

# **The Boys & Girls Clubs in Ventura County: Serving the Economic Interests of the Region while Providing a Positive Place for Kids**

**This Report Measures the Total Economic Impact of all the  
Boys & Girls Clubs in Ventura County**



**June 2014**

## Acknowledgements

We would like to thank the management and staff of all seven Boys and Girls Clubs in Ventura County for giving us the opportunity to conduct this research. We are grateful for their individual personal attention and the utmost cooperation of their staff and program coordinators during this research. Special thanks are owed to:

- William Locker, CEO/President of Boys & Girls Club of Camarillo
- Mark Elswick, CEO/President of Boys & Girls Club of Greater Conejo Valley
- Tim Blaylock, CPO of Boys & Girls Clubs of Greater Oxnard & Port Hueneme
- Jan Marholin, CEO of Boys & Girls Club of Santa Clara Valley
- Scott Mosher, CPO of Boys & Girls Club of Moorpark
- Virginia Hayward CEO of Boys & Girls Club of Simi Valley
- Patrick Davidson, CEO of Boys & Girls Club of Ventura

There have been a number of individuals from various Clubs who generously gave their time to help us with the sensitive and hard work of data collection. We sincerely apologize if we have missed mentioning any of their names in this acknowledgement. We gratefully acknowledge the help of Mr. Roberto Martinez and Ms. Julie Pope from Boys and Girls Clubs of Camarillo, Ms. Georgi Harden and Ms. Jennifer Wissusik from Boys and Girls Clubs of Greater Conejo Valley, Ms. Erin Antrim from Boys and Girls Clubs of Greater Oxnard and Port Hueneme, Ms. Maricela Soriano from the Boys and Girls Clubs of Santa Clara Valley, Ms. Denise Duarte from Boys & Girls Club of Moorpark, Mr. Chuck Theobald from the Boys and Girls Clubs of Simi Valley, and Ms. Patti Birmingham from Boys & Girls Club of Greater Ventura.

We are grateful for the support of the Club members and their parents who participated in our surveys. Their participation and support was a pivotal piece of this study. I would like to thank my research assistant Ms. Lavinia Kandy for her valuable and hard work in processing the gathered data and preparing them for analyses. We are grateful for the contributions of Adam Erickson, M.Ed. in editing the manuscript of this study.

**Jamshid Damooei, Ph.D.**  
**Professor of Economics and Chair**  
**Department of Economics, Finance, and Accounting**  
**California Lutheran University**  
**President of Damooei Global Research**  
**Tel: (805) 493-3357**  
**Cell: (805) 231-0264**  
[Damooei@callutheran.edu](mailto:Damooei@callutheran.edu)

## Table of Contents

Acknowledgements.....	2
Executive Summary.....	5
An Overview of Economic Impact Areas and Their Multipliers .....	7
<b>MULTIPLIER: Lifetime Gain from High School Graduation</b> .....	8
<b>MULTIPLIER: Lifetime Savings from Prevented Teen Pregnancies and Births</b> .....	9
<b>MULTIPLIER: Criminal Justice System Savings</b> .....	10
<b>MULTIPLIER: Substance Abuse Reduction Benefits</b> .....	11
<b>MULTIPLIER: Parental Earnings</b> .....	11
<b>MULTIPLIER: Countywide Output</b> .....	12
<b>MULTIPLIER: Total Economic Impact</b> .....	13
.....	14
ADDITIONAL IMPACT: Development of Healthy Habits at a Young Age.....	14
Qualitative Findings from Student and Parent Surveys.....	14
1) Scope and Structure of the Study .....	17
1.1) Data Collection and Methodology.....	19
2) Benefits of Boys & Girls Clubs for Club Members.....	21
2.1) Increases in Personal Earnings and National Income As a Result of Higher High School Graduation Rates .....	22
2.2) Cost Savings Due to Reduction in Teen Childbirth .....	40
2.3) Economic Impact through Reduction in Juvenile Arrests and Crimes.....	46
2.4) Development of Healthy Habits at a Young Age .....	57
2.5) Benefiting from Reductions in Substance Abuse.....	65
3) Economic Impact of Clubs to the Broader Community .....	76
3.1) Ability of Boys & Girls Clubs to Help Parents Work and Go to School.....	76
3.2) Economic Impact of Clubs’ Expenditures on Increasing Regional Production and Creating Jobs...	83
3.3) Economic Impact of Volunteer Labor .....	85
4) Qualitative Findings from Surveys .....	87
4.1) Results of Club Members’ Survey .....	87

4.1.1) Demographic Data .....	87
4.1.2) Program Attendance and Activities .....	90
4.1.3) Attendance Record in Clubs and School .....	96
4.1.4) Feeling Safe and Overall Opinion Regarding the Boys & Girls Clubs .....	97
4.2) Results from Parents' Survey .....	99
4.2.1) Demographic Information .....	99
4.2.2) Family's Need for Boys & Girls Clubs .....	103
4.2.3) Safety .....	107
4.2.4) Parent Opinions on Impact of the Clubs on their Children.....	107
4.2.5) Information on Students' Academic Achievement and Aspirations.....	115
Bibliography .....	119

## Executive Summary

The Boys & Girls Clubs in Ventura County commissioned an economic impact study in 2010. The findings of that report showed that the Clubs are undoubtedly the most vital sources of support for youth and their families in Ventura County. The current report renews this effort with new data and takes the effort further with the latest available information from the Clubs and the published data about county and its youth.

Throughout the year more than 15,000 young people throughout Ventura County attend various Boys & Girls Club locations. The parents of these young people depend on the Clubs as a safe, nurturing, and cost-effective environment for their children. Nevertheless, the value of the Boys & Girls Clubs in Ventura County extends beyond the direct benefits received by parents and Club members. The regional community enjoys a private and public funded service that keeps youths positively engaged and out of trouble in the afternoon and early evening.

This report provides a comprehensive collection of information and uses scientifically credible methods to show the ways in which the Boys & Girls Clubs create economic value. Many of these impacts include “positive externalities,” which is an economic term for the extra benefits that spillover from an initial investment. As a non-profit organization, the Clubs provide services directly and indirectly to various community stakeholders. These services are provided without remuneration but they nevertheless have value for those that benefit from the Club. There are three primary beneficiaries of the Club: Club members, the parents of Club members, and the community.

Every day, thousands of youth end their school day and head towards the Clubs; similarly, during school holidays and summer vacation, thousands of youth spend their days at the Clubs. These youth are able to socialize with peers and engage in a wide variety of educational and recreational programs. Without the Clubs, many of these youngsters would be without proper supervision, at-risk, and susceptible to negative influences and threats. In some families, a parent would have to stay home from work to provide such supervision, reducing the family’s earnings and economic security. The Clubs are an important social asset serving such working families.

The value of the Clubs extends beyond the direct benefits enjoyed by parents and Club members. The communities where they live also enjoy an important service by having youth positively engaged and away from trouble during non-school hours.

This report provides a comprehensive enumeration of the many ways in which Boys & Girls Clubs in Ventura County create economic value in the state as a whole. Club members receive perhaps the greatest benefit of all from their participation in the Clubs. When compared with their peers who do not attend the Clubs, they are more likely to graduate from high school and less likely to engage in risky behaviors resulting in juvenile arrest or teenage motherhood. Although exact mechanisms by which Club members outperform their peers are uncertain, the consistency of the trend strongly suggests that membership in the Clubs plays a vital role in explaining the behavior patterns of the group. By having access to a safe and nurturing environment, youth avoid negative influences. Moreover, basic Club services provide critical support to youth members, including academic assistance, health & life skills training and character development.

While Club members receive the most from their participation, others benefit as well. For instance, parents of Club members are able to be more productive since their children have a safe, supervised place to spend their afternoon and out of school hours. Many parents are able to work or pursue further education as a result of the services provided by the Boys & Girls Clubs.

Finally, the larger community also receives significant benefit from Club services. It is well known that juvenile crime peaks in the hours immediately following the end of the school day. Clubs provide the community with safe and constructive afterschool options for youth that promote education, healthy living and good citizenship.

Many of these benefits to parents, Club members, and the community have an economic value. Using data collected through stakeholder surveys and a review of publicly available information, this report places a monetary value on many of these benefits. The total value of all of these economic benefits is simply tremendous. This report focuses on the following mechanisms and services through which the Boys & Girls Clubs in the county create economic value in local communities:

- Impact of better education through higher graduation rates and the resulting improved lifetime earnings among youth who attend the Clubs on a regular basis as opposed to others who do not benefit from such services within the same socio-economic population.
- Lower teen pregnancy and motherhood rates, which create economic savings.
- Impact of Clubs' enrichment programs that enable youth to resolve conflicts and become more peaceful with their own peers and others in their communities. This is measured by considering

reductions in youth crime rates and the savings that such reductions generate in the community.

- Health education and its impact on reducing obesity and related diseases that leads to lower productivity and an increase in long-term chronic diseases.
- Lowering the tendency for substance abuse and lowering of the costs associated with underage drinking, tobacco and drug abuse.
- The ability of Club programs to help parents work or attend school in order to upgrade their skills.
- Total employment and income impact of the Clubs through their annual expenditures, including both operational and capital budgets, as well as the donated labor of volunteers.

For nearly all of these benefits, a monetary value was calculated. A summary of the analysis is presented below and categorized by the nature of the economic impact. Sections Two and Three of this report present the methodology developed and data used to calculate these values. Section Four provides additional statistics on qualitative questions asked in Club member and parent surveys.

### **An Overview of Economic Impact Areas and Their Multipliers**

One way to illustrate the impact of every dollar spent by the Boys & Girls Clubs in Ventura County is to compare the aggregate budget of the Clubs with the positive economic impacts that they generate in their communities. This framework can allow for a cost-benefit analysis that cogently illustrates the tremendous value of the Boys & Girls Clubs based on the findings of this study.

In order to consider the economic impact on all stakeholders, we have used the data collected in this study to calculate “multipliers,” which are quantitative measurements of the total economic impact of discrete activities. The areas considered include the impact of the Clubs on increased high school graduation rates, averted teenage pregnancies and births, reduced juvenile criminal activity, reduction in substance abuse (with emphasis on underage drinking), improved prospects for working parents, and a statewide output stimulus through productivity of budget, capital expenditures and volunteer labor.

## MULTIPLIER: Lifetime Gain from High School Graduation



**Boys & Girls Clubs in Ventura County play a vital role in helping youth improve their academic outcomes.** Clubs provide a variety of academic support and enrichment services that help youth succeed in school by providing homework assistance and tutoring services. Academic enrichment is also integrated throughout the Club during “high yield activities,” which are fun activities with a built-in learning goal. Moreover, beyond the direct academic enrichment provided by the Clubs, they also provide members with positive role models and a nurturing environment that can help them improve decision-making skills. Such skills can help ensure that Club members make positive choices when it comes to their academic futures.

Studies show that students who drop out of high school end up earning much less throughout the rest of their lives relative to their peers who attain a post-secondary degree. Similar studies indicate that those who drop out at some point tend to be less likely to complete college. Specifically, only 5% of those who ever drop out managed to receive a bachelor’s degree, as opposed to 38% of those who never dropped out of high school.

The economic cost of dropping out of school is not limited to the inability to earn a high-income job. High school dropouts face much higher rates of unemployment, live shorter lives, and depend more on government assistance than those who complete high school.

Given the pivotal role that the Clubs have on the academic success of their members, this study quantifies the monetary benefit of such services. The first step in such a calculation is to compare the academic success of Club members with the general population within the county.

In the most recent class of graduating seniors, the Clubs generated a positive economic impact of \$23.5 million through the increased lifetime earnings of graduates influenced by the services of the Boys & Girls Clubs. When compared to the annual budget for the California Clubs (\$14.5 million), this generates

a multiplier of 1.62; **in other words, for every \$1 spent by the Clubs, \$1.62 of increased lifetime earnings is generated by impacted Club members.**

**MULTIPLIER: Lifetime Savings from Prevented Teen Pregnancies and Births**



Boys & Girls Clubs in Ventura County play a pivotal role in helping youth avoid the serious consequences they will face if they become teenage parents. By providing youth with a nurturing environment, life skills programming, positive peer support and caring role models, the Clubs help youth develop a sense of responsibility for their lives. Such support can help an at-risk teenager develop better decision-making skills that can help them avoid risky behaviors that can lead to teenage parenthood.

According to recent studies, teen childbearing in the United States costs taxpayers at least \$9.1 billion annually at the federal, state, and local levels. On the national level, these costs include \$1.9 billion for increased public sector healthcare costs, \$2.3 billion for increased child welfare costs, \$2.1 billion for increased costs for state prison systems, and \$2.9 billion in lost revenue due to lower taxes paid by the children of teen mothers over their adult lifetimes.

In addition to the costs of teenage pregnancy that burden the taxpayers, it is important to consider the ways in which teenage parenthood changes the future life and prospects of the parent and the child. Teenage parents are less likely to complete high school and more likely to depend on public assistance. The children of teen mothers are more likely to perform poorly in school and are at a greater risk of abuse and neglect. The sons of teen mothers are 13% more likely to end up in prison and are more likely to commit more violent crimes, and the daughters of teen mothers are more likely to become teen mothers themselves.

This study showed that the Clubs generate a positive economic impact of \$2.3 million through savings to taxpayers and society for the teenagers who waited until they are older to have children. Compared with the annual budget of Boys & Girls Clubs in the county, this generates a multiplier of 0.16; **in other**

words, for every \$1 spent by the Clubs, \$0.16 is saved for taxpayers and the society on costs they would have incurred for teenage pregnancies and births on a yearly basis.

**MULTIPLIER: Criminal Justice System Savings**



Boys & Girls Clubs provide the positive alternatives to youth that help them avoid risky behaviors and make responsible life choices. Club facilities provide a safe haven for youth to escape the streets, meet with friends, and be part of a positive peer group. Club programs teach life skills, conflict resolution and focus on the development of character. Perhaps most important of all, caring adult staff and volunteers at the Clubs serve as role models, giving youth someone to turn to when they need help and guidance.

According to the California Legislative Analyst’s Office, individuals between ages of 12 to 24 are more likely to both commit and be the victims of violent crimes. The rate of crime spikes upwards dramatically with the highest rate of violent juvenile crimes occurring when youth leave schools between the hours of 3:00 and 4:00 PM. The cost of juvenile crime is most evident in increased spending in the juvenile justice system, but there are other costs to society as well: medical costs because of injuries suffered due to crime, stolen and damaged property resulting from crime, loss of work time by victims of crime and their families, and loss of property values in neighborhoods with high rates of crime.

Boys & Girls Clubs reduce juvenile crime rates by providing Club members a safe, nurturing environment, life skills training, and access to positive role models. The lower arrest rate among Club members generates a savings of \$21.5 million per year for taxpayers who support the criminal justice system. When compared to the annual budget of the Clubs, this generates a multiplier of 1.48; in other words, **for every \$1 spent by Boys & Girls Clubs in Ventura County, taxpayers save \$1.48 on expenditures for the criminal justice system annually.**

### MULTIPLIER: Substance Abuse Reduction Benefits



Boys & Girls Clubs use a team approach involving staff, peer leaders, parents and community volunteers to help youth develop resistance and refusal skills to avoid use of alcohol, tobacco and other drugs. This team approach assures that youth have a network of support to help them make responsible decisions and resist negative peer pressure.

Approximately 1,372,000 underage youth in California drink each year. In 2007-2009, California students in grades 9-12 reported: <sup>1</sup>

- 56.6% had at least one drink of alcohol on one or more days during their life.
- 19.9% had their first drink of alcohol, other than a few sips, before age 13.
- 34.0% had at least one drink of alcohol on one or more occasion in the past 30 days.
- 21.0% had five or more drinks of alcohol in a row (binge drinking) in the past 30 days.
- 7.5% had at least one drink of alcohol on school property in the past 30 days.

**Our study shows that for every dollar spent by Boys & Girls Clubs in Ventura County, the economy benefits as much as \$0.54 in the reduction of the cost of juvenile drinking.**

### MULTIPLIER: Parental Earnings



<sup>1</sup> For more information see Center for Disease Control (CDC). (2010), Youth Risk Behavior Surveillance System (YRBSS).

During the school hours, parents are free to work as their children are engaged with the school system. However, when the school bell rings and children leave the classroom, parents face a difficult and heart-wrenching decision: to continue working and leave their children with potentially inadequate supervision, or to stop working and reduce their family's earnings. Both outcomes have their own dangers; however, the Boys & Girls Clubs help parents avoid this difficult dichotomy by allowing parents to be productive during non-school hours while having the satisfaction of knowing that their children are adequately supervised.

By enabling parents to work and earn on average \$28,467 more per year, Boys & Girls Clubs enable parents to generate \$144 million in annual earnings for their families. This is a tremendous service that sustains an enormous level of economic activities across the state. Without the Clubs, these parents would be unable to earn this income. In other words, **for every \$1 spent by Boys & Girls Clubs in Ventura County, \$9.93 in earnings are generated by parents who can keep their jobs due to the services of the Club.**

This staggering figure shows the vital role that institutions like the Boys & Girls Clubs play in helping families to be economically productive while simultaneously not compromising the wellbeing of their children. It is important to realize that the wellbeing of these families benefits the entire society through reduced burdens on taxpayers for social programs. Beyond the benefit for taxpayers, these individuals and families are able to be more successful and enjoy a better quality of life.

#### **MULTIPLIER: Countywide Output**



The economic impact of social interventions resulting from the services provided by Boys & Girls Clubs represents a broad category of economic value created by the organization. Such social interventions are an important aspect of the value created by a nonprofit. However, just like any other organization providing services or producing goods, Clubs create tremendous business activity and tax revenue through their operating budgets, capital expenditures, and use of volunteer labor.

In order to quantify these types of economic outputs, we used the aggregated budgetary and capital expenditures of all the Clubs and employed it in a countywide model that we set up using the IMPLAN Regional Input-Output model. We set up similar models for the capital expenditures and work of the Club volunteers.

In this model, countywide output is defined as the market value of all goods and services produced as the result of a particular economic activity within the state. For the output generated by the Clubs, the total value of the regular budget of all Clubs together amounts to \$14.5 million.

Boys & Girls Clubs sustain many jobs in the county and their expenditures in the county are also helping local, state, federal agencies through the generation of substantial tax revenue. **The model estimates that a total of 355 jobs are created by the Clubs<sup>2</sup> and that the annual operating budgets of the Clubs generate \$25.0 million in regional output.**

Our research took a deeper look into the economic impact of volunteerism and goes further than many similar studies to attempt to estimate the output, job creation, and tax impact of volunteers' work. **Our study shows those efforts generated \$1,210,482 in economic output across the county. Their free and voluntary labor provides services that would otherwise require 14 fulltime workers. In addition, because of their work, the Clubs provide 3.3 paid jobs through indirect or induced impacts on the county economy.**

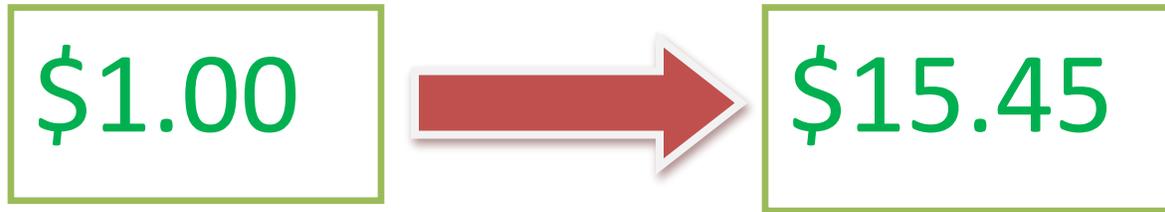
Finally, in order to estimate the overall statewide output of Clubs in Ventura County, the impacts of these three components (operating budgets, capital expenditures and volunteers) were added. Calculations based on the total output generated over the sum of the inputs stemming from the regular budget of the Clubs, their capital expenditures, and the value of volunteer labor resulted in an overall multiplier for statewide output of 1.72.

### **MULTIPLIER: Total Economic Impact**

Taken separately, each of these economic impacts is impressive on its own. However, when the economic impacts are added together, the results are all the more impressive.

---

<sup>2</sup> It is important to note that this number calculates employment in terms of full-time equivalents. In other words, a part-time employee would not count as "1." Rather, part-time paid positions are combined to yield this full-time equivalent value. A full-time equivalent value of labor assumes 2,080 hours of work in a year. For instance, a part-time employee only working 1,040 hours in the year would only count as "0.5" in this model.



**For every \$1 spent by the Clubs (donated or better say invested in the Clubs), Boys & Girls Clubs in Ventura County generate \$15.45 of positive economic impact in the region. This tremendous rate of return is a testament to the vital role the Clubs play in shaping the lives and futures of Club members and their parents.**

### **ADDITIONAL IMPACT: Development of Healthy Habits at a Young Age**

Many people in the United States, including youth, suffer from a lack of exercise and poor nutritional habits which can often lead to obesity or chronic conditions such as diabetes. These negative lifestyle choices have severe health consequences that reduce one's length and quality of life.

Data on childhood obesity is just as troubling. A 2005 research brief by Thomson Medstat Research found that the national cost of childhood obesity in terms of medical costs was \$11 billion for children with private insurance and \$3 billion for those with Medicaid. On a per capita basis, this means that the cost is \$3,700 per obese child on Medicaid and \$6,700 per obese child with private insurance. Accounting for inflation, the national cost for those with private insurance is \$12.75 billion or \$7,767 per capita in 2010. Similarly, in current dollars, the cost is \$3.48 billion or \$4,289 per capita for those with Medicaid.

**Our study shows that some 7331 youths through physical activities in their Boys & Girls Clubs reached or maintained a healthy weight; it is clear that the Clubs are helping their members lead healthier and more physically active lives. Given the epidemic of obesity and inactivity that is crippling this nation's youth; such a program is particularly worthwhile.**

### **Qualitative Findings from Student and Parent Surveys**

Although the primary purpose of the surveys distributed to parents and youth was to determine the economic impact of the Clubs, both surveys included more general questions on topics that may be of interest to Club management and stakeholders. Section Four of the study presents this data in detail.

The results of the Club member survey indicate that youth are satisfied with their experience at the Clubs. Moreover, it is clear that they are deriving benefits from their participation. A brief summary of some of the key findings follows:

- Club members indicate a very positive attitude towards participation in Boys & Girls Clubs programs. A very strong majority (66.5%) like the programs in which they participate at least most of the time. An additional 27.8% like participating in the programs sometimes, while only 5.7% never enjoy their participation.
- A majority (70.5%) of respondents feel that the staff is able to help them with their homework most of the time in the Power Hour program.
- The vast majority of Club members (88.5%) have strong school attendance records. 71.9% missed school less than five days during the year.
- A majority of 58.5% believes that their participation in the Club is one of the important reasons for their good school attendance.
- 51.7% indicate that they would always recommend the program to their friends while an additional 37.2% would recommend the program sometimes. As such, more than nine out of ten Club members are generally satisfied with the services they receive at their Club. This is a very encouraging rate of satisfaction.

The results of the survey distributed to parents are similarly encouraging. Parents are generally pleased with the Clubs and it seems that they serve their needs well. A brief summary of the findings follows:

- About 35% of parents, guardians and other caretakers live in single-parent families or households.
- The primary source of income for 93.9% of parents is jobs or businesses. This shows that Boys & Girls Clubs in Ventura County mainly serve working parents.
- 93.7% of parents said that their local Boys & Girls Club is the only program to which they can send their children.
- **Nearly all parents (96.7%) agree or strongly agree that their children are in a safe environment when they are attending the Boys & Girls Clubs in Ventura County.** This level of unanimity in the responses is particularly noteworthy and shows the extent to which parents have faith in the safety of the Clubs. Club management should be proud of this outcome.

- Parents are uniquely positioned to assess changes in their children. The survey included questions designed to understand how Club member behaviors have changed because of their participation in Club programs.
  - 87.7% of parents believed that since their children started going to the Club program, their ability to make friends has increased.
  - Club attendance has made children more confident in themselves according to parents. 88.9% of parents agree or strongly agree that their children have become more confident in themselves since going to the Clubs.
  - The vast majority of parents (78.1%) also observe that, since attending the Clubs, their children get along with their family better.
  - 77.8% of parents agree or strongly agree that they have observed their child's performance in school has improved since they began participating in Boys & Girls Club programs.
  - The majority of parents (70.3%) have observed improvement in their child's grades since attending the Club.
  - Parents generally report that their children have made better choices when it comes to selecting healthy foods and drinks since attending the Boys & Girls Clubs. The majority of respondents (61.5%) agrees or strongly agrees that their children have made such better choices.
  - The vast majority of parent respondents (75.7%) agrees or strongly agrees that their children have shown more interest in regular physical exercise since joining the Boys & Girls Clubs.
  - 37.0% of parents believe that as a result of regular exercise, their children are making progress towards a healthy weight. Adjusting for those who said their children were already at a healthy weight shows that 60.6% of those who need to reach a healthy weight apparently are reaching that state as a result of doing exercise while they are at the Clubs.
  - The vast majority of parents (93.1%) agree or strongly agree that their child has a good school attendance record. 63.6% of them indicated that one important reason for their child's good attendance record is participation in the Boys & Girls Club program.
  - 90.1% of parents agree or strongly agree that their children talk about higher education and its importance in their lives.

## 1) Scope and Structure of the Study

Boys & Girls Clubs provide a positive place for youth to develop healthy habits, improve their academic performance, learn conflict resolutions skills, experience the joy of volunteerism, stay away from violence, and be safe while they are away from their home and their day school. Until a few years ago there was not any serious attempt to take a close look at the economic impact of Boys and Girls Clubs around the country.

The first study that made an effort to measure the economic impact of Boys & Girls Clubs was conducted by Florida TaxWatch in 2008. This study looked at the economic impact of the Boys and Girls Clubs on local communities throughout Florida. They found that Boys & Girls Clubs have established both short and long term positive economic impacts through lower dropout rates, higher rates of graduation, and a lower teen birth rate. The savings were calculated based on the difference in income earned or costs saved by comparing the outcome from the Boys and Girls Clubs' members and others who have not been attending the Boys & Girls Clubs.

The Boys and Girls Club of Greater Oxnard and Port Hueneme in 2008 commissioned a similar study with a broader set of objectives to measure the economic impact of its Club. This study looked at a range of economic impacts that can show the benefits of the Clubs. They included:

- Impact of income, employment, and tax generation of the Club through their annual administrative and capital expenditures.
- Impact of better education through increase in high school graduation rates among youths who attend the Club on a regular basis.
- Economic savings generated by reduced juvenile crime rates due to the impact of Club's enrichment programs that enable youths to resolve conflicts and become more peaceful with their own peers and others in their communities.
- Lower teen pregnancy and teen childbirth and the economic benefits of such reductions.

This report made an attempt to list and provides some basic information about other tangible economic benefits that Boys & Girls Club of Greater Oxnard and Port Hueneme bring to thousands of families in the region. Some but not all of these impacts were not estimated in monetary values.

In the beginning of 2009, all the Boys & Girls Clubs in Ventura County decided to collaborate and launch a new study that could measure economic impact and many other non-monetary impacts of all the

Clubs. The outcome showed that Boys and Girls Clubs in Ventura County bring a tremendous positive economic impact to the county. Following that study, a number of other studies were carried out within the State of California and in other regions and states nationwide. In the new studies, the domains of impacts were widened, and with additional information, wider areas of measurable and unmeasurable positive changes were captured.

The new study of the Boys & Girls Clubs in Ventura County investigates the positive impact of all the seven Clubs collectively in the following areas:

- Total employment and income impact of the Clubs through its annual expenditure including both operational and capital budgets.
- Impact of better education through higher graduation rates among youth who attend the Clubs on a regular basis as opposed to others who do not benefit from such services within the same socio-economic population in the same region.
- Lower teen pregnancy and motherhood rates which create an economic benefit. Impact of Clubs' enrichment programs that enable youth to resolve conflicts and become more peaceful with their own peers and others in their communities. This is measured by considering reductions in youth crime rates and the savings that it generates in the community.
- Respecting laws and becoming mindful of their behavior, staying away from trouble, leading a positive life and, in the process, saving an enormous amount of public funds and tax payers' money for enforcement of laws and administration of justice.
- Avoiding risky behavior and resisting negative peer pressure and stay away from substance abuse and, in the process, helping the economy to have a much lower cost for such abuses in terms of direct cost to the youth and indirect cost to the economy as a whole.
- Learning healthy living and its impact in reducing obesity and related disease that leads to lower productivity and an increase in long-term chronic diseases.
- The impact of Club programs on allowing parents to attend school in order to upgrade their skills and reach a higher level of productivity in the economy.
- Strengthening and promoting volunteerism in the region.

## 1.1) Data Collection and Methodology

The first data collection instrument included an in-house questionnaire distributed to the management of the seven Clubs across Ventura County. Questions sought to learn basic demographic details about Club members, financial and budgetary information, Club activities and resources, and the volunteers and paid employees who work for the Clubs. This information was used to inform the questions in the next set of data instruments that were created for this study: surveys distributed to Club members and parents. To select a truly representative sample of both the Club members and their parents we used a combination of the stratified random sampling and the simple random sampling methods. With a confidence level of 99%, the margin of error was 3.1% and 3.9% for the members' and parents' surveys respectively.

We also designed a short questionnaire for the senior members of the Clubs, defined as members who were attending school in the 10<sup>th</sup> to 12<sup>th</sup> grades. This survey was given all those who were attending the Clubs within those grades.

The surveys were administered by the staff of each Club using detailed instructions given by the principal researchers. The aim of the protocol provided by the research team was to make sure that surveys were conducted in a manner that can generate a truly representative sample from each Club and thus an inferable outcome for all the seven Clubs altogether. The total number of surveys completed for the Club members and their families were 1563 and 977, respectively.

The Club member survey collected data critical to the conduct of this study. Themes of inquiry included but were not limited to the following:

- **Club's Environmental Assessment:** A measure of the psychological climate relating to emotional support, autonomy/privacy, and peer affiliation.
- **Belonging Scale:** Measures students' sense of belonging to their involvement in various Club programs.
- **Education Plans:** A measure of the Club members' academic success and attitudes regarding secondary and higher education.
- **Ability to Develop Healthy Habits:** A measure of exposure to programs that promote nutrition and physical activity within the programs of the Clubs.

- **Risky Behavior:** Inquiry was made into whether students had been arrested in the past year. We also asked questions about substance abuse by the older members of the Clubs.

Not all data relevant to this study could be collected from Club members. As such, a survey was administered to parents (both in English and Spanish) to learn more about the impact of the program on Club members while also learning about how parents benefit from the existence of the program.

Themes of inquiry included but were not limited to the following:

- **Basic Demographic Information:** Important demographic information that allows us to cross-tabulate information for various policy implications.
- **Measuring Positive Change in Children:** Assessment of positive changes in the behavior of their children as a result of attending the Club (assessing the efficacy of the Club services).
- **Academic Needs of Children:** Assessment of the success of the Club in meeting the academic needs of their children.
- **Health and Healthy Habits of Children:** Inquiry about parent views on the programs ability to help their children to develop healthy habits with regards to eating and exercise.
- **Parents' Education and Other Services Received:** Educational needs of parents to become more productive and to be able to help their children. In addition to serving the educational needs of parents, the survey sought to measure other needs that are likely to be met, such as:
  - Having the ability to attend their jobs as a result of having good and safe after-school programs for their children.
  - Having the ability to continue their education as a result of having safe and high quality after-school programs.

Surveys were administered to Club members and parents using random sampling techniques developed by researchers and explained to Club managers and program coordinators. Club managers then passed these instructions on to their staffs who administered the surveys accordingly. A sample size was determined for each of the seven Clubs based on the population of students served by the Clubs based on in-house questionnaires.

In addition to the above surveys administered randomly to samples of Club members and parents, a shorter more focused survey was administered to high school seniors attending the Clubs. This survey was administered as a census to all high school seniors in the Clubs. The focused themes of inquiry pertained to their high school graduation, exit exam status, and their attitudes regarding higher education.

## **2) Benefits of Boys & Girls Clubs for Club Members**

There are a variety of ways in which the Boys & Girls Clubs in Ventura County directly impact the lives of the youths that they serve. The ways in which these students and the community at large benefit have been described extensively in qualitative terms. This section of the report studies the following benefits enjoyed by Club members and the greater community:

- Improved rates of high school graduation
- Reduced levels of teenage pregnancy and motherhood
- Cost savings generated by reductions in juvenile criminal activity
- Reduced level of substance abuse and thus reduction in its cost to the individual and the community as a whole
- Improved healthy habits and increased physical activity

Students who participate in the Boys & Girls Clubs in Ventura County are more likely to graduate from high school and are less likely to become juvenile criminals or teenage mothers than their peers in the county who do not participate in the Club. They are less likely to smoke or abuse drugs. These findings are based on a combination of published data found by the authors of this report and surveys administered through the course of this study. All three of these social interventions have distinct economic benefits and cost-savings that are calculated in this section of the report.

Furthermore, students also get to enjoy better health and nutrition through participation in physical activity and nutrition-education programs offered through the Clubs. A substantial proportion of students reported improved fitness as a result of Club participation, including weight loss.

Unfortunately, no method based on existing research could be found to translate the improved nutritional outcomes into concrete monetary values.

By far the most important transformation that occurs in many who attend the Clubs on a regular basis is improvement in their behavior towards themselves and others around them. Character building is an important change which is hard to measure and quantify in terms of improvement in one's life and its payoff in monetary terms. However, youth who go through such transformations end of being more successful in their lives as adults.

## **2.1) Increases in Personal Earnings and National Income As a Result of Higher High School Graduation Rates**

One of the most important indicators of school performance is the high school graduation rate. This indicator is often included in both the federal and state accountability systems as another way to judge the performance of schools alongside the more common indicator based on student test scores.<sup>3</sup>

Calculation of high school graduation rates is not a simple task. The intuitive definition of the term differs from the actual calculations used to measure it. In August 2004, the National Center for Education Statistics (NCES) released a report synthesizing the recommendations of a panel of experts on graduation rate calculations. The panel recommended an adjusted cohort graduation rate as the best method for calculating the graduation rate.<sup>4</sup> In 2005, the National Governors Association (NGA) Task Force on High School Graduation Rate Data published its report. The leading recommendation was for all states to adopt and begin immediately taking steps toward implementing a standard four-year adjusted cohort graduation rate consistent with that proposed by the states.<sup>5</sup>

A common definition of the high school graduation rate is the percentage of students entering 9<sup>th</sup> grade who are likely to graduate from high school in four years. The definition is straightforward but the calculation is very complex because of limitations in the current student data collection system. Such limitations make it impossible to calculate the numbers of students who graduate, transfer, or drop out

---

<sup>3</sup> For more information see "What is California's High School Graduation Rate?", by Russell W. Rumberger (2007), California Dropout Research Project, UC Santa Barbara.

<sup>4</sup> National Institute of Statistical Sciences and Education Statistics Services Institute. (2004). National Institute of Statistical Sciences/Education Statistics Services Institute Task Force on Graduation, Completion, and Dropout Indicators (NCES 2005-105). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

<sup>5</sup> National Governors Association. (2005). Graduation Counts: A Report of the National Governors Association Task Force on High School Graduation Rate Data. Washington, DC

of school in a four-year period. However, states were asked to make the necessary provisions to be able to use the system over time from the starting point, which was the academic year 2008-2009.<sup>6</sup>

Such limitations make it impossible to calculate the numbers of students who graduate, transfer, or drop out of school in a four-year period. We need longitudinal student data systems that can overcome these limitations.

In order to give a somewhat clear picture of what has been going on in Ventura County, we extracted the information for high school cohort graduation based on the definition discussed earlier and made a comparison in graduation rates among various ethnicities in the county from academic year 2009-10 to 2012-2013, for which data from the California Department of Education was available.

**High School Graduation Rates in Cohorts in Total and Across Ethnicities in Ventura County  
Between 2009-2010 to 2012-13**

<b>Race/Ethnicity</b>	<b>Year 2009-2010</b>	<b>Year 2010-2011</b>	<b>Year 2011-2012</b>	<b>Year 2012-2013</b>
Overall Graduation Rate	79.2	81.5	82.7	82.4
Hispanic or Latino of any race	69.9	72.6	74.9	74.3
American Indian or Alaska Native	84.2	70.4	82.5	80.3
Asian	92.0	91.5	89.8	94.8
Pacific Islander	91.7	89.8	86.1	73.7
Filipino	90.7	91.7	95.9	95.4
African American	78.2	80.8	75.4	81.3
White not Hispanic	87.6	90.2	90.6	89.8
Two or More Races	78.8	87.0	88.6	88.3

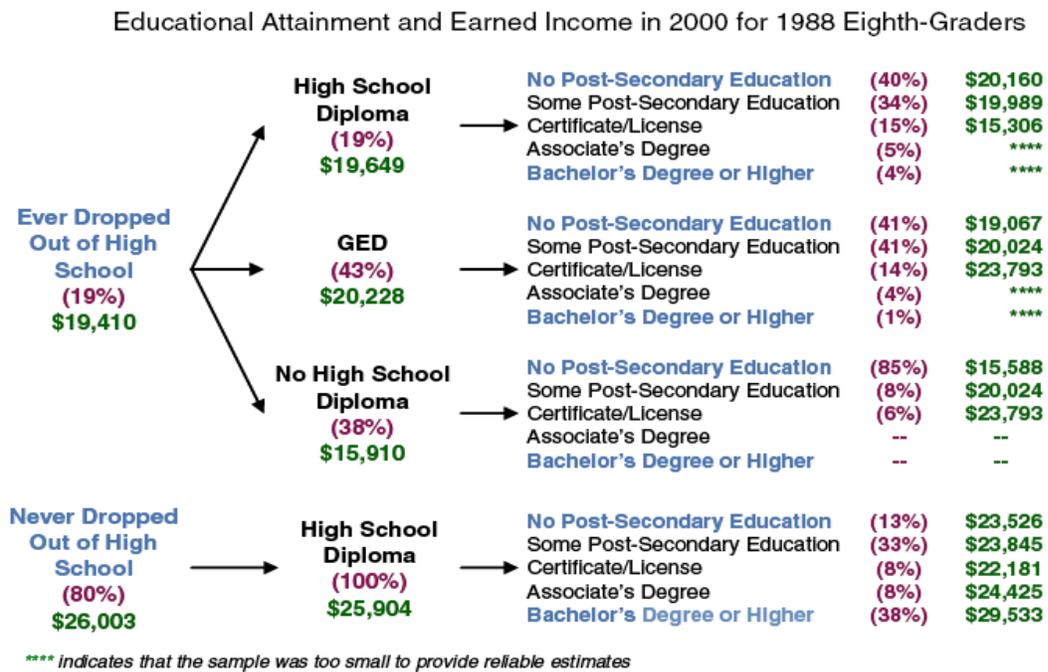
**Source: California Department of Education, Data Reporting Office, 2014**

The above table shows a significant improvement in the high school graduation rates in Ventura County during the last five years. The improvement occurred in the overall rate of graduation and also across various ethnicities. There is, however, a considerable gap between students from different ethnicities. We observe the same improvement around the nation. According to a recent study by Richard Murnane and Ashley Inman (2013), after 30 years of stagnation, high school graduation rates increased by 6

<sup>6</sup> For a complete discussion and study of the method of calculation see, US Department of Education (2008), High School Graduation Rate, a non regulatory guidance, Washington DC.

percentage points between 2000 and 2010, while the black-white and Hispanic-white graduation rate gap narrowed to 8.1 and 8.5 percentage points, respectively.<sup>7</sup>

Students who drop out of high school not only earn less but they face a myriad of other economic costs, such as having more health problems and being more likely to depend on government assistance or face unemployment. Some uncertainties include whether a student returns to school after dropping out and, if they do, what the highest level of education is that they eventually attain. Such uncertainties make it difficult to estimate the long-term economic consequences of dropping out of high school. This difficulty led the National Education Longitudinal Study to investigate the subsequent educational attainment and earnings of a nationally representative sample of students who were tracked from the time they were eighth-graders in 1988 through 2000, when most of the respondents were 26 years old.<sup>8</sup> The calculation is presented in the following chart.



Source: Susan Rotermund (2007), California dropout project, UC Santa Barbara Gervirtz Graduate School of Education, Statistical Brief # 5

<sup>7</sup> See Richard J. Murnane (2013), Graduation on the Rise, Education Next, FALL 2013 / VOL. 13, NO. 4 <http://educationnext.org/graduations-on-the-rise/>

<sup>8</sup> See Susan Rotermund (2007), California dropout project, UC Santa Barbara Gervirtz Graduate School of Education; Statistical Brief # 5.

The study clearly shows that those who “ever dropped out of high school” ended up earning much less in every single category considered. The study shows that only 1% of those who ever drop out managed to receive a bachelor’s degree, as opposed to 38% of those who never drop out of high school.

The economic cost of dropping out of school is not limited to the inability to earn a higher income. They face a much higher rate of unemployment, live shorter, and have greater dependency on government assistance. Steven H. Woolf et al (2007) argue that giving the health of educated people to everyone would save more lives than investing on medical advances. They are so convinced about the findings of their study that they make the following assertion.<sup>9</sup>

“Higher mortality rates among individuals with inadequate education reflect a complex causal pathway and the influence of confounding variables. Formidable efforts at social change would be necessary to eliminate disparities, but the changes would save more lives than would society’s current heavy investment in medical advances. Spending large sums of money on such advances at the expense of social change may be jeopardizing public health.”

The following information provides a much better understanding of the importance of higher education that begins with obtaining high school diploma. The information reported has primarily been taken from the Trends in Education Series published by the CollegeBoard in 2013.

