Beyond the School Bells: Mississippi After-school Program Initiative

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Abstract:

The purpose of this paper is to assess the extent to which after-school programs can improve the outcomes of at-risk low-income students in Mississippi – one of the few states that does not allocate state funding towards these programs. Currently, there are 217,663 students in Mississippi waiting to get into an after-school program, and 1 in 6 students will go unsupervised during the after-school hours. After-school programs provide an enhancing environment for students to work on homework, play sports, and participate in other stimulating activities. However, low-income students lack access to these programs due to the lack of affordability and availability. I propose that Mississippi enact the Beyond the School Bells Initiative (BSBI) to create a state funding stream for a variety of programs that target children whose household income is at or below 150% of the poverty line. A cost-benefit analysis suggests that this initiative would yield a benefit that ranges from a $24.13 to $27.54 for every $1 spent.

Key words: Poverty, After-school Programs, Cost-Benefit Analysis, Beyond School Bells, Mississippi, Crime, Academic Performance

Introduction

While in elementary and middle school, children have the opportunity to participate in after-school activities that involve doing homework, playing sports, or creating art with their peers. After-school programs, or out-of-school time (OST) programs, have provided high quality experiences for many young children in an effort to improve their performance inside the classroom. This is in addition to a number of other direct benefits on children and indirect benefits on their parents and the community. Vandell et. al. (2007) found that regular participation in after-school programs is correlated with a 20-percentile gain in math scores for program participants. Despite the promising advantages of these programs, not every family has access to them. A report from the Food and Research Action Center shows that the Mississippi’s federally funded after-school supper program is one of the smallest in the country. This program served fewer than one child for every 20 low-income children who participated in the state’s school lunch program (FRAC, 2018). This shows that after-school programs may only be reaching a fraction of low-income students. As it stands, 19.4 million children...
who are currently not enrolled in an OST program would be enrolled given the opportunity (McCombs, 2018). However, lack of availability and affordability have acted as barriers for these students.

To tackle the issues of funding and availability of such programs, federal and state governments have provided an array of grants, initiatives, and projects. For example, in New York, the Empire State After-school Program Fund grants a certain amount of money to school districts for after-school programs. Many of the existing programs are aimed at high-risk students whose families are considered low-income, or part of minority populations. In fact, about 24% of students that take part in the OST programs come from communities of concentrated poverty (NCSL, 2019). As such, if OST programs are adequately funded and made more widely available, they may be a useful tool to provide an equitable form of education outside of regular school hours, and to supplement the benefits achieved from education.¹

More than half the states in the U.S. have dedicated funding towards after-school programs. Despite the high demand, Mississippi is one of the few states that does not allocate funding for these programs. In 2020, there were about 217,663 students in the state awaiting an open spot in an after-school program (Afterschool Alliance, 2020). In addition to this, Mississippi has one of the highest rates of child poverty in the country.² Poverty provides a barrier to quality education as children living in impoverished households are less likely to receive equitable education (Duncombe, 2017). A statewide fund that is focused on financing high quality after-school programs in areas with high rates of child poverty may significantly benefit at-risk students. In this paper, I examine the extent to which after-school programs can improve the outcomes of at-risk low-income students in Mississippi. I propose that Mississippi enact a new funding stream targeting after-school programs in the state that serve low-income households. Utilizing estimates from literature, I show that providing funding to after-school programs in Mississippi will pass a cost-benefit analysis, yielding a benefit between $24.13 to $27.54 for every $1 spent.

Scope of the Issue

Impoverished families and at-risk youth living in areas of concentrated poverty do not possess sufficient access to after-school programs. The number of individuals living in communities of concentrated poverty who are current

¹ In a report, The Afterschool Alliance found that surveyed parents in Mississippi reported cost of after school programs (57%) as their number one barrier to access, lack of safe transportation (51) as their second, and lack of available programs (48%) as their third. More availability of funding for after school programs has the capacity to solve these problems. As will be seen below, the proposed funding program will allocate resources to subsidize fees (if applicable) for parents who cannot afford the cost and will also allocate funding for transportation services.

