THE EFFECT OF BILINGUAL MUSIC THERAPY ON THE EXPRESSIVE LANGUAGE OF SPANISH SPEAKING CHILDREN WHO ARE LEARNING ENGLISH IN EARLY CHILDHOOD CLASSROOMS

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To the Dean of the Graduate School:

I am submitting herewith a thesis written by Christina Dyan Stock entitled "The Effect of Bilingual Music Therapy on the Expressive Language of Spanish Speaking Children Who Are Learning English in Early Childhood Classrooms." I have examined this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts in Music with an emphasis in Music Therapy.

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ABSTRACT

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The purpose of this study was to determine the effect of bilingual music therapy on expressive language output in special needs children learning English in early childhood classrooms. Eleven English language learners participated in either an English-only control group or a Bilingual experimental group. In the English-only group, the researcher utilized Western songs, and spoke and sang only in English. In the Bilingual group, the researcher sang traditional Latin American folk songs in Spanish and English, and communicated with the students bilingually. Pretest and posttest data were analyzed on the *Woodcock-Muñoz Language Survey-Revised* (WMLS-R) and the school district's *Pre-Kindergarten Assessment Chart* (PKAC) to determine gains in expressive communication within each group and differences between control and experimental groups. While improvement was noted on the WMLS-R, t tests showed it was not statistically significant. PKAC scores were analyzed graphically. Students' PKAC data revealed improvement in expressive language bilingually, with the Bilingual group experiencing greater improvement.

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CHAPTER I

INTRODUCTION

The need for multicultural research and practice in music therapy is evidenced by the growing minority population in America. In 2007, the nation's minority population exceeded 100 million, meaning that one in three United States residents is a member of a minority group. The largest minority group was Hispanic, which was also noted as the fastest-growing minority group, with a 3.4 percent increase between 2005 and 2006. Texas was listed as one of four states including the District of Columbia that are "majority-minority" with a minority population of 52 percent (U.S. Bureau of the Census, 2007). It is estimated that 19.5 percent of Americans speak a language other than English at home, and 12.5 percent speak Spanish or a creole of Spanish (U.S. Bureau of the Census, 2006). Additionally, one third of the Hispanic population in 2007 was younger than 18, meaning that a significant minority population exists in American public schools (U.S. Bureau of the Census, 2007). American English Language Learners (ELLs) encounter many challenges in the educational setting where they are charged with the emotional tasks of assimilating into an unfamiliar culture and mastering a language while concurrently meeting educational goals (Schunk, 1999).

It is no longer enough for a music therapist to be well versed in functional musical skills on the piano, percussion, guitar, and autoharp. Because American music therapists will certainly work with clients from diverse backgrounds, they must also be familiar

with the cultures and languages of their clients (Moreno, 1988). An awareness for culturally sensitive or multicultural music therapy is emerging, and it is not surprising that this has been the topic of many current articles in the *Journal of Music Therapy* and *Music Therapy Perspectives.* In addition, multicultural music therapy was one of the educational tracks in the 2008 American Music Therapy Association's national conference schedule (American Music Therapy Association, 2008).

Because of its proximity to Mexico, the number of English Language Learners in Texas has expanded greatly over recent years and will continue to grow. In 2005, 35.5 percent of the population in Texas was Hispanic, compared to 14.5 percent nationwide (U.S. Bureau of the Census, 2005). Of the nearly eight million Hispanic residents of Texas over the age of five, nearly 34 percent spoke a language other than English at home, 29 percent spoke Spanish at home, and 14.8 percent reported that they spoke Spanish less than "very well" (U.S. Bureau of the Census, 2007). Between 1995 and 2005 in Texas, a 34% increase occurred in Limited English Proficient (LEP) student enrollment, compared with an overall student enrollment of 13.6 percent (United States Department of Education, 2006).

The American Music Therapy Association (AMTA) *Standards of Clinical Practice* defines *Spiritual and Cultural Background* as "an interrelationship among a client's musical experiences, personal belief system, and cultural background, which may be influenced by the client's geographical origin, *language*, religion, family experiences, and other environmental factors (emphasis added). The *Standards* further assert that "music therapy assessment methods will be appropriate for the client's...cultural

background" (2005, para 2.2) In Texas, a knowledge and understanding of Hispanic culture and the Spanish language would undoubtedly be beneficial for music therapists and may influence the relationship and quality of services received by clients. First, understanding of the client's language and culture will result in deeper rapport (Darrow, 1998; Groene, 2003; Moreno, 1988). In addition, music therapists will benefit from learning cultural musical idioms because the therapist can then provide opportunities for novel music therapy experiences and approaches to music making (Moreno, 1988). Finally, given the diverse populations with which a music therapist will work, a bilingual music therapist will be an invaluable asset to any work environment (Silverman, 2005).

CHAPTER II

LITERATURE REVIEW

Many issues surround bilingual learning in Texas. This section will cover concepts from second language learning theory and practice, the use of music in second language settings, and neurological factors of second language learning including the critical period hypothesis. Music therapy's role in early childhood education, support of multicultural music therapy within the music therapy research community, multicultural music therapy in a music therapist's education, and music therapy research already conducted in ESL classrooms will also be discussed.

Second Language Learning Theory

Underlying questions abound regarding the outcomes of bilingual development and the psychological, social, and educational benefits of exposure to multiple languages at different ages. The term "balanced bilinguals" describes individuals with nearly equal levels of competence in two languages who have cognitive and sociolinguistic advantages over monolinguals. However, in the United States, a trend exists toward "subtractive bilingualism," where an individual learns a second language in an environment that does not value the first with the eventual loss of the native language (Winsler, 1999).

Stephen Krashen developed five hypotheses about second language acquisition that remain the basis for ESL and bilingual teaching methodology. For the purpose of the

present study, the acquisition-learning distinction and Affective Filter hypothesis will be discussed. Krashen distinguishes between the learning and acquisition of a language. Second language learning refers to a conscious process that involves a student studying rules and vocabulary through drills and memorization. A language is learned for the sake of knowledge. In contrast, second language acquisition is a subconscious process that occurs as students use the language for a variety of purposes. For example, acquisition occurs when someone travels to a foreign country and picks up the language as he or she goes about activities of daily living (Freeman, 2004). A language is acquired for the sake of functioning in real world situations. It is reasonable to suggest that when working with Spanish speaking special needs students, there should be a focus on acquisition rather than learning so the students can access the rest of their education in areas other than language, such as math and science.

Krashen's (1983) Affective Filter hypothesis relates directly to the use of music therapy in second language learning. A variety of affective variables relate to the success in second language acquisition, and can be placed in the following categories:

1. Motivation. Performers with high motivation generally do better in second language acquisition.
2. Self-confidence. Performers with self-confidence and a good self-image tend to do better in second language acquisition
3. Anxiety. Low anxiety appears to be conducive to second language acquisition, whether measured as personal or classroom anxiety (Krashen, 1983, p. 31)

Music and Language in the Brain

Because music and language share functional cortical areas, music can be used to enhance language learning. Preliminary studies have demonstrated a possible relationship between proficiency in a second language and musical ability. Wong et. al. (2007) found evidence that musical training sharpens the subcortical sensory encoding on linguistic pitch patterns, which indicates that sound categorization skills in both language and music may have the ability to enhance each other.

As an individual's brain develops, certain functions are assigned or "lateralized" to the right and left hemispheres of the brain (Freeman, 2004). For example, with regard to communication, the areas responsible for understanding language and speech production are found in the left hemisphere. Spoken language comprehension takes place in Wernicke's area, which is located in the left parietotemporal cortex. Instructions for language output occur in Broca's area, located in the left frontal lobe. Language is not restricted to the left hemisphere, however. The contralateral area that corresponds to Wernicke's area interprets the nonverbal signals from others during communication. Similarly, the right-hemisphere homolog to Broca's area provides instructions for nonverbal communcation production, including emotional gestures and speech intonation (Lundy-Ekman, 2002).

Language and music share similar features as well as similar areas in the brain. Both have auditory structures, employ a temporal clock, may have hierarchical formats, employ tonal properties, and have cultural relevance (Matney, 2008). Just as there is no one region of the brain that processes language, music is also processed

interhemispherically (Taylor, 1997, p. 35). Because music and language share similar features and areas in the brain, bilingual music therapy may be a beneficial tool to facilitate first and second language learning in early childhood settings.

Music in Second Language Learning Settings

In second language learning settings, music therapy has been shown to increase motivation and self confidence while lowering anxiety (Schunk, 1999; Kennedy, 2005; Kennedy, 2008). Furthermore, listening to music has been shown to invoke activity in areas of the brain that closely related to physiologic mechanisms of reward behavior (Menon, 2005). This is especially important to consider when facilitating music therapy in an inclusive classroom with special needs ELLs because these students may be more withdrawn than their typically advancing peers. However, in lowering the student's Affective Filter, music then provides them with an outlet for expression.

Another aspect of second language acquisition theory is the concept of the Language Acquisition Device (LAD). Noam Chomsky suggested that "humans have a kind of mental organ or part of their brain that allows them to use the limited evidence they get from the language they hear to form rules. It is the LAD that helps children develop internal language rules based on what they hear (Freeman, 2001, p. 81).

