

Economic and Social Benefits of the **CHAMPIONS** School Fitness Program



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Report presented by Sachs Media Group, Breakthrough Research Division

Beyond improvements in quality of life, academics and overall confidence for each student individually, CHAMPIONS produces meaningful and substantial long-term cost savings for communities as a whole. These economic benefits are realized through decreased health care expenses and decreased corrections expenses.



Economic and Social Benefits of the CHAMPIONS School Fitness Program

SUCCESSES, STORIES & DATA FROM 2009-2014

CHAMPIONS is a prevention-driven health and wellness program delivered to a population of public school students in grades K-8. This comprehensive program is much more than just a youth exercise program – it is based on principles and techniques designed to improve gross motor skills, flexibility, posture, strength, balance and coordination using a long-term physical development approach to fitness and nutrition. The CHAMPIONS model is outcome-driven and has gained national attention from both the Alliance of Community Health Plans and the National ‘Let’s Move!’ Initiative.

The CHAMPIONS program was launched in 2006 at ten schools in Leon County (Tallahassee, Florida) through a community partnership with the dominant local health maintenance organization, Capital Health Plan. In 2008, the program expanded into adjacent Gadsden, Jefferson and Wakulla counties, encompassing more than 50 schools within the school day. In 2012, CHAMPIONS was launched within the school day in Calhoun County, and the next year the program entered Liberty County.

CHAMPIONS offers the only thematic, small-sided tactical game play curriculum, and is the only youth fitness program to focus on positive character traits that translate into greater performance in athletics as well as everyday life.

CHAMPIONS’ Tactical Game Play is designed to get children to focus in on what they are doing in games, allowing them to make choices as part of the game and then reflect on that choice – whether good or bad – to develop a better understanding of game play. By using this model, CHAMPIONS has measurably enhanced students’ life skills and self-regulatory behaviors.

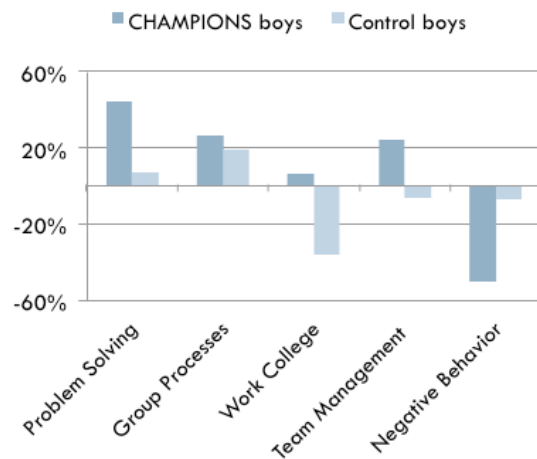
From the program’s start, CHAMPIONS has collected extensive data about everything from physical characteristics to behavioral indicators. For example, CHAMPIONS students are tracked for school absences, athletic agility, snack habits, leadership qualities, and more. This rigorous data collection and analysis has also included students in demographically-matched control groups, providing the ability to measure the relative impact of the CHAMPIONS program on students. The results of such comparisons to non-intervention students demonstrate clear and substantial successes for the CHAMPIONS program.

For example, boys and girls participating in the program increased **their problem-solving skills by 44% and 71%**, respectively, during the school year, while in the control groups boys improved by 7% and girls declined by 15% during the same time. The program also had a significant impact in reducing negative behavior as reflected in school disciplinary issues. CHAMPIONS boys and girls **decreased negative conduct by 50% and 36% respectively**, while control group boys decreased by only 7% and girls increased bad behavior conduct scores by 2% during the same time.

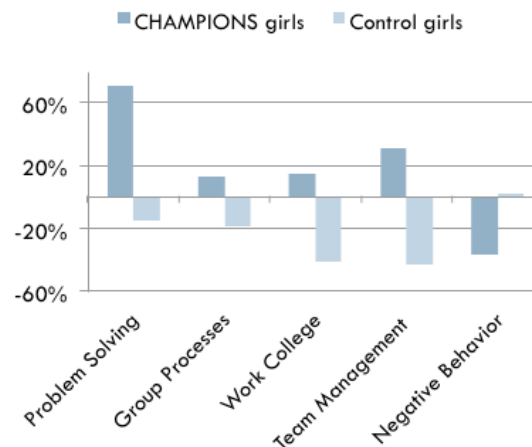




CHAMPIONS improves life skills among boys



CHAMPIONS improves life skills among girls



Beyond improvements in quality of life, academics and overall confidence for each student individually, these gains mean substantial long-term cost savings for communities as a whole. These economic benefits are realized through two distinct channels:

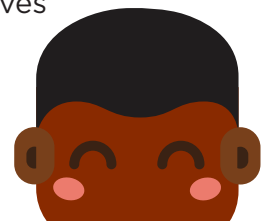
1. Decreased health care expenses due to the normalization of body weight among obese or overweight children
2. Decreased judicial and corrections expenses due to less frequent delinquencies and arrests

COST SAVINGS REALIZED THROUGH BODY WEIGHT NORMALIZATION

Multiple peer-reviewed studies have addressed the economic impacts of obesity. Taken together, these studies suggest that per capita health expenses are easily 100% greater for obese adults than for healthy weight adults.