Unemployment Rates Among Individuals Ages 25 and Older, by Education Level, 1992–2012, Selected Years

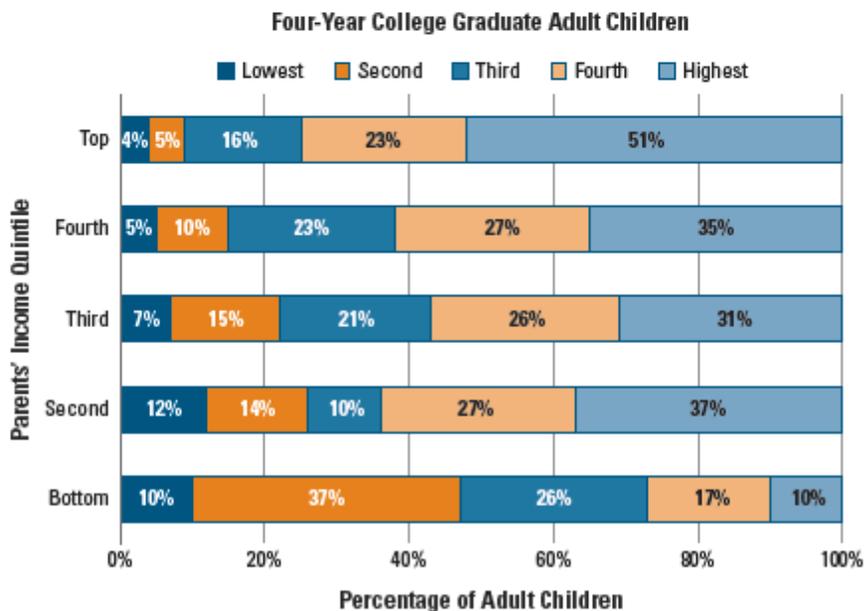
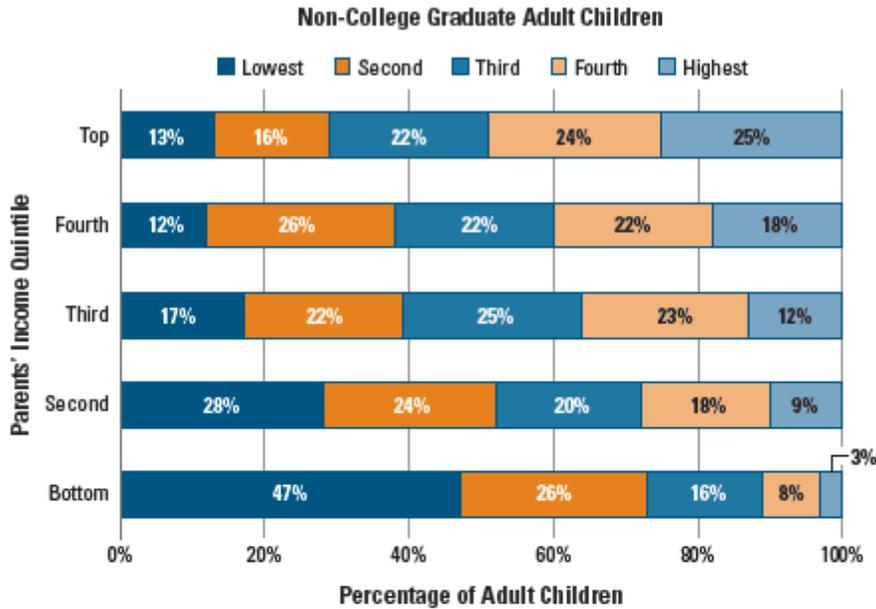
Year	Unemployment Rate					BA/HS Unemployment Rate Ratio
	Less than a High School Diploma	High School Diploma	Some College, No Degree	Associate Degree	Bachelor’s Degree or Higher	
1992	11.5%	6.8%	6.0%	4.8%	3.2%	0.46
1997	8.1%	4.3%	3.5%	2.7%	2.0%	0.47
2002	8.4%	5.3%	4.8%	4.0%	2.9%	0.55
2007	7.1%	4.4%	3.8%	3.0%	2.0%	0.46
2010	14.9%	10.3%	9.2%	7.0%	4.7%	0.46
2012	12.4%	8.3%	7.7%	6.2%	4.0%	0.48

SOURCE: Bureau of Labor Statistics, 2013b.

<sup>9</sup> See Steven H. Woolf et al (2007), *giving everyone the health of educated: An examination of whether social change would save more lives than medical advances* *The American Journal of Public Health*, Vol.97. No.4. 6.1

The above chart shows that rate of unemployment changes drastically with level of educational attainment. The table shows that in the midst of the recent economic crisis, the level of unemployment among people with a college degree was around what is considered as natural rate of unemployment in the nation, while people with less that high school diploma suffered from an unemployment rate nearly three times the rate of people with a college degree.

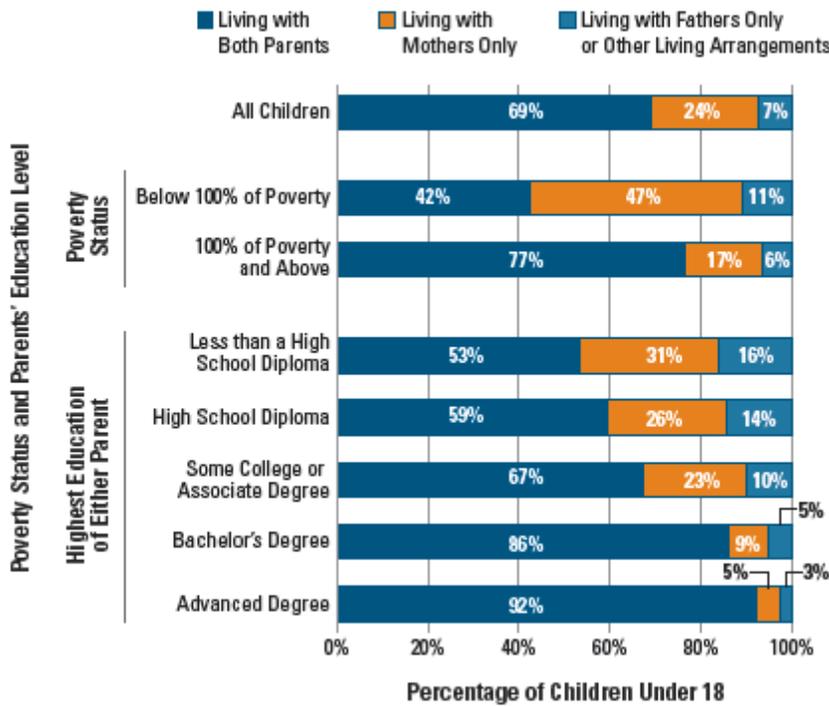
Family Income Quintiles of Adult Children, by Education and Parents' Family Income Quintile, 2000 to 2008



Source: Pew Charitable Trusts, 2012, Also can be found in Sandy Baum, Jenifer Ma, and Kathleen Payea, "Education Pays", College Board, Trend in Education Series, 2013

The above two charts depict a predictable pattern that shows parents with higher education are likely to end up having children with higher education and end up being in a much higher level of income.

Living Arrangements of Children Under 18 Years of Age, by Poverty Status and Highest Education of Either Parent, 2011

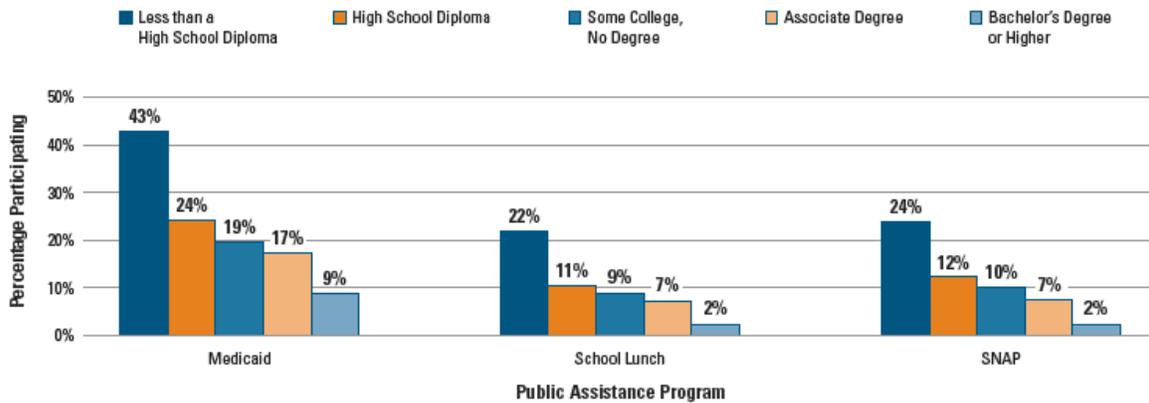


SOURCE: U.S. Census Bureau, 2011d, Table C-3.

The above chart shows multiple issues in our society that need to be understood in forming public policy and or appreciating the enormity of the good that organizations such as Boys & Girls Clubs bring to our communities. Family structure plays an important role in the economic and social status of our children. A third of our children nationwide live with single parents. The overwhelming majority of children living with single parents live with their mothers (at a ratio 3.5 to 1). Nationwide, almost a quarter of children live with their mothers in single parent households. Nearly half of the children living below 100% of the poverty level (47%) live with their mothers. Educational attainment is the most important factor that

can bring families out of poverty in a significant way despite the negative impact of family structure (living with single parents or with both parents).

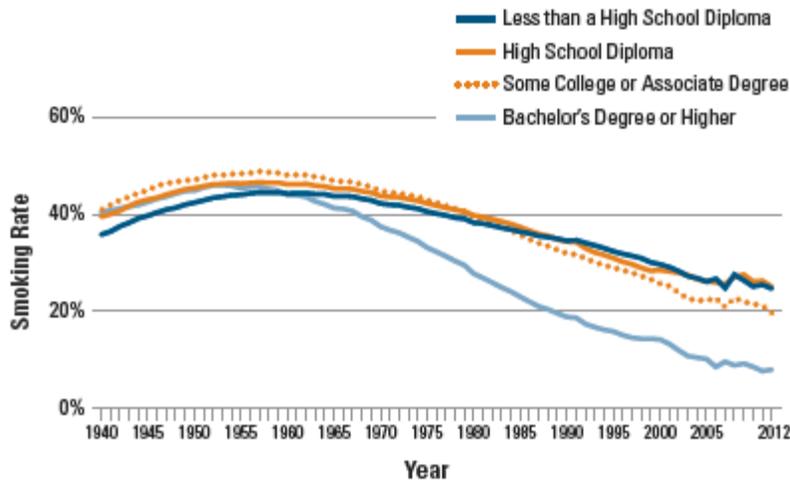
Percentage of Individuals Ages 25 and Older Living in Households Participating in Selected Public Assistance Programs, by Education Level, 2011



SOURCES: U.S. Census Bureau, 2012a; calculations by the authors.

The above charts show the high cost of assistance to families and it is abundantly clear that the level of need for assistance has a direct relationship to the level of educational attainment.

**FIGURE 1.16A**  
Smoking Rates Among Individuals Ages 25 and Older, by Education Level, 1940–2012

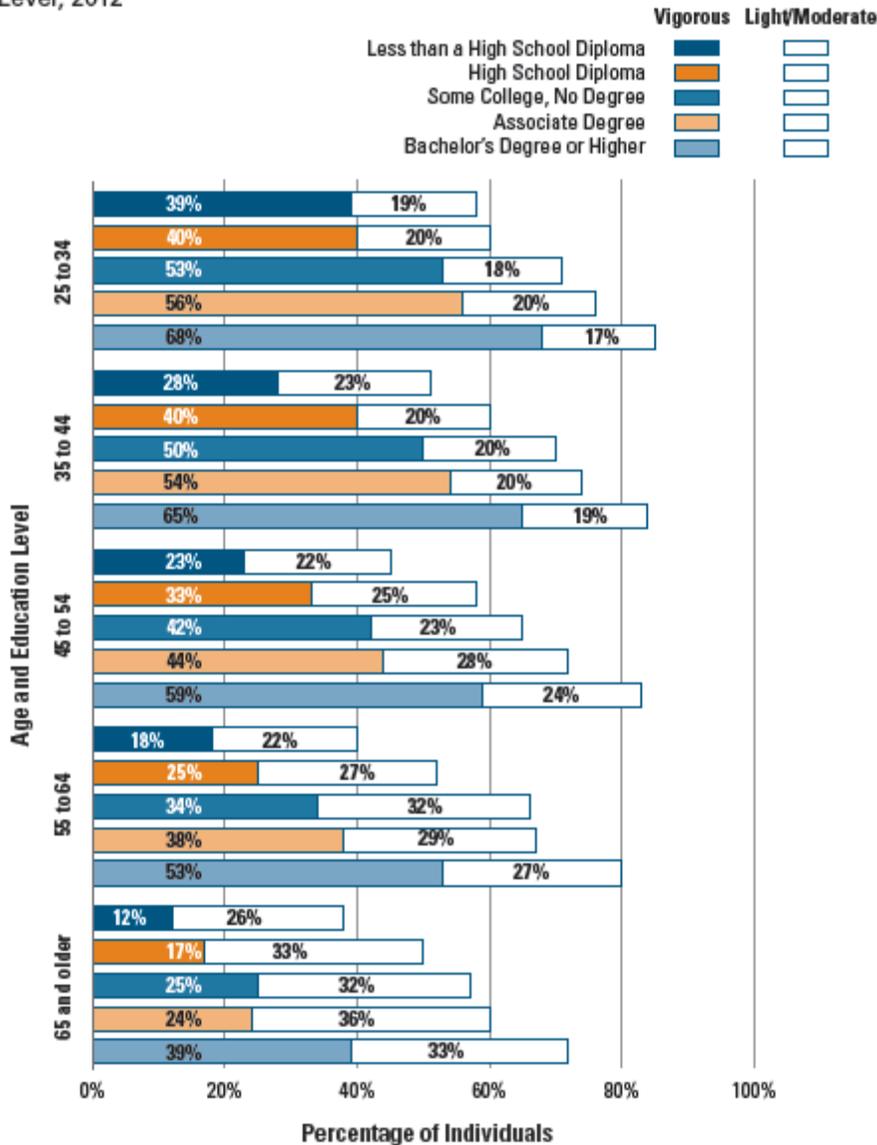


NOTE: Data for 2001 through 2005 are three-year moving averages.

SOURCES: de Walque, 2004; National Center for Health Statistics, 2002–2013; calculations by the authors.

Developing unhealthy living styles is shown to be directly related to the level of information that people have and the information in itself is related to the education levels. The above chart shows that smoking is directly related to educational attainment. There is a major gap between those with college degrees and those with less than a high school diploma.

**Exercise Rates Among Individuals Ages 25 and Older, by Age and Education Level, 2012**

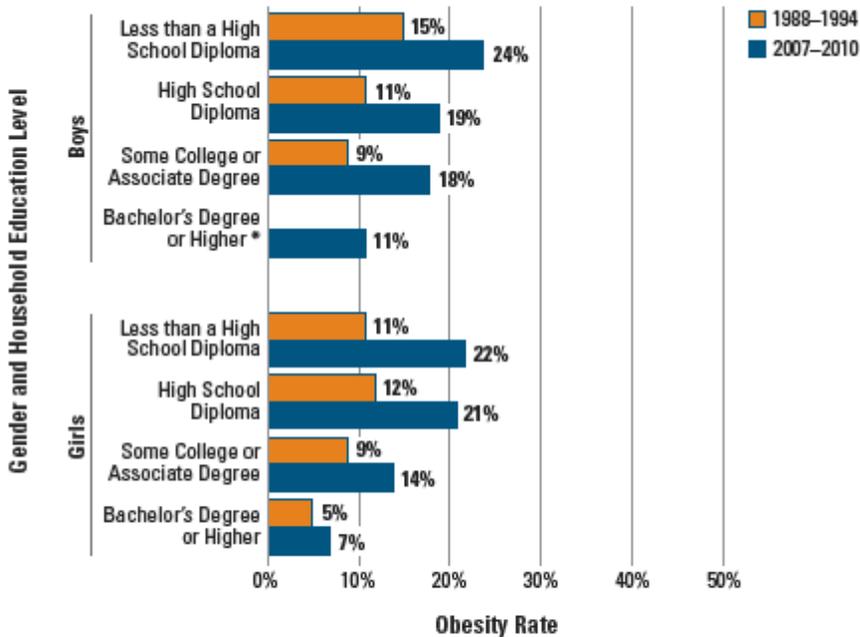


SOURCES: National Center for Health Statistics, 2013; calculations by the authors.

Paying attention to one's health is also directly related to educational level. In all age categories, exercise and having higher educational attainment are strongly correlated. The chart also shows that

the younger generation has a greater appreciation for exercise. Nonetheless, the higher the level of educational attainment, the higher the tendency is to exercise.

**Obesity Rates Among Children and Adolescents Ages 2 to 19, by Gender and Highest Household Education Level, 1988–1994 and 2007–2010**



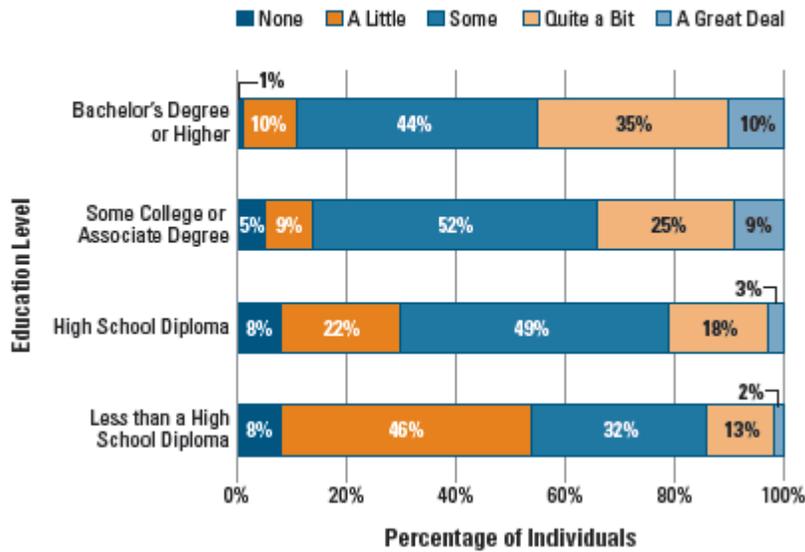
\* For boys from households with at least a bachelor's degree, the variation within the group in 1988–1994 is too large to generate a reliable estimate.

NOTE: Obesity is defined as a BMI at or above the 95th percentile for children of the same gender and age in months, based on the 2000 CDC growth charts for the United States.

SOURCE: National Center for Health Statistics, 2011a, Figure 25.

Obesity is one of the biggest health threats that our society is facing. The rate of obesity has been going up in all age categories. Its rise among the younger generation brings enormous concern for the health of our future generation of adults. The above chart shows that the rate increases significantly in relation to levels of educational attainment. The lower the level of educational attainment, the higher the rate of obesity. This is true of both genders.

Understanding of Political Issues Among Individuals Ages 25 and Older, 2012



SOURCE: National Opinion Research Center, 2013, 2012 Experiment Topic Module.

Educational attainment is directly related to the level of engagement and attention to the political issues of our society. More than 50% of people without a high school diploma have little or no knowledge of political issues in our society. This is an alarming rate; the costs of it include having uninformed people in the community and voting population, the lower rate of participation in bringing the conditions for improvement in public policy decision making forums, and the people's participation in a positive manner for society's improvement.

**The above information clearly proves the following points:**

- Higher educational attainment, which starts with receiving a high school diploma, reduces the level of unemployment among individuals and families.
- Higher educational attainment reduces the level of dependency on government assistance and thus reduces the need for tax revenue and brings greater tax reduction in an economy.
- Higher educational attainment develops healthy habits, such as the reduction of smoking, eagerness to exercise, and becoming less overweight or obese.
- Higher educational attainment brings greater political awareness and thus may bring about better public policy development and more efficiently run governments.

In a comprehensive study calculating the cost of high school dropouts, one has to include all sources of differential costs stemming from lower pay, higher unemployment, shorter life expectancy, more medical expenses, and government assistance. Finding an accurate basis requires estimation of a reliable rate of dropouts both at the state and county level. Unfortunately our existing database and sampling method would not give us the needed information, and therefore we concentrated on a partial calculation of the cost of not completing high school.

The pattern of dropouts in Ventura County presents a significant amount of challenges for the county as a whole. The following table shows the trend of changes overall and across various ethnicities and races.

**Dropout Rates in Cohorts in Total and Across Ethnicities in Ventura County  
Between 2009-2010 to 2012-13**

<b>Race/Ethnicity</b>	<b>Year 2009-2010</b>	<b>Year 2010-2011</b>	<b>Year 2011-2012</b>	<b>Year 2012-2013</b>
Overall Dropout Rate	13.2	11.7	10.7	10.7
Hispanic or Latino of any race	18.5	17.2	15.4	15.2
American Indian or Alaska Native	6.9	16.0	9.5	14.5
Asian	5.6	5.7	6.2	2.9
Pacific Islander	6.3	6.1	7.0	21.1
Filipino	4.9	6.5	2.9	3.4
African American	14.4	14.0	15.7	11.7
White not Hispanic	8.3	6.2	6.0	6.7
Two or More Races	14.1	9.0	8.6	6.3

**Source: California Department of Education, Data Reporting Office, 2014**

The dropout rate overall remained steady with some significant reductions from the outset of using cohorts to compare the dropout rate and graduation. The somewhat drastic change in a few entities to some extent is due to the small size of the group and therefore any changes in a few may make a more pronounced change in the overall rate. There is, however, a significant difference in the dropout rates among different ethnicities.

Unfortunately, there is no available longitudinal data set to calculate the rate of high school dropouts among those who attended the Boys & Girls Clubs in Ventura County from 9<sup>th</sup> to 12<sup>th</sup> grade. Instead, we used the passing rate for the California High School Exit Exam (CAHSEE) as an indicator of how many students among the senior class of the Boys & Girls Clubs passed their test compared with the county

and other areas that have similar demographics with those who attend the Club. This strategy is sensible because we do have the necessary data regarding the high school exit exam status of seniors attending the Boys & Girls Clubs.

In order to make a comparison between the county's CAHSEE data and the data related to the Boys & Girls Clubs, we had to find the status of seniors and their rate of success in passing the California High School Exit Exam. The situation is further complicated since such an exam can be taken by students who are not in their senior year but feel that they can pass it. Taking the latter point into consideration would make a close comparison between our calculation and the ones for the county and the district more difficult and uneven. Nonetheless, our attention was focused on comparing the rate of success in passing the exit exam between seniors attending the Club and seniors in the larger similar and comparable community.

We therefore distributed a survey administered to all seniors and students who are in the 10<sup>th</sup> grade and higher across the various Club locations.

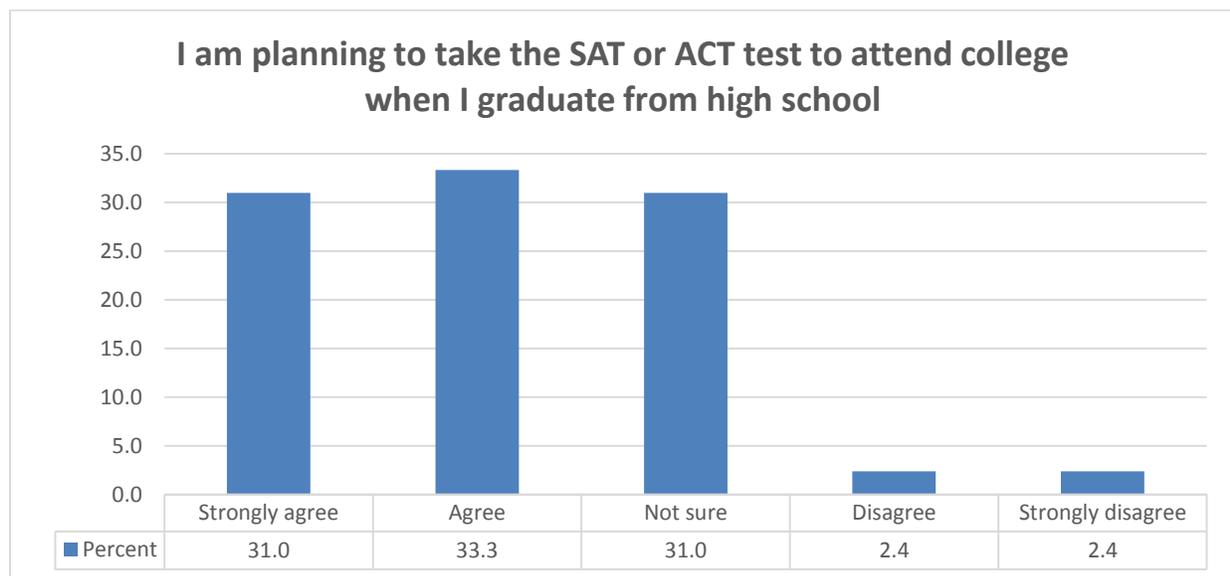
This led to a survey of 45 high school 10<sup>th</sup> graders to seniors. In order to filter this information and find out how seniors and other students who are likely to have taken their high school graduation exams, we have run several cross tabulations of the data and found the following information.

About 50% of the respondents, which included 10<sup>th</sup> and 11<sup>th</sup> graders, passed CAHSEE. In answering the question about whether they passed the CAHSEE, for all the 12<sup>th</sup> graders who answered this question, 95% either passed the CAHSEE or have plans to take and pass it. One person out of 18 remained unsure. A large number of others also reported that they passed it too. Out of 34 who responded to the question of being sure that they will graduate from high school, four altogether from a group of 34 responded that they are sure they will pass. Putting it all together and giving the unsure the possibility of passing or not at the ratio of 50% going either way, it was logical to assume the percentage of high school graduation at a rate of 97.0%.

In order to calculate the relevant economic impacts, the study emphasized finding the difference between the rate of high school students passing the CAHSEE amongst Club members and amongst the general population of Ventura County high school students. It is important to note that the way in which our rate is calculated, which is based on the survey of seniors, is different with the way the rate of high school students passing the California High School Exit Exam is calculated. Nonetheless, the latter two

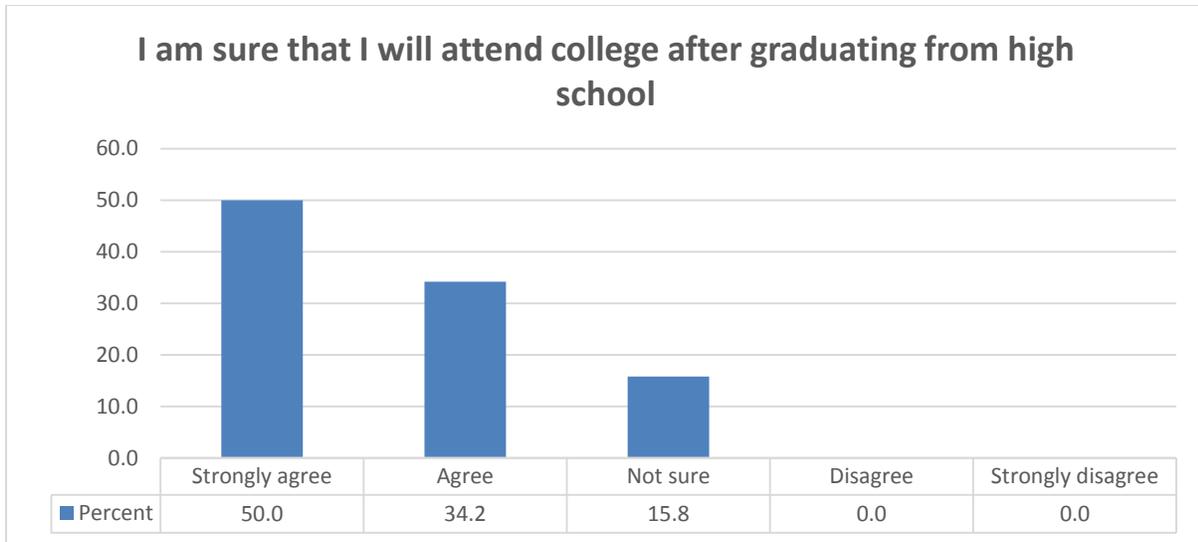
are compatible, when one considers the overall rate of success in the district or the county over the entire year. One more difference needs to be considered; there is a difference in the year of calculation. The county rate is taken from the existing published data for the academic year 2012-2013 (the latest year for which data is available) and our survey is based on the ongoing 2013-2014 academic year. Nevertheless, there is no strong reason to believe there is any anomaly in the two years which would make their comparison incompatible.

Before discussing the final calculations regarding the economic impacts of improved rates of high school graduation, it is important to learn more about Club members' academic intentions and long-term aspirations. Such attitudes will shape the future success and economic contribution of these individuals to their communities.



**Source: Survey of 10<sup>th</sup> to 12<sup>th</sup> graders attending Boys & Girls Clubs in Ventura County during academic year of 2013-2014**

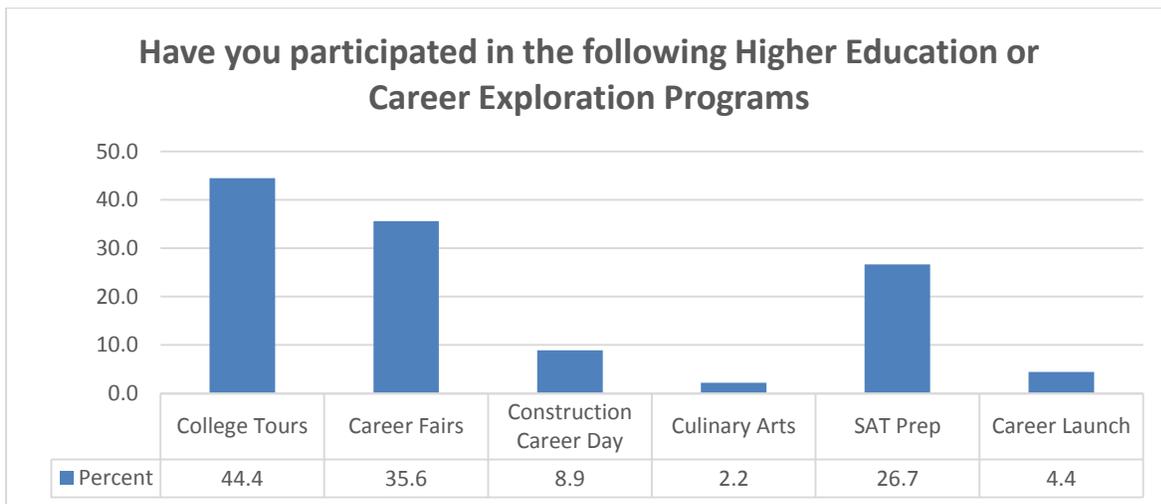
A majority of respondents (64.3%) indicate that they plan to take the SAT exam. This is a good sign since the SAT is an important component of direct admission to a four-year university program. It is important to note that an additional 31.0% of seniors were not sure whether they would or would not take the SAT, while only 4.8% were not planning to take the exam.



**Source: Survey of 10<sup>th</sup> to 12<sup>th</sup> graders attending Boys & Girls Clubs in Ventura County during academic year of 2013-2014**

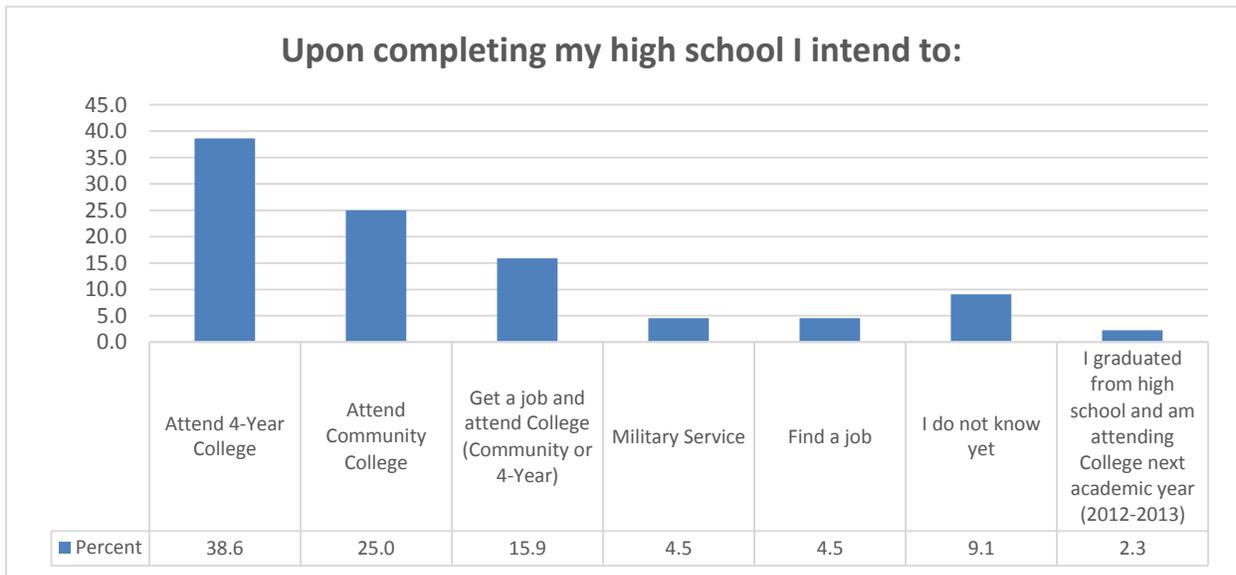
One of the most promising findings from the survey of senior attitudes and sentiments is the very strong belief amongst seniors in the program that they will attend college. 85.2% of the respondents indicate that they plan to attend college eventually after completing high school. The remaining 15.8% were not sure and no one indicated that they do not intend to attend college after graduating from high school.

What the above exhibit shows is not just a community desire; the following chart shows that an overwhelming majority of students who completed the survey have actually taken steps to reach their objectives.



**Source: Survey of 10<sup>th</sup> to 12<sup>th</sup> graders attending Boys & Girls Clubs in Ventura County during academic year of 2013-2014**

The above chart shows that a little less than half (44.4%) of the respondents have taken college tours. 35.6% have attended career fairs. Some 26.7% are attending SAT preparation classes and by comparing this result with an earlier chart, it became clear that a significant proportion of those who want to take the SAT preparation class are already doing it.



**Source: Survey of 10<sup>th</sup> to 12<sup>th</sup> graders attending Boys & Girls Clubs in Ventura County during academic year of 2013-2014**

To get more detail on the college ambitions of these students, we asked about their specific plans. Some 64.6% said that they would like to attend college (some 38.6% are planning to go to a four-year college and the remaining 25% intend to go to junior college). 2.3% were attending college already. Some 15.9% said they would want to get a job and attend college. Only 9.1% did not know what they want to do. This is a remarkable result from a group of young people at such a young age.

The last four exhibits indicate that the overwhelming majority of the students from the 10<sup>th</sup> to 12<sup>th</sup> grades surveyed consider college as the next step in their lives. The findings among these members of the Boys & Girls Clubs in Ventura County surveyed are very different from their peer groups in the school districts.

After considering the sentiments of those students attending the Club, we can now begin to calculate the economic impact of higher high school graduation among the seniors attending the Boys & Girls Clubs in Ventura County and their peer group. We began by taking the difference between the rate obtained from our survey and the countywide rates released by the California Department of Education.

Using a rate of 82.4%<sup>10</sup> as the rate of success in passing the California High School Exit Exam and 97% as the success rate amongst seniors attending the Boys & Girls Clubs, we found a difference of 14.6%.

We then looked at the estimated number of high school students according to the reports of the Clubs in Ventura County. Based on such calculations, we found that collectively, there are 307 student members.<sup>11</sup> Based on such calculations, the increase in the number of additional high school graduates because of attending the Clubs countywide is estimated to be 48 students.

We considered the 45 additional graduates an outcome of attending the Clubs and benefiting from the program and the environment that is more conducive to higher academic achievements, as well as having attention paid to their future plans of attending college and being successful in their future professional lives.<sup>12</sup>

In order to calculate the economic impact, we looked at the earning potential of people who graduate with a high school diploma, or have a degree or enter the labor force without a high school diploma. The calculation is based on the studies conducted for the State of California and some of the assumptions

---

<sup>10</sup> We have to bear in mind that the actual rate of high school graduation for a cohort with the exact demographic make-up would have been lower since the ethnic structure of the students attending the Boys & Girls Clubs in Ventura County have a higher percentage of students with ethnicities that have a lower rate of success in graduating from high school. Nonetheless, we used the county rate instead of a calculated equivalence in order to avoid inaccuracy and underestimation.

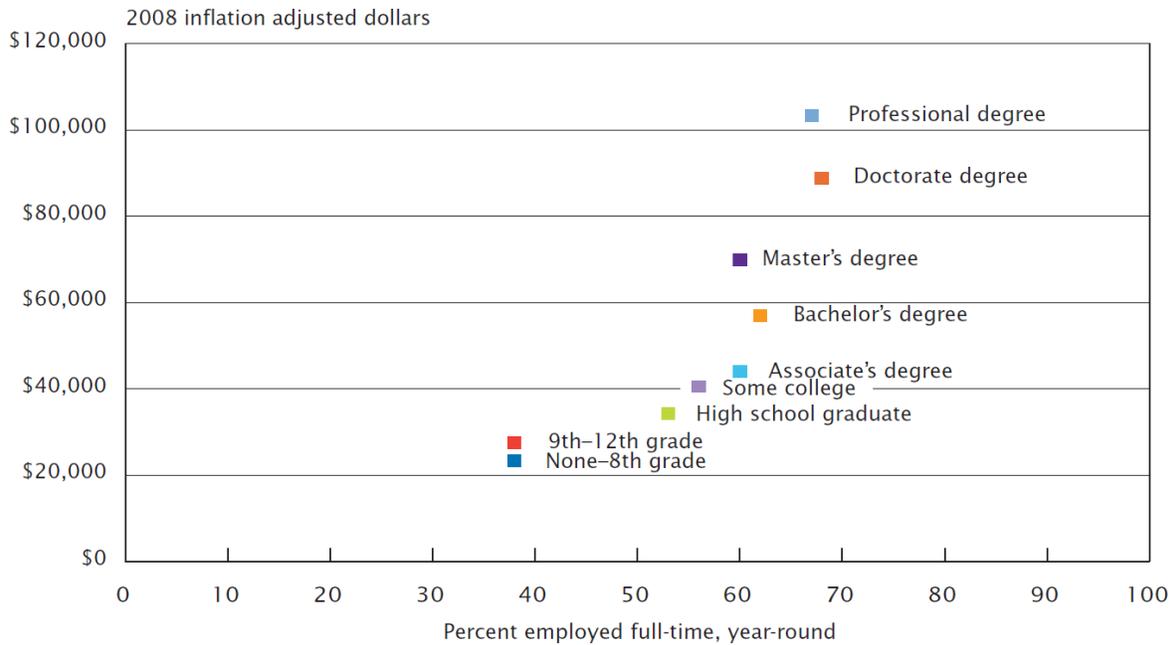
<sup>11</sup> The Clubs we have Boys and Girls Clubs of Greater Oxnard and Port Hueneme and Boys & Girls Club of Greater Ventura reported having 4% and 1% of their members who are in the 12<sup>th</sup> grade in 2013-2014. From the members survey, we found that 98.3% of the members attend the Clubs every day or at least three times during the week. These are the target group who go to the Club often enough in order to enjoy and benefit from their attendance. We then used the total number of members served and found the number of students who attend the Clubs and are in 12<sup>th</sup> grade. This led us to the calculation of 307 members.

<sup>12</sup> There is valid argument that what other circumstances may have contributed to a higher rate of success among the Club attendees. A number of such arguments are equally applicable to all other similar studies.

that we made based on our survey. The study tried to base its calculation on modest and conservative assumptions rather than assumptions that could be considered too optimistic.

According to the latest available information published by the US Census, we have the following annual compensation for people with different educational attainments:

Figure 2.  
**Education, Work Status, and Median Annual Earnings**



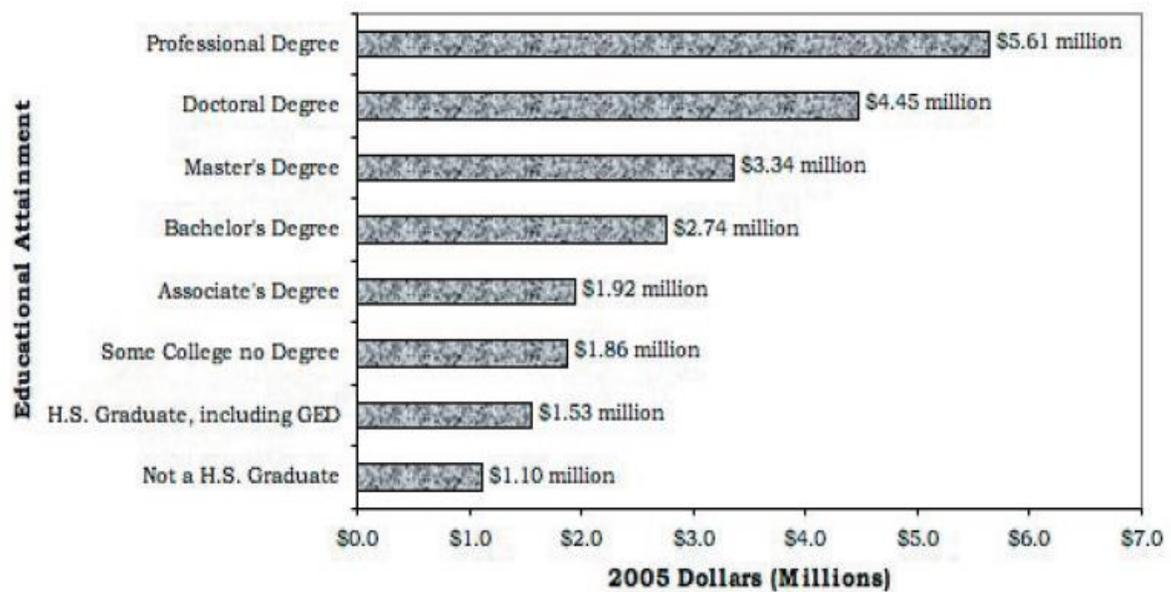
Source: U.S. Census Bureau, American Community Survey, 2006-2008.

