could independently do activities such as, “library, marching band, and zoo.” Marcia’s paraprofessional discussed Marcia’s ability to independently initiate leisure activities such as playing basketball or self-selecting a preferred activity like card matching and puzzles. Another paraprofessional voiced Jan’s ability to be independent with using the iPad to self-select songs to listen to during leisure time. Bobby verbalized his ability to be independent as well. When asked what he was able to do by himself, he stated that he could successfully do “angry birds in real life... annnnd, read... annnnd, paint, painting is my favorite thing...”

The finding that recreation as a related service influences the independence of students with disabilities in a public school setting challenges previous research conducted by Allsop et

al. (2013) and Garcia-Villamizar and Dattilo (2010). These researchers found that leisure programs did not influence the independence of their participants. Data collected within this study found that students with disabilities receiving recreation as a related service exhibited autonomy during leisure and recreation times, and felt successful participating within the activities they chose (finding 2). This connects to the work of Devine and Dawson (2010) who stated that participation in leisure activities can lead to an increase in self-esteem. It also connects with Badia et al.'s (2012) research who cautioned that QoL was more connected to individuals' preferences and constraints rather than the activity itself.

### **Social Participation**

Within Schalock et al.'s (2008) Quality of Life Framework, the social inclusion domain is described as an individual's participation within the community. In previous research done by Schleien et al. (2003), social inclusion traits included social acceptance and positive interactions among peers. These researchers stated that recreational therapists could foster the motivation that leads to social inclusion. Within this case study, 80% of IEP member participants felt that recreation as a related service influenced the social inclusion of students with disabilities.

Marcia's interview statements supported that students with disabilities who receive recreation as a related service experienced social inclusion. During this interview it was shared that Marcia loved to participate in chorus and gym with her peers. Her paraprofessional stated "I mean any opportunities where she could be social... she's very social and loves to say hi to everybody." Jan's interview also highlighted how she was included within her community stating that, "the peers in her class are awesome... and they are really... like if we are doing a game that involves throwing they are really good about getting, you know if they have a bunch of balls they will give her a couple and they are really very aware of her... they won't throw them at her. They

are fantastic!” Within Jan’s interview it was stated that the desire to be socially included was reciprocal. Jan’s paraprofessional shared that “if the kids are running laps [Jan] will run alongside them, she won’t do the whole lap, but she’ll try to keep up with them.”

Five out of the six student progress reports stated different scenarios of students participating in activities with peers. Examples included Marcia’s participation in “a girls group this year with a couple other female students in her class” and “participating in exercise groups such as yoga.” Jan’s progress report also highlighted social inclusion stating “Her peers in both PE and the gross motor group are very willing to help and include her in all activities.” Cindy’s progress report mentioned the support from peers to ensure her inclusion stating “Her peers are helping her when she needs it which has been really nice to see.”

Previous research conducted by Garcia-Villamizar and Dattilo (2010) had found that there was no significant increase in social integration for individuals that participated in a leisure program. The findings of this case study challenge Garcia-Villamizar and Dattilo (2010) in providing evidence that recreation as a related service had a positive impact on the social integration of students with disabilities in a public school setting. The findings suggest that students who receive recreation as a related service are socially accepted by their peers.

This case study found that 60% of IEP member participants felt that recreation as a related service influenced the interpersonal relationships of students with disabilities. According to Schalock et al.’s (2008) Quality of Life Framework, an individual that demonstrates interpersonal relationships is one that forms friendships and interacts with others. Research conducted by Allsop et al. (2013) revealed that campers who received therapeutic recreation experiences had an increase in their social performance with peers.

Two measures on the *KIDSCREEN-52* investigated the social aspects of individuals pertaining to quality of life. The Social Acceptance domain on the *KIDSCREEN-52* questionnaire gathered information on how respected and accepted individuals feel in regards to their peers. The IEP member participants within this case study gave a high score to students with disabilities who received recreation as a related service. This high score signified that IEP member participants felt that students with disabilities who received recreation as a related service felt respected and accepted by their peers.

The Social Support and Peers measure on the *KIDSCREEN 52* is similar to social acceptance in terms of individuals feeling respected and accepted by their peers, but emphasizes the relationships and friendships among them. IEP member participants felt that student participants did not demonstrate quality of life in this area, meaning students with disabilities receiving recreation as a related service had a lack of friendships despite being included and interacting with their peers. This differs from Badia et al. (2012) who found that children with disabilities who had high participation rates exhibited a high quality of life score within the social support/peers domain.

One explanation for this may be the disability type of students participants used for this case study. Three out of six student participants were identified as having Autism. Shattuck et al. (2011) found that adolescents with ASD were more likely never to see friends out of school, never get called by friends, and never to be invited to social activities. They discussed how common characteristics of Autism, such as difficulty maintaining conversations; deficits in social communication, and low functional cognitive skills, can contribute to students with Autism's lack of friendships.

Finding 4 indicates that recreation as a related service influences the social participation of students with disabilities in terms of their social acceptance and interpersonal relations, but does not influence the development of meaningful peer relationships and friendships. Only one student interviewed mentioned participating in a leisure activity with a friend. More research is needed to identify friendships among students with disabilities who receive recreation as a related service, the contributing factors in developing these friendships, and the impact different disabilities may have on developing friendships. Additional research is also needed to explore how recreation as a related service can play a role in developing peer relationships and friendships for students with disabilities.

According to Schalock et al.'s (2008) Quality of Life Framework, an individual's right is ensuring he/she has equal access. 80% of IEP member participants felt recreation as a related service influenced the rights of students with disabilities. Finding 3 of this study suggested that by teaching skills, and providing resources, modifications, and students with disabilities were ensured equal access to leisure and recreation activities.

According to Austin's (1998) Health Protection/Health Promotion Framework, the role of the recreation therapist includes enhancing leisure abilities. Within this case study, direct instruction, visual, verbal, and physical prompting, pre-teaching and practice were all identified as supports put in place to help student participants develop skills needed for leisure and recreation participation. 73.3% IEP member participants stated that recreation as a related service provided therapeutic recreation services to develop the skills students needed to participate in leisure activities. These supports were provided across a variety of settings including kitchens, community restaurants and pools, resource rooms, cafeterias, gyms, and school playgrounds. One example of support was found within Greg's progress report stating, "We spent two weeks on hygiene going

over in detail on how to brush your teeth correctly, why it's important to brush and how to floss. We also talked about washing your face, how to use deodorant, when to use a nail brush and a nail file." Marcia's progress report offered evidence of both physical and verbal prompting stating, "Marcia requires hand over hand assistance to manipulate the objects. Once she knows what is expected of her during the activity she is typically able to do it with some verbal prompting." Bobby's progress report referred to visual prompting used to support him in his leisure participation. His report stated that "visual cues paired with his behavior plan have also been very effective for keeping him on task...it has been helpful for Bobby to see written out the things we will be doing in gym class and checking them off as they are completed."

In this study, 60% of IEP member participants stated that recreation as a related service provided school and community resources and modifications/accommodations to ensure access for all. Greg and Peter's progress reports demonstrated the provision of modifications and accommodations during community outings to restaurants. Progress reports stated that,

[w]e did several different exercises where the students had a certain amount of money and wanted to buy an item and they would have to give the correct dollar amount. Greg (Peter) did well with this but needed help to walk through each scenario...[w]hen talking him through his total and how much money he had with him he was able to give the correct amount of money to the waitress.

Bobby's progress report also demonstrated the provision of modifications and accommodations to ensure access within gym. His progress report stated that,

[s]eeing Bobby in a one-on-one setting outside of gym has been very helpful in allowing Bobby to pick up the skills and perform well during PE... it has been extremely helpful

to use a colored spot to designate the area where Bobby's body needs to be for the activity.

Previous research conducted by Mc Manus et al. (2008) suggested that further research was needed to identify accommodations to help individuals access and participate in leisure activities and improve their quality of life. Findings from this case study respond to this by suggesting that recreation as a related service provides the accommodations needed to ensure equal access to leisure and recreation activities for students with disabilities, and influences their quality of life. Findings also connect to previous research done by Badia et al. (2012) who found that when leisure constraints were removed from an activity, one's QoL was higher.

Within their previous research, Kleinert et al. (2007) stated there was a lack of individuals, programs, and services being utilized in order to foster the involvement of students with moderate and severe needs in leisure and recreation activities. Findings within this case study suggest that recreation as a related service offered within a public school setting is one service that can be provided to foster the involvement of students with moderate and severe disabilities.

