For the Love of Music:

The Influence of After-School Music Programs on the Academic and Non-Cognitive Development of Disadvantaged Youth

By Alexandra Andreassen

Villanova University

May 6, 2013

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ABSTRACT

A variety of recent research has shown that the academic achievement gap has been growing between low- and middle-income students. Socioeconomic status has proven to have a large influence on academic attainment as well as the educational opportunities that a child is offered. This paper argues that, because poverty significantly affects children during the after-school and summer hours, extracurricular activities are an important way of closing the rich-poor achievement gap. Moreover, I hope to show that music programs have specific benefits for low-income children. First, I summarize the existing literature surrounding the socioeconomic achievement gap, extracurricular programs, and music education. Then, I review the results of my study of the academic and non-cognitive attainments of urban low-income students who participate in two extracurricular music programs in Philadelphia, Pennsylvania and Trenton, New Jersey. In a time of decreased funding for extracurricular programs and the arts, this research has implications for educational policy and practice.

1. INTRODUCTION

Educational methods, policy, and ideas are increasingly debated in today's world due to the changing nature of the field. New philosophies and research are paving the way for improvements in the educational sector, working towards the goal of a superior education for every child. However, there is debate about exactly how to achieve this goal, and inequality is still rampant among American schools. For a variety of reasons, low-income students are often subjected to an inadequate education, ensuring that many of them will remain trapped in poverty for their entire life. A dearth of family income severely restricts a child's the opportunities within and surrounding school; moreover, schools located in impoverished areas lack the financial resources and community support to foster high-quality teaching and learning. Without an adequate school experience, children cannot achieve their full potential, and poverty is perpetuated.

Rather than reiterate the debate about the processes inside the classroom that are contributing to this inequality in educational outcomes, I would like to explore the out-of-school effects that contribute to a student's success or failure in academic achievement, particularly with respect to non-cognitive skills. This paper argues that the participation of low-income students in extracurricular programs is important in order to raise their educational achievement. Out-of-school activities not only supplement in-the-classroom learning, but they also foster character development, and teach students valuable social, creative, and critical thinking skills. These are all necessary traits for commitment to schoolwork, subsequent academic success, and success in the work force later in life. I chose to focus on extracurricular activities (as opposed to in-school enrichment programs) because the detrimental effects of poverty on a child's educational achievement happen

significantly in the after-school and summer hours, when environmental factors take their toll. Moreover, I investigate the particular effectiveness of music programs in closing the achievement gap. Music has specific advantages that may especially benefit low-income youth. In a time of budget cuts and decreased funding, I emphasize the importance of music programs and extracurricular activities in general, and their effectiveness in promoting academic achievement and non-cognitive skills among disadvantaged students. These ideas contribute to the growing literature on closing the achievement and opportunity gap between low- and middle-income students.

2. LITERATURE REVIEW

A. Defining Achievement

Academic achievement is a seemingly straightforward concept: many believe that test scores, grades, and IQ determine the full intellectual capacities of a student. However, academic achievement can include much more than that. Engagement and participation in the classroom, analytical thinking, and non-cognitive skills are all learned in school as well, and important determinants of future success in life. These factors cannot often be measured by a number, and thus are hard to quantify and study. Therefore, most of the literature uses numerical values such as test scores to measure academic achievement; it must be noted, though, that numbers do not account for everything. For the purpose of this analysis, I define basic academic achievement as measured by test scores, grades, and IQ, while acknowledging that this method is an incomplete measure. I will also discuss non-academic skills such as perseverance, school engagement, and social skills, which in turn can influence academic achievement.

B. Achievement/Opportunity Gap

The academic achievement gap between black and white students has been well-documented in social science research. Minority students, scholars argue, typically perform significantly worse in school because of their high level of disadvantage in society. However, recent research has shown that the income achievement gap is now nearly twice as large as the black-white achievement gap (Reardon 2011:91). While the black-white gap was larger fifty years ago (91), there has been a transformation in which income levels have grown both more unequal and more important in American society. Using nineteen

nationally representative studies, Reardon compared the average math and reading skills of children from families with incomes at the 90th and 10th percentiles of the family income distribution, finding a "clear trend of increasing income achievement gaps across cohorts born over a nearly sixty-year period" (95). When the income achievement gap is juxtaposed with the narrowing black-white gap, the difference is striking (98). This trend could be due to the fact that the 1950s and 1960s saw historically low levels of income inequality and high levels of racial inequality, which began to reverse in the 1970s (110). While it is true that minorities disproportionately suffer from poverty and income inequality, the academic achievement gap debate has been transformed in recent years from a definition based on race to a definition based on income.

There are a number of reasons why children in poverty consistently perform at below-average levels. Many people reiterate the problems within American schools, which is both accurate at times and misleading. Poor students are often concentrated in certain schools, usually in very urban or very rural areas (Livingstone and Stowe 2007:111). The reality is that "increasing income segregation has led to greater differentiation in school quality and schooling opportunities between the rich and the poor" (Reardon 2011:100). Inner-city buildings are generally old buildings that have not been well-maintained, are dirty, and ill-equipped (Livingstone and Stowe 2007:112). Students from both urban and rural schools are faced with greater teacher shortages, less experienced teachers, and lower-paid teachers than in suburban schools (112). Thus, many argue that teaching quality is less in schools that serve greater populations of low-income students. Livingstone and Stowe also acknowledge the "hidden curriculum," meaning that teachers tend to treat students from different socioeconomic backgrounds differently, discriminating against

low-income students (110). Whereas working class students are expected to follow orders and be obedient, more affluent students are groomed for higher education and higher-level careers by intellectual independence, based on their social class (111). These differences make it so that students from more privileged backgrounds achieve more success in the conventional "middle class" school curriculum (113).

Condron (2009) performs an interesting analysis of the Early Childhood Longitudinal Study – Kindergarten Cohort data, a nationally representative sample of 21,260 kindergarteners, following them from 1998-2007. He concludes that

> school factors play an elevated role in generating the black/white achievement gap while non-school factors primarily drive social class inequalities. These findings help explain why black/white achievement disparities grow mostly during the school year (when schools are in session and have their greatest impact on students' learning) while class gaps widen mostly during the summer (when school is out of session and non-school influences dominate) (683).

He argues that racial disparities in learning grow during the school year because of racially segregated schools, while class gaps grow in the summer because of societal factors (700). Minorities are often concentrated in certain schools, are more subjected to teacher bias, and have less resources to work with (687-688). Nevertheless, many educational policies such as the No Child Left Behind Act ignore the fact that non-school factors in students' own family backgrounds generate achievement gaps more than inequalities within and between schools (683). Thus, social class disparities are often produced through non-school mechanisms, which schools attempt to combat, but in doing so they exacerbate black-white disparities. Consequently, the out-of-school time is when the negative aspects of poverty affect children most directly.

Flores (2007) looked at the standardized tests among students of different ethnic groups (African American, Latino, and white) and different socioeconomic levels. He found

evidence that there are striking and persistent differences between minorities and whites as well as low-income and middle-income students, and that opportunities to learn math are not equally distributed among students (29). An underlying cause of the achievement gap is that low-income and minority students are not as likely to have the same opportunities to learn; thus, it is not just an achievement gap, but also an opportunity gap (29-30). This dearth of opportunities includes lower-quality and inexperienced teachers, who assume deficits in low-income and minority students (32-33). Moreover, not all schools offer the same options for advanced courses (35). School funding is also an issue: "In many places in the U.S., school funding is based mainly on local property taxes. Thus, schools in districts with a large number of well-to-do people have more funds per student than schools in districts with a large number of people in poverty" (35). Flores concludes that "Reframing the problem in terms of opportunity gaps focuses attention on examining the lack of access to the very resources that contribute to the success of more privileged students" (40). Poor children have significantly less opportunities in school, which contributes to their lower academic achievement.

However, that American schools are "failing" our students is an exaggeration, because even the most excellent teachers and well-equipped schools have difficulty fighting the out-of-school effects of poverty. Like Reardon, Chakraborty (2009) contends that "socioeconomic factors play a far greater role than school inputs explaining variations in their achievement scores" (13). American schools have continued to improve: class sizes are shrinking, teachers' educational levels are increasing, and expenditure per student has increased, without any significant increase in student outcome (14). Chakraborty goes so far as to say that school inputs such as student-teacher ratio, teacher's experience and

educational background are not significantly related to students' test scores (14). In his book *Class and Schools*, Richard Rothstein (2004) writes that "the influence of social class characteristics is probably so powerful that schools cannot overcome it, no matter how well trained are their teachers and no matter how well designed are their instructional programs and climates" (5). Moreover, research has shown that many of the social class influences affect children during the after-school and summer hours, when children are not actually in classrooms (10). While the situation is multi-faceted, the emphasis on "failing" schools should be reframed to an emphasis on the wider factors at hand that strongly influence the achievement of low-income students: parenting styles, parental spending, and health and nutrition.

Many sources emphasize the importance of parenting styles on students' academic achievement, which generally varies according to social class. Rothstein (2004) notes, "parents of different social classes often have different styles of childrearing, different ways of disciplining their children, different ways of communicating expectations, and even different ways of reading to their children" (2). Children who are raised by professionals have more inquisitive attitudes and are better at collaboration and problem-solving, as compared to working-class children whose parents' jobs simply require them to follow instructions (2). As a result, no matter how competent the teacher, the achievement of lower-class children will tend to be less than that of middle-class children (2). On average, more educated parents read to their children more and encourage reading when the children are older, and such reading at home is essential for better academic achievement in the classroom (19). Students from poor families own fewer books and are read to less often (Livingstone and Stowe 2007:113). Moreover, they have less exposure to other

educational outlets such as museums, libraries, and the arts (113). Higher income parents generally invest more time and resources in their children's education and cognitive development than do lower-income families (Reardon 2011:100; Livingstone and Stowe 2007:113). Issues of time, finances, and parental education level are all possible reasons for this phenomenon.

