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ABSTRACT

Rongzhi Li. THE EFFECT OF COMMUNITY-BASED GROUP MUSIC THERAPY ON QUALITY OF LIFE FOR INDIVIDUALS WITH DEVELOPMENTAL DISABILITIES (Under the direction of Barbara Memory, Ph.D.) School of Music, November 2010.

The purpose of this qualitative study was to gain a richer understanding of the effect of community-based group music therapy on quality of life for individuals with developmental disabilities through the insights of four sub-groups in two community-based group music therapy choirs: choir members (people with developmental disabilities), parents/caregivers, choir leaders (music therapists) and the program supervisor. The study provided valuable feedback concerning how satisfied persons with developmental disabilities were with the group music therapy services that they had received, what benefits the choir members had derived from participating in the community-based group music therapy choirs, and how the benefits were related to the choir members' quality of life.

Data were collected in group and individual interviews that were conducted with 29 individuals consisting of 18 choir members, 8 parents/caregivers, 2 choir leaders and 1 program supervisor. Key statements of each subgroup were summarized according to the transcript texts. Global themes shared by part or all of the subgroups were identified by comparing and contrasting subgroups' key statements.

The result of this study showed that there is a significant positive effect of community-based group music therapy on the quality of life for individuals with developmental disabilities in the five categories of "emotional well-being," "social inclusion," "interpersonal relations," "self-determination," "personal development" and eleven subcategories of "safety," "self-concept," "happiness," "community integration/participation," "lifestyle," "friendships," "family relationships," "personal

control," "choices," "education," and "skills." Thirty global themes of the effect of community-based group music therapy on quality of life for people with developmental disabilities shared by part or all of the subgroups were identified and described.

THE EFFECT OF COMMUNITY-BASED GROUP MUSIC THERAPY ON QUALITY OF LIFE FOR INDIVIDUALS WITH DEVELOPMENTAL DISABILITIES

A Thesis Presented to

The Faculty of the School of Music

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Master of Music Therapy

By

Rongzhi Li

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Chapter 1

Introduction

People with developmental disabilities are one of the largest disabled populations in the United States. According to United States Department of Health and Human Services, Administration for Children and Families, and Administration on Developmental Disabilities, persons with developmental disabilities constitute between 1.2% and 1.65% of the U.S. population. It is estimated that between 3.2 and 4.5 million individuals are afflicted with these disabilities. (http://www.acf.hhs.gov).

Many Americans believe that persons with developmental disabilities have life goals, interests and values that are similar to those of the rest of the population (e.g., those with developmental disabilities essentially want the same things in their lives, and have the same needs and responsibilities, as everyone else). Some scholars state quality of life "is essentially the same for a person with and without disabilities" (Schalock, 1990, p.10). Yet some research show that individuals with developmental disabilities have significantly lower overall quality of life (hereafter, QOL) than non-disabled individuals (Sheppard et al., 2005; National Organization on Disability, 2000, 2004; Lau et al., 2006).

The last three decades have witnessed increased attention (both at the scholarly and policy-making levels) to QOL issues for people with developmental disabilities. Since 1985, there have been more than 20,900 published articles about QOL for people with developmental disabilities (Schalock, 2002b). More people in the general population report believing that QOL is important for all (disabled or not) and should be treated in the same way for all (http://www.ncbi.nlm.nih.gov).

A variety of services, projects, and research programs are now underway which are specifically designed to support and improve the QOL for this population and their families. A holistic approach emphasizes the total person. Community programs offer each client an individual plan developed by an interdisciplinary team based on the client's needs. The goals and objectives in the individual plan are integrated into each therapy session (Farnan, 2007).

Music therapy is an established part of the interdisciplinary team approach for treating these people. Music therapists work with other team members to provide various services, and to support and improve QOL for people with developmental disabilities (Ingber, 2003; Walworth et al., 2008). Music therapy has been recognized as being effective at addressing adaptive behavioral problems such as self stimulation behaviors and self help problems, enhancing conceptual and social skills (Farnan, 2007), reducing anxiety and stress, increasing relaxation and activities of daily living (Walworth et al., 2008), and improving or maintaining motor, physiological, social/emotional, sensory, communicative, and cognitive functioning of individuals with developmental disabilities (AMTA, 2009). A music therapist is believed to be very helpful at addressing the support areas of human development, education, home living, employment, health and safety, and social protection of clients. One of the future trends of music therapy is to offer the support necessary for a better QOL (Farnan, 2007).

While persons with developmental disabilities have often been served by music therapists, there is no research focusing on the effect of music therapy on QOL for individuals with developmental disabilities.

In contrast with a general view of what constitutes “a good life”, QOL is a distinctly personal concept. It is “a matter of consumer rather than professional definition” (Schalock,

1990, p.10). It is how the individual perceives and evaluates his/her life and situation. It is "one's satisfaction with one's lot in life, an inner sense of contentment or fulfillment with one's experience in the world" (Taylor and Bogdan, 1996, p. 44) even though life satisfaction was significantly associated with outside support (Miller, & Chan, 2008). Hence, the subjective nature of QOL makes it necessary to gather information on it through direct interviews—to ask persons to describe what influences and impacts their QOL from their own perspectives.

The purpose of this study was to gain a richer understanding of the effect of community-based group music therapy on QOL for individuals with developmental disabilities through the insights of four sub-groups in two community-based music therapy choirs: choir members (people with developmental disabilities), parents/care givers, choir leaders (music therapists) and the program supervisor. In doing so, the study will provide valuable feedback concerning how satisfied the choir members are with the group music therapy services that they have received, what the choir members benefit from participating in these group music therapy choirs, and how the benefits relate to the choir members' QOL.

The design of the study is qualitative that data was collected through in-depth interviews. The interviews were consisted of standard questions and used a conversational approach. Follow-up questions were determined by the participants' responses. Key statements of each subgroup were summarized according to transcripts of all interviews. Global themes shared by subgroups were identified by comparing and contrasting subgroups' key statements. The key statements and global themes were grouped into categories and subcategories that captured their essence.

Chapter 2

Review of Literature

This chapter provides a review of the literature relevant to quality of life (hereafter QOL) and music therapy for persons with developmental disabilities.

The review will begin with how “developmental disability”, “QOL” and “music therapy” have been defined in the literature. This discussion will be followed by a review of the literature on QOL among individuals with developmental disabilities. Then a review of the literature on music therapy and individuals with developmental disabilities will be discussed. Music therapy related to QOL in the literature will be presented as well.

Concepts

Developmental disability is a term used to describe life-long disabilities with mental and/or physical or a combination of both impairments. According to Administration on Developmental Disabilities, United States Department of Health and Human Services,

> The disability is manifested prior to age 22 and results in substantial functional limitations in three or more of the following areas of major life activity: self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living and economic self-sufficiency. The conditions reflect the individual's need for a combination and sequence of special, interdisciplinary, or generic services, supports, or other assistance that is of lifelong or extended duration and is individually planned and coordinated. When applied to infants and young children, an individual from birth to age 9, who has a substantial developmental delay or specific congenital or acquired condition, may be considered to have a

developmental disability without meeting 3 or more of the criteria described above. That is, if the individual, without services and supports, has a high probability of meeting those criteria later in life, the infant or child may be considered to have a developmental disability (www.acf.hhs.gov/programs/add/ddact/DDA.html).

Five categories of developmental disabilities are identified in the literature. These include "mental retardation," "autism," "cerebral palsy," "epilepsy," and "other neurological impairments" (Boxill, 2007).

QOL has been defined in a variety of ways, and the literature on it as a concept is quite extensive (Felce, 1995; 1997; Schalock & Verdugo, 2002; Schalock, 2004; Brown, 2009; Taylor & Bogdan, 1996; Joyce et al., 1999; Cummins, 1997; Goode, 1994; Heal & Sigelman, 1996). For example, research in the 1990s on QOL has resulted in more than 100 definitions (Cummins, 1997). Similarly, there is little agreement on the meaning of the term itself. According to Taylor and Bogdan (1996), "QOL is an elusive concept, especially when applied to people with mental retardation. We do not have an agreed upon standard for determining anyone's QOL" (p. 27).

Defining and conceptualizing QOL remains a complex process (Schalock et al., 2002b). According to Taylor and Bogdan (1996), rather than providing a definitive concept, the conception of QOL must be broad and give the user a general sense of reference and guidance in approaching empirical instances.

Among the many definitions, the concept of QOL that Schalock (2002a, 2004) has presented seems to have clear operational implications. Schalock is a psychologist who has been investigating areas of QOL and developmental disabilities for years. He was the past

president of the American Association on Mental Retardation. He is author or editor of several books and many chapters and articles on QOL and developmental disabilities. He analyzed a lot of literature regarding QOL and summarized the current understanding of the QOL concept. Schalock et al. (2002a) note that "in reference to its meaning, *quality* makes us think about the excellence or 'exquisite standard' associated with human characteristics and positive values, such as happiness, success, wealth, health, and satisfaction; *of life* indicates that the concept concerns the very essence or essential aspects of human existence" (p.1).

In a summary of QOL domains from 16 published studies, Schalock (2004) found a total of 125 indicators. About 92 (74.4%) of these indicators related to eight core QOL domains: interpersonal relations, social inclusion, personal development, physical well-being, self-determination, material well-being, emotional well-being, and rights (Schalock, et.al, 2002a).

After reviewing international literature regarding the conceptualization of the QOL, Schalock et al. (2002 b) also summarized nine core ideas and five related core principles. The nine core ideas include "well-being," "inter- and intrapersonal variability," "personal context," "life-span perspective," "holism," "values," "choices and personal control," "perception," "self-image," and "empowerment". The five core principles are that QOL "1) is composed of those same factors and relationships for people with intellectual disabilities that are important to those without disabilities; 2) is experienced when a person's needs and wants are met and when one has the opportunity to pursue life enrichment in major life settings; 3) has both subjective and objective components, but is primarily the perception of the individual that reflects the QOL he/she experiences; 4) is based on individual needs, choices,

and control; and 5) is a multidimensional construct influenced by personal and environmental factors, such as intimate relationships, family life, friendships, work, neighborhood, city or town of residence, housing, education, health, standard of living, and the state of one's nation" (p.460).

Most QOL investigators, however, suggest that the actual number of domains and ideas are perhaps less important than realizing that people know what is important to them and recognizing any proposed QOL model (Taylor & Bogdan, 1996). Moreover, domain relevance varies across groups according to gender and age, level of education, race, and high versus low levels of overall life satisfaction (Cummins, 1997). It is also important to recognize that specific indicators (more than 25%) are highly variable from person to person, result from individual perception and choice, and change over the lifespan (Brown, 2009). Moreover, the concept of QOL may vary from country to country, and even from area to area within countries (Schalock et al., 2002b).

Despite their differences, the following three aspects regarding the concept of QOL are widely accepted: 1) QOL integrates objective life conditions and reported satisfaction with those conditions, 2) "QOL is basically a social phenomenon and a product primarily of interactions with others" (Schalock, 1990, p. 10), And 3) QOL is multidimensional and includes a number of domains of personal well-being.