### **Well-Being**

Schalock et al.'s (2008) Quality of Life Framework, defined individuals with emotional well-being as those who demonstrate feelings of safety, happiness and calmness. According to Austin's (1998) Health Protection/Health Promotion Framework, the role of the recreation therapist includes enhancing leisure abilities by decreasing stress and improving emotional well-being. Approximately 73% of IEP member participants felt that recreation as a related service influenced the emotional well-being of students with disabilities (finding 1). All student participants reported that they felt "happy" when asked to describe their feelings during leisure and recreation activities. Progress reports also provided information that suggested students were happy

during leisure and recreation activities. Marcia's progress report stated that she "participates in all activities [during gym] and is always smiling... she has a great attitude [during community skills] and often responds with a high pitched sound when excited..." Cindy's progress report also stated how she demonstrated emotional well-being during gym class stating that, "Cindy always has a smile on her face and really enjoys the different warm up activities at the beginning of class."

Garcia-Villamizar and Dattilo's (2010) findings suggested that participation within a leisure program led to a decrease in stress levels and an increase in QoL. Researchers also found that individuals with ASD who participated within the program experienced less distress and more satisfaction during leisure activities. Finding 1 connects with the work of Garcia-Villamizar and Dattilo's (2010) finding, stating that students who participated in recreation as a related service demonstrated quality of life in the emotional well-being domain.

Previous research conducted by Brajsa-Zganec et al. (2011) found a positive relationship between participating in leisure activities and an individual's subjective well-being (individuals' emotional responses and satisfaction within life domains). Research conducted by Mc Manus et al. (2008) also found that leisure participation impacted individuals emotional well-being. Mc Manus et al. (2008) stated that children with high leisure participation rates exhibited a high quality of life score within the moods and emotions domain on the *KIDSCREEN-52*. Finding 1 of this case study supports Brajsa-Zganec et al. (2011) and Mc Manus et al.'s (2008) research finding, stating that students with disabilities receiving recreation as a related service felt happy and satisfied with life and exhibited positive feelings and moods.

Schalock et al.'s (2008) Quality of Life Framework defined individuals with physical well-being as those who have good health and the ability to participate in leisure and recreation

activities. According to Austin's (1998) Health Protection/Health Promotion Framework, the role of the recreation therapist includes enhancing the leisure abilities of individuals by improving their physical functioning/well-being. Approximately 86% of IEP members felt that recreation therapy influenced the physical well-being of students with disabilities (finding 1).

Within this study, students stated a variety of leisure and recreation activities they participated in both in and outside of school. These activities include biking, hiking, playing with a ball, playing hide and seek, going to the playground, roller skating, playing tag, going to the beach, camping, taking care of pets, going to the movies, going out to eat, going shopping, visiting the library, gardening, doing a picnic, cooking, horseback riding, playing soccer, playing Frisbee, playing cards, caring for a pet, fishing, dancing, drawing, painting and swimming. In order to access these activities, students needed to learn and demonstrate certain skills. According to student participant progress reports, recreation as a related service contributed to students' development of skills needed for participation in leisure and recreation activities. Jan's progress report discussed "increasing her endurance" through riding a scooter and how this would benefit her in whole group activities. Marcia's progress report also discussed the acquisition of skills needed to participate in leisure activities stating that "she does a good job with skill based activities such as kicking or dribbling during a soccer unit." Greg's progress report discussed his progress toward leisure and recreation skills stating that,

Greg is doing a very good job working on gross motor skills... [h]e has been working on many different skills such as rolling a ball, dribbling a basketball and soccer ball, shooting hoops, hitting a volleyball, and striking a ball with a bat and a racket... [h]e has been working in the weight room using the stationary bike, the ab lounge, the elliptical and several weight machines.

A high score in the physical well-being on the KIDSCREEN 52 signifies that an individual is physically fit, active, healthy and energetic. IEP member participants felt that students with disabilities who received recreation as a related service demonstrated physical well-being. Previous research conducted by Mc Manus et al.(2008) found that children with high participation rates exhibited a high quality of life score within physical well-being. Finding 1 of this case study supports the work of Mc Manus et al. (2008), suggesting that students who received recreation as a related service demonstrated physical well-being.

### **Family Support**

One additional finding unrelated from the research questions emerged from this study. Finding 5 from this case study suggested that family members played a critical role in the leisure participation of students with disabilities outside of the school setting. This finding emerged based on qualitative data from student participant interviews. During the interview process, student participants repeatedly referred to family members when discussing their leisure and recreation participation outside of school. Greg shared that he went shopping with his mother outside of school and that he “lik[ed] to shop!” He also stated that he rode bikes and went to the movies with his father. Peter discussed doing a number of leisure activities with his mother which included gardening, going to the river, going on a picnic, and going swimming. Bobby shared that he enjoyed reading with his parents and doing art with his grandparents. Cindy’s responses to interview questions continuously highlighted the presence of family during leisure and recreation times. When presented with the visual prompts; beach, camping, hiking, fishing, and playing cards, Cindy consistently stated “I do that with my family.”

Comments within students’ interviews connected with the *KIDSCREEN-52* data. IEP member participants designated a high score for students’ parent relations and home life. A high

score on the parent relations and home life measure of the *KIDSCREEN-52* signifies that individuals feel secure and supported, well understood, and that their parents are available to them.

Previous research conducted by Kleinert et al. (2007) identified that the availability of personal assistance during attended activities from parents or teachers contributed positively to the involvement of students with moderate and severe needs in leisure and recreation activities. Finding 5 of this case study supports Kleinert et al.'s (2007) belief that parents contribute positively to the leisure involvement of students with disabilities.

The impact of family members and the involvement in leisure and recreation activities was also mentioned in the work of Potvin et al. (2013) and Schleien et al. (2003). Potvin et al. (2013) found that children with HFA often frequented activities with family members. Schleien et al. (2003), found that recreation therapists had a key role in providing leisure education. Within this study 60% of IEP members stated that recreation as a related service provided leisure education to help students recognize the importance of recreation, and develop an awareness of resources and a positive attitude. Schleien et al. (2003) recommended that the parents and schools work together to ensure that goals regarding recreation were placed on Individualized Education Programs to ensure skills needed for leisure and recreation participation were taught and monitored.

This study identified that goals regarding leisure and recreation participation were in fact incorporated within student IEPs and the skills within these goals were directly taught and monitored within recreation as a related service. In accordance with IDEA (2004), parents are directly involved within the IEP writing process, and are aware of their child's goals. In this case study, the leisure and recreation participation of students with disabilities outside of school may have been influenced by their family's awareness these goals. Previous research conducted by Devine

and Dawson (2010) recommended that parent and caregivers promote leisure participation for youth with disabilities. This study suggests that family awareness of the strengths and needs of students with disabilities in leisure and recreation may encourage families to seek appropriate activities for their children to participate in.

### **Cross-Case Comparison**

Data triangulation showed consistency among elementary and high school student participant perceptions of recreation as a related service and its outcomes. Student participants voiced that the recreation as a related service helped them during leisure and recreation activities. They stated that they felt independent and happy participating in leisure and recreation activities. Progress reports discussed student participants' development of skills and independence, as well as referenced an increase of social participation with peers during leisure and recreation activities at school. Interviews and document analysis revealed domains of quality of life that recreation as a related service contributed to including: personal development, self-determination, interpersonal awareness (in the form of interactions with others), social inclusion, rights, emotional well-being and physical well-being.

Cross-case comparisons allowed the researcher to further compare recreation as a related service within the elementary, middle, and high school context. In comparing these three contexts it was found that IEP member participants across all contexts perceived that recreation as a related service influenced the quality of life of students with disabilities. Recreation as a related service was most influential in the domains of personal development, self-determination, social inclusion, rights, emotional well-being and physical well-being.

Inconsistencies emerged when comparing the extent of these perceptions among IEP members at each of the three levels of schools: elementary, middle and high school. The first in-

consistency was found in the interpersonal domain for Social Participation. IEP member participants at the elementary level perceived that recreation, as a related service was less influential on the interpersonal relationships of students with disabilities compared to middle and high school. Only 50% of elementary IEP member participants felt that recreation as a related service was very influential on interpersonal relationships of students with disabilities receiving the related service. Middle school IEP member participants felt that recreation as a related service had the most influence on the interpersonal relationships of students with disabilities that received recreation as a related service with 100% stating it was very influential, followed by 75% of IEP member participants at the high school level. Cross-case comparison using data from the Social Support and Peers area on the *KIDSCREEN-52* showed that only 25% of elementary IEP member participants felt students demonstrated quality of life in the social support and peers category compared to 50% at the high school level. This suggests that though recreation as a related service has little influence on the development of friendships for students with disabilities, it is more influential at the middle and high school levels. It should be noted that IEP team member participants at the middle school level did not complete the *KIDSCREEN-52* questionnaire after numerous reminders to do so via email. Therefore there is no middle school data from the *KIDSCREEN-52* to add to this cross case comparison.