Annette Lareau (2011) extensively documents how parents' social class impacts children's life experiences in her book *Unequal Childhoods: Class, Race, and Family Life*. Her central thesis is that middle-class parents tend to adopt a cultural logic of child-rearing that stresses the concerted cultivation of children, while working-class and poor parents undertake the accomplishment of natural growth (4). This means that the former's children gain skills that are valuable in the future when they enter the world of work, and the latter's children experience long stretches of leisure time and unstructured play with more autonomy from their parents (4). There are "three ways in which social class makes a difference in children's lives and family life: the organization of daily life, language use, and interactions between families and institutions" (11). Middle- and upper-class children grow up in homes with more talking, resulting in larger vocabularies and more familiarity with abstract concepts (5); parents of lower-class children talk less frequently to their children, and in different ways.

Importantly, middle-class children learn how to deal with authority figures, as their parents tend to take a more active role in their child's schooling and negotiate effectively with schools (163, 287). They gain more advantages from the educational system due to higher parental involvement. In contrast, "working-class and poor parents, while they are just as concerned about the welfare of their child, tend to assume that educators are taking

their leadership role" (163). They do not know how to "work the system" to effectively promote their child's success. Stemming from this idea, middle-class children act with a sense of entitlement, as though they have a right to pursue their individual preferences and be actively engaged in institutional settings such as schools; working-class and poor children show a sense of constraint in institutional settings, and merely follow the system (6-7). A child's success is often closely tied to the class position and attainments of their parents, which reproduces existing social inequality over time (305). Parents across all classes love and care for their children equally, but social class does shape how much parents are able to advocate on the behalf of their child and promote their education.

Parental spending on their child's education, another factor tied with socioeconomic status, also has an effect on academic achievement. Parental spending on their children has been increasing since the early 1970s. Kornrich and Furstenburg (2012) note, "spending on children grew more unequal over time as income inequality grew. Contemporary rich households in the 2000s spend more relative to both the rich of the past and the contemporary poor" (19). Both rich and poor parents spent greater shares of their income on their children over time, on things like quality education and child care, as well as residence in better neighborhoods (26). This suggests that it is not purely a result of changes in available income, but also a result of growing pressures to invest in children (26). Poor parents, therefore, want their children to do well in school and have the same opportunities as rich ones, but they do not have as many resources, particularly financial ones. Higher income children have a greater advantage in American schools simply because their parents can and do spend more on their child's education, enabling them to achieve more academically (28). In this way, the widening opportunity gap is perpetuated.

In addition to parental factors, poor health and housing are other disparities that disproportionately affect impoverished children. It is a fact that lower-class children have poorer health on average, and their families cannot find affordable and adequate housing, both of which have demonstrable effect on academic achievement (Rothstein 2004:3). Health and housing are linked because poor families often live in low-quality housing, contributing to the lower health of their children. Lead exposure from living in older buildings results in hearing loss and declines in IQ, and asthma is much more likely among poor children living in densely populated urban areas (Rothstein 2004:39-41). They suffer from inadequate and infrequent healthcare, adding to the health problems such as vision impairment and lack of oral health (41). Poor nutrition also directly contributes to an achievement gap between lower- and middle-class children (44). All of these factors severely affect a child's ability to attend school regularly, pay attention in the classroom, and complete homework successfully.

Thus, while the achievement and opportunity gaps in American society are somewhat affected by in-school factors, much of the low student achievement among the poor and working-class is due to factors outside of the classroom. In the out-of-school time, children are subject to home environments that are not conducive to learning and educational promotion. Parental social class has numerous and significant effects on a child that are not easily erased by the processes inside schools, no matter how "good" a school may be. Moreover, "as the children of the rich do better in school, and those who do better in school are more likely to become rich, we risk producing an even more unequal and economically polarized society" (Reardon 2011:111). It is a vicious cycle that is hard to

beat: the barriers facing lower-class children are so strong that something extra must be done to help students overcome them and reach their fullest academic and social potential.

C. Extracurricular Activities

Since the negative aspects of poverty influence low-income children significantly in the out-of-school hours, extracurricular activities could conceivably be an effective way to combat these deleterious effects. Indeed, I argue that participation in extracurricular programs is in fact essential for a student's in-school success. Condron (2009) asserts that social class gaps in educational attainment occur primarily from non-school factors because of health-related factors, family-related factors, and cultural/social capital. If what he says is true, then extracurricular activities in the after-school and summer hours could prevent these forces from affecting children as much by removing them from their impoverished communities for longer periods of time and placing them in enriching and supportive environments for learning and skill-building. First, I review the research on the benefits of extracurricular activities for students of all socioeconomic statuses (SES). Then, I show that these are particularly beneficial for less-privileged children; however, they are less likely to participate for a variety of reasons, and thus do not have the opportunity to reap the benefits.

Scholars, most of them researching this topic within the past decade, have discovered a number of advantages that extracurricular activities provide to students of all income levels and abilities. The first and most easily testable one is that students who participate in activities have higher academic achievement than those who do not participate (Broh 2002; Dumais 2006; Darling 2004; Dick 2010; Eccles, Barber, Stone, and

Hunt 2003; Gardner, Roth, and Brooks-Gunn 2008; Knifsend and Graham 2012; Park 2010; Shulruf, Tumen, and Tolley 2008; Wilcox 2012). While sometimes mixed, the results overall point to a positive relationship between academic achievement and participation in extracurricular activities. Results are consistent across age (elementary, middle, and high school) and location (urban and rural). For many studies, the extent to which activities are related to achievement depends on the type of activity. Dumais (2006) found that elementary school students' participation in dance lessons, athletic activities, and art lessons affect teachers' evaluations of mathematics skills and reading achievement test scores, but not math achievement test scores or teachers' evaluations of language arts skills (117). Darling (2004) found a small but consistent effect of more time spent on extracurricular activities and higher grades and academic aspirations among adolescents (499). Eccles et al. (2003) controlled for social class, gender, and academic aptitude, and still found that participants in most extracurricular activities, particularly performing arts, sports, school involvement activities, and academic clubs, achieved higher than non-participants (865, 872).

Park's (2010) results indicated that music was the only type of activity related to academic achievement, significantly contributing to performance on reading, language, math, and science standardized exams, after controlling for sociodemographic selection factors (iii-iv). Interestingly, Park found that sports have significant negative effects on achievement (iv), while Shulruf et al. (2008) found that only participation in team sports had a small positive effect on achievement (424). However, Shulruf et al. were looking at the causal link between activities and achievement, and only used data from one school, so their data overall lends support to the possibility of a positive association concerning non-

sport activities as well (425). Finally, the results for rural students are particularly strong: two separate studies of rural high school students in Nebraska and Indiana showed that students who participated in extracurriculars had significantly stronger GPAs and standardized test scores than their non-participant peers (Dick 2010:4; Wilcox 2012:iii).

A frequent finding is that the duration and depth of involvement is important for the academic outcomes. The results of Gardner et al. (2008) indicated that "More intensive participation in school-sponsored activities was associated with greater educational attainment" (824); the longer the adolescents participated in activities, and the more committed they were to them, the better their academic outcomes. They also suspect that quality of activities is important, but they are not able to measure this in their study (829). Similarly, Knifsend and Graham (2012) study the relation between the breadth of activities (participating in multiple different types of activities) and academic engagement and achievement among 11th grade students. There was a curvilinear relationship: adolescents involved in two activity domains had the greatest grade point averages, but too many or too little activities reduced the GPAs.

From this, the overscheduling hypothesis arises. Essentially, the theory posits that youth are overscheduled in extracurricular activities, and that this has negative consequences for their academics and well-being. Some argue that excessive levels of involvement have negative consequences because of time requirements, stress, and the emphasis on values contradictory to academic pursuits (Fredricks 2012:296). Research has shown that this hypothesis may have some validity: "at very high levels of participation (5–7 or more activities, 14 or more hours) the academic well-being of these youth declined. However, in the majority of models, the academic adjustment of 10th graders who

participated in extracurricular contexts at high levels was higher than 10th graders who were not involved in any organized contexts" (303). Thus, the overscheduling hypothesis is somewhat true, but its effects have been overestimated by the media and press (303). When graphing academic adjustment versus amount of participation, the graph often results in an inverted U shape, showing that academic adjustment increases from participation until a certain point, when involvement can get in the way of academics (Fredricks 2012:304; Knifsend and Graham 2012:386). The research of Gardner et al. (2008) actually failed to support the overscheduling hypothesis for the most part (827). Thus, it may have some weight in arguments concerning extracurricular activities, but it does not negate the positive effects, academic and otherwise, that most students experience from participation.

