Impact of Participation in a Small Music Group on the Academic Achievement of Primarily Hispanic Youth

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IMPACT OF PARTICIPATION IN A SMALL MUSIC GROUP ON THE ACADEMIC ACHIEVEMENT OF PRIMARILY HISPANIC YOUTH

by

Danielle Juliana Keaton

Thesis submitted in partial fulfillment of the requirements for the degree of

HONORS IN UNIVERSITY STUDIES WITH DEPARTMENTAL HONORS in

Psychology and Music Therapy in the Department of Psychology and the Department of Music

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Spring 2016
Abstract

The purpose of the present study was to explore the effects of participation in a children's violin instructional music program, The Young Violinists from St. Thomas Aquinas (YVSTA), on the primarily Hispanic participants' academic achievement. Data collection involved obtaining YVSTA attendance records and participants' academic records: their standardized test scores, attendance records, and academic transcripts. The participants were 5 boys and 14 girls ranging in age from 6 to 14, enrolled in Kindergarten to eighth grade. Children attended the YVSTA between 9 and 57 times, representing 36.36% to 86.36% attendance. All children but one were identified as being Hispanic; one child was identified as White American. Data were analyzed by coding, description, and interpretation. Analyses revealed no significant effects between children's attendance to the music program and their academic transcripts, attendance records, and standardized test scores, although there was evident improvement in participants' GPA over time. Combined with participants' relatively high attendance to the music program, we suggest that involvement in the YVSTA is akin to a preventive intervention designed to enhance at-risk youth's academic performance. The findings of this study highlight the potential positive effects of this type of music program on children's academic achievement, and support the continuation of this program and the development of similar music education programs.

Keywords: Hispanic youth, violin program, music education
Acknowledgements

I would like to thank Dr. Sergio Bernal, one of my mentors, for allowing me to become involved in his music group, and I would like to thank Dr. Melanie Domenech Rodriguez, my psychology professor and other mentor, for her continual guidance and support throughout this research. I am so grateful for having worked with two individuals who are so passionate and knowledgeable about their interests and willing to share their expertise with me. My interest in multicultural psychology prompted me to reach out to Dr. Domenech Rodriguez, and she has inspired me to continue pursuing multicultural issues in graduate school.

Additionally, I would like to thank my music therapy professor, Maureen Hearns, for although she was not directly involved in this project, she has been an exemplary role model for me in becoming the best music therapist (and person) that I can be. She has also inspired me to pursue multicultural issues in graduate school, and I am so fortunate to be able to call her my professor and friend.

Finally, I would like to thank my parents and grandparents who have always been my personal cheerleaders in everything I have pursued. Without their unending love and support, none of this would have been possible!
# Table of Contents

Introduction and Literature Review .............................................................................. 1

The Young Violinists from St. Thomas Aquinas .......................................................... 5

Method .......................................................................................................................... 11

Results ......................................................................................................................... 17

Discussion .................................................................................................................... 21

References .................................................................................................................... 24

Appendix A ................................................................................................................... 28

Appendix B .................................................................................................................... 33
List of Tables and Figures

Table 1. Music Program Attendance and School Attendance ............................................ 12

Figure 1. Attendance to the music program represented as a percentage of classes attended between March 2014 and January 2016 divided by the total number of classes offered during that time period. ........................................................................................................................................ 13

Table 2. Academic Achievement .......................................................................................... 15

Table 3. Standardizing Test Scores ..................................................................................... 17

Table 4. Frequency of Letter Grades per Semester .............................................................. 18

Table 5. Correlations Between Study Variables .................................................................... 20
Introduction and Literature Review

Throughout the literature, researchers have documented racial and ethnic disparities in the educational setting. Hispanic children in particular often struggle more academically than do their non-Hispanic peers. Studies have found that Hispanic youth have lower grades and are more likely to drop out of public high school than their White American counterparts (Chapman, Laird, Ifill, & KewalRamani, 2011; Leventhal-Weiner & Wallace, 2011). Characteristics of at-risk children include socioeconomic status, family size, minority group status, and low parental education (Alva & de Los Reyes, 1999). For Hispanics, especially, evidence suggests that the acculturation process into the dominant culture oftentimes creates stress which may not only be difficult to cope with (Cervantes & Castro, 1985; Cervantes, Padilla, & Salgado de Snyder, 1991; Delgado-Gaitan, 1988; Gil, Vega, & Dimas, 1994; Hovey & King, 1996; Saldaña, 1994), but also negatively impact children’s academic performance (Alva & de Los Reyes, 1999).

One potential solution for increasing academic performance among Hispanic youth may lie in encouraging their participation in extra-curricular activities, for much research has shown the positive effects of student participation in those activities. In the United States, much of that research has focused on academic outcomes (Simoncini & Caltabiono, 2012). Participation in extra-curricular activities has shown to be positively associated with academic outcomes, including grades, test scores, school engagement, and educational aspirations (Broh, 2002; Cooper, Valentine, Nye & Lindsay, 1999; Fletcher, Nickerson & Wright, 2003; Marsh & Kleitman, 2002), and has appeared to benefit all children, whether they are from advantaged or disadvantaged backgrounds (Simoncini & Caltabiono, 2012).

Additionally, involvement in some type of music education program or activity such as enrolling in a school’s band or orchestra, or enrolling in private music instruction, has been
THE YOUNG VIOLINISTS FROM ST. THOMAS AQUINAS

shown to positively affect children in a variety of domains including the academic domain (Hallam, 2010). For at-risk youth in particular, research conducted by Nina Kraus, a neurobiologist at Northwest University, concluded that learning to play a musical instrument or sing can help disadvantaged children strengthen their reading and language skills (Musical Training Offsets Academic Achievement Gaps, 2014). The purpose of this study was to explore the relationship between involvement in the Young Violinists from St. Thomas Aquinas, a violin music instruction program, and the academic achievement of its primarily Hispanic youth participants living in Cache Valley, Utah.

Disparities in Educational Settings

Many racial and ethnic disparities have been reported over the years in the educational setting. In a statewide survey conducted in Minnesota from 1998-2010 (Nitardy, Duke, Pettingell, & Borowsky, 2015), researchers looked at the differences in academic achievement and academic aspirations between 350,000 high school students ranging in age from 13-19 who identified as White American, Asian American/Pacific Islander, Black/African American, Hispanic/Latino, American Indian, and mixed race. This study used data from the Minnesota Student Survey gathered in 1998, 2001, 2004, 2007, and 2010. Measures of academic achievement and educational aspirations were examined by race/ethnicity, poverty status, and family structure. Results found that there were significant race/ethnic disparities at every time point regarding academic achievement, and that academic aspirations among participants varied according to such factors as race/ethnic group identity, individual factors, and systemic factors (Nitardy et al., 2015).

In examining high school dropout rates, it seems that Hispanic youth are at a particular disadvantage. A report released in October 2011 by the United States Department of Education...
(Chapman et. al, 2011) noted that the public high school dropout rate from grades 9-12 for Hispanic students (5.0%) was more than twice that of White American students (2.3%). In another analysis of high school dropout rates among White American, Black American, and Hispanic students in 275 U.S. Metropolitan Statistical Areas (MSAs), Leventhal-Weiner and Wallace (2011) found that Black American and Hispanic youth were more susceptible to extremely high dropout rates. For Hispanic students especially, the top three MSAs with the highest rates were Decatur, AL (68.3%), Lexington, KY (55%), and Jackson, TN (54.3%). The top MSA dropout rate for Hispanics (68.3% in Decatur, AL) was more than three times that of White Americans in their top MSA (20% in Elkhart-Goshen, IN).