For the current study, QOL will be operationally defined as a sense of personal satisfaction and happiness with life and one's personal situation when/after receiving group music therapy service for at least two years.

<u>Music therapy</u> generally defined as "the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program"

(www.musictherapy.org). Music therapists help clients improve physical, emotional, cognitive, and social skills by using music as a tool within a therapeutic relationship. Music therapy is a mature profession with national standards of clinical practice, a code of ethics, and a professional organization, American Music Therapy Association, which supports two research journals, national and regional conferences, and which advocates for the profession.

QOL of Individuals with Developmental Disabilities

Landmarks

During the 1970s, there were important changes in the fields of special education and the lives of people with developmental disabilities. The impetus to these changes was the passage of Public Law 94-142 in 1975, the Education for All Handicapped Children Act, now codified as Individuals with Disabilities Education Act, and Willowbrook, the catalyst for the reorganization of services for individuals with developmental disabilities (Darrow, 2007).

In 1975, PL 94-142, the Education for All Handicapped Children Act was passed. The purpose of the law is to protect the educational rights of children and youth with disabilities. It states that every child, regardless of their disability, should have a free and an appropriate education that emphasizes special education and related services designed to meet his/her unique needs in a least restrictive environment. Before PL 94-142 was enacted, most children with disabilities were denied access to public schools and had to go to state schools for special needs students, such as schools for students with developmental disabilities, deafness or blindness. These segregated institutions were usually outside of the towns. Children left home to attend these schools and to live in dormitories when they were young. After graduation from schools, many of them had to stay in state residential institutions for the rest of their lives (Darrow, 2007).

After the passage of PL 94-142, most students with disabilities were moved back to their home communities and accepted by public schools. School programs started to reinforce both

the “Individual Education Program” (IEP) objectives and the “Individual Program Plan” (IPP) for each student. An interdisciplinary team was required to provide various services based on students’ needs. After graduation from schools, many lived in community settings instead of segregated settings. With the shift, people with developmental disabilities had a chance to participate more in community programs and activities in order to have better QOL (Verdonschot et al., 2009). Through community-based programs, they started to be trained to gain vocational skills and had opportunities to work in either supported employment or the community.

Willowbrook was an event that happened in 1972 in New York's Willowbrook State School, the biggest state-run institution for the children with mental retardation. It was the public outcry over the deplorable conditions found in the school which resulted in the movement of individuals with developmental disabilities from state institutions to community-based care started in late 1980s. The movement extended throughout New York and the United States. After Willowbrook, services for individuals with developmental disabilities have improved (Darrow, 2007). Both children and adults with developmental disabilities have lived better in recent decades because of the passage of the Law 94-142 and the examination of treatment conditions at Willowbrook.

Current Situation

A substantial amount of research has been conducted in the past three decades to survey individuals with and without developmental disabilities and the people who care about them. Results from such research have shown that people with developmental disabilities have a lower QOL than members of the general population on many indicators (e.g., Sheppard, 2005; Bramston et al., 2005; Parmenter, 1992; Hooper, 2008a; Notal et al., 2007).

People with developmental disabilities have less personal choices, from decision-making in everyday matters to the more important life decisions. They are also at a disadvantage and experience more restrictions with regard to access to some basic human rights such as transportation (Sheppard, 2005). The oppressive restraints, both physical and psychological, have limited their opportunities for community involvement (Bramston et al., 2005) and have an impact on work, leisure, health, and safety (Parmenter, 1992; Hooper, 2008a). The oppressive restraints also affect their communication, self-care, home living, self-direction, functional academic and social/interpersonal skills (Hooper, 2008a). Dependency often denies their freedom of choice and the ability to make independent decisions. People with more severe intellectual disability show lower levels of self-determination, QOL and social abilities than people in other impairment levels (Notal et al., 2007).

Although responses for sub-groups within the disabilities community were not broken down, the overall statistics of comparisons between people with and without disabilities are informative for QOL.

According to the United States Department of Health and Human Services, 22% of people with disabilities including with and without intellectual impairment do not have a high school diploma, compared to only 9% of people without disabilities. In contrast, 12% of people with disabilities have graduated from college compared to 23% of people without disabilities. And 38% of people with disability who are between 25 and 60 years old belong to low income community compared to 8% of people with no disability (http://www.hhs.gov).

According to the National Organization on Disability (hereafter, NOD), QOL of Americans with disabilities appears to improve in the right direction but the development is

still not as fast as people expect (National Organization on Disability, 2000; National Organization on Disability, 2004). The NOD has contributed Harris surveys for more than 20 years in order to explore the gap between people with and without disabilities in different aspects. In the most recent Harries survey conducted in 2004, it was found that

> "only 35 percent of people with disabilities reported being employed full or part time, compared to 78 percent of those who do not have disabilities. People with disabilities are three times more likely to live in poverty with annual household incomes below $15,000 (26 percent versus 9 percent). People with disabilities remain twice as likely to drop out of high school (21percent versus 10 percent). They are twice as likely to have inadequate transportation (31 percent versus 13 percent), and a much higher percentage go without needed health care (18 percent versus 7 percent). People with disabilities are less likely to socialize, dine out, or attend religious services than their non-disabled counterparts. Life satisfaction for people with disabilities also trails, with only 34 percent saying they are very satisfied compared to 61 percent of those without disabilities" (http://www.nod.org/research_publications/nod_harris_survey/).

Current Services

Children and adults with developmental disabilities have greater access to better service today than in the 1970s.

PL 94-142 mandated that students with developmental disabilities have rights to a free and appropriate education in the least restricted environment for them. Each state has a Disabilities Law Center which provides a guide for accessing services for children with developmental disabilities. The following description comes from the Maryland guide and describes the services covered for children with developmental disabilities by Medical Assistance in Maryland (Maryland Disability Law Center, 2009).

> Almost any service deemed 'medically necessary' through an assessment or screening, and recommended by a doctor or other licensed health care practitioner is covered by Medical Assistance through the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program. A screening does not need to be a formal process; it can include any visit by a child with a doctor or other qualified professional, regardless of whether the professional participates in the Medical Assistance program. Some covered services include: Regular Well-Child Check-Ups; Case Management; Physical, Occupational, and Speech Therapy; Home Health/ Private Duty Nursing; Personal Care; Durable Medical Equipment and Disposable Medical Supplies; Dental and Vision Care; Specialty Mental Health Services; Therapeutic Behavioral Services; Therapeutic Nursery; Services/ Medical Day Care; Limited Residential Services. The federal law lists a number of specific services that must be covered, but if a child needs services that are not on the list, the child should still be able to get them. Children who are covered by Medicaid (also called Medical Assistance), Maryland Children's Health Program (MCHP), or MCHP Premium have the right to virtually any home or community-based service that a health care professional determines is medically necessary (p.3).

Emerson & Hatton (1996) pointed out adults with developmental disabilities increasingly shift from living in segregated settings to community settings in recent years. Community-based residential services give people with developmental disabilities increased opportunities to attend daily activities in an organizational service system. They have more contact with caregivers, relatives and friends because they live in their community. The services help them improve adaptive behaviors and, as a result, they gain more community acceptance. Sheppard (2005) stated one of the important goals for community service providers today is to help people with cognitive impairments to improve life satisfaction with

personal situation. According to Farnan (2007), "services for individuals with intellectual and developmental disabilities need to be person centered, provide positive behavior supports, produce evidenced-based practice and provide for self determination, social inclusion, full participation, self sufficiency, personal responsibility, economic stability and be consumer controlled." All of these examples are QOL indicators and suggest that the primary goal is to provide QOL for the people with developmental disabilities.

In most communities, there is a government department which is dedicated to providing services for people with disabilities. One important service is to provide recreational opportunities for people with special needs. The Recreation and Parks Department in Greenville, North Carolina is responsible for providing recreation programs and activities for people with developmental disabilities in Pitt County. The programs for Fall 2010 may be grouped into three categories. The first category is athletics, which includes "TOPSoccer," "Specialized Tennis," "Fall Ball (baseball)," and "Special Olympic Programs." The second category is arts, including "Holiday Dance," "Heart and Soul Choir," "Sing for Joy Choir," "Miracle Choir," and "Craft Corner." The third category is parties including "Friday Fun Night" and "Costume Party." Through these programs, The Recreation and Parks Department is dedicated to creating an equal environment and for making people with and without disabilities equal members in the community (http://www.greenvillenc.gov).

In individual service programs, an interdisciplinary team of professionals such as counselors, psychologists, physical therapists and music therapists often work together to help individual person with developmental disabilities. According to the clients' needs, the team services develop the treatment goals and objectives. Through plans and procedures, the team of professionals helps the client to improve the skills necessary for functioning in the community, and as applicable, vocational skills (Farnan, 2007).

<u>Assessment and measurement issues</u>

Similar to the definition of QOL, views on assessment and measurement of QOL for people with disabilities differ markedly from one author to another.

First, there is a disagreement on the issue of whether or not there is a significant difference between QOL for people with disabilities and the general population. Some researchers take the same approach and methodology to evaluate QOL for all people, with and without disabilities (Felce & Perry, 1995; Goode, 1994; Schalock, 2002a, 2004). Others believe that the field of QOL is young and little data can be regarded as reliable evidence to explain the similarities and differences of QOL between people with and without disabilities (Cummins, 1997). As a result, those who adopt the former position develop the same measurement frames for people with and for people without a disability. Those adopting the latter assess issues related to QOL separately for the two subgroups.

Second, a wide range of methodologies have been used for assessing QOL. *The Directory of Instruments to Measure Quality of Life and Cognate Areas* by Robert A. Cummins (1997) lists 229 methodologies. The number of techniques for measuring QOL for people with developmental disabilities is also very large (Schalock et al., 2002a). According to Heal et al. (1996), there are several reasons for such wide variation in methodological approaches including: 1) "measures can be objective or subjective"; 2) "a measure can be absolute or relative"; 3) "QOL can be reported directly by the subjects of study or it can be assessed by someone else"; and 4) "the measure can be authored or generated by the investigator or by the subjects of investigation" (p.161-162).

Third, some investigators proposed a typology to stimulate thinking about methodological choice points and try to summarize a system approach to QOL measurement. For example, Heal et al. (1996) suggested a typology which measures QOL using *what, who,* and *how*. The *what* concerns what is assessed, objective or/and subjective perspective. The *who* concerns who provides the data, the person with mental impairment or other people. The

how concerns how the researchers reestablish the goals and select types of items which would be used to assess QOL. Schalock et al. (2008) suggested a measuring approach which is based on assessing indicator items grouped in different domains of QOL. It includes nine domains and seventeen indicator items. The nine domains are personal development, self-determination, interpersonal relations, social inclusion, rights, emotional well-being, physical well-being and material well-being. The seventeen indicator items are educational status, personal skills, adaptive behavior, choices/decisions, autonomy, personal control, personal goals, social networks, friendships, social activities, interactions, relationships, safety and security, positive experiences, health and nutrition status, recreation, and leisure. After conducting a review of literature regarding QOL assessment and measurement, Brown et al., (2009) summarized a number of "measurement interrogatories,"—"the what, how, who, and where of QOL measurement".