As discussed earlier within this chapter, the nature of a student's disability and the level of family involvement could impact the social relationships of students with disabilities. Further analysis may be needed to explore the types of disabilities and amount of family involvement and how this may contribute to the development of friendships at each level of schooling. Further analysis is also suggested to determine the nature of the friendships of student participants and the components of recreation as a related service that may have contributed to these friendships.

Additional analysis could also be used to determine if established friendships are solely an outcome of recreation as a related service or if other programs contributed (i.e. inclusive practices, peer tutoring, best buddies, peer support program). Qualitative data collection tools such as observations and IEP Member and Parent interviews would be helpful to gather more in depth detail regarding friendships of students with disabilities and the role recreation as a related service has in the development of interpersonal relations.

A discrepancy was also found within the emotional well-being domain. Middle school IEP member participants perceived recreation as a related service as having little influence on the emotional well-being of students with disabilities. Only 50% of middle school IEP members felt that recreation as a related service was very influential to the emotional well-being of students, compared to 75% of IEP member participants at the high school level and 80% of IEP member participants at the elementary school level. IEP members within the elementary and high school level scored students receiving recreation as a related service high in the areas of psychological well-being and positive self-perception.

The moods and emotions area on the KIDSCREEN 52 was one measure used to determine the emotional well-being of students with disabilities in this case study. Cross case comparison of this measure found that elementary students receiving recreation as a related service received the lowest score on moods and emotions. Only 37% of IEP member participants scored students high in this area compared to 66% of high school IEP member participants. This suggested that IEP member participants felt that students with disabilities receiving recreation as related service at the high school level presented in a good mood with little stress more so than elementary students.

Possible explanations for this discrepancy could be the age of students, the nature of their disability, and services students receive (i.e. counseling services, social thinking curriculum, etc.). Further analysis is suggested to compare the different types of services students with disabilities receive in conjunction with recreation as a related service, as well as their age and disability type and the impact these may have on student moods and emotions.

Cross-case comparisons were also conducted to explore the different components of recreation as a related service utilized within the different levels of schools. When comparing responses of the different levels using qualitative data, it was found that at each level, both students and IEP member participants felt that recreation as a related service helped enable students with disabilities to access leisure and recreation activities by fostering skills and providing various accommodations and modifications. Using responses from the IEP Member questionnaire, it was found that at least half of all IEP members felt that recreation, as a related service was influential in removing barriers for students with disabilities. High school IEP members felt it was the most influential with 100% responding very influential. Data also showed that 80% of elementary IEP member participants responded that recreation, as a related service was very influential for removing barriers. In contrast, only 50% of middle school IEP member participants felt that recreation, as a related service was very influential for removing barriers.

The discrepancy on how influential recreation as a related service was for removing barriers could be a result of the different components of recreation as a related service utilized at each level. Among the four components of recreation as a related service, the provision of leisure education and leisure assessment were consistent across each level of schooling. The discrepancy was found in the remaining components of therapeutic recreation and the provision of school/community resources, accommodations and modifications. Elementary IEP members felt

that recreation as related service concentrated the most on providing school/community resources, modifications and accommodations to ensure access for all (80%). Student interviews and progress reports highlighted the use of resources, modifications and accommodations in the form of visual supports, pre-teaching, rehearsing and providing alternative materials and rules.

Cross case comparisons conducted also revealed that elementary students receiving recreation as a related service had the highest leisure participation rates both during and after school for structured and unstructured activities. This connects to research conducted by Shikako-Thomas et al. (2012) who found a relationship between leisure participation and quality of life, but that as children's ages increased, their leisure participation decreased and potentially impact their quality of life.

Only 50% of middle and high school IEP members reported that recreation as a related service provided school/community resources, accommodations, and modifications. IEP Member participants at these levels instead felt that recreation as a related service focused more on providing therapeutic recreation services. Though progress reports and student interviews noted the development of social, gross, and fine motor skills as outcomes of recreation as a related service, cross case comparison suggests the development of these skills in isolation is not enough to influence the leisure participation of students.

Based on this data it is possible that in addition to therapeutic recreation services and community resources, additional accommodations and modifications may also be needed to increase leisure participation and the quality of life of students with disabilities. Prior research conducted by Shikako-Thomas et al. (2012) suggested that research was needed to identify ways to adapt and provide leisure activities that match a child's skill and preference, and to find how these accommodations could influence one's quality of life. Cross case comparison suggests that

recreation as a related service's provision of school/community resources, accommodations and modifications influences the leisure participation of students with disabilities.

Cross case comparisons found that students with disabilities at all levels participated the least in leisure and recreation activities outside of school. Informal discussions with the recreation therapist revealed that providing resources, accommodations, and modifications within the community was a missing component within her program. Further research is warranted to explore the provision of community resources, accommodations and modifications and its influence on students with disabilities' leisure participation outside of school.

It should be noted that regardless of what components of recreation as a related service were used, students with disabilities receiving recreation as a related service within each level of schooling demonstrated factors of quality of life according to Schalock et al.'s (2008) Quality of Life Framework.

### **Limitations**

The data collection tools, methodology and research participants used within this case study created limitations that must be acknowledged. Participation within this case study was voluntary. Getting volunteers from the school who served on the IEP team of student participants was difficult. As a result the researcher had to accept volunteers from the school who may not have served on student participant IEP Teams, but who did serve on IEP teams of other students receiving recreation as a related service.

Limitations were also identified in student participant interviews. A majority of the student participants within this case study had limited verbal and cognitive ability and therefore accommodations and modifications needed to be made prior to and during student interviews. Accommodations and modifications included the creation of visuals to represent leisure activities,

giving a verbal or visual choice of two, simplifying the language of interview questions, and accepting vocalizations, facial expressions and responses from the paraprofessionals who worked one on one with students as student participant responses. This limitation could have impacted the data collected from student participants. It is suggested that future research on gathering the perspectives of students with disabilities on recreation as a related service include observations to compensate for students limited verbal and cognitive ability.

This study focused on recreation as a related service, but did not include the recreation therapist as an IEP team member participant in an attempt to control for bias. Excluding the recreation therapist as an IEP team member participant risked losing critical information on the service delivery models of recreation as a related service within the public school, as well as the vision and mission of the recreation therapist pertaining to the quality of life of students with disabilities. Further research is recommended to include the recreation therapist as an IEP member participant to gather perspectives and goals of recreation as a related service.

This case study was conducted using a mixed methods approach. IEP team member participants completed two questionnaires and student participants were interviewed. It is suggested that this study be repeated using qualitative measures such as interviews and focus groups to gather the perspectives of IEP member participants, as well as student observations to better understand student perspectives and the service delivery of recreation as a related service in a public school setting.

It is important to note that limitations may have impacted the conclusions presented within this cross-case comparison. The research sample for this case study was small and the number of IEP member participants within each context differed. Middle school IEP members did not complete the *KIDSCREEN-52* questionnaire and therefore could not be included in the

cross case comparisons conducted. Additional research is warranted to explore the perception of recreation as a related service across elementary, middle, and high school contexts using a larger, more comparable research sample.

### **Conclusion**

The purpose of this case study was to explore how recreation as a related service contributes to the quality of life of students with disabilities in a public school setting. The research proposition for this study proposed that recreation, as a related service would enhance the leisure participation of students with disabilities and influence the quality of life of students with disabilities.

Based on the analysis and synthesis conducted, it is suggested that recreation as a related service within a public school setting contributes to the quality of life of students with disabilities. Recreation as a related service removes barriers, provides support and teaches necessary skills for leisure participation. In doing so, students with disabilities have increased emotional and physical well-being (Finding 1), increased independence (Finding 2), and participate more in school with their peers (Finding 4).

These findings are significant in that they identify the benefits and outcomes of recreation as a related service within the public school setting. Previous research conducted by Waller and Wozencroft (2010) and Hawkins et al. (2012) discussed the need to identify the outcomes of therapeutic recreation programs and recreation as a related service. Previous research by Hawkins et al. (2012) stated that identifying the benefits and outcomes of recreation as a related service within the public school setting would lead to the increased awareness and utilization of recreation as a related service. Findings 1, 2, and 4 of this case study describe the outcomes that emerged from students with disabilities receiving recreation as a related service including independence, social participation, and well-being.