The above chart shows that there is a considerable difference in the median annual income earnings among people with a high school diploma and those without. In reality, we have shown that a significant proportion of the Club members are going to attend university and become people with a college degree and thus earn far more than a high school graduates. But based on a mere comparison of high school graduates and those without a high school diploma, there is still a considerable gap in earnings. The other equally important issue is that people with high school diplomas are more likely to be full time employee year around, which suggests the possibility of higher earnings during the year.

In order to calculate the additional income earned by high school graduation, we needed the synthetic work-life earnings of the additional high school graduates in year 2013-2014. The best data is the information produced by the Census Bureau through the American Household survey and their analysis

for estimating the overall life time earnings of people according to their educational attainment. Such information is not produced very often. The latest available data was based on the 2006-2008 American Community Survey based on the 2008 level of prices. The data provides this information for different genders and across various ethnicities and race. The alternative was a study carried out by Kantrowitz (2007).

**Figure 1**  
**Synthetic Work-Life Earnings Estimates**  
**for Full-Time Year-Round Workers by Educational Attainment, 2005**



**Source: Mark Kantrowitz (2007), The Value of Higher Education, Journal of Student Financial Aid, Vol. 37, Issue 1**

The above chart shows a large gap between the work-life earnings of a person with a high school diploma and someone without one. The difference in 2005 dollars is \$430,000. Converting this into 2013 dollars by using an inflation rate of 2.5% will bring the difference to a total of \$521,793. That is for one additional comparative high school graduate. Multiplying it by 45 brings about a total additional work-life additional income of \$23.5 million in 2013 level prices (2013 dollars).

The following table sums up the economic benefits created by the ability of Boys & Girls Clubs in Ventura County to improve high school graduation rates:

Percentage of Students Passing CAHSEE in Ventura County	Percentage of Sample of Seniors Attending Clubs Passing CAHSEE	Additional Number of Students Passing CAHSEE in Clubs in Comparison	Total synthetic life-work income made Due to Higher High School Graduation for one person based on 2013 Dollars	Total work-life increment in earning due to higher rate of passing CAHSEE of all Club members
<b>82.4%</b>	<b>97%</b>	<b>45</b>	<b>\$521,793</b>	<b>\$23,480,680</b>

Sources: Survey of 10<sup>th</sup> to 12<sup>th</sup> graders for the Boys and Girls Clubs in Ventura County, Mark Kantrowitz (2007), and California Department of Education.

## 2.2) Cost Savings Due to Reduction in Teen Childbirth

The United States of America has the highest teen birth rate among all the industrialized countries in the world. Teen pregnancy results in serious education and health problems for the mother and father. Teen mothers are more likely to have serious complications during pregnancy and delivery. Teen mothers and fathers are less likely to earn a high school diploma.

	Adolescent birth rate	Pregnancies per 1000	Births per 1000	Abortion ratio	Abortions per 1000
Australia	15.5				14.2
Canada	14.1	27.4	13.6	50.4	13.7
Denmark	4.5				15.2
France	11.9	10.3	3.5	66.0	17.4
Germany	8.2				6.1
Italy	6.5				10.0
Japan	4.6				9.2
Netherlands	9.3				9.7
Norway	9.5				16.2
Sweden	5.9	16.4	2.7	83.5	20.8
United Kingdom	25.1	28.6	14.8	48.3	14.2
United States	34.2	52.8	33.8	36.0	19.6

Source: Annual number of births to women 15 to 19 years of age per 1,000 women, for 2011 or most recent year. United Nations Statistics: See the following URL [http://internationalcomparisons.org/intl\\_comp\\_files/sheet010.htm](http://internationalcomparisons.org/intl_comp_files/sheet010.htm)

The above chart shows that the United States continues to have the highest level of teen pregnancy among the twelve western industrialized and developed countries.

According to recent reports, teen births have decreased; however, it continues to be a significant problem in California. In a 2006 report from the California Commission on the Status of Women, 83% of teen births happen to low income families and two out of three are Latinos. Many of these young women have lower educational attainment and 70% of them are high school dropouts.

According to recent studies, teen childbearing in the United States costs taxpayers at least \$9.1 billion annually at the federal, state, and local levels.<sup>13</sup> The cost measured in the referred study is based on expenses in 2004. The inflation adjusted cost in 2011 will be in excess of this estimate, assuming that the rate did not subside drastically. Most of the costs of teen childbearing are associated with negative consequences for the children of teen mothers, including increased costs for healthcare, foster care, and incarceration.

On the national level, these costs include \$1.9 billion for increased public sector healthcare costs, \$2.3 billion for increased child welfare costs, \$2.1 billion for increased costs for state prison systems, and \$2.9 billion in lost revenue due to lower taxes paid by the children of teen mothers over their adult lifetimes.

In summary, taxpayers face the following economic costs as a result of teenage parenthood:

- Lost tax revenues from the decreased short and long-term earning power of teenage parents.
- Public assistance expenditures necessary to support teen parents and their families.
- Healthcare costs for the children of teenage mothers.
- Foster care costs for the children of teenage mothers.
- Criminal justice costs for the children of teenage mothers.

---

<sup>13</sup> This estimate was done in a recent study by Saul Hoffman, Professor of Economics and Chair of Department of Economics at Delaware University. For more information see the full study <http://www.buec.udel.edu/hoffmans/Research/By%20the%20Numbers.pdf>

In addition to the costs of teenage pregnancy that burden the taxpayers, it is important to consider the ways in which teenage parenthood changes the future life and prospects of the parent. These changes can have long-term emotional and economic consequences.

As the economy has transitioned from an emphasis on manufacturing to an emphasis on services, education has become an important determinant of success. One of most important elements of building a strong workforce for the 21<sup>st</sup> century is to have a well-educated labor pool. Due to the negative impact teenage pregnancy has on educational outcomes, reducing teen pregnancy can help strengthen the future workforce. Teen pregnancy substantially reduces the opportunity of teen parents to continue their education, and thereby makes segments of the American workforce less competitive.

Insufficient education deprives young parents of the opportunity to have stable and high paying jobs in the future. Teen parents and their children are less likely to graduate from high school. In fact, less than four in ten mothers who began their families before age 18 ever complete their high school education.<sup>14</sup>

A study by the National Campaign to Prevent Teenage Pregnancy in 2002 shows that in the past 25 years, the median income of people without a college education decreased in absolute terms (not inflation adjusted) by 30% while the median income of college graduates increased by 13%.<sup>15</sup> The same study shows that half of teen mothers drop out of school after becoming pregnant. 52% of all mothers on public assistance had their first child as a teenager. Teenage mothers are less likely to complete high school and only 1.5% of them earn a college degree by the age of 30. This, in turn, influences their earning capacity and likelihood to rely on public assistance.<sup>16</sup>

In total, the sources of short and long-term costs for the families of teen parents are as follows:<sup>17</sup>

- Teenage parents are less likely to complete high school.
- Teenage parents are more likely to depend on public assistance.

---

<sup>14</sup> For more information see <http://www.teenpregnancy.org/resources/data/pdf/notjust.pdf>, not just another single issue: Teen Pregnancy Prevention's link to other critical social issues, Feb. 2002.

<sup>15</sup> Ibid.

<sup>16</sup> Maynard, Rebecca, A, *Kids having kids: Economic costs and social consequences of teen pregnancy*, Published by John Wiley and Sons on behalf of Association for Public Policy Analysis and Management, 1999.

<sup>17</sup> <http://www.vahealth.org/teenpregnancyprevention/>

- The children of teen mothers are more likely to perform poorly in school.
- The children of teen mothers are at a greater risk of abuse and neglect.
- The sons of teen mothers are 13% more likely to end up in prison and are more likely to commit more violent crimes.
- The daughters of teen mothers are more likely to become teen mothers themselves.

The Boys & Girls Clubs in Ventura County play an important role in saving youth from the serious consequences they will face if they become teenage parents. By providing youth a nurturing environment and programs that develop important life skills, the Clubs provide the youth with positive reinforcement and hope for a better life. Such emotional support can help an at-risk teenager develop better decision-making skills that can help them avoid risky behavior that can lead to teenage parenthood. Among the Clubs' programs that help youth to find a better path for a better future are SMART Moves, SMART Girls, Triple Play, and Passport to Manhood.<sup>18</sup>

In order to calculate the economic impact of the Clubs' potential to reduce teenage pregnancy, our literature review yielded an impressive nationally representative study by Dr. Rebecca Maynard, a professor at the University of Pennsylvania and a member of the National Campaign to Prevent Teen Pregnancy.<sup>19</sup> This study provides cost estimates for the economic impact of teen pregnancy to

---

<sup>18</sup> These programs are commonly used across various Boys & Girls Clubs organizations. For a full description of these programs and how they help Club members to learn more and lead a healthy life see <http://www.bgca.org/programs/healthlife.asp>

<sup>19</sup> We also looked at a number of other studies for searching the latest information on teen pregnancy and childbearing. To arrive at a long term cost over the life time see the following:

[http://www.health.state.nm.us/phd/fp/teen\\_pregnancy.htm](http://www.health.state.nm.us/phd/fp/teen_pregnancy.htm)

<http://www.thenationalcampaign.org/costs/pdf/states/california/fact-sheet.pdf>

[http://www.usa.gov/Topics/Reference\\_Shelf/Data.shtml](http://www.usa.gov/Topics/Reference_Shelf/Data.shtml)

<http://usasearch.gov/search?v%3Aproject=firstgov-web&query=Economic+cost+of+teen+birth>

[http://www.health.state.nm.us/phd/fp/economic\\_impact06.htm](http://www.health.state.nm.us/phd/fp/economic_impact06.htm)

[http://info.sen.ca.gov/pub/07-08/bill/asm/ab\\_1501-1550/ab\\_1511\\_cfa\\_20070602\\_170429\\_asm\\_floor.html](http://info.sen.ca.gov/pub/07-08/bill/asm/ab_1501-1550/ab_1511_cfa_20070602_170429_asm_floor.html)

<http://women.ca.gov/UserFiles/922.FinalPublicPolicyAgenda.pdf>

taxpayers and society, which capture many of the adverse impacts of teen pregnancy discussed earlier in this section.

Since this rigorous study looked both at the taxpayer and societal costs, we will use its findings for both categories. In order to derive the taxpayer costs, Maynard:

“employed conservative assumptions, and used the most directly attributable costs, including tax revenue costs based on mother’s and father’s income and consumption, public assistance direct costs such as welfare and medical assistance as well as the associated administrative costs of these programs, costs for increased foster placement and incarceration of children, and tax revenue costs based on children’s income and consumption when they reach early adulthood. Some costs such as public assistance were averaged over 13 years of parenthood... Appropriately, and unlike other less rigorous cost analyses, Maynard estimated net costs, adjusted for estimated costs in the same categories had the teen mother delayed her birth until age 20 or 21” (Constantine 2003)

Using a similarly thorough methodology, Maynard calculated the economic costs for society as a whole. This analysis considered the impact of teenage pregnancy on other stakeholders beyond the taxpayer. Considerations in this part of the analysis included “estimated changes in earnings of teen mothers, fathers, and children when they reached early adulthood, and privately paid medical costs” (Constantine 2003).

The results of the analysis conducted found that the annual costs per instance of teen pregnancy for teens aged 15-19 was \$2,129 to taxpayers and \$4,750 to society. However, the total outlay per teen pregnancy is much more significant if the long-term costs are considered.

*“Each teen birth costs taxpayers and society \$126,358”*

---

The analysis conducted by Maynard averaged many costs over 13 years. If one considers the future costs over this entire period, the total outlay of economic costs per teenage pregnancy is \$27,677 for taxpayer costs and \$61,750 for societal costs. In other words, each time a teenager between the ages of 15 and 19 gives birth, taxpayers and society incur a marginal cost of \$89,427. Please note that all these

---

<http://www.thenationalcampaign.org/costs/tables.aspx>

calculations are in the year 2000 dollars. Adjusting for inflation and assuming an average rate of inflation each year of 2.5%, this analysis finds that each teen birth costs taxpayers and society \$126,358 in 2014 dollars; in annual terms, this is \$9,719 per year.

In order to calculate the return on investing in teenage members of the Clubs through reduction of teen pregnancy and thus teen birth, we used two separate sources to find the rate of teen pregnancy among teenage female members of the Clubs during the current academic year. We asked the management of the Clubs if they had any information on any teen members of their Clubs becoming pregnant in year 2012-2013 in the respective questionnaire. The outcome was that no one reported any pregnancy in their teenage members. We therefore considered the rate of pregnancy to be zero for the Clubs and thus established a rate of zero for the teen birth rate for the teenage female Club members.

According to the latest data available from Kidsdata (2014), the rate of teen births for Ventura County in 2012 was 23.3 per 1000 women ages of 15 to 19. Comparing the prevailing rate of zero among the Club members, we estimated that the Clubs bring a reduction of 23.2 per 1000 female Club members in that age category.

According to the final reports of the Clubs through in-house surveys, the total number of youth served by the Clubs is over 15,000; about 45% of the members are female and the remaining 55% are male. We used the proportion of male to female members and calculated the total number of female members between ages of 15 to 19 years of age based on individual reports from the Clubs and that brought about an estimate of 756 female teenagers in that age category among all the Club members. Using this number and applying the saving rate of 23.2 per 1000 teenagers in the ages of 15 to 19 countywide allowed us to estimate that Club membership brings a total of 18 teenagers who are saved from the life of teenage motherhood. We used this number and made the following calculation that can be seen in the following table:

Approximate number of teenage girls between ages of 15 and 19 attending the Boys & Girls Clubs	Rate of teen childbirth in a comparative community in lives per thousand	Rate of teen childbirth among girls ages 13 to 19 who attend the Boys & Girls	Total number of reduction in teen childbirth due to positive influence of Clubs	Estimated cost of teen birth to taxpayers and society	Total costs saved to tax payers due to positive influence of Clubs

		Clubs			
<b>756</b>	<b>23.2</b>	<b>0.00</b>	<b>18</b>	<b>\$126,358</b>	<b>\$2,274,444</b>

### 2.3) Economic Impact through Reduction in Juvenile Arrests and Crimes

Crimes in general and juvenile crimes in particular are a major source of social disorder, economic loss, and public health concerns in every society. While protecting individuals and families has an important place in the community, prevention of violence has been argued by many scholars and practitioners as the most effective and cost-saving long-term solution. As a result, programs such as Boys & Girls Clubs that help to reduce juvenile crime are valuable social and economic assets.

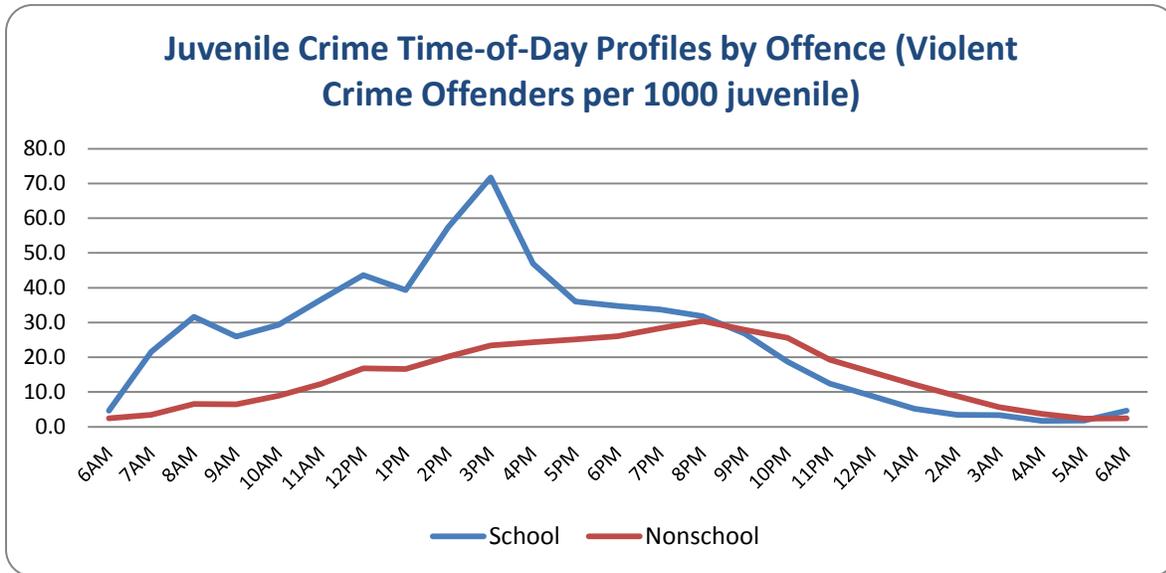
The existing data shows that juvenile crimes increased significantly over the last two decades. According to a report published by California’s Legislative Analyst’s Office (LAO) in January 2007, characteristics of the crime victims can be summed up as follows:<sup>20</sup>

- Individuals between the ages of 12 to 24 are more likely to commit and be the victim of violent crimes. The probability of being the victim of crimes is significantly lower for all other ages.
- The likelihood of being a victim of a violent crime was 45% higher for males than for females.
- Violent victimization rates for blacks were 37% higher than those for whites. Hispanics had a violent victimization rate 24% higher than whites.
- Black households were victims of property crimes at a rate 7% higher than whites.
- Hispanic household victimization rates were 35% higher than whites.
- Poorer households were much more likely to experience an unlawful entry into their homes (burglary) than wealthier households. However, while wealthier households do not experience burglary as often, they were more likely to be victims of theft, which includes the taking of household items, motor vehicle accessories, or other objects without entry into the home.

<sup>20</sup> California’s Criminal Justice System: A Primer, Legislative Analyst’s Office (LAO) California Nonpartisan Fiscal and Policy Advisor.

Looking at such statistics shows that age, ethnicity, gender, and economic status are important determinants of who is likely to suffer most from crimes in our communities.

In order to understand juvenile crimes better, one needs to look at patterns that can explain why, how, and when juvenile crime happens. One of the most telling variables is the issue of *when* crime happens during the day. The below chart illustrates patterns of arrest throughout the day:



**Source: National Archive of Criminal Justice Data. National Incident-Based Reporting System, 2008: Extract Files [Computer file], <http://ojjdp.gov/ojstatbb/offenders/qa03301.asp?qaDate=2008> Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-08-13.**

The above diagram illustrates that the rate of crime spikes upwards dramatically with the highest rate of violent juvenile crimes occurring when youth leave schools between the hours of 3:00 and 4:00 PM.

Thousands of children and teens head to the Boys & Girls Clubs to be safe and to find a nurturing environment in order to develop their talents and grow to become productive members of their communities.

The focus of the juvenile criminal justice system is to rehabilitate and bring back at-risk youth to a productive and crime-free future life. The juvenile criminal justice system quite rightly focuses more on education, treatment, and counseling programs when compared to the adult criminal justice system. This difference in philosophy makes correctional programs for juveniles more expensive than facilities for adults.

In order to have a good estimate for the cost of crimes and in particular the cost of juvenile crime, we had to find information that would allow us to calculate such costs in a comprehensive manner. This brought us to use the existing estimates, which were available for 2009.

In 2009, the total number of juvenile arrests in California reached 204,696, which constituted 14% of all arrests made in the entire state. The rate of arrest per 1000 youths in the age group of 10 to 17 years of age reached 45.1 per 1000 youths.<sup>21</sup> The majority of juveniles arrested will have a chance to return to society and hopefully lead a productive, crime-free life. Doing so requires a nurturing environment that can help youth find their way forward, gain self-respect, and be encouraged to succeed in their lives.

Finding the cost of juvenile arrests for California was also a very difficult task and it is hard to justify every assumption that one makes in a study when there is not concrete and reliable information about an issue such as the comprehensive cost of juvenile crime in a region.

The latest crime data for California is published by the California State Department of Justice. The number of arrests, types of arrests and cost of criminal justice in the state can be obtained from this source. The latest published figure for the state was in 2007-2008, for a total of \$35,113,844,000 (\$35.1 billion). The latest rate increase in cost from the previous year was around 8.4%. Bearing in mind that the total number of arrests fell from the year before by almost 5%, this shows that the actual rate of increase per head from the year before was around 13%. This is far greater than most rates of increase in public spending.<sup>22</sup>

To reach a reasonable cost per arrest for youth, we need to determine what percentage of this cost belongs to adults and which proportion to youths. It is highly inaccurate to divide this cost based on the percentage of youth arrested compared to adults, for as we know, the state spends a far greater amount on youths than on adults, as the underlining justice philosophy for youths is rehabilitation and a focus on a return to life among society as opposed to isolation and punishment. According to the report by the LAO in 2007, the cost of housing a juvenile in a state facility is estimated to be approximately \$180,000 in 2006-07. These costs are substantially more than the state cost to house adult offenders, primarily because juvenile facilities have a higher staffing ratio and greater costs for education and

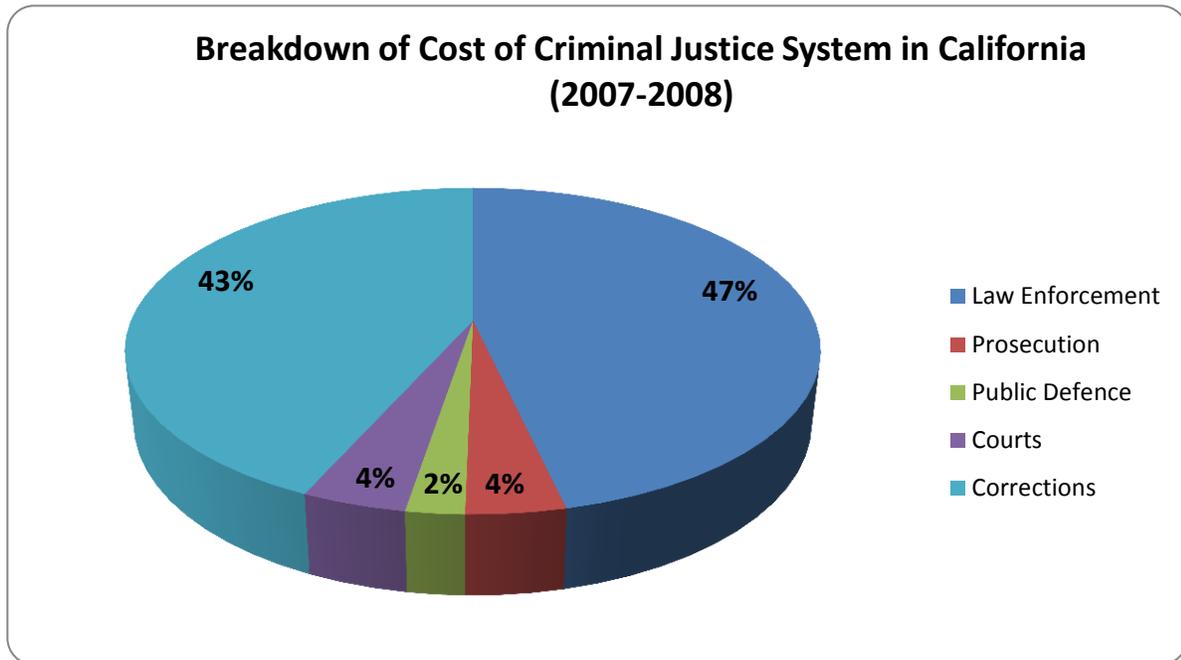
---

<sup>21</sup> For more information see State of California Department of Justice: <http://ag.ca.gov/cjsc/pubs.php#crimeCAUS>

<sup>22</sup> A 13% increase in cost per arrest over a year shows a cost escalation far in excess of any other state public spending.

rehabilitation programs than adult facilities. The same report shows that the cost of housing an adult inmate in prison in the same year was around \$43,000.

Looking at the structure of the cost of criminal justice in California offers the ability to divide the total cost as a reasonable proportion between the youth and the adults.



**Source: State Department of Justice for 2009. This is the latest available information at the time of preparation of this study**

The important issue is how to divide the costs of crimes between juveniles and adults. In 2007-08, 85.2% of the total arrests were adults.<sup>23</sup> One of the most important and costly categories of offenses are felony crimes. It is hard to make a clear breakdown for dividing various felony crimes between adults and juveniles, and it is even more difficult to divide the cost accordingly. At the same time, dividing the cost based on the percentages of juvenile and adult arrests is not an accurate way to divide the cost either. As mentioned earlier, we know all states spend far more on juvenile offenders than on the older segment of the arrested population.

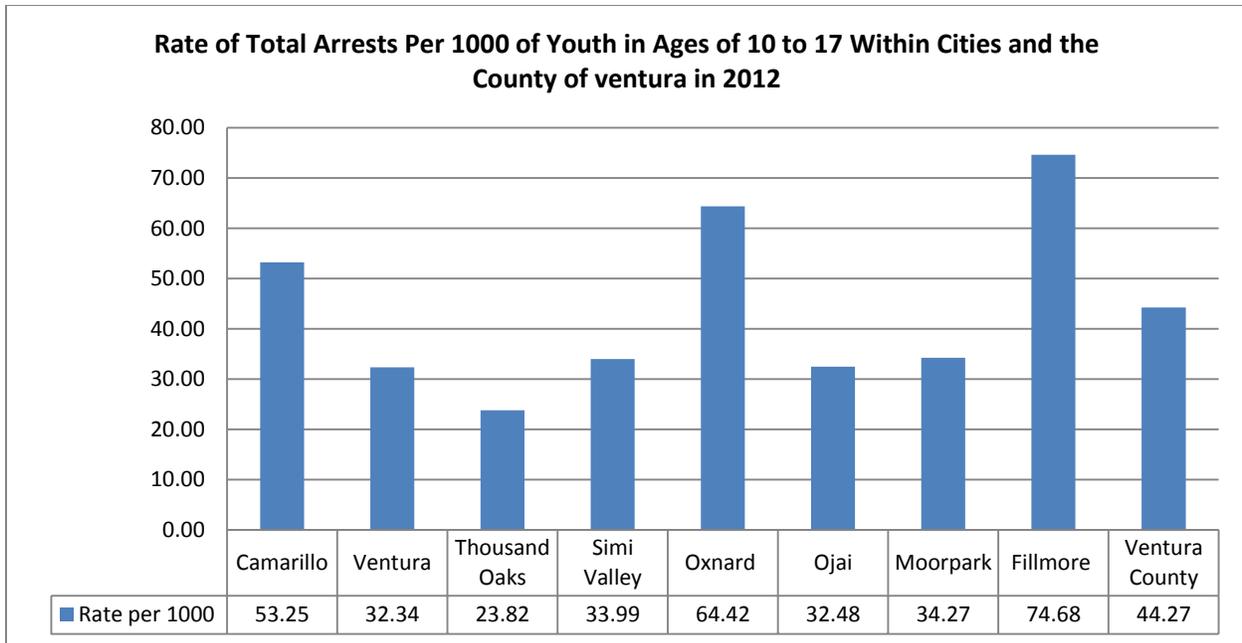
<sup>23</sup> See <http://ag.ca.gov/cjsc/pubs.php#crimeCAUS>

The total cost of criminal justice in California based on the latest available information was \$35,113,844,000 in year 2008. In the same year, the total number of arrests reached 1,543,665 and 14.8% of total arrests consisted of youth offenders. Knowing that the cost of corrections for youths is more than four times the cost for adult corrections, and youth crimes is about 43% of the total cost of crimes in California, we used a ratio of 2:1 for allocating the cost of crimes per youth compared to an adult. The number of total arrests shows that for every 5.9 adults, one youth between ages of 10 to 17 was arrested in 2008. Using our argument about the relatively higher cost of criminal justice for youths, we divided the total cost of criminal justice in California for the purpose of this study on the proportion of six (6) for adults and two (2) for youth or 75% for adults and 25% for youth. This suggests that in 2008, the total cost of criminal justice for youths was around  $\$35,113,844,000 \times 0.25 = \$9,778,461,000$  (\$9.8 billion). In the same year the total number of youths arrested was about 229,104. This means that the cost per youth arrested reached \$38,317 in the year 2008. Earlier, we pointed out that the cost of crimes has a much higher rate of escalation. According to our calculations, the cost increased 13% per person arrested from 2008 to 2009. Despite the reduction in percentage of crimes over years, the cost of crimes has not been going down.<sup>24</sup> Using a more conservative annual rate increase of 10%, the estimated cost per youth arrested in 2010-2011 will amount to \$67,319.

In order to find out the impact of the Boys & Girls Clubs in Ventura County in reducing the number of youth arrested, we used the results of our survey to estimate the average rate of youth arrests among the Clubs in Ventura County. Based on the survey and cross tabulation of parents' responses and calculation of number of kids represented by the total number of responses by the parents and number of kids per responding parent and percentage of children from the age of 10, we estimated an arrest rate of 0.5% (or 5 per 1000) which is much lower compared with the prevailing rate of juvenile arrests in the control group within the county. According to the latest available rate in Ventura County from 2012, the rate of juvenile arrests for ages of 10 to 17 has been 17.0 per thousand within the county. One has to bear in mind that the rates of arrests differ greatly among the cities within the county. The following chart shows the rate of arrests per one thousand youth ages 10 to 17 within the county.

---

<sup>24</sup> See Haapanan et al (2009), Issues for California Specific E, State of California Department of Correction and Rehabilitation, Center for Public Policy, US Davis:  
[http://www.cdcr.ca.gov/adult\\_research\\_branch/Research\\_Documents/CDCR%20Interim%20Report%20Cost%20of%20Crime%20Project%2010-31-09.pdf](http://www.cdcr.ca.gov/adult_research_branch/Research_Documents/CDCR%20Interim%20Report%20Cost%20of%20Crime%20Project%2010-31-09.pdf)

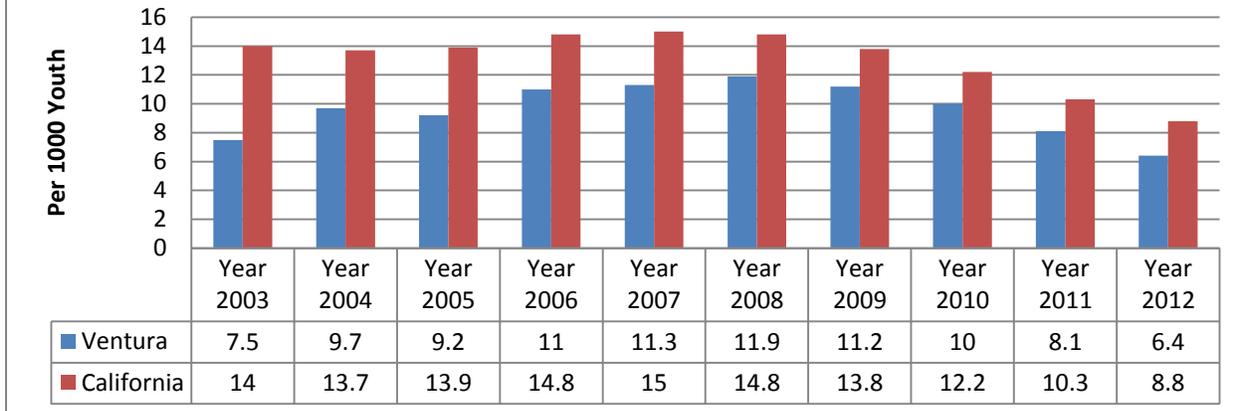


**Source:** California Dept. of Justice, 2014: <http://oag.ca.gov/crime/cjsc/stats/arrests>

As the chart shows, the rates of arrests vary among different cities. It is important to note that arrests are divided into three categories of arrest. They are: felony, misdemeanors, and status offences. The rates shown in the above graph bring the rate of all the three together per 1000 youth living in the mentioned geographic locations. Fillmore and Oxnard have the highest overall total rate of youth arrests within the county.

It is important to note that the rate of crimes and particularly felony crimes declined substantially in recent years. The following chart shows such a decline over a decade. The chart shows that with some difference, the rate of felony arrests have been in decline both in the State of California and Ventura County since 2008. It is interesting to note that despite the fairly stable rate of felony arrests within the state, the rate has been on the rise in Ventura County from 2003 to 2008. The rate of change in Ventura County has been quite significant during the recent years.

### Rate of Juvenile Felony Arrests in Ventura County and State of California From 2003 to 2012



**Source:** KidsData.org (California Dept. of Justice), <http://www.kidsdata.org/topic/165/juvenilearrest-rate/table#fmt=1098&loc=2,363&tf=67,64,46,37,16,10,9,8,7,6>

In order to relate the rate of overall arrests to the cost of crime, we used the following logic model. We assumed that the cost of juvenile justice can be linked to the level of arrests made in an area. It is true that some of the arrests do not go much further and the youth arrested will be released and the cost will not go much further. However, some of those arrested will go further in the criminal justice system and the cost of such cases will escalate. It is logical to average out the total cost per arrest and consider it as the expected cost to the criminal justice system in dealing with juvenile crimes.

Based on the aforementioned logic, we calculated the differential arrest rate for juveniles between the Club members and the county population as the basis of finding out how attending Clubs (three times per week or more frequently) may reduce the cost to the criminal justice system and thus taxpayers through a reduction in the arrest rate. Based on our earlier calculation, the arrest rate among those attending the Clubs were 5 per 1000 youths, and the latest rate available for the county (from 2012) was 44.27 per 1000. This suggests a dividend of 39.27 (i.e.  $44.27 - 5.0 = 39.27$ ). We need to bear in mind that the cost has been calculated on the expected cost per arrest, and falling into the pattern of unlawful behavior at young age has a much higher cost to the person, which has not been factored in to our calculation directly.

Based on the information received from the Clubs through their in-house information, we calculated that in total we have 8301 youth between the ages of 10 to 17 in the Clubs. We used this estimate to calculate the total amount of cost savings through a reduction of possible criminal acts by the members of the Boys and Girls Clubs compared with their control group with the county.<sup>25</sup> The estimation shows that attendance at the Clubs may have saved 320 youth from being arrested.

On the most basic and intuitive level, the Clubs reduce crime by taking kids off the streets and guiding them in a safe and nurturing environment where they are safe not only from victimization but also from negative influences that can cause them to perpetuate crime. Such a safe haven is critical during the non-school hours when juvenile crimes are most rampant.

Total number of Juvenile saved from Arrest	Difference in rate of arrest within the Clubs compared with the control group in the county	Expected cost of crimes in California per arrest	Total saving per year due to impact of Clubs
<b>320</b>	<b>39.27 per 1000 youth</b>	<b>\$67,319</b>	<b>\$ 21,542,080</b>

**Source: Author's calculation, California Department of Justice**

We need to bear in mind that this cost is an underestimation of the total cost to the criminal justice system, and the actual cost over time is much higher. This can be better understood when we look at the other costly items that are realistic but are not included in the costs to the criminal justice system. These costs, according to the Legislative Analyst's Office, include:

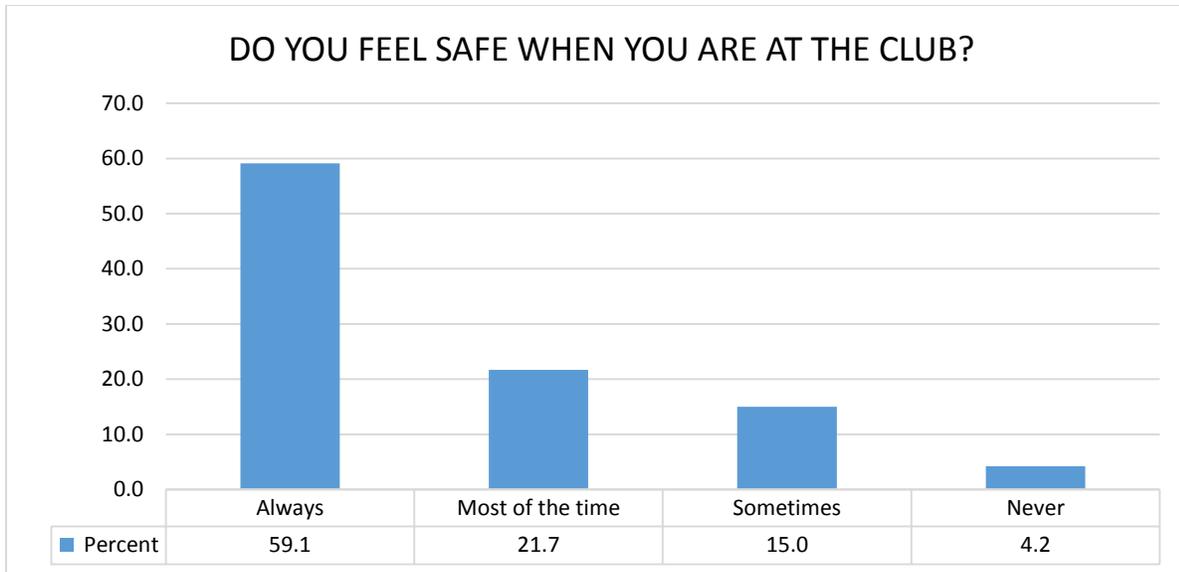
- **Medical cost:** Paid by victims, families, businesses and governments because of injuries suffered due to crime.

<sup>25</sup> The total estimates for the corresponding age group is 8301 and we know that based on the members' survey 98.3% of them attend the Clubs at least three times a week (the target group who are likely to receive the full benefits of attending the BGC). The differential rate between arrest with the Club and the control group was 5.54 per 1000 youth. This will lead to the following calculation:  $8301 \times 0.983 \times 0.03927 = 320$  youth saved from being arrested.

- **Stolen and damaged property resulting from crime:** In the NCVS, victims reported that their property was either stolen or damaged in 95% of property crimes and 18% of violent crimes, resulting in an average loss of almost \$700 per incident.
- **Loss of productivity to society:** This could be due to death or medical and mental disabilities resulting from crime.
- **Loss of work time** by victims of crime and their families. According to NCVS data, about 6% of victims missed time from work due to crime.
- **Loss of property values** in neighborhoods with high rates of crime.
- **Pain and suffering of crime victims:** This can occur to their families and friends, as well as communities plagued by crime.
- **Foster care and other social services costs:** This is to provide homes and other services for children of offenders.

The fact of the matter is that no one can really estimate the exact costs listed above as they may change from case to case. Therefore, it should be easily accepted that saving 320 juveniles from possible arrests has a monetary value many times over the estimate provided in this study.

Moreover, the services of the Clubs operate on another level as well. By providing various resources and access to positive role models in the Club staff, the Boys & Girls Clubs in Ventura County are helping these youth develop the decision-making skills necessary to make the productive and positive choices and avoid decisions that will negatively affect them and the community. In order to understand the positive influence the Clubs can have in keeping youth safe and away from negative influences, our survey to Club members contained the following two qualitative questions:



Given the fact that youth are most at-risk after school, it is important to understand whether youth participating in the Clubs feel safe while they are at the Clubs. A feeling of safety can reflect a sense of security against being victimized or security from negative influences. The results are overwhelmingly positive. More than eight out of ten respondents (80.8%) feel safe at the very least most of the time with the majority (59.1%) feeling safe always. Only a small fraction of 4.2% never feels safe when they are in the Club environment. Beyond the simple feeling of safety, it is important that Club members feel good about the adults working at the Clubs.



Some teens become engaged in criminal activity or gangs due to contact with negative role models who encourage destructive behavior. One way in which Boys & Girls Clubs in Ventura County may help youth make better choices is by exposing them to positive role models who are productive members of the community—such as those who work and volunteer for the Clubs. For role models to be effective, they must also be well-liked by Club members. These results from the Club member survey are promising. The vast majority of respondents (76.9%) indicate that they like the adults working at the Clubs at least most of the time with a proportion of just over 50% (50.4%) indicating that they like them always.

Given the intuitive reasons why the Clubs help reduce the likelihood of youth pursuing criminal activity, it is important to measure this impact quantitatively and to understand the related economic impact of this social intervention.

The positive, safe, and nurturing environment of **Boys & Girls Clubs throughout Ventura County saves the taxpayers nearly 21.5 million dollars in reduced criminal justice system spending.**

## 2.4) Development of Healthy Habits at a Young Age

Many people in the United States, including youth, suffer from a lack of exercise and poor nutritional habits which can often lead to obesity or chronic conditions such as diabetes. These negative lifestyle choices have severe health consequences that reduce one's length and quality of life. While poor health is a serious problem in and of itself, it is important to consider that it also creates economic problems by reducing individuals' economic productivity and increasing public and private healthcare costs. As such, any organization such as Boys & Girls Clubs that helps to improve nutrition and encourage exercise deserves to be acknowledged for any such positive contributions to the community.

*In 2009, the annual national "cost of obesity [was] \$147 billion and the people who are obese [spent] almost \$1,500 more per year on healthcare"*

---

The Centers for Disease Control and Prevention (CDC) has attempted to quantify the costs imposed on society due to obesity. Research in 1998 found that the costs of obesity were \$78.5 billion nationally ("Economic Consequences" Par.1). Recent studies indicate that these costs have only grown in the last decade and are expected to continue to rise. In a July 2009 press conference, Dr. Thomas Frieden, Director of the United States Centers for Disease Control (CDC), reported that the current cost of obesity is \$147 billion and that people who are obese spend almost \$1,500 more per year on healthcare (Reinberg 2009). Research by Kenneth Thorpe of Emory University suggests that if Americans continue their current patterns of obesity, the medical expenses of obesity will cost \$344 billion by the year 2018 (Hellmich 2009). Based on these calculations, an obese individual will incur an additional \$2,460 in medical expenses each year as a result of such healthcare expenses.