In a study examining gender and racial/ethnic differences in students' grade trajectories across seventh grade, researchers found that the clearest differences were those between ethnic/racial groups (Wampler, Munsch, & Adams, 2002). Among Black American, White American, and Hispanic youth, the researchers discovered that the Hispanic children in particular exhibited the most change as they followed a downward trajectory that took them down nearly a letter grade lower than their average in the previous grade. In contrast, data from Black American and White American youth showed that their grades were fairly consistent throughout seventh grade. Wampler et al. (2002) hypothesized that peer culture pressures and varying school environments (such as physical location and ethnic makeup of the student body) were the stressors contributing to the marked contrast between Hispanic and Black American and White American youths in the study. From this study, researchers noted that it was clear that Hispanic students were at a higher risk of dropping out of school than either non-Hispanic White American or Black American youth (Wampler et al., 2002).
Music Education

Previous studies involving children and adolescents have shown the positive effects of music instruction in a wide variety of domains, such as perceptual and language skills, literacy, intellectual development, creativity, social/personal development, and health and well-being (Hallam, 2010). Music education programs such as El Sistema, begun in Venezuela in 1975 for underprivileged children (Lesniak, 2012), and the Masidlale Music Project, begun in 2009 by the Cape Philharmonic Orchestra for disadvantaged youth in South Africa (Brenner, 2011), have proved incredibly successful, positively impacting hundreds of young lives around the world.

Begun in 1975 by José Antonio Abreu in Venezuela, El Sistema had its humble beginnings in an underground parking garage (Lesniak, 2012). At the start of his music program, Abreu taught eleven children. His goal for El Sistema was to provide an opportunity—free of charge—for impoverished children to receive a musical education to promote the development of the entire child. When the program began, there were only two orchestras in Venezuela. Today, the country has over 60 children's orchestras, nearly 200 youth orchestras, 30 professional adult orchestras, and dozens of choruses. The influence of El Sistema has spread outside the country as well, inspiring music programs in over 50 countries, including Canada, Netherlands, Portugal, Japan, South Africa, and the United States (“El Sistema Around the World,” n.d.). Within the U.S. alone, the most recent census summary reports 117 known El Sistema-based programs across the country, involving over 28,000 children (El Sistema USA: A National Alliance of El Sistema Inspired Programs, 2014). Together, El Sistema and its related programs have transformed over a million children's lives around the world through providing quality music education and opportunities for disadvantaged youth.
In another part of the world, there exist three music programs also dedicated to enriching the lives of impoverished children through music. The Masidlale Music Project, the Music Investment Project, and the Mangaung String Programme are three music education programs founded in South Africa at different times by various people (Brenner, 2011). Though the projects are pedagogically diverse, their leaders are dedicated to the same goal of positively impacting at-risk youth. Students within each of the three programs learn to play orchestral instruments and are all supported by their instructors to succeed both inside and outside the classroom. Strong relationships are formed between students and teachers, and the latter provide many opportunities for the former to incorporate their own culture in the curriculum, develop awareness of other cultures, and interact in the community. All three projects share an additional goal of providing the children with employment in the music industry (e.g., working as a gardener in exchange for piano lessons) (Brenner, 2011). Over the years, these programs have proven to be successful in brightening the lives of hundreds of children in South Africa. Along with El Sistema and their related programs begun around the world, music programs such as these have no doubt provided disadvantaged youth with positive experiences to both grow musically and develop individually.

**The Young Violinists from St. Thomas Aquinas**

Although much research has been conducted on the positive effects of educational music programs for children, few research exists which examines those effects on minority youths specifically. This purpose of the present study was to build on the work begun last spring in which we conducted a program evaluation of the Young Violinists from St. Thomas Aquinas (YVSTA). The YVSTA is a small violin music education program for children launched in Logan, UT in October 2012 and directed by Dr. Sergio Bernal, associate professor from the
Department of Music at Utah State University (USU) and the director of the USU symphony-orchestra. Together with his assistants, three youths and one adult, Dr. Bernal teaches group violin lessons every Friday, excepting the first Friday of each month. The two hour group music instruction is divided into two hour-long sessions, with the first one devoted to teaching beginning students and the second one devoted to teaching the more advanced students. As a former teacher at El Sistema, Dr. Bernal modeled his program after it, adopting the Suzuki Method of teaching music in which children initially learn through constant repetition, listening, and memorization instead of learning to read the music. El Sistema encourages learning through performing and collaboration, and Dr. Bernal does the same by providing his students with ample opportunities to perform in the community, whether it be at St. Thomas Aquinas church services on Sundays alongside other worship group members, at public concerts, or with the USU symphony-orchestra. Most importantly, Dr. Bernal creates a nurturing and positive environment for his young violinists in order to promote the growth of the whole child through music—the ultimate goal of both El Sistema and Dr. Bernal’s Young Violinists from St. Thomas Aquinas.

In the program evaluation conducted last spring, we were interested in examining the social, behavioral, familial, and academic effects of participation in the YVSTA on its primarily Hispanic participants. Because USU’s institutional review board determined the project was not “human subjects research,” typical consent forms were not needed for participants. Instead, I created simple informational fliers and handed them out to personally recruit families for the program evaluation. To conduct a thorough evaluation, I obtained attendance records, interviewed participants and their parents, and collected behavioral observations at St. Thomas Aquinas in Logan, UT. I secured permission from 9 boys, 21 girls, and 3 fathers and 3 mothers to
THE YOUNG VIOLINISTS FROM ST. THOMAS AQUINAS

participate in the program evaluation. The children ranged in age from 5 to 16, and 83.3% identified as being Hispanic, 13.33% as Asian American, and 3.33% White American. Half of the children participants reported being involved in extracurricular clubs and activities such as orchestra, band, and robotics club, and over half of them reported having learned or played another instrument besides the violin (most often citing the piano). Additionally, almost all of the participants (86.67%) reported having at least one family member who played one instrument or another. Over half of them were enrolled in elementary schools, followed by local charter schools, middle schools, and high school. Few of the participants were able to comment upon their grades. In regards to six parent participants, three identified as being Asian American, one was Hispanic, and two were White American. All of them had graduated high school and gone on to obtain tertiary education, and they reported income levels ranging from an average of $50,000 per year to over $100,000. Musically, four of the parents had personal experience playing an instrument, and two parents reported that their spouses played an instrument.