> ...children acquiring English quickly learn to produce the correct form of the plural. In *cats,* the plural *s* has an s sound, but in *dogs,* the s sounds like a *z*. In a word like *bus,* the plural takes on an *iz* sound...In experiments, young children can give the correct plural form for a nonsense word. (Freeman, 2001, p.82)

Krashen (1983) expands on the theory of the LAD to describe a phenomenon referred to as the "Din in my head" (p. 41) This "Din" refers to the involuntary language rehearsal experienced by learners of second languages. The maximization of this involuntary rehearsal is comparable to audiation, the cognitive and often subconscious rehearsal of music (Schunk, 1999).

Overall, the use of music in second language acquisition fits in with second language theory and practice. Music therapy can facilitate active practice and learning in a fun, non-threatening manner, and it is neurologically linked to reward and motivation. Furthermore, melody, rhythm and repetition may act as facilitators of unconscious language rehearsal.

Critical Period Hypothesis

Age is an important factor to consider in second language acquisition. The *Critical Period Hypothesis* states that the first few years of life are the crucial time of life during which an individual can acquire a first language if presented with adequate stimuli. If language input does not occur until after this time, the individual will never achieve a full command of language and grammatical systems (Penfield, 1959, Lenneberg, 1967). To give a more comprehensive timeline, acquisition of a language is "guaranteed for children up to the age of six, is steadily compromised from then until shortly after puberty, and is rare thereafter" (Pinker, 1994, p. 293). This is not to say that age should be a deterrent for language learning. Age plays a role in the way brains process and learn language in that language acquisition may occur most easily during earlier years of life. However, individuals may still achieve fluency during adult years

(Krashen, 1973, Perani, 1998). Children who acquire a second language before puberty tend to speak the language without an accent, while older learners speak the second language with an accent (Freeman, 2004). The present study will therefore focus on music therapy's effect on language learning and acquisition in early childhood.

Music Therapy and Expressive Language in Early Childhood Education

While a significant amount of research in music therapy journals regarding music therapy in early childhood has been presented, this section deals specifically with expressive language development in early childhood. Music therapy has been utilized in early childhood classrooms to address specific educational goals. Monti (1985) described the role of music therapy in a therapeutic nursery with children aged two to five years who had severe psycho-motor retardation, mild cerebral palsy, neurological impairment, speech and language delays, emotional disturbance, and autism. In one example, music therapy was used in conjunction with play therapy with a bilingual child, "David," to encourage social interaction and self-expression. After the interventions, David reportedly was able to interact with other children, and his capacity to explore his environment vocally increased, leading to alleviation of elective mutism.

Hoskins (1988) investigated the use of music to increase verbal response and improve expressive language abilities of preschool language delayed children. The sixteen students who participated in the study were diagnosed with a developmental delay or mental retardation. Hoskins noted that children responded especially well to familiar songs. In working with culturally diverse clients, it may therefore be beneficial for a

music therapist to utilize songs that are familiar, even if it means singing/translating them from other traditions.

Davis (1990) suggested a model to integrate music therapy in preschool classrooms for children with disabilities or language delays. In the model, students engaged in music experiences that included singing, chanting, instrument playing, moving, listening, creating lyrics, and reading notation. Weekly classroom themes were incorporated into music selection. When working with children with language delays, Davis stressed the importance of following several guidelines, including:

> (1) Use short phrases when speaking or singing. (2) Use simple, concrete vocabulary. (3) Use repetition and review. (4) Limit directions, being aware of how much a child can follow. (5) Be consistent. (6) Provide appropriate models for speech and language. (7) Think about pragmatics, the social use of language. (Davis, 1990, p. 83)

Preschool classes for children with disabilities can be comprised of special needs and typically advancing students. Humpal (1991) examined the effects of an early childhood music program on social interaction between children with handicaps and their typical peers. It was concluded that music was an effective tool for socialization and that because music provided an inclusive, non-threatening environment, it encouraged interaction between children who are typically advancing and their peers with special needs.

Support of Multicultural Music Therapy

Individuals seeking music therapy, no matter what their ethnicity, are an amalgamation of their past experiences and indelibly, their cultures. Music is deeply connected with culture, and an individual's heritage can play a powerful role in the music therapy practice (Darrow, 1998). Ethnic music can be used to magnify interpersonal and musical communication between therapist and client in that performance of even basic material can help establish initial rapport (Moreno, 1988). Chase (2003) agrees that music's many cultural shapes and forms can open doors of communication between client and therapist, as well as motivating clients who are otherwise unresponsive to Western music. The appeal of exotic, unfamiliar musical styles and playing may encourage clients to become more involved in therapy (Chase, 2003).

Music therapists have reported that multicultural music in therapy sessions helped clients relate to the therapist and helped the therapists build relationships with the clients. In educational settings, multicultural music during therapy sessions affected how students related to the therapist (Darrow, 1998). A study by Sue, Fujino, Hu, & Takeuchi (1991) showed that an ethnic or language match between therapist and client was a predictor of length and outcome of treatment. When clients' cultural and primary linguistic needs were met, the client was more successful in therapy.

Nearly 15 years ago, the field of music therapy focused little attention on the evolving diversity needs of its clients (Toppozada, 1995). Over time though, a shift toward multicultural-mindedness in music therapy has occured, as evidenced by the increasing number of articles and presentations in music therapy publications. Music

therapists are beginning to understand the issues involved in working with clients from different ethnic and cultural backgrounds.

Music therapy articles abound regarding the support of multicultural music therapy by students and professionals. Topozada (1995) examined professional music therapists' knowledge of and attitudes toward relevant multicultural issues. The study showed that respondents to the survey agreed most strongly that a client's cultural background should be taken into consideration when selecting music to be used in therapy sessions. However, while the respondents supported underlying dimensions of multiculturalism and understood the importance of culture in therapy, the survey did not show how therapists integrate cultural knowledge into their sessions (Topozada, 1995).

Darrow (1998) also studied music therapy literature in quest of multicultural content. The purpose of her study was to examine multicultural perspectives in the field of music therapy. Darrow surveyed professional and student therapists practicing in culturally diverse areas of the US and reviewed the National Association of Music Therapy's (NAMT) educational program requirements, professional literature and national conference programs regarding multicultural issues. She found that professional interest in music therapy practices in different cultures existed, but at that time no articles addressed cultural diversity or the utilization of culturally specific music within the music therapy clinical setting.

Chase (2003) examined multicultural music therapy literature and provided implications and suggestions for music therapy research and clinical practice. The purpose of the study was to kindle an interest in multicultural music therapy research.

Chase presented five considerations adapted for use in music therapy settings from two cultural-competency models to help music therapists in working with culturally diverse clients:

1. Know yourself. This suggestion is helpful because a therapist may have underlying cultural biases and must confront them in order to work with diverse clients.
2. Engage in new cultural experiences. This could be in the form of classes at a university or seeking out cultural festivals in the therapist's city.
3. Treat each person as an individual. Diverse cultures are often stereotyped. If a client speaks Spanish, he or she could be from any number of linguistic and cultural backgrounds.
4. Be musically flexible. Western musicians tend to be bound by their cultural conception of music with regard to harmony, melody, and rhythm.
5. Ask for help. The most useful resource a music therapist can utilize is a teacher or parent in the school. One does not have to be fluent in his or her client's language to facilitate multicultural music therapy. This researcher suggests start with one word of one song . Recognizing that you have a lot to learn and using your client as a resource can also help in building rapport. Therapists should not be intimidated by what they do not know, but should be confident in seeking and utilizing new information.

Multicultural Music Therapy Education

Two main benefits of multicultural education for music therapists exist. First, it increases students' awareness of how different cultural groups will vary in behaviors, attitudes, and value systems. This will help reduce the danger of stereotyping and misunderstanding in the therapeutic process. Second, multicultural education improves potential therapists' attitudes toward other cultures and worldviews by increasing the therapists' preference for different musical styles (Toppozada, 1995). The increasing diversity of music therapy clinical populations will continue to demand "diversity of education and training of music therapists" (Wyatt, 2000, p. 104).

A substantial amount of literature and tools already exist that can be used by music therapists whose interest lies in multicultural music therapy. A music therapist may decide to study ethnomusicology, which considers world music genres in relation to their cultural contexts (Moreno, 1988). Moreno suggests that music therapists have a basic working knowledge of a wide variety or representative world music genres (1988). This researcher believes that while that is a noble goal to attain, a music therapist must look at the predominant minority cultures that he or she may be serving and pick the one that will most be encountered. For music therapists in Texas, that means having a basic handle on some Spanish words, and depending on the clientele, appropriate folk songs.

Groene's (2003) discusses a disparity between being able to meet the therapist-to-client ratio needs of the populations music therapists currently serve and the number of music therapists to meet those needs. Learning diverse musical idioms and languages of the clients would be a step in the right direction. This will require flexibility on behalf of

the music therapist – communicating in a client's own ethnic musical language may not always be needed, but the music therapist should have the ability to do so when necessary (Moreno, 1988). While it would be unreasonable to suggest that every music therapist should learn as many cultural musical idioms as possible, the guiding ethic of the music therapy education system is to "help every student meet the widest possible range of client needs which he or she may encounter in a variety of clinical settings" (Bruscia, 1989, p. 84).

The most compelling evidence for bilingual music therapy in music therapy practice came through two descriptive studies by Silverman (2005, 2007). In 2005, Silverman conducted a descriptive study of private practice in music therapy, and found that while 16.2 percent (n=117) of music therapists were bilingual, 40 percent (n=118) served non-English speaking clients. Silverman stated that "it is definitely an advantage to be a bilingual therapist" and postulated that universities may want to require students to study a foreign language (Silverman, 2005, p. 269). Additionally, Silverman conducted a descriptive study of trends in psychiatric music therapy. He found that the majority of respondents, or 85 percent (n=146), were not bilingual, but still worked with non-English speaking clients (Silverman, 2007).