The mediating mechanisms in this relationship are just as important as the fact that academics improve with participation. It is not simply that academics improve with participation; it is that extracurriculars teach non-cognitive skills (Covay and Carbonaro 2010; Rothstein 2004), promote school connection (Brown and Evans 2002; Knifsend and Graham 2012; Marsh and Kleitman 2002), and promote interpersonal relationships and community-building (Eccles et al. 2003;McNeal 1995), all of which may in turn increase academic achievement. First, extracurricular activities are lauded by many sources for teaching non-cognitive skills such as leadership, teamwork, dealing with authority, confidence, and time management. Rothstein (2004) cites social responsibility, organizational skills, discipline, and self-confidence as things that children learn in structured after-school activities which contribute to academic proficiency (143). Children learn social skills like persistence in school, integrity, personality, employability, and civic

and democratic participation. Schools are supposed to teach these skills as well, but they often get overlooked in favor of merely improving test scores and grades. Covay and Carbonaro (2010) specifically argue that "noncognitive skills mediate the influence of SES and extracurricular activities on academic skills" (20). They believe that non-cognitive skills are the mechanism that explains why extracurricular participation usually results in increased academic achievement (21). The authors cite important non-cognitive advantages like value achievement, skill mastery, dealing with success and failure, task persistence, strong work ethic, being on a team, social relationships, and subordination to authority (22), all of which promote academic achievement when carried over into the classroom. Non-cognitive skills statistically explain a large share of the relationship between sports and reading/math scores, and a small portion of the relationship between music and reading/math scores (38). Overall, "Much of the relationship between EAs and achievement is explained by differences in noncognitive skills. This is an important contribution of our study because little is known about why extracurricular[s] matter for achievement" (40). Importantly, Covay and Carbonaro's data comes from elementary school students, so their findings may or may not be applicable to high school students. Nevertheless, they show that non-cognitive skills are an extremely important benefit of extracurricular activities.

A recurring theme in the literature is that activities promote school connection, which aids in students' academic achievement. School connection is the sense of belonging that a student feels in school, and their sense of commitment to the school and to their academics. Marsh and Kleitman (2002) support the conclusion that extracurriculars "foster school identification/commitment that benefits diverse academic outcomes" (464). Brown

and Evans' (2002) results similarly revealed that students who participated had greater levels of school connection, even after controlling for ethnicity (41). Knifsend and Graham (2012) agree:

> Results of our mediational analyses suggested that sense of belonging at school partly explained the relationship of total number of activity domains to academic engagement… Thus, participating in a moderate number of activities (i.e., two domains) may provide an optimal number of contexts in which to relate to others at school and to feel a sense of belonging, which in turn fosters academic achievement 1 year later. (387).

Their data clearly show that extracurricular activities promote school identification and belonging, which increases academic achievement. School connection could be part of the link that explains why students who participate generally achieve better in the classroom, particularly in extracurricular activities that are run by schools.

A final mediating mechanism has to do with creating a community in which students become members, helping them to form relationships and social networks that promote academic achievement. Though participating, students develop a sense of community and see themselves as a member of a group (Eccles et al. 2003:866). Since extracurricular activities are usually positive settings, students form a positive self-image, and surround themselves with supportive people who encourage academic success. Activities also protect students from engaging in risky behaviors such as drinking, drugs, and skipping school (870), which also promotes success in the classroom.

Academic achievement by no means the only positive effect of extracurricular participation. The following is a discussion of other benefits that authors address in their work. While Park (2010) found that music was the only type of activity related to academics, participation in other types of activities still "positively predicted higher life satisfaction, positive affect, and self-esteem, and lower levels of negative affect" (iv). She

goes on to write, “Despite challenges and adversity in a child’s life, extracurricular activity may provide connections with supportive social networks, a means for catharsis and escape, and buffer the negative impact of life events stress on youth academic and psychosocial outcomes” (157). Students who participate are often happier and well-adjusted, promoting psychological health.

This well-being can also include less substance abuse and crime. Darling (2004) found a small connection: “adolescents who participated in extracurricular activities reported lower levels of smoking, marijuana use, and use of other drugs compared to non-participants… Participants and non-participants did not differ in self-reported drinking” (498). Eccles et al. (2003) similarly found that adolescents involved in prosocial activities (such as church attendance and community service activities) reported less involvement in risky behaviors like drinking alcohol, getting drunk, using drugs, and skipping school (870). However, participation in sports activities predicted greater involvement in risky behaviors (871). Rothstein (2004) believes that the relation between risk behaviors and extracurriculars is due to adult supervision: “students without supervision are at greater risk for truancy, stress, poor grades, and substance abuse. They are most likely to be perpetrators or victims of crime in the first few hours after school” (143). The supervision and positive environment that activities provide may prevent these kinds of risky behaviors, which also affect other aspects of a child’s success and well being.

A few authors address the connection between participation and dropping out of high school. McNeal’s (1995) central hypothesis is that “participation in certain extracurricular activities (athletics and fine arts) significantly reduces a student’s likelihood of dropping out, whereas participation in academic or vocational clubs has no

effect" (62). Sports provide peer status and prestige, while fine arts provide cultural capital as well as academically-oriented skills and values, all of which may keep children in school (74-75). Since academic ability, race, and gender are all factors in dropping out, extracurriculars may intervene in the dropout process to prevent students from leaving school (62). Mahoney and Cairns (1997) agree: "Results indicate that engagement in school extracurricular activities is linked to decreasing rates of early school dropout in both boys and girls. The outcome is observed primarily among students who were at highest risk for dropout" (248). They believe that extracurriculars provide a "positive and voluntary connection to the educational institution" which prevents dropping out (248). Thus, the data shows that participation in extracurricular activities significantly reduces a child's likelihood of dropping out in high school, which has enormous benefits for future success.

Other important outcomes of extracurricular participation have to do with longitudinal studies of participants' attainment later in life. Mahoney, Cairns, and Farmer's (2003) "main finding was that consistent participation in extracurricular activities across adolescence was positively linked to educational status at young adulthood. This held for boys and girls with high or low interpersonal competence at the beginning of the investigation" (416). In other words, children who engaged in extracurricular activities during high school had a higher educational attainment in adulthood, including college attendance, and this is true even for adolescents with below-average interpersonal competence in the beginning. Thus, particularly for these students, extracurricular activities helped them "build interpersonal skills and construct positive plans for the future" (416). Gardner et al. (2008) similarly found that the longer the duration of a student's participation in school-sponsored activities, the more postsecondary educational

attainment they had, measured at 2 and 8 years after high school (820). Among the children that they studied, those who participated in an activity for 2 years were even more likely to have better educational attainment after graduation than those who participated for just 1 year (826).

Gardner et al. also supported the conclusion that youths who participated longer had more civic engagement after high school, which was partially mediated by how much postsecondary education they completed (814). Extracurricular activities promote civic engagement as much as 8 years after high school, and they also promote postsecondary education which further encourages civic engagement. Interestingly, this generalization is supported by a study in Ankara, Turkey. Keser, Akar, and Yildirim (2011) studied the role of extracurricular activities on "active citizenship learning" in a private primary school in Ankara. Their findings yielded six themes: students who participated had high levels of active citizenship perception, social accountability, intercultural awareness, awareness of democracy and human rights, thinking and research skills, and interaction and intrapersonal skills (822). They had more social, cultural, political, and scientific awareness, both domestically and internationally, and they were skilled at empathy building, communication, valuing differences, and identifying global values (829, 833). While these skills probably only result from certain types of activities specifically oriented toward active citizenship, the results show how powerful these programs can be. Acts such as volunteering and voting are important for the community as well as the individual, and thus civic activity would be a positive outcome.

It is evident that extracurricular activities pose numerous benefits, both of academic nature and otherwise, for students who participate in them. Of particular concern is the

function of extracurricular activities for low-income students. Rothstein (2004) presents the argument that after-school and summer programs are a primary means of closing the achievement gap. Since most of the social class differences in educational attainment occur during after-school and summer hours as previously discussed (Covay and Carbonaro 2010; Rothstein 2004), he writes that "investments should also be made to expand the definition of schooling to cover those crucial out-of-school hours" in addition to school reforms (Rothstein 2004:10). These cannot merely be remedial programs in which children get added drill in math and reading:

> The advantage that middle-class children gain after school and in the summer likely comes mostly from the self-confidence they acquire and the awareness they develop of the world outside their homes and immediate communities, from organized athletics, dance, drama, museum visits, recreational reading, and other activities that develop their inquisitiveness, creativity, self-discipline, and organizational skills. After-school and summer programs can be expected to have a chance to narrow the achievement gap only by attempting to duplicate such experiences (11).

During the summer, the achievement gap expands because middle-class children are more likely to read for pleasure and engage in structured activities that expose them to new and different environments (58). Lower-class children lack these opportunities, and that is why the achievement gap is perpetuated.

Multiple sources indicate that low-income students actually benefit more from participating than do privileged students. Broh's (2002) results suggest that "specific extracurricular programming could be a vehicle for generating social capital among disadvantaged students, their parents, and schools that may, in turn, help improve their achievement" (87). Broh noted that participation in sports provides a greater boost in academics for low-income students than for high-income ones (87). Both Dumais (2006) and Covay and Carbonaro (2010) showed that art and music activities provide lower SES

students with larger gains in reading test scores than higher SES students (141; 40). Dumais (2006) concluded that in general, "children from lower socioeconomic backgrounds reap greater benefits from participating in activities than do children from higher socioeconomic backgrounds" (145). Marsh and Kleitman (2002) also supported this finding (464). Urban et al. (2009) observed that extracurricular activity promoted positive youth development and less depression and risk behaviors for girls in low asset neighborhoods, but participation was actually detrimental for these aspects in girls living in high asset neighborhoods (611). The opposite effect was seen for boys, but the results at least show that lower-income girls benefited more from participation than higher-income girls.