In reviewing participants' attendance in the music program, the average length of involvement was 12.2 months ($SD = 10.08$), with a range from 3 to 28 months, indicating that participants had been attending Dr. Bernal's group for a considerable amount of time. Twenty-one participants (70%) cited their own interest as the primary reason for why they decided to join the program. Using a five-point Likert-type scale (where 1 = strongly like and 5 = strongly dislike), participants reported a high level of satisfaction with the YVSTA as 26 of them (86.67%) chose a rating of 4 or 5. The average rating for all 30 participants was 4.52 ($SD = 0.78$). In reporting what they liked most about the program, the two most frequent responses were participants' enjoyment of learning the violin ($n = 17, 56.67\%)$ and their enjoyment of making new friends and getting together with them during the music sessions ($n = 5, 16.67\%)$. A
few participants also talked about specific things they disliked, such as having to memorize all the music and the sometimes noisy and distracting environment, and made suggestions for the group, such as further dividing the groups according to instructor style and learning a wider variety of songs and instruments. Additional comments were made in general about how much participants enjoyed the YVSTA program overall.

Through interviews with parents, I found that five of the six (83.3%) indicated that both they and their children attended each session that was offered every month. All six parents reported a satisfaction rating of 5 on the same Likert-type scale that the child participants had used. In discussing the overall impact of the program on their children and describing what they like the most and least about it, all of the parents were immensely positive about the violin group. One parent discussed how it seemed his child’s self-esteem had been positively impacted and that his child’s confidence had improved. Three of the parents expressed their appreciation for the socialization opportunity it provided their children. Another parent commented on the noticeable increase in self-confidence in her child. Half of the parents mentioned how knowledgeable and effective Dr. Bernal was at teaching the children and using various strategies to keep them engaged. One parent discussed how attending the weekly music session with his child had increased their relationship because they were able to spend this time together in a shared activity. The parents also made suggestions for the group and made additional comments about how much they approved of and were satisfied with the YVSTA.

Through my behavioral observations conducted across 9 sessions, I observed that on average, a total number of 27 children ($SD = 4.64$) attended each session, with a range of 22 to 34 attending. Across the nine sessions, boys were consistently outnumbered by girls in a 1:5 ratio. Additionally, at least one parent stayed in each session with their child. In teaching, Dr.
Bernal and his assistants primarily used verbal instruction (including singing) and demonstrative activities to teach the students. For example, when teaching a section of music, he would tell the students what he wanted them to do (a directive statement), model that instruction (a demonstrative activity), signal the students to perform, and then use an approval statement such as “good job!” to positively reinforce their performance. Before modeling an instruction, Dr. Bernal would always preface that with the verbalization of “my turn.” Then the students would wait while he modeled that instruction. After that, Dr. Bernal would say “your turn” and verbally prepare the students by counting numbers 1 to 4 out loud. The students would then all play together along with Dr. Bernal. By using simple instructions, the students could easily understand exactly what was asked of them. By counting to four, Dr. Bernal allowed the students time to prepare for playing their violins as they were able to get into the correct playing position to do so. By alternating verbal instructions and performance opportunities often, Dr. Bernal maintained student engagement which also helped to prevent off-task behavior and limit distractions among the group.

In addition to modeling a specific instruction on the violin in a regular playing position, Dr. Bernal also used creative ways to model that behavior in order to maintain student engagement. For example, instead of merely standing and playing the violin in the normal position, he would lift and hold one leg, hop in place, or sit down and stand up while playing. Dr. Bernal would then use a directive statement to encourage students to perform the section of music in the same way (i.e., by also lifting and holding one leg, hopping in place, or sitting down and standing up while playing). By modeling instructions in creatively different ways, Dr. Bernal effectively held the attention of the group, frequently eliciting laughter and smiles from all of the students as they attempted to copy him. Additionally, Dr. Bernal provided individual
students the opportunity to lead the group by choosing an action to do while playing the violin and then having everyone else copy that individual. In this way the individual students were validated and given responsibility for a brief period of time, which in turn helped to maintain the engagement of the other students as they focused on one of their peers.

Ultimately, this program evaluation yielded many positive effects in the social, behavioral, and familial domains. Three themes emerged regarding all participants’ experience with the music program: (a) overall enjoyment of the violin group, (b) socialization opportunities, and (c) satisfaction with the music instructor. Regarding the overall enjoyment of the group, both participants and their parents expressed a high level of satisfaction with the music program. The participants frequently expressed their enjoyment of learning the instrument while the parents expressed their enjoyment at seeing their children succeed in a welcoming environment. In regards to socialization opportunities, parents and their children alike praised the opportunity for such socialization among their peers during the sessions. Finally, several students and parents commented upon the effectiveness of Dr. Bernal as a music instructor who was personable, knowledgeable, and engaging.

Having conducted this program evaluation, we sought to focus more narrowly on the effects of participation in the YVSTA on participants’ academic achievement in this current study. By analyzing participants’ attendance records in the YVSTA in relation to their academic transcripts, attendance, and standardized test scores, we hypothesized finding a positive correlation between them which would provide support for the positive effects of music instruction on the academic outcomes of minority youth participants.
Method

Participants

Participants for the present study were selected on the basis of their current participation in The Young Violinists from St. Thomas Aquinas. At the time of this research, 28 children regularly attended the YVSTA. Of those 28 children, parental consent and school records were obtained for 21 of them for a 75% participation rate. Two of the 21 children provided their consent, but the schools they attended did not provide their records. Thus, the final sample was comprised of 19 children, 5 boys and 14 girls between 6 and 14 years of age ($M_{age} = 9.83, SD = 2.71$), who resided in Cache Valley, Utah. All but one participant identified as Hispanic ($n = 18, 94.74\%$); the other participant identified as White American. Participants attended Kindergarten through eighth grade.

Procedure

Approval to conduct this research was sought and secured from the USU institutional review board (Protocol #6898). Participants were recruited by word of mouth by Dr. Bernal and me. I distributed consent forms (see Appendix A) and authorization to release school record forms (see Appendix B) to the children during the Friday evening music sessions and they returned them with parental signatures. Dr. Bernal provided the attendance records for all of his students; attendance records were available beginning in March 2014 and ending in January 2016. To obtain participants’ academic records, I personally visited schools and corresponded with school officials via email to secure their data. Participants’ age and ethnicity were marked on their authorization forms. All of the data was then scanned, coded, and securely uploaded online to Box, a secure cloud storage hosted by Utah State University. Scans were made of all the consent and authorization forms and also uploaded to Box. Parents of the participants were
then given the opportunity to have their child’s original academic data returned to them along with a brief explanation of its meaning. The remainder of the unwanted physical data was securely destroyed.

Measures

Attendance Records.

**YVSTA.** Attendance records to the YVSTA were available from March 2014 through January 2016. During that time period, Dr. Bernal offered 66 classes to a total of 93 children who were listed in the roster as having ever participated in the YVSTA. Participation for all 93 children ranged from attending 1 to 62 classes ($M_{days} = 14.27$, $SD_{days} = 16.20$). In our sample of 19 participants, children attended 9 to 57 classes out of the total 66 offered. Because they started at different times, we calculated program attendance relative to the time period (i.e., number of classes attended between March 2014 and January 2016 divided by 66) and found that attendance ranged from 36.36% to 86.36% ($M = 63.74\%$, $SD = 13.21\%$, see Table 1 and Figure 1). Of those 19 participants, 13 of them had been participating in the YVSTA since March of 2014 reflecting long-term involvement in the program.

