FACTORS THAT PREDICT PARTICIPATION IN CHORAL MUSIC FOR HIGH-SCHOOL STUDENTS

Dennis James Siebenaler
California State University, Fullerton
dsiebenaler@fullerton.edu

Participation in music and the fine arts can be viewed as having both musical and non-musical benefits for participants at all levels. As music educators we value what we do for students, both musically and non-musically. Some would argue that a comprehensive choral music program should address aesthetic awareness and high levels of performance followed by authentic evaluation (Hylton, 1997). Gates (1991) suggests that “... extramusical values have always provided the social foundations for music participation in American schools” (p. 8). Students have various reasons for beginning music study and for continuing to participate in musical activities and ensembles. Why do some students continue to participate in school music when it is no longer mandatory, while others opt to discontinue participation in school music? Several researchers have examined the attitudes of students toward their music participation, the possible relationship of musical ability and attitude toward music, and various socioeconomic, geographic and social factors affecting participation in school music. A review of these studies has been organized by the chronological age of the subjects, from elementary-aged students through adults.

Surveys of students regarding their attitudes toward school music begin at the elementary level. Mizener (1993) questioned 542 children in grades three through six concerning their attitudes toward singing and choir participation. While less than half (45%) of the children surveyed would like to sing in a school choir, a robust 78% enjoyed singing in alternative settings (i.e. singing along with the radio, etc.). This study found no correlation between singing skill and attitudes toward school choir participation. Better singers were not necessarily more interested in singing in choir. Mizener made several recommendations to encourage positive attitudes and continued participation in school music based on the results of her questionnaire: use unpitched percussion for rhythmic exercises and drills, use singing games to engage students musically, and find songs that are in a limited, comfortable range for upper elementary students. Attitudes toward school music at the elementary level are neither constant nor consistent. Pognowski (1985) noted the increasingly negative attitudes toward school music as children advance by age and grade level. She hypothesized that involvement in an interactive experiential music curriculum might improve those declining attitudes. Consistent with Mizener, Pognowski discovered no relationship between musical aptitude and attitudes toward school music. There was, however, a moderately high correlation between global attitudes toward music and attitudes toward school music. Students who liked music in general were more likely to enjoy school music.
Another consideration is students’ beliefs about their own musical ability. Austin (1990) found that students with higher levels of musical self-esteem (typically found in girls and lacking in boys) were more likely to participate in school music. Bowman and VanderArk (1982) also noted the positive relationship of self-esteem and parental support to music participation.

Middle school or junior high is often the first opportunity that students have to enroll in classes that match their interests. In 1997, The National Center for Education Statistics conducted a survey of 1,270 eighth-grade students concerning their participation in school music. For this representative sample, 49% of the eighth-grade students reported that they liked to play music alone or with others, 36% reported that they have a talent for music, 25% sang in a school choir, 19% played in band, 2% played in the school orchestra, while 25% played an instrument outside of school. School music as well as formal and informal experiences outside of school provided a musical outlet for these eighth-grade subjects.

High school students’ attitudes toward participation in school music programs have also been examined. Castelli (1986) investigated possible reasons for the decrease in male singers at the high school level. In this study, music educators and students did not agree on which factors were most influential for boys to stop singing in school choir. Possible factors effecting school music participation identified by this study were family, peer pressure, gender roles, voice changes, and occupational choice. Pitts (2005) proposed that musicians depend on recognition from others and a sense of self-identification with the field of music performance. She found in her interviews with high school students that they valued music as a potential source of confirmation and confidence, an opportunity to demonstrate or acquire skills, and an opportunity to perform with others.

In a study regarding high school music programs (2001), the Grammy Foundation discovered that music participation was higher in schools with a higher socio-economic status (SES). Smaller schools had a higher percentage of band and choir participation, while larger schools had a higher percentage of orchestra participation. The Grammy Foundation survey also found some geographical differences. Rural communities had higher percentages of participation in band; urban areas had higher percentages of participation in orchestra, and suburban areas the highest percentage of choral participation. In an interview of 60 high school students participating in choir, band, or orchestra, Adderly, Kennedy, and Berz (2003) found that the reasons for joining music ensembles included family influence, social benefits, and musical growth. Music students enjoyed being a subgroup of the larger campus, different from, yet part of the student body.