The findings from this case study should be used to raise awareness of recreation as a related service and identify its purpose within the Individualized Education Programs of students with disabilities. The benefits and outcomes of recreation as a related service that emerged from this study should be shared with federal, state and school district administrators, special education teachers, related service providers, as well as parents and advocates of students with disabilities. These are the individuals who have the power to make decisions involving the programming for students with disabilities and the responsibility to make these decisions with the student's quality of life at the forefront. Findings should also be shared with general education teachers, including physical education teachers and teachers of the related arts to help guide their instruction and identify supports and resources needed to foster the leisure participation of students with disabilities. Students with disabilities should be encouraged to share their stories and experiences regarding recreation as a related service in order to raise awareness of its influence on the quality of life of students with disabilities, and provide guidance on its implementation within a public school setting. Though further research is needed in regards to recreation as a related service in some areas, the connections made between recreation as a related service, leisure participation, and the quality of life of students with disabilities, cannot be discounted.

## References

- About therapeutic recreation (n.d.) Retrieved from <https://www.trontario.org/about-therapeutic-recreation>
- Allsop, J., Negley, S., & Sibthorp, J. (2013). Assessing the social effect of therapeutic recreation summer camp for adolescents with chronic illness. *Therapeutic Recreation Journal*, 47(1), 35.
- Ashton-Shaeffer, C., Johnson, D. E., & Bullock, C. C. (2000). A survey of the current practice of recreation as a related service. *Therapeutic Recreation Journal*, 34(4), 323.
- Austin, D. R. (1998). The health protection/health promotion model. *Therapeutic Recreation Journal*, 32(2), 109.
- Badia, M., Orgaz, M. B., Verdugo, M. Á., Ullán, A. M., & Martínez, M. (2013). Relationships between Leisure Participation and Quality of Life of People with Developmental Disabilities. *Journal Of Applied Research In Intellectual Disabilities*, 26(6), 533-545.  
doi:10.1111/jar.12052
- Bedini, L. (1995). The 'Play Ladies'—The First Therapeutic Recreation Specialists. *Journal of Physical Education, Recreation & Dance*, 66(8), 32-35.
- Bloomberg, L.D., & Volpe, M. (2012). *Completing your qualitative dissertation: A road map from beginning to end* (2nd ed.). Los Angeles, CA: SAGE Publications, Inc.
- Brajsa-Zganec, A., Merkas, M., & Sverko, I. (2011). Quality of life and leisure activities: How do leisure activities contribute to subjective well-being? *Social Indicators Research*, 102(1), 81-91. doi:<http://dx.doi.org/10.1007/s11205-010-9724-2>

- Carbone, P. S., & Murphy, N. A. (2008). Promoting the participation of children with disabilities in sports, recreation, and physical activities. *Pediatrics*, 121, 1057.
- Carruthers, C., & Hood, C. (2007). Building a life of meaning through therapeutic recreation: The Leisure and Well-Being Model, part I. *Therapeutic Recreation Journal*, 41(4), 276–297.
- Carter, E. W., Swedeen, B., Moss, C. K., & Pesko, M. J. (2010). "What are you doing after school?" Promoting extracurricular involvement for transition-age youth with disabilities. *Intervention In School And Clinic*, 45(5), 275-283
- Commission on accreditation of allied health education programs (n.d.) Retrieved from <https://www.caahep.org/Content.aspx?ID=61>
- Creswell, J. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.
- D'Eloia, M. H. & Sibthorp, J. (2014). Relatedness for youth with disabilities: Testing a recreation program model. *Journal of Leisure Research*, 46 (4), 462
- Devine, M. A., & Wilhite, B. (1999). Theory application in therapeutic recreation practice and research. *Therapeutic Recreation Journal*, 33(1), 29.
- Devine, M. A., & Dawson, S. (2010). The effect of a residential camp experience on self esteem and social acceptance of youth with craniofacial differences. *Therapeutic Recreation Journal*, 44(2), 105.
- Devlin, R. & Pothier, D. *Critical disability theory: Essays in philosophy, politics, policy and law* (2005). UBC Press.
- Etzel-Wise, D., & Mears, B. (2004). Adapted physical education and therapeutic recreation in schools. *Intervention in School and Clinic*, 39(4), 223-231.

- García-Villamizar, D. A., & Dattilo, J. (2010). Effects of a leisure programme on quality of life and stress of individuals with ASD. *Journal Of Intellectual Disability Research*, 54(7), 611-619. doi:10.1111/j.1365-2788.2010.01289.x
- Hawkins, B. L., Cory, L. A., McGuire, F. A., & Allen, L. R. (2012). Therapeutic recreation in education: Considerations for therapeutic recreation practitioners, school systems, and policy makers. *Journal of Disability Policy Studies*, 23(3), 131-139.
- Henry, A. (2000). *Pediatric interest profiles: Surveys of play for children and adolescents, kid play profile, preteen play profile, adolescent leisure interest profile*. San Antonio, Tex.: Therapy Skill Builders.
- Heyne, L. A., & Anderson, L. S. (2012). Theories that support strengths-based practice in therapeutic recreation. *Therapeutic Recreation Journal*, 46(2), 106.
- Individuals with disability education act [IDEA]. (1997). Retrieved from <http://www.apa.org/about/gr/issues/disability/idea.aspx>
- James, A. (n.d.). The Conceptual Development of Recreational Therapy. Retrieved January 6, 2015, from <http://www.idyllarbor.com/journal/rthistory.shtml>
- KIDSCREEN instruments Health-Related Quality of Life Questionnaire for Children and Young People. (2004). Retrieved August 24, 2015.
- The KIDSCREEN Group Europe. (2006). *The KIDSCREEN Questionnaires – Quality of life questionnaires for children and adolescents. Handbook*. Lengerich: Pabst Science Publishers
- Kleinert, H. L., Miracle, S. A., & Sheppard-Jones, K. (2007). Including students with moderate and severe disabilities in extracurricular and community recreation activities: Steps to success. *TEACHING Exceptional Children*, 39(6), 33-38.

- Kolehmainen, N., Bult - Mulder, M., Bult, M., Law, M., Shikako-Thomas, K., & Ketelaar, M. (2014). Promoting leisure participation as part of health and well-being in children and youth with cerebral palsy. *Journal of Child Neurology*, 29(8), 1125-1133.
- Mc Manus, V., Corcoran, P., & Perry, I. J. (2008). Participation in everyday activities and quality of life in pre-teenage children living with cerebral palsy in south west ireland. *BMC Pediatrics*, 8(1), 50-50. doi:10.1186/1471-2431-8-50
- (n.d.). Retrieved March 4, 2015, from <http://www.merriam-webster.com/dictionary/friend>
- (n.d.) Retrieved January 11, 2015 from <http://www.ncrta.org/consumer/related.htm>
- Miles, M. B., & Huberman, A. M., (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks: Sage Publications.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks: Sage Publications.
- NCTRC - National Council for Therapeutic Recreation Certification. (n.d.). Retrieved July 10, 2015.
- Palisano, R. J., Almars, N., Chiarello, L. A., Orlin, M. N., Bagley, A., & Maggs, J. (2010). Family needs of parents of children and youth with cerebral palsy. *Child: Care, Health and Development*, 36(1), 85-92.
- Palisano, R. J., Chiarello, L. A., Orlin, M., Oeffinger, D., Polansky, M., Maggs, J., . . . Children's Activity and Participation Group. (2011). Determinants of intensity of participation in leisure and recreational activities by children with cerebral palsy. *Developmental Medicine & Child Neurology*, 53(2), 142-149.
- Palmer, S., Heyne, L., Montie, J., Abery, B., & Gaylord, V. (Eds.). (2011). Impact: Feature Issue on Supporting the Social Well-Being of Children and Youth with Disabilities, 24(1), 16-17.