Table 1

*Music Program Attendance and School Attendance*

<table>
<thead>
<tr>
<th></th>
<th>$n$</th>
<th>Min</th>
<th>Max</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Music Attendance</td>
<td>19</td>
<td>36</td>
<td>86</td>
<td>63.74</td>
<td>13.22</td>
</tr>
<tr>
<td>% School Absence</td>
<td>19</td>
<td>0</td>
<td>12</td>
<td>5.90</td>
<td>4.00</td>
</tr>
<tr>
<td>% School Tardy</td>
<td>19</td>
<td>0</td>
<td>33</td>
<td>4.64</td>
<td>9.12</td>
</tr>
</tbody>
</table>
Figure 1. Attendance to the music program represented as a percentage of classes attended between March 2014 and January 2016 divided by the total number of classes offered during that time period.

School. School attendance data was available for all 19 participants for the current 2015-2016 school year (see Table 1). All schools but one met for 180 days of instruction, thus we calculated attendance as a percentage of absences and tardies.

Academic Transcripts.

Academic transcripts were not available for every participant. Those transcripts that were obtained varied widely in the amount and kinds of information they provided. We were interested in examining students’ grades from both this current school year and the previous one, but not all transcripts included the previous year’s grades. The grades themselves also differed in how they were recorded, for some schools used the basic letter grade system while others used a 1-2-3-4 system or even designed their own grading system. Finally, the number of terms varied
between schools as they ranged from 2 to 6. We were interested in examining students’ grades at two general time points during the school year, in the fall and in the spring. For schools that offered two terms, we simply looked at their grades in those first (fall) and second (spring) terms. For schools that offered three terms, we looked at student grades in the first (fall) and third (spring) terms. For schools that offered six terms, we looked at student grades in the third (fall) and sixth (spring) terms.

Of our 19 participants, we obtained current year grades from 13 of them and previous year grades from 9 of them. In coding the grades, we converted all grades to the same basic letter grade system in which A was the highest grade and F was the lowest. No distinctions were made for grades that were accompanied by a + or – sign. We excluded pass/fail grades. For schools which used a 1-2-3-4 grading system, we converted a grade of 4 to an A, a grade of 3 to a B, a grade of 2 to a C, and a grade of 1 to a D. One school used their own E-M-A-N-x system, in which E stood for “exceeds expectations,” M for “meets expectations,” A for approaching expectations, N for “not meeting expectations,” and x for “not yet measured.” For that school, we converted a grade of E to A, M to B, A to C, and N to D. For all schools, we excluded all grades from citizenship-related classes (e.g., social emotional skills and personal learning skills) from our data. All other classes were included. Additionally, we chose to exclude any grades from those participants in Kindergarten as their progress reports simply varied too much in form and content to be able to arrive at a meaningful systematic categorization.

**Grades.** To calculate a cumulative grade for each of the semesters for those participants who provided grades, we multiplied the number of As, Bs, Cs, and Ds by 4, 3, 2, and 1, respectively, and then divided that number by the total number of letter grades that participant
had received. Table 2 shows the range, average, and standard deviation of grades for each semester.

Table 2

<table>
<thead>
<tr>
<th>Academic Achievement</th>
<th>n</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2014 GPA</td>
<td>9</td>
<td>2.50</td>
<td>4.00</td>
<td>3.28</td>
<td>0.50</td>
</tr>
<tr>
<td>Spring 2015 GPA</td>
<td>9</td>
<td>2.50</td>
<td>4.00</td>
<td>3.32</td>
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<tr>
<td>Fall 2015 GPA</td>
<td>13</td>
<td>2.57</td>
<td>4.00</td>
<td>3.53</td>
<td>0.52</td>
</tr>
<tr>
<td>Standardized Math</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>2.00</td>
<td>0.63</td>
</tr>
<tr>
<td>Standardized Science</td>
<td>9</td>
<td>1</td>
<td>3</td>
<td>2.22</td>
<td>0.67</td>
</tr>
<tr>
<td>Standardized Language</td>
<td>16</td>
<td>1</td>
<td>2</td>
<td>1.81</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Standardized Test Scores. Standardized test scores were not available for every participant. Of our 19 total participants, 16 provided test scores for one standardized test. Five of those 16 provided scores for an additional test. All the participants who provided test scores took at least one of the following three tests: Utah's Student Assessment of Growth and Excellence (SAGE) test, the Idaho Standardized Achievement Tests (ISAT), and the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) test.

ISAT. This test is given annually to students in grades 3 and above and measures math, language arts, and science comprehension. The ISAT measures proficiency in each of those three areas by using a 1-2-3-4 system in which 4 is the highest score a student could earn in the specific subject test, indicating an advanced or highly proficient level; a 3 indicates a proficient level; a 2 indicates basic or approaching proficient level; and a 1 indicates below basic or below proficient level.
SAGE. This test is given annually to students in grade 2 and above and also measures math, language arts, and science comprehension. Like the ISAT, it uses a 1-2-3-4 system to measure proficiency in those three areas. Four (4) is the highest score a student can earn in the specific subject test, indicating an advanced or highly proficient level; a 3 indicates a proficient level; a 2 indicates basic or approaching proficient level; and a 1 indicates below basic or below proficient level.

DIBELS. Unlike the ISAT or SAGE, this test only measures early childhood literacy and is therefore offered three times per year to those in grades Kindergarten through sixth grade only. The DIBELS test gives an evaluative score of at or above benchmark, below benchmark, or well below benchmark for each of its subtests measured at the beginning, middle, and end of the school year. Additionally, the DIBELS provides a composite score also measured at the beginning, middle, and end of the school year that indicates whether the student is at or above benchmark, below benchmark, or well below benchmark at each time period.

Standardizing test scores. To standardize scores across all three tests, we assigned a score of above average, average, or below average to each test (see Table 3). On the ISAT and SAGE, a score of 4 was converted to above average, a score of 2 or 3 was converted to average, and a score of 1 was converted to below average. On the DIBELS test, we converted a score of above benchmark to above average, and a score of below benchmark or well below benchmark to below average. For our participants who provided DIBELS scores for each subtest, we counted how many scores were considered average out of all the scores compiled for that school year (e.g., 4 of 7 scores were considered average). For those who provided a composite DIBELS score, we simply converted it to above average, average, and below average. We then assigned a value of 3 to above average, 2 to average, and 1 to below average. Table 2 shows the range,
average, and standard deviation of each of the three subject test scores for the first standardized test that participants reported.