Additional research has examined possible economic and racial factors affecting participation in school music. In Texas, Nabb (1995) found that students from disadvantaged backgrounds and with lower academic achievement participated less often than their peers in school music ensembles. Watts, Doane, and Fekete (1994) examined music participation of minority (African-American and Hispanic) students in Florida. The authors recommended family-based, school-based, and class-based strategies to encourage further minority participation in the school music program. Some of the strategies named were personal contact with students, culturally sensitive pedagogy, small group rehearsals, and special transportation arrangements for students. Music participation of minority students has possible non-musical benefits. For at-risk urban youth, achievements in music performance, and mentoring by a music teacher have been considered to build confidence and possible feelings of global self-worth (Shields, 2001).

As stated earlier, there is evidence of music education’s non-musical effects. “At-risk” students involved in fine arts electives had significantly better attendance than those “at-risk” students not involved in the fine arts (Taetle, 1999). High school students with music experience rated higher on measures of creativity than students without music experience (Hamann, Bourassa, & Aderman, 1991). Teen-agers, who participated with senior citizens in an inter-

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generational choir for one year, developed more positive attitudes toward the senior citizens but somewhat surprisingly more negative attitudes toward themselves (Darrow, Johnson, & Ollenberger, 1994).

Music experience is highly predictive of future music participation. Haygood (1994) explored participation in college choir after participation in high school choir. Factors he discovered relating to continued participation were: literature to be performed, self-perceptions of skill, parents, and the personality of the college conductor. Experiences in school music have also been shown to have an effect on attitudes toward music participation for adults. Bowles (1991) found that many adults who were willing to consider continuing education in music had participated in choir during high school. Seventy-eight percent of adults considering further training in music had general music in elementary school. Forty-six percent of the general music experiences were with a trained music specialist. These same adults acknowledged that their parents, school music teachers and private lesson teachers had a positive impact on their decision to participate in music education.

As we have seen, there are various reasons why children, adolescents, and adults begin the study of music and participate in musical performance ensembles, as well as various reasons for discontinuing participation in music programs. The decline in positive attitudes toward choral music through late elementary and early adolescence years should be a concern for music educators. While some of the reasons for discontinuing participation in school choral music are beyond the control of the public school music teacher, there may be opportunities to encourage continued meaningful participation in high school choral music and in choral experiences beyond school. What are the factors that predict continued participation in choral music through high school? How do home influences, peers, prior music experiences and teachers, self-perceptions of ability, and musical experiences outside of school contribute to decisions concerning participation in school choral music? This study will explore the motivation of high school students to remain active participants in their school choral programs, and hopefully provide information to educators regarding student attitudes.

Method

In order to determine some of the reasons why high school students participate or do not participate in choral music programs, a survey was developed. The questionnaire was compiled and adapted from prior studies cited in the review of literature (Adderly, Kennedy, and Berz, 2003; Bowles, 1991; Mizener, 1993; and The National Assessment of Educational Progress in the Arts, 1997). The survey questions were considered reliable and valid based on their appearance in previously published research. A large high school (total enrollment of approximately 3,000 students in grades 9-12) in suburban southern California, that had been named three times as a National Blue Ribbon School of Excellence, including Special Honors in Arts Education (1998), was selected as the site of the survey. With the approval of the school principal and the music teacher, a permission letter was sent to all students and their parents who would be completing the survey. The survey was completed in the spring of 2005.

Choir students completed the survey during their regularly scheduled classes. In order to get information from non-participants, students that were not enrolled in music courses were recruited from intact English classrooms. In the English classes, students that were currently in a vocal music class were excluded from the survey. The researcher administered all surveys over a period of two days. Of the 288 subjects who completed the survey, 176 were enrolled in a vocal music course and 112 were not. The subjects ranged in age from 14-18, with the largest percentage (31%) being 16 years old. The sample of all subjects, participants and non-participants, was 37% male and 63% female. Ethnically, the following groups were represented: 4.2% African-American (n = 12), 6.7% Asian (n = 19), 12.7% Hispanic (n = 36), 66.1% White (n = 187), and 10.2% identified as “Other (n = 29).” By grade level the respondents were 22.9% freshmen (n = 66), 34.7% sophomores (n = 100), 22.9% juniors (n = 66), and 19.4% seniors (n = 56).
The 176 music participants were enrolled in at least one of six different vocal music courses: women’s chorus \( (n = 69) \), advanced women’s chorus \( (n = 38) \), men’s chorus \( (n = 42) \), show choir \( (n = 33) \), jazz choir \( (n = 9) \), and concert choir \( (n = 71) \). Because some subjects were in more than one music course, the course enrollments add up to more than 176.