- Peterson, P. E. (2010). *Saving schools*. Cambridge (Mass.); London: Belknap Press of Harvard University Press.
- Potvin, M., Snider, L., Prelock, P., Kehayia, E., & Wood-Dauphinee, S. (2013). Recreational participation of children with high functioning autism. *Journal of Autism and Developmental Disorders*, 43(2)
- Professional Resources. (n.d.). Retrieved November 13, 2015, from [http://college.cengage.com/education/resources/res\\_prof/students/spec\\_ed/legislation/pl\\_94-142.html](http://college.cengage.com/education/resources/res_prof/students/spec_ed/legislation/pl_94-142.html)
- Ravens-Sieberer, U., Gosch, A., Rajmil, L., Erhart, M., Bruil, J., Duer, W., Auquier, P., Power, M., Abel, T., Czemy, L., Mazur, J., Czimbalmos, A., Tountas, Y., Hagquist, C., Kilroe, J. and the European KIDSCREEN Group. (2005). KID- SCREEN-52 quality-of-life measure for children and adolescents. *Expert Review of Pharmacoeconomics & Outcomes Research*, 5 (3), 353-364
- Schalock, R. L., Bonham, G. S., & Verdugo, M. A. (2008). The conceptualization and measurement of quality of life: Implications for program planning and evaluation in the field of intellectual disabilities. *Evaluation and Program Planning*, 31(2), 181-190.  
doi:10.1016/j.evalprogplan.2008.02.001
- Shattuck, P. T., Orsmond, G. I., Wagner, M., & Cooper, B. P. (2011). Participation in social activities among adolescents with an autism spectrum disorder. *PloS One*, 6(11), e27176.
- Schleien, S., Green, F., & Stone, C. (2003). Making friends within inclusive community recreation programs. *American Journal of Recreation Therapy*, 2(1), 7-16.

- Shikako-Thomas, K., Dahan-Oliel, N., Shevell, M., Law, M., Birnbaum, R., Rosenbaum, P., . . .  
Majnemer, A. (2012). Play and be happy? leisure participation and quality of life in school-aged children with cerebral palsy. *International Journal of Pediatrics*, 2012
- Stone, C. F. (1998). *The effectiveness of leisure education and classroom recreation participation on social and communication skills, community living skills, and problem behaviors of students with mental retardation* (Doctoral dissertation). Retrieved from ProQuest, UMI Dissertations Publishing. (9914914)
- Stumbo, N. J., & Peterson, C. A. (1998). The leisure ability model. *Therapeutic Recreation Journal*, 32(2), 82.
- Trochim, W. M., & Donnelly, J. P. (2008). *Research methods knowledge base*. Cincinnati, OH: Atomic Dog Pub.
- Turnbull, H., Turnbull, A., Wehmeyer, M., & Park, J. (2003). A Quality of Life Framework for Special Education Outcomes. *Remedial and Special Education*, 67-74.
- Veal, A.J. retrieved on March 4, 2015 <http://www.csun.edu/~vcrec004/ls251/re-sources/VealRecDefinitions.pdf>
- Waller, S. N., & Wozencroft, A. J. (2010). Project TRiPS: A school-based learning opportunity for therapeutic recreation students. *Therapeutic Recreation Journal*, 44(3), 223
- WHOQOL Group. (1995). The World Health Organization Quality of Life Assessment (WHOQOL): Position paper from the World Health Organization. *Social Science and Medicine*, 41, 1403–1409.
- Yin, R. K. (2013). *Case study research: Design and methods*. Los Angeles, CA: Sage Publ

## **Appendix A: Superintendent/Principal Informed Consent Form**

### *Introduction:*

I am Melissa Diodati, a doctoral candidate at Southern New Hampshire University. I am doing research on recreation as a related service within a public school setting. I am going to give you information and invite you to give permission for your school/school district to be part of this research.

Before you decide, you can talk to anyone you feel comfortable with about the research.

This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can contact Melissa Diodati at (978) 270-2157 or [melissa.diodati@snhu.edu](mailto:melissa.diodati@snhu.edu).

### *Purpose of the Project:*

Recreation is a related service that can be provided to students with disabilities. Related services help children with disabilities benefit from their special education by providing extra help and support in needed areas. The purpose of this research is to explore how recreation as a related service contributes to the quality of life of students with disabilities in a public school setting.

### *Type of Research Intervention:*

This research will involve educators and parents from your school/district to complete two questionnaires that will take about thirty minutes time. Parents will be asked to give permission for their child to participate in a one on one interview with the researcher that will be audio taped using an *Echo Livescribe Pen*. Consent will also sought for permission to view documents to be analyzed. These documents will include the student participants' accommodation and modification page of his/her Individualized Education Program, the service delivery page of his/her Individualized Education Program, and progress reports dating back to the start of Recreation Therapy.

### *Participant Selection:*

You are being invited to take part in this research because your school district's experience with recreation as related service for students with disabilities can contribute to the knowledge and understanding of this related service and raise awareness of its availability to individuals with disabilities.

### *Voluntary Participation:*

Your participation in this research is entirely voluntary. It is your choice whether to participate or not. No negative consequences will incur if you should choose not to participate in the research.

### *Procedures:*

Participants are being asked to help the researcher learn more about recreation as a related service and how it contributes to the quality of life of students with disabilities. Your school district

is invited to take part in this research project. If you accept, two IEP teams of students who receive recreation as a related service (including one parent from each team) at the elementary, middle, and high school level will be asked to complete the *KIDSCREEN-52* Questionnaire and a Researcher-Designed Questionnaire. Students for which these teams were developed will be asked to participate in one to one interviews with the researcher lasting approximately 30 minutes.

Questionnaires will be distributed individually. Multiple choice and rating scale answer formats will be used on both questionnaires. Educators and parents will be asked to answer each question to the best of their knowledge and be given two weeks time to complete both questionnaires. Questionnaires will be collected by Melissa Diodati.

The questionnaires are able to be completed in a setting educators and parents choose to ensure their comfort. The researcher will not be present when they are completing their questionnaire.

Parents will also be asked to provide consent for their child to participate in a one on one interview with the researcher. The one to one interview to be conducted will last approximately thirty minutes. The interview protocol is designed to make their child feel comfortable and not threatened. During the interview, I will sit down with their child in a comfortable place within his/her school. If the child does not wish to answer any of the questions during the interview, he/she may say so and the interviewer will move on to the next question. A familiar person may join us if the child requires a communication system to express his/her thoughts.

Interviews will be recorded, but the child will not be identified by name on the audio file. The audio file will be kept on a password-protected computer. The information recorded is confidential, and no one else except Melissa Diodati will have access to the recording.

Parents will also be asked to provide permission for documents to be analyzed. Documents will include the accommodation and modification page from the child's Individualized Education Program, progress reports that reflect the progress towards goals addressed with Recreation Therapy and the service delivery grid page.

No identifiers will be used on the questionnaires, interview protocols or on the documents for analysis. The School District and Schools will not be identified by name. Participants and schools will be referred to by letter or number. Questionnaire results and Interview and Document Analysis transcripts will be kept on a password-protected computer. Melissa Diodati is the only person who will have access to the results.

*Duration:*

The researcher will need approximately 30 minutes of time in a two week span to administer and

await responses. An additional 15 minutes may be necessary to gather the documents to be analyzed.

To conduct the interviews, the researcher will need approximately 3 hours of time in a one week span to conduct interviews with students at times that are convenient to students and families.

*Risks or Discomforts:*

There is a risk that participants may share some personal or confidential information by chance, or that you may feel uncomfortable having individuals sharing their perspectives. However, we do not wish for this to happen. Participants do not have to answer any question if they feel the question(s) are too personal or if you feel the question(s) are harmful to the district reputation.

*Benefits of the study:*

There will be no direct benefit to the district, but the district's participation is likely to help us find out more about recreation as a related service and its role on the quality of life of students with disabilities. This information will help school districts better understand recreation as a related service and increase the awareness and utilization of this service within public school settings.

*Compensation:*

Your school district will not be provided any incentive to take part in the research.

*Confidentiality:*

The district's part in this research is confidential. None of the information will identify the district by name. All information will be given a code number/letter or pseudonym. Only the primary researcher will have the code that links names to the data. All data will be held in a secure place only accessible by the researcher.

We will participants not to talk to people outside the group about what was said on the questionnaire and interviews and how they responded. We will, in other words, ask each participant to keep what they shared on the questionnaire confidential. You should know, however, that we cannot stop or prevent participants from sharing things that should be confidential.

*Sharing the Results:*

Nothing that participants tell us on the questionnaires and during the interviews will be shared with anybody outside the research team, and nothing will be attributed to the district or participants by name. A summary of participant responses will be developed from the data collected today. These summaries will be shared with each participant as well as the superintendent and principals of the participating schools prior to making the findings public to other students and professionals.