Among many of approaches for measurement and assessment of QOL, "the methodological pluralism approach" to QOL measurement summarized by Schalock seems to have become widely accepted (Schalock, 2002b; 2004). The approach measures QOL from three perspectives focusing on objective, subjective natures and external conditions of QOL. The subjective measurement is to identify self satisfaction or happiness with personal situations. The objective measurement is to evaluate observed things such as materials and social connections that affect individual affection and attitude. The external conditions are about social indicators such as standard of living, employment rates and literacy rates that affect the personal objective environment and subjective perception of satisfaction.

To summarize, three aspects seem apparent regarding the assessment and measurement of QOL: 1) There are a lot of measurement approaches and techniques currently used in QOL research; 2) A measure may assess objective, subjective or both aspects by assessing indicator

items of each perspective; 3) A system approach to QOL measurement needs to relate to the multidimensional nature of the domains of QOL.

Music Therapy and QOL of Individuals with Developmental Disabilities

People with developmental disabilities have been one of the most served populations by music therapists (Gfeller, 2007). Today, approximately 40 percent of all music therapists serve one of three populations-mental disorders, developmental disabilities, and elderly people in nursing homes (Davis, 1999). Music therapists provide services for people with developmental disabilities in all ages from infants to elderly people. The major skill areas that music therapists assess include motor, communication, social, cognitive, music skills (Chase, 2004). The other skill area that music therapist often assess include physical, emotional, and sensory functioning working with this population (AMTA, 2009). Music therapy services can be designed to enhance all these domains for clients in the full range of disorders (Boxill, 2007). Music therapists follow general procedural steps including referral and acceptance, assessment, program planning, implementation, documentation and termination when work with clients with developmental disabilities. Each procedure has its standard of music therapy clinical practice (AMTA, 2009).

Rationale for using music as a therapeutic tool

From lullabies for infants to religious music at the end of life, music is a life-long activity. Music is a universal feature of all people, with and without disabilities. Merriam (1964) suggests music has ten major functions: (1) physical response, (2) communication, (3) emotional expression, (4) symbolic representation, (5) enforcement of conformity to social norms, (6) validation of social institutions and religious rituals, (7) contribution to the continuity and stability of culture, (8) contribution to the integration of society, (9) aesthetic enjoyment, and (10) entertainment.

As a therapeutic tool, three of the functions of music are emphasized: music produces emotional reactions, physiological responses in people and contribution to the integration of society. Certain structural features of music arouse particular emotional and physiological responses (Strongman, 2002; Kenny, 2002; Davis, 1999; DeBedout, 2006). For example, music with a rapid tempo and in a major key was most closely related to perceived emotion of happiness. A slow tempo and a minor key were associated with sadness (Kenny, 2002). Music listening can lead to release of tension, increased oxygen saturation levels, and decreased blood pressure and heart rate (DeBedout, 2006). Music related programs give people give opportunities integrate into society and a sense of belong to a group.

Boxill (2007) provided a more detailed discussion of the rationale for using music as a therapeutic tool.

> Music 1) effects direct contact on a psychobiological basis with people who often are otherwise unreachable, 2) serves to establish, maintain, and strengthen the client-therapist relationship in ways that are uniquely attributable to the power of this tool, 3) facilitates expression in people who either are nonverbal or have delays in communication skills, 4) provides the opportunity for experiences that open the way for, and motivate, learning in all domains of functioning, 5) creates the opportunity for positive, successful, and pleasurable social experiences not otherwise available to them, 6) develops awareness of self, others, and the environment that improve functioning on all levels, enhances well-being, and fosters independent living (p. 19).

Because of all these unique and positive effects of music on human beings, music can be used as a therapeutic tool to help people with developmental disabilities to improve functioning skills and increase satisfaction with general life or specific situations.

<u>Music therapy and QOL</u>

While persons with developmental disabilities have often been served by music therapists, there is no research focusing on the effects of music therapy on QOL for individuals with developmental disabilities. Fortunately, the effects of music therapy on some QOL indicators related to people with developmental disabilities have been closely examined--though the researchers did not specifically mention the words “QOL” (Sussman, 2009; DeBedout, 2006; Hooper, 2008b; Kern, 2006; Whipple, 2004). Studies have also shown that music therapy has positive effects on QOL for populations other then developmental disabilities (Coffman, 2002; Choi, 2010; Etoile, 1996; Grocke, 2009; Hilliard, 2003; Walworth et al., 2008; Wolfe, 2000).

Sussman (2009) researched the effect of music on peer awareness in preschool age children with developmental disabilities. She found music therapy combined with play-based context can help sustain attention toward peers for the longest duration. DeBedout (2006) found music therapists evoke more communication and self –determination responses (mobility, learning, and independence) from severe developmental disabilities than switch-activated toys and recorded music.

Hooper (2008a) reviewed a total of 606 documents, written between 1943 and 2006, regarding music therapy and intellectual disabilities. They included published review articles, chapters, or theses, and unpublished "grey literature.” The documents were arranged in three categories: 292 descriptive documents (surveys, reports, case studies, and literature reviews/meta-analyses), 50 philosophical articles (speculation, criticism, indicators for research), and 264 experimental studies. The descriptive writings and experimental writings show therapeutic outcomes for music therapy. They include social benefits (communication, relating to others, cooperation, peer acceptance), cognitive outcomes (motivation, concentration, perceptual ability, learning, music development), physical outcomes (movement, body awareness, spatial awareness, lime extension) and emotional and

psychological outcomes (expressing emotion, alleviating agitation, pleasure, accomplishment, self esteem).

Walworth et al. (2008) found live music therapy can be beneficial in reducing patients' anxiety, perception of hospitalization, relaxation, and stress levels for persons receiving surgical procedures of the brain.

Hilliard (2003) did experimental research to evaluate the use of music therapy on QOL of people diagnosed with terminal cancer who live in their homes and receive hospice care. QOL was measured by the Hospice QOL Index-Revised (HQLI-R) for hospice patients. The HQLI-R is a self-report questionnaire using a scale of 0 to 10 with a total of 28 items designed for hospice patients with cancer. Questions pertain to various aspects of QOL including physical, relationship, psychological, spiritual, and financial issues. Hilliard (2003) found QOL for people diagnosed with terminal cancer was higher when they received music therapy, and their QOL increased over time as they received more music therapy sessions.

Coffman (2002) did a literature review regarding music and QOL in older adults. This review demonstrated that both music listening and music making influenced older adults' perceptions about the quality of their lives. Music listening influenced older adults' biological markers of health and subjective perceptions of well-being. Music making had psychological and social benefits for them.

Choi (2010) did a study to examine the effects of music, progressive muscle relaxation, and music combined with progressive muscle relaxation on the reduction of anxiety, fatigue, and the improvement of QOL in family hospice caregivers. By doing pre and posttest measurements, Choi found positive changes in anxiety, fatigue, and QOL of family hospice caregivers by the use of music therapy interventions.

Grocke (2009) investigated whether music therapy influenced QOL and social anxiety for people with a severe and enduring mental illness living in the community. A ten week group music therapy project and ten one-hour weekly music therapy sessions included singing, song writing, and improvisation. Quantitative data were measured through three scales, mainly the WHOQOL-BREF QOL Scale. The WHOQOL-BREF QOL Scale is a measurement of QOL by assessing four domains: physical, psychological, social and environment. Qualitative data were gathered through focus group interviews and an analysis of lyric themes. The results of the study showed that QOL, particularly enjoyment of life, was enhanced, and social interaction anxiety was reduced.

Goals and intervention techniques

Developmental disabilities are life-long. Researchers and music therapists have explored various approaches and techniques aimed at efficient interventions (Farnan, 2007). Individualized interventions are often considered effective and can bring positive changes and improve the individual's QOL (Allgood, 2005).

Meadows (1997) outlined six general music therapy goals for individuals with developmental disabilities: (1) fulfilling basic needs, (2) developing a sense of self, (3) establishing or re-establishing interpersonal relationships, (4) functioning with greater independence, (5) dispelling pathological behavior, and (6) developing an awareness and sensitivity to the beauty of music.

Pasiali (2004) suggests music therapists can collaborate with other members of treatment teams to create and musically adapt social stories to encourage social participation for children with autism. Social stories are individualized short stories using pictures and text that describe a social situation, who is involved, and the appropriate social responses. Each story aims to teach a particular student a specific desired response. By using the technique of

creating social stories, music therapists and other members in the treatment team can help children with autism to promote social skills.

Allgood (2005) describes family involvement as a highly valuable component of effective treatment for early intervention for children with autism.

Kwak (2007) suggests music therapists may use Rhythmic Auditory Stimulation when working with clients with cerebral palsy in the gait training for ambulation. She stated Rhythmic Auditory Stimulation help individuals with cerebral palsy regulate their internal timekeeper of their brains and motor control system. With the help of music therapists and the technique of Rhythmic Auditory Stimulation, the gait patterns of clients with cerebral palsy are better organized.

Ingber (2003) describes that MIDI activities help clients with cerebral palsy who have very limited movement to work on motor skills, social interaction, and stimulating creativity.

As the foregoing review suggests, the value of music therapy to improve QOL for people with developmental disabilities is well-grounded.

Chapter 3

Methodology

Subjects

Subjects in this study were choir members (people with developmental disabilities), parents/caregivers, choir leaders (music therapists) and the program supervisor involved two community-based music therapy groups in Greenville, NC.

Subjects were recruited according to the following inclusion criteria:

1. Choir members, parents and choir leaders had participated in one of two community-based choirs for people with developmental disabilities (Sing for Joy Choir, age 18-39; Heart and Soul Choir, age 40 and over).
2. The choir members had been present for the group music therapy at least two years.
3. The parents and care givers had been present in at least three of the group music therapy sessions.
4. Choir leaders were Board-certified music therapists (MT-BC) by the Certification Board for Music Therapy.
5. The program supervisor was the director of programs and activities for Special Populations in the Recreation and Parks Department, City of Greenville.

Procedures

1. Participation and consent procedures

The researcher gave a short introduction of the study to the eligible subjects. The participation of this study was voluntary. Before each interview, the researcher gave an informed consent document to participants. This document spelled out details of the research

and interview and noted that participation in the study was voluntary, that the study had no foreseen potential risks and that the information shared would be presented in a thesis and relevant presentation. Each participant was asked to review the document and subsequently sign the confidentiality form (Appendix A).