**Results**

The goal of this study was to identify which factors can be used to significantly predict participation in high school choral music courses. Several areas of influence in regard to student attitudes and participation in music can be inferred from the survey data.

The home had some influence on students’ participation in school music. For students involved in high school choral music, 72.4% reported that music was important in their homes, while 49.5% of the non-participants responded that music was important in their homes. Levels of parental participation in music were also different for the two groups: 52.3% of the parents of music participants also participated in music, while 33.9% of the parents of the non-participants were involved in music. Concerning possible reasons to participate in school music, 13.5% of the non-participants named family as a reason while 41.1% of the choir students responded that “family wants them to participate.”

Concerning possible school influences, it was interesting to note that a slightly higher percentage of non-participants \( (76.6\%) \) had a music specialist in elementary school compared to 71.6% of the high school choir participants. In regard to elementary school music, 84.2% of the choir participants enjoyed performing in school music programs while 38.2% of the non-participants enjoyed the elementary school performing experience. Other differences between the two groups (choir participants vs. non-participants) in regard to elementary school music were the enjoyment of singing songs (participants \( 89.4\% \) vs. non-participants \( 46.3\% \)) and playing musical games (participants \( 60.6\% \) vs. non-participants \( 33.7\% \)). The levels of enjoyment for other elementary music activities were much more similar between the two groups: playing Orff instruments, playing recorder, composing/improvising, reading music, and listening to classical music.

Middle school music participation was another factor to consider; 93.2% of high school choir participants were enrolled in music classes in the middle school while 51.4% of non-participants were involved in middle school music. A middle school music teacher inspired 33.7% of participants to continued involvement in music, while a middle school music teacher influenced only 7.2% of non-participants.

Factors that may predict participation in high school choir were assessed using multivariate logistic regression analysis. For the logistic regression analysis, stepwise analyses were performed using a forward selection. Variable entry into the model was controlled with a probability value set at .05. Of the 288 subjects, 269 (93.4%) were included in the analysis. Nineteen subjects \( (6.6\%) \) had missing data for one or more questions and were eliminated from the multiple regression analysis. Eight variables were determined to predict with 88.5% accuracy, which students would or would not be participating in high school choir \( (95\% \) accuracy for the choir participants and \( 78\% \) accuracy for the non-participants). Findings of the multivariate regression analysis indicated that playing instruments in elementary school, composing/improvising in elementary school, singing songs in elementary school, having friends participate in music, performing music (for others), being told they are good musicians, and purchasing recordings were significant predictors of continued participation in school music. The Hosmer-Lemeshow goodness of fit test indicated a good model fit \( (H-S \chi^2 [8] = 2.522, p = .961) \), with a Cox and Snell \( R^2 \) of \( .508 \) and a Nagelkerke \( R^2 \) of \( .689 \). See Table 1 for a summary of the eight predictor variables.

**Table 1.**

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These eight predictor variables included three elementary school musical experiences (playing percussion instruments, composing/improvising, and singing songs). For current choir participants, 89.4% enjoyed singing songs in elementary school compared to 46.3% of the non-participants. When it came to playing percussion instruments in elementary school, 28.5% of choir participants enjoyed playing percussion instruments while 12.6% of the non-participants enjoyed playing percussion instruments. This trend of higher enjoyment for current choir participants was reversed concerning composing/improvising in elementary school. For current choir participants, 86.1% did not enjoy composing/improvising in elementary school compared to 80.2% of the non-participants. In regard to purchasing recordings, 18.8% of non-participants rarely or never buy recordings, while 9.7% of the choir participants were in the same category. Another predictor of participation was the response to the statement “people tell me I am a good musician.” 63.6% of the choir participants have been told they are good musicians while only 22.3% of the non-participants have been told the same thing. Peer influence appears to be another predictor of music participation. 60.8% of participants are in choir because it is “where their friends are” while 31.5% of non-participants considered their friends in making that choice. Enjoying performing for others was another strong predictor, with 82.4% of choir participants agreeing and only 27.7% of non-participants agreeing. This difference is also reflected in the odds ratio for “performing for others,” being almost 3:1 (2.905).