² Mississippi’s poverty rate for those under 18 years old is the highest in the country, reaching 28.1% in 2019, compared with a national average of 16.8% in the same year.

poverty was as high as 77.4 million in 2010 and consisted of mainly African American and Hispanic individuals (Afterschool Alliance, 2016). In a survey conducted by Afterschool Alliance (2016), 2 out of every 3 parents living in areas with a high poverty rate expressed that it was a challenge to find a productive after-school environment for their children. As one of the states with the highest poverty rates, Mississippi has an abundance of children who do not currently have access to an after-school program, and a portion of these children do not have any supervision during after-school hours. Therefore, the large number of households who are unable to access these programs creates an inequality of opportunity, where many low-income students in the state are not receiving the educational and social benefits these programs offer.

**Impact on After-school Programs on Academic Performance**

The impact of after-school programs on educational performance is well documented in literature. Zimmer, Hamilton, and Christina (2010) studied the effects of two after-school tutoring programs in Pittsburgh after the enactment of the No Child Left Behind Legislation (NCLB). This legislation put pressure on districts to improve student’s proficiency level in schools. The two programs tested were the Educational Assistance Program (EAP) and the Supplemental Education Services (SES). Both programs were provided either before or after-school, were free, and targeted low performing students; but SES specifically targeted low-income students (Zimmer, Hamilton, & Christina, 2010). Overall, the results indicated that the students who participated in both programs experienced gains in achievement for math and reading.

The SES program resulted in more achievement gain than EAP (Zimmer, Hamilton & Christina, 2010). The authors argued that one potential reason for the differences in achievement gain is that SES specifically targeted at-risk low-income students who may benefit more than the general student population. This is because there may be more room for academic improvement and gains in resources for low-income students, when compared to other students. Similarly, Hanlon et al. (2009) focused on the effect of after-school programs targeting urban African American youth and found significant positive effects on factors like grade point average and teacher ratings. These studies serve as an indication of how after-school programs can improve education outcomes in low-income communities.

Similarly, Durak, Weissberg, and Pachan (2010) found that after-school programs can also improve students’ social and personal skills. The meta-analysis revealed that most studies in the literature found these programs have an overall positive effect. Much of the evidence suggests that after-school programs have a more significant impact on students when they provide higher quality services. Consequently, more funding for high quality

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3 The poverty rate in Mississippi is almost 7.3% higher than the national average.
4 Overall, studies have indicated that factors like program quality and level of participation play a
**After-school Programs and Parental Labor Market Outcomes**

The impact of after-school program goes beyond the students and into the lives of parents. The Afterschool Alliance (2020) report on the status of Mississippi’s after-school programs indicates that 64% of parents agree that “after-school programs help their kids get excited about learning.” Over 60% of parents also agreed that these programs helped their children to develop soft skills such as leadership, critical thinking, and teamwork. In addition, 68% of parents believe that the after-school care that the programs provide allows them to keep their job, which is critical for low-income families (Afterschool Alliance, 2020). However, empirical evidence on the impact of after-school programs provides mixed results. Felfe, Lechner, and Thiemann (2016) examined the impact of providing after-school care in Switzerland. They found that after-school programs had no statistical impact on parent’s overall employment status, but it improved maternal full-time employment by about 3.3 percentage points (Felfe, Lechner, and Thiemann). Gambaro, Marcus, and Peter (2018) found that a child’s participation in after-school care increases the employment rate and hours worked by mothers in Germany. Finally, Takaku (2017) shows that women in nuclear families are more likely to exit the workforce after their firstborn begins school if there are no available after-school programs. Based on the empirical evidence, and survey of parents in Mississippi, there is at least a positive correlation between hours worked and the availability of these programs.

**After-school programs and crime**

The relationship between after-school programs and crime is another important factor to consider when reviewing the impacts of these programs. About 1 in 6 students in Mississippi will go unsupervised after-school (after-school Alliance, 2020). Without access to an enriching environment or supervision, children may be more likely to get involved in delinquent behavior.