2. Interviews

This study was designed as a qualitative research study. Choir members, parents/care givers, music therapists and the program supervisor were interviewed using open-ended interview questions devised by the researcher. Four types of questions were designed to collect data about behaviors, opinions, values, feelings and knowledge of the subjects in each of four subgroups. The questions about "behaviors" focused on what subjects have done and what they are doing. The questions about opinions and values focused on what subjects thought about the topic. The questions about feelings focused on subjects' emotional reactions. The questions about knowledge were designed to tap into subjects' factual knowledge of the topic. The questions were organized according to the four subgroups consisted of choir members (Appendix B), parents/caregivers (Appendix C), choir leaders (Appendix D), and the program supervisor (Appendix E). While the questions were asked as a guide to ensure that the same general areas of information were collected from each interviewee and to provide a focus, the interviews used a conversational approach. And follow-up questions were shaped by the participants' responses. Each participant was given their choice of the interview location, Greenville Teen Center, home, or any other convenient location in the city they preferred. Interview sessions lasted an average of 30 minutes. All interviews were voice taped and subsequently transcribed.

3. Member Checking

To enhance the credibility of the research report, the researcher utilized member checking. A member check is a technique used to help improve the accuracy, credibility, validity, and transferability of a study. During member checking, the transcription of the interview was given to each subject in order to check the accuracy of the transcription.

4. Phenomenological Analysis and Presentation of Data

The interview transcripts were analyzed by using the qualitative research technique of Phenomenological Analysis consisting three steps:

Step 1. The researcher read through all transcripts to obtain an overall sense of the participants' experiences and then summarized key statements of each subgroup.

Step 2. Key statements of subgroups were compared, contrasted and analyzed to create global themes. Global themes are ideas that were shared by the subjects in part or all subject groups.

Step 3. Key statements of each subgroup and global themes shared by part or all subgroups were grouped into categories and subcategories that capture their essence and units of meaning. The category names and subcategory names of key statements and global themes were selected from Schlock's (2002a) quality of life domains and core indicators and descriptors of the domains.

Data were presented in Table 1-6.

Chapter 4

Results

This study gathered qualitative data concerning quality of life and music participation from 29 individuals involved with two community-based choirs for adults with developmental disabilities. The collected data were organized as four subgroups: 18 choir members (people with developmental disabilities), 8 parents/caregivers, 2 choir leaders (music therapists) and 1 program supervisor. Results of this study will be presented for the following topics: 1) description of participants in study; 2) interview questions and results: choir members, parents/caregivers, choir leaders, and the program supervisor; 3) Global themes shared by part of or all subgroups.

Choir Members

Eighteen choir members participated in this study. Seven of 18 members were from the Sing for Joy Choir and 11 clients were from the Heart and Soul Choir. All of them were adults with developmental disabilities in different levels of severity. A 20 year old young woman was the only one who was at the profound level (IQ level below 20) of developmental disability. She had no ability to communicate verbally and also used a wheelchair. Two choir members, one female and one male, were at the moderate level (IQ level from 35 to 49) and could only speak a few words. The rest of the 15 choir members were at the mild level (IQ level from 50 to 70) and one of them was in a wheelchair. Eighteen choir members consisted of 7 males and 11 females. There were 16 choir members were living in group homes. Two of them were living at home with their parents (Table One).

Table One Clients' Demographic Description

N=18

Gender		Severity Level			Communication		Physical	Living	
Male	Female	Profound (IQ: below 20)	Moderate (IQ: 35-49)	Mild (IQ: 50-70)	Nonverbal	Verbal	Wheelchair	Group Home	Home with Parents
7	11	1	2	15	1	17	2	16	2

Two group interviews and seven individual interviews were conducted with the choir members. One group interview consisted of five women from the Heart and Soul Choir. They were living in a group home together. The other group interview consisted of six men from the Heart and Soul Choir. They were living in a group home together as well. During all the seven individual interviews, every choir member had either a parent or caregiver to accompany and help, such as repeating questions when needed.

Interview Questions: Choir Members

The choir members were asked the following questions: 1. Do you enjoy coming to the choir on Thursday/Tuesday nights? 2. Do you want to keep coming to the choir next semester? 3. How do you feel when you come to the choir? Happy? Bored? (Yes/no for each) 4. What do you like about the choir? 5. Do you like the performances that we did in the churches and in the community? 6. Did you enjoy the Christmas caroling? 7. Do you like the people in the choir? Tell me names of people in the choir that you remember? (Appendix A)

Interview Results: Choir Members

For question #1 and #2 “Do you enjoy coming to the choir on Thursday/Tuesday nights?” and “Do you want to keep coming to the choir next semester?” all the members

answered positively. The answers included “yes”, “it is good to go to the choir” and “I like to spend time at choir every Tuesday.” Three members spontaneously asked when the choir would start in the next semester, fall 2010, during the interview.

For question #3 “How do you feel when you come to the choir?” they all answered that they felt happy and not bored. Their answers included “happy”, “I feel good”, “never bored”, “no way to be bored” and “no, I do not feel bored”.

For question #4 “What do you like about the choir?” they expressed that “I like the whole thing” and “I like to do a little bit everything”. Their detailed answers indicated that they liked music, playing the instruments, singing together, singing solos, being with people, the teachers, students, being part of the group, appreciation (listening to music), performance, helping to do things, and new experiences in the choir.

All members of the choir expressed liking to play instruments and singing together. The answers about playing instruments included “I like the instruments”, “I like shakers”, “I like microphone and guitar”, “I like playing drum”, “I like to play sticks”, “I like playing guitar”, “I like playing the keyboard.”, “I like ‘Rock and Roll’ (playing sticks with the music) and I have that CD”, “I like to play hand bells”, and “I like to play piano”. The answers about singing included “I like singing”, “I love to sing. I have my own microphone”, “I like the song ‘Goodnight Sweetheart’”, “amazing grace”, “sing out for joy”, “Twinkle, twinkle”, “the goodbye song”, “‘Arustasha’, it is my favorite song now” and “I like to hear other people singing”.

Eight members expressed that they liked singing solos. They said “I like singing solos”, “I like ‘Amazing Grace’ that I sing by myself” and “Jesus Loves Me”.

All choir members indicated that they liked the activity of Appreciation, listening to music. Ten out of 18 members spontaneously mentioned the song “you are my all and all”, which was a music activity that combined listening to the music with sign language. The other eight members responded positively when they were asked the opinion about the song. Fourteen choir members could not remember the name of this song, but they remembered a few of the lyrics such as “Jesus”, “fill my cup”, “Jesus, I love you God” and some of them tried to do the sign language. According to one member and her parent, this song was originally brought by them to share with the choir. The choir leader developed it to an activity and it gradually became a popular activity in the choir.

Three members mentioned they liked the recorded music “Peter and the Wolf”, which was originally suggested by one of the choir members. The member said he had another piece of music, “Tubby the Tuba”, which he wanted to suggest the choir listen to next time.

Eight members motioned that they liked the live music played by choir leaders or music therapy students. They said “I like the music played by violin”, “I like the flute music”, and “I like the little Chinese instrument, Erhu. It is interesting”.

All members also indicated that they liked being with people and being part of groups, and developing friendship. The answers included “I like we talk to each other”, “I like talking to people we know”, “I like the people in the choir”, “I just enjoy being around people”, “I just like we all get together”, “I like to make friends there”, and “I like we pass the ball to each other”. There were 15 members who expressed that they like the leaders, students and they missed the former leader of the choir.

Nine members also answered that they like to contribute to the choir by doing things.

The answers included “I like to bring CD and play it”, “I like to pass out the name tags”, “I like to pass out the instruments”, “I like to pass the ball” and “I like to help”. The other nine members of the choir answered “yes” when asked if they like to help in the choir.

All the members expressed that they liked parties. The answer included “I like parties”, “eating the snacks”, “parties were fun”, “I like Hollowing party, Christmas party and little Valentine party”, “I like parties like that” and “yes, I like parties”.

There were two members spontaneously answered that they liked dancing. Six members indicated that the dancing was ok, but they liked instruments and singing more. Furthermore, one of them said the music for dancing in the choir was too slow. All remaining 10 members answered “yes” when they were asked if they like the dancing activity.

All the members liked the experience of doing “new things.” The answers included “I like to do different things”, “I like going to the concert” and “I like different instruments”.

For question #5 and #6 “Do you like the performances that we did in churches and in the community? and “Did you enjoy the Christmas caroling?” all the members answered “yes” immediately. The answers included “I like the performance in my church”, “I like the Christmas Performance on the stage”, “I like we played the bells in the church”, “I like the one standing outside the houses and sing Christmas songs. I like that the most” and “I like to go to Ms. Barbara’s house to sing. She gave us cookies.”

When asked “what you do not like about the choir”, they answered “none”, “I like it”, “I do not know what I do not like much about it.” or “I cannot think much about it”.

For the question #7 “Do you like the people in the choir?” they all answered “yes”. When asked to say the names of people in the choir that they remembered, One members was

able to say eight choir members' names. Two of them were able to say five choir members' names. Three members were able to say three people's names. Four members were able to say two names. Five members were able to say one name. Three members were not able to say even one name. When the researcher asked them to identify the names by asking the question as "Do you remember (a person's name)?" they all said "yes".

According to choir members' interview transcription texts, 20 key statements of the choir members were summarized. They were grouped into five categories and ten subcategories in the following table (See Table Two).

Table Two **Key Statements Shared by the Choir Members**

Categories	**Choir members**
Emotional well-being	**Self-concept:** 1. The choir gives its members opportunities to access various music activities which bring out the interests, skills and talents of the choir members. 2. The choir gives the members opportunities to perform and sing solos which help members get attention and feel good about themselves. 3. The choir gives the members opportunities to make contributions and feel productive when they help the leader do things such as collecting or passing out instruments and materials.
	Happiness:

	4. The choir members enjoy coming to the choir and feel happy when they are in the choir. 5. The choir members like the whole experience and indicate that there is not anything they do not like about the choir.
Social Inclusion	**Community integration/participation:** 6. The choir gives the members opportunities to socialize with other people. 7. The choir gives the members an opportunity to belong to a group in which they do things together. 8. The choir gives them opportunities to go to new places and meet new people in the community through music activities such as performances and going to concerts.
	Lifestyle: 9. The choir helps the members have a social life. 10. The choir brings the members the music world through recordings and live performances and a music life including singing, dancing, playing instruments, performance and so on.
Interpersonal Relations	**Friendships:** 11. The choir gives members an opportunity to meet new people and make friends. 12. The choir creates rapport between the choir leaders and members.

Self-determination	Personal control: 13. The choir gives the members an opportunity to make contributions by sharing, by helping other members, by helping the leader.
	Choices: 14. The choir gives the members opportunities to choose instruments, songs and music. 15. The choir gives opportunities to sing solos voluntarily.
	Decisions: 16. The choir gives the members a chance to bring in their own things such as CDs and presents to share with the group.
Personal Development	**Education** 17. The choir gives the members an opportunity to access live music. 18. The choir broadens the members' horizons by doing new things such as bringing in new instruments, doing public performances and going to concerts.
	Skills 19. The choir teaches the members new songs, new instruments and new activities which help them to improve cognitive skills. 20. The choir helps the members to improve their social skills.

Parents/Caregivers

Three parents and five caregivers participated in this study. Individual interviews were conducted with each of them.