*Right to Refuse or Withdraw:*

Participation in this study is voluntary. Your school district does not have to participate. If you decide to take part in the study, you may quit at any time with no penalty. After completing the summary of responses, I will give you an opportunity to review responses, and you can ask to modify or remove portions you feel are threatening to the district.

*Who to contact:*

If you have questions about the study, please contact Melissa Diodati, the person mainly responsible for this study, at (978) 270-2157 or melissa.diodati@snhu.edu.

This proposal has been reviewed and approved by the SNHU IRB, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact Thomas Beraldi at t.beraldi@snhu.edu or 603-645-9695.

**I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.**

Print Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_

Day/month/year

## **Appendix B: IEP Team Informed Consent Form**

### *Introduction:*

I am Melissa Diodati, a doctoral candidate at Southern New Hampshire University. I am doing research on recreation as a related service within a public school setting. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research.

Before you decide, you can talk to anyone you feel comfortable with about the research. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can contact Melissa Diodati at (978) 270-2157 or melissa.diodati@snhu.edu.

### *Purpose of the Project:*

Recreation is a related service that can be provided to students with disabilities. The purpose of this research is to explore how recreation as a related service contributes to the quality of life of students with disabilities in a public school setting. The researcher believes that your experiences will allow for a greater understanding of the impact recreation as a related service on students and how it is delivered within a public school setting. The researcher believes this knowledge will help raise awareness of recreation as a related service and increase the utilization of recreation as a related service within the public schools.

### *Type of Research Intervention:*

This research will involve your completion of two questionnaires that will take about thirty minutes of your time total. You will also be asked to take fifteen minutes to provide documents for analysis.

### *Participant Selection:*

You are being invited to take part in this research because your experience working with students who receive recreation as a related service can contribute to the knowledge and understanding of this related service and raise awareness of its availability to individuals with disabilities. .

### *Voluntary Participation:*

Your participation in this research is entirely voluntary. It is your choice whether to participate or not.

### *Procedures:*

You are being asked to help the researcher learn more about recreation as a related service and how it contributes to the quality of life of students with disabilities. You are invited to take part in this research project. If you accept, you will be asked to complete the *KIDSCREEN-52* Questionnaire and a Researcher-Designed Questionnaire.

Questionnaires will be distributed individually. Multiple choice and rating scale answer formats will be used on both questionnaires. You will be asked to answer each question to the best of your knowledge and be given two weeks time to complete both questionnaires. Questionnaires will be collected by Melissa Diodati.

Upon receiving parent consent, you will also be asked to provide documents to be analyzed. Documents will include the accommodation and modification page from an Individualized Education Plan of a student you work with who receives recreation as a related service, as well as student progress reports. The provision of the service delivery grid will also be sought.

The questionnaires are able to be completed in a setting you choose to ensure your comfort. The researcher will not be present when you are completing your questionnaire.

No identifiers will be used on the questionnaires. Participants will be referred to by letter. Questionnaire results will be kept on a password-protected computer. Melissa Diodati is the only person who will have access to the results.

*Duration:*

The researcher will need approximately 30 minutes of time in a two week span to administer and await responses. An additional 15 minutes may be necessary to gather the documents to be analyzed.

*Risks or Discomforts:*

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable sharing your perspectives. However, we do not wish for this to happen. You do not have to answer any question if you feel the question(s) are too personal.

*Benefits of the study:*

There will be no direct benefit to you, but your participation is likely to help us find out more about recreation as a related service and its role on the quality of life of students with disabilities. This information will help school districts better understand recreation as a related service and increase the awareness and utilization of this service within public school settings.

*Compensation:*

You will not be provided any incentive to take part in the research.

*Confidentiality:*

Your part in this research is confidential. None of the information will identify you by name. All information will be given a code number/letter or pseudonym. Only the primary researcher

will have the code that links names to the data. All data will be held in a secure place only accessible by the researcher.

We will ask you and others on your IEP team not to talk to people outside the group about what was said on the questionnaire and how you responded. We will, in other words, ask each of you to keep what you shared on the questionnaire confidential. You should know, however, that we cannot stop or prevent participants who are IEP members from sharing things that should be confidential.

*Sharing the Results:*

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge from this research will be shared with you before it is made widely available to the public. Each participant will receive a summary of the results.

*Right to Refuse or Withdraw:*

Participation in this study is voluntary. You do not have to participate. If you decide to take part in the study, you may quit at any time with no penalty. I will give you an opportunity after completing the questionnaire to review your responses, and you can ask to modify or remove portions.

*Who to contact:*

If you have questions about the study, please contact Melissa Diodati, the person mainly responsible for this study, at (978) 270-2157 or [melissa.diodati@snhu.edu](mailto:melissa.diodati@snhu.edu).

This proposal has been reviewed and approved by the SNHU IRB, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact Thomas Beraldi at [t.beraldi@snhu.edu](mailto:t.beraldi@snhu.edu) or 603-645-9695.

**I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.**

Print Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_

Day/month/year

## **Appendix C: Parent Informed Consent Form**

### *Introduction:*

I am Melissa Diodati, a doctoral candidate at Southern New Hampshire University. I am doing research on recreation as a related service within a public school setting. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research.

Before you decide, you can talk to anyone you feel comfortable with about the research.

This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can contact Melissa Diodati at (978) 270-2157 or [melissa.diodati@snhu.edu](mailto:melissa.diodati@snhu.edu).

### *Purpose of the Project:*

Recreation is a related service that can be provided to students with disabilities. The purpose of this research is to explore how recreation as a related service contributes to the quality of life of students with disabilities in a public school setting. The researcher believes that your experiences will allow for a greater understanding of the impact recreation as a related service on students and how it is delivered within a public school setting. The researcher believes this knowledge will help raise awareness of recreation as a related service and increase the utilization of recreation as a related service within the public schools.

### *Type of Research Intervention:*

This research will involve your completion of two questionnaires that will take about thirty minutes of your time total. You will also be asked to give permission for your child to participate in a one on one interview with the researcher. Consent is also sought for permission to view documents to be analyzed. These documents will include your child's accommodation and modification page of his/her Individualized Education Program, the service delivery page of his/her Individualized Education Program, and progress reports dating back to the start of Recreation Therapy.

### *Participant Selection:*

You are being invited to take part in this research because your experience with your child with disabilities who receives recreation as a related service can contribute to the knowledge and understanding of this related service and raise awareness of its availability to individuals with disabilities.

### *Voluntary Participation:*

Your participation in this research is entirely voluntary. It is your choice whether to participate or not.

*Procedures:*

You are being asked to help the researcher learn more about recreation as a related service and how it contributes to the quality of life of students with disabilities. You are invited to take part in this research project. If you accept, you will be asked to complete the *KIDSCREEN-52* Questionnaire and a Researcher-Designed Questionnaire.

Questionnaires will be distributed individually. Multiple choice and rating scale answer formats will be used on both questionnaires. You will be asked to answer each question to the best of your knowledge and be given two weeks time to complete both questionnaires. Questionnaires will be collected by Melissa Diodati.

The questionnaires are able to be completed in a setting you choose to ensure your comfort. The researcher will not be present when you are completing your questionnaire.

You will also be asked to provide consent for your child to participate in a one on one interview with the researcher. The one to one interview to be conducted will last approximately thirty minutes. The interview protocol is designed to make your child feel comfortable and not threatened. During the interview, I will sit down with your child in a comfortable place within his/her school. If your child does not wish to answer any of the questions during the interview, he/she may say so and the interviewer will move on to the next question. A familiar person may join us if your child requires a communication system to express his/her thoughts.

Interviews will be recorded, but your child will not be identified by name on the tape. The tape will be kept on a password-protected computer. The information recorded is confidential, and no one else except Melissa Diodati will have access to the recording.

You will also be asked to provide permission for documents to be analyzed. Documents will include the accommodation and modification page from your child's Individualized Education Program, progress reports that reflect the progress towards goals addressed with Recreation Therapy and the service delivery grid page.

No identifiers will be used on the questionnaires, interview protocols or on the documents for analysis. Participants will be referred to by letter or number. Questionnaire results and Interview and Document Analysis transcripts will be kept on a password-protected computer. Melissa Diodati is the only person who will have access to the results.

*Duration:*

The researcher will need approximately 30 minutes of time in a two week span to administer and await responses. An additional 15 minutes may be necessary to gather the documents to be analyzed.

*Risks or Discomforts:*

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable sharing your perspectives. However, we do not wish for this to happen. You do not have to answer any question if you feel the question(s) are too personal.