As of 2015, Mississippi’s juvenile offenses were at or above the average U.S. rate for property crimes of children 10 and older (JJGPS, n.d). A report from the Council for a Strong America (CSA) reviewed the prime time for juvenile crime in the U.S. This report found that the highest percentage of juvenile crimes (21%) in Mississippi occurs during the times of 2PM and 6PM, consistent with similar data from other states (CSA, 2019). The same report found that quality after-school programs can benefit children and communities by reducing crime. It specifically looked at the Chicago-based Becoming a Man (BAM) program which yielded a 35% reduction in total arrests. Los Angeles’ BEST program, focusing on holistic youth development, found that consistent attendance led to a 30% to 50% reduction in the likelihood that treated

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strong role in the magnitude of the impact that after-school programs have on students. (Durlak & Weissberge, 2007; Jenner & Jenner 2007).
students committed a juvenile crime (CSA, 2019).

Other empirical evidence finds mixed results in the relationship between after-school programs and the level of juvenile delinquency. Taheri and Welsh (2015) found that after-school programs had a small insignificant positive effect on delinquency. On the other hand, studies that have looked at specific programs have found positive effects. The Fit2Lead, a park-based program for high-risk youth, resulted in a significant reduction in youth arrests for ages 12-17 (Agostino et al., 2019). Although the target age group for this proposal is between 6-11 years old, programs like Fit2Lead is a prime example of a successful program that have impacted at-risk students. Funding a diverse range of programs that offer participants the opportunity to engage with academia, music, sports, and other activities can reduce the possibility of youth delinquency by exposing students to a more nurturing environment.

The Beyond the School Bells Initiative (BSBI)

There are currently 82,754 students in after-school programs in Mississippi (Afterschool Alliance, 2020). The main funding source of these programs is the federal government. The federal funding streams that dedicate money towards after-school programs are: the 21st Century Community Learning Centers (21CCLC), the Child Care and Development Fund (CCDF), the Temporary Assistance to Needy Families (TANF) program, and the Federal Food and Nutrition Programs (Afterschool Alliance, n.d.). The 21CCLC is the only federal program that solely targets after-school programs.

While funding can come from both the federal government and private donations, like the Mott Foundation, 32 states have dedicated or partially allowed funding for after-school programs (NCSL, 2021). However, Mississippi is not one of those states. Therefore, I propose that the state of Mississippi create a special fund, the Beyond the Bells Initiative (BSBI), to improve access to after-school programs for low-income and at-risk students.

Eligibility

The BSBI fund will be geared towards low-income children who do not have access to after-school programs due to affordability or an insufficient number of open slots for programs. The funding stream will target the providers of after-school programs. The organizations that can apply for state funding are those that work with children from the ages of 6-12 years old. Funds will be distributed to programs based on the number of students they serve whose household income is at or below 150% of the federal poverty line. This is in accordance to related government programs, like the National Income families, focusing on programs that work with kids in the 6-12 age group may help reduce these existing gaps.


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5 Research by Child Trends in 2014 found that there were growing gaps in OST program participation rates between low-income children ages 6-11 and their non-low-income counterparts. Participation among low-income children in that age group declined by 5% between 1997-2012 and increase by 7% for non-low-income children during the same time period. Since BSBI specifically targets low-
Lunch Program, which offers free meals for children whose family falls at or below 135% of the poverty line and discounted meals for those at or below 185% of the poverty line. Both publicly and privately-run programs can apply for funding.