Table 3

<table>
<thead>
<tr>
<th>Standardizing Test Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ISAT</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
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<td>3</td>
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<td>4</td>
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<tr>
<td><strong>SAGE</strong></td>
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<td>1</td>
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<tr>
<td>2</td>
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<tr>
<td>3</td>
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<td>4</td>
</tr>
<tr>
<td><strong>DIBELS</strong></td>
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<tr>
<td>Above benchmark</td>
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<tr>
<td>Below benchmark</td>
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<tr>
<td>Well below benchmark</td>
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</tbody>
</table>

Results

School attendance

Table 1 shows the student absences which ranged from 0 to 12.23% ($M = 5.90\%, SD = 4.00\%) and the student tardies which ranged from 0 to 33.33% ($M = 4.64\%, SD = 9.12\%) . For the previous 2014-2015 school year, attendance data were available for 15 participants. Student absences ranged from 0 to 12.23% ($M = 5.90\%, SD = 4.00\%) and student tardies ranged from 0 to 33.33% ($M = 4.64\%, SD = 9.12\%) .
Academic grades

Table 4 shows the frequency of letter grades for each of the three semesters. In compiling the current 2015-2016 school year fall grades from the 13 participants for which data were available reveal a total of 45 As (56.25%; $M_A = 3.46$, $SD_A = 2.76$), 28 Bs (35%; $M_B = 2.15$, $SD_B = 3.00$), and 7 Cs (8.75%; $M_C = 0.54$, $SD_C = 0.97$). None of those participants earned any Ds or Fs. At the time these data were collected from the various schools, the schools had just begun their spring semesters, thus no data were available. Nine participants from the spring semester of the previous 2014-2015 school year earned a total of 19 As (32.76%; $M_A = 2.11$, $SD_A = 2.15$), 34 Bs (58.62%; $M_B = 3.78$, $SD_B = 3.45$), 4 Cs (6.90%; $M_C = 0.44$, $SD_C = 0.73$), and 1 D (1.72%; $M_D = 0.11$, $SD_D = 0.33$). None of the participants earned Fs. During the fall semester of the 2014-2015 school year, participants earned a total of 17 As (30.36%; $M_A = 1.89$, $SD_A = 2.15$), 34 Bs (60.71%; $M_B = 3.78$, $SD_B = 3.19$), 4 Cs (7.14%; $M_C = 0.44$, $SD_C = 0.73$), and 1 D (1.79%; $M_D = 0.11$, $SD_D = 0.33$). None of the participants earned any Fs.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Fall 2014</th>
<th></th>
<th>Spring 2015</th>
<th></th>
<th>Fall 2015</th>
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<tbody>
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<tr>
<td>As</td>
<td>17</td>
<td>30.56%</td>
<td>19</td>
<td>32.76%</td>
<td>45</td>
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<tr>
<td>Bs</td>
<td>34</td>
<td>60.71%</td>
<td>34</td>
<td>58.62%</td>
<td>28</td>
<td>35.00%</td>
</tr>
<tr>
<td>Cs</td>
<td>4</td>
<td>7.14%</td>
<td>4</td>
<td>6.70%</td>
<td>7</td>
<td>8.75%</td>
</tr>
<tr>
<td>Ds</td>
<td>1</td>
<td>1.79%</td>
<td>1</td>
<td>1.72%</td>
<td>0</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

Standardized test scores.

ISAT: One participant provided an official science subject score which was converted to a score of below average. That participant also provided interim scores (essentially taken as a
practice test for the upcoming official test) for language arts and math which were also converted to scores of below average. That participant did not provide official subject scores for language arts or math.

**SAGE.** Ten participants provided SAGE scores for the previous 2014-2015 school year, and three of those ten also provided their scores from that test for the 2013-2014 school year. For the ten participants who provided 2014-2015 scores, 6 (60%) scored average or above average in math, 5 scored average or above average in science (50%), and 6 scored average in language arts (60%). Two science scores were missing from this data. For the three participants who provided 2013-2014 scores, 2 (66.67%) scored average or above average in math, none scored average or above average in science, and 2 (66.67%) scored average in language arts. Two science scores were also missing from this data.

**DIBELS.** Five participants provided DIBELS scores for the current 2015-2016 school year, and two of those five also provided their scores from that test for the previous 2014-2015 school year. Of the five scores for this current year, three were reported in terms of how many scores were considered average out of all those compiled so far. One student had 2 out of 8 average scores (25%), another student had 8 out of 8 average scores (100%), and the third student had 4 out of 7 average scores (57.14%). The other two students reported their composite scores. Both were considered at or above average. Out of the five students who reported current year DIBELS scores, two of those also reported their scores from the previous year. One student had 12 out of 12 average scores (100%) while the other had 11 out of 12 average scores (91.67%).
We conducted a correlation analysis between music program attendance, school attendance, GPA, and test scores. Despite finding some highly correlated variables, we did not have sufficient statistical power to detect significant differences. For example, absenteeism and GPAs were correlated at -.483, -.761, -.496 for Fall 2014, Spring 2015, and Fall 2015, respectively, but only the -.761 correlation was significant at \( p = .017 \) (see Table 5).

Table 5

<table>
<thead>
<tr>
<th>Correlations Between Study Variables</th>
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<tr>
<td></td>
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<tr>
<td>1. Attendance to YV</td>
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<tr>
<td>(*n)</td>
</tr>
<tr>
<td>2. Fall 15 attendance</td>
</tr>
<tr>
<td>(*n)</td>
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<tr>
<td>3. Fall 15 tardiness</td>
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<tr>
<td>(*n)</td>
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<tr>
<td>4. Fall 15 GPA</td>
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<tr>
<td>(*n)</td>
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<tr>
<td>5. Fall 2014 GPA</td>
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<td>(*n)</td>
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<tr>
<td>6. Spring 2015 GPA</td>
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<tr>
<td>(*n)</td>
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<tr>
<td>7. Testing math</td>
</tr>
<tr>
<td>(*n)</td>
</tr>
<tr>
<td>8. Testing science</td>
</tr>
<tr>
<td>(*n)</td>
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<tr>
<td>(*n)</td>
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</tbody>
</table>

\( n = 16 \) 16 16 11 7 7 11 9
Discussion

The purpose of this study was to analyze the effects of participation in a small music program, the Young Violinists from St. Thomas Aquinas, on the primarily Hispanic participants’ academic achievement. Although our analyses revealed no significant effects between children’s attendance to the music program and their academic transcripts, attendance records, and standardized test scores, there was evident improvement in participants’ GPA over time. This improvement in GPA was further reflected by the increase in the number of As that the children earned over the three semesters. Combined with the fact that participants had relatively high attendance to the music program, we suggest that involvement in the YVSTA is akin to a preventive intervention designed to enhance at-risk youth’s academic performance. Other studies have shown the positive effects of music education programs for participants on a wide variety of domains (Bilhartz et al., 2000; Butzlaff, 2000; Cheek & Smith, 1999; Douglas & Willatts, 1994; Hallam, 2010; Harland et al., 2000; Johnson & Memmott, 2006; Morrison, 1994), and our results indicate the potential for this music program to impact its primarily minority youth participants similarly regarding academic outcomes.

Nation et al (2003) reviewed several articles to identify nine overall characteristics of effective prevention programs: comprehensive, included varied teaching methods, provided sufficient dosage, were theory driven, provided opportunities for positive relationships, appropriately timed, socioculturally relevant, included out-come evaluation, and involved well-trained staff. When examining the YVSTA as a kind of prevention program, it appears that it has incorporated all those characteristics to some degree. In particular, results from the program evaluation conducted last spring have shown that Dr. Bernal’s music program provides numerous opportunities for participants and their parents to foster positive relationships with one
another, and past participants have directly expressed their appreciation of those opportunities. Additionally, Dr. Bernal and his assistants are well-trained. Dr. Bernal worked for a decade at El Sistema in Venezuela and holds conducting degrees from Yale University and the University of Michigan and a doctorate degree in Composition from the University of Utah. His youth assistants, advanced violin students, have studied personally with him for several years and have performed with the USU symphony-orchestra several times. From attendance to some of the music sessions over the past year, I observed a variety of teaching techniques that Dr. Bernal has used with his students to maintain engagement (e.g., modeling, singing, and bowing). Thus, the YVSTA does appear to possess characteristics of effective prevention programs, especially sociocultural relevance (Nation et al., 2003). For future research in this area, the limitations of our study should be taken into account.