*Benefits of the study:*

There will be no direct benefit to you, but your participation is likely to help us find out more about recreation as a related service and its role on the quality of life of students with disabilities. This information will help school districts better understand recreation as a related service and increase the awareness and utilization of this service within public school settings.

*Compensation:*

You will not be provided any incentive to take part in the research.

*Confidentiality:*

Your part in this research is confidential. None of the information will identify you by name. All information will be given a code number/letter or pseudonym. Only the primary researcher will have the code that links names to the data. All data will be held in a secure place only accessible by the researcher.

We will ask you and others on your IEP team not to talk to people outside the group about what was said on the questionnaire and how you responded. We will, in other words, ask each of you to keep what you shared on the questionnaire confidential. You should know, however, that we cannot stop or prevent participants who are IEP members from sharing things that should be confidential.

*Sharing the Results:*

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge from this research will be shared with you before it is made widely available to the public. Each participant will receive a summary of the results.

*Right to Refuse or Withdraw:*

Participation in this study is voluntary. You do not have to participate. If you decide to take part in the study, you may quit at any time with no penalty. I will give you an opportunity after completing the questionnaire to review your responses, and you can ask to modify or remove portions.

*Who to contact:*

If you have questions about the study, please contact Melissa Diodati, the person mainly responsible for this study, at (978) 270-2157 or [melissa.diodati@snhu.edu](mailto:melissa.diodati@snhu.edu).

This proposal has been reviewed and approved by the SNHU IRB, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact Thomas Beraldi at [t.beraldi@snhu.edu](mailto:t.beraldi@snhu.edu) or 603-645-9695.

**I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.**

Print Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_

Day/month/year

## **Appendix D: Student Informed Consent Form**

### *Introduction:*

I am Melissa Diodati, a doctoral candidate at Southern New Hampshire University. I am doing research on recreation as a related service within a public school setting. I am going to give you information and invite you to be part of this research. You do not have to decide today whether or not you will participate in the research.

Before you decide, you can talk to anyone you feel comfortable with about the research. This consent form may contain words that you do not understand. Please ask me to stop as we go through the information and I will take time to explain. If you have questions later, you can contact Melissa Diodati at (978) 270-2157 or melissa.diodati@snhu.edu.

### *Purpose of the Project:*

Recreation is a related service that can be provided to students with disabilities. The purpose of this research is to explore how recreation as a related service contributes to the quality of life of students with disabilities in a public school setting. The researcher believes that your experiences will allow for a greater understanding of the impact recreation as a related service on students and how it is delivered within a public school setting. The researcher believes this knowledge will help raise awareness of recreation as a related service and increase the utilization of recreation as a related service within the public schools.

### *Type of Research Intervention:*

This research will involve your participation in a one to one interview that will take about 30 minutes.

### *Participant Selection:*

You are being invited to take part in this research because your experience receiving recreation as a related service can contribute to the knowledge and understanding of this related service and raise awareness of its availability to individuals with disabilities. .

### *Voluntary Participation:*

Your participation in this research is entirely voluntary. It is your choice whether to participate or not.

### *Procedures:*

You are being asked to help the researcher learn more about recreation as a related service and how it contributes to the quality of life of students with disabilities. You are invited to take part in this research project. If you accept, you will be asked to complete participate in a one to one interview with the researcher. Melissa Diodati will conduct the interview by referring to an interview protocol.

The interview protocol is designed to make you feel comfortable and not threatened. During the interview, I will sit down with you in a comfortable place within your school. If you do not wish to answer any of the questions during the interview, you may say so and the interviewer will move on to the next question. A familiar person may join us if you require a communication system to express your thoughts.

Interviews will be recorded, but you will not be identified by name on the tape. The tape will be kept on a password-protected computer. The information recorded is confidential, and no one else except Melissa Diodati will have access to the recording.

*Duration:*

The researcher will need approximately 30-45 minutes of time on a single occasion to ask a series of questions concerning your thoughts on recreation as a related service and your experiences receiving this as a related service in school. .

*Risks or Discomforts:*

There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable sharing your perspectives. However, we do not wish for this to happen. You do not have to answer any question if you feel the question(s) are too personal.

*Benefits of the study:*

There will be no direct benefit to you, but your participation is likely to help us find out more about recreation as a related service and its role on the quality of life of students with disabilities. This information will help school districts better understand recreation as a related service and increase the awareness and utilization of this service within public school settings.

*Compensation:*

You will not be provided any incentive to take part in the research.

*Confidentiality:*

Your part in this research is confidential. None of the information will identify you by name. All information will be given a code number/letter or pseudonym. Only the primary researcher will have the code that links names to the data. All data will be held in a secure place only accessible by the researcher.

We will ask you do not to talk to people about what was said in the interviews. We will, in other words, ask each of you to keep what you shared within the interview confidential. You should know, however, that we cannot stop or prevent participants from sharing things that should be confidential.

*Sharing the Results:*

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. The knowledge from this research will be shared with you before it is made widely available to the public. Each participant will receive a summary of the results.

*Right to Refuse or Withdraw:*

Participation in this study is voluntary. You do not have to participate. If you decide to take part in the study, you may quit at any time with no penalty. I will give you an opportunity after completing the questionnaire to review your responses, and you can ask to modify or remove portions.

*Who to contact:*

If you have questions about the study, please contact Melissa Didoati, the person mainly responsible for this study, at (978) 270-2157 or [melissa.diodati@snhu.edu](mailto:melissa.diodati@snhu.edu).

This proposal has been reviewed and approved by the SNHU IRB, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the IRB, contact Thomas Beraldi at [t.beraldi@snhu.edu](mailto:t.beraldi@snhu.edu) or 603-645-9695.

**I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.**

Print Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_ Day/month/year

Appendix E: *KIDSCREEN-52 Quality of Life Questionnaire*



---

**KIDSCREEN-52**  
**Health Questionnaire for Children and Young People**

Parent Version  
English (US)

Date: \_\_\_\_\_  
          Month      Year

Dear Parents,

How is your child? How does she/he feel? This is what we would like to know from you.

Please answer the following questions to the best of your knowledge, ensuring that the answers you give reflect the perspective of your child. Please try to remember your child's experiences over the last week...

## 1. Physical Activities and Health

**In general, how would your child rate her/his health?**

1.  excellent

very good

good

fair

poor

**Thinking about the last week ...**

	not at all	slightly	moderately	very	extremely
2. Has your child felt physically fit and well?	<input type="radio"/>				
3. Has your child been physically active (e.g. running, climbing, biking)?	<input type="radio"/>				
4. Has your child been able to run well?	<input type="radio"/>				

**Thinking about the last week ...**

	never	almost never	sometimes	almost always	always
5. Has your child felt full of energy?	<input type="radio"/>				

## 2. Feelings

**Thinking about the last week ...**

	not at all	slightly	moderately	very	extremely
1. Has your child felt that life was enjoyable?	<input type="radio"/>				
2. Has your child felt pleased that he/she is alive?	<input type="radio"/>				
3. Has your child felt satisfied with his/her life?	<input type="radio"/>				

Thinking about the last week ...		never	almost never	sometimes	almost always	always
4.	Has your child been in a good mood?	<input type="radio"/>				
5.	Has your child felt cheerful?	<input type="radio"/>				
6.	Has your child had fun?	<input type="radio"/>				

### 3. General Mood

Thinking about the last week ...		never	almost never	sometimes	almost always	always
1.	Has your child felt that he/she does everything badly?	<input type="radio"/>				
2.	Has your child felt sad?	<input type="radio"/>				
3.	Has your child felt so bad that he/she didn't want to do anything?	<input type="radio"/>				
4.	Has your child felt that everything in his/her life goes wrong?	<input type="radio"/>				
5.	Has your child felt fed up?	<input type="radio"/>				
6.	Has your child felt lonely?	<input type="radio"/>				
7.	Has your child felt under pressure?	<input type="radio"/>				

## 4. About Your Child

Thinking about the last week ...		never	almost never	sometimes	almost always	always
1.	Has your child been happy with the way he/she is?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
2.	Has your child been happy with his/her clothes?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
3.	Has your child been worried about the way he/she looks?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
4.	Has your child felt jealous of the way other girls and boys look?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
5.	Has your child wanted to change something about his/her body?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>

## 5. Free Time

Thinking about the last week ...		never	almost never	sometimes	almost always	always
1.	Has your child had enough time for him/herself?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
2.	Has your child been able to do the things that he/she wants to do in his/her free time?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
3.	Has your child had enough opportunity to be outside?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
4.	Has your child had enough time to meet friends?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>
5.	Has your child been able to choose what to do in his/her free time?	never <input type="radio"/>	almost never <input type="radio"/>	sometimes <input type="radio"/>	almost always <input type="radio"/>	always <input type="radio"/>