Data on childhood obesity is just as troubling. A 2005 research brief by Thomson Medstat Research found that the national cost of childhood obesity in terms of medical costs was \$11 billion for children with private insurance and \$3 billion for those with Medicaid. On a per capita basis, this means that the cost is \$3,700 per obese child on Medicaid and \$6,700 per obese child with private insurance. Accounting for inflation, the national cost for those with private insurance is \$12.75 billion or \$7,767 per capita in 2010. Similarly, in current dollars, the cost is \$3.48 billion or \$4,289 per capita for those with Medicaid.

This financial cost is significant and is accounted for by the fact that the likelihood of various medical problems increases with obesity, even amongst children. Obese children are two to three times more likely to be hospitalized. There is evidence that such hospitalizations are on the rise in recent years.

Between 1999 and 2005, the number of hospitalizations for youth between the ages of 2 and 19 with a primary or secondary diagnosis of obesity increased twofold from 21,743 to 42,429 per year (Hellmich 2009). These hospitalizations were for a variety of obesity-related ailments including “asthma, diabetes, gallbladder disease, pneumonia, skin infections, pregnancy complications, depression and other mental disorders.” Not only is hospitalization traumatic for these youth, but it is extremely costly given the great expense generally incurred in hospitals.

Given these costs, programs such as those in the Boys & Girls Clubs that encourage healthy habits are vital to the wellbeing of the community. All local Boys & Girls Clubs are members of the Boys & Girls Clubs of America (BGCA) and provide some sort of program which promotes physical exercise and/or nutritional education. One particularly popular program is BGCA’s Triple Play, a program which consists of a three-part objective of helping Club members improve their health and well-being through a focus on mind, body, and soul. Noteworthy components of the program include a “Healthy Habits” curriculum developed in partnership with the U.S. Department of Health & Human Services.

Certain programs such as organized sports leagues are known to provide additional health benefits to participants. One study explains that

“Appropriate and safe youth sports participation can provide a wide range of complementary health-enhancing benefits and gains in health-related fitness... regular participation in organized sports and consequent enhanced health and fitness in youth may have a positive impact on cardiovascular and other measures of health later in life... Sport and competitive-level specific advantages in cardiorespiratory fitness and general and functional muscular strength, endurance, and power have been shown in boys and girls across a variety of youth sports activities” (Bergeron 2007)

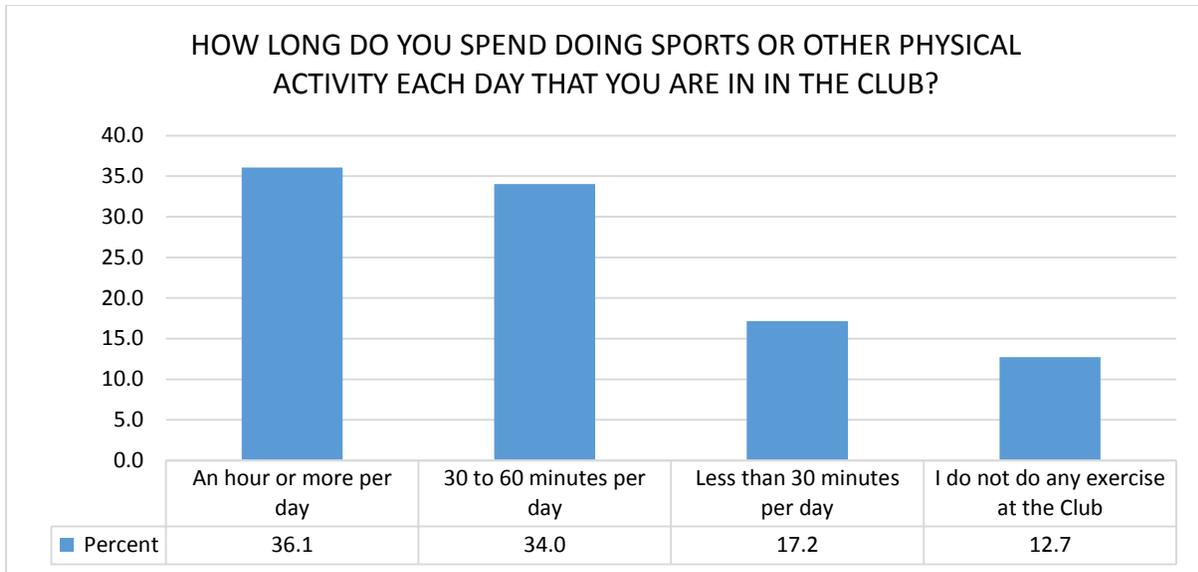
Such research demonstrates that youth participating in organized athletic programs at Boys & Girls Clubs not only develop better fitness skills and habits, but are likely to be more fit later in life. Such long-lasting health benefits may help counteract the troubling health and economic consequences of inactivity and obesity.

Improved health and wellbeing is not only good for its own sake. Research has shown that weight loss can yield significant economic benefits by reducing one's lifetime healthcare costs. Dr. Gerry Oster (et al) conducted a thorough study to measure the economic benefits enjoyed by moderately to severely obese individuals who reduce their body weight by 10%. The study took into consideration the relationship between Body Mass Index (BMI) and conditions such as type 2 diabetes, hypertension, hypercholesterolemia, stroke, and coronary heart disease (CHD); such conditions were the focus of the study since they account for 85% of obesity-related medical expenditures (Oster 1536). The study employed a model that considered the risks and costs associated with a certain BMI over the life of the individual in question. The model found that a sustained 10% reduction of BMI would reduce lifetime medical costs by \$2,300 to \$5,300 for men and \$2,200 and \$5,200 for women; the range in question depends on the individual's age and initial BMI.

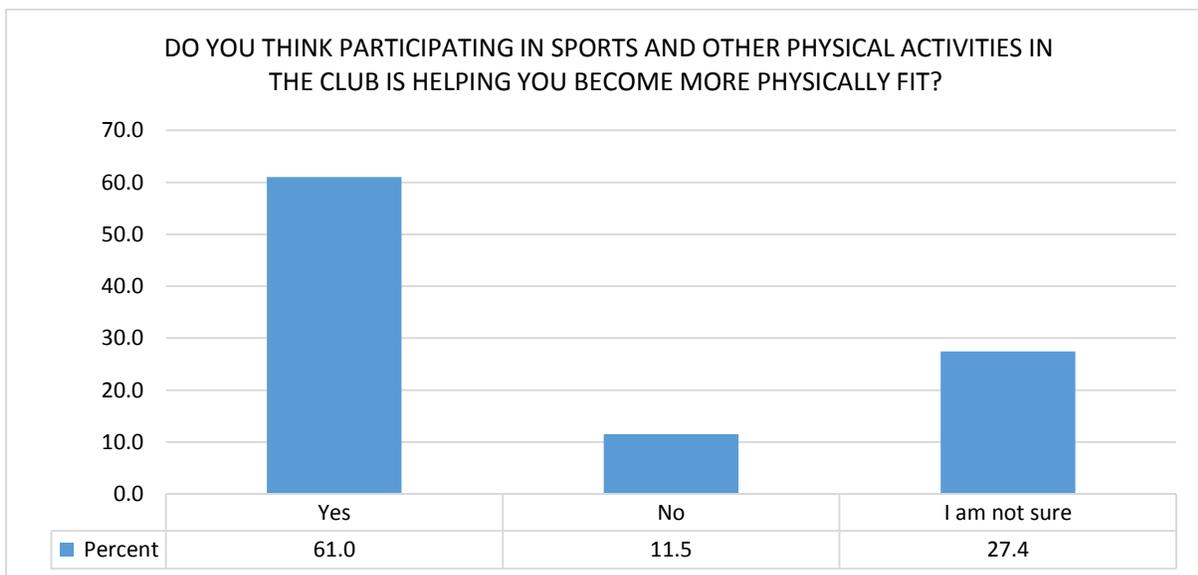
Although the scope of our study did not include a scientifically rigorous pre- and post-collection of data on Club members' BMI, there is good reason to believe that the programs offered by Boys & Girls Clubs encourage sufficient physical activity and improved nutrition to create long-term economic savings for the community.

Beyond the Oster study, others have verified the positive economic benefits that can be achieved through lifestyle changes. One study found that a reduction of daily caloric, sodium, and saturated fat intake can all result in medical cost savings (Dall 2009). For instance, the study calculated that a 100-kcal reduction in caloric intake across the country would reduce national medical expenditures by \$58 billion while a more extreme 500-kcal reduction would reduce such expenditures by \$111 billion. It is clear, therefore, that by helping to improve lifestyle decisions, Boys & Girls Clubs throughout California are creating an economic benefit to their communities. The impact of the Clubs is further illustrated in Club member surveys.

Several survey questions were designed to determine the impact of the Clubs on members' health and nutrition. The results were positive and indicate that Clubs are helping to improve the lifestyle choices of members.



A majority of survey respondents (70.1%) exercise for at least 30 minutes a day while at Boys & Girls Clubs. More than a third of the participants (almost 4 out of 10) 36.1% spend an hour or more exercising when they are in the Club environment. Such levels of regular, daily exercise are beneficial to the health of Club members and help them avoid the pattern of physical inactivity that leads many young people to become overweight or obese.



Club members also report a widespread belief that such physical activity is making them more physically fit. 61.0% believe this statement to be true while an additional 27.4% are uncertain. Only 11.5% of Club members do not believe that physical activities at the Clubs are making them more fit.

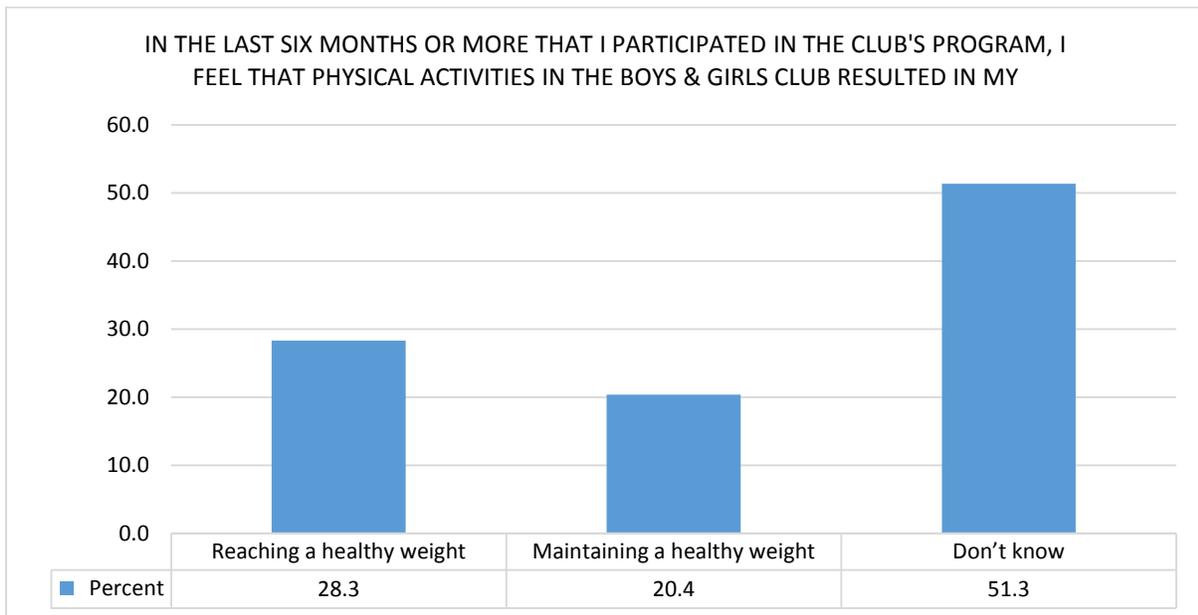
We used the percentage of those who agreed with the statement to find out how many of the more than 15,000 youth who are served by the Clubs feel that their exercise within the Clubs is helping them with staying fit.

*“With 9183 youth feeling fit and 7331 feeling that they are reaching or maintaining a healthy weight through participation in the activities of Boys & Girls Clubs in Ventura, it is clear that the Clubs are helping their members lead healthier and more physically active lives.”*

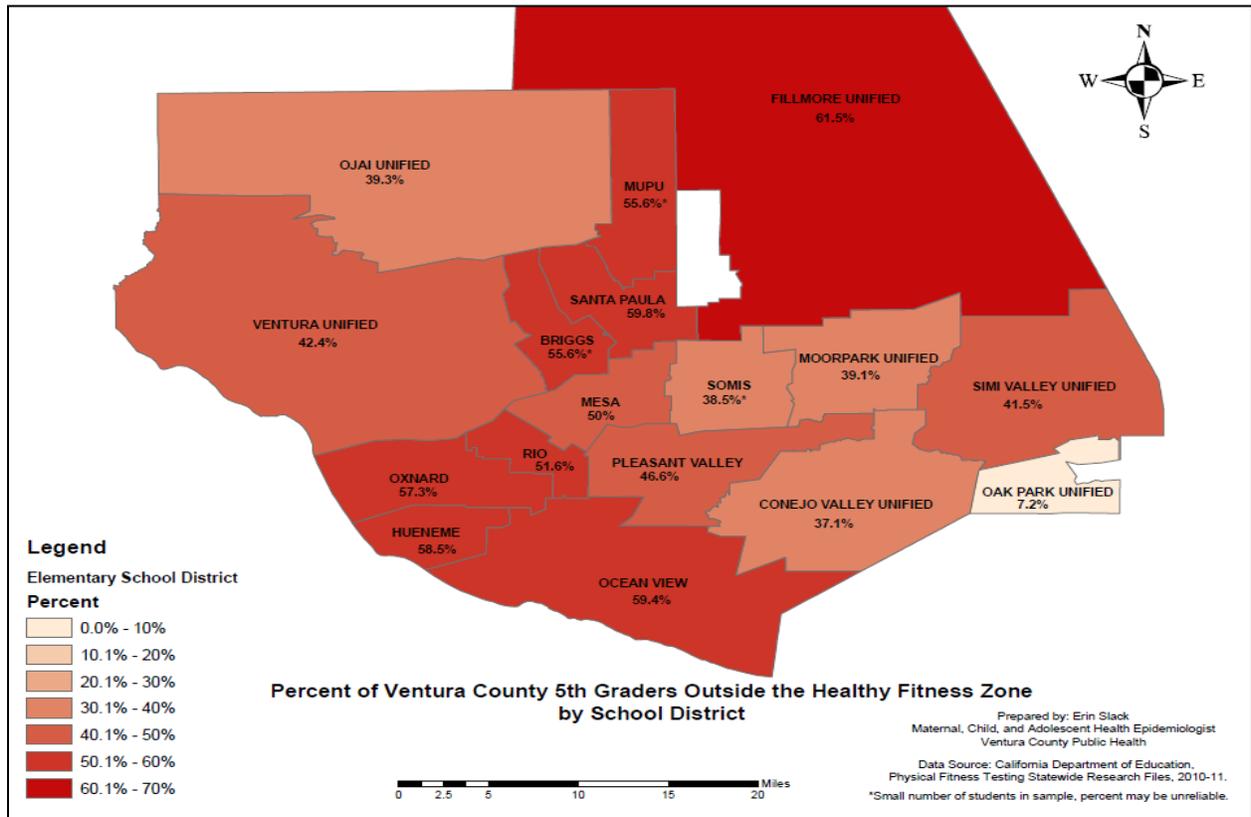
---

In addition to these questions, the survey included questions designed to determine whether Club members have reached a healthy weight. This line of inquiry was adopted since such findings are quite important given the nature of research discussed earlier in this section on the positive economic benefits of weight loss among overweight and obese populations.

The following chart shows 28.5% of the respondents believed that they reached healthy weight through the physical activities that they have participated in during the last six months of the program at their local Boys & Girls Club. An additional 20.4% believed such physical activities helped them to maintain a healthy weight. This is a remarkable assertion of an enormous achievement that, if we had more scientific information, would be translated into huge economic gains.



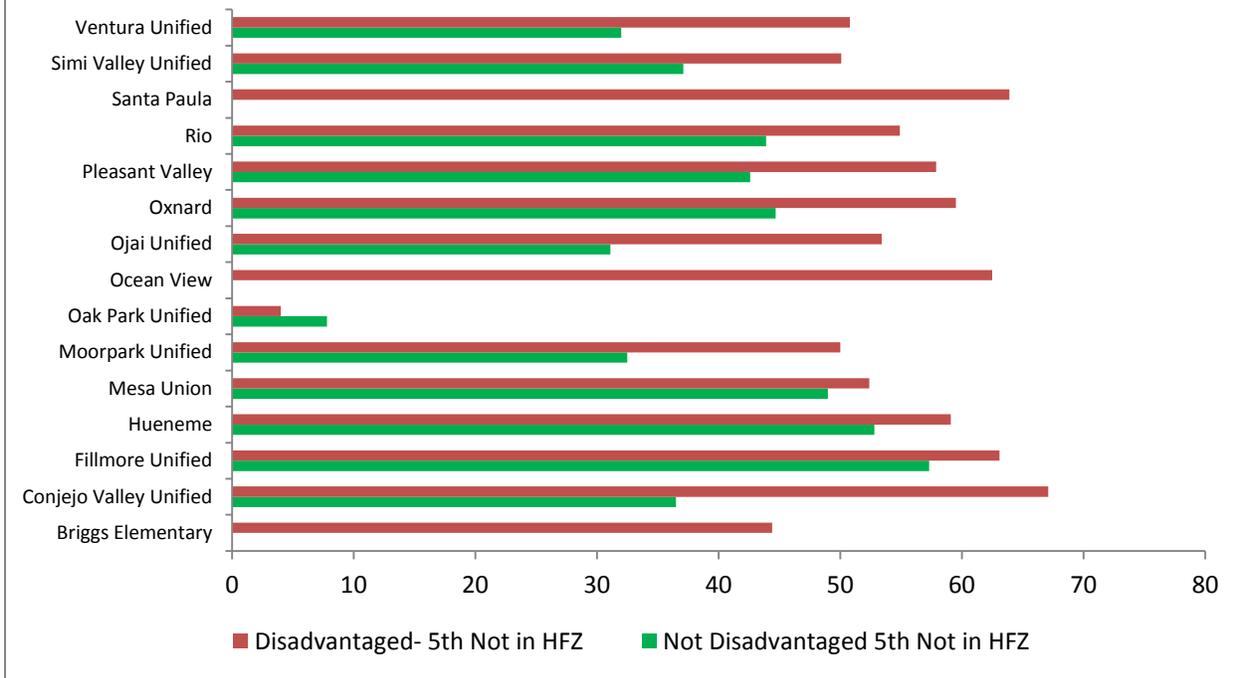
The information presented in the above chart comes as an important step taken by all the Clubs to help in reduction of what is clearly emerging as a devastating development for the health of our community and our children. The following chart presents the problem of being overweight or obese among children in each school district of the county.



**Source:** California Department of Education, 2011-2012

The following chart shows that in many communities, the overwhelming majority of our children are in danger of leading a life with multiple health and emotional problems, such as being overweight or obese. The following graph sheds more light on the same issue.

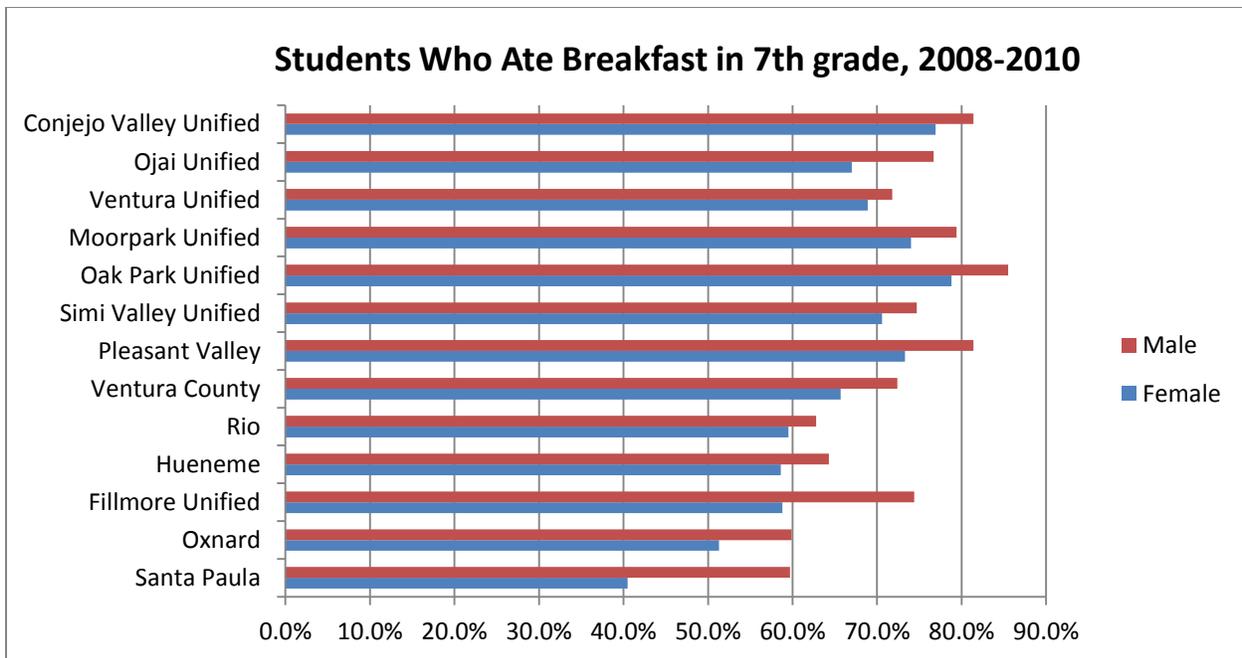
### Outside HFZ by Economic Status for 5th graders 2010-11 (in Percentages)



**Source:** California Department of Education, 2011-2012

The picture is very clear and it explicitly shows that the danger of being obese or over weight has a very strong correlation to the economic status of our children. It is vitally important to bear in mind that the Boys & Girls Clubs in Ventura County provide the greatest coverage for the same group of children.

Having breakfast proved to have a positive impact on the students' ability to learn, and the following chart shows that such ability is directly correlated to the economic status of the children and where they live and go to school.



**Source:** Kidsdata.org; 2014

<http://www.kidsdata.org/data/topic/table.aspx?loc=2%2c363%2c1615%2c1617%2c1618%2c1619%2c1620%2c1621%2c1623%2c1625%2c1626%2c1627%2c1628%2c1629%2c1631%2c1632%2c1633%2c1634%2c1636&wested=1&embed=standard&ind=304>

Proper nutrition over the course of one’s life can prevent many diseases such as osteoporosis, dental problems, high cholesterol, and high blood pressure.<sup>26</sup> Eating breakfast can promote proper nutrition. Children who have breakfast are more likely to have a healthy diet and engage in physical activities. This can help them maintain a healthy weight, improve their memory, mood, and school attendance.<sup>27</sup>

The fact that all Boys & Girls Clubs in Ventura County provide nutrition for the kids in their Clubs shows a very strong adherence to an important and highly effective policy for the health of our children.

In order to calculate the positive impact of physical activities within Boys & Girls Clubs in Ventura County, we added the total percentages of those who reached a healthy weight and managed to maintain it. This came to a rate of 48.7%. Applying this ratio to the total number of registered members who participated in Club programs will result in a total sum of 7331 youths who stated that through

<sup>26</sup> For more information see Breakfast First <http://www.breakfastfirst.org/pdfs/HealthAndAcademicBenefits.pdf>

<sup>27</sup> For more information see Center for Disease Control and Prevention (2008), Nutrition facts., <http://www.cdc.gov/HealthyYouth/nutrition/facts.htm>

physical activities in their Boys & Girls Clubs, they reached or maintained their healthy weight. The summary of the calculation is presented in the following table.

Total number of Club members who attended the Boys & Girls Clubs' programs in Ventura County	Percentage of Club members who have maintained or reached a healthy weight through participation in the physical activities during the last six months at their Club	Estimated number of Club members who have reached or maintained a healthy weight through participation in physical activities at their Club
<b>237,544</b>	<b>48.7%</b>	<b>7331</b>

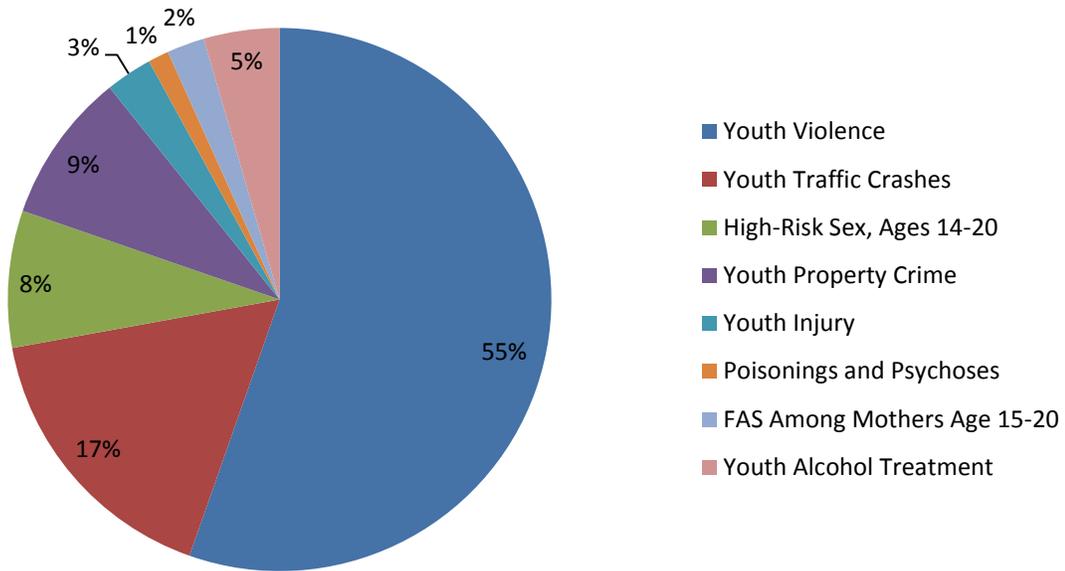
**With 7331 youths reaching or maintaining a healthy weight through participation in the activities of the Boys & Girls Clubs, it is clear Clubs are helping their members lead healthier and more physically active lives. Given the epidemic of obesity and inactivity that is crippling this nation's youth; such a program is particularly worthwhile.**

### **2.5) Benefiting from Reductions in Substance Abuse**

Tragic social and economic problems result from the use of alcohol by youths. Underage drinking is a causal factor in a host of serious problems, including: homicide, suicide, traumatic injury, drowning, burns, violent and property crime, high risk sex, fetal alcohol syndrome, alcohol poisoning, and the need for treatment for alcohol abuse and dependence.

According the latest available data, underage drinking cost California taxpayers \$6.8 billion in 2010. We do not have any source of information for the portion of this cost that is related to the incidents of underage drinking in Ventura County. Therefore, we used the same source and apply the cost in terms of per juvenile in California to the county as well. These costs include medical care, work loss, and pain and suffering associated with the multiple problems resulting from the use of alcohol by youths. This translates to a cost of \$1,811 per year for each youth in the state in 2010. Adjusting the cost for a moderate inflation rate of 3%, the cost per youth per year will reach **\$1921 at 2013** price levels. Excluding pain and suffering from these costs, the direct costs of underage drinking incurred through medical care and loss of work in California total \$2.9 billion each year or \$1.31 per drink (at 2010 level of prices).

**Costs of Underage Drinking by Problem, California 2010  
Components of the Total Cost (in %)**



Source: Pacific Institute for Research and Evaluation, 2010.

**Breakdown of the Costs of Underage Drinking in California, 2010 \$**

Problems	Total Costs (in millions)
Youth Violence	\$3,754.5
Youth Traffic Crashes	\$1,136.0
High-Risk Sex, Ages 14-20	\$553.1
Youth Property Crime	\$606.8
Youth Injury	\$188.2
Poisonings and Psychoses	\$83.9
FAS Among Mothers Age 15-20	\$151.5
Youth Alcohol Treatment	\$305.3
<b>Total</b>	<b>\$6,779.4</b>

Source: Pacific Institute for Research and Evaluation, 2010.

The table presents a breakdown of the cost of teenage drinking by problems and sheds light on a deeper concern of many, which is evident in the types of problems listed. It is the connection between underage drinking and a wide range of social and economic problems that we experience in many communities not only in California but also across the country.

Violence and traffic accidents attributed to alcohol use by underage youth in California represent the largest costs for the state. The combined cost of youth violence and traffic accidents amounts to 72% of total cost of underage drinking in the State of California. However, other problems contribute substantially to the overall cost.

Research shows that young people who begin drinking before age 15 are four times more likely to develop alcohol dependence and are two and a half times more likely to become abusers of alcohol than those who begin drinking at age 21.<sup>28</sup>

Unfortunately, we continue to experience widespread underage drinking in California. Approximately 1,372,000 underage youth in California drink each year. In 2007-2009, California students in grades 9-12 reported<sup>29</sup>

- 56.6% had at least one drink of alcohol on one or more days during their life.
- 19.9% had their first drink of alcohol, other than a few sips, before age 13.
- 34.0% had at least one drink of alcohol on one or more occasion in the past 30 days.
- 21.0% had five or more drinks of alcohol in a row (binge drinking) in the past 30 days.
- 7.5% had at least one drink of alcohol on school property in the past 30 days.

Underage drinking in California leads to substantial harm due to traffic crashes, violent crime, property crime, unintentional injury, and risky sex.<sup>30</sup>

- During 2009, an estimated 141 traffic fatalities and 7,552 nonfatal traffic injuries were attributed to driving after underage drinking.
- In 2009, an estimated 239 homicides, 114,500 nonfatal violent crimes such as rape, robbery and assault, and 179,000 property crimes including burglary, larceny, and car theft were attributable to underage drinking.

---

<sup>28</sup> For more information see Grant, B.F., & Dawson, D.A. (1997). Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse* 9: 103-110.

<sup>29</sup> For more information see Center for Disease Control (CDC). (2010), Youth Risk Behavior Surveillance System (YRBSS).

<sup>30</sup> Miller, TR, Levy, DT, Spicer, RS, & Taylor, DM. (2007), Societal costs of underage drinking *Journal of Studies on Alcohol*, 67(4) 519-528.

- In 2007, an estimated 28 alcohol-involved fatal burns, drowning, and suicides were attributable to underage drinking.
- In 2009, an estimated 2,820 teen pregnancies and 115,282 teens having risky sex were attributable to underage drinking.

These statistics indirectly demonstrate the overall cost of underage drinking in the state.<sup>31</sup> However, it is very difficult to assign the cost based on the CDC Youth Risk Behavior Survey in a clear and objective manner. This difficulty arises from several observations. The first issue is that risky behaviors are wrong regardless of the degree of the risk. In other words, each time a 9<sup>th</sup> grade student drinks, there is a cost no matter the overall level of alcohol consumed. If we accept the validity of such an argument, we must assign a cost whenever an underage youth drinks. While this argument may have certain elements of relevance, it is hard to apply it with such a level of severity. It is necessary to establish some standards and threshold for defining what level of abuse constitutes a level that causes the cost associated with substance abuse among various groups of youth. We should establish and apply levels of high risk with which we can identify frequent users and assign the cost to them compared with other users that register a much lower level of use. This is a task that requires the expertise of a public health professional or criminologist. The California Attorney General's Office conducted a study into this matter in 2007 with the help of the Department of Education and Department of Alcohol and Drug Abuse.<sup>32</sup>

The authors of the aforementioned study argue that the field of adolescent substance abuse research has long been challenged by the lack of a clear consensus on how to define "heavy use," "misuse," or "abuse" because these are relative concepts. For example, some people consider any recreational drinking by youth to be abuse solely by virtue of its illegality. Complicating the determination of abuse among youth is the delay in the development of persistent adverse physiological consequences that are typically used to identify abuse and dependency. For example, alcoholism is difficult to define for any population and it is found rarely among young people when measured by adult criteria. They argue that frequency rates, such as daily and weekly use, are helpful in identifying heavy users, but can by themselves be misleading because they overestimate the potential harm to young people who may use

---

<sup>31</sup> Pacific Institute for Research and Evaluation, 2010

<sup>32</sup> See Gregory Austin, Ph.D., Rodney Skager, Ph.D., Jerry Bailey, M.A., and Scott Bates, Ph.D. Tenth Biennial California Student Survey 2003-2004 Heavy Alcohol and Drug Use, Jointly sponsored by California Attorney General's Office California Department of Education and Department of Alcohol and Drug Programs, 2007

often, but in small amounts. This is especially a problem with alcohol (e.g., a small glass of wine might be consumed once a week with the family meal). Therefore, measures that combine frequency and level of use are more useful. Assessment of heavy drug use is even more complex because it is harder for users to gauge the amount consumed per session (the concentration of active ingredients in illegal drugs varies widely).

In an effort to determine the level of alcohol misuse, Ellickson et al. (1996) utilized a panel of ten experts to provide guidance. Most of the panel felt that frequency and quantity should be considered together in determining misuse, and there was a consensus that experiencing use-related problems or engaging in certain high-risk behaviors once or twice in the past year constituted misuse. However, there was disagreement over what constitutes cutoffs. Therefore, they looked at a range of definitions with different cutoffs.<sup>33</sup>

In most studies, four types of data are used typically to estimate heavy use: (a) high-risk patterns of use; (b) use-related problems; (c) dependency-related experiences; and (d) cessation-related efforts. Some behaviors are intrinsically risky and associated with abusive patterns. For example, two common demarcations of heavy drug use are: (a) frequent use of marijuana (once per week or more often); and (b) any use of other “hardcore” illicit drugs (e.g., methamphetamines), because they are more dangerous and less socially acceptable and available, thus indicating a greater level of drug involvement.

For example, even small amounts of alcohol may produce feelings that are interpreted as drunkenness by people who may have never actually been “drunk” as defined by their blood alcohol content or mental and physical changes. Still, the rate of occurrence may help to distinguish the naïve from more seasoned. Students were also asked if they had ever experienced acute adverse pharmacological effects associated with consuming too much (e.g., blacking out, memory loss).

Heavy users typically engage in polydrug use, which is defined as using two or more substances (excluding tobacco) at the same time in the past six months (e.g., alcohol and marijuana). Polydrug use is considered particularly risky because of the possible synergistic interactions that may result when

---

<sup>33</sup> See Ellickson et al., "Does Alcohol Advertising Promote Adolescent Drinking? .... Associations Between Drug Use and Deviant Behavior in Teenagers, 1996

different drugs are used together. It may produce unpredictable combined pharmacological changes in users for which they are not mentally prepared or emotionally mature enough to handle.

Another potential indicator of heavy involvement is using drugs or alcohol at school or during the school day. An inability to forego use during school, despite the inherent risks, suggests a level of involvement that may reflect psychological and/or physiological dependency, as well as disengagement from school. Even if adolescents do not think they will get caught, it is high-risk behavior in any case, due to the potential ramifications of getting caught, and the adverse pharmacological effects on learning are indisputable.

A second common criterion for assessing the level of heavy use is to define it in practical terms of problem intervention: those students who manifest that use have become detrimental to themselves, others, and society and, therefore, warrant services to reduce or stop use. This is known as use-related problems indicating heavy substance abuse.

A third area of measurement relates to indicators suggesting dependency or a high level of involvement in a substance-use lifestyle. Another criterion for dependence in the (*Diagnostic and Statistical Manual version IV*) DSM-IV is a persistent desire or unsuccessful efforts to cut down or control substance use.<sup>34</sup>

Not all the surveys used allow for all three areas of estimating heavy use and long-term problems that may come from youth substance abuse, and our survey did not explore the issue of youth substance abuse in such a detailed manner. Nonetheless, it is important to know that detecting and arguing objectively about youth substance abuse does require a much higher level of scrutiny and refined research before going ahead and assessing monetary costs related to youth positively impacted by the intervention of Boys & Girls Clubs and others as control groups in their communities at large.

In order to relate the cost of underage drinking to our study, we compared the findings of our survey in order to estimate the economic benefit of attending the Boys & Girls Clubs in Ventura County with regard to reduction of the cost of substance abuse. We used the latest available findings for the state of

---

<sup>34</sup> For more information see American Psychiatric Association. Also the following link [http://en.wikipedia.org/wiki/Diagnostic\\_and\\_Statistical\\_Manual\\_of\\_Mental\\_Disorders](http://en.wikipedia.org/wiki/Diagnostic_and_Statistical_Manual_of_Mental_Disorders)

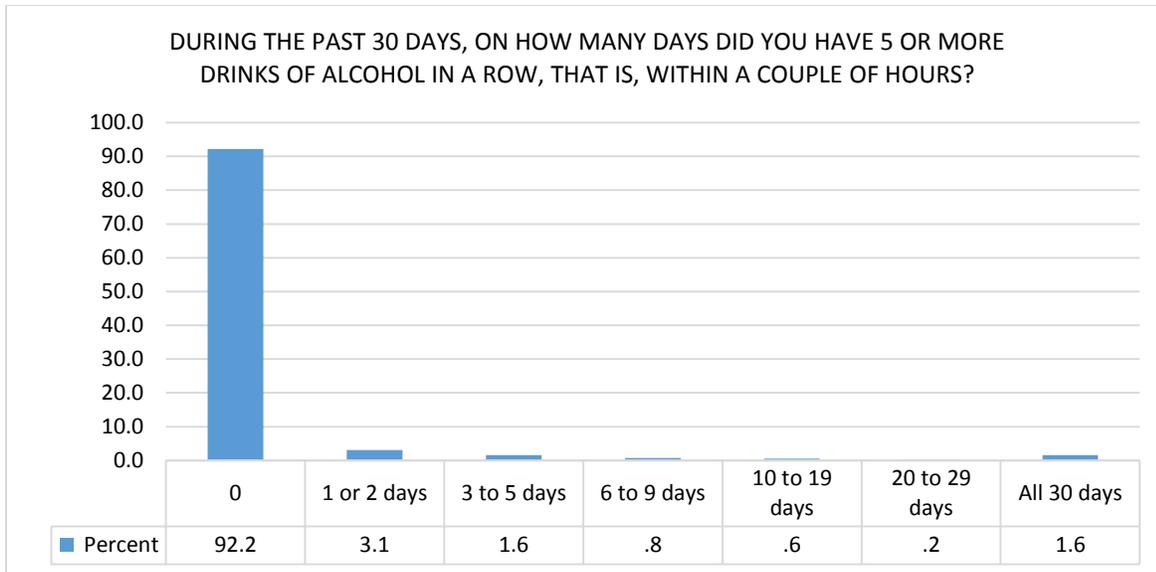
California based on the CDC's latest findings. The following charts show some of the most important findings from our survey.



The outcome presented by this graph shows that 11.0% of the respondents said they had one or more drinks during the last 30 days and 89% said that they did not have any drink of alcohol in the last 30 days. We made a comparison between the reply from our Club members and those answered the same question given to them by the California Department of Education. The latest available information was from 2008-2010 surveys. The results of the surveys are given for 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> graders. We used the data and found the overall rate of response based in calculating the weighted rate of average response.<sup>35</sup> The rate countywide was 75% who said that they did not have any drink in the last 30 days and this shows that 25% of the respondents did so. This shows a gap of 14% between the respondents of Boys & Girls Clubs in Ventura County and their peers within the county.

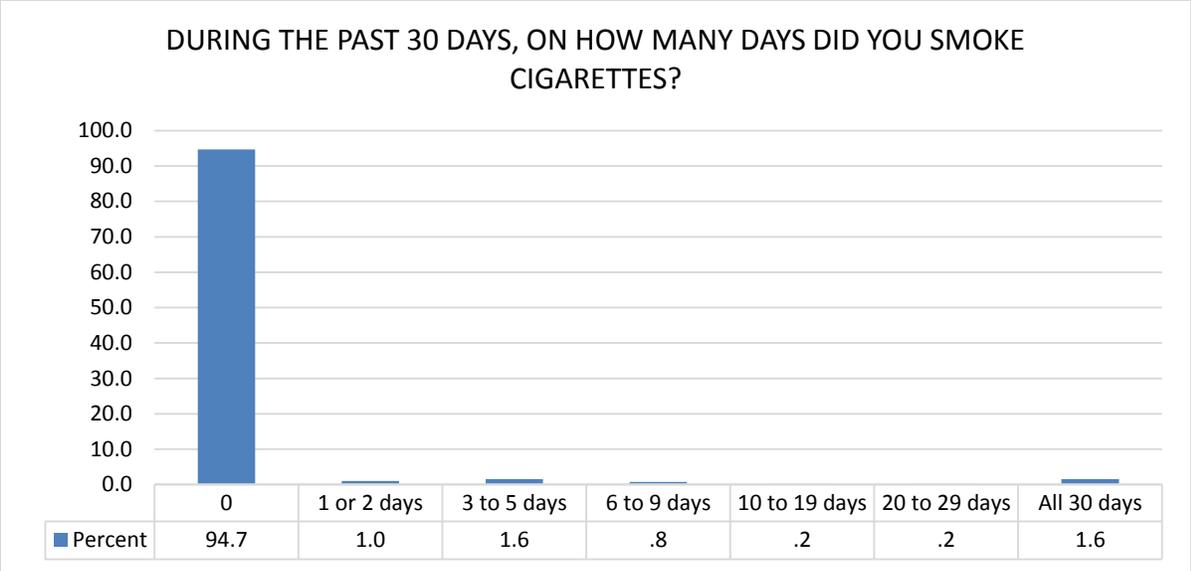
On the issue of binge drinking, the outcome from our survey shows the following.