Interview questions: Parents/Caregivers

Each of them was asked the following questions: 1. Has your child enjoyed attending the choir? If yes, how does he/she show the enjoyment? 2. What do you think your child likes about the choir? 3. How do you think the choir has helped your child? 4. How do you think the choir has helped their relationships and socializing with other? How about family relationships? 5. How do you think the choir has contributed to your child's quality of life? 6. How valuable do you think the following music activities have been for your child? (Appendix C)

In question #6, parents and caregivers were asked to give a score and also comments to evaluate each music activity. The activities include group singing, solo singing, playing instruments, dancing, appreciation (listening to music) and public performances. The scores ranged from "5"-extremely valuable, "4"-very valuable, "3"-somewhat valuable, "2"-not very valuable to "1"-not valuable at all.

Interview Results: Parents/Caregivers

For question #1 "Has your child enjoyed attending the choir? If yes, how does he/she show the enjoyment?" all eight parents and caregivers answered "yes". According to the parents, the choir members showed their enjoyment the following ways: asking questions about the time to go to the choir, reminding the parents/caregivers to go to the choir and interacting joyfully and friendly in the choir. All the parents and caregivers stated that they

had never heard the choir members complain about having to go to the choir. Instead they looked forward to going to the choir.

For question #2 “What do you think your child likes about our choir?” the answers included singing, playing instrument, seeing people, getting attention, being part of the group, dancing, parties and snacks. Among these, singing (five parents/caregivers), socializing with people (four parents/caregivers), and playing instrument (three parents/caregivers) were the top three aspects that the choir members like about the choir in parents/caregivers’ opinions. When asked about what the choir members like the most about the choir, three (37.5%) parents/caregivers chose singing, three (37.5%) parents/caregivers chose playing instruments, and two (25%) parents/caregivers chose socializing with people.

For question #3 “How do you think the choir has helped your child?” All the parents/caregivers indicated that the choir definitely contributed to the choir members’ socialization. The choir gave them an opportunity to be around people, interact with people and do things with the group. As a result, the choir helped their social skills. The comments included “They love going there to meet other members, the teachers, music therapy students and other people who spend time with them”, “They love to make friends there”, and “They all have disabilities and they are all there together. The choir makes them feel belong to a team”.

Parents/caregivers indicated that the choir helped improve the choir members’ mood and contributed to their happiness. All the parents/caregivers stated that the choir members were excited about going to the choir. They talked about the choir when they went back home after the choir. Furthermore, they could see the obvious difference between before and after the

choir when the choir members had a bad day. If a choir member was in a bad mood for some reason before going to the choir, he/she usually cheered up after the choir.

All the parents/caregivers indicated the activities helped the choir members' emotional well-being. Some activities such as singing solo and public performance gave the choir members opportunities to get attention from other people which improved their self-esteem.

The choir helped the members learn new things. The choir gave the members new experiences such as live music which was different from the music on their own CDs. The choir also taught them new songs and play instruments which helped their cognitive skills. Through new songs, the parents/caregivers reported seeing the learning process and improvement of choir members. The comments include "at the beginning of learning a new song, they did not know it at all. As they keep going, they knew the words when the choir leader starts singing the song. They can sing the words without looking at a piece of paper. The more they go, the more comfortable they get" and "They all do more and more".

The parents/caregivers also indicated that the choir brought out things, skills and talents of the choir members. The comments included "some choir members are great singers and the choir brings the talents out." "The choir gave them an opportunity to express themselves through music."

The choir helped the choir members feel safe. "The members went to the choir and they understood they would meet people they knew and had the music they like."

A parent whose child was at the severe profound level reported that her daughter started physical and brain development when she started to attend the choir three years ago. "She was 17 years old, but she looked like 5-6 years old physically and mentally. Now she looks

like 10 years old or older." But the parent did not know the real reason for the growth. "Maybe the music helped."

For question #4 "How do you think the choir has helped their relationships and socializing with others? How about family relationships?" all eight parents and caregivers stated the choir gives its members an opportunity to meet people and make friends, which improve their social skills. To family relationships, seven out of eight parents and caregivers indicated that the family relationship was not affected by the choir. The reason was that they were with the choir members together every day, they already had close relationships. It did not need the choir to help bond them together. One parent said if there was a worker who was not so familiar with the member, they might need something to bond, and the choir could help their relationship. The caregiver of six men in the choir who lived together at a group home reported that the choir activity brought all men closer. "Coming together as a choir can bring them together," "They talk about being friends to each other." However, the caregiver of six women in the choir who lived together at another group home reported there was no difference between the ladies' relationship because they already tend to get along very well.

For the question #5 "How do you think the choir has contributed to your child's quality of life?" all eight parents and caregivers stated that the choir really gave the members a sense of belonging to something positive. The comments included "They are like going out with the community", "The choir helps them feel normal and pretty like anybody else", and "The choir members say they are part of the choir and tell other people what type of things they do."

Three parents and caregivers indicated that without the choir, the quality of life for the

choir members would be diminished. “The choir was one wonderful program of community services which was different from other programs the choir members attended.”

Three caregivers stated the choir helped the choir members work toward their personal goals like going out to the community and hanging out with friends. “The choir gave them the opportunity to be independent when they were interacting with the group.” “The choir also helps them stand in front of people to sing.” “The choir gave them a chance to show the world what they could do instead of getting stuck in the house.”

All eight parents and caregivers stated the choir gave them the opportunity to learn new songs and new things. One parent reported one song, “Arustasha” that her daughter learned from the choir had become her favorite song. “The choir gave members new experiences and broadened choir members’ horizon by doing some things like bringing new instrument in and going to the concert.”

To question #6 “How valuable do you think the following music activities have been for your child?” six of parents/caregivers gave group singing“5” which was the highest score and meant extremely valuable. And the remaining two parents/caregivers gave group singing “4” which meant very valuable. The six parents/caregivers who gave group singing the score “5” indicated that group singing helped the members feel belonging to a team and doing things together made the choir members feel good inside. “The choir members really enjoy it”. The two parents/caregivers who gave the score “4” indicated similar opinions with other parents/caregivers except that they believed that new songs were picked up so often that some choir members were confused and had a hard time to follow. They suggested going over the same song enough times.

Seven parents/caregivers gave sing-solo “5” which was the highest score and meant extremely valuable and the rest (1 out of 8) gave solo singing “4” which meant very valuable. They all stated that the choir members had equal opportunities to have a solo that they wanted to have. They really liked it. And Choir members received attention from other people when they sang a solo which made them all feel good about themselves. One caregiver who gave a score of “4” said, sometimes, it was hard to push them to sing solo at the beginning, but once they started singing, you could not stop them.

Seven parents/caregivers gave playing instruments “5” which was the highest score and meant extremely valuable and one gave it “4” which meant very valuable. All the parents and caregivers indicated, in the playing instruments activity, that everyone had a chance to play an instrument. By learning how to play instruments such as hand bells, the parents/caregivers saw a learning process of the choir members occurring. Moreover, some new instruments such as Erhu, a Chinese traditional instrument, were introduced to the choir. The choir members were impressed and they loved it. The caregiver who gave it score “4” stated playing instruments together was hard for the choir members because playing in the group was not easy for any cognitive level.

In contrast, six parents/caregivers gave dancing “4” which meant very valuable and two gave it “5” which meant extremely valuable. Five parents and caregivers stated the dancing activity in the choir was less valuable because their children had been attending a dancing program in the community. In addition, two caregivers also believed that the choir was not about dancing but about singing. “Maybe the choir member could be taught to dance with a song even though the choir members did like the free style dancing.” One parent stated the

dance in the choir should have variety, as the music selected for dancing was general too slow. For the three parents/caregivers whose children did not attend the dancing program in the community, one of them stated that dancing activity in the choir had less value because the choir members could dance by themselves at home. The other two believed that dancing at choir was extremely valuable.

Four out of 8 parents/caregivers gave the activity of appreciation (listening) “5” which was the highest score and meant extremely valuable and 4 out of 8 gave it “4” which meant very valuable. The parents/caregivers stated the activity of appreciation gave the choir members a chance to bring their own CDs to share with the group. The music with motions such as “You are my all and all” became something really popular in the group. The music with a story such as “Peter and the Wolf” told them a story and helped them understand the music better. “They love it”. One caregiver stated it was not easy for the music of appreciation to meet all members’ taste because they all had their own favorite music style. “The music picked by the choir might not meet all members’ tastes.” Three parents and caregivers stated the choir should have the choir members listen to more different types of music such as classical, country and rock and roll music.

All parents and caregivers gave the activity of performance score “5”. They stated that the choir members were excited about it. In the performance, the choir member received attention and learned how to perform in front of people. The activity of performance gave the choir members “a chance to go to new places and meet new people”. “The members can show the people what they can do and everybody see how good they do”.

According to parents/caregivers’ interview transcription texts, 21 key statements were

identified. These key statements were summarized and grouped into five categories and ten subcategories in the following table (See Table Three).

Table Three Key Statements Shared by Parents and Caregivers

Units	Parents/Caregivers
Emotional well-being	**Self-concept:** 1. The choir gives the members opportunities to get attention from other people which make them feel good inside. **2.** The choir gives the members opportunities to show what they can do and how good they are, which improves the members' self-esteem and self confidence. **3.** The choir brings out the things, skills and talents of choir members. 4. The choir helps the members feel normal and like anybody else. 5. The choir gives the members an opportunity to express themselves through music.
	Happiness: 6. The choir contributes to the members' happiness because they enjoy coming to the choir. 7. The choir helps improve members' mood which is especially obvious when they have a bad day.
Social Inclusion	**Community integration/participation:** 8. The choir gives the members a sense that they belong to a team.

	9. The choir helps the members experience normal life.
	Lifestyle: 10. The choir helps its members have access to the music world and have music life.
Interpersonal Relations	**Friendships:** 11. The choir gives its members an opportunity to meet people and make friends. 12. The choir helps its members make friends and show friendships. 13. The choir has built rapport between the choir leaders and members.
Self-determination	**Personal control:** 14. The choir gives the members an opportunity to be independent by letting them interact with other people themselves.
	Choices: 15. The choir gives its members opportunities to choose instruments, songs and music.
	Decisions: 16. The choir gives the members a chance to bring their own things such as CDs and presents to share with the group.
Personal Development	**Education** 17. The choir gives the members new experiences and broadens

	their horizon by doing things like bringing new instrument in and going to concerts. 18. The choir gives the members an opportunity to access live music. 19. The choir helps the members to work toward their personal goals such as going out to the community and hanging out with friends.
	Skills: 20. The choir teaches the members new songs, new instruments and new activities which help them to improve cognitive skills. 21. The choir helps the members to improve their social skills.

Choir Leaders

There were two choir leaders since the beginning of the choirs in 2007, and both participated in interviews. One was the former choir leader, who led the choirs for two and half years from 2007 to August, 2009. The current choir leader has been leading the choir for one year. Both choir leaders are board-certified music therapists, MT-BC. Individual interviews were conducted with each choir leader.