Covay and Carbonaro (2010) posed an interesting theory stemming from their findings concerning sports and math/reading scores. In their study, low-SES students received a boost in math from participating in sports, while high-SES students did not receive an added math boost. Moreover, high-SES students who participated in sports had decreased reading scores compared to their non-participating counterparts. The authors hypothesized that for high-SES students, extracurricular activities are a compensatory context in which to practice non-cognitive skills already learned at home, while low-SES students need extracurricular activities as an additional context in which to learn these skills (41). Math scores are less connected to the home environment compared with reading scores, so low-SES students who participated in sports performed better in math while high-SES students did not. Reading is highly dependent on the home environment (i.e. whether or not parents read to their children and encourage reading), so the decrease in reading scores of high-SES students who participated in sports may be due to spending

less time at home and more at practice (41). This idea could be generalized to academics versus extracurriculars as a whole: low-SES students need activities as an additional context in which to learn, while high-SES students use them to reinforce skills and values already learned at home. Thus, activities benefit low-income children more than high-income ones.

It is possible that extracurricular activities benefit disadvantaged children more because they foster school identification and commitment, which raises academic outcomes, "particularly for socioeconomically disadvantaged students who are least well served by the traditional educational curriculum" (Marsh and Kleitman 2002:464). Moreover, school-sponsored after-school programs provide low-income children with the same opportunities for enrichment as middle-class children, who have an array of arts lessons, coached sports, and academic tutoring at their disposal (Posner and Vandell 1999:877). If schools do not provide these programs, "these so-called luxuries are out of reach for most low-income children." (877). Activities get children "off the streets" and in engaging and supportive atmospheres. They lessen the effects of poverty, which take their hold on children during the after-school and summer hours. Thus, extracurricular activities are an effective way of increasing academic achievement and non-cognitive skills among low-income youth.

Despite their importance, low-income children are statistically much less likely to participate in extracurricular activities, so they do not receive the benefits. This is a main contributor to the achievement gap. In her ethnographic study, Lareau (2011) found differences in the ways that the non-school time is organized for children of different classes: "middle and upper-middle-class children pursue a hectic schedule of adult-

organized activities while working-class and poor children follow a more open-ended agenda that is not as heavily controlled by adults" (68). Lower-income children on average spend most of their time in unstructured environments, keeping them from the benefits that middle-class children obtain from structured extracurricular activities. Dick (2010) also provided evidence that there is a "glaring disparity" in participation rates between low- and middle-income students (56). Similarly, Covay and Carbonaro (2010) proved that "low-SES students are still less likely to participate in all types of EAs, providing students with disparate access and opportunities… High-SES students have access to such sites in a variety of settings, continuing to provide these students with an advantage" (41).

There are a variety of reasons for why low-income children are less likely to participate. One simply is that schools in low-income communities lack the funding and resources to provide children with extracurricular opportunities. Even more salient is parental income, which has striking implications for child extracurricular participation. The Xu, Gauthier, and Strohschein (2009) study of Canadian children showed that low household income was one of the strongest determinants of extracurricular participation (338). This conclusion was supported by the finding that there were significant income differences among children who did participate in costly organized sports and those who did not, but no significant income differences among children in unorganized sports, which entail little or no cost (338). In Chin and Phillips' (2004) ethnographic study, the middle-class children had varied and organized summer experiences, while none of the working-class children had such varied and organized activities (193). They attributed this to a lack of financial resources, parental time, and parental knowledge on the part of the working-class and poor parents (193-194). Nevertheless, their data suggest that the working-class

and poor families were just as focused as the middle-class families on developing their children's skills and talent; they merely lacked the financial resources and know-how in order to match the participation of the middle-class children (194).

Parental education also plays a role in the social class differences of extracurricular participation. Well-educated parents are more likely to have the "knowledge about how to match particular activities to their children's skills and interests" (Chin and Phillips 2004:204). Xu et al. (2009) found that having a parent with only high school or lower education also reduces the likelihood of participating in various extracurricular activities (339). Lareau (2011) also confirms the finding that "children of highly educated parents and of high-income parents exhibit substantially greater involvement in organized activities than their peers whose parents are less well-educated and have lower income" (340). Parents who achieved a higher education themselves will actively promote extracurricular participation to their children, and highly-educated parents are disproportionately found in the middle- and upper-class. Parental education is therefore another reason why social class disparities exist within extracurricular participation.

The community in which a child lives also may have an effect on their participation levels. Xu et al. (2009) supported that "living in a poor neighbourhood constitutes an extra disadvantage for children's participation in organized sport activities" (325). In their study, neighborhood average income had an effect on a child's organized sport activities, even after adjusting for household level income (339). Their study "can not illuminate the mechanisms through which neighbourhood income operates, but it is possible that the lack of recreational facilities or concern with neighbourhood safety in deprived neighbourhoods underlie the observed association" (339). Living in a poor area limits the opportunities

available to those that live there, and this particularly affects children. The social institutions, including schools, in poor areas often lack the funding and community support needed to keep extracurricular programs alive.

As a final possible reason for the diminished participation of low-income students, Guest and Schneider (2003) bring up an interesting point. They hypothesize that the effect of extracurricular activities on participants, academic or otherwise, depends mostly on the social context of the environment. They suggest that "activity-based identities, which are given meaning by school and community value systems, mediate the relationships between extracurricular participation and its effects… Differences in school contexts may help explain why young people are differentially affected by participation" (90). Different schools view the varied types of activities in different lights. For example,

> participants in sports are more likely to be seen as good students at schools with low academic expectations and at schools in poor communities. In contrast, participants in non-sports extracurricular activities are more likely to be seen as good students at schools with higher academic expectations and at schools in wealthy communities (103).

Therefore, the value of extracurricular participation is dependent on the social context (105). Especially in light of Lareau's (2011) interviews with parents and students, it is possible that poor communities view extracurricular activities as unnecessary and irrelevant, while more wealthy ones view them as necessary for a child's growth and development.

Essentially, the literature suggests that low-income children fall behind their middle-income counterparts in school and post-graduate attainment in part because the latter have more opportunities to participate in extracurricular activities. Without such opportunities, disadvantaged children miss out on the numerous academic, non-cognitive,

and life-enhancing benefits that extracurricular programs provide to students. With the goal of educational equality in mind, extracurricular activities should not be cut from school budgets as is the trend today, but added in abundance.

D. The Arts and Music Programs

In particular, music programs have been proven to provide many of the aforementioned benefits of extracurricular activities. Engaging in the arts is a good in itself, and people take part in music for a pure love of the art. This participation, however, translates into concrete benefits in other areas of a person's life. Music has mostly positive effects on IQ and intelligence, but this influence is often indirect, mediated by its effects on emotions, happiness, stress levels, and more which then influence cognitive ability. Music in itself is a reward, which results in better quality of life for all involved. At the same time, however, low-income students are much less likely to have access to the arts, especially in light of funding cuts in schools and the No Child Left Behind Act. Society must make more of an effort to increase access to the arts for disadvantaged students.

A frequently researched effect of music has to do with its intellectual and IQ benefits. Many scholars have found a significantly positive effect of music participation and academic outcomes (Broh 2002; Catterall 2012; Catterall et al. 1999; Fitzpatrick 2006; Foregard et al. 2008; Respress and Lutfi 2006; Schellenberg 2004; Schellenberg 2006; Southgate and Roscigno 2009; Wetter, Koerner, and Schwaninger 2009). Broh (2002) discovered that aside from sports, "Participation in music groups is the only other activity to yield such consistent benefits for achievement. Similar to interscholastic sports, music participation improves math and English grades and scores on math tests but not on

reading tests" (83-84). Foregard et al. (2008) studied the skills of children ages 8-11 who had at least 3 years of music instruction. They found that these children outperformed their control counterparts in both verbal ability (vocabulary) and non-verbal reasoning, and that duration of music training predicted performance on the tests (5). The researchers note that this superiority could be due to the possibilities that music enhances selected cognitive abilities, that music may enhance general IQ which leads to improvements in cognitive domains, or that other variables may mediate the association (6).

Respress and Lutfi (2006) note that fine arts stimulate the general symbol processing area in the frontal region of the brain (the right cerebellum, left frontal cortex, and the "gate" between the two), which in turn develops reading, math, and science skills (25). They cite research by the American Psychological Association, which suggests that music lessons can enhance spatial reasoning performance which links to math problems, creative scientific processes, and the ability to plan (26). They also write that "the arts pay off most expansively in basic reading skills, language development, and writing skills. Increases in general academic skills also show up and appear to reinforce these specific literacy-related developments" (26). Similarly, Southgate and Roscigno (2009) support the argument that music matters for academics, finding that music participation both inside and outside of school is positively associated with reading achievement for adolescents, and less so math achievement (17). The effect "remains even when in-school music is controlled" (17), emphasizing the particular importance of extracurricular programs. Schellenberg (2006) supports the contention that there is a significant positive association between music and intelligence, but that the observed associations are not limited to specific subsets of intellectual ability (e.g., mathematical, spatial-temporal, verbal)— the

results are more about general intelligence (464). While various studies have found different results with regard to specifically which subject areas music benefits (mathematics, English, verbal, ability, reading, etc.), results are consistent overall among these authors that music relates positively with academics, most likely in a general sense across various subject areas.

The duration of musical involvement may have an important effect on the relationship between music and academics. Catterall et al. (1999) found that the gains associated with participation, students' mathematics scores in this study, become more pronounced over time because of increased involvement (2). Schellenberg (2005) agrees that "real-world effects of musical training on intellectual abilities are larger with longer periods of training" (319). Similarly, Wetter et al.'s (2009) results indicate that music participation results in better average performance in school, but that duration of training is most relevant:

> In the third grade, where children can be expected to have had but little musical training, there is no significant difference in school performance between such who play an instrument and such who do not. In later grades (e.g. grade 6), where it is most likely that children have had more musical training so far, school performance in the ''music'' group is significantly higher (370-71).