<sup>35</sup> For more information see California Healthy Kids Survey, Ventura County Secondary 2009-2011 Main Report.



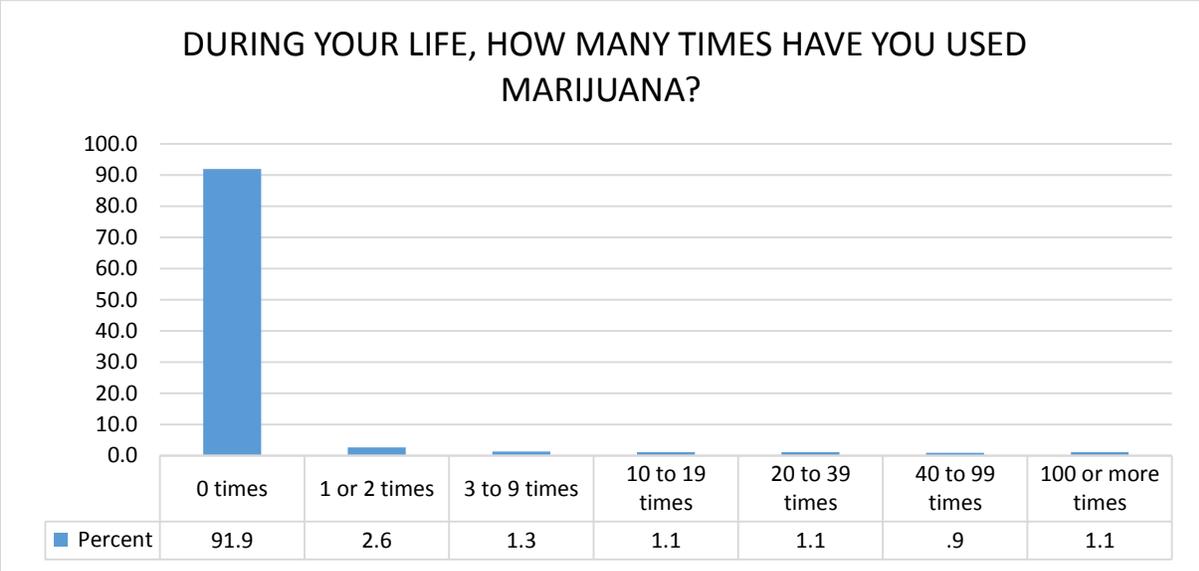
Our survey shows that 7.8% of survey respondents had at least one occasion of binge drinking during the last 30 days, whereas based on the report for Ventura County, this rate was 84%. This means that the rate of those who never had any experience of binge drinking in the Clubs was almost half of their peers within the county.

These comparisons clearly indicated that the behavior of Club members is far better than the youth of the county as a whole. We made the countywide comparison between the findings of our study with regard to the use of tobacco. The following chart exhibits present findings from Club members' surveys.



Our survey shows that 5.3% of the respondents had smoked at least one day during the last 30 days. According to our calculation based on the available data for the peer groups in Ventura County, 9.0% of the youth smoked during the last 30 days, again a ratio of close to twice as much as the youth surveyed within the Clubs.

We also made the same comparison between behaviors of Club members with regard to use of drugs. The following charts present our findings and the direct comparison between our findings and those countywide.



The above chart shows that 91.9% of Club members have never tried marijuana. The response rate within the county was much higher. The ratio countywide was 72%. This indicates that about 8% of the respondents in the Club have smoked marijuana in their lifetime as opposed to 28% countywide.

The survey of drug use and its comparisons clearly shows that youth in Ventura County in almost every category use drugs, drink alcoholic beverages and tobacco in much greater proportion than those who attend Boys & Girls Clubs in Ventura County.

Finally, we need to make some basic assumptions about how the cost of substance abuse among the Club members compares to their peers statewide. Our research showed that in almost all categories of substance abuse, Club members' abuse rate is much lower than the average youth in Ventura County. While we can clearly state that the Club members show consistently better behavior, it is very hard if not impossible to argue definitively about the cost implied by the Club members versus their other peers statewide.

The obvious point is that Club members show a much lower tendency to abuse substances such as tobacco, marijuana, and alcohol; the abuse of these substances is the cause of much of the economic cost of substance abuse by youth in the county. In all of these cases, the Club members' abuse rate was around 50% of the state level. In the case of drug abuse, the ratio is even lower than half. We therefore argue that youth who do not participate in Club programs are twice as likely to incur economic costs to their community due to substance abuse as are youth who participate in their local Clubs programs.

As shown earlier, the average **cost of underage drinking per year for each youth equals to \$1,921 in 2013 level of prices**. Our argument is that the average cost of a drinking problem per Club member in that age category is half of this amount, or \$960.5 per person, in the age group of 10 to 20 years old.<sup>36</sup> This suggests a savings of \$960.5 per youth 10 to 20 years of age as the positive economic impact of the Clubs in the county as a whole.

---

<sup>36</sup>It should be understood that change of age category does not make an important impact on the overall cost of underage drinking. By reducing the age category the cost per person will go up but on the other hand the total number of youth identified in the age group will rise. By enlarging the age group the cost per person will go down but the number of youth in that category will rise. The results of the multiplication will be more or less the same.

The total number of Club members in this age category (we added the number of Club members from age 10 year and older) was about 8301. Bearing in mind that only 98.3% of the registered members attend the Clubs three or more times a week based on our survey, the total number of youth affected by this positive impact will amount to  $8301 \times 0.983 = 8160$  youth. Using a savings of \$960.5 per youth in this age category, we calculated total positive savings of \$7,837,680 due to programs offered at Boys & Girls Clubs in Ventura County.

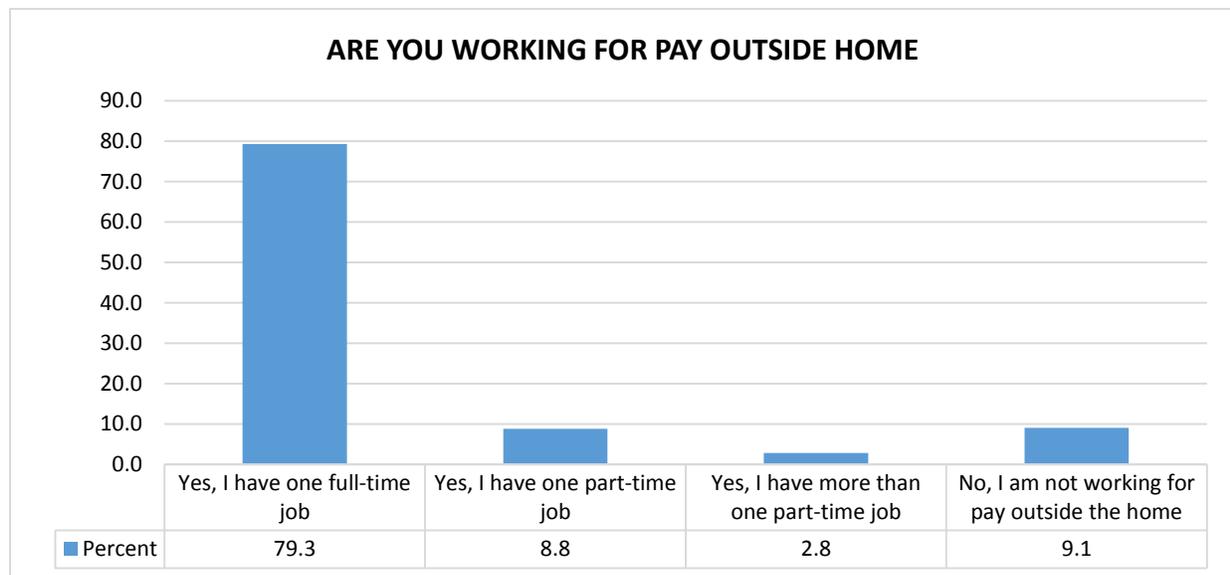
Cost of underage drinking per youth aged 10 to 20 in California	Cost of underage drinking based on our findings per Club members in the same age group	Savings per youth of the same age category due to impact of Boys & Girls Clubs in Ventura County	Total number of Club members between ages 10 and higher in Ventura County	Total savings due to better youth behavior and habits regarding underage drinking among Club members
<b>\$ 1921</b>	<b>\$960.5</b>	<b>\$960.5</b>	<b>8160</b>	<b>\$7,837,680</b>

Ideally, we need to add the savings derived from better behavior in avoiding tobacco, marijuana and other drug use. Unfortunately, there was no hard data based on current research that we could use to establish a convincing basis for such calculations. Our survey clearly indicated that Club members have more appropriate behavior towards the use of both tobacco and marijuana. Most of the harm of tobacco usage comes at an older age and much of the cost of drug abuse is born out of higher legal costs that we have taken into account through the cost of juvenile crimes in the earlier part of our study. There is, however, a much greater cost associated with drug abuse in terms of health cost and loss of productivity that we could not gather and allocate with some level of accuracy to the juvenile segment of the total cost of substance abuse. We can therefore clearly state the savings calculated in our study is a fraction of the savings that the Boys & Girls Clubs in Ventura County create with regard to substance abuse through their performance and their positive impacts on their members and families.

### 3) Economic Impact of Clubs to the Broader Community

#### 3.1) Ability of Boys & Girls Clubs to Help Parents Work and Go to School

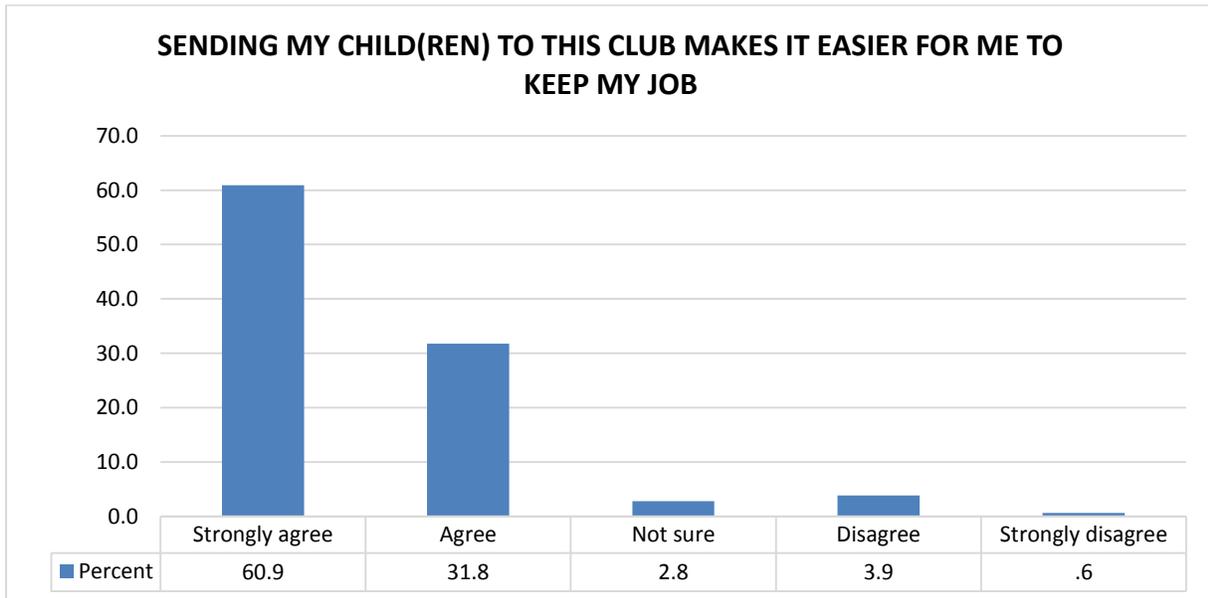
The positive influence of the Boys & Girls Clubs is not limited to the children that they serve directly. The Clubs also have an immense impact on the lives of parents who are working and pursuing an education. Many child-care services are cost-prohibitive for the families served by the Clubs. Without access to a safe, high-quality facility for their children, many parents would be faced with a tough decision: they would either have to stop working to care for their children or they would have to risk leaving their children without supervision after school. The degree to which this is an important decision for parents is illustrated in the following diagram:



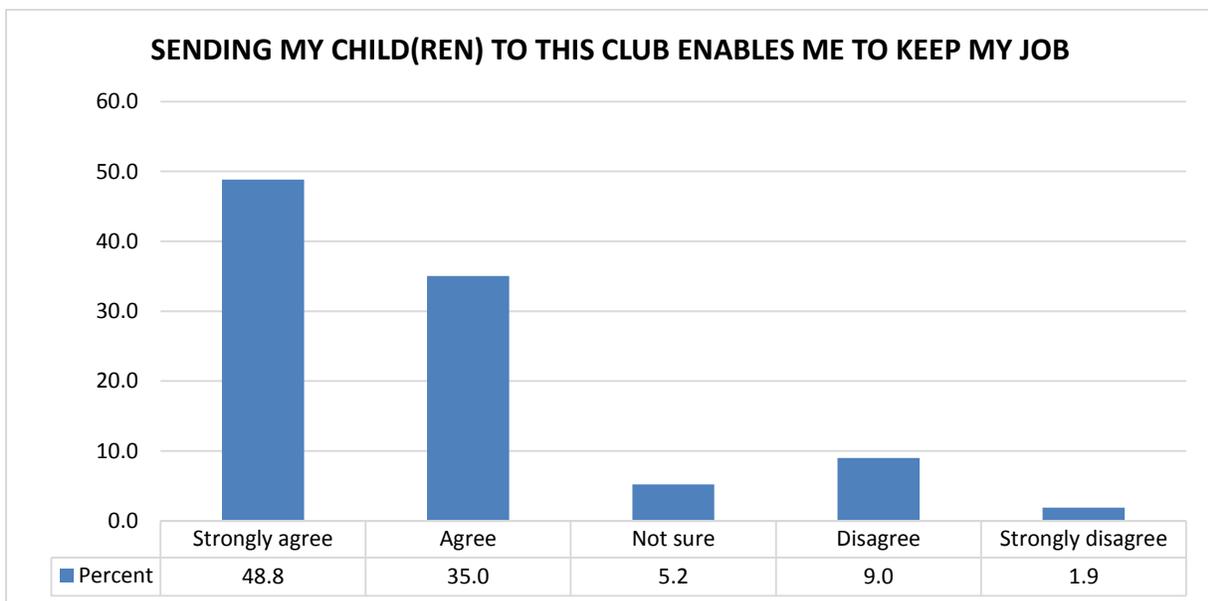
As the data from surveys distributed to parents demonstrates, the Clubs serve working parents who are likely to need after-school supervision for their children. The vast majority (79.3%) have a full-time job while an additional 11.6% of parents have one or more part-time jobs. This shows that 90.9% of the parents work in order to provide for their families.

By allowing parents to leave their children in a safe, supervised environment, the Clubs are enabling parents to be more productive members of the community. The Clubs, subsequently, must receive the necessary recognition for the positive impact this has had on the community. In order to better understand and quantify this benefit, the survey distributed to parents included several questions designed to understand the role the Clubs have in allowing them to work or further their education.

The first question from the survey which we will consider asked parents whether sending their child(ren) to the Clubs “enabled me [them] to keep my [their] job.” The strong wording of this question was specifically designed to be as clear as possible about the direct relationship their children’s attendance at the Club has on the parent’s ability to keep their job. The results are as follows:

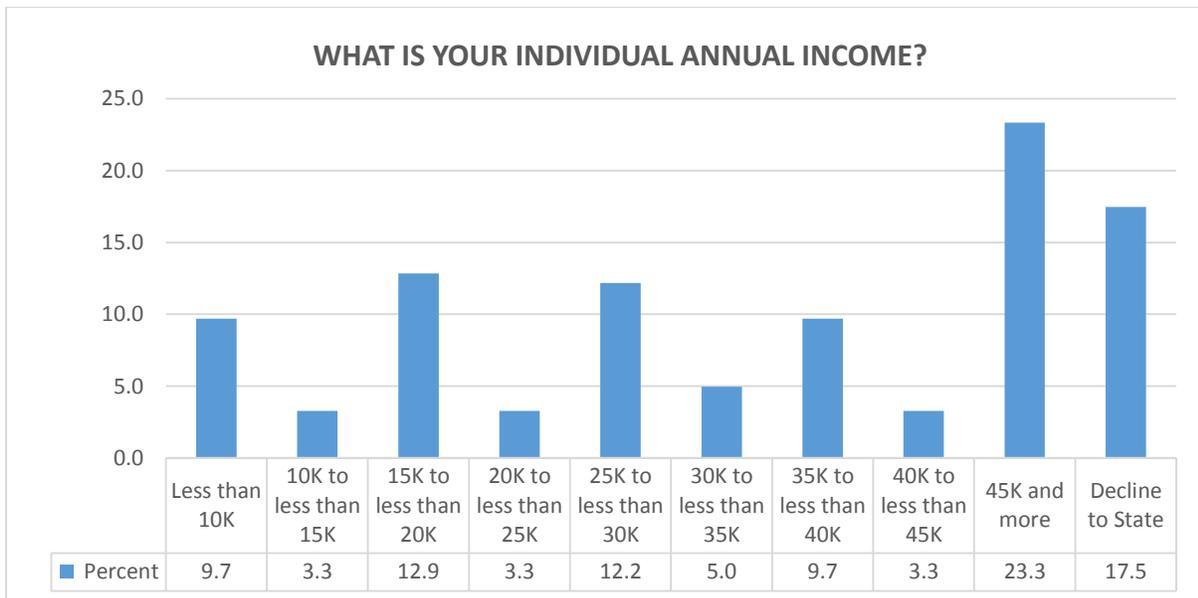


The above chart shows that having the Boys & Girls Clubs in Ventura County makes it much easier to keep their jobs. However, this does not tell us if having the Club is a vital element for them to be able to keep their jobs. The next question goes much further.



The survey responses indicate that 48.8% of parents strongly agree while an additional 35.0% agree that sending their children to the Club enabled them to keep their job. While there is a case to be made that both of these groups of parents have been able to keep their job as a result of the Clubs, we will only consider the 48.8% who strongly agreed with the statement. Due to their strong agreement, it is reasonable to assume that without the Clubs these individuals would not be able to keep their work. Based on this, we will calculate the monetary benefit created by having these parents remain in the workforce.

We asked the parents about their level of income (salary and wages) and we received the following information.



We used the data presented in the table to calculate an average individual income level for the group as a whole.<sup>37</sup> This calculation allowed us to estimate the average income of individuals responding to the survey to be \$28,467.

The next step in this analysis is to consider the number of parents who receive this benefit. Based on in-house questionnaires, we have 15,054 kids who are served by the Clubs. The parents' survey helped us

<sup>37</sup> We eliminated the percentage of those who declined to answer and adjusted the rate of responses accordingly.

to calculate that the rate of children attending the Clubs per household is about 1.45 children per parent. Using these numbers we calculated the total number of families within the county to be 10,367 (15,054/1.45). We used the data we obtained or calculated to find the total annual earning that is estimated to become possible because of the Clubs and the assistance they offer parents.

Total number of families served by the Boys and Girls Clubs in Ventura County <sup>38</sup>	Percentage of families that at least one member believes that sending their children was the reason for him/her to be able to work and keep a job	Total number of parents who have directly benefited through keeping their jobs and being able to work.	Average per annum gain from keeping an average job by parents of Club members	Total annual additional earnings to families of members because of sending their children to Boys and Girls Clubs in Ventura County
<b>10367</b>	<b>48.8%</b>	<b>5059</b>	<b>\$28,467</b>	<b>\$144,014,553</b>

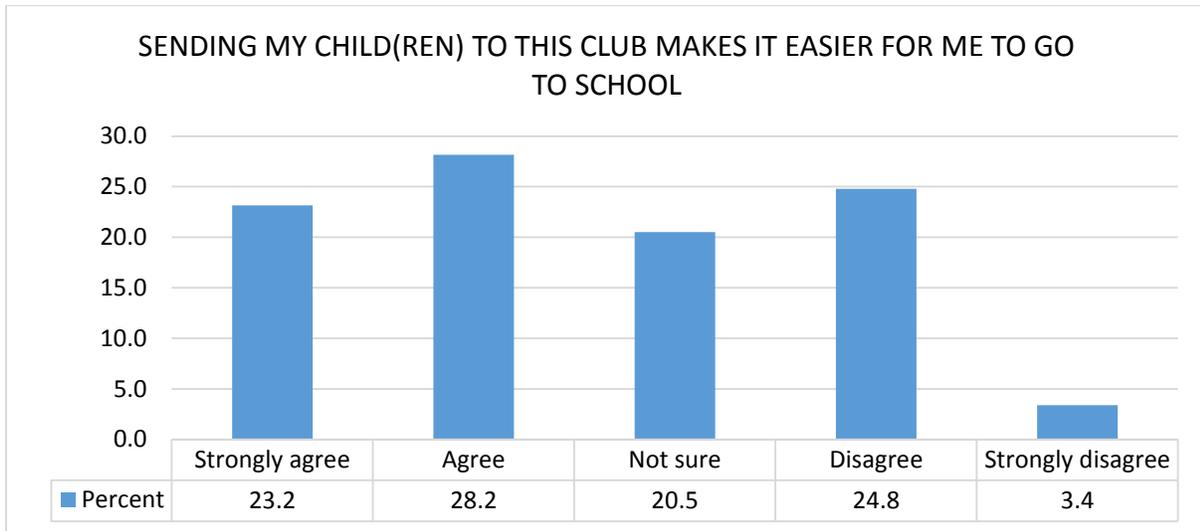
By enabling 5059 parents to work and earn on average \$28,467 per year, the Boys & Girls Clubs in Ventura County are enabling these parents to generate \$144,014,553 in additional annual earnings for their families. This is a tremendous service that sustains a great deal of economic activity across the county. Without the Clubs, these parents would be unable to earn this income.

Beyond helping parents pursue work, the Boys & Girls Clubs are also helping some parents to further their education. While some parents need to work during the after-school hours, others are pursuing a higher degree or certificate that will help them with their career. Such education will ultimately allow them to become more productive members of the workforce. Without the Clubs, this improved

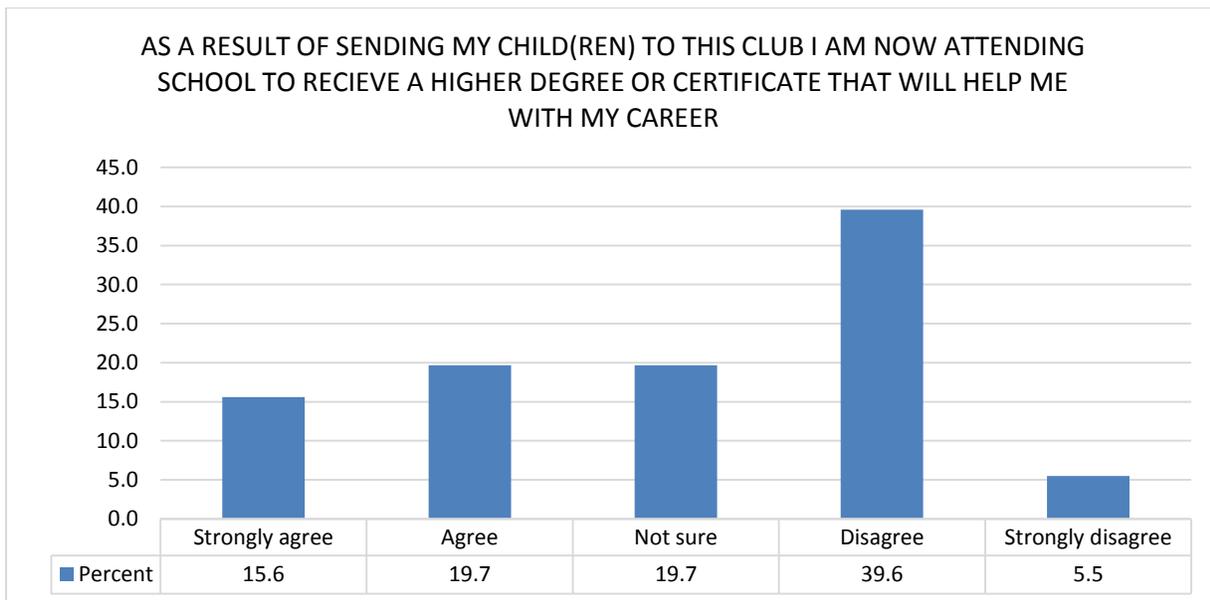
---

<sup>38</sup> In order to calculate the number of parents we calculated the average number of children sent by parents to the Club. This average was based on the response of parents to a survey question asking them how many children they had in the Clubs.

productivity would not be possible. As such, the parent survey included the following question designed to understand how many parents derive this benefit from the Clubs:



The above chart shows that 51.3% of parents agree or strongly agree that sending their children to the Boys & Girls Clubs made it easier for them to go back to school. The next chart shows that a significant proportion of such parents have already embraced the opportunity and are attending school to upgrade their education and skills, which can help them to earn more and help their family further.



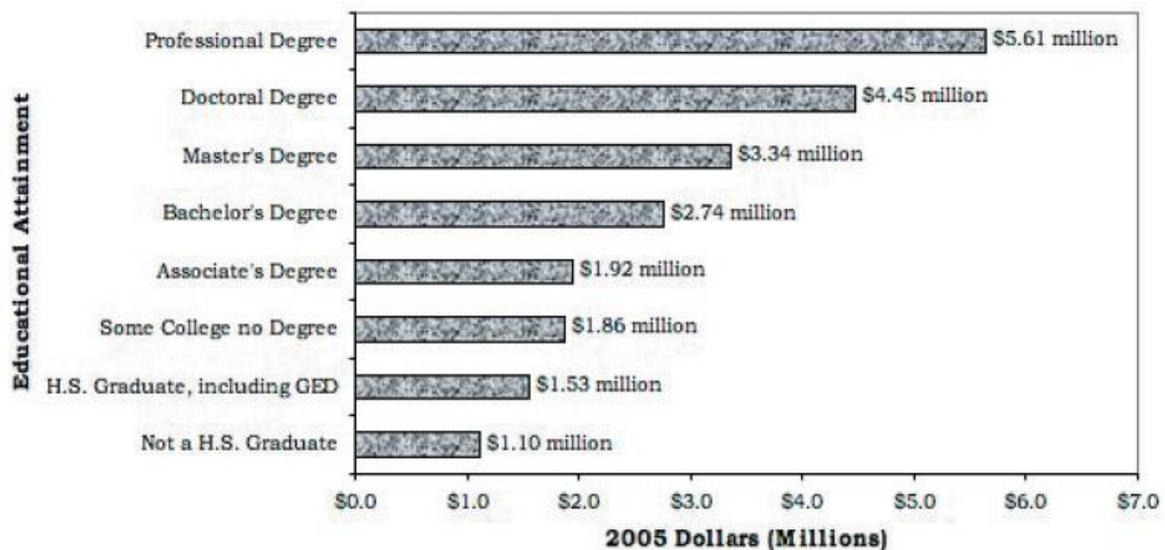
According to parent respondents, 19.7% agree while an additional 15.6% strongly agree that it is because of the Clubs that they are “attending school to receive a higher degree or certificate that will

help me [them] with my [their] career.” The following table summarizes the positive impact of the opportunity to pursue further education:

Total number of families served by the a Boys & Girls Clubs in Ventura County	Percentage of families that at least one member believes that sending their children was the reason for him/her to be able to study and upgrade his/her skill	Total number of parents who have directly benefited through upgrading their skills
<b>10367</b>	<b>15.6%</b>	<b>1,617</b>

Based on the survey results, 1,617 parents are able to pursue further education or certification that will help them further their career. Unfortunately, existing research does not exist that can help develop an estimate of the value of this adult education for these parents. As such, an exact monetary value cannot be determined. However, it is clear that the benefit is likely to be significant simply by reexamining the value of higher education that has been discussed earlier in this report.

**Figure 1  
Synthetic Work-Life Earnings Estimates  
for Full-Time Year-Round Workers by Educational Attainment, 2005**



**Source:** Mark Kantrowitz (2007), The Value of Higher Education, Journal of Student Financial Aid, Vol. 37, Issue 1

As data from the above table shows for every level of higher education, an individual earns significantly more over the course of a lifetime. For instance, if a parent who is able to earn an associate's degree as a result of sending their children to the Boys & Girls Clubs in Ventura County, their lifetime earnings will increase from \$1.92 million to \$2.74 million on average. Although we are not able to put an exact value on this benefit, Census data suggests that the benefit is very significant.

### 3.2) Economic Impact of Clubs' Expenditures on Increasing Regional Production and Creating Jobs

While other sections focus on the economic impact generated by the social interventions of the Boys & Girls Clubs, this section will focus on the impact of the Clubs' operating and capital expenditure budgets in the region measured in terms of output and employment.

Economic impact studies require a large amount of data to capture all the economic changes that an institution can bring to a community. The first set of data for this purpose consists of information that presents the direct flow of resources from an institution to the community. This includes budgetary and capital expenditures of the institution in the community. The second and equally important component of the economic impact of an institution is comprised of the flow of resources to that specific community that would have not be coming to that community if the concerned institution was not in existence. This component will include the impact of resources that are generated as byproducts of the institution in question.

We constructed an input-output model to calculate the economic impacts of the Boys and Girls Clubs across the county. The principal purpose of using an input-output framework is to analyze the interdependence of industries and various economic entities and organizations in an economy through market based transactions. Input-output analysis can provide important and timely information on the interrelationships in a regional economy and the impacts of changes on that economy.

We chose IMPLAN (Impact Analyses for Planning) to identify and measure the economic impact of the agency.<sup>39</sup> IMPLAN employs a regional social accounting system and can be used to generate a set of balanced economic/social accounts and multipliers. The social accounting system is an extension of input-output analysis. Input-output analysis has been expanded beyond market-based transaction accounting to include non-market financial flows by using a Social Accounting Matrix (SAM framework).

---

<sup>39</sup> IMPLAN is a computer software package that consists of procedures for estimating local input-output models and associated databases. The acronym is for *Impact Analyses and Planning*. IMPLAN was originally developed by the U.S. Forest Service in cooperation with the Federal Emergency Management Agency and the U.S. Department of the Interior's Bureau of Land Management to assist in land and resource management planning. Since 1993, the IMPLAN system has been developed under exclusive rights by the Minnesota Implan Group, Inc. (Stillwater, Minnesota) which licenses and distributes the software to users. Currently there are hundreds of licensed users in the United States including universities, government agencies, and private companies.

The model describes the transfer of money between industries and institutions and contains both market-based and non-market financial flows, such as inter-institutional transfers.

This economic analysis measures the cumulative effects of spending brought about by the activities of the Boys & Girls Clubs within its region. This analysis, like any other with similar research, aimed to measure the following impacts:

- ✚ **Direct effects:** Budgetary, capital, and other related expenditures that create jobs and add to the production capacity of our region.
- ✚ **Indirect effects:** The economic activity generated among the region's businesses to meet the Clubs' demand for various products and services used for its operations.
- ✚ **Induced effects:** The effects of expenditures made in the city/county/state by Club employees and others who receive income because of their work in relation to the activities of the institution as a whole.

Using this model, we calculated the explicit economic impacts of the Clubs' annual budgetary and capital expenditure, and volunteers' work through increased regional income and jobs on the regional levels. In order to generate the relevant findings, we collected data regarding the Clubs' regular and capital expenditures through questionnaires distributed to and completed by Club managers in addition to financial statements provided by the management to our research team for analysis. For all institutions, we used the most recent readily available full fiscal year budget. Based on this review of financial information, the total budget for operational expenditures of all the participating Clubs was found to be \$14,481,497 based on the latest available information (2013-2014). In addition, the Clubs spent \$152,200 on capital expenditures.

We set up appropriate models for the regular and capital expenditures. The model generated by analyzing the Clubs' budgetary and capital expenditures data indicates that the Clubs are a tremendous engine of economic output in the region. The breakdown of economic impacts on the regional level is given below:

<b>Regional (Countywide) Economic Impact of Budgetary and Capital Expenditures of Boys &amp; Girls Clubs in Ventura County</b>				
<b>Impact Type</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Total Value-Added</b>	<b>Output</b>
Direct Effect	274.2	7,427,556.9	8,400,957.1	14,603,256.7
Indirect Effect	28.5	1,253,028.6	2,401,822.0	3,958,667.8
Induced Effect	38.2	1,725,733.5	3,345,923.8	5,270,825.9
<b>Total Effect</b>	<b>340.9</b>	<b>10,406,319.0</b>	<b>14,148,720.0</b>	<b>23,832,750.3</b>

### **3.3) Economic Impact of Volunteer Labor**

Our research took a deeper look into the economic impact of volunteerism and goes further than many similar studies to make an attempt at estimating the output and job creation of volunteers. It is true that volunteers do not receive monetary compensation for their work and, as such, do not pay any direct tax from the financial compensation that they do not receive.

However, one can argue that by volunteering to work without pay, volunteers are in reality paying for their own work and this can be considered as payment to the organization that is using their services. In other words, they are making an in-kind donation of their labor and human capital. Such a donation of services can operate much the same way as a cash donation. Monetary donations make it possible for the organization to make various expenditures—including the ability to hire people who could carry out the services done by volunteers. By making a charitable contribution of their labor—rather than their cash—volunteers are simply cutting out the medium of exchange but nevertheless providing a similar productive value to the organization.

The Clubs could potentially be able to deliver some of their services or some other jobs that become available only as a direct result of being assisted (or subsidized as it may be argued) by the volunteers. While there might be some argument about the number of paid jobs that the work of volunteers creates or the tax payments generated, there is no doubt about the indirect and even part of the induced job creation or tax revenue that volunteers create in an economy. The same is true about the regional output impact of volunteers' work.

We gathered information about various participating Clubs and that showed that in total, there are an impressive total number of 1753 volunteers which include both groups and individuals throughout the year. According to the information we received and our estimates together the Clubs enjoy from

A total of 28,567 hours of volunteers work which amounts to 14 full-time jobs, if they were paid employees. This level of cooperation and assistance by individuals and groups is noteworthy. This shows

the high level of community dedication and commitment to the Boys & Girls Clubs throughout the county.

In order to measure the overall impact of volunteerism, we converted the total number of hours into the full-time equivalent number of employees. We set the model and ran the direct, indirect and induced impact of such a number of employees to estimate their economic impacts in terms of creation of regional output (production) and creation of jobs. The results are presented in the following table. In order to use a more conservative estimate of the impact, we reported the sum of indirect and induced impact on regional output and job creation in a separate table and added them to the total economic impact of the Clubs. This undoubtedly should be considered as an underestimation of the impact of Club volunteers' economic impact in the region.

<b>Economic Impact of Volunteers' Work From Boys &amp; Girls Clubs in Ventura County</b>				
<b>Impact Type</b>	<b>Employment</b>	<b>Labor Income</b>	<b>Total Value-Added</b>	<b>Output</b>
Direct Effect	14.0	377,867.8	427,140.9	741,485.5
Indirect Effect	1.4	63,493.9	121,999.6	201,000.2
Induced Effect	1.9	87,745.4	170,124	267,996.7
<b>Total Effect</b>	<b>17.4</b>	<b>529,116.9</b>	<b>719,264.9</b>	<b>1,210,482.4</b>

The above table shows that as the result of volunteer work in the Boys & Girls Clubs in Ventura County, \$1,210,482 will be created and added to the region's economy. It is important to realize that although volunteers do not ask for compensation, their work will allow the Boys & Girls Clubs function and in the process it creates jobs for others whose opportunity to work depends on the work of volunteers.

Finally, we add all the segments and that shows that in total, the operations of the Boys & Girls Clubs within the county generate a total of **\$25,043,233 for the region** (countywide). In the process, 355 jobs are created or maintained, out of which 67 jobs are created in other sectors as the indirect and induced impact of the economic activities of the Clubs. This in itself shows a remarkable economic presence of the Clubs and their positive pay off for the county as a whole.

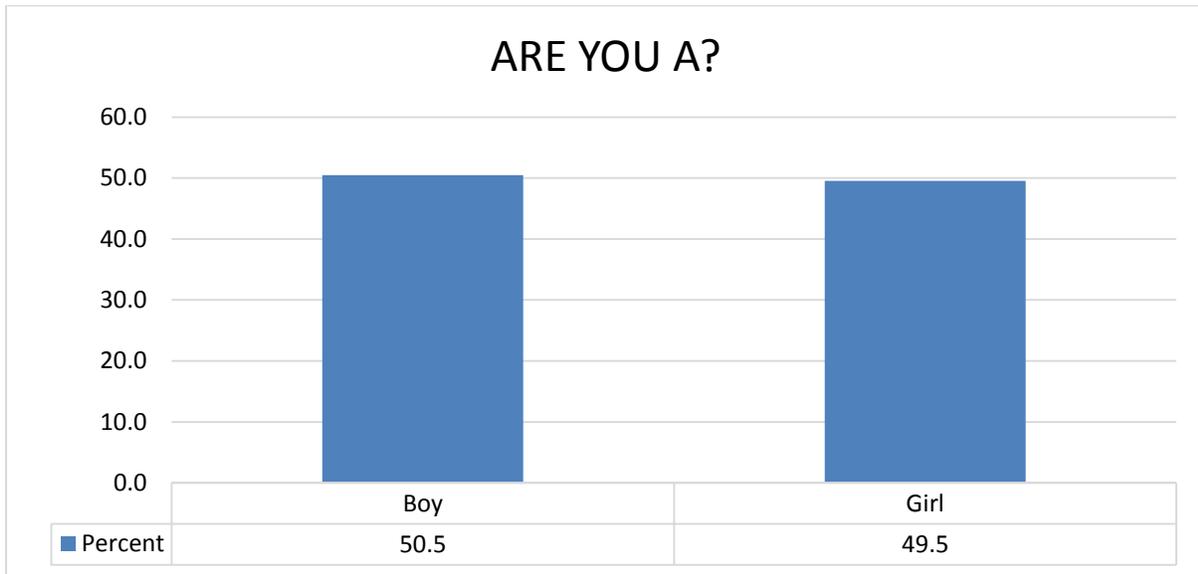
## 4) Qualitative Findings from Surveys

In addition to questions that attempted to monetize the economic benefits of the Boys & Girls Clubs, the various survey instruments that were created for this study included questions that were more qualitative in nature. This data can be used by Club management to gauge the success of its programming and to learn about the attitudes of the stakeholders who are served by the organization.

### 4.1) Results of Club Members' Survey

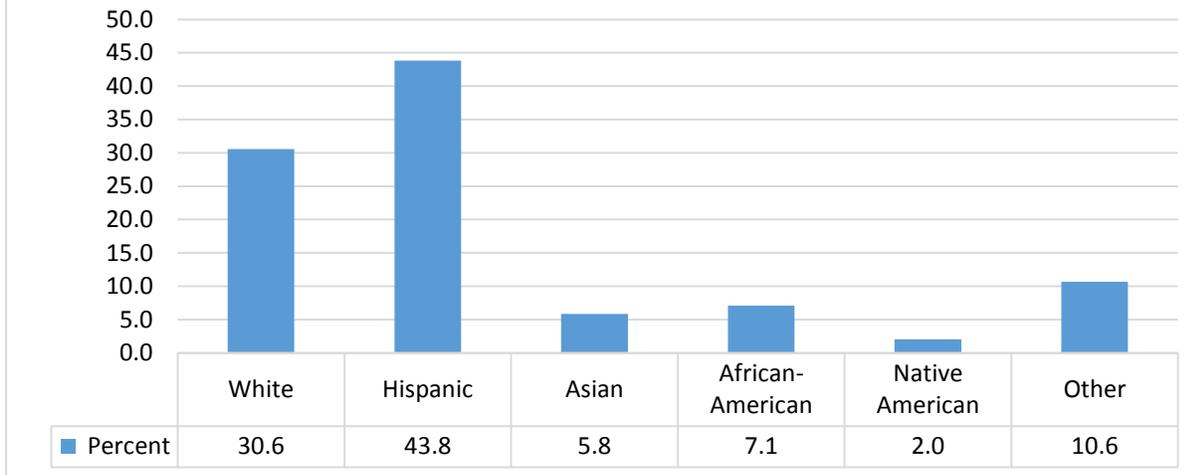
#### 4.1.1) Demographic Data

In order to learn more about those who use the Club's services, several demographic questions were included. Not only is such information enlightening, but it can also be used for cross-tabulations of other results.