First and foremost, our sample of participants was very small. Analyses of the data was further hindered by the fact that participants were unable to provide data for every measure (i.e., grades, school attendance, and standardized test scores), with the exception of attendance to the YVSTA and school attendance. Second, the ways in which schools reported grades for elementary students varied considerably, making the process of standardizing grades for all students difficult. Third, this study lacked a control group, a number of children who were of similar age and grade, against which our results could be compared to see if there was a difference in academic performance between students involved in a music education program and those who were not involved in that kind of program. Finally, the time period for which we collected data was relatively short. In order to address all of these issues, we recommend continuing this study for several years and including a control group so that current participants in the program can be tracked to measure any significant progress or decline in their academic
outcomes. Those results can then be measured against the results from students not participating in such a music program to see if academic performance differed significantly between the two groups. It would additionally be interesting to include a third group of participants, those who were involved in the music program for a period of time and then left. By tracking their academic performance for some amount of time after they left the program, we could see if the seemingly positive effects of being involved in the YVSTA lasted.

Despite the above limitations of our study, and despite being unable to draw definite conclusions regarding participants' academic performance, it is apparent that this program has positively impacted children's lives by providing them with an activity in which they genuinely enjoy participating. Along with this program's continuation and growth, ultimately it is hoped that this study inspires the development of similar music education programs for children to enrich their lives in a variety of areas.


Appendix A

Consent Form – English Version

The Young Violinists from St. Thomas Aquinas: Analyzing the Effects of a Small Music Group On the Academic Achievement of Primarily Hispanic Youth in Cache Valley

Study Purpose. Dr. Melanie Domenech Rodriguez in the Department of Psychology and Dr. Sergio Bernal in the Department of Music at Utah State University are conducting a research study to determine the effects of Dr. Bernal’s weekly violin music group at St. Thomas Aquinas on participants’ academic achievement. You have been asked to take part because your child is participating or has participated in Dr. Bernal’s group. There will be approximately 35 total participants in this research. Danielle Keaton, a senior majoring in psychology and music therapy at USU, will be involved in this study. In addition to research presentations and publications, we may also use this information to try to secure funding to continue the Young Violinists program.

If you agree to participate, you and your child will provide basic demographic data such as sex, age, education, income, and ethnicity of your child, experience with musical instruments, and participation in Dr. Bernal’s group. Attendance records will be used as well. Finally, you would sign a release form to provide authorization to obtain your child’s academic transcripts, school attendance records, and Student Assessment of Growth and Excellence (SAGE) scores. All of this information will be converted to numbers and placed in an electronic file without identifiers. Original school records will be returned to you as soon as the information is entered in our data files.

Risks. Participation in this study involves minor risks or discomforts. There is a small risk of loss of confidentiality should school records be misplaced. We will take steps to reduce this risk by entering the data immediately and returning records to families at their earliest convenience. Your child’s information may be used for research presentations, publications, or grant proposals. Data will be presented in aggregate form and no individual participant will be identifiable.

Benefits. A potential benefit to participating in this study is receiving your child’s school records with an opportunity to discuss those records if you wish. You may feel satisfied to know that your participation is helping us become informed about the impact of the program in a way that could support this music program to continue and grow many years into the future.

Explanation & offer to answer questions. Danielle Keaton has explained this research study to you and answered your questions. If you have other questions or research-related problems, you may reach Melanie M. Domenech Rodriguez (PI) (435) 890-4613 or Danielle Keaton at (707) 360-8557. You may call or text those phone numbers. You may also email us at Melanie.Domenech@usu.edu or Keaton.Danielle@gmail.com. Dr. Domenech Rodriguez is able to take calls in both Spanish and English. Danielle Keaton is able to answer phone calls in English.

Your child’s participation in this study is entirely voluntary. Your child may refuse to participate or withdraw at any time without consequence or loss of benefits. Simply communicate with Drs. Domenech Rodriguez or Bernal, or with Danielle Keaton and we will be sure to delete your data from the data file.

Research records will be kept confidential, consistent with federal and state regulations. Only the researchers will have access to the data, which will be kept in Box.com, a HIPAA-compliant cloud-based storage. To protect your privacy, personal, identifiable information will be removed from study.

Date: 07/08/2011
INFORMED CONSENT

The Violinists from St. Thomas Aquinas: Analyzing the Effects of a Small Music Group On the Academic Achievement of Primarily Hispanic Youth in Cache Valley

documents and replaced with a study identifier. Identifying information will be stored in physical form in Dr. Domenech Rodriguez’s office in a locked filing cabinet. Identifying information will be kept as long as we have IRB approval from USU. Once our approval expires, identifiers will be destroyed. Deidentified information may be kept indefinitely.

The Institutional Review Board for the protection of human participants at Utah State University has approved this research study. If you have any questions or concerns about your rights or a research-related injury and would like to contact someone other than the research team, you may contact the IRB Director at (435) 797-0567 or email irb@usu.edu to obtain information or to offer input.

You have been given two copies of this Informed Consent. Please sign both copies and keep one copy.

Investigator Statement “I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered.”

Melanie M. Domenech Rodriguez
Principal Investigator
(435) 797-3059; (435) 890-4613
melanie.domenech@usu.edu

Danielle J. Keaton
Student Co-investigator
(707) 360-8557
keaton.danielle@gmail.com

Child/Youth Assent: I understand that my parent(s) or guardian(s) are aware of this research study and that they have given permission for me to participate. I understand that it is up to me to participate even if they say yes. If I do not want to be in this study, I do not have to and no one will be upset if I don’t want to participate or if I change my mind later and want to stop. I can ask any questions that I have about this study now or later. By signing below, I agree to participate.

Child’s Name: ___________________________ Signature: ___________________________

Date: ___________________________

Name of parent or caregiver: ___________________________ Signature: ___________________________

Date: ___________________________

Parent/caregiver’s relationship to participant: ___________________________
CONSENTIMIENTO

Los Violinistas de Sto. Tomás de Aquino: Análisis de los Efectos de la Participación en un Grupo Pequeño de Música sobre el Rendimiento Académico de Jóvenes Primordialmente Latinos en el Condado de Cache

Propósito del estudio. La Dra. Melanie Domenech Rodriguez en el Departamento de Psicología y el Dr. Sergio Bernal del Departamento de Música de Utah State University están llevando acabo un estudio para determinar los efectos de la participación de jóvenes en el grupo de música del Dr. Bernal sobre el rendimiento académico de los participantes. El grupo se lleva a cabo en la iglesia de Sto. Tomás de Aquino. Le hemos pedido que tome parte en este estudio por su hijo/a que ha participado o está participando en el grupo del Dr. Bernal. Habrán aproximadamente 35 participantes en este estudio. Además de presentaciones y publicaciones profesionales, es posible que utilicemos la información que aprendemos para obtener más financiamiento para el programa de los Jóvenes Violinistas.