Music Therapy in ESL Classrooms

While many articles exist in ESL and other educational journals advocating the use of music to facilitate language learning (Darrow, 1998), a search of the Music Therapy Research CD-ROM revealed a total of three articles have been published between 1998 and 2008 in the *Journal of Music Therapy* and *Music Therapy Perspectives*

that specifically address the use of music therapy in ESL classrooms. The studies indicate that music therapy can aid in ESL students' language comprehension, dissolving cross-cultural barriers, and lessening the effect of fear on new immigrant students attempting to learn academic concepts on the same level as their English speaking peers (Kennedy, 2005; Kennedy, 2008; Schunk, 1999).

Music therapy in ESL classrooms can be a dynamic tool because qualities that are inherent to music, such as rhythm and repetition, are also valued in language learning (Murphey, 1990). The importance of involuntary mental rehearsal and physical activity in music therapy sessions is highlighted by the use of singing paired with signing to enhance the ESL classroom setting. One particular study indicated that students who rehearsed new vocabulary by singing or speaking accompanied with signing performed better than the students who rehearsed new vocabulary by speaking only (Schunk, 1999). In this study, the participants' dominant languages were Spanish, Hmong and Lao. However, it was not mentioned in the study if the investigator used any songs or words from the participants' native cultures.

Music therapy can be used in inclusion classrooms with ESL students who are typically advancing as well as students with disabilities. Kennedy (2005) investigated the effects of music therapy techniques on the story retelling and English speaking skills of middle school students. In this study, low- and high- functioning groups were studied to determine the outcome of the use of singing, movement to music, and other to enhance language acquisition. Interestingly, Kennedy discovered that the experimental (music therapy) group performed statistically better than the control group, regardless of level of

functioning (Kennedy, 2005). Again, the participants in this study were identified as Hispanic, and songs during the interventions were mentioned, including pop culture songs like "The Electric Slide" and "Brush it Off." The issue of using the participants' native language or culturally specific music was not addressed.

In a follow-up study, Kennedy (2008) explored the use of music therapy on the English speaking and story retelling skills of Kindergarten students in two ESL classes, a public school group and an after-school group. Music therapy activities were designed to accompany the regular ESL teacher's lesson plans and included chanting, rhythm stick activities, singing, movement to music, music listening, and lyric analysis. The music therapy interventions were found to be effective in enhancing ESL students' practice and acquisition of English. In addition, the after-school music therapy group scored higher than the public school group on tests, suggesting that a less stressful setting was where students were able to more easily acquire English (Kennedy, 2008). Of the three music therapy articles mentioned above, only the 2008 Kennedy study briefly mentions that hello songs were sung in English and Spanish.

Purpose Statement and Null Hypotheses

The purpose of the study was to determine the effect of bilingual music therapy on the expressive language output in children who are learning English in early childhood classrooms. The following Null Hypotheses were tested:

H_1: No significant difference will be found in English expressive language between the English-only group and the Bilingual group post-test scores on the WMLS-R.

H_2: No significant difference will be found in Spanish expressive language between the English-only group and the Bilingual group post-test scores on the WMLS-R.

H_3: No improvement will be found in English expressive language within the English-only group from pretest to posttest on the English PKAC items.

H_4: No improvement will be found in English expressive language within the Bilingual group from pretest to posttest on the English PKAC items.

H_5: No improvement will be found in Spanish expressive language within the English-only group from pretest to posttest on the Spanish PKAC items.

H_6: No improvement will be found in Spanish expressive language within the Bilingual group from pretest to posttest on the Spanish PKAC items.

H_7: No difference will be found between the English-only group and the Bilingual group improvement scores on the English PKAC items.

H_8: No difference will be found between the English-only group and the Bilingual group improvement scores on the Spanish PKAC items.

CHAPTER III

METHODOLOGY

The participants in this study were 11 students aged three to five years attending the same early childhood education center in North Texas. The distribution of student ethnicity at the early childhood center is as follows: 60 percent Hispanic, 14 percent African American, 13 percent White, and 13 percent Other (Jackson, 2007). The researcher selected the potential participants in consultation with the teachers, principal, and Speech Language Pathologists (SLPs) on campus. Participants in both groups came from Spanish-speaking families and spoke Spanish as their first language. In addition, the participants were part of a preschool class for children with disabilities and in the school's ESL program. In this setting, preschool students are only in class for a half-day, therefore the researcher used the natural division of morning and afternoon classes for the experimental and control groups.

The researcher received approval from the TWU Institutional Review Board and distributed English and Spanish consent forms to the teachers, who in turn sent the forms home with the students. After consulting with the teachers, the researcher scheduled three music therapy sessions a week for four weeks with one exception. The experimental group received music therapy for 30 minutes three times a week for four weeks in English. The researcher also spoke with the students and the teachers only in English. The control group received music therapy for 30 minutes three times a week for four

weeks in English and Spanish. In this instance, the researcher spoke with the students and teachers in English and Spanish. Each group received 13 sessions.

Music therapy sessions were devised from the students' Individualized Education Plans (IEPs), which reflected concepts and goals from the standardized testing tool and the alternative assessment tool used. All songs and activities allowed for expressive communication through call-and-response and encouraged verbal interaction with the researcher. The songs used in the music therapy sessions were strophic, in keys suitable for the age of the children, and sung at a tempo easy for the students to understand, learn and sing. The researcher accompanied herself on guitar and percussion instruments and utilized a variety of visual aids provided by the music therapy department of the Lewisville Independent School District. Because this researcher was interested in the use of bilingual and cultural music in the therapy setting, the researcher referred Latin American song and rhyming books for ideas including: *Arroz Con Leche Popular Songs and Rhymes from Latin America* (Delacre, 1989), *Tortillas Para Mama And Other Nursery Rhymes/Spanish and English* (Griego, 1981), *La Salsa* (Ross, *Grandmother's Nursery Rhymes/Las Nanas de Abuelita* (Jaramillo, 1994), *Calling the Doves/El canto de las palomas* (Herrera, 1995), *De Colores and Other Latin American Folk Songs for Children* (Orozco, 1999), and *Oso pardo, oso pardo, ¿Qué ves ahí?* (Martin, 1998). In the English-only group, the therapist used Western folk and children's songs, and only once used a translated Latin American folk song. In the Bilingual group, the therapist used Western and Latin American folk and children's songs. The material for each class was the same each day, except that the Bilingual class received music therapy in English

and Spanish. For example, the opening Hello Song lyrics for the English-only group were:

Hello, everybody, hello, everybody, hello, everybody, H-E-L-L-O

Hello, everybody, hello, everybody, hello, everybody, H-E-L-L-O

The opening Hello Song lyrics for the Bilingual group were:

Hola, mis amigos, hola, mis amigos, hola, mis amigos, H-O-L-A

Hello, everybody, hello, everybody, hello, everybody, H-E-L-L-O

The researcher recognizes that in translating songs, approximations may need to be made in order to uphold the integrity of the rhythmic structure of the song. An example of this would be in using the book *Oso pardo, oso pardo, ¿Qué ves ahí?* The researcher used the melody she had learned for the book which lined up with the translated English words, "brown bear, brown bear, what do you see?" Therefore the song phrase was shortened to "oso pardo, ¿Qué ves ahí?"

The independent variable was the music therapy treatment condition. The dependent variable was expressive language output as measured by the *Woodcock-Muñoz Language Survey-R* (WMLS-R; Woodcock, 1993) and by an authentic assessment utilized by teachers at the early childhood center, *the Pre-K Assessment Chart 2006-2007* (PKAC). The WMLS-R is a standardized language dominance test which is used to determine eligibility for bilingual services, to assess the students of English and Spanish language proficiency, and to measure cognitive-academic language proficiency through seven tests (Woodcock, 1993). The pretest was administered by the SLPs and administrators at the education center in the Spring of 2007, and posttests were

administered in Spring 2008. The WMLS-R addresses several aspects of communication but for the purposes of the education center, only two of the seven tests were used: Test 2: *Verbal Angalogies/Analogias verbales* and Test 6: *Story Recall/rememoracion de cuentos.* Test 2 requires listening to three words of an analogy and completing it with an appropriate fourth word. Test 6 requires the participant to recall stories that are presented using an audio recording. After listening to a passage, the participant was asked to recall as many details of the story as he or she remembered. These tests measured listening skills, meaningful memory, and expressive language. The scores on the WMLS-R are expressed in terms of cognitive-academic language proficiency (CALP). CALP is defined as language proficiency in academic situations and is measured by the WMLS-R because the intent of the WMLS-R is to assess the student's proficiency based on cognitively demanding language. The CALP range of scores is 1 to 6, with a CALP score of 1 indicating that a student is very limited and a CALP score of 6 indicating that the student is very advanced. For the sake of this age group (3 – 5 years), a CALP oral language score of 3-5 is acceptable (Alvarado, 2005).

The researcher also collected data via a modified version of the PKAC, a form that was designed by the special education staff at the early childhood center. The PKAC is used by classroom teachers to track the progress of students over six-week periods. For the purpose of this study, the researcher pared the observations to only expressive communication items on the forms in English and Spanish, which are reflected in a revised assessment chart in the appendix. The three classroom teachers agreed to complete separately the form at the end of weeks one and four in order to establish inter-

rater reliability. Although the PKAC is not a standardized assessment, it still is a valuable research tool and is referred to as an "alternative assessment." Alternative assessments are defined by their ability to convey what a student knows or can do that shows growth. Alternative assessments are not standardized tests and are based on activities that show actual progress toward educational goals and objectives. These assessments are useful because they reflect classroom and real-life tasks and require integration of language skills (Zainuddin, 2007).