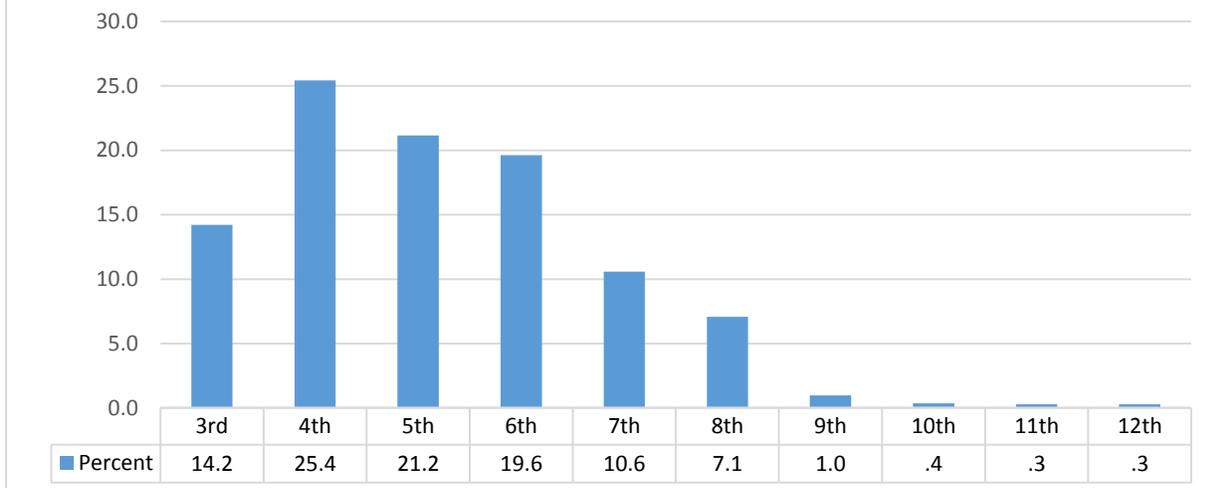
The sample of respondents appeared to be almost equally distributed between boys and girls. The Clubs information shows a higher proportion of boys than girls in most Clubs. We should also remember that only those who were eight years old or older were asked to fill out this survey.

## WHAT IS YOUR ETHNICITY?

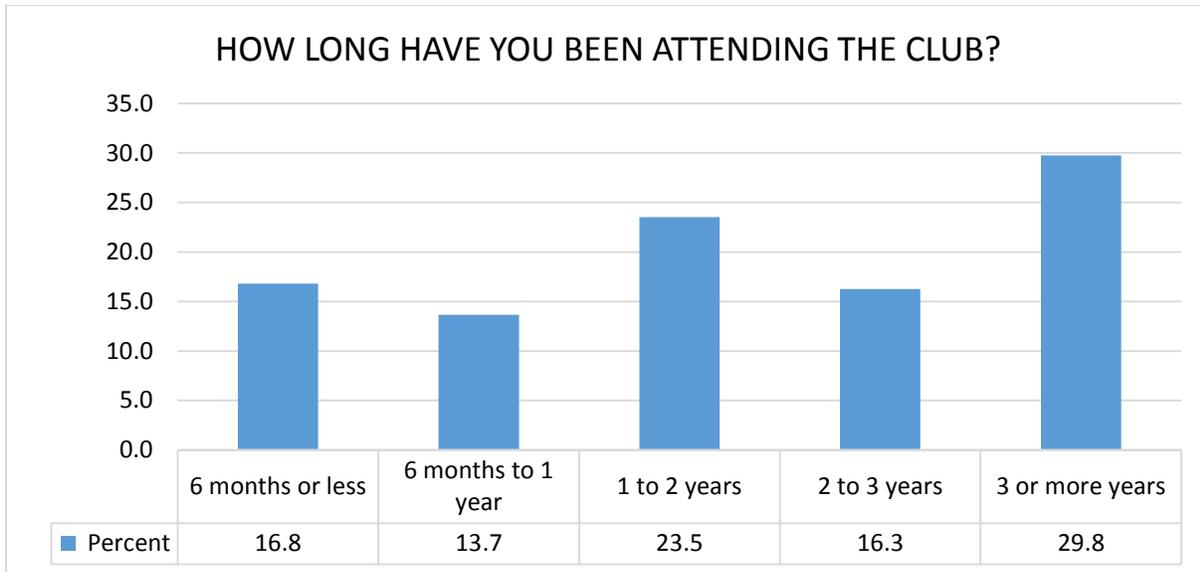


The majority of Club members (43.8%) are Hispanic. In addition, the second most represented groups are whites, who compose 30.6% of the Clubs' members. The remainders of Club members are evenly split between African Americans, Native Americans, Asian/Pacific Islanders, and those who identify as "other."

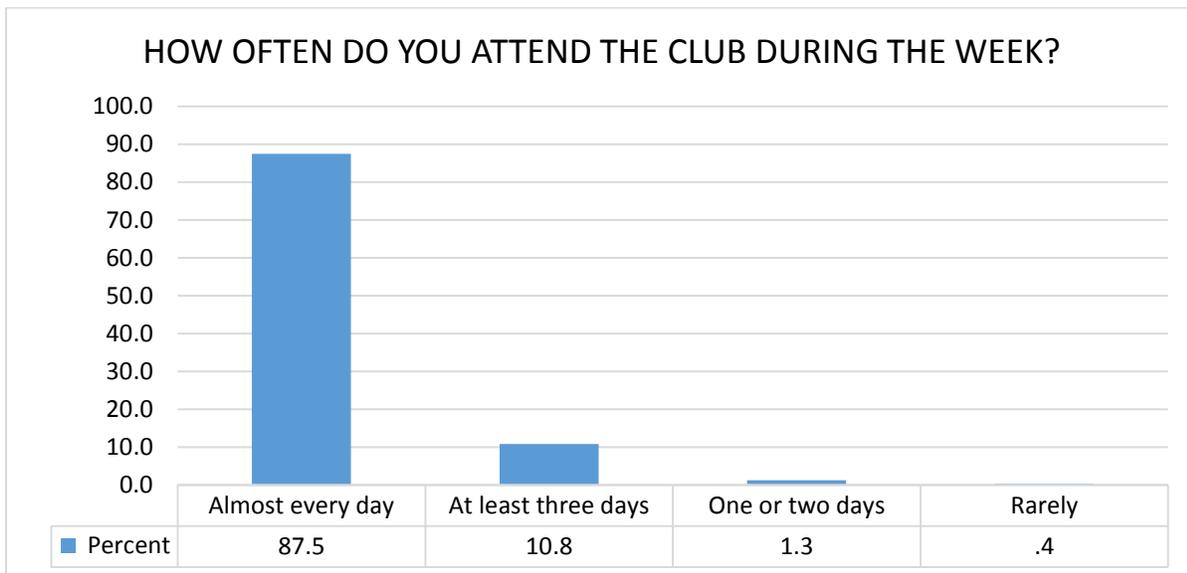
## WHAT IS YOUR GRADE?



Those who took the survey had to be third grade or higher. The chart shows that there were a significant proportion of adolescents and teens among the respondents. However, it is quite likely that the sample underrepresented the proportion of older members of the Clubs.



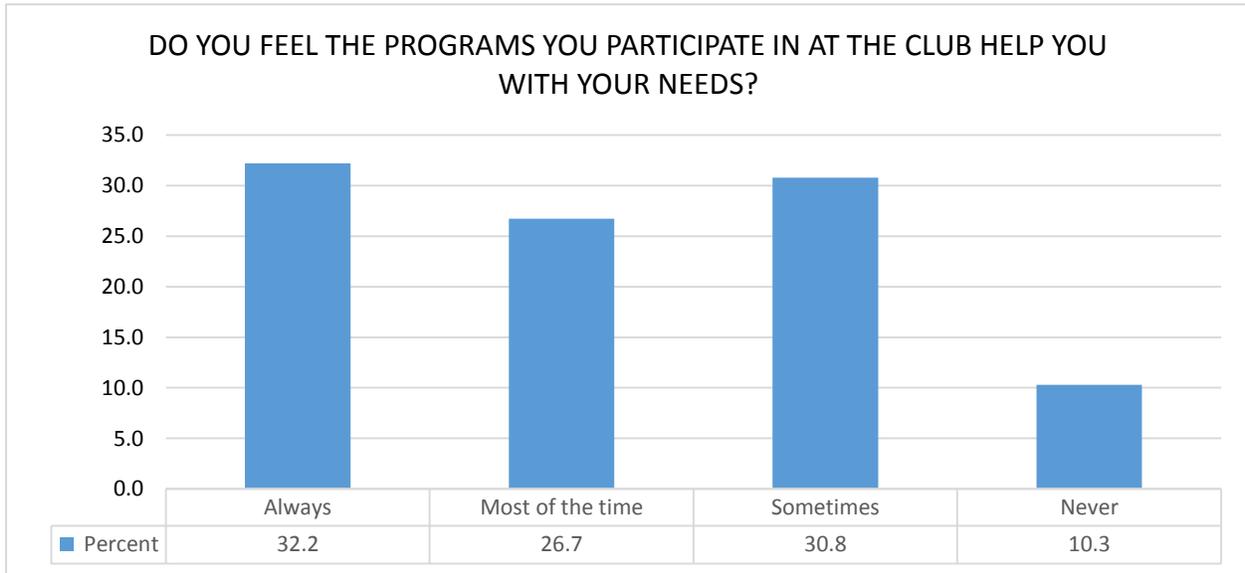
The above chart show nearly 70% of the respondents have been attending the Clubs more than a year and nearly 50% of them have been going to their Boys & Girls Clubs for two or more years and nearly 30% have been going for longer than three years.



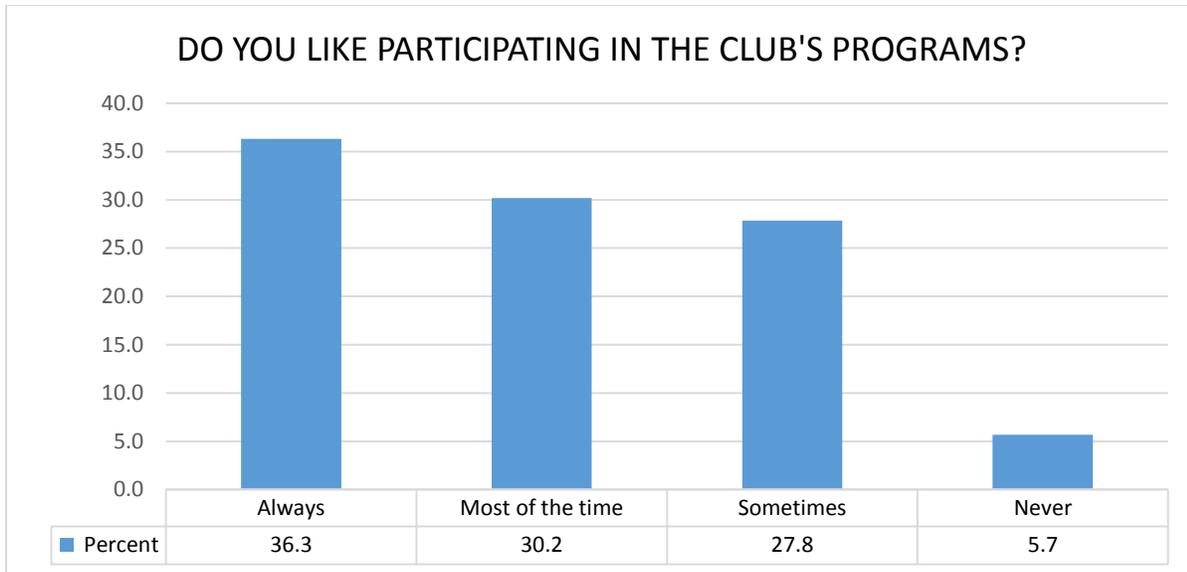
The above chart shows that 98.3% of the respondents attend the Clubs at least three times a week. Some 87.5% attend the Clubs every day.

#### 4.1.2) Program Attendance and Activities

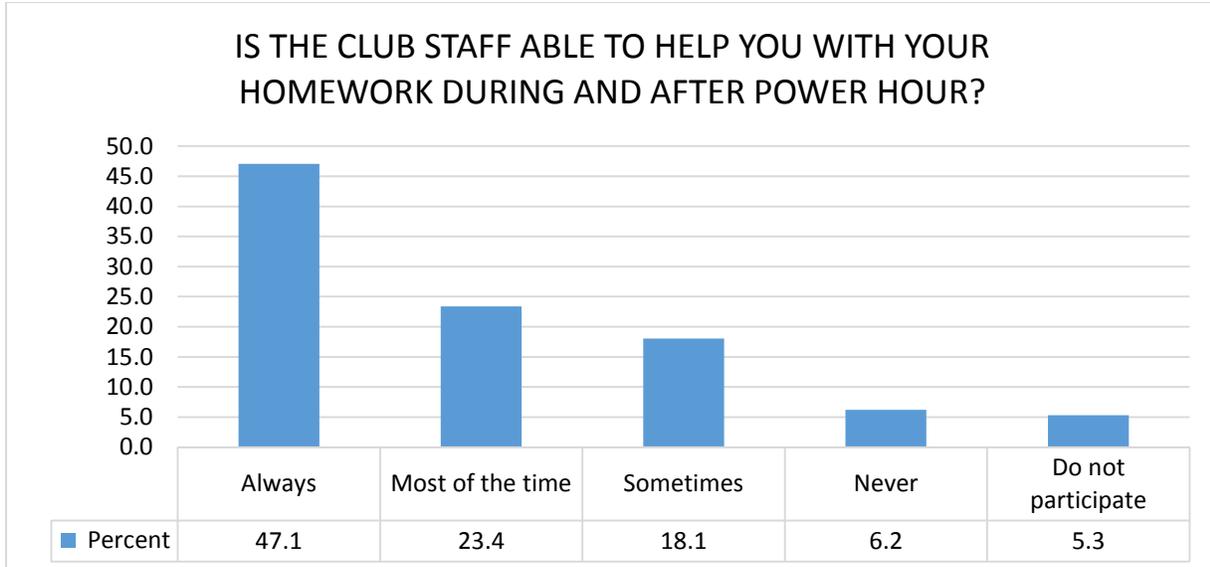
Club management is constantly striving to provide the best available programming and activities to Club members. An important consideration when pursuing this objective is to learn how those who are served by these programs feel about the various activities and programs offered. Such feedback can help an organization understand what they are doing well and what they can improve further.



The programs at the Boys & Girls Clubs seem to be doing a great job of satisfying the “needs” of Club members. About a third of the members (32.2%) believe that the programs always help with their needs, while an additional third (26.7%) believe this to be true most of the time. In total, 56.9%, or almost 6 out of 10 members, believe that their needs are met always or most of the time by their participation in the Club activities. Only 10.3 % believed that the Clubs never help them with their needs.



Club members indicate a very positive attitude towards participation in programs of the Boys & Girls Clubs. The majority (66.5%) like the programs in which they participate at least most of the time. An additional 27.8% like participating in the programs sometimes while only 5.7% never enjoy their participation.



One particular area of interest is the Power Hour program. The Boys & Girls Clubs in Ventura County is dedicated to helping Club members with their school work and providing them tutoring to help them with their homework. This program intends to help improve the academic proficiency of Club members who are 6 through 12 years of age.

This program is particularly important in the context of this study since it contributes to the academic achievement of Club members, thereby contributing to the economic benefits of the higher high school graduation rates discussed in Section Three of this report. As such, the success of the Power Hour program is critical. Fortunately, the majority of members surveyed (70.5% of respondents) like the tutoring program either always or most of the time.<sup>40</sup> Amongst this group, it is important to note that only 6.2% never like the tutoring program.<sup>41</sup> Setting aside the percentage of those who do not participate in the program, the percentage of those who participate in the program and find the staff helpful always or most of time reaches 74.5%.

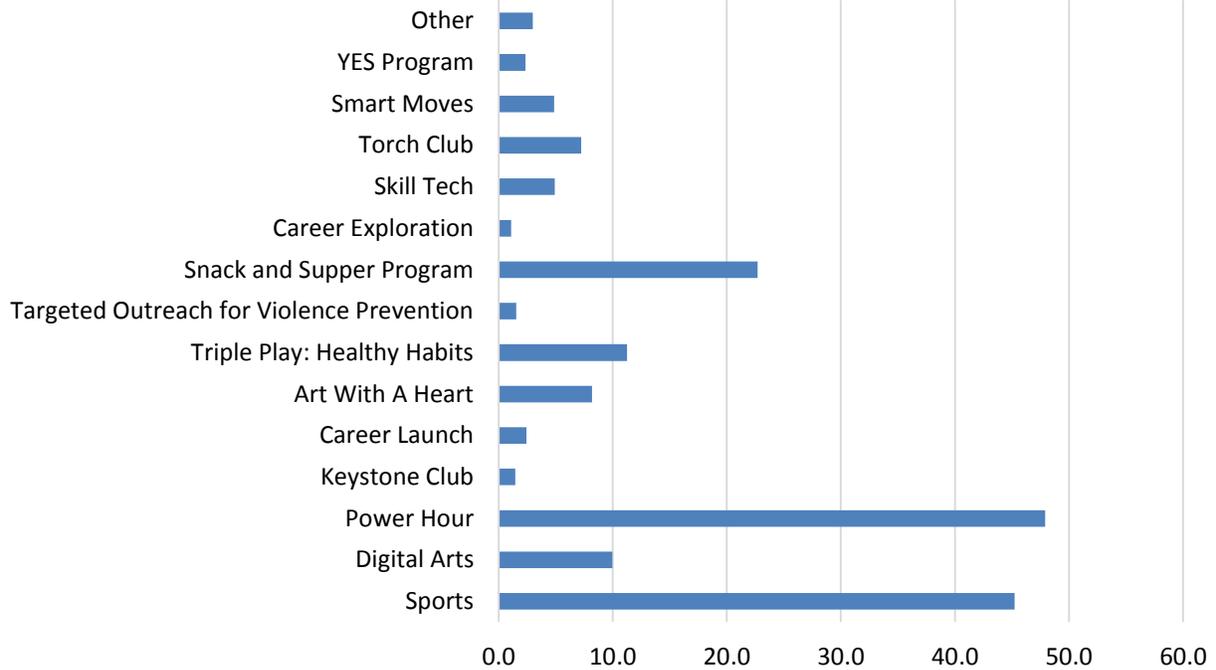
The following chart shows the extent of the participation of Club members in the various activities of the Clubs.

---

<sup>40</sup> This calculation does not exclude the 5.3% who do not participate in the program. With their exclusion the percentage of those who always or most of the time like will go up even more.

<sup>41</sup> This percentage was not adjusted for those who do not participate in the program

## WHICH PROGRAM DO YOU ATTEND AT THE CLUB?

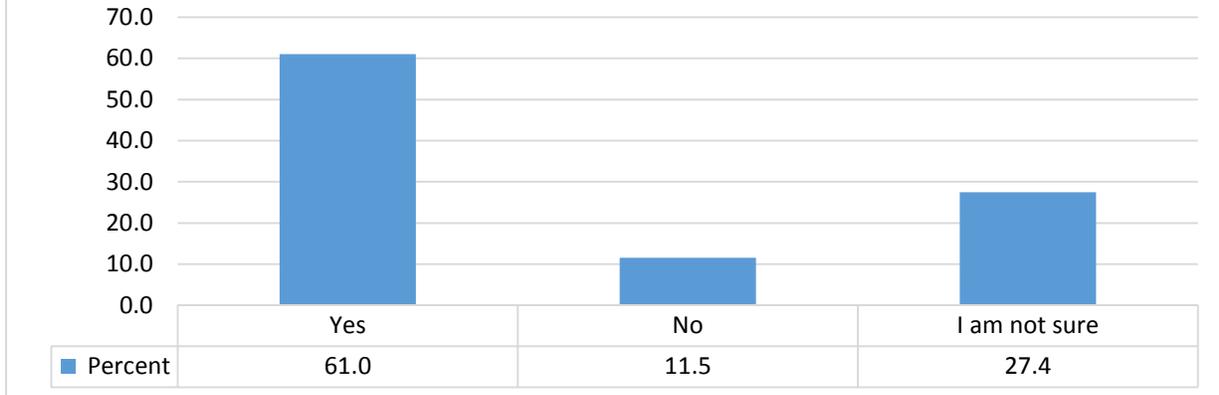


	Sports	Digital Arts	Power Hour	Keystone Club	Career Launch	Art With A Heart	Triple Play: Healthy Habits	Targeted Outreach for Violence Prevention	Snack and Supper Program	Career Exploration	Skill Tech	Torch Club	Smart Moves	YES Program	Other
■ Percent	45.2	10.0	47.9	1.5	2.4	8.2	11.3	1.5	22.7	1.1	4.9	7.2	4.9	2.4	3.0

This chart shows that the Power Hour program and participation in sports is by far the most popular program that attracts Club members. The Snack, Supper Program, Triple Play, and Healthy Habits are also among the popular programs by comparison to others.

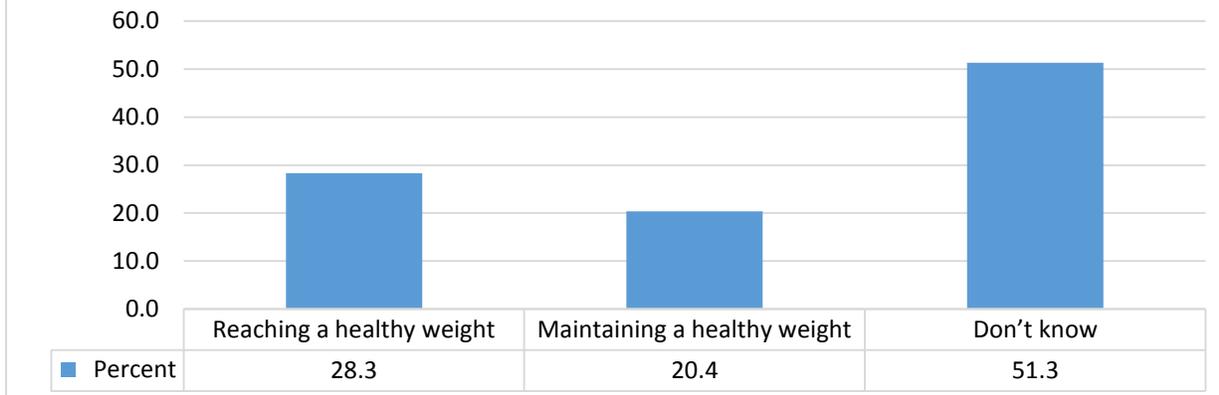
The next chart sheds more light on the perceived expectation of Club members from their participation in the sports programs.

**DO YOU THINK PARTICIPATING IN SPORTS AND OTHER PHYSICAL ACTIVITIES IN THE CLUB IS HELPING YOU BECOME MORE PHYSICALLY FIT?**

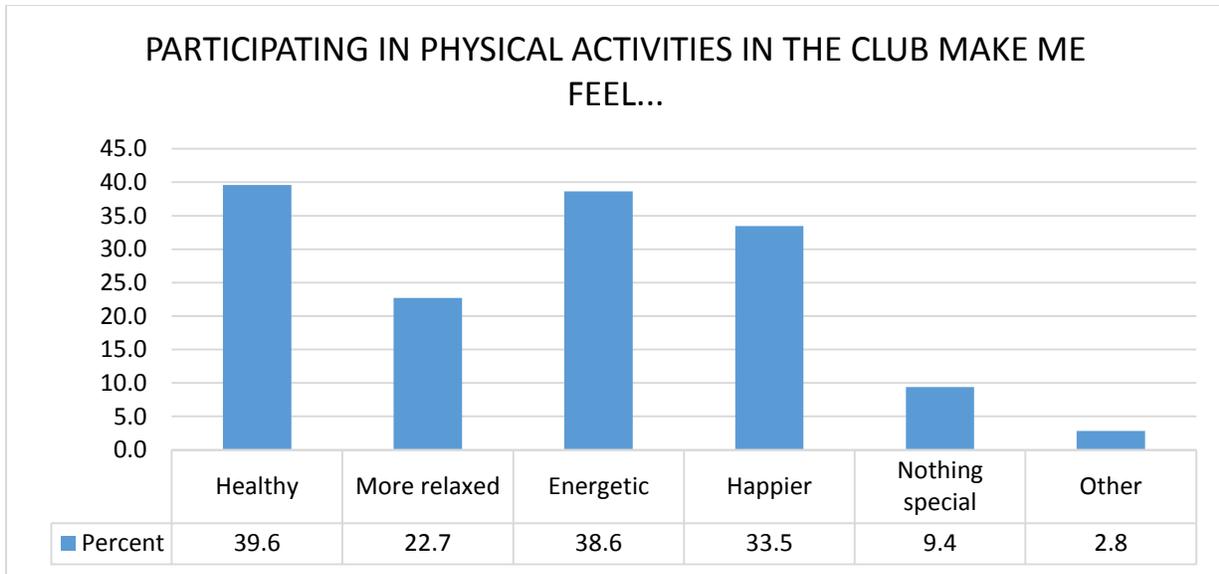


The above chart shows that the majority of participants (61.0%) think that participation in sports and physical activities helps them to become more physically fit. A large group of 27.4% was not sure and only 11.5% said that such participation does not help them to become more physically fit.

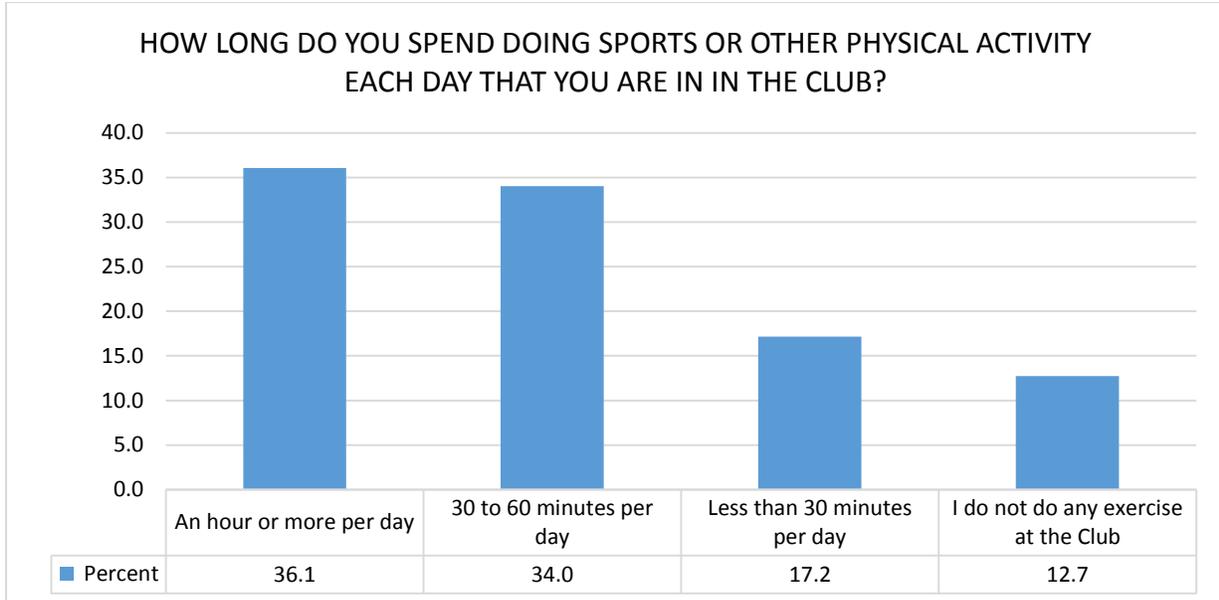
**IN THE LAST SIX MONTHS OR MORE THAT I PARTICIPATED IN THE CLUB'S PROGRAM, I FEEL THAT PHYSICAL ACTIVITIES IN THE BOYS & GIRLS CLUB RESULTED IN MY**



The outcome presented in the above chart is important as it indicates that 48.7% of respondents believe that through participating in the Clubs' physical activities, they reached or maintained a healthy weight. The remaining 51.3% do not know and no one rejects the idea that there is no positive impact from being engaged in physical activities.



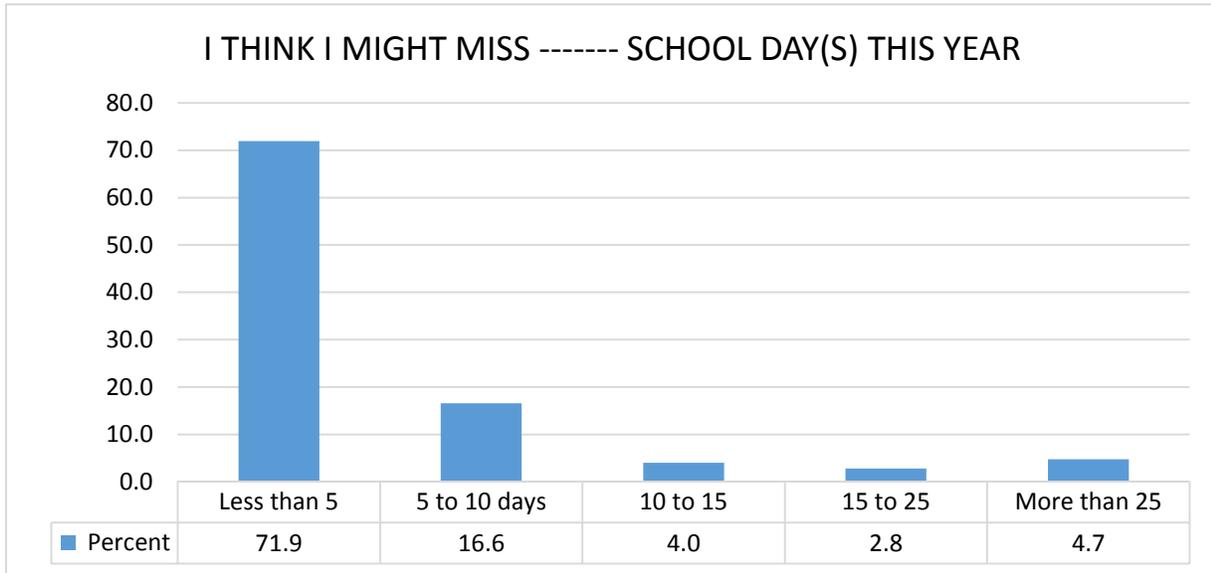
The above chart examines the question of the impact of physical activities further. This chart shows that some 39.6% feel healthy as a result of participating in the physical activities of the Clubs. 38.5% felt energetic, and 33.5% felt happier. Some 22.7% felt more relaxed and only 9.4% said that they feel nothing special.



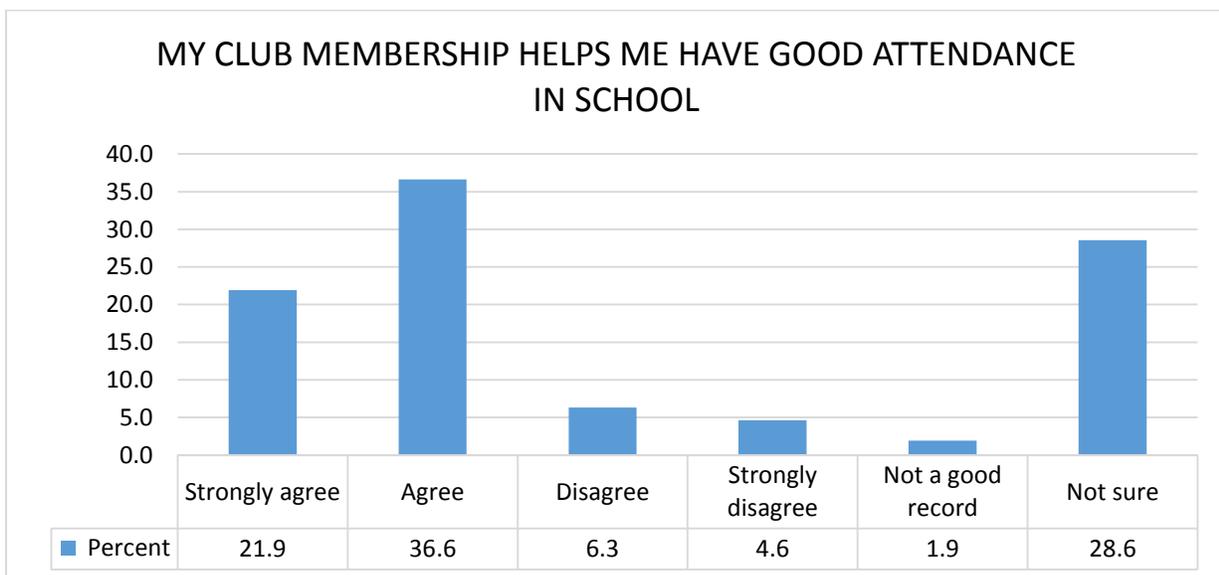
Regular exercise is pivotal for maintaining physical fitness and health. The outcome of the members' survey shows that 70.1% of respondents spend more than 30 minutes on physical activities when they are in the Club. Some 36.1% spend an hour or more doing physical activities.

### 4.1.3) Attendance Record in Clubs and School

Regular and strong attendance records are an important indicator of academic success. By regularly attending school, students are less likely to fall behind in their studies and therefore more likely to succeed. As such, several questions in the survey sought to learn about student attendance records and the impact of Club participation on these records.



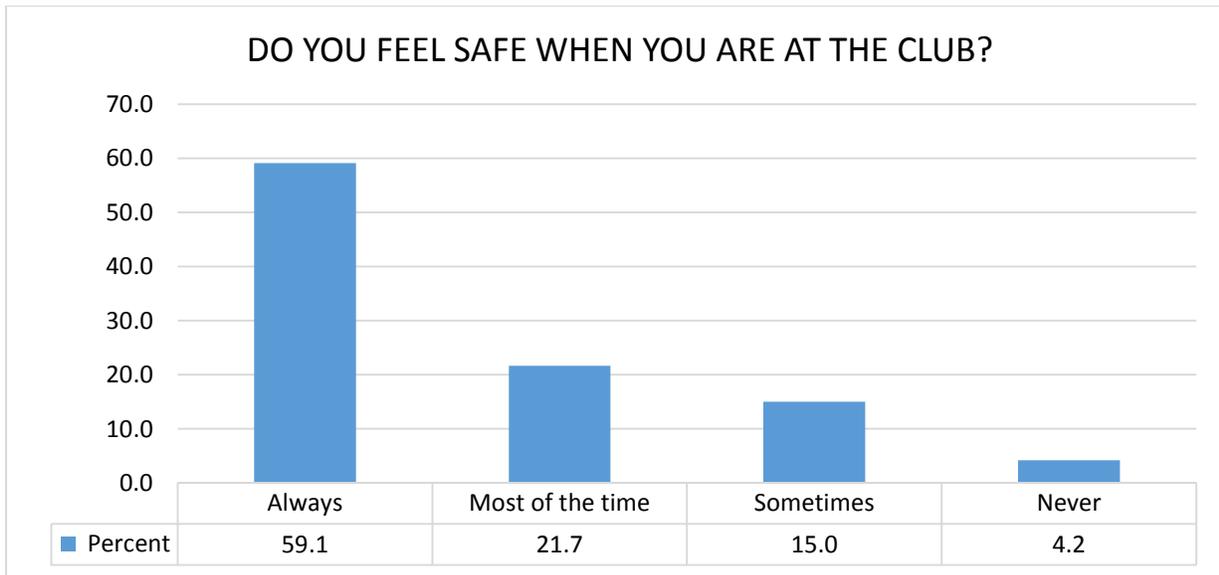
The vast majority of Club members have strong attendance records. 71.9% of respondents indicated that they anticipate missing 5 days or less of school. This is a remarkable record. 88.5% missed school less than 10 days during the year. Only 4.7% anticipated missing more than 25 days of school.



We also asked students whether their strong attendance records are related to the fact that they attend the Boys & Girls Clubs regularly. The majority of respondents (58.5% or six out of ten) believe that their regular attendance at the Clubs accounts for their good attendance records in regular day school.

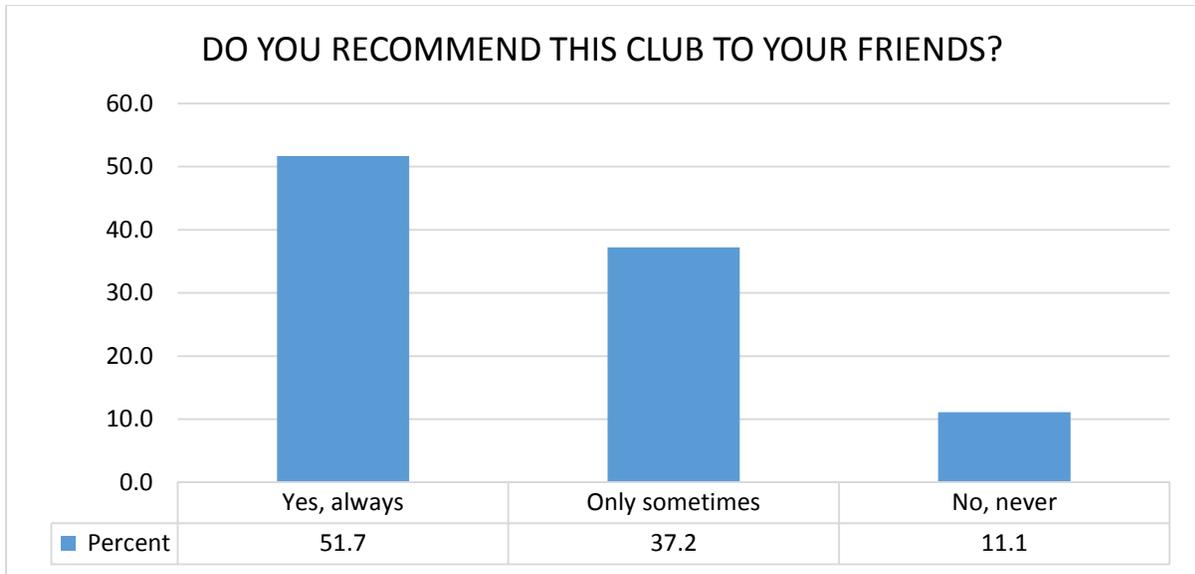
#### 4.1.4) Feeling Safe and Overall Opinion Regarding the Boys & Girls Clubs

Keeping children feeling safe is one of the most important contributions of Boys & Girls Clubs in our community. The following chart shows that an overwhelming majority of members feel safe when they are in the Club environment.



Some 8 out of 10 respondents (80.8%) feel safe (always or most of the time) when they are in the Clubs. Another 15.0% feels safe sometimes. Only 4.2% never feel safe when they attend the Clubs.

One way to determine whether an individual is satisfied with something is to ask them whether they would recommend it to their friends. By recommending something, an individual invests their own reputation in the fact that the service is effective. As such, we asked Club members whether they would recommend the Club to their friends.



More than half (some 51.7%) indicated that they would always recommend the Club to their friends, while an additional 37.2% would recommend the program sometimes. Only 11.1% of Club members would never recommend the program to their friends. As such, it would seem that over 9 out of 10 Club members are generally satisfied with the services they receive at Boys & Girls Clubs in Ventura County.

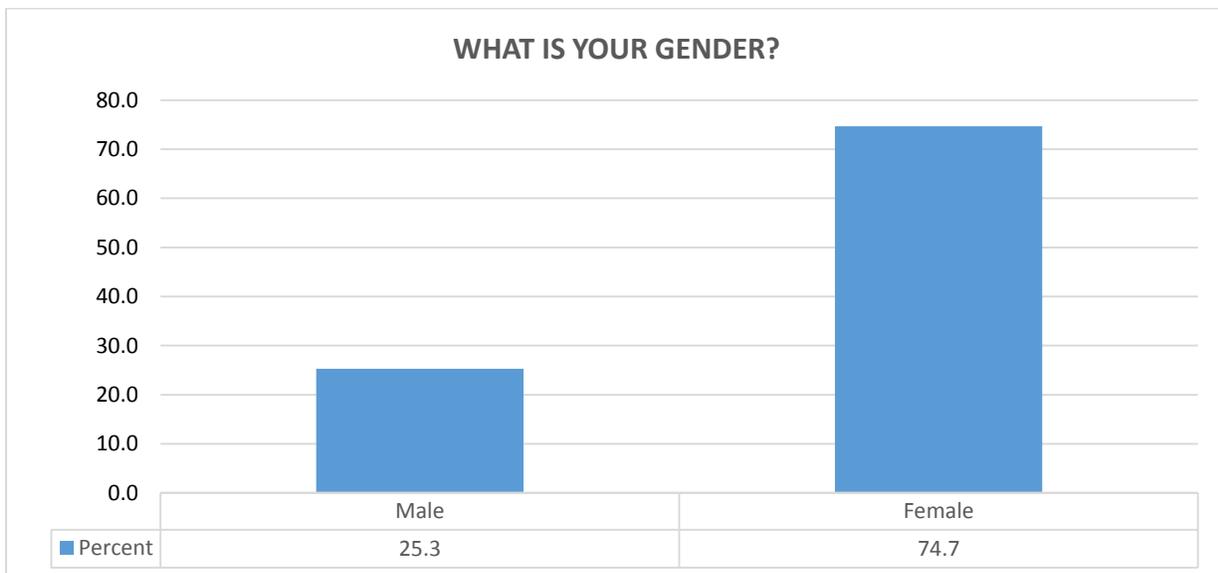
## 4.2) Results from Parents' Survey

In addition to Club members, parents represent another important group of stakeholders. They are heavily invested in the quality and effectiveness of the program. Without the Clubs, parents would have to find alternate means for taking care of their children during after-school hours. Some may have to work less to stay at home with their children. Others may have to pay more for other services that are of uncertain quality, if they are able to afford it. Moreover, they are an important source of supplementary information to assess the impact of the Clubs on their children due to their special vantage point.