Interview questions: Choir Leaders

The following questions were asked: 1. How do you think the choir has helped choir members? 2. How do you think the choir has contributed to the psychological well-being of choir members? 3. How do you think the choir has contributed to choir members'

relationships and socializing with others and with families? 4. How do you think the choir has contributed choir members' quality of life? (Appendix D)

Interview results: Choir Leaders

For question #1 "How do you think the choir has helped choir members?" the former choir leader stated that the choir helped people with special needs to have a rich community life. Although there were choir societies based on auditions and church based choirs, there were not choirs that were "music participation-based for people with special needs in the community". So these choirs for individuals with developmental disabilities gave the members opportunities to make music. Through the choir-related activities, the choir members involve more in the community.

The former choir leader also believed that the choir helped its members emotional-well being. She gave an example of a woman in one of the choirs who had a beautiful voice, and was shy at first when she sang a solo, but as time went on, "she would ask to sing a solo when we would have a church service or a special opportunity". She also stated that "the choir provides an opportunity to dance, to kind of show off their good moves, to be part of dynamic moving thing" which helped the choir members psychologically.

The current choir leader stated that the choir was a recreation social program. She mentioned five benefits that the choir members had received from the choirs. The first benefit was that the choir gave families and children with disabilities a chance to "be in a normal environment and experience normal living which is something they do not get to do". The second benefit was that through the choir, the members were able to socialize and interact on a social and fun level with other people. The third benefit was that the choir members "get to

the opportunity to come in, train and try things under supervision" from music therapists. She said this benefit "is invaluable in my opinion". The fourth benefit was that the choir members had a chance to "have positive fun, take risks, be silly, get to be just who they are without risk of being made fun of and risk being told they cannot do something". The fifth benefit was that the choir was the place to see the ability of the choir members without having to see the limitation of the choir members, which helped the members psychologically.

For question #2 "How do you think the choir has contributed to the psychological well-being of choir members?" the former choir leader answered that three psychological needs of all choir members and one more for the young adults in Sing for Joy choir, had been met. The first was "the choir members' psychological need to express their musicianship" had been met. The choir "has provided the opportunities for their artistic needs". The second psychological need was to learn new things. "The choir offers an opportunity to learn new songs, listen to new sounds of music, play instruments, sometimes freely and sometimes in certain prescribe rhythm. It challenges their cognitive system and then with success, their psychological need for mastery is partially met". The third psychological need of "going back freedom of childhood which is no worries, spontaneity" had been met. "Music activities give them a chance to be silly, to be joyful, to be creative, and to do things with partner". "Nobody is judging us". The choir was the place to celebrate, share and make prayer request for their families.

In addition to the three psychological needs stated above, the former choir leader believed the young adults' choir members (Sing for Joy) had the fourth psychological need met because of their age and their living situations. The members in the Sing for Joy choir

lived with their families while the members in the Heart and Soul choir lived in three group homes together. The fourth psychological need for the members in Sing for Joy was to feel productive. “With young adults, I think they need to know they are following the directions and making contributions by sharing, by helping the leader collecting things or passing out instruments/materials”. “They need to produce and to be a member of a team that has a job”. They need to “be praised and to feel confident” after “having done something correctly”.

The current choir leader stated that the choir did impact the choir members' psychological well being. First, the choir helped the choir members' psychological need of being normal. She believed that the choir members always emotionally doubted themselves. “They may ask themselves questions such as ‘am I different?’, ‘Do I fit in?’, ‘Where do I fit in?’, and ‘Who would accept me?’” The choir was “an unconditional place that you are accepted no matter what your abilities are.” “Limitations are not what are viewed, except abilities are what are viewed here.” “I think that make a big difference to their feelings.” Second, the choir was the place that the members felt safe and just be themselves. They were able to take risk of doing things that were meaningful to them and did not need to worry about the displacement and negative response. “This is the place they can do that if they are not 100 percent on tune, they are still celebrated rather than being corrected, rather than being displeased or being redirected”. Third, the choir had helped its members to improve self-esteem. The choir gave them opportunities to get attention and they were praised and encouraged when they were trying things or following directions correctly. Fourth, the choir was a place for its members to celebrate and share. The choir celebrated holidays, shared news and had parties at the end of each semester.

For question #3 “How do you think the choir has contributed to choir members’ relationships and socializing with others and with families?”, the former choir leader mentioned five benefits on socializing with others and benefits on family relationship. The first one was that the choir gave its members an opportunity to meet and interact with other members, parents, caregivers, choir leaders and college students.

The second benefit was that the choir members were given an opportunity to build and show their friendship through the music games they played. “The relationships they have created and nurtured through the choirs have built deep and lasting and true friendships”. They knew each other’s favorite songs and “they take pride in each other’s accomplishment”. She gave one example. If the choir members did a music game with a ball, they remembered and reminded the choir leader to make sure each person had a turn.

The third benefit was that the choir gave its members an opportunity to get attention from other people and relish the attention by doing music activities such as singing solos.

The fourth benefit was that the choir showed a way to bond the choir members with their parents and siblings during music activities. The leader gave two instances. One instance concerned a shy female choir member who was in the wheelchair and had a beautiful voice. When she had a chance to sing a solo, she wanted her mom to know and asked the caregiver to tell her mom when her mom did not come to the choir that day. The other instance was about a pair of twins in one of the choirs. They knew each other’s favorites of songs, things or instruments. For example, “If one has the opportunity to hand out instruments, she goes straight to her sister and she gives her first choice or her favorite instrument”. “This connection with her sister is especially close”.

The fifth benefit was that the choir has become a valued part of family weekly life for the ones who lived at home. The choir members need to have some family activities involving sport or church or their cultural heritage. They needed family time together. The music was part of them.

In addition to the benefits above, the former leader stated that “The Heart and Soul Choir is a very established group with their own dynamics” because they lived together in two group homes and did things together. In the choir, it showed the relationships and things built in house.

The current choir leader mentioned three benefits on socializing with others and benefits on family relationship. The first benefit was that the choir helped its members having a group to belong to and building socialization and network for themselves and their families. This was “a big contribution on relationships”. The current choir leader indicated that the members in both groups were participating in the same activities in the community and doing things together. “They are all networked together”. “They knew each other, saw each other, socialized and incorporated things together”. “When they came to the music class, they also were celebrating what they did in their athletic event or they were celebrating what they did in the dance or last holiday social they had together. When they went to athletic event, they were talking about they were going to have singing thing coming up and getting good wishes”.

Second benefit was that they built and showed friendships through the choir and the network. If someone was absent, people would ask why, or they came back and remembered where you were. “That, to me, shows value that they have each other’s attendance or they

have each other's socialization together". "I really think this just is an intangible benefit that we have".

Third benefit was that the choir could help family relationships if parents participated in the choir with their children. For the ones whose parents participated in the choir, the choir gave a way for the parents and their children to interact with and encourage each other. The choir leader heard conversations directly between parents and their children in certain ways. For example, one parent said to a child "you had this idea yesterday. Can you remember and tell them the same thing today?" "You were singing this song all week long. Now I get to hear the real words to it". Or "share the song with them that we have been doing it all week together". The choir also helped the parents be proud of their children. In the choir, "the parents they get to enjoy the ability of their children that aspect without having to see the limitation of their children". "When their children were performing in the public, the parents get to invite their friends, their families and their co-workers to see their children doing something".

For question #4 "How do you think the choir has contributed choir members' quality of life?" the former choir leader answered with six contributions. The first contribution was that the choir enhanced to the choir members' happiness. Choir members enjoyed coming to the choir very much. "From staff, parents and care givers' comments, most the choir members look forward to choir on weekly bases". They also were very warm, friendly and expressive which meant they were satisfied with being in the choir". "We never met first week of the month. They could hardly to wait two weeks to pass so that they could come to choir". "They always arrived early and they would come bounding in and get the chair set up". "Those

behaviors showed me that they were invested in the group". "They also were very warm, friendly and expressive".

The second contribution was that the choir involved the members in a group dynamic. "We nurture that by making each person calling by name, warm approach, greeted each person when they came in. People would know they belonged and we were so happy to see them. I think that group dynamic was important part of their quality of life. They felt valued".

The third contribution was that the choir helped the members to see new things, learn new music, songs, and instruments by exposing them to the music world. "I think the care givers would say this is going to add up to something because they might never have played maraca or rhythm sticks with group before. But like all people, the next time when they are given that instrument or have that song, it would be part of them. They will be able to response at a higher level".

The fourth contribution was that the choir provided a challenge for its members. She gave the following example. "In the poetry thing and learning new lyrics, they always surprised me by willing to read, by willing to point the words even the academic skills were slightly above their level". "They want to do it. They were invested in trying. They like the challenge. So I think that makes good quality of life".

The fifth contribution was that the choir helped its members to have a structured life. "I think this music can become such valued part of their weekly life".

The sixth contribution was that the choir helped the member look back with happy memories.

The current choir leader offered three contributions of choir members' quality of life.

The first one was that the choir gave the members an opportunity to have routine activities. “They schedule around it”. “We hear things about ‘we are going to go out to eat after we do this’. Or ‘we are going to plan to do this next week because we do not this event’”. So “the choir is a value event in their lives”. “It is part of their schedule rather than just extra”.

The second contribution was that the choir helped them to feel they were equal members of the society. “When they go to church, they hear people talk about their activities. When they go to their jobs or when they walk in their school, they hear people talk about the activities they go to. The choir gives them a chance to say ‘I have one’ too.

The third contribution was that the choir helped the members to have a safe place to go. “Having a quality of safe place to go is part of the quality of living”.

According to the choir leaders’ interview transcription text, key statements shared by the choir leaders were identified and quoted. They were grouped into five categories and twelve subcategories in the following table (See Table Four).