## 6. Family and Home Life

Thinking about the last week ...		not at all	slightly	moderately	very	extremely
1.	Has your child felt understood by his/her parent(s)?	<input type="radio"/>				
2.	Has your child felt loved by his/her parent(s)?	<input type="radio"/>				

Thinking about the last week ...		never	almost never	sometimes	almost always	always
3.	Has your child been happy at home?	<input type="radio"/>				
4.	Has your child felt that his/her parent(s) had enough time for him/her?	<input type="radio"/>				
5.	Has your child felt that his/her parent(s) treated him/her fairly?	<input type="radio"/>				
6.	Has your child been able to talk to his/her parent(s) when he/she wanted to?	<input type="radio"/>				

## 7. Money matters

Thinking about the last week ...		never	almost never	sometimes	almost always	always
1.	Has your child had enough money to do the same things as his/her friends?	<input type="radio"/>				
2.	Has your child felt that he/she had enough money for his/her expenses?	<input type="radio"/>				

Thinking about the last week ...		not at all	slightly	moderately	very	extremely
3.	Does your child feel that he/she has enough money to do things with his/her friends?	<input type="radio"/>				

## 8. Friends

Thinking about the last week ...		never	almost never	sometimes	almost always	always
1.	Has your child spent time with his/her friends?	<input type="radio"/>				
2.	Has your child done things with other girls and boys?	<input type="radio"/>				
3.	Has your child had fun with his/her friends?	<input type="radio"/>				
4.	Have your child and his/her friends helped each other?	<input type="radio"/>				
5.	Has your child been able to talk about everything with his/her friends?	<input type="radio"/>				
6.	Has your child been able to rely on his/her friends?	<input type="radio"/>				

## 9. School and Learning

Thinking about the last week ...

	not at all	slightly	moderately	very	extremely
1. Has your child been happy at school?	<input type="radio"/>				
2. Has your child got on well at school?	<input type="radio"/>				
3. Has your child been satisfied with his/her teachers?	<input type="radio"/>				

Thinking about the last week ...

	never	almost never	sometimes	almost always	always
4. Has your child been able to pay attention?	<input type="radio"/>				
5. Has your child enjoyed going to school?	<input type="radio"/>				
6. Has your child got along well with his/her teachers?	<input type="radio"/>				

## 10. Bullying

Thinking about the last week ...

	never	almost never	sometimes	almost always	always
1. Has your child been afraid of other girls and boys?	<input type="radio"/>				
2. Have other girls and boys made fun of your child?	<input type="radio"/>				
3. Have other girls and boys bullied your child?	<input type="radio"/>				

## Appendix F: IEP Team Member Questionnaire

# IEP Team Member Questionnaire

The following questions are designed to obtain demographic information. All responses will be kept confidential.

\* Required

**1. What is your role on the IEP team? \***

**2. What is the grade level of the student receiving recreation therapy? \***

**3. What is the disability of the student who receives Recreation Therapy? \***

Check all that apply

- Physical
- Emotional
- Intellectual
- Neurological
- Sensory/Hearing
- Health
- Communication
- Autism
- Developmental Delay
- Multiple Disabilities
- Sensory/Vision
- Sensory/Deaf/Blind
- Specific Learning

The following question is meant to gather information on the delivery format of recreation as a related service. Please answer to the best of your knowledge.

**4. What components of recreation therapy are utilized with the student \***

check all that apply

- assessment of recreation and leisure functioning
- leisure education to help student recognize the importance of recreation and develop an awareness of resources and a positive attitude
- Therapeutic Recreation services offered to develop skills students need to participate in leisure activities
- school and community modifications/accommodations to ensure access for all

Please refer to the following definitions to complete the statements below regarding the student on your case load participating in this study

structured leisure activities: adult supervised activities

unstructured leisure activities: spontaneous activities that are not supervised by an adult

leisure participation: voluntary participation in self selected activities that bring pleasure during leisure time

leisure time: time outside an individuals daily obligations

	never	rarely	sometimes	often	always
5. What is the student's frequency of participation in structured leisure activities during school	<input type="radio"/>				
6. What is the student's frequency of participation in unstructured leisure activities during school	<input type="radio"/>				
7. What is the student's frequency of participation in structured leisure activities after school	<input type="radio"/>				
8. What is the student's frequency of participation in unstructured leisure activities after school	<input type="radio"/>				

	not at all influential	slightly influential	somewhat influential	very influential	extremely influential
9. How helpful is RT for improving the LP of the student in structured activities at school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. How helpful is RT for improving the LP of the student in unstructured activities at school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. How helpful is RT for improving the LP of the student in structured activities outside of school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. How helpful is RT for improving the LP of the student in unstructured activities outside of school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	never	rarely	sometimes	often	always
13. How often does the student face barriers to participate in structured leisure activities in school?	<input type="radio"/>				
14. How often does the student face barriers to participate in unstructured leisure activities in school?	<input type="radio"/>				
15. How often does the student face barriers to participate in structured leisure activities out of school?	<input type="radio"/>				
16. How often does the student face barriers to participate in unstructured leisure activities out of school?	<input type="radio"/>				

	not at all helpful	slightly helpful	somewhat helpful	very helpful	extremely helpful
17. How helpful is RT for removing barriers for students in structured leisure activities in school?	<input type="radio"/>				
18. How helpful is RT for removing barriers for students in structured leisure activities out of school?	<input type="radio"/>				
19. How helpful is RT for removing barriers for students in unstructured leisure activities in school?	<input type="radio"/>				
20. How helpful is RT for removing barriers for the student in unstructured leisure activities out of school?	<input type="radio"/>				

	not at all influential	slightly influential	somewhat influential	very influential	extremely influential
21. What role does RT play in removing barriers for the student with disabilities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Please refer to the following definitions to complete the statements below regarding the student on your case load participating in this study

personal development: activities of daily living, belief of success, cognitive skills, social skills, educational performance

self determination: ability to have control and make choices and set goals independently

interpersonal relations: formation of friendships and interactions with others

social inclusion: participation in the community

rights: equal access for all

emotional well being: feeling of safe, happy, calm

physical well being: health, ability to access leisure and recreation

material well being: ??? do we need

	not at all influential	slightly influential	somewhat influential	very influential	extremely influential
22. To what extent does RT increase the personal development of the student?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. To what extent does RT increase the self determination of the student?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. To what extent does RT increase the interpersonal relationships of the student?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. To what extent does RT increase the social inclusion of the student?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. To what extent does RT increase equal access to students?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. To what extent does RT increase the emotional well being of the student?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. To what extent does RT increase the physical well being of the student?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. What role does RT play in the QoL of the student with disabilities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## **Appendix G: Student Interview Protocol**

### Demographics

1. How old are you?
2. What grade are you in?

### Service Delivery Format of Recreation Therapy

3. What type of activities do you do when you work with CTRS.
- 3.a. when, where

### Student Perspective of Recreation Therapy

- 3.b. How do you feel when you do ... (based on the above RT activities)
4. I want you to think about times when you have free time at school, what activities do you like to do during that time?
  - 4.a. How did you become interested in these activities?
  - 4.b. Who do you do these activities with?
  - 4.c. How do you feel when you do... ?
  - 4.d. What are some ways/How has/does CTRS help/s you during this time?
5. I want you to think about classes like gym, music, art, and other specialists.
  - 5.a. How do you feel when you do... ?
  - 5.b. What are some ways/How has/does CTRS help/s you during this time?
6. Tell me about the activities you do outside of school.
  - 6.a. How do you feel when you do these activities?
  - 6.b. How did you become interested in these activities?
  - 6.c. Who do you do these activities with?
  - 6.d. What are some ways/How has/does CTRS help/s you participate in these activities?

### Quality of Life/Student Outcomes

7. Do you think you are independent?
  - 7.a. What are some ways/How has/does CTRS help/s you be independent?

8. Do you like to talk/play with classmates?

8.a. What are some ways/How has/does CTRS help/s you do this?

9. On most days do you have something to look forward to?

9.a. What are some activities you look forward to?

**Appendix H: Document Analysis Gathering Grid**

Student 1	interview	
	Progress reports	
Student 2	interview	
	Progress reports	
Student 3	interview	
	Progress reports	
Student 4	interview	
	Progress reports	
Student 5	interview	
	Progress reports	
Student 6	interview	
	Progress reports	