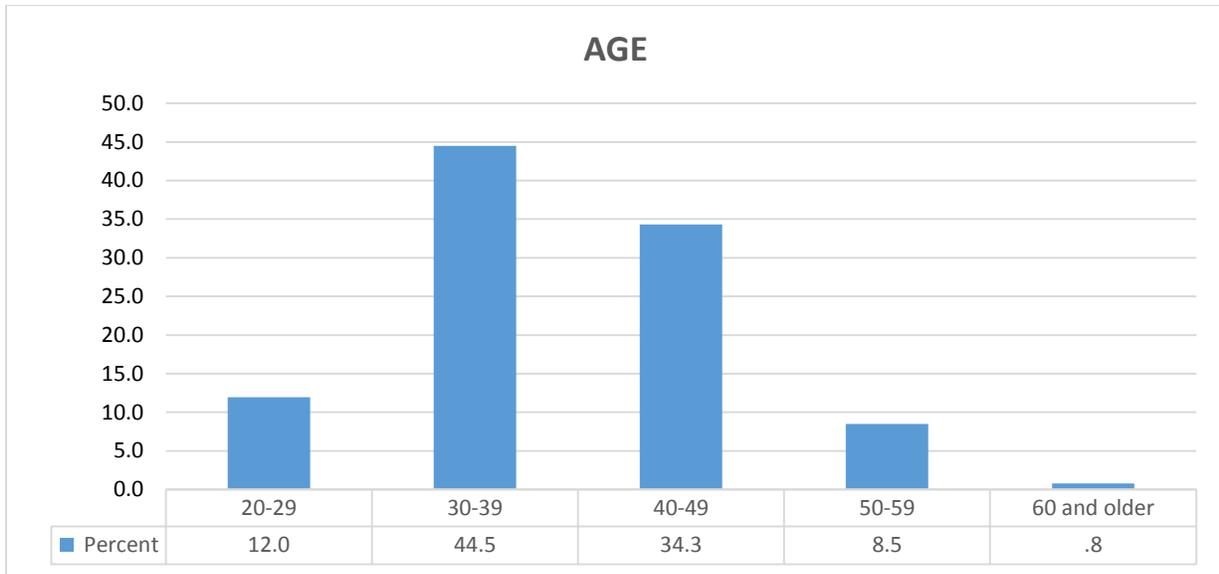
Given these considerations, it was critical to collect data from parents to see how well they are being served by the Clubs and to see how effective they perceive the programs to be.

### 4.2.1) Demographic Information

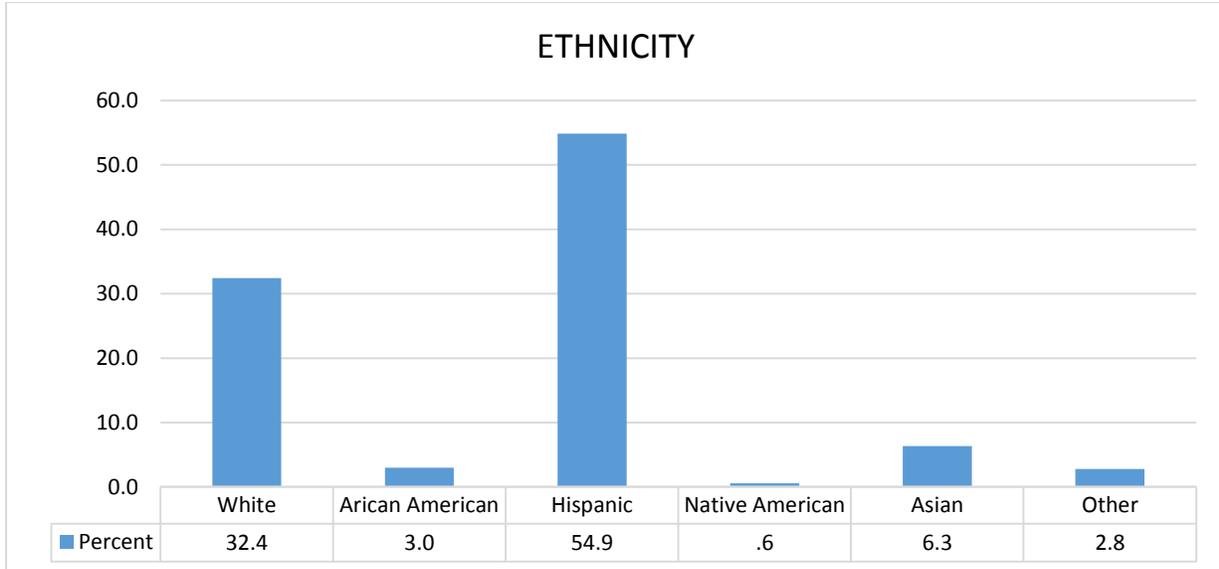
Some demographic data was collected from parents. This information helps us to understand the profile of respondents and the households in which Club members are being raised.



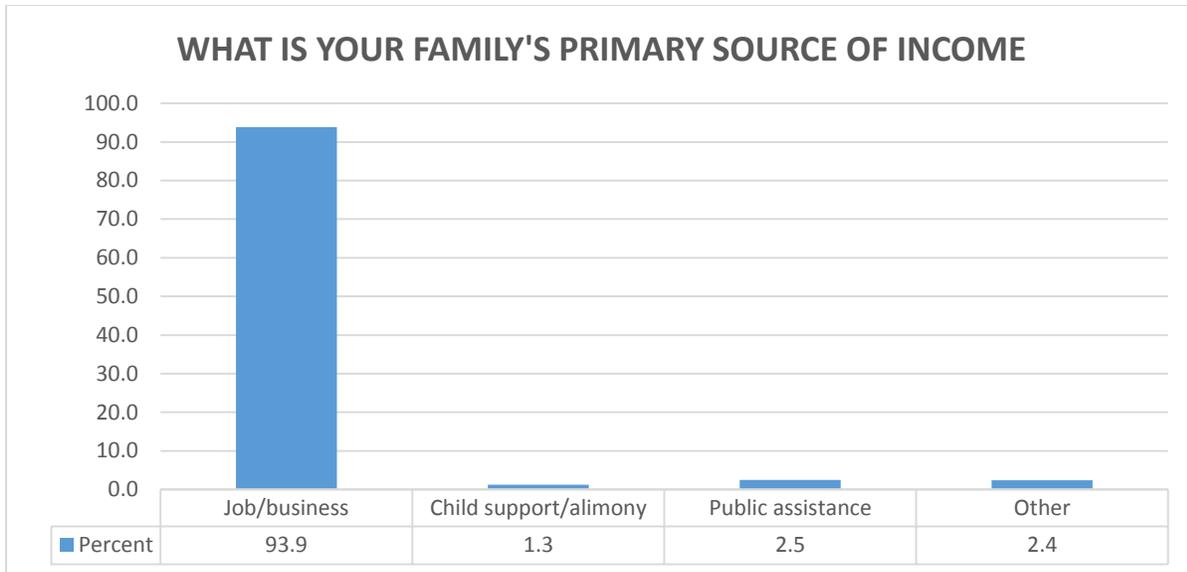
The vast majority of respondents (74.7%) are females. This indicates that the survey represents the thoughts and opinions of the mothers and grandmothers of Club members for the most part.



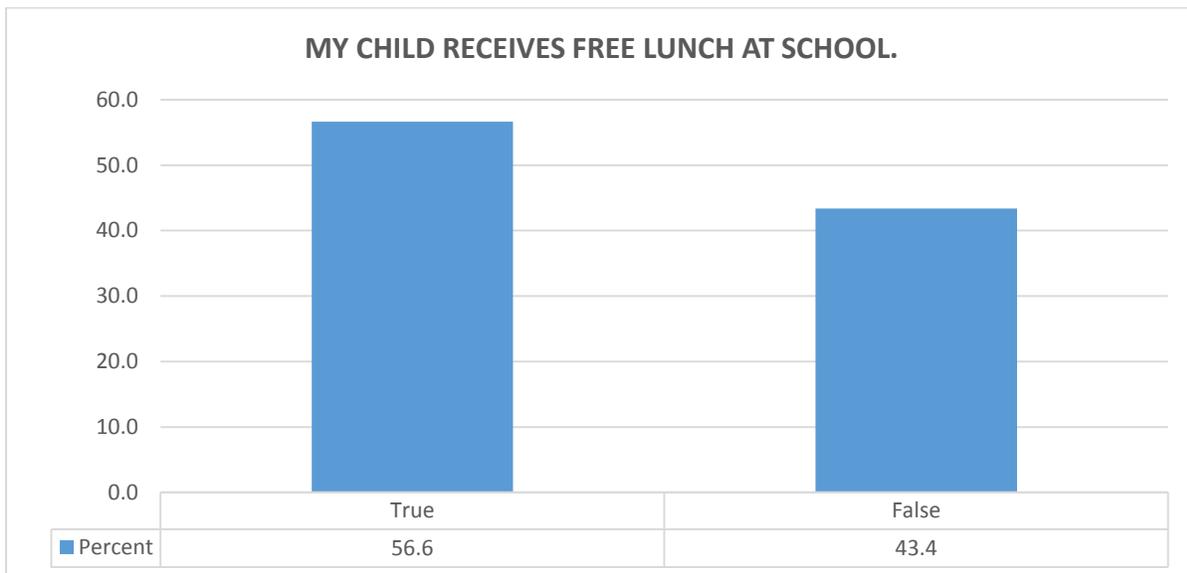
The largest proportion of parents (44.5%) is between the ages of 30 and 39. The second most represented age group is those between the ages of 40 and 49 (34.3%). As such, the survey results seem to indicate the opinions of middle-aged parents for the most part. There is, however, a significant percentage of younger parents between the ages of 20 to 29 (12.0%).



The highest proportion of respondents (54.9%) is Hispanic while the second most represented group is white, which composes 32.4% of the parents. The ethnic make-up of parents based on this survey is similar to the ethnic make-up of Club members determined in the Club member survey.

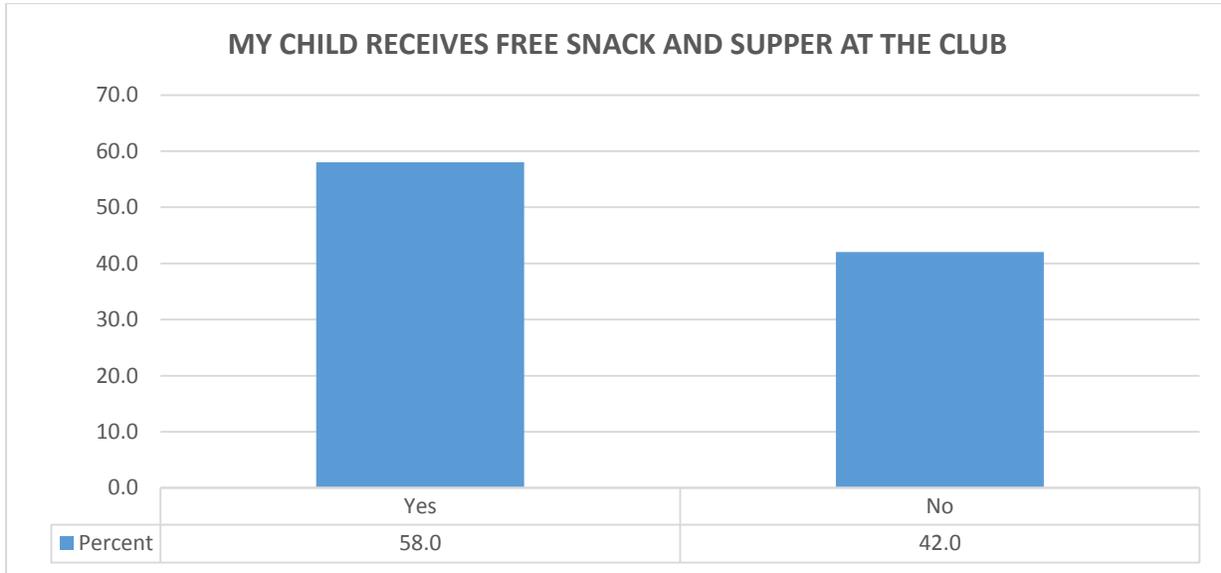


As the above chart shows, most families' primary source of income is a job or their own business. This demonstrates that the Clubs predominantly serve working parents and families who need safe supervision of their children during after-school hours.

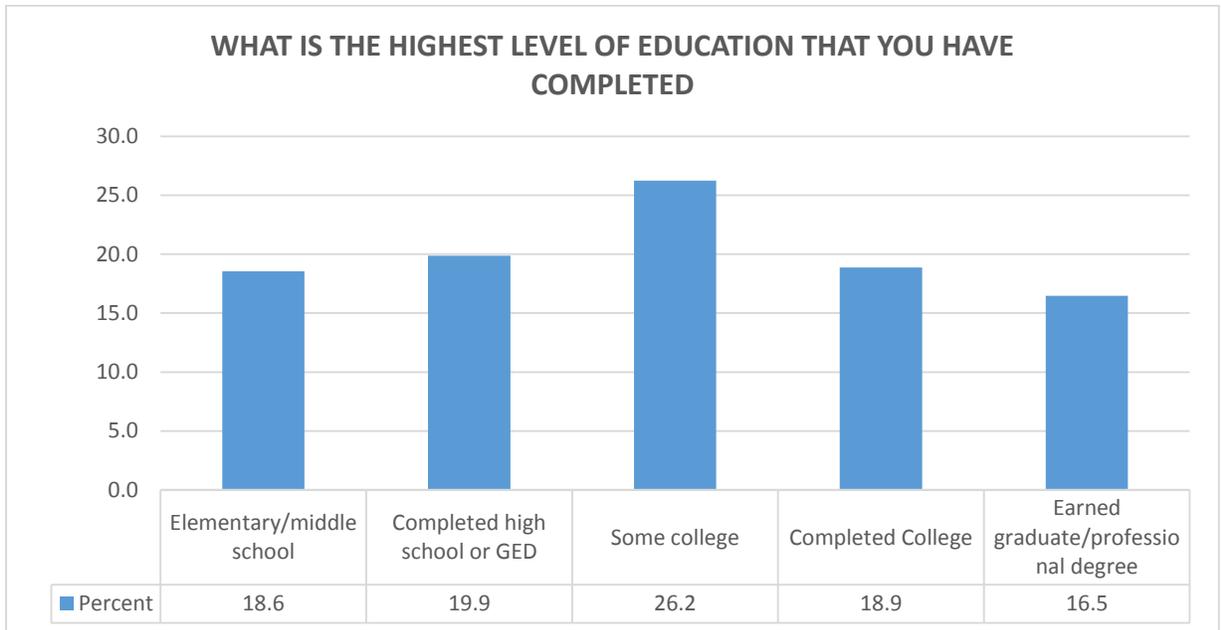


Economically disadvantaged young people are eligible through a national program to receive free lunches. By understanding the proportion of those served by the Clubs who receive free lunches, it is possible to learn something about the economic profile of those families served. The results are quite telling. According to the parent surveys, 56.6% of Club members receive free lunches when they are in

school. This data indicates that the Boys & Girls Clubs in Ventura County provide a great contribution to serving an economically disadvantaged group.



The above chart shows that a majority of the children (58.0%) receive a free snack and supper at the Clubs. This is an important contribution to the family that helps them to feed their children.

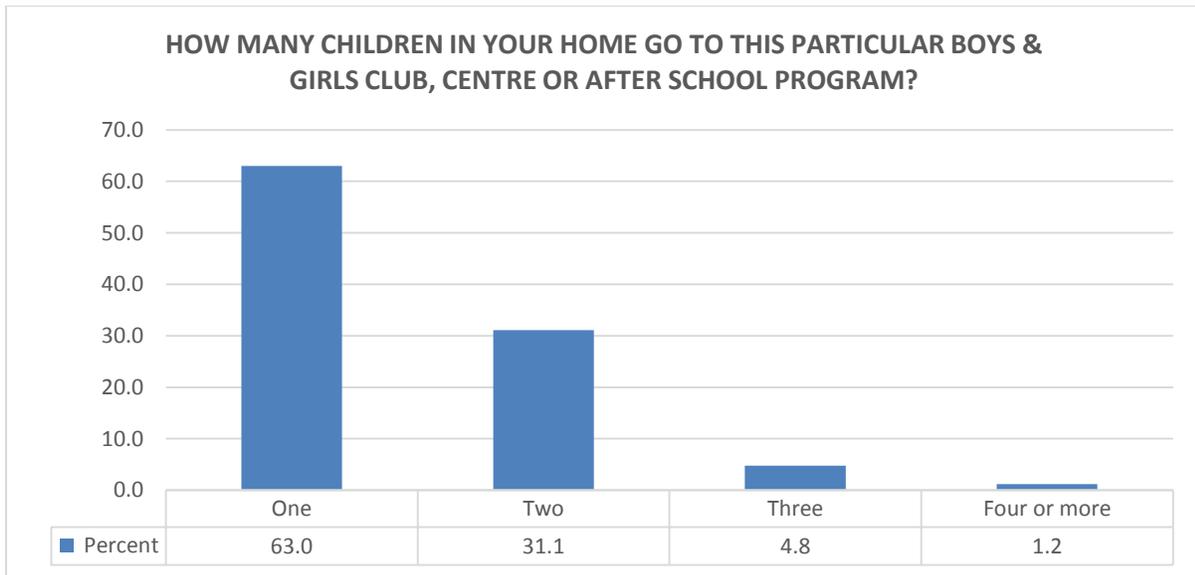


Another important demographic consideration is the level of education attained by parents. Education and earnings are closely related as discussed in earlier sections of the report. Survey results indicate that the educational background of parents is very diverse. The largest portion of parents has some college

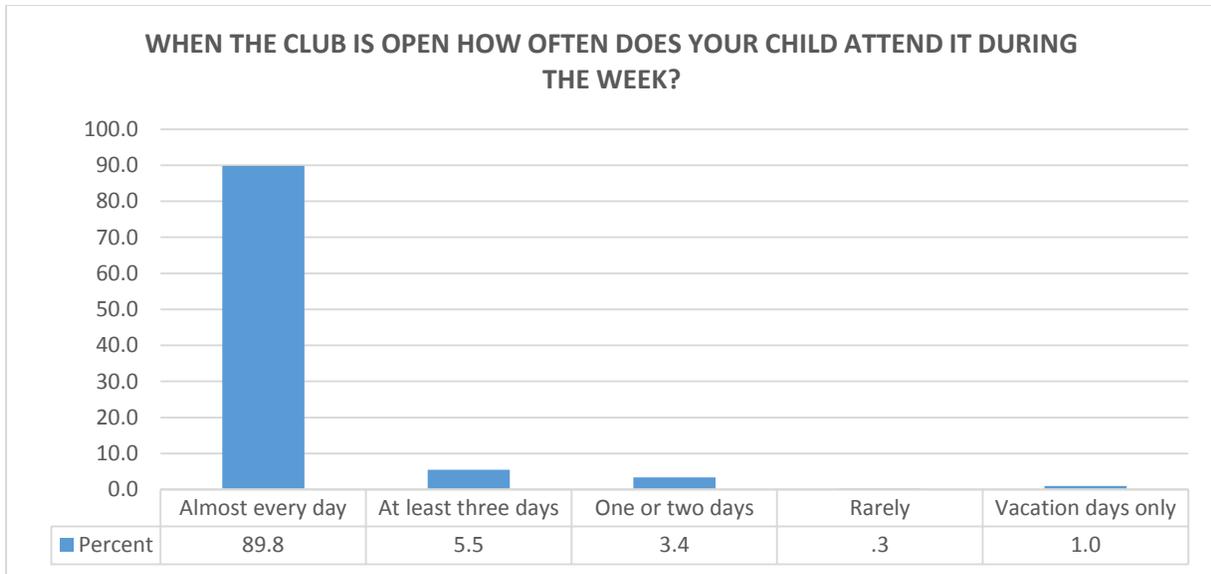
education (26.2%). The second largest groups are those with a high school diploma or GED (19.9%). 18.9% have completed college and some 16.5% have earned graduate or professional degree. Some 18.6% of parents surveyed do not have a high school diploma.

**4.2.2) Family’s Need for Boys & Girls Clubs**

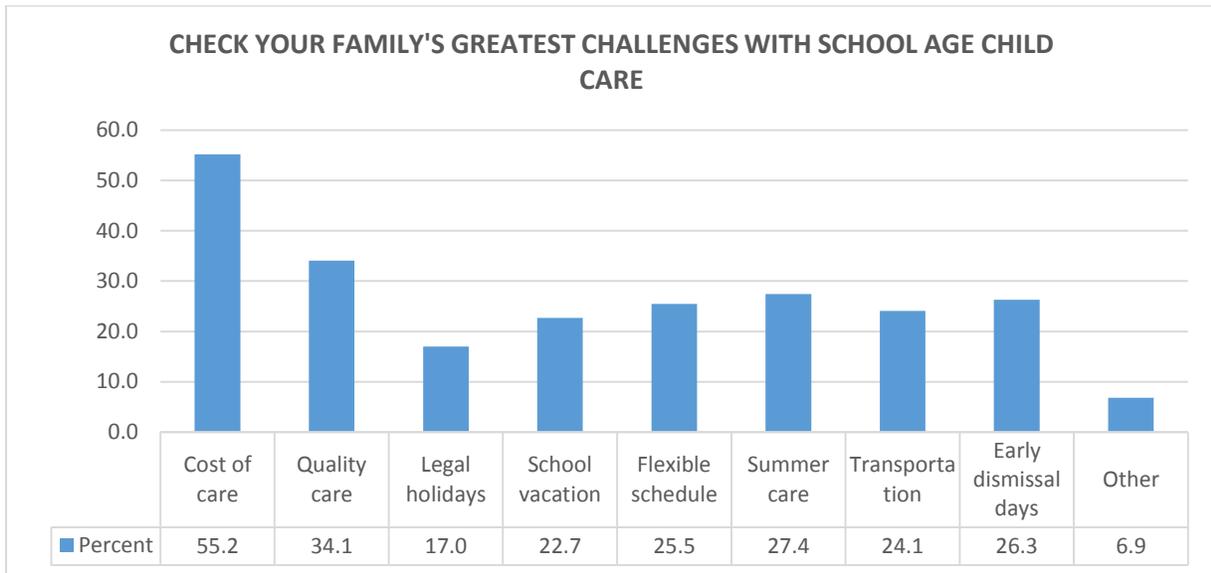
When understanding the value created by the Boys & Girls Clubs in the community, it is important to understand the extent to which families who use the service depend on its existence. The survey included several questions to learn about the frequency and depth of the demand for Club services.



The highest proportion of families (63%) have one child in the Boys & Girls Clubs. 31.1% have two, 4.8% have three and the remaining 1.2% of families have four or more. For those with multiple children at the Clubs, the need for the service is amplified since the cost and difficulty of supervising multiple children after school can become significant. As such, the need for the Clubs is particularly acute for the significant proportion of families with multiple children.

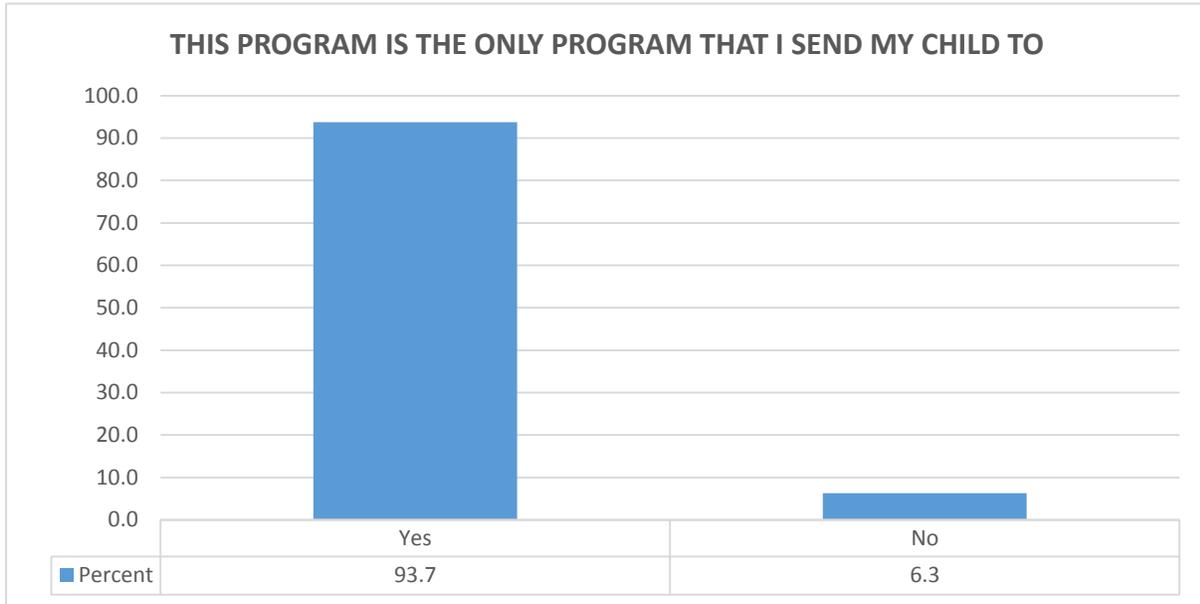


Almost 9 out of 10 parents (89.8%) report sending their children to the after-school program almost every day, while an additional 5.5% report sending their children to the program at least three days per week.

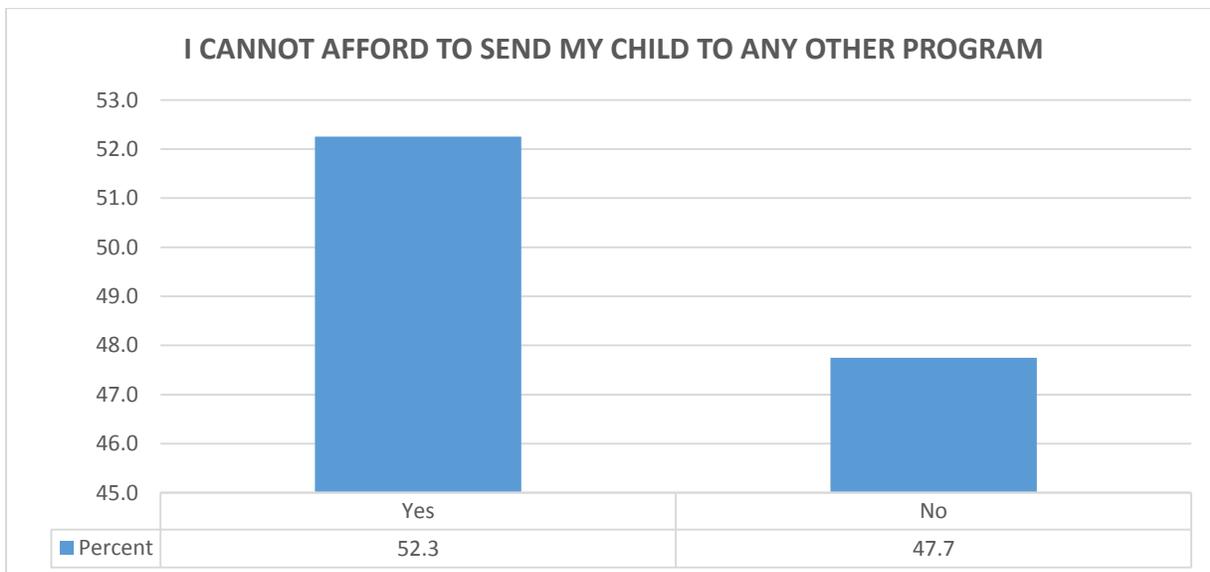


When determining the level of dependence these families have on the Clubs, it is important to understand the source of the challenges that the families face with school-aged child care. By far, the greatest challenge for all these families is the cost of care. Some 55.2% of families served by the Clubs consider the cost of care as the greatest challenge they face. As such, programs such as the Boys & Girls Clubs that provide high-quality cost-effective services are critical to the community. Quality of care,

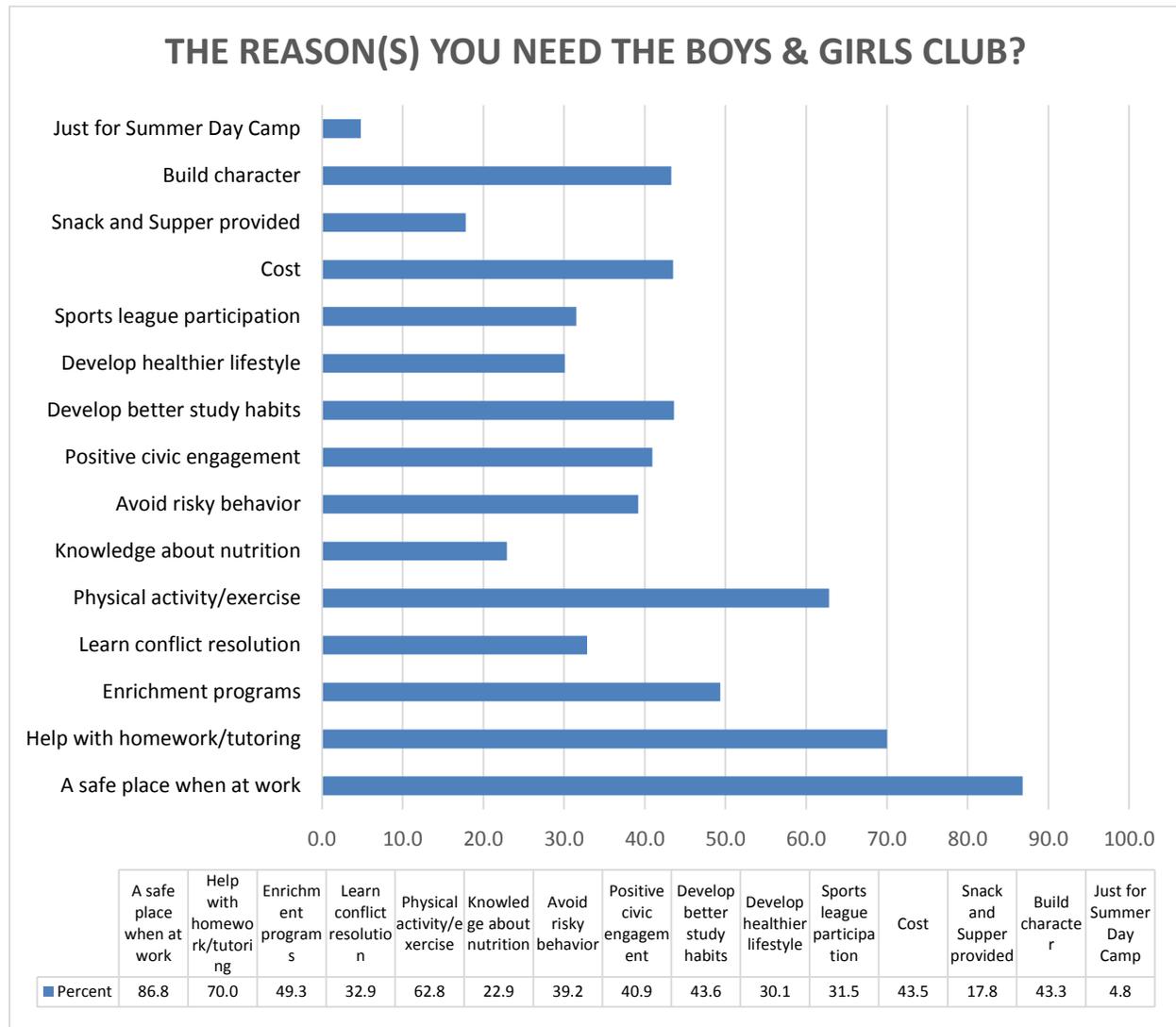
summer care, flexible schedules, and transportation are other challenges that parents face in taking care of their school-age children.



The degree to which many families depend on the Boys & Girls Clubs is further demonstrated by the fact that 93.7% of parents indicate that the Club is the only program to which they can send their children. Without the Clubs, it is unclear what these families would do. Parents would either have to modify their own work schedules or these children would be without proper supervision; either scenario would be troubling.



One reason that many families must rely exclusively on the Clubs for after-school care is the fact that other programs and private services are cost-prohibitive. According to the parents survey, more than half of the parents (52.7%) cannot afford any other program.

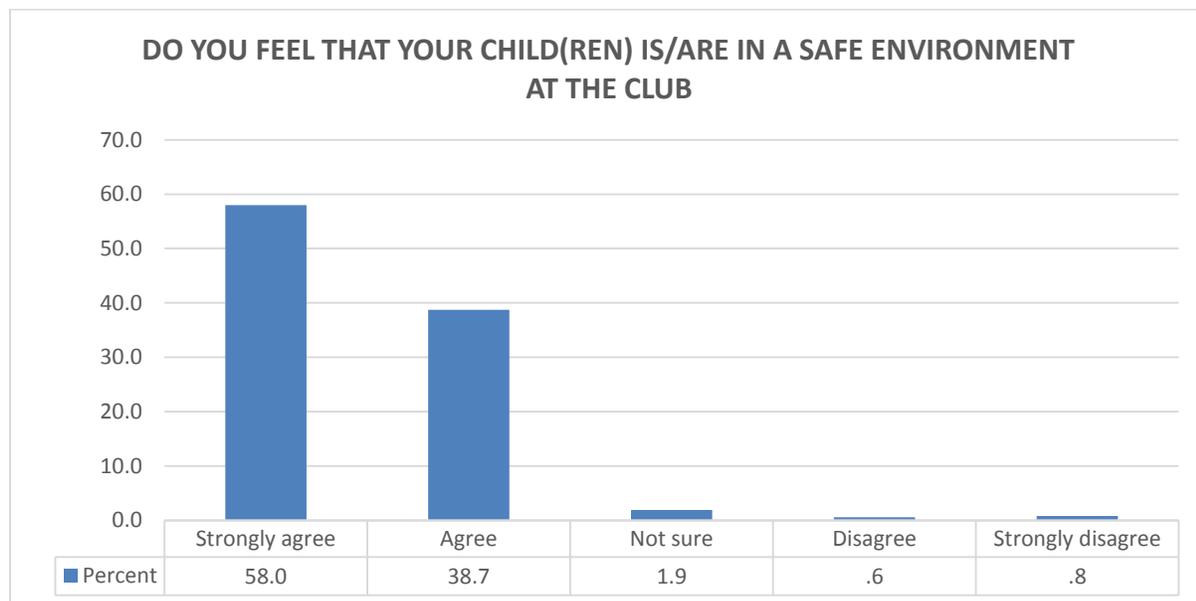


The parent survey also asked parents why they need the Boys & Girls Clubs. There is widespread agreement on the reason. More than three quarters of the parents (86.8%) report that they need the Clubs since their children are at a “safe place when they are at work.” This response shows that this asset allows parents to be productive members of the community by allowing them to attend to their work. Without the after-school program, such parents would likely have to work less; this would be bad for families since they would lose income, and this would be bad for the community since it loses productive workers. Other reasons, such as having a place for their children to benefit from the tutoring

program (70.0%), and to have access to exercise and enjoy enrichment programs and learn to build character and have positive civic engagement are of significant importance.

#### 4.2.3) Safety

Given the importance parents place on having a “safe place” for their children, it is important to measure whether parents believe that the Clubs are a safe environment. As such, the survey included a question to determine parent sentiments on this point.



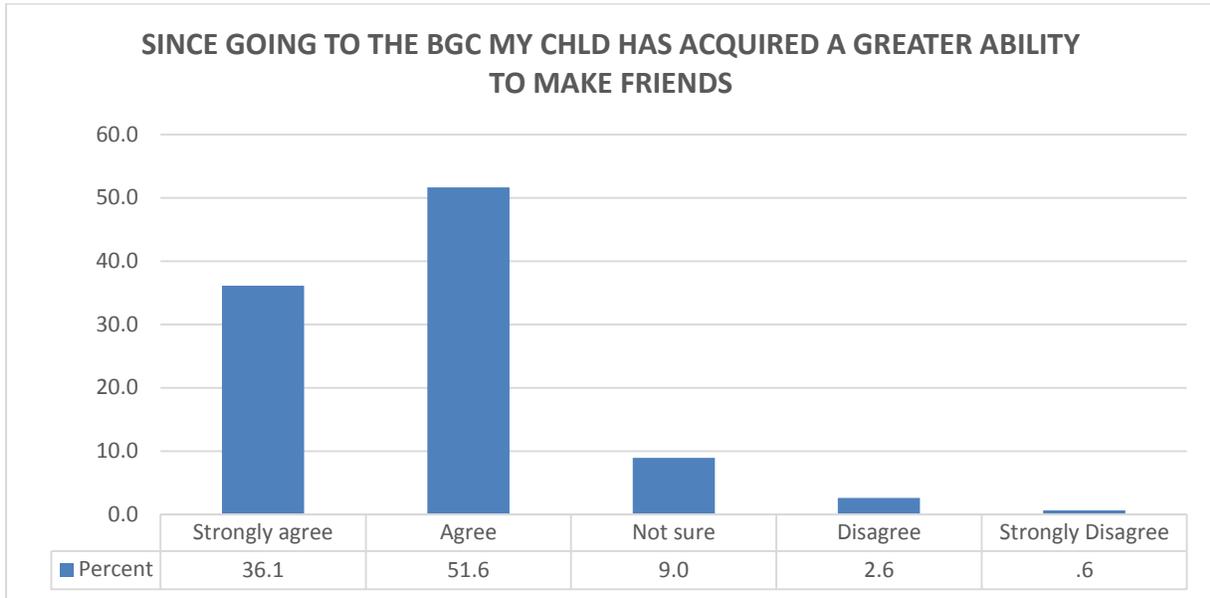
Almost all parents (96.7%) agree or strongly agree that their children are in a safe environment when they are attending the Boys & Girls Clubs. This level of unanimity in the response is particularly noteworthy and shows the extent to which parents have faith in the safety of the Clubs. Club management should be proud of this outcome.

#### 4.2.4) Parent Opinions on Impact of the Clubs on their Children

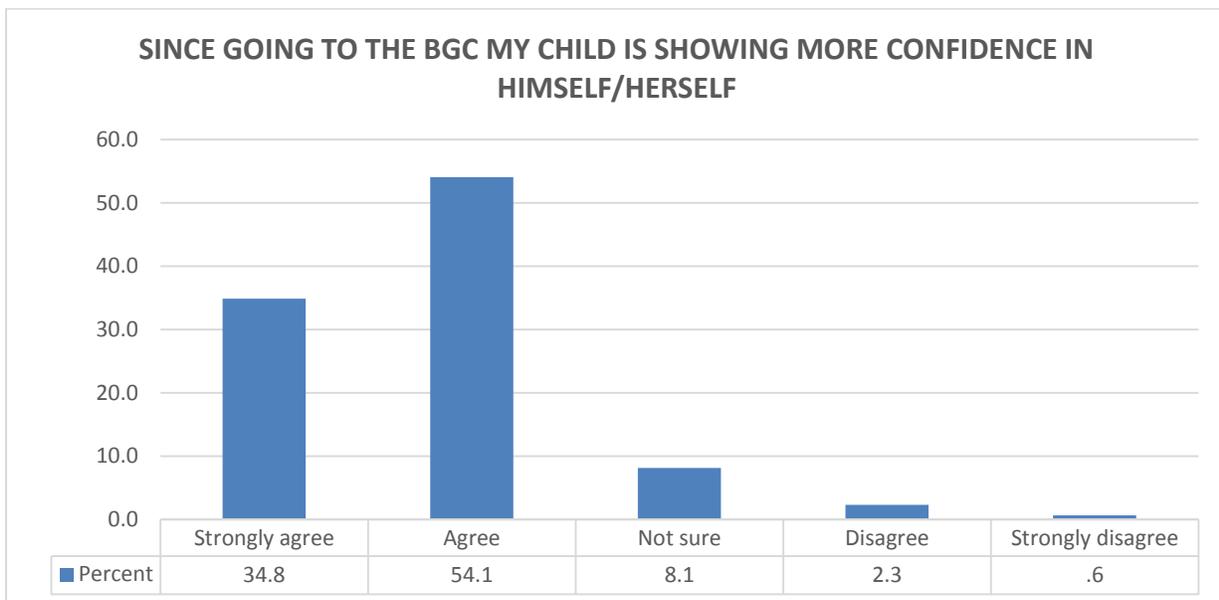
In some ways, parents know their children better than their children might know themselves. As such, the parent survey included many questions that asked parents about the impact of the Clubs on their children. The data from these questions can be used to assess the impact of attending the Boys & Girls Clubs on Club members.

In order to organize this data, the questions have been examined in three separate categories. The first considers questions relating to social and emotional skills, the second considers academic achievement and promise, and the third considers the impact on nutrition and physical activity.