Over the period 2008-2014, schools participating in the CHAMPIONS program began the academic year with an average of 43% of students classified as overweight or obese, and ended the school year with an average of 39% of students classified this way.

In other words, for each school year that CHAMPIONS operated as a program within the school day, the share of obese or overweight students decreased by an average of more than 9%. These are not just numbers on a ledger, they are actual children whose lives have been positively changed by the program.





School year	% Obese or overweight at outset	% Obese or overweight at end	Percentage points difference begin to end	# of students	# Obese or overweight students at outset	# Obese or overweight at end	# Change in obese or overweight during school year	% of overweight or obese students normalized
2008	42%	38%	-4% points	9,000	3,780	3,420	-360	10%
2009	38%	37%	-1% points	12,000	4,560	4,440	-360	3%
2010	42%	33%	-9% points	12,750	5,355	4,208	-1020	21%
2011	40%	36%	-4% points	14,500	5,800	5,220	-725	10%
2012	42%	38%	-4% points	16,500	6,930	6,270	-990	10%
2013	51%	48%	-3% points	18,000	9,180	8,640	-540	6%
2014	43%	41%	-2% points	18,000	7,740	7,380	-360	5%
2008-2014 avg. or total	43%	39%	-4% points	100,750	6,192	5,654	-538 average each year	9%

Normalization of body weight has multiple implications for quality of life, as well as beneficial economic impacts. In Florida, the per-capita health care expenditure for obese or overweight adults is \$5,650 more than that for healthy weight adults.ⁱ This means that for the average number of students (538) whose weight was normalized through the CHAMPIONS program each year and who then maintain a weight in the healthy range into adulthood, the Big Bend area saves more than **\$3 million per year** in avoided health care expenditures.

Even if only half of these 538 students go on to maintain a healthy body weight into adulthood, the cost savings within the Big Bend area in reduced health expenditures **exceeds \$1.5 million per year** over the course of these students' lives.

Put in even more basic terms, each child whose weight is normalized and remains that way is conservatively estimated to save the health care system **\$278,000 over his or her lifetime.**ⁱⁱ This figure is a conservative estimate, as it does not account for inflation or measures of decreased productivity that would result in the workplace from a less-healthy employee.

However, we don't have to look only to the future to see cost savings from normalized weight in children. Studies of per-child health expenses also show substantial differences in health spending between obese and healthy weight children. According to prior research, the average annual health care expenditures for obese children range from 175% to 238% higher than expenditures for healthy weight children.

Using a far more conservative estimate of a 30% difference in expenditures (\$500) between overweight and healthy weight children in Florida today, substantial cost savings would still be realized to the state if 9% of overweight children saw their weights normalize in any given year through a program such as CHAMPIONS. For example, if all children enrolled in Florida Medicaid were to participate in a program like CHAMPIONS, and if approximately 9% of obese children within that group were to see body weight normalized within the school year, this would amount to an estimated **savings to Medicaid of about \$25 million per year.**ⁱⁱⁱ





COSTS RELATED TO DELINQUENCIES & ARRESTS

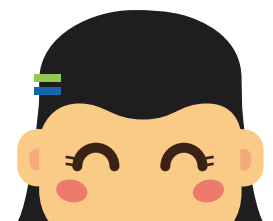
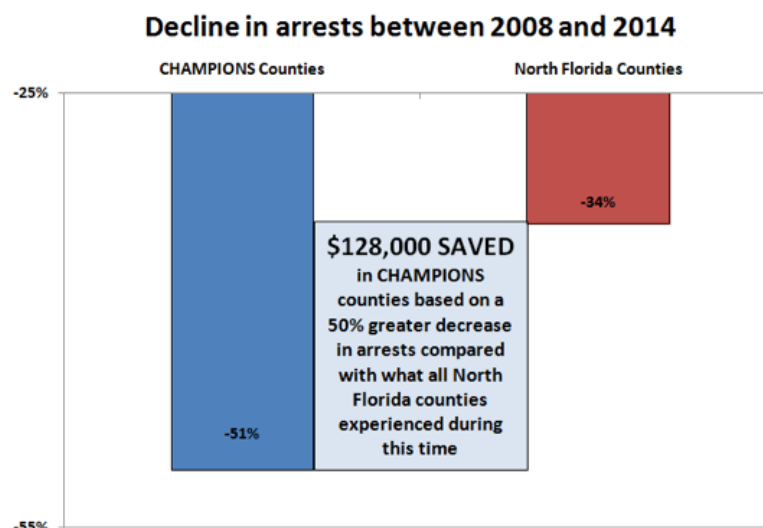
As noted above, CHAMPIONS students show dramatically improved Behavior Conduct scores from the time they begin the program and when they complete it. These improved behavior characteristics contribute strongly to students' positive behavior outside of the classroom as well.