Questions on the PKAC were as follows:

1. Expresses needs and wants using words in English
2. Speaks sentences/complete thoughts in English
3. Names numerals in English
4. Names and describes shapes in English
5. Uses words to solve problems in English
6. Uses new vocabulary in English
7. Answers questions about stories in English
8. Explains sorting (size/color/shape) in English. The teachers were asked to represent mastery of each item with a "+" symbol.

When the item had been assessed but not yet mastered, this was indicated with "-" (See Appendix C).

In order to protect the confidentiality of the students, the principal at the early childhood center assigned a number to each student in the researcher's classrooms with scores being released by number only. The principal maintained the list of the students

and their corresponding numbers and released the WMLS-R and the PKAC scores using the codification system.

CHAPTER IV

RESULTS

Expressive Language Measured by the WMLS-R

Because the sample size was small, an improvement score was calculated by subtracting the pre-test scores from the posttest scores. Mean reflects the average *improvement* made from pretest to posttest on the WMLS-R (See Table 1).

Table 1

Means and Standard Deviations for Group WMLS-R Improvement Scores

		N	Mean	SD	Std Error Mean
English CALP					
	English-Only	5	1.0000	.70711	.31623
	Bilingual	6	1.0833	.66458	.27131
Spanish CALP					
	English-Only	5	.6000	.41833	.18708
	Bilingual	6	.7500	.75829	.30957

On those scores, a t-test was then calculated to compare the expressive language of the English-only group to the Bilingual group. The results of the t test failed to show

significant difference between the English-Only Group and the Bilingual Group on the WMLS-R (See Table 2).

Table 2

WMLS-R t-tests

	t	df	Sig. (2-tailed)	Mean Difference
English CALP	-.201	9	.845	-.0833
Spanish CALP	-.393	9	.703	-.15000

Expressive Language Measured by the PKAC

In order to determine whether any improvement would be found in English expressive language within the English-only group (n = 5) between pretest and posttest scores on the English PKAC items, the researcher first organized the English-only group's PKAC data (See Table 3). On items 1E and 2E, one student had mastered the items at pretest, and five students mastered the items at posttest. Three students mastered item 3E at pretest, and five students mastered 3E at posttest. Two students mastered item 4E at pretest, and all students mastered 4E at posttest. At pretest, one student mastered item 5E at pretest and five students mastered item 5E at posttest. Three students mastered item 6E at pretest and five students mastered item 6E at posttest. The number of items mastered at pretest and posttest was then totaled. On item 7E, one student mastered it at

pretest, while five students mastered item 7E at posttest. Finally, three students mastered item 8E at pretest, and all five students mastered item 8E at posttest.

Next, the researcher found an improvement score by subtracting each item's pretest from its posttest. For example, one student mastered item 1E at pretest and five students mastered 1E at posttest. Therefore, the improvement score is 4. Refer to Figure 1 for the English-only group's improvement scores on the English PKAC. The greatest amount of improvement would have been reflected by a score of 5 because there were 5 students in the class. No improvement would be represented by a score of 0. Students improved the most on items 1E, 2E, 5E, and 7E with an improvement score of 4. On items 4E and 8E, there was an improvement score of 3. On items 3E and 6E, there was an improvement score of 2.

Table 3

English-Only Group English PKAC Scores

	Student 1	Student 2	Student 3	Student 4	Student 5	Total
1E Pre	-	-	+	-	-	1
1E Post	+	+	+	+	+	5
2E Pre	-	-	+	-	-	1
2E Post	+	+	+	+	+	5
3E Pre	-	-	+	+	+	3
3E Post	+	+	+	+	+	5
4E Pre	-	-	+	+	-	2
4E Post	+	+	+	+	+	5
5E Pre	-	-	+	-	-	1
5E Post	+	+	+	+	+	5
6E Pre	-	+	+	-	+	3
6E Post	+	+	+	+	+	5
7E Pre	-	-	+	-	-	1
7E Post	+	+	+	+	+	5
8E Pre	+	-	+	-	-	2
8E Post	+	+	+	+	+	5

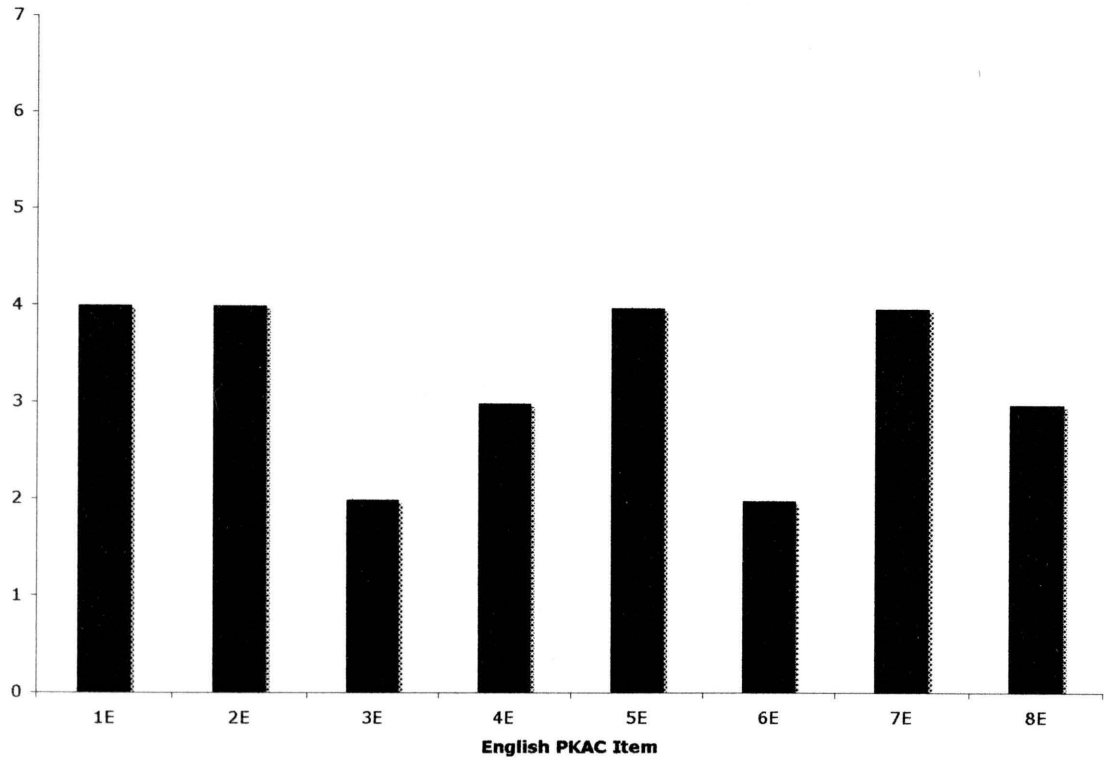

Figure 1: English-only group improvement score on English PKAC

To determine whether any improvement would be found in English expressive language within the Bilingual group (n = 6) between pretest and posttest scores on the English PKAC items, the researcher first organized the English-only group's PKAC data (See Table 4). Zero students had mastered items 1E and 2E at pretest. Six students mastered item 1E at posttest and five students mastered item 2E at posttest. Two students mastered item 3E at pretest, and at posttest six students mastered item 3E. At pretest, zero students had mastered items 4E and 5E. Six students mastered items 4E and 5E at posttest. Two students mastered item 6E at pretest and five students mastered it at

posttest. Zero students mastered items 7E and 8E at pretest. Five students mastered items 7E and 8E at posttest.

The researcher then repeated the procedure for finding improvement scores for the Bilingual group (n = 6) and represented them in a graph (See Figure 2). The greatest amount of improvement would have been reflected by a score of 6 because there were 6 students in the class. Again, no improvement would be represented by a score of 0. Students improved the most on items 1E, 4E, and 5E, with an improvement score of 6. On items 2E and 7E, there was an improvement score of 3. On items 3E, 6E, and 8E there was an improvement score of 4.

To determine if there was an improvement in Spanish expressive language within the English-only group between pretest and posttest scores on the PKAC, the researcher arranged the data (See Table 5). Five students mastered item 1E at both pretest and posttest. Three students mastered item 2E at pretest and five mastered item 2E at posttest. Five students mastered items 3E and 4E at pretest and at posttest. Four students mastered item 5E at posttest and five students mastered it at posttest. On item 6E, five students mastered it at pretest and posttest. Three students mastered item 7E at pretest and five students mastered it at posttest. Five students mastered item 8E at pretest and posttest.