Thus, while music is important for all ages, musical training may have an even larger effect on academics when students are still committed in the later years of schooling. Level of engagement is important as well: Costa-Giomi (2012) did not find that merely studying music provided long-lasting or pronounced cognitive benefits among participants. More consequential is the level of engagement in learning music, such as the child's efforts in learning to play the instrument (349). She found that the relationship between long-term cognitive benefits of music instruction and motivation becomes significant after 2 years of

lessons; thus, "while providing children with music lessons may produce a temporary boost in their cognitive development, it is the long-term and dedicated commitment to learning an instrument that may provide them with more lasting cognitive benefits" (350).

It is important to acknowledge the studies that do not support the proposed hypothesis. The results of an earlier study by Costa-Giomi (2004) indicated that, for low-income fourth-grade children attending public schools in Montreal, "piano instruction had a positive effect on children's self-esteem and school music marks but did not affect their academic achievement in math and language as measured by standardized tests and school report cards" (139). The results of this study do not support that there is a causal relationship between formal music instruction and academic achievement (148). However, the benefit on the self-esteem of the subjects is notable, and will be revisited.

A very important caveat to the claim about the relationship between music and increased intelligence is the possibility that the students who choose to participate in music already have a higher cognitive ability than their non-participating counterparts. Many scholars acknowledge this: Wetter et al. (2009) note that "children with a high IQ and above-average performance at school might be more motivated to learn to play an instrument" (71). Students who elect to participate in music activities are usually more academically capable already, have higher socioeconomic status, higher parental education, and more participation in other extracurricular activities (Costa-Giomi 2012:343). In Costa-Giomi's study, personality traits like persistence, responsibility, and discipline "characterized the students even before they started learning an instrument and did not change as a result of participating in music instruction" (347). Thus, students who study music often have these traits from the outset. Fitzpatrick's (2006) study also supported the

relationship between music and academics. However, in the Columbus, Ohio school district that he studied, string instruction starts in fourth grade and band starts in fifth grade; so, "the significantly higher fourth grade scores of those students who would go on to be high school instrumental musicians suggest that Columbus public-school instrumental music classes attracted students with higher test scores from the outset" (82). This is possible among students of any socioeconomic background, and it is important to keep in mind when studying the effects of music participation on intelligence.

While music participation does seem to have an effect on academic ability, it may not be a direct relationship. There is a strong case for the idea that music influences non-academic outcomes such as emotions, happiness, stress levels, self-esteem, focus, and attention, which then translate into the classroom. Music in itself is a reward; when it affects the well-being of a student, this makes secondary outcomes like academic achievement even better. E. Glenn Schellenberg (2004, 2005, 2006, 2012) has studied this phenomenon. Merely listening to music, such as was documented in the "Mozart effect," can "change listeners' emotional state, which, in turn, may impact their cognitive performance… the link is mediated by arousal and mood" (Schellenberg 2012:334). Music lessons can do the same: in a study of 147 children and 150 undergraduates, Schellenberg (2005) found a link between music out-of-school activities and IQ/achievement for both groups that was not found with other non-musical activities (319). He cites possibilities such as the fact that music lessons are school-like in nature and thus have intellectual benefits; that they train and improve abilities like focused attention and concentration, memorization, reading music, fine-motor skills, and expressing emotions; and that they teach students to think abstractly, learn about musical structures and technical skills, and

recognize similarities across musical contexts which may facilitate intellectual development (319-320). Schellenberg concludes: "Does music make you smarter? The answer is a qualified yes. Music listening and music lessons can lead to short-term and long-term cognitive benefits, respectively" (320).

Both O'Neill (2005) and Respress and Lutfi (2006) note similar advantages to music programs as Schellenberg. Children develop "focus and concentration, skills in expression, persistence, imagination, creativity, and inclinations to tackle problems" (Respress and Lutfi 2006:26). This translates into enhanced intellectual abilities (26). Music is a way in which young people express their identity and their emotions, and learn how to do this in relation to others (O'Neill 2005:261). Music develops social skills and friendships based on shared musical tastes (O'Neill 2005:263; Respress and Lutfi 2006:26). Interestingly, music shares the diversity of different socioeconomic, ethnic, racial, cultural, and national groups, as it has historically been a "part of the social activities of families, communities, and religion" (O'Neill 2005:261). Musical engagement also provides opportunities for peer groups to challenge stereotypes (264). All of these benefits translate not only into enhanced academic skills among youth, but also a healthier and more positive self-image.

Altenmuller and Schlaug (2012) report recent research about the neurological benefits of instrumental music. Deliberate practice of an instrument is characterized by curiosity, stamina, striving for rewarding experiences, and goal-oriented behavior; as such, it "is to a large extent mediated by the transmitter substance dopamine… Dopamine is widely recognized to be critical to the neurobiology of reward, learning, and addiction" (15). Music controls stress-related hormones such as cortisol as well (16). Neurologically, music participation increases memory performance, emotional competence and prosocial

behavior (18). The emotional response to music has the largest effect on a person's wellbeing and health (16). According to the authors, "making music provokes motions and emotions, increases between-subject communications and interactions, and—mediated via neurohormones such as serotonin and dopamine—is experienced as a joyous and rewarding activity through activity changes in amygdala, ventrial striatum, and other components of the limbic system" (21). The health and wellbeing effects of music can translate into all other areas of a person's life, among them academics.

Importantly, the arts should not be strictly thought of as a means to an end – "using" music education to improve students' academic scores. Fitzpatrick (2005) writes, "without any effect whatsoever on test performance, instrumental music is a valuable part of education for its own sake. The establishment of relationships between standardized test performance and musical involvement is not necessary to justify the presence of a comprehensive music curriculum for every child" (82-83). There are "myriad goals that education and involvement in the arts serve" that go beyond the non-arts outcomes that have been studied (Catterall et al. 1999:16). These goals include "skills in the various arts themselves, competencies as critics of art forms, aesthetic awarenesses, cultural understandings, appreciations valuable in their own right, and new-found powers and joys to see and express" (16). All of these are important results of an arts education itself. Music programs should not be justified on the basis of academic or other outcomes alone, but on the emotional health and intrinsic enjoyment that comes with studying music.

The benefits of music programs rarely extend to one of society's most vulnerable groups: low-income children. Even if students don't have to pay to receive music instruction, students who come from families with lower socioeconomic status (SES) are

less likely to enroll in music activities than those from higher SES families (Costa-Giomi 2012:345). SES is related to the rate of music participation. A student's race, parental education, and family structure are also associated with music engagement (345), and these factors often depend on SES. For example, Costa-Giomi found that children with college-educated parents were "almost twice as likely to enrol in music ensembles than were other students" (346). Students who study music, and remain engaged in music in the long-term, come from a more privileged environment than those who do not (347). Catterall et al. (1997) agree that "the probability of being 'high arts' remains almost twice as high for students from economically advantaged families, and the probability of low arts involvement is about twice as high if one comes from an economically disadvantaged family" (7). Despite this, low-SES students who participate in arts programs, particularly extracurricular ones, achieve the same (if not greater) academic and non-cognitive benefits from participation as do higher-SES students (Catterall 2012:12). As such, "in-school or extracurricular programs offering deep arts involvement may help to narrow the gap in achievement levels among youth of high- versus low-SES" (24).

According to the U.S. Department of Education's report on *Arts Education In Public Elementary and Secondary Schools 1999-2000 and 2009-10*. 91% of public secondary schools offered music instruction in the 2008-09 school year, and it was 90% in 1999-2000 (Parsad and Spiegelman 2012:9). While this looks favorably upon arts in America's public schools, access is distributed unequally. They report that "the percentage of secondary public schools that offered music differed by the school's poverty concentration: 81 percent of the schools with the highest level of poverty concentration offered the subject compared with 95 percent and 96 percent of schools with the two lowest categories of poverty

concentration" (21). Most strikingly, for schools with 76% or more students eligible for free or reduced-price lunch, this 81% is down from 100% in 1999-2000 (21). That means that in 10 years, there was a 19% percent drop in the number of schools with high poverty concentrations that offered arts education. After-school arts programs have therefore become increasingly important to disadvantaged children.

Arts instruction is particularly important for these children, but they suffer from "unequal access to the arts". Funding is often at the core of this problem, because schools in impoverished areas do not often have the financial means to spend on the arts. According to Kennedy (2007), schools face differences in instruction, facilities, and cultural resources, which often comes down to finances and the income of the area in which the school is located (202). Recent analyses have revealed that

> the schools with students who could most benefit from the documented advantages of arts strategies are often those that either do not recognize the benefits of arts education or do not have the resources to provide it to their students. Current budgetary crises as well as the narrowing of curricula have forced some schools to curtail arts programs when they are most needed. This situation highlights the growing disparity between those who are able to take advantage of the benefits of arts education, and those who are not. (Dwyer 2011:11).

Further, public school parents in affluent areas are able to pick up the funding slack for their children, while parents in less affluent areas cannot, even if they have the desire to do so (Kennedy2007:202). Southgate and Roscigno (2009) agree social class has a significant effect on parental music involvement, undoubtedly a function of resource availability within families (13).

The No Child Left Behind Act (NCLB) of 2001 has also had a noteworthy effect on arts education in schools. With its focus on test scores, grades, and a narrow range of subjects in the curriculum, NCLB has squeezed out opportunities for arts education. The

Act set achievement goals for all public schools, measured by standardized assessments. To achieve these goals, schools have focused solely on subjects that are tested on the assessments (reading, math, and science) while reducing programs not on the assessments, such as the arts (Costa-Giomi 2012:342; Rebell and Wolff 2008:69). This has particularly affected students in schools serving low-income and minority students (Rebell and Wolff 2008:70). In a study of arts in the New York City public schools, Kennedy (2008) found that "concern over performing well on standardized tests [because of NCLB] has caused many New York City school principals to limit or eliminate access to art and cultural institutions" (199). Administrators at underperforming schools believe that they must choose between spending money and time on test preparation in English and math, *or* they can include arts and field trips "but risk the failure of their school" (200). However, in order to be successful in these subjects and also become a well-rounded, productive person, subject areas like the arts, history, and languages are also extremely important.