Table four Key Statements Shared by Choir Leaders

Categories	Former choir leader	Current choir leader
Emotional well-being	**Safety:** 1. The choir has met the need of “giving back freedom of childhood which is no worries, spontaneity”. 2. The choir is the place “to be silly, to be joyful, to be	**Safety:** 1. The choir gives the members a safe place to go where the members can be themselves and do not have to worry about the displacement and negative response.

	creative, and to do things with partner". 3. The choir is the place to celebrate, to share and to make request. **Self-concept:** 4. The choir has met "the psychological need to feel productive, to know they are following the directions and making contributions by sharing, by helping the leader collecting things or passing out instruments and materials". 5. The choir has met the psychological needs to feel confident coming from having done something correctly and being praised. 6. Music activities provide an opportunity to show off	2. The choir is an unconditional place that members are accepted no matter what your abilities are. "Limitations are not what are viewed, except abilities are what are viewed there". 3. "The choir members get a chance to have positive fun to take risk, be silly, and get to be just who they are". 4. The choir is the place to celebrate and share. **Self-concept:** 5. The choir has met the choir members' psychological need to be normal. "They get an opportunity to do what other people do every day". 6. The choir has helped them to improve self-esteem. They get attention and they are praised

	themselves by doing the music activities such as singing or playing solos and performing in the public which improve their self-esteem. 7. The choir has group dynamic which was important part of their quality of life. 8. The choir has met "their artistic need to express their musicianship". 9. The choir has "partially met the psychological needs for mastery" when the choir members do music activities challenging their cognitive system. **Happiness:** 10. Choir members enjoy coming to the choir very	and encouraged when they try things in the choir. **Happiness:** 8. Choir members enjoy coming to the choir every week which shows from their faces and the way they interact with the choir leader and people.

	much. 11. They look back with happy memories.	
Social Inclusion	**Community integration/participation:** 12. The choir gives them an opportunity to belong to a group with dynamic. 13. The choir helps the members to meet and socialize with other people. 14. The choir helps choir members having a rich community life. **Lifestyle:** 15. The choir helps the members to have a structured life. “This music became such valued part of their weekly life”. 16. The choir offer opportunities to the music	**Community integration/participation** 9. The choir gives the members an opportunity to belong to the group. 10. The choir gives its members and families a chance to be in a normal environment, experience normal living. **Lifestyle:** 11. The choir gives them an opportunity to have routine activities. 12. The choir helps the members to have a music life.

	world such as singing, dancing, playing instruments, performance.	
Interpersonal Relations	**Friendships:** 13. The choir gives its members an opportunity to socialize with other people. 14. "The relationships they have created and nurtured through the choirs have built deep and lasting and true friendships". 15. Choir members are given an opportunity to show their friendship through the music games they played. **Family:** 16. The choir shows a way to bond the choir members with their parents and siblings during music activities.	**Friendships:** 13. The choir has helped to create and show their friendship. 14. The choir gives its members an opportunity to socialize with other people. **Family:** 12. The choir can help family relationships if parents participated in the choir with their children. 13. For the ones whose parents participated in the choir, the choir gives a way for the parent and their children to interact with and encourage each other. 14. For the ones whose parents participated in the choir, the

	17. The choir has become a valued part of family weekly life for the ones who live at home.	choir also helps the parents to be proud of their children.
Self-determination	**Personal control:** 18. The choir gives them opportunities to “make contributions by sharing, by helping the leader collecting things or passing out instruments/materials”. 19. “They were invested in trying things. They like the challenge.” **Choice:** 20. The choir gives its members opportunities to choose instruments, songs and partners. 21. The choir gives the members opportunity to sing solos voluntarily.	**Personal control:** 15. They are given chances to be leaders in singing, dancing and playing instruments. 16. The choir gives its members opportunities to help choir leaders to pass collect instruments/materials. **Choice:** 17. The choir gives them opportunities to choose. The opening song is an activity choosing instruments. 18. The choir gives the members opportunity to sing solos voluntarily.

	Decision: 22. The choir gives its members opportunities to try things and meet challenges.	
Personal Development	**Education:** 23. Music activities may challenge the choir members' cognitive system. **Skills:** 24. The choir teaches the members new songs, new instruments and new activities which help them to improve cognitive skills. 25. The choir helps the choir members to improve their social skills.	**Education:** 19. "Choir member have a chance to come in, train and try things under professional supervision and get help from music therapists". **Skills:** 20. The choir teaches the members new songs, new instruments and new activities which help them improve cognitive skills. 21. The choir helps the members improve their social skills.

Program Supervisor

The program supervisor was the City of Greenville Recreation and Parks Director of Special population.

Interview Questions: Program Supervisor

The following questions were asked: 1. How did the idea of organizing the choirs come up? 2. Do you think the choir members have enjoyed attending the choir? If yes, how can you

tell the enjoyment? 3. How do you think the choir has helped choir members? 4. How do you think the choir has contributed to choir members' relationships and socializing with others? 5. How do you think the choir has contributed choir members' quality of life? (Appendix E)

Interview Results: Program Supervisor

For question #1 "How did the idea of organizing the choirs come up?" the supervisor stated that the choir was a unique program because, in the community, people with special needs had sport programs and Aktion club, which is a Kiwanis-affiliated community service organization for adults with developmental disabilities. Some school-age participants had access to music therapy in schools but there was no music program for special needs population in the community. With the suggestion and help of a music therapist, the program was started in 2007.

For question #2 "Do you think the choir members have enjoyed attending the choir? If yes, how can you tell the enjoyment?" the supervisor answered "yes". She said she could tell by the way the choir members did things, shared things, helped choir leaders and other members and interacted with other people. She also mentioned that the members must enjoy coming to the choir. If not, they would not come.

For question #3 "How do you think the choir has helped choir members?" the supervisor believed that the choir helped the choir members' self-expression. The choir was a media form for the choir members to express themselves through music.

The choir also helped the members with their self confidence and self esteem. Some of them were very shy and quiet. People would think they would never stand up to participate in the activities. But gradually, with time, they opened themselves up and they started to show self confidence by doing things, following the directions correctly and being praised by the leaders, members and other people.

The choir helped the choir members improve their self-esteem by giving the members

opportunities to show off themselves in contexts such as performances, solo singing and answering questions. Some members were talented singers. When they were singing a solo, you could see they feel good inside.

The choir helped the members' socialization. The choir gave the members opportunities to meet other members in their ages and their levels and interact with other people in different ages, which made them feel belong to a group.

The choir gave the choir members a relaxed environment where nobody was judging them and they did not need to worry about how people would think about them. The choir had its structure, yet it did not push the members but rather encourage them to do themselves. They could freely express themselves instead of being directed how. They could do thing based on their interests.

The choir members could not only enjoy music but also learn new songs, instruments and other new things in the choir, which helped their cognitive skills. "You can see how much they have been growing since the choir started". The choir performances helped the members as much as any typical performer. The choir members stood in front of people, which helped them to gain confidence. Just standing there and singing whatever they have in front of a crowd was a huge accomplishment.

The choir helped the members to improve the members' mood and release their stress. They might have a bad day or have a bad time during the work, and then they came to the choir. They might play the drum or they could sing as loud as they want to let the bad mood come out. They might not play or sing in the tune but this was just a way for them to release their stress and problems they were going through emotionally. The music helped them calm down.

Two members could relate and talk to each other because of they go to the same choir. The choir helped the members feel being normal.

The choir helped the members have a structured life by meeting every week and having a prepared schedule for the whole semester.

For question #4 “How do you think the choir has contributed to choir members’ relationships and socializing with others?” the supervisor stated that the choir was a place for the members to socialize. The choir members did not see each other at regular basis, but they met in the choir every week. They met each other. They also met choir leaders, college students and other people’s family members. They talked to each other about how their days had been going, helped each other and built friendships through the choir. According to the supervisor, the choir also helped family relationships. In the choir, the parents had opportunities to see their children do things that they might not be willing to do or they never did at home. They could see their children interact with people and they could see their children really enjoy the choir. All of these might make them start to think of a family plan such as involving the community programs more or going to a concert together.

For question #5 “How do you think the choir has contributed to choir members’ quality of life?” the supervisor stated that the choir really helped the members out all around to have a good life. Besides the social benefits and emotional benefits above, she emphasized that the choir gave the members a rich community life. By performances, the choir put the members in the community. When they went out to the community such as churches and other places, they made the community realize that they liked the same things as any other people did and they could do so many things. By doing these performances and things, we could see how much the choir members had been changing and growing. On the other hand, more people in the community could benefit from what the choir did. For example, one person in the community might watch the performance. He/she might go back to tell his/her cousin and his/her cousin might have a friend whose child had a special need. They might start to ask how to get involved. This helped their improvements as well because they could see the

performance in the community.

Nineteen key statements by the program supervisor have emerged. They were grouped into the four categories and nine subcategories as the following table (See Table five).

Table five Key Statements Shared by Program Supervisor

Categories	**Program supervisor**
Emotional well-being	**Safety:** 1. The choir gives the members a relaxed environment where nobody is judging them and they do not need to worry about how people would think about them.
	Self-concept: **2.** The choir gives its members an opportunity to access various music activities which bring out the interests, skills and talents that the choir members already have. 3. The choir, a media form, helps the choir members' self-expression through music. 4. The choir helps the choir members improve their self-esteem by giving them opportunities to perform, which helps them get attention and feel good about themselves. 5. The choir helps the members to feel being normal. For example, in the public, two members can relate and talk to each other because they go to the same choir.

	Happiness: 6. The choir members enjoy coming to the choir and feel happy when they are in the choir. 7. The choir helps the members improve the members' moods and release their stress.
Social Inclusion	**Community integration/participation:** 8. The choir gives them opportunities to socialize with other people. 9. The choir gives them an opportunity to belong to a group in which they do things together. 10. The choir gives the members a rich community life. The choir put the choir members in the community through music activities such as performances.
	Lifestyle: 11. The choir helps the members have a social life. 12. The choir brings the members to go in the music world and have a music life. 13. The choir helps the members have a structured life by meeting every week and having a prepared schedule for the whole semester.

Interpersonal Relations	**Friendships:** 14. The choir gives them an opportunity to meet people and make friends. **Family:** 15. The choir has helped family relationship. They may come out a family plan with ideas from the choir.
Personal Development	**Education** 15. The choir gives the members an opportunity to access live music such as going to the concert. 16. The choir gives the choir members new experiences and broadens their horizon by doing new things such as bringing new instrument in, doing public performances.
	Skills 17. The choir teaches the members new songs, new instruments and new activities which help them improve cognitive skills. 18. The choir helps the choir members improve their social skills.

Global Themes

Table six contains 30 global themes shared by part or all subgroups by comparing, contrasting and analyzing the key statements of the four subgroups (See Table six).

Table six Global Themes Shared by Part or All the Four Subject Groups

Categories	Subjects
Emotional well-being	**Safety:** 1. The choir gives its members a safe place where there is spontaneity and no worries. The members can be silly, be joyful, be creative, take a risk, celebrate, share and make request (shared by choir leaders and supervisor).
	Self-concept: 2. The choir helps its members with their self-confidence and self-esteem by letting them know they are following right directions, having done things correctly and therefore being praised and encouraged, or giving them opportunities to get attention from other people and show off themselves (shared by all subgroups). 3. The choir helps the members feel being normal by doing things that other people do every day (shared by parents/caregivers, one choir leader and program supervisor). 4. The choir gives the members opportunities to access various music activities which bring out the interests, skills and talents that the choir members already have (shared by choir members, parents/caregivers).