Table 4

Bilingual Group English PKAC Scores

	Student 6	Student 7	Student 8	Student 9	Student 10	Student 11	Total
1E Pre	-	-	-	-	-	-	0
1E Post	+	+	+	+	+	+	6
2E Pre	-	-	-	-	-	-	0
2E Post	-	+	+	+	+	+	5
3E Pre	-	-	-	-	+	+	2
3E Post	+	+	+	+	+	+	6
4E Pre	-	-	-	-	-	-	0
4E Post	+	+	+	+	+	+	6
5E Pre	-	-	-	-	-	-	0
5E Post	+	+	+	+	+	+	6
6E Pre	-	-	+	-	-	+	2
6E Post	+	+	+	+	+	+	6
7E Pre	-	-	-	-	-	-	0
7E Post	-	+	+	+	+	+	5
8E Pre	-	-	-	-	+	-	1
8E Post	-	+	+	+	+	+	5

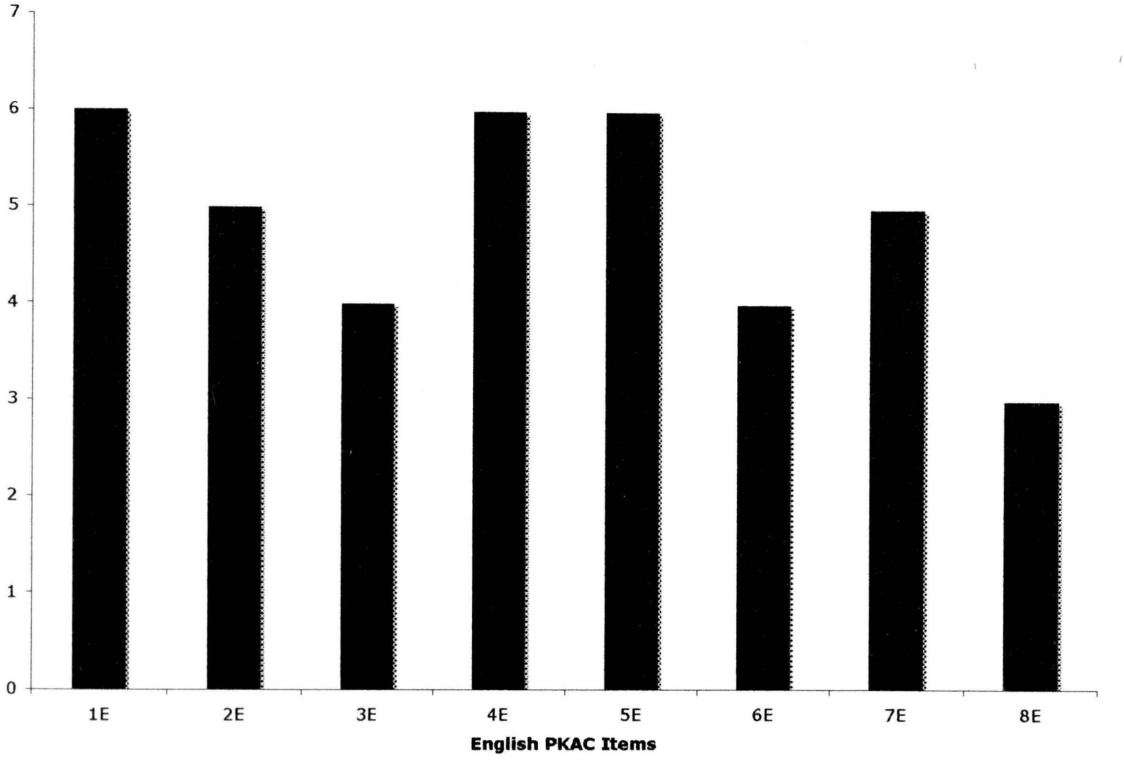

Figure 2: Bilingual group improvement score on English PKAC items

The improvement score was again calculated by subtracting the number of each item mastered at pretest from posttest (See Figure 2). The greatest amount of improvement would have been reflected by a score of 5 and no improvement would be represented by a score of 0. One must remember that "no improvement" should not have a negative connotation because all students have achieved mastery in that item at pretest and posttest. Items 2S and 7S showed improvement scores of 2. Item 5S had an improvement score of 1. Items 1S, 3S, 4S, 6S, and 8S all reflected improvement scores of zero.

Table 5

English-Only Group Spanish PKAC Scores

	Student 1	Student 2	Student 3	Student 4	Student 5	Total
1S Pre	+	+	+	+	+	5
1S Post	+	+	+	+	+	5
2S Pre	-	+	+	+	-	3
2S Post	+	+	+	+	+	5
3S Pre	+	+	+	+	+	5
3S Post	+	+	+	+	+	5
4S Pre	+	+	+	+	+	5
4S Post	+	+	+	+	+	5
5S Pre	-	+	+	+	+	4
5S Post	+	+	+	+	+	5
6S Pre	+	+	+	+	+	5
6S Post	+	+	+	+	+	5
7S Pre	-	-	+	+	+	3
7S Post	+	+	+	+	+	5
8S Pre	+	+	+	+	+	5
8S Post	+	+	+	+	+	5

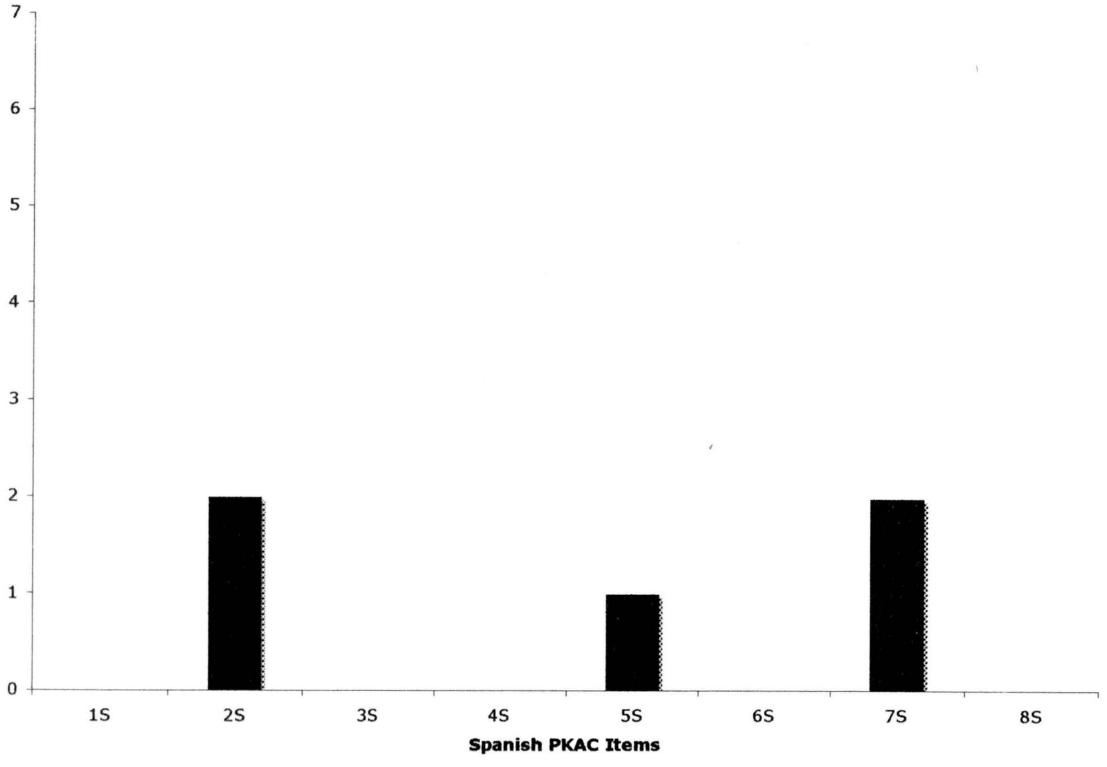

Figure 3: English-only group improvement scores on Spanish PKAC items

To determine if there was an improvement in Spanish expressive language within the Bilingual group between pretest and posttest scores on the PKAC, the researcher arranged the data (See Table 6). Two students mastered item 1S at pretest, and six students mastered item 1S at posttest. On item 2S, zero students mastered it at pretest, while six students mastered it at posttest. Five students mastered item 3S at pretest, and six mastered it at posttest. Four students mastered item 4S at pretest, and six mastered item 4S at posttest. Zero students had mastered item 5S at pretest, and six mastered it at posttest. On item 6S, 3 students mastered it at pretest, and six students mastered it at

posttest. One student mastered item 7S at posttest, and 5mastered it at posttest. Finally, three students mastered item 8S at pretest and six mastered it at posttest.

The improvement score was calculated by subtracting the number of each item mastered at pretest from posttest (See Figure 4). The greatest amount of improvement would have been reflected by a score of 6 and no improvement would be represented by a score of 0. Item 5S showed the greatest improvement for this group with a score of 6. Students improved by a score of 5 on item 2S. Items 1S and 7S showed students improving by a score of 4. Students improved on items 6S and 8S by a score of 3. Students improved on item 4S by a score of 2. Students improved on item 3s by a score of 1.

In order to determine if there would be a difference found in English expressive language between the English-only group and the Bilingual group on the English PKAC items, the researcher compared the graphs of the English-only group and the Bilingual group on the English PKAC from above (See Figure 5). The graph shows that there was some difference between the English-only group and the Bilingual group on each English PKAC item.