Finally, there is often decreased support for the arts and arts education in low-income communities. In a piece by Dimaggio and Useem in 1978, the authors address the issue that arts consumption is often seen by people in low-income communities as only for high-class people. Unequal arts consumption in America is linked to cultural capital, as families and society from different social classes socialize their children in different ways (142). Education is a primary means through which culture is reproduced and passed down, and as previously discussed, exposure to the arts through education is a function of social class origins (142-143). They write, "the high arts, including fine art, opera, ballet, modern dance, theater, and classical music, are likely to be heavily consumed by members of the upper-middle and upper class and to be consumed with decreasing frequency as one

descends the class hierarchy" (144). Frequency of exposure to the arts is also class stratified (146). A reason for this might be that "appreciation and understanding of the high arts is related to the context in which they are represented, and the context is generally more familiar to the upper-middle and upper classes than to others" (150-151). Low-income communities do not have the resources or prior experience to engage their children in the arts. This task often falls to the schools, which also struggle to keep the arts in their curriculum.

Arts education is incredibly important for a student's academic attainment, emotional well-being, social skills, and more. As vital as these programs are for children and adolescents, many children are not receiving an adequate arts education through their schools and communities. This is particularly true for those from impoverished areas, because their schools and communities lack the financial and cultural support to sustain arts programs. However, due to its benefits, music may be an important way to break the cycle of poverty and poor academics for children in need.

E. Conclusion

Children from low-income communities face an enormous disparity of opportunity in the American educational system. They consistently perform at below-average levels in school, because of reasons such as lack of adequate school funding, a dearth of qualified teachers, and stereotyping based on social class. Poor students do not have access to the same resources as middle- and upper-income students. Much of the inequality is likely due to processes outside of schools and in the community, which affects the students' in-school

attainment. Parenting styles, parental spending on education, and poor health and housing are all factors that negatively affect children in the after-school and summer hours.

As a result, extracurricular activities could be an effective way to combat these deleterious effects. Extracurriculars offer a number of advantages to children of all income levels and abilities. Ten authors argue that participation often predicts higher academic achievement, which is often mediated by the non-cognitive skills, school connection, and interpersonal relationships that extracurriculars promote. Non-cognitive skills can include leadership, teamwork, dealing with authority, confidence, discipline, and time management. Participation reduces the likelihood that a child will engage in risk behaviors such as drinking and smoking, and reduces the likelihood that they will drop out of school. Students who participate in extracurricular activities also have higher educational attainment and more civic engagement as an adult.

Further, low-income students may actually benefit more from participating than their privileged counterparts. However, these same children are statistically much less likely to participate in extracurricular activities due to funding, parental education, and their community. Low-income children fall behind their middle-income counterparts in school and post-graduate attainment in part because the latter have more opportunities to participate in extracurricular activities. Without such opportunities, disadvantaged children miss out on the numerous academic, non-cognitive, and life-enhancing benefits that extracurricular programs provide to students.

Finally, music programs frequently provide many of the aforementioned benefits of extracurricular activities. Engaging in the arts is a good in itself, but participating in an arts program translates into concrete benefits in other areas of a person's life such as emotions,

happiness, and stress levels, which then influence cognitive ability and intelligence. Ten authors show that there is a significantly positive effect of music participation and academic outcomes, often mediated by these factors. Most of all, music is an intrinsically joyous and rewarding experience, a part of education for its own sake. Again, however, the benefits of music programs rarely extend to low-income children because of unequal access and funding problems. The No Child Left Behind Act of 2001 has also narrowed the curriculum, putting the focus on math and reading test scores, while squeezing out opportunities for arts education.

Combining the research on music education with the research on the importance of extracurricular activities suggests that after-school music programs would be an effective way to close the achievement and opportunity gap between low- and middle-income students. The most vulnerable children may benefit immensely from arts education, contributing to better academic scores, non-cognitive skills, and future attainment. Only a small amount of research focuses on extracurricular programs and low-income students, and music programs and low-income students. Further, much of the literature on music and education focuses on in-school programs, and very few researchers investigate programs that are both extracurricular and musical in nature. I address this gap by researching the effects of extracurricular or after-school music programs on low-income youth. I will test the hypotheses that arts programs benefit the academic scores, non-cognitive skills, and other outcomes of low-income students. Music is an immensely enriching activity, and after-school programs place at-risk children in structured environments and remove them from detrimental living situations for longer periods of time. Thus, I will test the idea that using after-school time to learn music has multiplied

benefits for students. In a time of decreased funding for the arts and extracurricular programs, this research has a number of real-world implications, and could affect educational policy and practice.

3. STUDY

A. Methods

The central hypothesis is that extracurricular music programs have a positive impact on the academic attainment and various non-cognitive skills of low-income students. I explore this hypothesized impact through the self-reporting of middle and high school students using survey research in two case studies. The students are in one of two extracurricular music programs, one choral and one instrumental.

Site Selection: Both programs serve primarily low-income students from disadvantaged urban areas. Program 1 is an instrumental program based in Philadelphia, PA. It is a subsection of an arts organization that runs other orchestras as well. Practices take place in a school, using the classrooms available after the school day is over. It meets 5 days a week. The Program 1 student body is 98% African American and 2% Hispanic, and close to 90% receive free or reduced price lunch. At the time of this study, there is a fluctuating enrollment of about 100 participants, from ages 6-13.

Program 2 is a choral program based in Trenton, NJ. It is an independent non-profit organization in which its sole function is the choral activities. It meets two days a week in a church. The Program 2 student body is 81% African American, 10% White, and 9% other. 70% of the students are low to severe low income. At the time of this study, there is an active enrollment of 112 students, from ages 5-18.

I chose to sample these two programs because they were in similar and convenient locations, and had large enough sample sizes of students of my target age. They are similar in that both are located in urban areas that have a large population of impoverished residents. The programs have the same mission and goals to empower and nurture

disadvantaged children through music education. Furthermore, they were both interested in collaborating with me on this research.

Participants: I administered surveys to middle and high school-aged students, all within grades 5-12. The sample size is 32 students. Of the students in my sample, 29% are male and 71% are female. This is exactly the ratio of male to female in Program 2, and an 11% difference from the ratio of Program 1. The mean age is 12.8, and the mean grade in school is 7.29. The mean GPA out of 100 is 89.1, and the mean GPA letter grade is between an A- and a B+. Students have participated in their respective program for a mean of 2.8 years. 100% of my sample is African American, with 3 students reporting African American and another race. 41.9% attend a public school, 45.2% attend a charter school, 9.7% attend a private school, and 3.2% (1 respondent) attend a vocational school. 48.3% live with both parents, 44.8% live with their mother only, 3.4% (1 respondent) live with their father only, and 3.4% (1 respondent) live with other family members and no parent. When asked about the highest level of education their mother earned, 7.1% reported some high school, 10.7% reported a high school degree, 35.7% reported some college, 7.1% reported an A.A. degree, 25% reported a B.A./B.S. college degree, and 14.3% reported an advanced degree.

I recruited participants to my study by approaching them, introducing myself, and asking them if they would like to participate. The program directors helped introduce me to the students, and they told me which students were of the age I was looking to survey.

Measures: The survey had 22 questions in total, and participants at both programs received the same survey, with the name of the program changed. There were 6 yes/no questions, 7 multiple-choice questions, and 14 open-ended questions. Students were asked to complete the survey by hand at the program site. At Program 1, the director pulled 1-2

students out of their rehearsal to complete the survey. At Program 2, I surveyed the children during their snack and socializing time before the rehearsals began.

Analytic Plan: I analyzed the data using the SPSS computer program. I coded the responses to the open-ended questions using open and focused coding. I analyzed the frequencies of the responses, and also used inferential statistics, including chi-square analysis and t-tests.

B. Results

Academics: I first asked the students about the impact of their participation in an after-school music program on their academic achievement. 65.6% of students said their grades had changed as a result of participation, and 34.4% said that their grades had not changed. Of those that said their grades had changed, a large majority (90%) said that their grades improved, while only 10% (2 students) said they got worse. Overall, 55.2% of the sample said that their grades improved, 37.9% said they stayed the same, and 6.9% said they got worse. That students see an improvement in their grades is generally consistent across the duration (number of years) of participation, but note that the Chi-Square for this analysis is not significant **(Table 1)**.

On their surveys, students whose grades improved wrote a number of reasons why they thought this happened. Many said that it was their love of the program that helped them achieve: “Singing make *[sic]* me feel good and alive,” “because I’m doing something I really love,” “I’m doing something I honestly love and care about,” “My attitude has got positive *[sic]* and my behavior,” “It kind of gives me a reason to do better.” Students also wrote about how the music teachers also offer academic support and homework help in

addition to the music lessons. The students whose grades stayed the same said that their grades have always been good, even before participating in the program. One student said, "My grades were already good but when I started the program they maintained to stay good *[sic]*."