Si consiente a participar, su y su hijo/a compartirán información demográfica básica, como lo es sexo, edad, educación, ingreso, y grupo étnico al que pertenece su hijo/a, experiencia con instrumentos musicales, y participación en el grupo del Dr. Bernal. Se utilizan los registros de asistencia también.

Finalmente, le pediremos que firme una autorización para obtener los registros académicos de su hijo/a que incluyen rendimiento académico, asistencia a clases, y sus grados en la prueba estándar “Student Assessment of Growth and Excellence” conocida como SAGE. Toda la información que obtengamos se convertirá en valores numéricos y será ingresada en un archivo electrónico sin ninguna manera de identificar a cada estudiante individualmente. Los registros académicos que recibamos les serán entregados a los padres tan pronto la información sea ingresada en nuestra base de datos.

Riesgos. La participación en este estudio pudiera resultar en incomodidad o riesgos menores. Existe el riesgo de que se pierda la confidencialidad si los registros académicos se extravían. Reduciremos la probabilidad de este riesgo al ingresarnos los datos inmediatamente y devolviéndolos a las familias a la brevedad posible. La información que obtengamos de su hijo/a será utilizada de manera agregada y no será posible identificar a ningún participante individualmente.

Beneficios. Un beneficio posible de su participación en este estudio es el recibir los registros académicos de su hijo/a y tener la oportunidad de sentarse con alguien que le puede explicar el contenido si usted así lo desea. Puede también sentirse satisfecho al saber que su participación nos ayudará a conocer el impacto del programa y que estos hallazgos puedan ayudar a mantener el programa funcionando en el futuro.

Explicación y oferta de contestar preguntas. Danielle Keaton y o Sergio Bernal le ha explicado este estudio y le ha contestado sus preguntas. Si tiene alguna otra pregunta o problemas relacionados a este estudio, puede comunicarse con Melanie M. Domenech Rodriguez at (435) 890-4613 o Danielle Keaton al (707) 360-8557. Puede llamar o enviar texto. También nos puede escribir por email a Melanie.Domenech@usu.edu o Danielle Keaton a KeatonDanielle@gmail.com. La Dra. Domenech Rodriguez puede contestar llamadas en español e inglés. Danielle Keaton solo puede contestar llamadas en inglés.

La participación de su hijo/a en este estudio es completamente voluntaria. Su hijo/a puede decidir que no quiere participar en un principio o retirar su participación en cualquier momento sin penalidad alguna o
CONSENTIMIENTO

Los Violinistas de Sto. Tomás de Aquino: Análisis de los Efectos de la Participación en un Grupo Pequeño de Música sobre el Rendimiento Académico de Jóvenes Primordialmente Latinos en el Condado de Cache

perdida de beneficios. Simplemente se puede comunicar con la Dra. Domenech Rodriguez, el Dr. Bernal, o Danielle Keaton y retiraremos sus datos de nuestros archivos.

La información que recopilamos se mantendrá confidencialmente, consistente con regulaciones federales y estatales. Solamente los investigadores tendrán acceso a los datos. Los datos se mantendrán en Box.com, un sitio de web para guardar datos que cumple los requisitos de HIPAA. Para proteger su privacidad, información que lo pueda identificar será removida de los documentos del estudio y será remplazada con un número de identificación. La información que identifica a los participantes se mantendrá en forma física en la oficina de la Dra. Domenech Rodriguez, en un archivo con llave. La información que lo identifica se mantendrá siempre y cuando haya un protocolo vigente con el Comité Institucional de Repaso para la Protección de Sujetos Humanos en Investigación (IRB, por sus siglas en inglés) de USU. Un vez cada que la aprobación, se destruirá toda la información que identifique a individuos particulares. La información sin identificación será retenida indefinidamente.

El Comité Institucional de Repaso para la Protección de Sujetos Humanos en Investigación (IRB) de Utah State University ha aprobado este estudio. Si tiene alguna pregunta o duda acerca de sus derechos o sufre alguna lesión o daño asociada a su participación y quisiera ponerse en contacto con alguien externo al equipo de investigación, puede comunicarse con la Directora del IRB al (435) 797-0567 o por email al irb@usu.edu. Allí podrá obtener información u ofrecer su consulta. La Directora del IRB solo habla inglés.

Ha recibido dos copias de este Consentimiento. Por favor firme ambas copias y retenga una copia.

Declaración de la Investigadora: "Certifico que este estudio ha sido explicado al individuo ya sea por mí o alguien de mi equipo de investigación, y que el individuo entiende la naturaleza y propósito, los riesgos posibles, y los beneficios asociados con su participación en este estudio. Cualquier pregunta que ha tenido ha sido contestada."

Melanie M. Domenech Rodriguez
Investigadora Principal
(435) 797-3059; (435) 890-4613
melanie.domenech@usu.edu

Danielle J. Keaton
Estudiante co-investigadora
(707) 360-8557
keaton.danielle@gmail.com

Asentimiento del Niño/a/Jóven: Entiendo que mi padre, madre, o guardián conocen los detalles de este estudio y me han dado permiso de participar. Entiendo que yo decido si quiero participar o no aunque ellos hayan dado permiso. Si no quiero participar en este estudio, no tengo que hacerlo y nadie va a molestarse conmigo por no participar o por cambiar de pare, y quiero para después. Puedo hacer las preguntas que quiera sobre este estudio, ahora o en cualquier momento. Con mi firma en este documento, doy mi permiso para participar.

V7 06 13 2011
CONSENTIMIENTO
Los Violinistas de Santo Tomás de Aquino: Análisis de los Efectos de la Participación en un Grupo Pequeño de Música sobre el rendimiento Académico de jóvenes Primordialmente Latinos en el Condado de Cache

Nombre y firma del niño/a o joven: ____________________________
Fecha: ____________________________

Nombre del padre, madre, o guardian: ____________________________
Fecha: ____________________________

Relación del padre, madre, o guardian con el niño/a: ____________________________
Authorization to Release Academic Records Form – English Version

AUTHORIZATION TO RELEASE EDUCATIONAL RECORDS

Child's name: _________________________ Date of birth: ________________________

Parent guardian of participant: ____________________________________________

I, ________________________________, hereby voluntarily authorize the student researcher, Danielle Keaton, and faculty mentor, Dr. Melanie Domenech Rodriguez, from Utah State University to obtain the academic transcripts, attendance records, and Student Assessment of Growth and Excellence (SAGW) scores for my child, ________________________, from his or her school _______________________. These records are being used for examining the possible impact that my child's participation in the Young Violinists from St. Thomas Aquinas has had on his or her academic performance. I understand that my authorization will remain effective until the records have been released, and that the information will be handled confidentially in compliance with the standards set by Utah State University's Institutional Review Board for the protection of human participants. I understand that the records may be released electronically and/or physically, and that they will be properly disposed of or returned to me within two weeks of being obtained. I also understand that I may see the information that is to be sent, and that I may revoke the authorization at any time by written, dated communication.

I have read and understand the nature of this release.