	5. The choir gives the members a way to express themselves through music (shared by parents/caregivers, one choir leader and program supervisor). 6. The choir has given the members opportunities to feel productive and make contributions by suggesting music, by sharing and by helping the leader collect things or passing out instruments and materials (one choir leader and choir members).
	Happiness: 7. The choir has helped its members' happiness. They enjoy coming to the choir very much. They were very warm and expressive and interact with people friendly (shared by all subgroups). 8. The choir helps the members improve the members' moods and release their stress which is especially obvious when they have a bad day (shared by parents/caregivers and supervisor). 9. They look back with happy memory (shared by one choir leader).
Social Inclusion	**Community integration/participation:** 10. The choir gives the members a rich community life which helps them access to the music resources in the community and access the community through music activities such as

	performances (shared by one choir leader and supervisor). 11. The choir gives them an opportunity to belong to the group with dynamic and have network (shared by all four subgroups). 12. The choir gives the members opportunities to go out to be in a normal environment and experience normal life by going to new places, meeting new people instead of getting stuck in the house (shared by one choir leader and parents/caregivers).
	Lifestyle: 13. The choir helps the members have a social life (shared by all subgroups). 14. The choir brings the members to the music world and have access to a music life by singing, dancing, playing instruments, performance and so on (shared by all the subgroups). 15. The choir meeting weekly helps the members have a routine activity and a structured life (shared by choir leaders and supervisor).
Interpersonal Relations	**Friendships:** 16. The choir gives the members opportunities to meet and socialize with other people (shared by all subgroups). 17. The choir gives the members opportunities to create and

	show the friendship (shared by all subgroups). 18. The choir shows rapport between the choir leaders and members (shared by parents/caregivers and members).
Self-determination	**Personal control:** 19. The choir gives the members an opportunity to make contributions by sharing, by helping other members, by helping the leader doing things (shared by choir leader and choir members). 20. The choir gives the members an opportunity to independently interact with other people (shared by parents/caregivers).
	Choices: 21. The choir gives the members opportunities to choose instruments, songs and music (shared by choir members, parents/caregivers and choir leaders). 22. The choir gives the opportunities to sing solos voluntarily (shared by choir leaders and members).
	Decisions: 23. The choir gives the members a chance to bring in their own things and presents to share with the group (shared by parents/caregivers and members).

Personal Development	**Education:** 24. Choir member have a chance to come in, train and try things under professional supervision and get help from music therapists (shared by one leader). 25. The choir provides opportunities to learn new things such as new songs and new instruments which may challenge their cognitive system and their creativity (shared by all subgroups). 26. The choir gives the members new experiences and broadens their horizon by doing some things like bringing new instrument in and going to the concert (shared by parents/caregivers and members). 27. The choir helps the members to work toward their personal goals like going out to the community, hanging out with friends (shared by parents/caregivers). 28. The choir gives the members an opportunity to access live music (shared by members, parents/caregivers and supervisor).
	Skills 29. The choir teaches the members new songs, new instruments and new activities which help them to improve cognitive skills (shared by all subgroups).

	30. The choir helps the members improve their social skills (shared by parents/caregivers, choir leaders and supervisor).

Chapter 5

Discussion

The purpose of this qualitative study was to gain a richer understanding of the effect of community-based group music therapy on quality of life for individuals with developmental disabilities through the insights of four sub-groups in two community-based group music therapy choirs: choir members (people with developmental disabilities), parents/care givers, choir leaders (music therapists) and the program supervisor. The study provided valuable feedback concerning how satisfied persons with developmental disabilities were with the group music therapy services that they had received, what the choir members had benefited from participating in the community-based group music therapy choirs, and how the benefits were related to the choir members' quality of life.

Different music therapy activities were evaluated by the four subgroups. Thirty global themes were identified and described shared by part or all of the participants with two interesting differences. Compared with other music activities such as singing and playing instruments, a lesser interest of the choir members and a less valuation of parents/caregivers on "dancing" were unexpected. Different opinions of the choir leader, supervisor and parents/caregivers about the effect of community-based group music therapy on the family relationships were observed. The global themes, the activity "dancing" and different opinions related to the family relationship will be discussed.

Global themes

There were 30 global themes identified, which are the positive results of the study. They were grouped into categories, and assigned 5 titles and 11 subtitles that capture its essence

and meaning of the units. Five titles include “emotional well-being,” “social inclusion,” “interpersonal relations,” “self-determination,” and “personal development.” Eleven subtitles include “safety,” “self-concept,” “happiness,” “community integration/participation,” “lifestyle,” “friendships,” “family relationships,” “personal control,” “choices,” “education,” and “skills.”

These 30 global themes were shared by part or all of the participants. For example, the theme that “the choir has helped its members’ happiness” was shared by all subgroups. While the theme that “the choir helps the choir members to work toward their personal goals like going out to the community, hanging out with friends” was shared by only one subgroup (parents/caregivers).

Although the subjects agree with each other on most measures of the effect of community-based group music therapy on the quality of life of the choir members, a lesser interest of the choir members and a lower valuation of parents/caregivers on the activity “dancing” and different opinions about the effect of group music therapy on the family relationship were unexpected.

Dancing

Compared to other music activities such as singing and playing instruments, the choir members showed lower interest in “dancing”. Although 2 out of 18 choir members spontaneously said that they liked dancing, none of the choir members chose “dancing” as the aspect most liked about the choir. Six out of 18 members stated that dancing was ok, but they liked playing instruments and singing more. Furthermore, one of them said the current music for dancing in the choir was too slow. The other 10 members answered “yes” when they were

asked if they liked the dancing activity.

Compared to other music activities such as singing and playing instruments, parents and caregivers gave a less valuation on “dancing”. Six out of eight parents/caregivers gave dancing score “4” which meant very valuable and two out of eight give it score “5” which meant extremely valuable. These were less valuation compared to the scores for other activities such as singing, six out of eight parents/caregivers gave “5” and playing instruments, seven out of eight parents/caregivers gave “5”. The reasons included that their children were attending a dancing program in the community, that choir was not about dancing but more singing and playing instruments, that dancing should have variety or that the choir members could dance themselves at home.

Family relationships

For the effect of community-based group music therapy on family relationships, choir leaders, the program supervisor and parents/caregiver had different perspectives. Both choir leaders and the program supervisor believed that the choir provided a way for parents and children to interact with each other and helped family relationships. However, all the eight parents/caregivers stated that family relationships were not affected by the choir. The reason was that choir members were with the choir members everyday and they already had close relationships. There was no impact on family’s relationships because members went to the choir together.

Conclusion

This study showed that there is a significant positive effect of community-based group music therapy on the quality of life for individuals with developmental disabilities.

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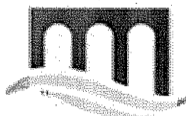
APPENDIX A: INSTITUTIONAL REVIEW BOARD FORM

(INFORMED CONSENT DOCUMENT)



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
1L-09 Brody Medical Sciences Building• 600 Moye Boulevard • Greenville, NC 27834
Office **252-744-2914** • Fax **252-744-2284** • **www.ecu.edu/irb**

TO: Rongzhi Li, 1112 E-10th Street, Apr 1F, Greenville. NC, 27858

FROM: UMCIRB

DATE: April 20, 2010

RE: Expedited Category Research Study

TITLE: "The Effect of Group Music Therapy on Quality of Life for Individuals with Developmental Disabilities"

UMCIRB #10-0210

This research study has undergone review and approval using expedited review on 4.14.10. This research study is eligible for review under an expedited category number 6 & 7. The Chairperson (or designee) deemed this **unfunded** study **no more than minimal risk** requiring a continuing review in **12 months**. Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The investigator must adhere to all reporting requirements for this study.

The above referenced research study has been given approval for the period of **4.14.10** to **4.13.11**. The approval includes the following items:

- Internal Processing Form (received 4.14.10)
- Appendix A: Interview Questions—Parents & Caregivers
- Appendix B: Interview Questions—Choir Members
- Consent Form/Parental Permission Form (received 4.20.10)
- Minor Assent (received 4.20.10)

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

The UMCIRB applies 45 CFR 46, Subparts A-D, to all research reviewed by the UMCIRB regardless of the funding source. 21 CFR 50 and 21 CFR 56 are applied to all research studies under the Food and Drug Administration regulation. The UMCIRB follows applicable International Conference on Harmonisation Good Clinical Practice guidelines.

Consent Form/Paternal Permission Form

1. The purpose of this study is to gain a richer understanding the effect of group music therapy on quality of life for individuals with developmental disabilities through different insights.
2. All information in this study will be used only for the thesis study and not for any other study. It will not be publicly distributed.
3. You can select the most comfortable interview location-- Teen Center, your home, or local meeting places for your interview setting.
4. No risks or discomforts are anticipated during the present project as it is an interview process.
5. Interview session will last about 30 minutes.
6. Your interview will be voice-taped and subsequently transcribed.
7. The transcription of your interview will be given to you in order to check the accuracy of the transcription.
8. The information will be stored in a secure place and will be only available to the investigator.
9. Participation in this study is entirely voluntary. You have the right to quit the study anytime.

If you agree to participate in the study, please sign your name.

Thank you very much for your participation!

Signature:_______________

Date: _______________

UMCIRB
APPROVED
FROM 4·14·10
TO 4·13·11

APPENDIX B

SING FOR JOY CHOIR & MIRACLE CHOIR

INTERVIEW QUESTIONS - Choir Members

The member will answer the questions with help from his/her parent, caregiver or the researcher.

1. Do you enjoy coming to the choir on Thursday/Tuesday nights?
2. Do you want to keep coming to the choir next semester?
3. How do you feel when you come to the choir? Happy? Bored (yes/no for each)
4. What do you like about the choir?
5. Do you like the performances that we did in the churches and in the community?
6. Did you enjoy the Christmas caroling?
7. Do you like the people in the choir? Tell me names of people in the choir that you remember?

APPENDIX C

SING FOR JOY CHOIR & MIRACLE CHOIR

INTERVIEW QUESTIONS– Parents and Caregivers

1. Has your child enjoyed attending the choir? If yes, how does he/she show the enjoyment?

2. What do you think your child likes about the choir?

3. How do you think the choir has helped your child?

4. How do you think the choir has helped their relationships and socializing with other? How about family relationships?

5. How do you think the choir has contributed to your child's quality of life?

6. How valuable do you think the following music activities have been for your child?

5 Extremely valuable; 4 Very valuable; 3 Somewhat valuable; 2 Not very valuable; 1 not valuable at all

______1). Singing-group

Comments:____

____

______2). Singing-solo

Comments:____

____

______3). Playing instruments

Comments:____

____

______4). Dancing

Comments:____

____

______5). Appreciation (Listening to music)

Comments:____

____

_____6). Public performances

Comments:____

____

APPENDIX D

SING FOR JOY CHOIR & MIRACLE CHOIR

INTERVIEW QUESTIONS– Choir Leaders

1. How do you think the choir has helped choir members?
2. How do you think the choir has contributed to the psychological well-being of choir members?
3. How do you think the choir has contributed to choir members' relationships and socializing with others and with families?
4. How do you think the choir has contributed choir members' quality of life?

APPENDIX E

SING FOR JOY CHOIR & MIRACLE CHOIR

INTERVIEW QUESTIONS– Program Supervisor

1. How did the idea of organizing the choirs come up?

2. Do you think has the choir members enjoyed attending the choir? If yes, how can you tell the enjoyment?

3. How do you think the choir has helped choir members?

4. How do you think the choir has contributed to choir members' relationships and socializing with others?

5. How do you think the choir has contributed choir members' quality of life?