Non-Cognitive Skills: Another area explored was the students' non-cognitive skills. Nearly all the participants (93.8%) felt they had learned focus and teamwork skills. The next three most commonly cited skills included social skills (80.6%), dealing with authority (79.3%), and time management (78.1%). All 6 students who said they had not learned social skills as a part of the program still said that participation helped them make friends, but note that the Chi-Square for this analysis is not significant **(Table 2)**. Two-thirds of the sample (65.6%) indicated that they learned study skills. 68.4% of those that did said their grades improved, and 26.3% said their grades stayed the same, but note that the Chi-Square for this analysis is not significant **(Table 3)**. 9 of those who did not learn study skills still saw an improvement or no change in their grades. Perseverance was the least commonly cited skill learned; however, it is important to observe that more than half of the sample (62.1%) felt that they developed this skill through their involvement in music. Comparing duration in the program with whether or not they learned these non-cognitive skills shows that the acquisition of these skills does not have to do with duration of involvement. The acquisition of these skills is generally consistent no matter how long or short a student has been in the program.

When asked how participation helped develop these non-cognitive skills, students said things like "[the program] makes you a better person in life," "by teaching me the importances *[sic]* of each skill," and "because I didn't have time for foolishness." One of the

most telling quotes is from a student who said, “The staff at the [program] encourages us to do our best. We’ve learned to take pride in what we do. We make friends and help one another do work.” Other students also mentioned the staff of the program (“They told me it was going to be hard but not to give up”). Finally, one student noted, “They teach us different things that we never did before.”

Leadership: A majority of the students (71.9%) had been a leader in their music program or another extracurricular activity. Whether or not a child has been a leader in the program has a significant relationship with the parents that a child lives with – only both parents, mother only, etc. **(Table 4).** The two students who live with their father only or with no parent said that they had not been a leader in the program, which is a higher count for that response than expected. Interestingly, out of those who live with their mother only, more than expected had been a leader, and fewer than expected had not been a leader. Many surveys implied that the respondents took pride in their leadership positions in being a role model for the younger ones, helping the teachers, or being given the responsibility of having a solo. The program “has taught me the meaning of leadership,” has “given me responsibilities that I normally wouldn’t have at home or anywhere else,” “it shows me that I can be a leader,” and “it helps me be a bigger person.”

School Connection: Students were asked how participation influenced their school connection, and results were split: about half (48.3%) said there was no change in their feelings about school, while the other half (51.7%) said that they felt more connected to school as a result of participating. Those whose grades improved were more likely to say they felt more connected to school, while those whose grades stayed the same or got worse were more likely to say that there was no change in in their feelings of school connection

(Table 5). More students than expected said that both their grades improved and they felt more connected to school, while fewer students than expected said their grades improved and they felt no change in school connection. Further, more students than expected said their grades stayed the same or got worse and their school connection had no change, while fewer students than expected said their grades stayed the same or got worse and they felt more connected to school. The Chi-Square for this table is just shy of significant.

Aside from grades, students cited that they felt more connected to school because their program included learning and homework help, made them feel more confident in their work, and promoted friendships and the broadening of social networks among the students. One student who participated in the program that took place at the charter school, and who also attended that same school during the day, said that their school connection improved "because I stay hear *[sic]* longer." One student even said that "when I first started [my program] at first I didn't want to go to the school any more but now I changed my mind about that."

Friendship: Concerning friendship, most students (90.6%) also said that participating in the program has helped them make friends. One student wrote, "I got to know them better by singing and getting help from them." A few students mentioned the diversity of participants: "there are a lot of kids here from all different age groups and backgrounds and I had a better chance to meet new people"; "before I was just friends with people in my grade now I got to meet people I didn't even know existed."

Risk Behaviors: When asked if the program affected their risk behaviors such as drinking, smoking, and sex, 65.2% said that participating had not affected their involvement (or decision not to be involved) in such behaviors. About one-third (30.4%)

were affected positively by the program in respect to risk behaviors, saying "It keeps me occupied in my time after school," ""It has taught me the importance of being my own person and not following the crowd," and "They teach us to lead not follow." Only one student (4.3%) was affected negatively by the program with respect to risk behaviors, and in response to this question he wrote, "To be honesty *[sic]* it made me think of drugs and sex. It's because the kids I'm with sometimes talk about those things."

Future Plans: Almost all of the students (90%) responded that participation had indeed influenced their future plans. As far as what these future plans were, 61.9% said that they wanted to continue playing/singing music, 19% said that the program helped with their career goals, and 19% said that it influenced their plans to go to high school or college. Among the students who do not plan on continuing to play their instrument or sing in the future, 85.7% of them still said that participation in music influenced their future plans, although the Chi-Square is not significant **(Table 6)**.

Reasons for Participating: Two final questions on the student survey asked questions about the respondent's overall experience in the program. One question asked why they have participated in the program for as long as they have. 40% said their participation was because they love the musical aspects (responses included singing or playing their instrument, concerts, rehearsals… etc.) of the program. Students wrote simple phrases such as "Because I love it" or "I love music!" The second most common reason was because they enjoy the program (25.7%) and because of their parents' insistence that they participate (22.9%). A few (11.3%) cited other reasons for participating including getting in to college and feelings of safety at the program. Additional interesting responses to why

they participate include “the environment I’m around I feel safe,” “you learn so much,” “I want to see where it takes me,” and “to be different.”

When asked about their favorite thing about participating in the program, exactly half (50%) said that their favorite thing is the musical aspect. Even most of those students (71.4%, or 5 out of 7) who say that they do not plan to continue playing their instrument or singing in the future cite the music as their favorite aspect **(Table 7)**. The Chi-Square for this analysis is just shy of significant. The next most common favorite aspect was the trips that they take (21.1%), followed by their friends that they have made (15.8%) as well as other reasons (13.2%), which included seeing the teachers, helping the younger children, and learning new things.

For each student I surveyed, I gave them a one-page mail-in survey to take home to their parents. I also distributed one-page mail-in teacher surveys to the program staff (not the students’ in-school teachers). Unfortunately, there was a very low response rate, with only 4 parents and 3 teachers responding, and all of these except one parent were affiliated with the instrumental program.

Parent Responses: All four parent respondents saw a link between participation and their child’s academics, through confidence in the classroom and increased homework completion. One parent saw tremendous improvements because her daughter knows that meeting her academic goals is a requirement of participating in the program. Another said, “I feel that being part of [the program] has given my son confidence in and out of school.” All four parents also saw improvements in their child’s non-cognitive skills, social skills, confidence, organization, and following the rules. Focus, teamwork, and dealing with

authority were important results cited by a parent. One wrote an extra comment about how grateful they are to the wonderful staff of the program, showing the importance of the teachers in this process. Another mentioned music: "[My children] have developed their ability to learn and love music." Two talked about the finances associated with the program. One wrote, "Because of a change income, it is hard to reach $150.00." Another said, "If not for [the program] it would have been unaffordable plus impossible to attend."

Teacher Responses: Two out of the three teachers saw improvements in their students' academic scores, as well as immensely improved focus and behavior in rehearsal. One said, "They take pride in their music lessons, and that pride often turns into confidence in the classroom.". A third teacher said it was hard to know the influence of the program on academics and non-cognitive skills because of little communication between the program and the students' schools, as well as the fact that the teachers do not see their students outside of the after-school program. Finally, in a comments section, one teacher wrote: "Programs like [this one] are giving students a chance to take control in a way they can't do in larger classroom settings. The discipline and positive reinforcement gives them a chance to succeed, and over the past few years the kids themselves are seeing the difference."

C. Discussion

Most of the results strongly support the hypothesis that low-income students believe that extracurricular music programs affect their academic outcomes, non-cognitive skills, and other areas of their lives. Concerning academics, over half of the sample said that their grades improved as a result of participating in their program. Almost all of those whose grades changed said they improved. Only two children said that their grades got

worse, one of whom specifically noted that the decrease was not because of their participation, but "because of myself." Further, **Table 1** shows that students believed their grades had improved no matter how many years they had spent in the program. This is strong evidence for the fact that after-school music programs can impact achievement in the classroom. From the comments on the surveys, it appears that the nature of the programs, and the commitment of the staff, seems to encourage students to do better musically, which translates into academics.

The verbal responses of the students whose grades did not change support the idea that those who choose to participate in these voluntary programs already have higher academic achievement than their peers before they start. This is reinforced by the question that asks about why students have participated for as long as they have, in which 22.9% of the students said that their parents insisted they participate. Among this sample, it is probably true that higher academically capable students as well as students with more educated parents self-selected to be in the program.

It is clear that students learn a number of non-cognitive skills through participation. Focus and teamwork were particularly strong. Students must exhibit a large amount of focus in order to learn how to play or sing, as well as rehearse with others. Teamwork is also a large part of making music, as one has to work with others to make any piece (other than a solo) sound good. This aspect is social in nature and also promotes social skills. Social skills, dealing with authority, time management, and study skills and perseverance all showed significantly positive results. It is interesting that the data show that acquisition of these skills does not have to do with duration of involvement, because this contradicts what some of the literature says. The results about duration show the power of music

programs to foster non-cognitive skills in students, because students feel that they have learned these skills even if they have only participated for 1 or 2 years.

Finally, leadership is another important non-cognitive skill that these programs seem to promote. Music programs provide a wonderful space for leadership opportunities to students who might not otherwise be offered them. Providing leadership opportunities, and encouraging the belief that participants are capable of being a leader, is an immensely important function of these programs. Overall, after-school music programs seem to foster skills that disadvantaged students may not be learning at home or at school, or learning them only to a small degree. Moreover, the comments reveal how the influence of the teachers in this process is essential.

One significant finding about leadership showed that whether or not a child has been a leader in the program has a significant correlation with the parents that a child lives with. While none of the students' comments on leadership mentioned their parents, family structure seems to have an effect on leadership, although this is limited by the small number of respondents who lived with their father only or no parent. These findings are interesting points for further research.