<table>
<thead>
<tr>
<th>Predictor variables</th>
<th>Parameter estimate</th>
<th>Wald $X^2$</th>
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</thead>
<tbody>
<tr>
<td>Elem. school - playing instruments</td>
<td>.253</td>
<td>5.003 *</td>
</tr>
<tr>
<td>Elem. school - composing/improvising</td>
<td>-.455</td>
<td>11.39 **</td>
</tr>
<tr>
<td>Elem. school - singing songs</td>
<td>.587</td>
<td>12.12 **</td>
</tr>
<tr>
<td>Where my friends are</td>
<td>.373</td>
<td>6.05 *</td>
</tr>
<tr>
<td>Like to perform</td>
<td>.546</td>
<td>7.95 *</td>
</tr>
<tr>
<td>People tell me I am a good musician</td>
<td>.873</td>
<td>10.05 *</td>
</tr>
<tr>
<td>Like to perform for others</td>
<td>-.427</td>
<td>5.12 *</td>
</tr>
<tr>
<td>Frequency of recordings purchased</td>
<td>.653</td>
<td>9.75 *</td>
</tr>
</tbody>
</table>

*a OR = odds ratio  
b CI = confidence interval

*p < .05, ** p < .01
Discussion

This study attempted to identify some of the factors and influences that may predict continued participation in choral music for high school students. As prior studies have discovered (Adderly, Kennedy, & Berz, 2003; Bowles, 1991; Castelli, 1996; and Haygood, 1994), home and family support can make a difference in student interests and choices. This survey confirmed that more students continued to participate in school choral music whose parents were also involved in music and who came from homes where music was relatively important.

While some have found that musical skill was not related to attitudes toward or participation in school music (Mizener, 1993; Pognowski, 1985), others were able to relate music self-concept to successful participation (Austin, 1990; Haygood, 1994; National Center for Educational Statistics, 1999). In this study, most choir participants (63.6%) have been told they are good musicians, while only 22.3% of non-participants received that message from others. Positive feedback evidently contributed to musical self-concept and continued participation in school music. Are there ways that some of the non-participants could have been made to feel more successful in their musical pursuits and activities? Could prior musical experiences have been designed or structured to maximize student success and minimize student frustration?

It seems that prior music experiences in school are also related to participation in high school choral music. For this sample of high school singers, 93.2% had also participated in middle school music programs. The middle school music teacher was an inspiration to continue music for 33.7% of the high school participants. Although this study did not examine how many middle school students choose to dropout of music or the reasons why, there appears to be a relationship between continued musical studies in middle school up through high school.

Although the percentages of participants and non-participants who had a trained music specialist in elementary school were very similar, several elementary music activities served as predictors of continued vocal music participation. Playing classroom percussion instruments and singing songs were activities that came through in the step-wise multiple regressions as predicting continued participation in high school choir. As suggested by Mizener (1993), use of percussion instruments and enjoyment of musical games in elementary school were common elements for many of these high school musicians. Performing in elementary school programs was a positive experience for 84.2% of the choir participants. The enjoyment of performing continued through high school with 82.4% of current musicians listing performance as a reason for continued participation.

Peer influence was also a factor in predicting music participation in high school choir. For these high school singers, 60.8% participated in choir because it was “where their friends are,” while only 31.5% of the non-participants considered that to be a valid reason. Choir students would seem to be attracted to and share commonalities with other choir students. The sense of camaraderie and support was palpable in the choir room of this high school. Because the survey occurred at the end of the school year, there had been many opportunities to bond and connect through the rehearsals and performances of the prior academic year(s).

To summarize, the factors that predicted continued participation in choral music for these high school students in Southern California were positive support and involvement at home, positive music experiences in elementary school and middle school, a positive self-concept in regard to music skills, and the support of peers. While there are many factors to consider, and not all are in the realm or control of the music educator, positive, quality, meaningful music experiences in elementary and middle school would encourage students to continued participation and predict further musical development.