Table 6

Bilingual Group Spanish PKAC Scores

	Student 6	Student 7	Student 8	Student 9	Student 10	Student 11	Total
1S Pre	-	+	+	-	-	-	2
1S Post	+	+	+	+	+	+	6
2S Pre	-	-	-	-	-	-	0
2S Post	-	+	+	+	+	+	5
3S Pre	-	+	+	+	+	+	5
3S Post	+	+	+	+	+	+	6
4S Pre	+	-	+	+	-	+	4
4S Post	+	+	+	+	+	+	6
5S Pre	-	-	-	-	-	-	0
5S Post	+	+	+	+	+	+	6
6S Pre	-	-	+	+	-	+	3
6S Post	+	+	+	+	+	+	6
7S Pre	-	-	-	+	-	-	1
7S Post	-	+	+	+	+	+	5
8S Pre	-	-	+	-	+	+	3
8S Post	+	+	+	+	+	+	6

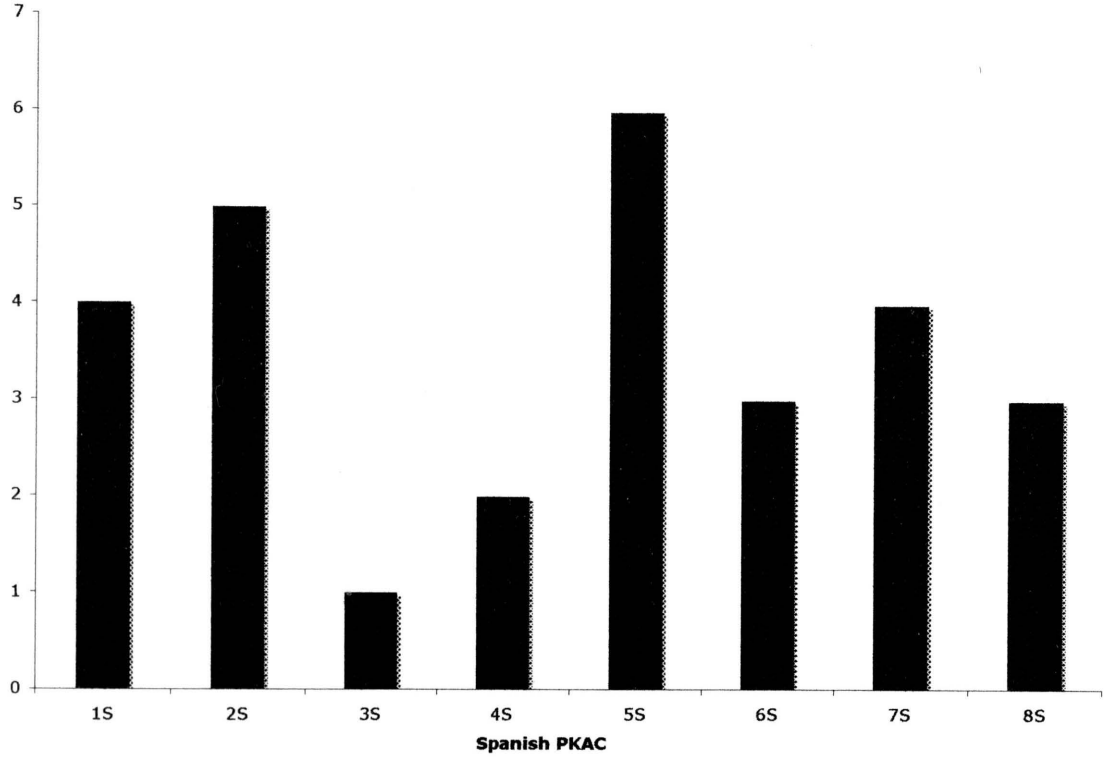

Figure 4. Bilingual group improvement scores on Spanish PKAC items

To determine if improvement would be found in English expressive language between the English-only group and the Bilingual group on the Spanish PKAC items, the researcher compared the graphs of the English-only group and the Bilingual group on the English PKAC from above (See Figure 6). The graph shows that there was some difference between the English-only group and the Bilingual group on each English PKAC item.

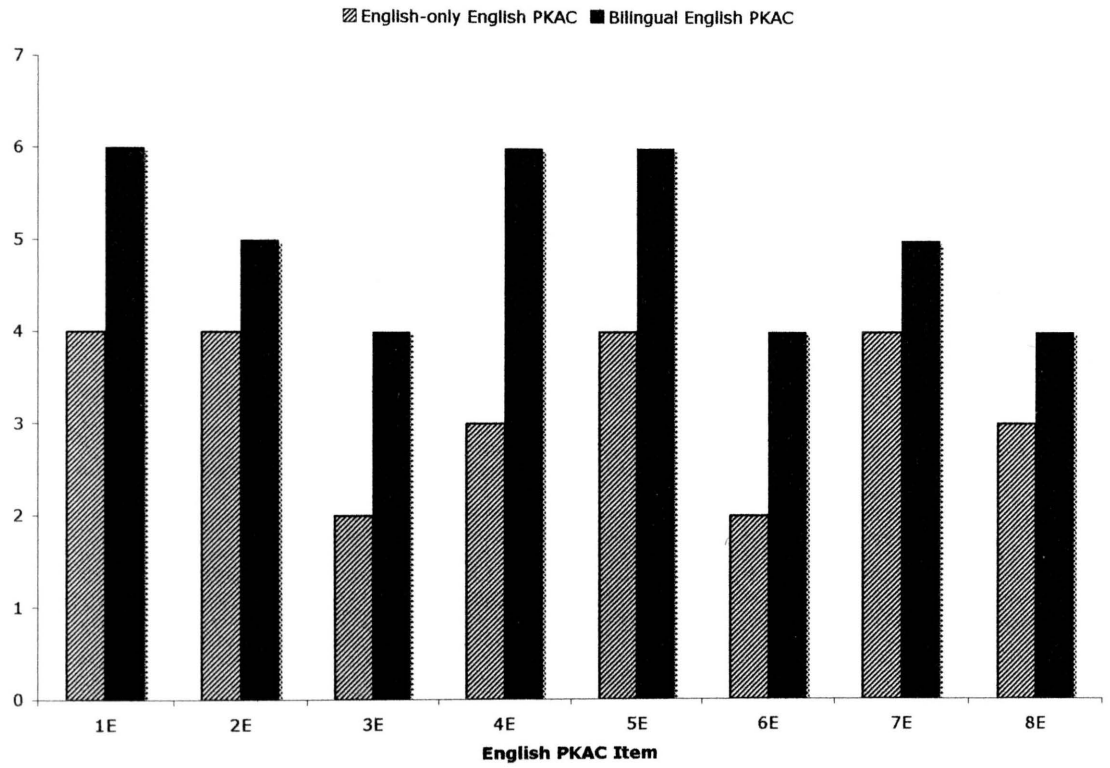

Figure 5. Difference between English-only and bilingual groups English PKAC improvement scores.

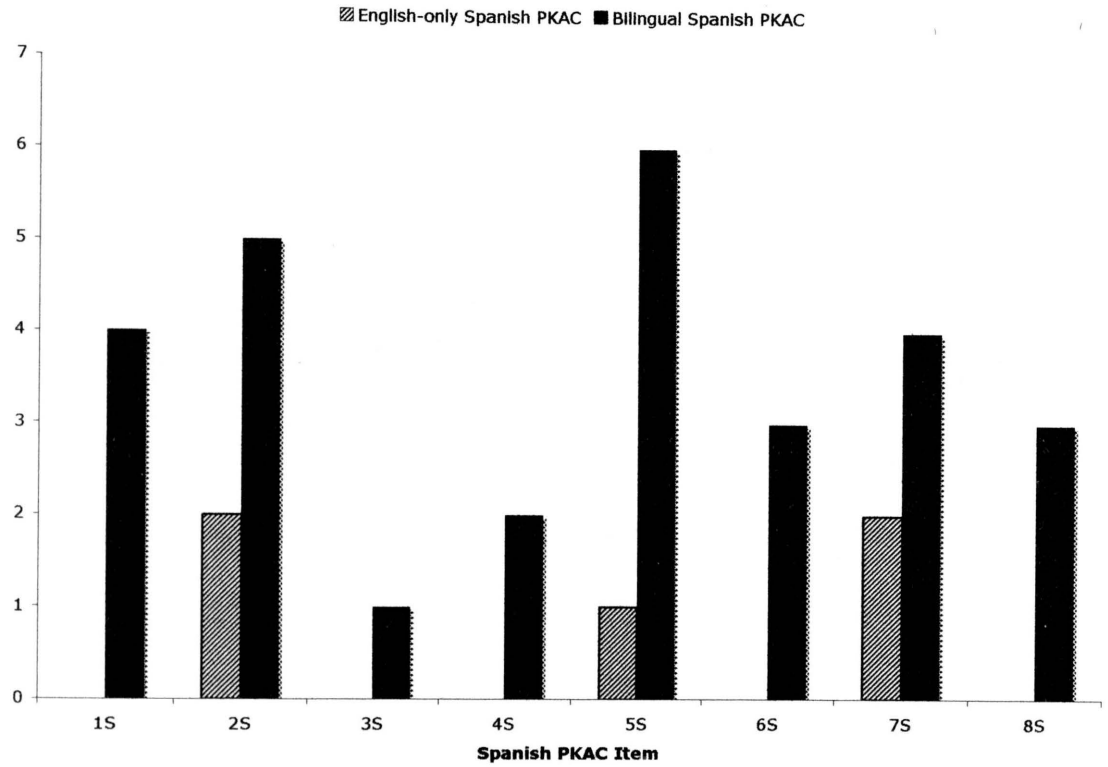

Figure 6. Difference between English-only and bilingual group Spanish PKAC improvement scores.

Hypothesis Summary

H_1: No significant difference will be found in English expressive language between the English-Only Group and the Bilingual Group scores on the WMLS-R.

T-test results ($p = .845$) failed to show significant differences in English expressive language between the English-only group and the Bilingual group scores on the WMLS-R.

H_2: No significant difference will be found in Spanish expressive language between the English-only group and the Bilingual group post-test scores on the WMLS-R.

T-test results ($p = .703$) failed to show significant differences in Spanish expressive language between the English-only group and the Bilingual group scores on the WMLS-R.