There is somewhat a case for the idea that participation in an after-school music program increases the students' connection to their school, with half of the responses supporting it. It is important to note that neither program studied was run by a school or school district but by independent organizations. However, one program took place in a charter school building, while the other took place in a church basement. These factors could have affected if and how the program promoted school connection among the individual students. **Table 5** suggests that the link between participation and school

connection may be mediated by whether or not students' grades improved or not. It could be that students feel more connected to school when their grades improve. Those that reported that their school connection had not changed could have said this because their grades did not improve, but instead stayed the same or got worse.

Almost all of the students said that participating in the program has helped them make friends. The influence of friendship also showed up in results for the questions about why they have participated for so long, what their favorite part of the program is, and school connection. Making music is a collaborative process, which fosters friendship and social engagement. Clearly, friendship and social connections is an important aspect of the program, and it would be interesting to explore this in more depth.

The majority of students who answered the question about how their participation affected their risk behaviors said that the program had no effect. For the most part, after-school music programs have a neutral or positive effect on risk behaviors; however, the quote from the student who said that participation increased risk behaviors is an indication that risk behaviors could be promoted in a small minority due to the social nature of the programs.

A love for music, and a desire to continue it, was one of the most interesting results that I noticed among the students. First, almost the entire sample reported that their participation influenced their future plans. Over half of these students wanted to continue with their musical pursuits in the future, with career goals and college plans also cited by much smaller percentages. The importance of the musical aspects of the programs also dominated questions about why students participated in the program and what their favorite part about it is. 40% said they participated in the program for as long as they had

because of the musical aspects, and another 25.7% said it was because they enjoy or love the program. Exactly half cited the musical aspects as their favorite part of the program, with trips and friends as secondary responses. Even most of those students who say they do not plan to continue playing their instrument or singing in the future cite the music as their favorite aspect. These results support the idea of learning music for its own sake, for the emotional benefits that come with it, which then translate into other areas of a student's life. While music may not be a part of their future plans, they still enjoy it. For many students, a love of the music is a main reason why they continue to participate, and why they love the program so much.

Finally, the teacher and parent responses show that both parties have seen improvements in the program participants, both academically and non-cognitively. The teacher responses show the importance of a music education for its own sake, which then translates into benefits in the classroom. The comment from the parent about struggling to meet the program expense is particularly striking. Music programs in general are expensive to run, and this comment exemplifies how hard it is for parents of limited means to come up with the funds for participation.

My results support much of the existing literature on the importance of both extracurricular programs and music programs. I showed that extracurricular music programs promote higher academic achievement among disadvantaged students, probably mediated by the non-cognitive skills that these programs foster. My results also support a connection between participation and school connection, interpersonal relationships, and decreased risk behaviors, all of which are supported by previous research of various scholars. Finally, it supports music as a good in itself, the benefits of which then translate

into other aspects of a participant's life. One point of prior studies that my research contradicts is that duration of involvement has an influence on the intensity of the benefits of participation. However, my results on this idea should be investigated through further research. Overall, my study uniquely contributes research on the impact of programs that are specifically both extracurricular and musical in nature.

Limitations: There are some limitations to my study. First, I have a small sample size, which may have affected the results. I did not include a control group because of time restrictions, which could have enhanced the results. Moreover, the students participating in the study may have been more academically gifted in the first place, as noted in my discussion. Thus, having a control group in a similar study would be very important. Another limitation is that my results were based on the self-report of the students, which some might argue is not an accurate way to measure the effects. It would have been beneficial to cross-check the students' answers about their academic scores and strengths with their teachers in school. Differences in the two programs may have affected the results as well, and it would be interesting to separate the responses from the two programs.

Further Research: My study provides insight into how students feel after-school music programs have benefited them. I believe it is important for future research to investigate deeper into why and how music programs do this, looking at the mechanisms within the programs that contribute to the benefits for participants. Outside factors, such as family structure, seem to have an impact on a student's participation, so it would be interesting to research these effects further. I am also very curious about what kinds of students choose to participate in these programs – for example, is it true that those who do participate are already more academically gifted than those who do not choose to

participate? Finally, something I did not address in my research was whether or not extracurricular music programs are even more beneficial for low-income students than for middle-income ones. This would be an interesting point for further research.

Implications: There are various implications for policy and practice from this study. Educators at all levels should be aware of the importance of the arts and arts education. They should also be aware of the impact that the after-school time has on students, contributing to the growing income achievement/opportunity gap in American society. Music teachers should promote the education of non-cognitive skills such as focus, teamwork, and leadership through their music programs, as well as thought about future plans. Policy-makers should also be aware of these findings, as it is essential to form and fund after-school arts programs for students of all income levels, particularly those who are low-income. I recommend increasing access to the arts, especially for disadvantaged students, both in and out of school. In a time of decreased funding for the arts, music programs should be added in abundance and not cut. Promoting the importance of the arts for low-income youth, as well as all types of extracurricular activities, can truly have an impact on their academic achievement, non-cognitive skills, and other areas of their lives.

4. CONCLUSION

The American educational system is facing a crisis in which low-income students have significantly lower in-school achievement, as well as fewer opportunities within their education, than their middle-income counterparts. Closing this gap is a complicated issue; however, extracurricular music programs may be able to help. These programs have a number of benefits for disadvantaged children that may translate into many areas of their lives. Academic benefits are important, but these programs go beyond raising grades and scores to a well-rounded enrichment of the whole person. Non-cognitive skills, future plans, school connection, risk behaviors, friendship—all are positively influenced by participation in a music program, according to the students themselves. As a result, these programs can contribute to closing the achievement and opportunity gap in the American educational system.

Since low-income students are traditionally underserved in school, and their home lives have a strong impact on their in-school learning, after-school music activities can provide a place for them to compensate for what they may not be learning elsewhere. Most importantly, music is beneficial in itself purely for the love of it as well as the emotional expression that it fosters. Every child, regardless of socioeconomic status, should have the opportunity to engage in music through an extracurricular program.

5. APPENDIX I: DATA TABLES

Table 1: How grades changed * Number of Years Participated

			Number of Years Participated				Total
			1-2	3-4	5-6	7-8	
If yes, how grades changed	Improved	Count	10	5	2	1	18
			90.9%	100.0%	66.7%	100.0%	90.0%
	Got worse	Count	1	0	1	0	2
			9.1%	0.0%	33.3%	0.0%	10.0%
Total		Count	11	5	3	1	20
			100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square=0.477

Table 2: Has participation helped you make friends * Have you learned social skills

			Have you learned social skills		Total
			No	Yes	
Has participation helped you make friends	No	Count	0	3	3
			0.0%	12.0%	9.7%
	Yes	Count	6	22	28
			100.0%	88.0%	90.3%
Total		Count	6	25	31
			100.0%	100.0%	100.0%

Chi-Square=0.372

Table 3: Grades changed: improved, stayed the same, got worse * Have you learned study skills

			Have you learned study skills		Total
			No	Yes	
Grades changed: improved, stayed the same, got worse	Got worse	Count	1	1	2
			10.0%	5.3%	6.9%
	Stayed the same	Count	6	5	11
			60.0%	26.3%	37.9%
	Improved	Count	3	13	16
			30.0%	68.4%	55.2%
Total		Count	10	19	29
			100.0%	100.0%	100.0%

Chi-Square=0.140

Table 4: Have you ever been a leader in program or another activity * What family members do you live with - parents

			What family members do you live with - parents				Total
			both parents	mother only	father only	no parent, with family	
Have you ever been a leader in program or another activity	No	Count	3	1	1	1	6
		Expected Count	2.9	2.7	.2	.2	6.0
			21.4%	7.7%	100.0%	100.0%	20.7%
	Yes	Count	11	12	0	0	23
		Expected Count	11.1	10.3	.8	.8	23.0
			78.6%	92.3%	0.0%	0.0%	79.3%
Total		Count	14	13	1	1	29
		Expected Count	14.0	13.0	1.0	1.0	29.0
			100.0%	100.0%	100.0%	100.0%	100.0%

Chi-Square Tests=.029

Table 5: How has participation changed your feelings about school - more or less connected * Grades changed: improved, stayed the same, got worse

			Grades changed: improved, stayed the same, got worse			Total
			Got worse	Stayed the same	Improved	
How has participation changed your feelings about school - more or less connected	no change	Count	1	8	4	13
		Expected Count	.5	5.5	7.0	13.0
			100.0%	72.7%	28.6%	50.0%
	more connected	Count	0	3	10	13
		Expected Count	.5	5.5	7.0	13.0
			0.0%	27.3%	71.4%	50.0%
Total		Count	1	11	14	26
		Expected Count	1.0	11.0	14.0	26.0
			100.0%	100.0%	100.0%	100.0%

Chi-Square=0.054

Table 6: Has participation influenced future plans * Plan to continue playing instrument/singing in future

		Plan to continue playing instrument/singing in future		Total
		No	Yes	
Has participation influenced future plans	No	14.3%	8.7%	10.0%
	Yes	85.7%	91.3%	90.0%
Total		100.0%	100.0%	100.0%

Chi-Square=0.666

Table 7: What is your favorite thing about participating * Plan to continue playing instrument/singing in future

		Plan to continue playing instrument/singing in future		Total
		No	Yes	
What is your favorite thing about participating	music	5	14	19
		71.4%	56.0%	59.4%
	friends	1	3	4
		14.3%	12.0%	12.5%
	trips	0	6	6
		0.0%	24.0%	18.8%
	other	1	2	3
		14.3%	8.0%	9.4%
Total		7	25	32
		100.0%	100.0%	100.0%

Chi-Square=0.541

6. APPENDIX II: REFERENCES

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