There will be no requirement on what types of after-school programs can apply to receive state funding. All school-based, community-based, music, academic, art, or other program offering after-school services are eligible to apply. However, there are a number of special requirements that need to be met. These entities:

1. Must meet certain performance targets (which are highlighted in the following section)
2. Must provide meals and healthy snacks

These two criteria assure that programs will provide higher quality services and include nutrition among the services they offer. In addition, providing meals can serve as an incentive for more low-income parents to encourage their children to participate. BSBI funding can be used for:

1. Procurement of supplies (i.e., books, sports items, other program specific resources)
2. Transportation costs including field trips and rides from school to the program location
3. Staff salaries for management, activity leaders, teachers, and other support staff
4. Meals (this funding will be in addition to federal Afterschool Nutrition Programs and National School Lunch Programs)

a. The state funding should be used for meals after federal funding has been exhausted

5. Subsidize fee for parents who are unable to pay the full amount (if fees are applicable)

With the BSBI funding, programs should offer free or subsidized services to low-income children. The funds can also be used to cover the costs of new investments or addition of program slots. Funds should not be used for paying administrative costs, rent or utilities, and/or benefits.

Quality and Performance Target Areas
To help ensure quality, the organizations that apply for new or recurring BSBI funding must meet certain performance targets to be eligible under the proposal. The three target areas are:

1. Child performance
   a. Programs must submit annual reports detailing the ways in which they impacted the participating children and the community.
   b. All programs must submit the annual report to apply for recurring funds.

2. Youth involvement
   a. Measures of program quality, such as student attendance and rate of participation, should be included in the annual report.
   b. Programs should demonstrate at least 2/3 participation based on the number of slots offered.
3. Parental involvement
   a. To measure program quality, parent satisfaction evaluations should be conducted annually.

Quality is an important factor in assuring that programs significantly impact participants, therefore, this policy is geared towards assuring it.

Costs and Benefits

The typical expenses of after-school programs include staff salaries, space and utilities costs, administrative costs, transportation costs, and other costs that include supplies and meals. Table one in the Appendix shows the estimated annual cost of the proposed BSBI funding stream. Since BSBI funding does not cover utilities and administrative costs, these are omitted from the estimation. Assuming that students are served for 181 days each year for an average length of 3.7 hours per day, the cost of the program would amount to about $3,110.40 per enrollee (Grossman, 2009). As mentioned above, there are about 217,663 children who are currently waiting for an after-school program in Mississippi. An Afterschool Alliance (2020) report on the demand for afterschool programs shows that 51% of the low-income students who are not participating in an afterschool program would take one up given the opportunity. Therefore, the expected number of participants is roughly 111,000 and about $345 million in BSBI funding is needed each year to cover these additional students.\(^6\)

Regarding the benefits of the program, the Ohio After-school Network (n.d.) estimates that 63% of low-income students who participated in after-school programs were more likely to graduate high school, compared to 42% of those who did not participate in such programs.\(^7\) The foregone lifetime earnings as a result of dropping out of high school were reported to be about $205,009 (Trostel, 2015). Consequently, the total educational benefits of BSBI funding, as measured by lifetime earnings, will be approximately $4.8 billion for the 111,000 expected participants.\(^8\) Similarly, Trostel (2015) found that students who graduate from high school pay about $73,135 more in federal and state taxes over their lifetime than those who do not. Therefore, the federal and state tax revenue that would be derived from the BSBI program would be approximately $1.7 billion.\(^9\) Students who graduate high school will also save the government $41,299 in

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\(^6\) This is comparable to the cost spent on afterschool programs in other states. For example, in 2019 the New York City COMPASS program served 178,800 students at a cost of $334.5 million (Gallear, 2019). California state funded After School Education and Safety (ASES) program allocated $589 million to after school programs, which together serves 4,243 program sites, which together serve 376,985 students daily (Davis, 2019).

\(^7\) Huang et al (2005) found that drop-out rates for the LA BEST After-school Program were as high as 14%. While this lowers the cost benefit estimate to a $16.83 - $20.12 benefit for every $1 spent, it does not change the general results.

\(^8\) This information implies that about 23,310 students (21% of 111,000) will be more likely from high school because of the BSBI funding. This would yield $4.8 billion in earnings ($205,009 x 23,310).