______________________________       ________________________________
Parent Guardian Name         [Date]

______________________________       ________________________________
Parent Guardian Signature      [Date]

______________________________       ________________________________
[Witness]                             [Date]
AUTORIZACIÓN PARA OBTENER RÉCORDS ACADÉMICOS

Nombre del niño/a: ______________________________
Fecha de nacimiento: ____________________________
Padre/madre/guardián: ____________________________

Por este medio yo, _____________________________, doy mi autorización de manera voluntaria para que la estudiante, Danielle Keaton, y su mentora, la profesora Melanie Domenech Rodriguez, de Utah State University, obtengan transcripciones académicas, récords de asistencia, y las notas obtenidas en el examen Student Assessment of Growth and Excellence (SAGW) por parte de mi hijo/a, ___________________________. Estos materiales se obtendrán directamente de la escuela ___________________________. Estos récords se usarán para examinar la relación que pueda existir entre la participación de mi hijo/a en el programa de violinistas de la iglesia St. Thomas Aquinas y su rendimiento académico.

Entiendo que mi autorización permanecerá efectiva hasta que se hayan transmitido los documentos y que la información se manejará de manera confidencial y cumpliendo con las reglas establecidas por el Comité Institucional para la Protección de Sujetos Humanos en Investigación de Utah State University. Entiendo que los récords pueden ser transmitidos de manera física o electrónica, y que serán propiamente destruidos o se me devolverán dentro de un periodo de dos semanas. También entiendo que podré ver toda la información transmitida, y que puedo retirar mi autorización en cualquier momento por medio de una comunicación escrita.

He leído y entiendo esta autorización.

__________________________________________________________  [Fecha]
Nombre del Padre/Madre o Guardián

__________________________________________________________  [Fecha]
Firma del Padre/Madre o Guardián

__________________________________________________________  [Fecha]
[Testigo]
Author Biography

Danielle Keaton was adopted from China and raised in Fort Bragg, California. One of six adopted siblings, she graduated from Three Rivers Charter School in 2012. She entered Utah State University in the fall of 2012 as a music therapy major and soon added a psychology major in her sophomore year. While at Utah State, Danielle enjoyed serving as a mentor in the Global Aggie Program, working with a young woman refugee; volunteering at an elementary school; participating in the ASL club’s Silent Weekend; and participating in the music therapy student association. She was an undergraduate teaching fellow for introductory music and psychology classes for three years, and she is a member of Psi Chi, the Utah Association of Music Therapists (UAMT), and the American Music Therapy Association. In addition to attending several UAMT conferences, she received funding from the psychology and honor departments to present this research project at the Rocky Mountain Psychological Association conference in Denver, Colorado in April. Over the years, Danielle has especially enjoyed her practicum experiences working with young children at a preschool, elderly adults diagnosed with Alzheimer’s at a residential facility, child witnesses of domestic violence, and an individual child diagnosed with autism. Following graduation in May 2016, Danielle will begin her music therapy internship in January at Music To Grow On in Sacramento, California. Following completion of her internship, she will take the national music therapy board-certified exam to earn her practicing credential. After practicing for a year or two, she plans on pursuing a graduate degree in music therapy.
Reflective Writing

In completing the project this past year, I faced a number of challenges: recruiting participants and gaining their consent to be in my study, obtaining data from participants’ schools, and standardizing that data. First, when visiting the Friday music sessions at the beginning of the year, I had no trouble gaining the children’s interest in being part of my study, but obtaining their permission and their parents’ consent to be in it was a slow-going process. It took me about a month and a half for all my participants to provide consent. In designing the various forms, I created both an English and a Spanish version and brought copies of each to the sessions to pass out to the children and their parents. One parent gave her consent for her child to participate, but then when contacted by the school to confirm her consent so that I could get her child’s academic data, she did not appear to understand the forms and ultimately withdrew her child from the study. When initially explaining the study and handing out the consent forms, I primarily spoke to the children without their parents as their parents were either not present or involved in a different activity that was occurring simultaneously in a different room of the church. The majority of children then passed along the information I had told them to their parents, in addition to giving them the consent forms. In hindsight, I should have explained my study and consent process to both the children and their parents altogether.

Once I had everyone’s consent to be in the study, I then had to obtain participants’ academic data from each of their schools. Some schools were eager to provide the data for their students, while others were unsure about releasing such information to me. Often times, the principals at the schools were unavailable to speak with me, so I had to leave or email copies of the students’ consent forms along with an explanation of my study, and then wait to hear back from them. This process spanned about two months, with me playing phone tag and email tag
many times. When I had almost finished obtaining all my participants’ data, I found out that I could receive blanket approval from the Logan School District for each child from each of the schools under the district jurisdiction. One of their employees then provided me transcripts, attendance records, and test scores for each of my participants. Had I thought to contact the school district first, I am sure it would have saved me a lot of running around town.

Finally, the last big challenge I faced was deciding how to standardize all the data. In particular, determining how to do that for students’ transcripts and test scores proved particularly difficult, as the grading systems that schools used varied between each one, and the different tests reported scores differently as well. It might be beneficial for schools within the same geographical area at least to use some sort of standard grading system, but I recognize the challenges associated with that, especially when considering the younger grades of students in elementary school or kindergarten where it may be harder to reliably assess students’ abilities at those younger ages.

Attending the music sessions was one of the most enjoyable parts of this project, for I was able to observe the students and see first-hand what strategies and techniques Dr. Bernal employed. As a music therapist, there are times when we may use music education as part of our therapy, so I thought it particularly invaluable to notice the various ways in which Dr. Bernal maintained his students’ engagement. Through singing, using directive statements, simply bowing in the air, and modeling, Dr. Bernal creatively and effectively held everyone’s attention throughout the sessions. I noticed that he used verbal praise as the primary reinforcement method, and I appreciated how he offered control to his students by having them lead the group in playing the violin or choosing a funny action to do simultaneously while playing. It was apparent to me during each session that I attended that the children enjoy having Dr. Bernal as
the instructor, for he is a warm, welcoming, easily approachable individual, and many of the children themselves commented about how much they like him. Overall, observing everyone genuinely enjoy the music sessions was one of the highlights of this project for me.

My suggestions to future students considering or just beginning their own capstone projects begin first and foremost with picking a topic that you are extremely interested in, for you will be learning about and working on it a lot! Similarly, when finding a mentor to guide you on your project, ensure they are just as passionate as you are about your topic of interest. I was very fortunate to work with two individuals, Dr. Bernal and Dr. Domenech Rodriguez, who are extraordinarily passionate about multicultural psychology and music. In addition to their passions, they are also extremely knowledgeable about them and easily willing to share their knowledge with me. When choosing a mentor, also ensure that he or she is a good fit for you in terms of how much guidance you anticipate needing throughout the course of your project. Dr. Domenech Rodriguez in particular was quite busy this year teaching her graduate students and attending to her several other obligations, thus I primarily contacted her through email and only met with her a few times. Much of my work was self-directed, and that was simply fine for me. For other individuals who may have had a topic they felt required more guidance from their mentor, perhaps mine would not have been a good fit for them.

Another suggestion I have for future students is to be prepared to face challenges and be willing to problem solve often to overcome those challenges. Just as life does, know that things will not go as you planned them, but that’s ok because you will gain the skills necessary to work through those unplanned obstacles. Finally, if the opportunity arises, present your project at the undergraduate symposium here and/or at another conference. Take pride in all the hard work you have done and go show it off!