In CHAMPIONS counties, [juvenile arrests decreased by an average of 51% between 2008 and 2014](#), while non-participating North Florida counties saw arrests decrease by just 34% during this same period of time. In other words, during that time period, the decline in juvenile arrests was [50% greater in CHAMPIONS counties](#) than in comparable nearby counties.

What does this mean in terms of cost avoidance? Looking at the hard costs of juvenile arrests alone, the decrease in juvenile arrests in CHAMPIONS counties between 2009 and 2015 [saved taxpayers of those counties approximately \\$386,000](#).^{iv}

The difference between the decline in juvenile arrests in CHAMPIONS counties and the average decline across North Florida was 17%.

Even using a conservative assumption that only this share can be attributed to CHAMPIONS and other interventions, CHAMPIONS counties still [saved \\$128,000](#) through avoided arrests compared with what would have been expected for this period of time. These figures do not include the costs of lost schooling, the costs of the crime itself, or the many costs experienced by arrested youths in lost earnings over a lifetime.





COSTS RELATED TO JUVENILE RESIDENTIAL COMMITMENTS

Between 2009 and 2014, CHAMPIONS counties also saw a greater decline in residential commitments of juvenile offenders vs. all North Florida counties, non-Champions neighboring counties and Florida as a whole.

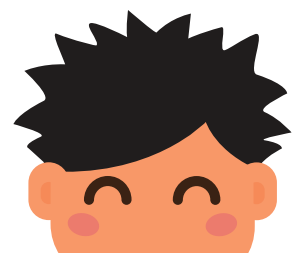
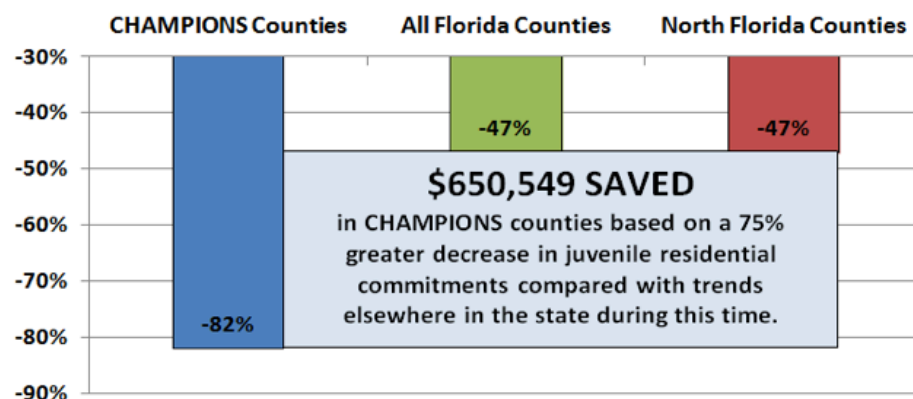
Residential commitments of juvenile offenders are more costly to the state and to individual counties than are arrests alone.

On average in Florida, each juvenile commitment lasts 254 days at a cost of \$109.22 per day for the lowest-risk facilities.

In CHAMPIONS counties, the 82% decrease in commitments – from 67 in 2009 to 12 in 2014 – represents a savings of \$1.5 million in avoided commitment costs (using the most conservative assumptions about facility costs).

Comparatively, during this time residential commitments decreased in both Florida and in North Florida by 47%. Even assuming that only a 35% decline in juvenile commitments – the difference between CHAMPIONS counties and the North Florida average – was due to CHAMPIONS and other local interventions, CHAMPIONS counties saved \$650,549 over what would have been expected in residential commitments during that time.

Decline in residential commitments between 2009 and 2014





CONCLUSIONS

The CHAMPIONS program cost less than \$80 per student in 2015.

These findings clearly demonstrate that CHAMPIONS pays for itself in multiple direct cost savings for participating counties each year.

The findings also suggest the importance of repeat contact with students over time – not only for giving students the best chance at healthy habits but for offering substantial gains in life skills and behavior.

Each child whose weight is normalized through CHAMPIONS or related interventions will save the health care system more than \$278,000 over his or her lifetime.

For each cohort of students who have already participated in CHAMPIONS, cost savings between \$1.5 million and \$3 million per year will continue to improve the overall physical and economic health of these regions. Once again, these estimates do not include the many indirect savings realized through improved health, such as improved work productivity.

Finally, the potential economic benefits for Florida as a whole would be dramatic and substantial if overweight children served by Florida's Medicaid program were to have access to a program such as CHAMPIONS in their school day.

If just 9% of overweight Florida children who are enrolled in Medicaid were to have their weight normalize, costs savings to the program would exceed \$25 million per year.



ⁱ Calculated using 2009 obesity rate and health care expenditure data in Florida, in 2009 USD.

ⁱⁱ Calculated based on a \$5,560 annual savings in 2009 USD for 50 years following age 18.

ⁱⁱⁱ Calculated based on the 2011 average child Medicaid expenditure in Florida of \$1,716; a Florida childhood obesity rate of 27.5%; and a Florida Medicaid enrollment of approximately 2 million children.

^{iv} Across Florida, the average per-arrest intake cost is approximately \$2,000.

