Statistically Speaking:
Evaluation of the Becoming a Man (B.A.M.) Program in Chicago

By Meryl Prochaska

Studies have found that children living with chronic stress, including stress related to exposure to violence in their community, experience challenges with developing non-cognitive or “social cognitive skills.” The study’s authors explain that these skills include self-regulation, reasoning, impulse control, and conflict resolution, and are also correlated with educational outcomes and future criminal and violent behavior. Accordingly, as the authors of this study note, many programs focus on developing these social cognitive skills in early childhood. Despite the focus on early childhood interventions, researchers from the University of Chicago’s Crime Lab recently provided data to show that non-cognitive skills can also be taught to youth in later childhood. The Crime Lab evaluated the Becoming a Man (B.A.M.©) -Sports Edition (“BAM”) program, an intervention that aims to teach and help develop social cognitive skills in middle school and high-school aged children.

BAM was developed by Youth Guidance and World-Sports Chicago, both non-profit organizations in Chicago. Youth Guidance explains that BAM was developed based on research that demonstrates a relationship between youth homicides and children’s impulsive behavior and on the theory that social cognitive skills are related to success in school, employment, and in avoiding criminal behavior. Accordingly, Youth Guidance and the study’s authors discuss that BAM focuses on helping youth develop the “social cognitive skills” described above, including: emotional regulation, interpersonal problem solving, conflict management, control of stress response, coping skills, goal setting and attainment, ability to evaluate consequences, and the ability to create solutions to problems. To do this, the BAM program provides in school and after school programs that focus on developing these skills. Specifically, the authors provide that the in-school intervention includes group counseling and mentoring sessions that teach a skill each session through various teaching methods, and students are assigned a homework assignment to practice a skill learned in the session. In the after-school program, through activities such as wrestling, martial arts, archery, weightlifting, and handball, the program helps children work on the behavioral skills in a different “non-traditional after-school sports program” context. According to Youth Guidance, BAM is currently working with more than 1,500 male youth in about 40 schools in Chicago.

In 2009, through the “Chicago Initiative to Reduce Gun Violence among School-Age Youth,” the University of Chicago Crime Lab selected the BAM program as a gun violence prevention intervention for the Crime Lab to evaluate. Importantly, because of the lack of “rigorous” studies evaluating violence prevention interventions, the study’s authors note that there is little known about what interventions are effective in reducing violence in the communities. Accordingly, the Crime Lab initiative evaluated BAM using a randomized-control study and indicated that they designed their evaluation like a clinical study conducted in medicine, which the authors note, is rare in crime prevention interventions. In addition, the Crime Lab initiative explained that it also aimed to address
the fact that gun violence is responsible for more deaths of African American men ages fifteen to twenty-four than the next nine leading causes of death combined.

In the evaluation year, BAM was offered to male youth between the 7th and 10th grades at eighteen Chicago Public Schools located in low-income communities where, the authors explain, youth violence and economic pressures are prevalent. Additionally, the authors note, eligibility for the study was determined by whether a student was considered “medium risk,” which included students who both had already demonstrated a deficiency in social cognitive skills and who were also likely to attend school. The study identified 2470 male youth at the eighteen Chicago Public Schools. In each of the eighteen schools, these male youth were randomly assigned to either the control group or one of the intervention groups, which included only the in-school intervention, only the after-school intervention, or combination of both. Notably, the authors discuss, in the year prior to the intervention the average child study participant missed six weeks of school, the average grade point average was a D plus, and one third of the participating students had a prior arrest, which demonstrates the challenges experienced by these children prior to the program year.

To evaluate the BAM program, the authors explain that they used administrative records from Chicago Public Schools and juvenile and adult justice system records from the Illinois State Police. The author’s explain that their results showed that BAM “significantly increased school engagement and performance by 0.14 standard deviations during the program year” and even continued to improve in the follow up year by increasing school engagement and performance by 0.19 standard deviations, which correlates to a ten to twenty-three percent graduation rate increase.

Additionally, the authors found that during the year in which the BAM program was evaluated, violent crimes arrests were reduced by forty-four percent. Further, the program reduced weapons crime and vandalism by thirty-six percent.

Despite significantly reducing crime in the program year, in the year after the program, unlike school engagement outcomes, the intervention did not have a statistically significant effect on reducing violent crime arrests. However, the authors discuss, because the intervention had the effect of reducing violent crime arrests during the program year, in the year after the program, the youth participant's likelihood of being detained and attending school in a juvenile detention center was reduced by fifty-three percent. The authors note that this finding could be due to the fact that when a child is arrested, authorities may look at previous arrests when deciding if the child should be detained.

Further, the authors explain that the successful outcomes are also significant considering the low-cost of the intervention. Specifically, the cost of BAM was $1100 per student. In estimating that the program could increase graduation rates from ten to twenty-three percent, the authors found that this could benefit society in the amount of $49,000 to 119,000 per student participant, which the authors explain would come from an increase in participants’ lifetime earnings and tax payments and decreased use of public benefits. Additionally, BAM’s cost benefits that came from reducing crime were also significant. According to the Crime Lab, gun violence includes significant direct and indirect costs to society, including the fact that every crime-related gunshot wound costs
society one million dollars. Accordingly, the authors explain that during the BAM evaluation year, the effect that BAM has during the program year on reducing violence and criminal behavior provides cost benefits to society from about $3600 to $34,000 per student participant.

Despite these successful outcomes, the authors discuss limitations with their findings. First, because the study was not conducted long enough to measure actual graduation rates of the student participants, the authors had to estimate BAM’s effect on graduation rates by using pre-existing data from prior studies conducted in Chicago Public Schools that studied the relationship between children’s early school outcomes and engagement measures with graduation rates. Additionally, the authors still seek to investigate “program fade out” and understanding why the effects of the program significantly continued in the follow up year for engagement in school but not for violent behavior.

Despite these limitations, however, the authors describe that this evaluation demonstrated that this low cost program, which focused on developing and improving social cognitive skills, and where students had a “limited number of contact hours” in the program year, had significant outcomes in school engagement and in reducing violent crime arrests in the intervention year. Thus, the authors concluded that this study shows that there may be significant benefits to society from focusing on programs that help develop and improve social cognitive skills of adolescent youth.

Further, because of the positive findings from the BAM program evaluation, the Crime Lab and University of Chicago Urban Education Institute Lab developed an intervention that combined the BAM program with the MATCH Education program, a tutoring program developed in Boston. In the 2012–2013 school year, the Crime Lab and Urban Education Institute Lab conducted a randomized controlled study of the combined interventions. The results of this study were recently published as a working paper in the National Bureau of Economic Research. Notably, the Crime Lab describes that their evaluation of the combined program found that after only six months of the program, participants math test scores improved in an amount that would have been an average of about three years of schooling, decreased the number of failed courses, increased the rate of school attendance, and increased the participants likelihood to be “on track” to graduate. As a result of this successful pilot implementation and results, a large-scale implementation began in August 2013 in twenty-one Chicago Public School high schools. Further, Mayor Emanuel recently announced an award of two million dollars to the BAM program in an effort to offer the program to more students in Chicago.

In conclusion, the Crime Lab’s BAM evaluation, the authors, and the BAM and Match Education programs have ultimately demonstrated through their randomized control studies that implementing and providing resources for programs like BAM and MATCH Education for older children can have a significant impact on both individual children as well as society.

Sources:


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