H_3: No improvement will be found in English expressive language within the English-only group from pretest to posttest on the English PKAC items.

The results showed that improvement was found in English expressive language within the English-only group from pretest to posttest on the English PKAC items.

H_4: No improvement will be found in English expressive language within the Bilingual group from pretest to posttest on the English PKAC items.

The results showed that improvement was found in English expressive language within the Bilingual group from pretest to posttest on the English PKAC items.

H_5: No improvement will be found in Spanish expressive language within the English-only group from pretest to posttest on the Spanish PKAC items.

The results showed that improvement was found in Spanish expressive language within the English-only group from pretest to posttest on the Spanish PKAC items.

H_6: No improvement will be found in Spanish expressive language within the Bilingual group between pretest and posttest scores on the Spanish PKAC items.

The results showed that improvement was found in Spanish expressive language within the Bilingual group between pretest and posttest scores on the Spanish PKAC items.

H_7: No difference will be found between the English-only group and the Bilingual group improvement scores on the English PKAC items.

Results showed that a difference was found between the English-only group and the Bilingual group improvement scores on the English PKAC items.

H_8: No difference will be found between the English-only group and the Bilingual group improvement scores on the Spanish PKAC.

Results showed that a difference was found between the English-only group and the Bilingual group improvement scores on the Spanish PKAC items.

CHAPTER V

DISCUSSION

The purpose of this study was to determine the effect of bilingual music therapy on the expressive language output in children who are learning English in early childhood classrooms. Students participated in two music therapy groups: an English-only control group and a Bilingual experimental group. Pretest and posttest data were analyzed on the WMLS-R and the PKAC to determine gains in expressive communication and differences between control and experimental groups. Scores and analyses on the WMLS-R indicate no significant difference in the improvement scores on CALP for either the English-Only Group or the Bilingual Group. The mean standard deviation scores were high on the WMLS-R English and Spanish CALP scores, which indicates a wide range of scores. While improvement did occur for both groups on the WMLS-R, the improvement may not necessarily be attributed to the music therapy intervention.

Due to the educational environment of the PPCD class, it was not surprising that the English-only group and the Bilingual group both showed improvement on each of the English PKAC items from pretest to posttest. After all, the target language in both classes is English. In comparing the English-only group and the Bilingual group improvement scores on the English PKAC items, the Bilingual group had higher improvement scores. This could be attributed to the fact that the Bilingual group had more improvement to make and therefore accomplished their goals. This information was important in

determining whether the groups could be compared statistically. It turns out they could not, not only because the data were categorical, but also because the two groups were not matched at pretest. The English-Only Group had consistently higher pretest scores on both the English and Spanish PKAC pretest scores when compared to the Bilingual Group. The English-only group and the Bilingual group both showed improvement on many of the Spanish PKAC items from pretest to posttest. However, fewer improvements were made by the English-only group on the Spanish PKAC items. This again is not negative – the improvement score was a 0 if the students had mastered all five items at pretest and at posttest. Therefore, in comparing the English-only group and the Bilingual group improvement scores on the English and Spanish PKAC items, the Bilingual group experienced more improvement. Most importantly, the PKAC showed that students in the English-only group and the Bilingual group improved from pretest to posttest during the course of the music therapy treatment.

Limitations

Homogeneity of variance was not met between groups from the outset of the study because the two groups were from classrooms, which were inherent cluster samples, and not matched. Additionally, one of the three teachers in the classroom disclosed halfway through the study that the English-only group was overall more fluent in English and Spanish than the Bilingual group.

The experimental period was originally planned to continue for eight weeks, with each group receiving music therapy twice a week. However, because of miscommunication as to when the standardized testing would be done, the experimental

period was shortened to four weeks with music therapy groups occurring three times a week. Due to circumstances beyond the researcher's control, not enough participants were assigned to each group. To be more specific, not all of the consent forms were returned to the researcher. This could have occurred because at the time this research was going on, the researcher had to obtain video releases for all the students in order to include their videos in AMTA regional and national conferences. Therefore, the teachers had sent home video release forms to the parents. The consent forms may have gotten misplaced by parents or teachers, or the parents may have thought the consent form was a duplicate of the video release form and did not return it. Another limitation to the study was that the researcher realized that attendance was not kept for the sessions, therefore there is no way to know how many music therapy sessions each child received, which could have had an effect on their posttest scores.

Limitations with the PKAC and WMLS-R were few but require discussion. The researcher was not able to obtain inter-rater reliability on the PKAC due to an apparent miscommunication with the three teachers. Instead of receiving three different assessments on each student, the researcher received the same assessment three times with three different teacher initials on each. The researcher can only assume that perhaps the teachers collaborated on each student and then filled out the form. Because the data was presented with "+" or "--" and not numerically, the data could therefore not be interpreted statistically. This researcher recommends utilizing a different system for scoring if a PKAC assessment is going to be used in future research. For example, a Likert scale could be devised to gauge how a student is progressing. The test could be

administered weekly, but if the overall study is to be replicated, it must take place over a longer period of time in order to determine what effect the bilingual music therapy has on the expressive language of the students. Similarly, while the WMLS-R is a solid standardized assessment, the study must continue for ideally an entire year in order to see a substantial effect. In addition, having a true control group would have benefited the study, but the researchers' resources were limited to this early childhood education center, where all PPCD classrooms received music therapy. If the study is to be replicated, there should be a group that does not receive music therapy in order to compare the three groups.

Although this pilot test included many challenges and limitations, this researcher believes that this research adds to the field of music therapy and bilingual education. The researcher was approached several times by teachers, the on-campus SLPs, and administrators about the ethical concerns of testing special needs children in a language in which they are not fluent. The researcher realizes that the issues surrounding bilingual education are numerous and daunting, but believes that bilingual music therapy should be utilized with special needs ELLs in order to provide for them optimal accessibility to education.

The researcher experienced particularly cogent sessions in her PPCD class and during her internship regarding bilingual music therapy. During a session with this research's English-only group, the researcher had translated a familiar Spanish song to English and was teaching it to the participants when a student's face registered recognition. After learning the song, the student exclaimed, "I know this song!" and

proceeded to sing it in Spanish. As she sang, the rest of the class joined her. The researcher did not know how to react because she wanted to maintain the integrity of the study, in speaking and singing only in English to the control group. Because of this incident, the researcher solidified her belief that culture is not something that can be repressed by demanding English from students.

In the researcher's internship experience, it was beneficial to have a working knowledge of Spanish songs due to the diverse patient population. When a client started singing "Un Dia A La Vez" (One Day At A Time) during a session, the researcher/intern could then accompany him on the guitar. Soon, another Spanish-speaking patient at the hospital came up and sang along. During another group with elderly patients diagnosed with concomitant mental illness and cognitive dysfunction, the researcher started leading an improvisational drumming session. After the group played together for a few minutes, an elderly Latin American woman began vocally improvising "Al Tambor," a Panamanian folk song she learned in her childhood. Because the intern/therapist was familiar with the song, she was able to teach and encourage the rest of the group to participate in the singing and accompaniment to the song. In the very same group, a Liberian woman also vocally improvised a song from her childhood that the group then learned and accompanied with drums. What was so fascinating about this older group was that when observed on the unit, they were all observed as sedate. Through the multicultural music therapy session though, they seemed more willing to dance, socialize, and reminisce about their childhoods because they were able to express their memories musically.

Future Research

The music therapy field is finally at a point where clinical use of multicultural music therapy, including bilingual music therapy, is common enough to be further examined. Studies have already been done on the imbalance in minority culture music therapists (Silverman, 2005, 2007), but further research could explore why that imbalance exists, and what can be done to recruit and retain non-Caucasian students to pursue a career in music therapy. As it stands, the demographics of the music therapy profession do not represent the current racial, ethnic, and even gender demographics of America (Groene, 2003).

Researchers have suggested studies that examine client responses to multicultural music within music therapy sessions (Darrow, 1998) and to determine the outcome of world musics in music therapy with specific client populations (Chase, 2003). It has been suggested that further research should be conducted questioning whether Western music is the most effective facilitator of learning for children of diverse backgrounds (Toppozada, 1995) and what the satisfaction levels are of culturally diverse clients receiving individual and group music therapy (Chase). Additionally, case studies from music therapists currently providing multicultural music therapy to culturally diverse clients would be "interesting and helpful" (Chase).

As Schunk (1999) stated, a need exists for more empirical evidence with students of all ages that show the benefits of music therapy interventions on academic progress. Bilingual music therapy with students in schools who are older than preschool could be studied in a variety of ways, including surveys for the parents or more controlled studies.

Because language development looks different at every age, this would contribute important information to this area of research. This researcher would like to suggest additional research in the following areas: Bilingual music therapy with Asian cultures in the United States, including refugees and asylees. Bilingual music therapy may already be occurring in schools or other settings such as mental health facilities, geriatric facilities, or substance abuse centers. If it is occurring, music therapists need to write and submit case studies in order to expand our knowledge of practices in this area.

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APPENDIX A

Consent to Participate in Research – English Form

TEXAS WOMAN'S UNIVERSITY
CONSENT TO PARTICIPATE IN RESEARCH

Title: The Effect of Music Therapy on the Expressive Language of Special Needs Spanish-Speaking Children Who Are Learning English in Early Childhood Classrooms

Investigator: Christina Stock
Advisor: Nicki Cohen, Ph.D.