\(^9\) The federal and state tax revenue will be a total of $59,210 for the 23,310 students who were more likely to attend high school. Resulting in a $1.7 billion tax revenue ($73,135 x 23,310).
The savings in public assistance associated with the BSBI funding will be a total of $963 million ($41,299 x 23,310). This will lead to a total benefit of $963 million as a result of the proposed state funding program. Lastly, a study by the Rose Institute at Claremont McKenna College found that after-school programs led to crime prevention benefits of $5.92 for every $1 spent. Accounting for the estimated cost of BSBI and the number of low-income students expected to take up a program, the total benefit of crime prevention will be $2 billion (Brown et al., 2002). In addition, a study on LA’s BEST after-school program found a lower yield of $2.50 benefit in crime reduction for every dollar spent. (Huang, Goldschmidt, La Torre, 2014). This would result in a total benefit of $863 million. Assuming these numbers remain true, the total benefits from crime reduction would range from $863 million to $2 billion.

Given the assumption that the program will function like those in other states, the total benefit is expected to be between $8.3 billion and $9.5 billion. This implies that the potential benefit ranges from $24.13 to $27.54 for every $1 spent. However, if the assumption does not hold, the predicted outcome could be an overestimate of the true value of BSBI. Similarly, the calculation does not account for the effects on maternal labor market outcome, which could result in an underestimate.

**Conclusion**

Over 88,000 children go unsupervised in Mississippi during the hours of 2PM and 6PM, and many more are waiting for the opportunity to get into an after-school program. After-school programs provide a prospect for kids to be exposed to a nourishing environment during the after-school hours. Not only are children able to do their homework, they can gain new skills through the diverse number of activities offered by the programs. After-school programs have the biggest impact on low-income students. Low-income students can access a number of essential resources they may not have without these programs. Among the resources after-school programs offer are meals and snack for students to ensure that they receive proper nutrition after school.

Despite the resources that these programs offer, many low-income students do not have access to them due to affordability or availability. This gap in opportunity can contribute to differences in income later in life. As mentioned above, over 60% of parents living in areas of concentrated poverty note that their economic conditions make it challenging to place their child in an after-school program. Expanding such programs to target low-income communities could therefore potentially reduce gaps in educational opportunities and outcomes.

There are 32 states that allocate state funding for after-school programs. In this article, I propose the Beyond the School Bells Initiative to create a state fund for after-school programs in Mississippi, one of the few states that does not allocate state funding for these programs. Both the state’s children...
and communities could benefit from an increase in the availability of after-school programs. These programs may lead to better academic outcomes, lower juvenile crime, and higher lifetime earnings, with a potential benefit that ranges from $24.13 to $27.54 for every $1 spent. Consequently, public policymakers in Mississippi should consider the boundless opportunities that can arise from providing state funding for after-school programs.
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Appendix

Table 1: Per enrollee cost calculations by item

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Per Student Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation cost</td>
<td>Cost of busing children and field trips</td>
<td>$86.40 per enrollee</td>
</tr>
<tr>
<td>Meals and equipment costs</td>
<td>Cost of supplies for students including food, and materials for conducting activities</td>
<td>$648 per enrollee</td>
</tr>
<tr>
<td>Staff salaries</td>
<td>Cost of salaries for management, activity, and support staff</td>
<td>$2,376 per enrollee</td>
</tr>
</tbody>
</table>


Table 2: Per enrollee benefit by item

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Per Student Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term education gains</td>
<td>Calculation of life-time earnings for share of low-income students who graduated from high school as result of attending after-school programs</td>
<td>$43,052 per enrollee</td>
</tr>
<tr>
<td>Crime reduction</td>
<td>Crime reduction benefits include taxpayer saving, criminal justice costs, and direct costs for victims</td>
<td>$7,775 – $18,411 per enrollee</td>
</tr>
<tr>
<td>Gains in taxes</td>
<td>Gains in federal and state income taxes from low-income students who did not dropout of high school as a result of attending after-school programs</td>
<td>$15,358 per enrollee</td>
</tr>
<tr>
<td>Savings from reduction in public assistance</td>
<td>Savings in public assistance costs from low-income students who did not dropout of high school as a result of attending after-school programs</td>
<td>$8,673 per enrollee</td>
</tr>
</tbody>
</table>

In total 23,310 persons will be more likely to graduate from high school because from this program