Explanation and Purpose of Research
You are being asked to participate in a research study for Ms. Stock's thesis at Texas Woman's University. The purpose of this research is to determine the effect of music therapy on the expressive language on Spanish-speaking special needs children in early childhood classrooms. The research questions are: 1) Is there a difference in expressive language output when English-based songs are used as compared to Spanish-based songs? 2) Does the amount of English/Spanish that is spoken at home impact expressive language output at the end of the music therapy treatment period?

Research Procedures
For this study, the investigator will conduct music therapy Mondays, Wednesdays, and Fridays from 10:30am to 11:00am in English to Sra. Cabezas and Mr. Draper's morning class, and music therapy Mondays, Wednesdays, and Fridays from 2:30pm to 3:00pm in English and Spanish in Sra. Cabezas and Mr. Draper's afternoon class. The music therapy sessions will be conducted over a total of 4 weeks, which amounts to 6 hours of total time commitment for your child.

In order to tailor the music therapy sessions to the needs of your student, the researcher will access your student's individualized education plan (IEP). The researcher will collect test scores from two sources. First, the *Woodcock-Muñoz Language Survey*, a test that is given twice a year by speech-language pathologists at your child's school. The researcher will analyze the scores taken from the beginning of the school year as well as the scores from the end of the school year. Second, the researcher will gather information from a *Pre-Kindergarten Assessment Chart 2006-2007* at the beginning, at 4 weeks, and 8 weeks, which will be completed by your child's classroom teacher.

Potential Risks
Potential risks include loss of classroom time, which is minimized by the fact that music therapy is provided as a part of child's curriculum. Potential loss of confidentiality is also a risk, which will be minimized by the following steps: pre-and posttest oral language scores from the *Woodcock-Muñoz Revised Language Assessment* will be compiled by the principal at Lillie Jackson. Each student will be assigned a number with scores being released under this number only. LJJECC will maintain the list of the students and their corresponding numbers. Any paper or electronic information the researcher has will be destroyed 18 months after the research is completed. Confidentiality will be protected to the extent that is allowed by law. Another potential risk is the loss of anonymity from accessing your student's individualized education plan. As mentioned above, the researcher will only access this information to create music therapy session protocols and will keep the materials in a locked file cabinet, separate from any

identifying information. There is also a risk of fatigue for your student, which will be minimized by the researcher verbally stating to the participants that if they get fatigued, they can leave the session at any time with no penalty. The final risk is the risk of frustration that may come from learning English. This risk is minimized by the presence of three classroom teachers at the time of music therapy to assist with translations if the participants have trouble understanding what is expected of them. The researcher will try to prevent any problem that could happen because of this research. You should let the researcher know at once if there is a problem and she will help you. However, TWU does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research.

Participation and Benefits

Your child's involvement in this research study is completely voluntary and you may discontinue your child's participation in the study at any time without penalty. Should you choose not to allow your child to participate, your child will still receive the music therapy services, but your child's test scores will not be included in the study. The only direct benefit of this study to you is that at the completion of the study, a meeting will be held at the school where the test results will be shared with interested parents/guardians/teachers, and a copy of the completed thesis will be given to the Early Childhood Center.

Questions Regarding the Study

If you have any questions about the research study you may ask the researchers; their phone numbers are at the top of this form. If you have questions about your rights as a participant in this research or the way this study has been conducted, you may contact the Texas Woman's University Office of Research and Sponsored Programs at 940.898.3378 or via e-mail at IRB@twu.edu. You will be given a copy of this signed and dated consent form to keep.

Please sign this consent form and return it to the classroom teacher within 3 days of receiving it.

_____ _____

Signature of Parent/Guardian Date

***If you would like to receive a summary of the results, please include your address where the findings may be sent:**

_____

_____

_____

APPENDIX B

Consent to Participate in Research – Spanish Form

TEXAS WOMAN'S UNIVERSITY
CONSENTIMIENTO PARA PARTICIPAR EN INVESTIGACIÓN

Título: El Effecto de Therápia Música en la Lengua Expresiva de Estudiantes Especiales que Habla Español Que Hay Aprenderlo Inglés en Clases Tempranas De La Niñez

Investigador: Cristina Stock.....
Consejera: Nicki Cohen, Ph.D. .....

Explicación y Propósito del Investigación
Le están pidiendo participar en un estudio de la investigación para la tesis de Ms. Stock en Texas Woman's University. El propósito de esta investigación es determinar el efecto de la terápia de la música en la lengua expresiva en niños necesidades de lenguaje de habla hispana de las necesidades en salones de clase tempranas de la niñez. Las preguntas de la investigación son: 1) ¿ Hay una diferencia en la lengua expresiva en las canciones en Inglés con respecto a las canciones en Español? 2) Cuando los niños hablan otro idioma en este caso en Español la musca de terapia le ayuda para mejorar para aprender el segundo lenguaje en este caso, en Inglés. Esto resultado se ha medido con el *Woodcock-Muñoz Survey.*

Procedimientos del Investigación
Para este estudio, el investigador conducirá a dos grupos de la terapia de la música: uno totalmente en inglés y el otro en español e inglés. La terapia de la música ocurrirá en lunes, miercoles y viernes durante de Abril en la sala de clase de su niño. Las sesiones de la terapia de la música serán conducidas durante el día de la escuela por 30 minutos dos veces una semana, sobre un total de 4 semanas, que asciende a 6 horas de la comisión total del tiempo para su niño.

El investigador puede leer los planes individuales de educación (IEP) para crear sesiónes de musica terápia por su niño. El investigador recogerá cuentas de la prueba de la encuesta sobre la lengua de *Woodcock-Muñoz,* una prueba que se da dos veces al año por los patólogos de la discurso-lengua en la escuela de su niño, y de los informes sobre la marcha de los trabajos terminados por el profesor de la sala de clase de su niño (*Pre-Kindergarten Assessment Chart 2006-2007.)*

Riesgos Potenciales
Riesgos potenciales incluye uso de tiempo en la clase de su niño. La terapia de la música está proporcionada como parte del plan de estudios del niño. Los datos o información de los estudiantes son confidenciales, manteniendo de Lillie Jackson. Estudiantes tendrá un numero asignado del Kathy Haule. Los datos del *Woodcock-Muños* sera protegido de este numero. Tambien, estos datos en un gabinete con llove o una una computadora contraseña-asegurada en el hogar del investigador. La información de la cuenta de la pruebas también contendrá códigos más bien que nombres para proteger la identidad de su niño. Todos los datos de papel serán destruidos antes 18 meses después del investigación. El información será protegido hasta el punto de sea permitido por la ley. Otro riesgo potenciál es fatiga durante del therápia del música. El investigador dirá los groupos que sí puede relaje a cualquier momento. Un otro riesgo es frustración asociado con aprendiendo Inglés. Hay tres maestros que puedo ofrecer ayuda y traducción por los estudiantes. El investigador intentará prevenir cualquier problema que podría

suceder debido a esta investigación. Usted debe dejar al investigador saber inmediatamente si hay un problema y ella le ayuda. Sin embargo, TWU no proporciona servicios médicos o la ayudará financiera para lesiones que pudieron suceder porque usted está participando en esta investigación.

Preguntas Sobre La Investigación
La implicación de su niño en este estudio es totalmente voluntaria y usted puede parar la participación de su niño en el estudio en cualquier momento sin pena. Si usted elige no permitir que participe su niño, su niño seguira recibiendo los servicios de la terapia de la música, que son una parte regular del plan de estudios de el salon de clase, pero las cuentas de la prueba de su niño no serán incluidas en el estudio. La única ventaja directa de este estudio a usted es en la terminación del estudio, una reunión será celebrada en la escuela en donde los resultados de la prueba serán compartidos con padres/guardas/maestros interesado, y una copia de la tesis terminada será dada al centro temprano de la niñez.

Preguntas Con Respecto al Estudio
Si usted tiene cualesquier pregunta sobre el estudio de la investigación usted puede preguntar a los investigadores; sus números de teléfono están en el frente de esta forma. Si usted tiene preguntas sobre los derechos de lose studios o como se van a conducir, usted pueda llamar a la officina de Texas Woman's University en 940.898.3378 o por E-mail en IRB@twu.edu. Usted recivira una copia de estos documentos firmados

Firme por favor esta forma del consentimiento y regresarla al profesor de la sala de clase en 3 días.

_____ _____

Firma del Padres or de la Guarda Fecha

***Si usted quisiera recibir un resumen de los resultados de este estudio, proporcione por favor un direccionamiento a el cual este resumen debe ser enviado:**

_____

_____

_____

APPENDIX C

Modified Pre-Kindergarten Assessment Chart (PKAC)

Modified Pre-Kindergarten Assessment Chart

Student Name:_____ Teacher Initials:_____

	Week 1	Week 4
1E. Expresses needs and wants using words in English		
1S. Expresses needs and wants using words in Spanish		
2E. Speaks in sentences/complete thoughts in English		
2S. Speaks in sentences/complete thoughts in Spanish		
3E. Names numerals in English		
3S. Names numerals in Spanish		
4E. Names and describes shapes in English		
4S. Names and describes shapes in Spanish		
5E. Uses words to solve problems in English		
5S. Uses words to solve problems in Spanish		
6E. Uses new vocabulary in English		
6S. Uses new vocabulary in Spanish		
7E. Answers questions about stories in English		
7S. Answers questions about stories in Spanish		
8E. Explains sorting (size/color/shape) in English		
8S. Explains sorting (size/color/shape) in Spanish		

mastered +
assessed but not yet mastered –