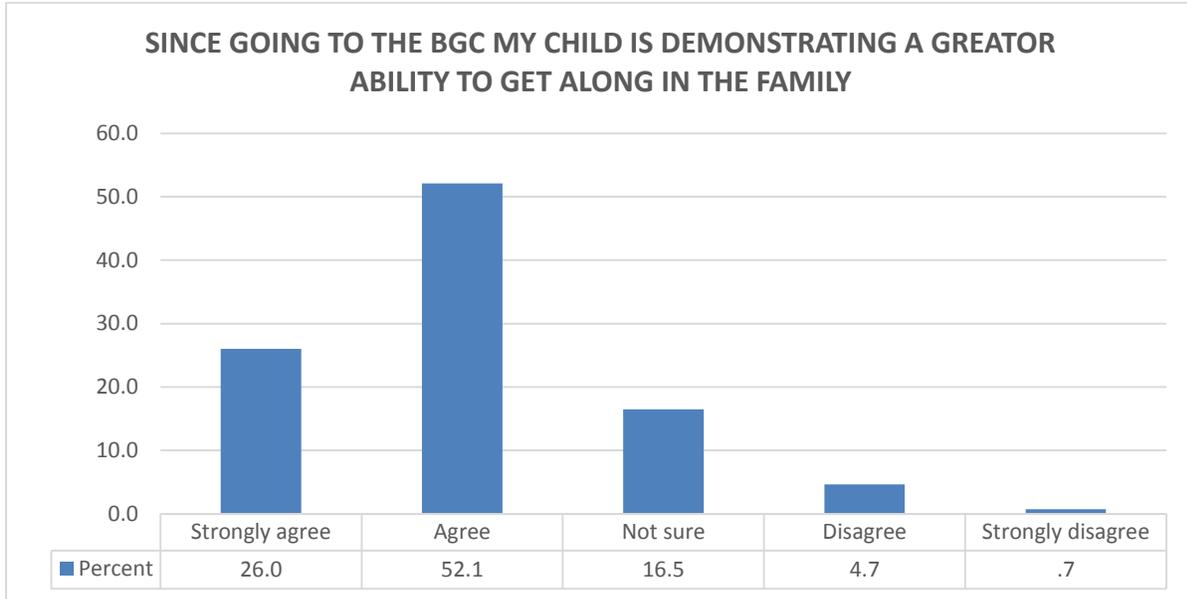
**4.2.4.1) Social and Emotional Skills**



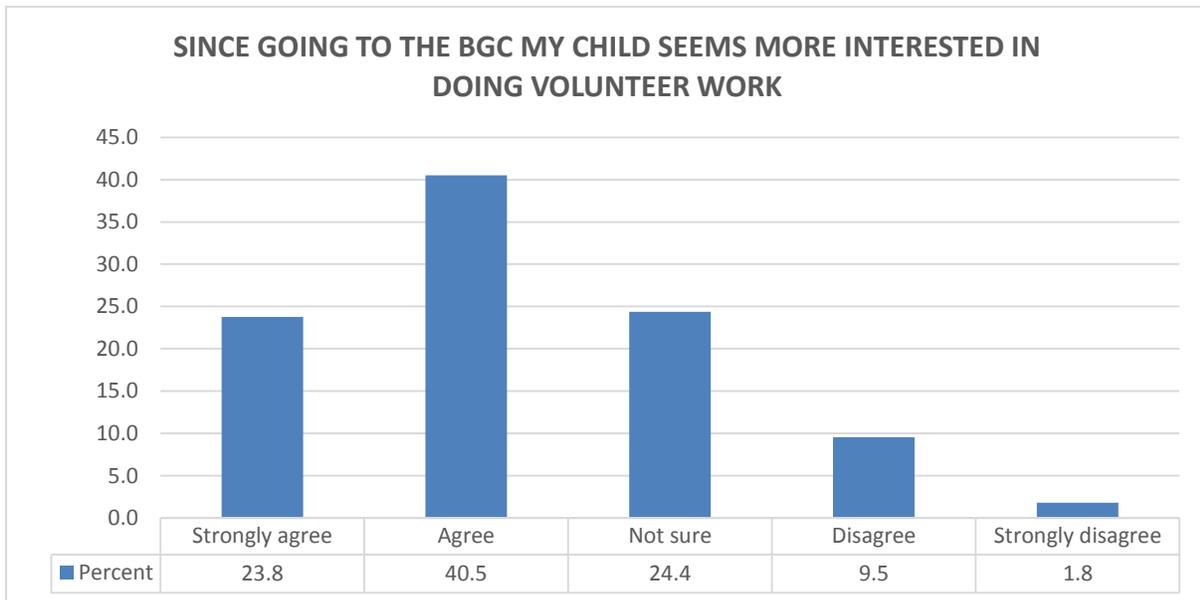
Social skills and the ability to make friends are critical to leading an emotionally healthy life. There is widespread consensus amongst parents that Club attendance has allowed their children to better acquire friends. Specifically, 87.7% of parents either agree or strongly agree that their children have developed this skill set since joining the Clubs.



Self-confidence is another important key to happiness. Yet again, Club attendance has made children more confident in themselves, according to parents. 88.9% of parents agree or strongly agree that their children have become more confident in themselves since going to the Clubs.



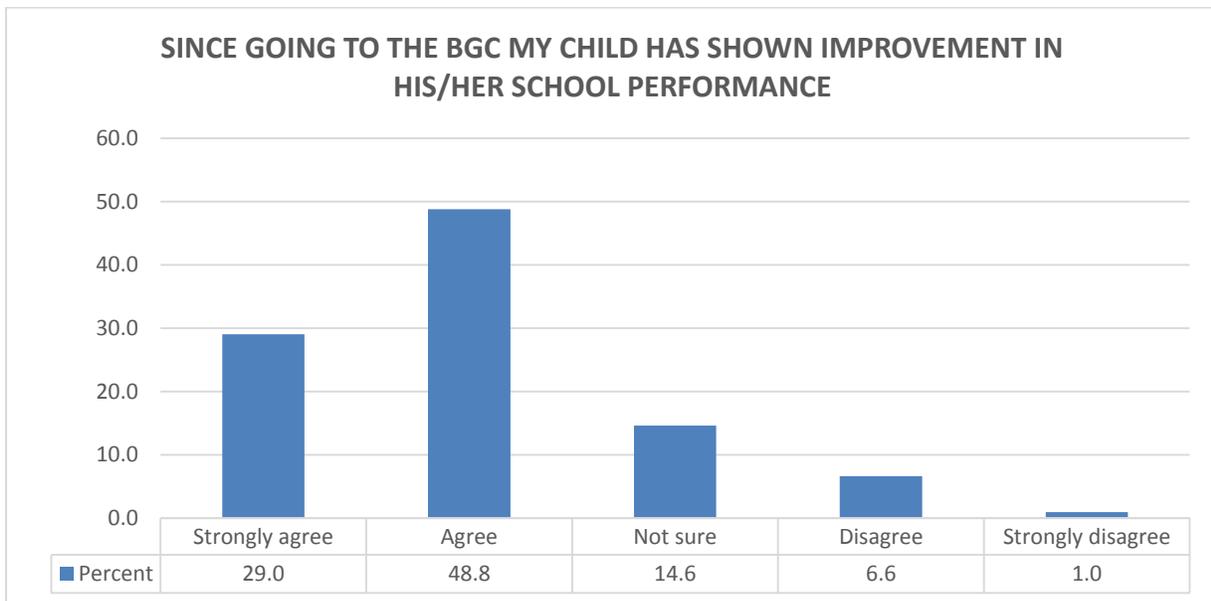
In addition to their relationships with their friends, interactions with parents and others in the family can be quite telling indicators of a child’s emotional wellbeing. According to a vast majority of parents (78.1%), Club members have shown a greater ability to get along in their families since attending the Clubs.



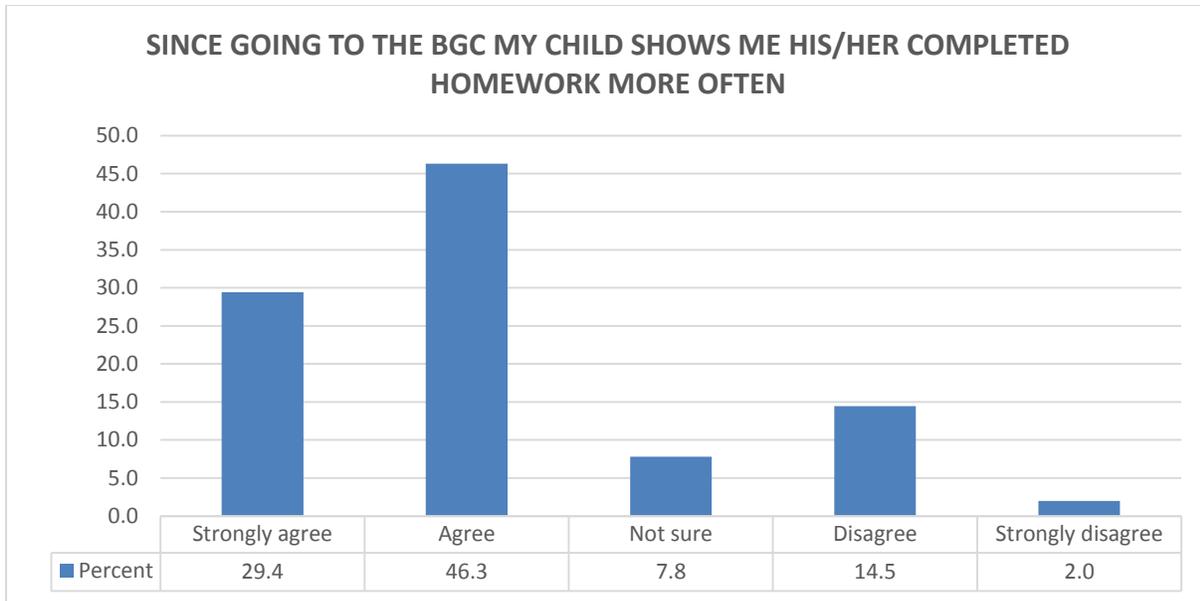
Empathy for others and the willingness to volunteer to help the community are signs of emotional maturity. Moreover, the willingness to volunteer may be influenced by contact with an organization that utilizes many generous volunteers. The propensity to volunteer may indicate that the youth is being positively influenced by those in the Clubs.

The data is encouraging. The majority of parents (64.3%) indicate that their children are more interested in volunteer work since participating in the Boys & Girls Clubs. Some 24.4% were not sure and only 11.3% disagreed or strongly disagreed with such an assessment.

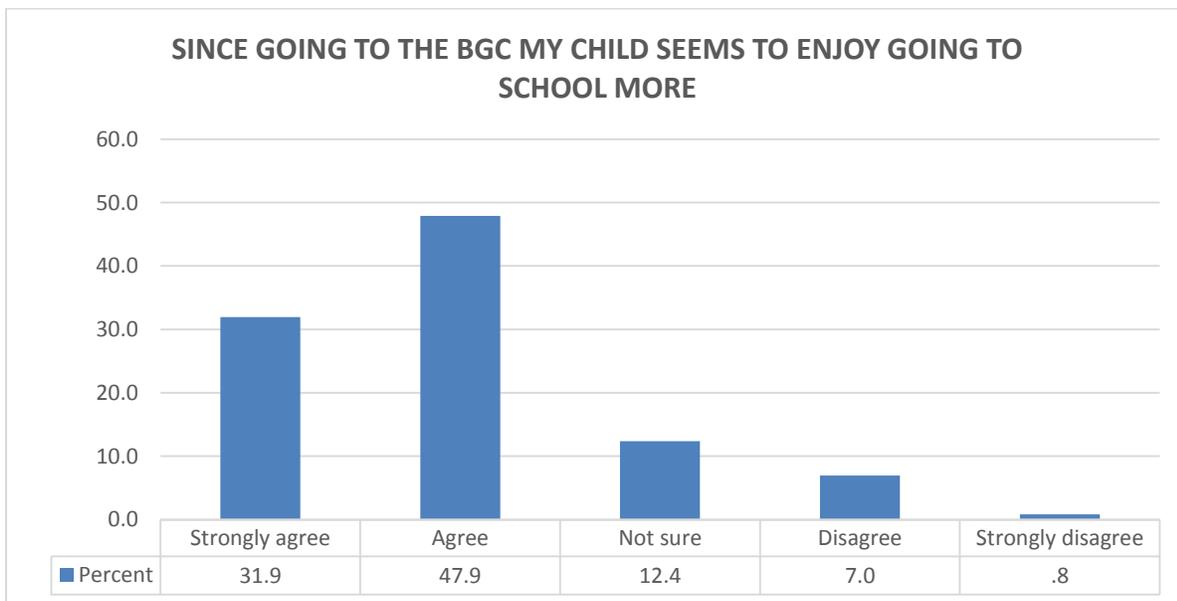
**4.2.4.2) Academic Achievement and Promise**



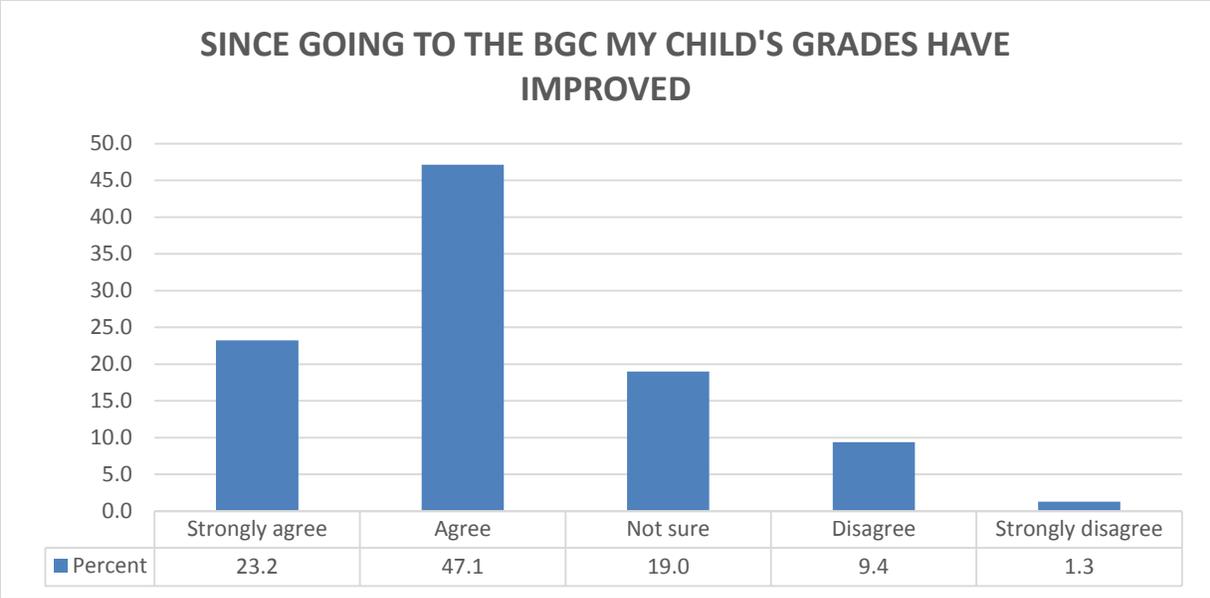
According to the results of the survey, parents report that their children have improved performance in school since attending the Boys & Girls Clubs. Specifically, 78.8% of parents either agree or strongly agree that they have observed this pattern. Only 7.0% disagree or strongly disagree that such improvement has occurred.



One way for parents to observe the study habits of their children is through their children showing them completed homework. 75.7% of parents have observed their children showing them completed homework more often since attending the Boys & Girls Clubs.



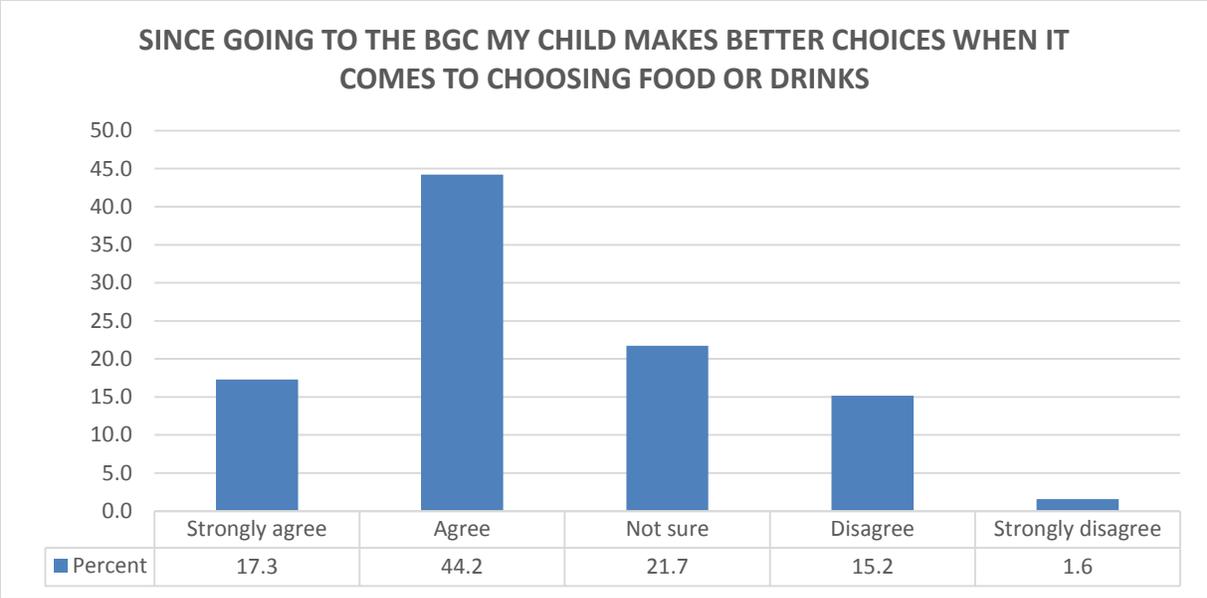
There is also broad consensus among parents that their children enjoy going to school more since attending the Boys & Girls Clubs. 79.2% of parents agree or strongly agree that they have seen such improvement.



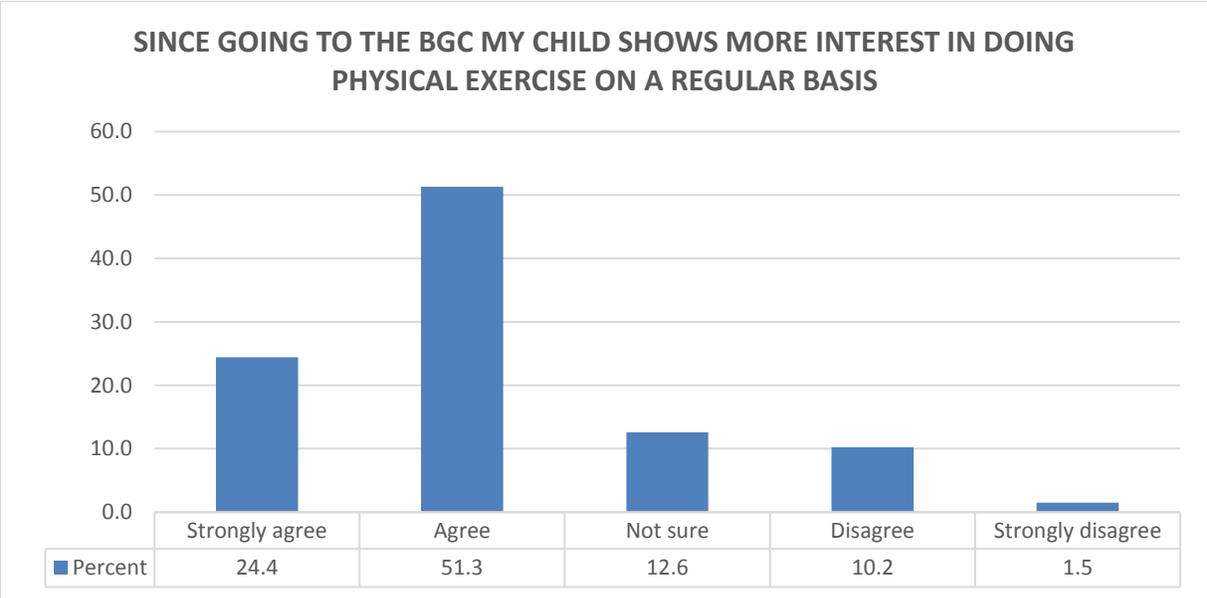
Many of the academic improvements parents have observed in their children are also corroborated by improved grades. Grades are a particularly objective measure of Club member performance and indicative of long-term prospects. The data is similarly impressive in this regard. The majority of parents (70.3%) have observed that their children’s grades have improved since attending the Boys & Girls Clubs. Only 10.7% of parents disagreed about whether such an improvement has occurred.

**4.2.4.3) Health and Nutrition**

Finally, parents are also in a great position to see the sort of decisions made by their children regarding nutrition and physical activity. As such, the survey included several questions designed to understand the impact of the program on Club members’ health.

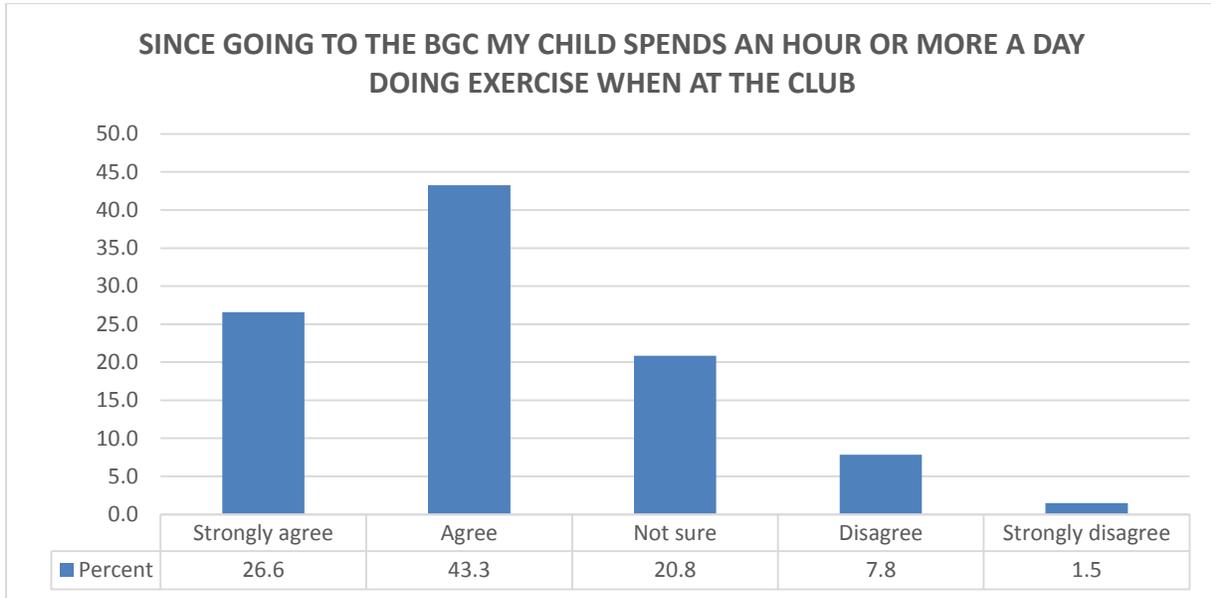


Parents generally report that their children have made better choices when it comes to choosing foods and drinks since attending the Boys & Girls Clubs. The majority of respondents (61.5%) agree or strongly agree that their children made better food choices. Such decision-making skills are critical in ensuring that youth eat nutritious food that is conducive to their long-term health.



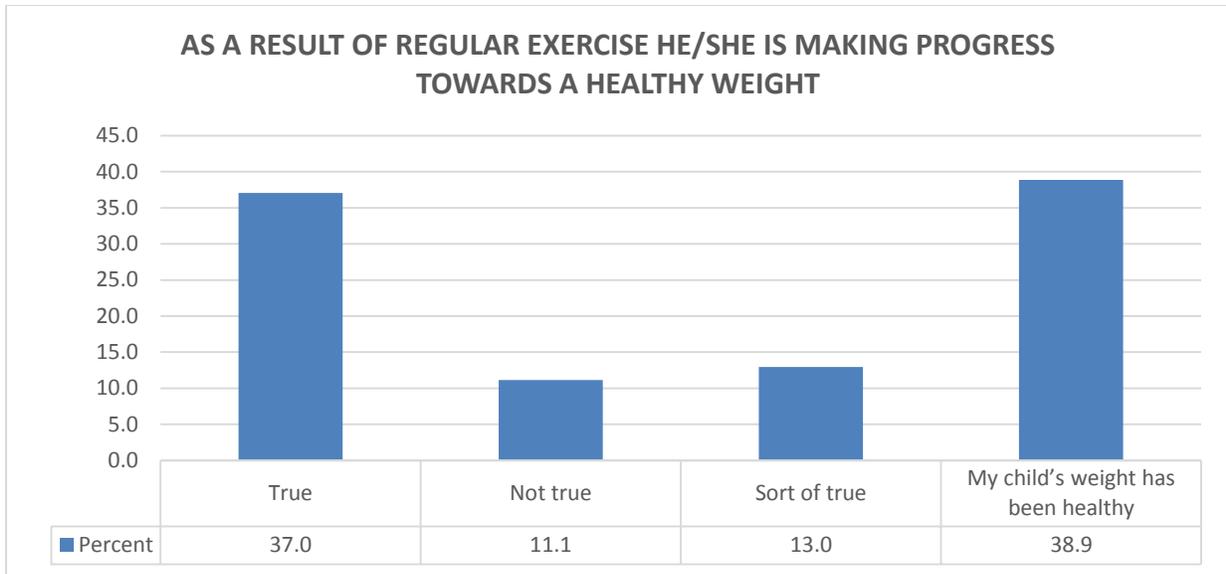
The vast majority of parent respondents (77.7%) agree or strongly agree that their children have shown more interest in regular physical exercise since attending the Boys & Girls Clubs. This is a significant

finding since physical activity not only staves off obesity, but it can help improve youths in other ways, from developing better functioning cardiovascular systems to having greater emotional confidence.



Doing regular exercise for a certain period of time during a day is highly desirable and recommended by many government-funded programs. Some 69.9% of parents agreed or strongly agreed that their children spend an hour or longer exercising during each day when they are in the Club environment.

Physical exercise has a variety of benefits, from improved cardiovascular health to reduced levels of stress. One particularly important benefit of exercise is that it can help Club members reach a healthy weight level. Given the fact that many youths face the problems of being overweight and obese, any program that can help students lose weight is beneficial.



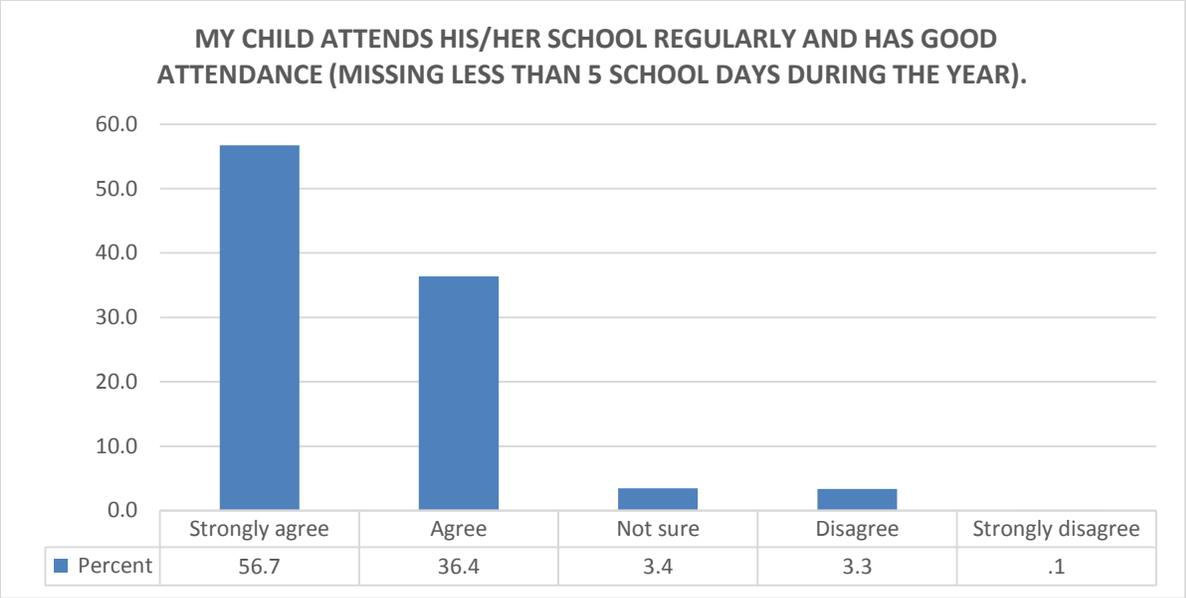
It must be noted that 38.9% of parents indicated that their children did not need to lose weight and they are at a healthy weight already. This is a promising statistic and such children are fortunate not to face the myriad of risks associated with being overweight. Nevertheless, the remaining 61.1% of children may be in need of losing weight based on the responses of parents. For these children, the services provided by the Clubs are particularly important.

A majority of parents of those who had children with possible existing or potential weight problems (50.0%) indicate that it is true or sort of true that their children are becoming less overweight as a result of physical exercise. However, as a proportion of those who are potentially overweight, some 82.0% of parents indicate that their children are making progress towards reaching a healthy weight as a result of regular exercise.

Given the fact that regular exercise is a part of the Club program, it is clear that the Boys & Girls Clubs are playing a vital role in helping the children of these parents become less overweight.

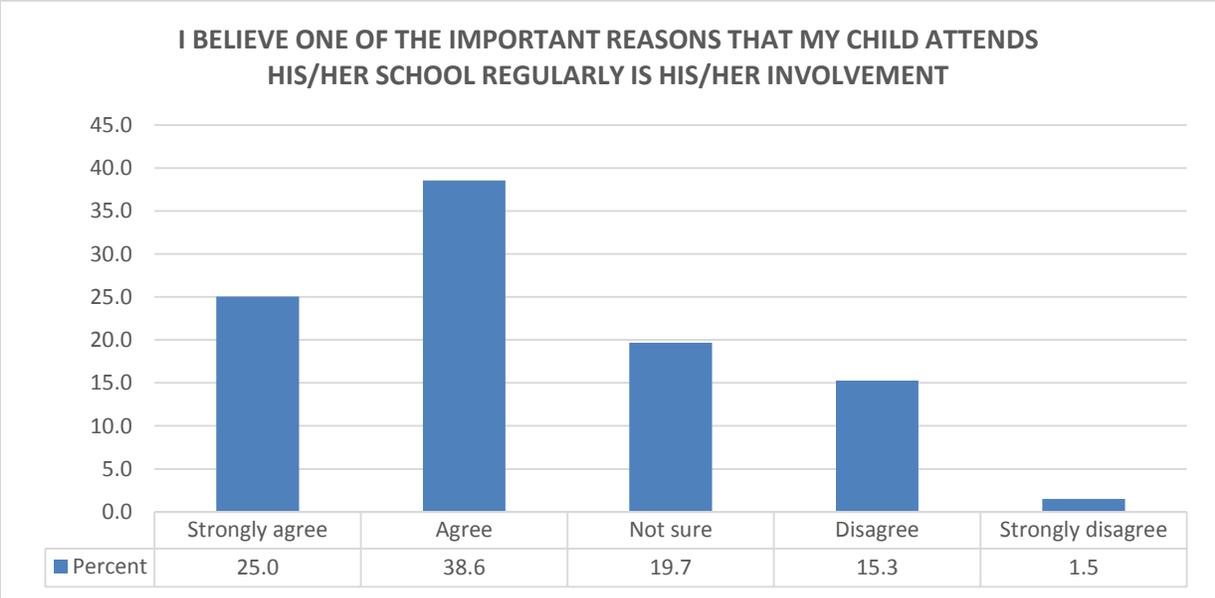
#### **4.2.5) Information on Students' Academic Achievement and Aspirations**

Beyond the direct impact of Club attendance on students' academic achievement, the survey also asked parents to give more general information on their children's academic achievements and objectives. Such information can be used to learn more about the children served by the Boys & Girls Clubs.

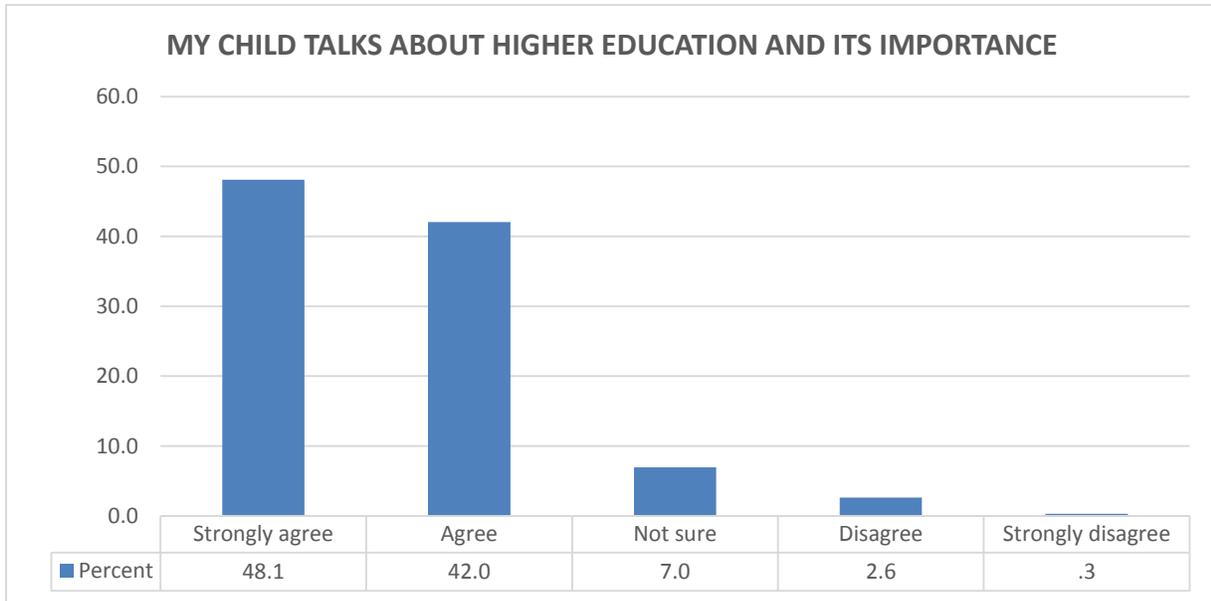


Having a good attendance record in school is an important factor in whether a student becomes academically successful. Missing school can often lead to a student falling behind and becoming frustrated with their studies. As such, good attendance (defined as missing less than five school days during the year) is an important indicator of academic success.

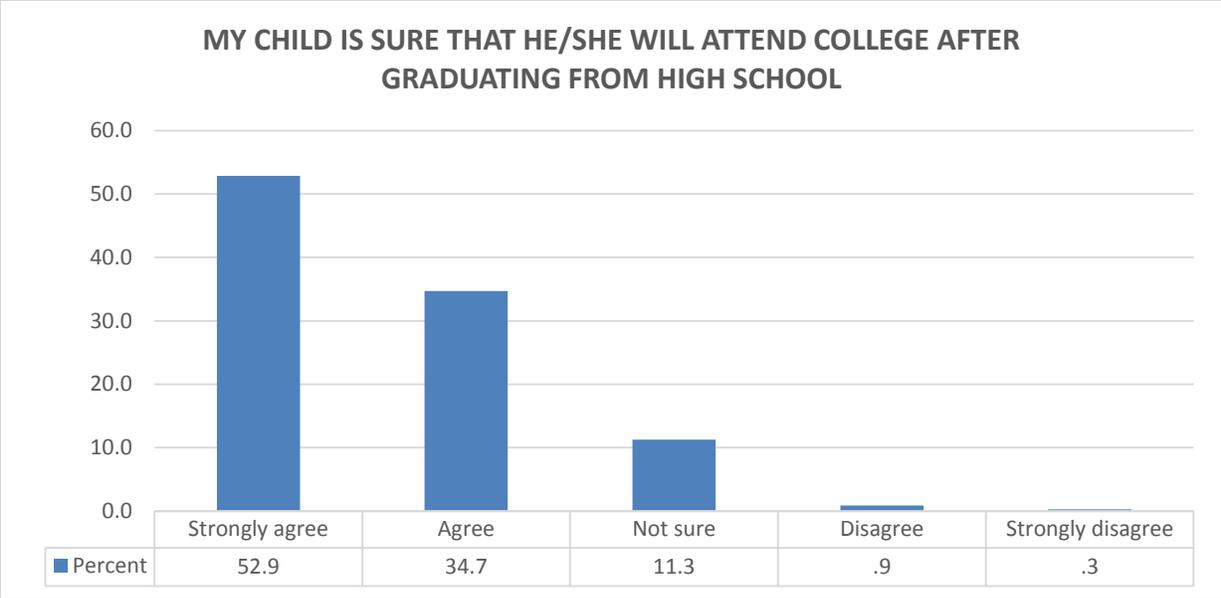
The vast majority of parents (93.1%) agreed or strongly agreed that their child attends school regularly and has good attendance. This data is very promising and shows that many children in the program are attending school regularly and not falling behind in their classes.



There can be a variety of reasons for the strong attendance records reported by parents. As such, the survey attempted to determine the influence of the Clubs on regular school attendance. More than three out of five parent respondents (63.6%) indicated that they agreed or strongly agreed that one of the important reasons that their children attend school regularly is their membership and attendance in the Boys & Girls Clubs. This question shows the vital role the Clubs play in providing a positive academic influence on their Club members.



Having ambitions and goals can help motivate children academically. One indicator of ambition can be whether or not a child talks about pursuing higher education beyond high school. A vast majority of parents (90.1%) agree or strongly agree that their children discuss these goals and their importance.



The vast majority of parent respondents (87.6%) agreed or strongly agreed that their children believe they will attend college after graduating from high school. This data further corroborates the fact that children of these parents have high academic ambitions.

In brief, the results of both surveys show the pivotal contribution of the Boys & Girls Clubs to the economic and social wellbeing of tens of thousands of Club members and their families throughout the county.

## Bibliography

- Albert, Bill. (2000), "With One Voice: America's Adults and Teens Sound Off About Teen Pregnancy," A Periodic National Survey.
- American Promise Alliance (2010), "Significant decline in number of dropout factories," US school when just 60% or fewer students graduate.
- Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2010-08-13.
- Annual number of births to women 15 to 19 years of age per 1,000 women, for 2011 or most recent year. United Nations Statistics: See the following URL  
[http://internationalcomparisons.org/intl\\_comp\\_files/sheet010.htm](http://internationalcomparisons.org/intl_comp_files/sheet010.htm)
- Austin, G., Skager, R. , Bailey, J. and Bates, S. "Tenth Biennial California Student Survey 2003-2004 Heavy Alcohol and Drug Use," Jointly sponsored by California Attorney General's Office California Department of Education and Department of Alcohol and Drug Programs, 2007
- Becker, Barrie. (2005). "County level estimates of the effects of a universal preschool program in California," Rand Labor and population.
- Bergeron, Michael F. "Improving health through youth sports: Is participation enough?" *New Directions for Youth Development*, No. 115 (Fall 2007).
- "California – State Education Brief." (2007), Diplomas Count: An Essential Guide to Graduation Policy and Rates.
- "California Commission on the Status of Women" (2007), Public Policy Agenda and Proposals to the Governor and State Legislature for 2007-2008.
- "California's Criminal Justice System: A Primer," Legislative Analyst's Office (LAO) California Nonpartisan Fiscal and Policy Advisor.
- California Department of Education, Data Reporting Office, 2014
- California Dept. of Justice, 2014: <http://oag.ca.gov/crime/cjsc/stats/arrests>
- "California's Front Line Against Crime." (2007), Fight Crimes Invest in Kids California: A School and Youth Violence Prevention Plan.
- Carole, Sharron et al (2006), "State Innovation to prevent Teen Pregnancy," Association of Maternal and Child Health program, State of Utah.
- Centers for Disease Control (CDC). (2007), Youth Risk Behavior Surveillance System (YRBSS).
- Centers for Disease Control and Prevention (2010), Teen Pregnancy.  
<http://www.cdc.gov/TeenPregnancy/index.htm>

Centers for Disease Control and Prevention, National Health Statistics, 2013

Constantine, Norman and Carmen Nevarez. "No time for complacency: Teen Births in California." Public Health Institute. March, 2003.

"Cost of Teenage Childbearing and Parenting to Teenage Mothers." (2006). New Mexico Department of Health family Planning Program.

Davids, Rebecca and Vecchiarelli, Stephanie (2007), "A report presented to the management of the Boys & Girls Clubs of Greater Oxnard and Port Hueneme."

Dall, Timothy. "Potential Health Benefits and Medical Cost Savings from Calorie, Sodium, and Saturated Fat Reductions in the American Diet." American Journal of Health Promotion. 12 Feb. 2009.

Day, Jenifer Cheeseman and Newburger, Eric C. (2002), "The Big Payoff: Educational Attainment and Synthetic estimates of Work-Life earning; Special Studies," *US Census*.

Department of Commerce, Census Bureau, Current Population Survey (CPS), March and Annual Social and Economic Supplement, selected years, 1981–2009

"Economic Consequences." Center for Disease Control and Prevention, 2009. 27 Dec. 2009. <<http://www.cdc.gov/obesity/causes/economics.html>>.

Ellickson et al., "Does Alcohol Advertising Promote Adolescent Drinking? .... Associations Between Drug Use and Deviant Behavior in Teenagers, 1996.

Fishman, Laura (2010), Why high school students should avoid working long hours.

Ganderton, P. T. (2006), "The Economic Cost of Teenage Childbearing and Parenting in New Mexico: New Estimates." NMDOH, Santa Fe, NM. 87502.

Goldschmidt, Pete, Huang, Denise, and Chinen, Marjorie. (2006). University of California, Los Angeles.

Grant, B.F., & Dawson, D.A. (1997). Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the Nation Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse* 9: 103-110.

Greene, Jay P. (2006), "Leaving Boys Behind: Public High School Graduation Rate," Manhattan Institute for Policy Research.

Guttmacher Institute (2010), U.S. Teenage Pregnancies, Birth, and Abortions: National and State Trends and Trends by Race and Ethnicity. <http://www.guttmacher.org/pubs/USTPtrends.pdf>.

Hamilton, B.E., Martin, J.A., Ventura, S.J., Sutton, P.D., and Menacker, F. (2005). "Births: Preliminary data for 2004." National vital statistics reports; vol 54 no 8. Hyattsville, Maryland: National Center for Health Statistics.

- Hellmich, Nanci. "Study: Hospitalization related to childhood obesity nearly double." USA Today. 9 July 2009.
- Hoffman, Saul D. (2006), "By the number: The public cost of teen childbearing," National Campaign to Prevent Teen Pregnancy.
- Kantrowitz, Mark (2007), The Value of Higher Education, *Journal of Student Financial Aid*, Vol. 37, Issue 1
- KidsData.org (California Dept. of Justice), <http://www.kidsdata.org/topic/165/juvenilearrest-rate/table#fmt=1098&loc=2,363&tf=67,64,46,37,16,10,9,8,7,6>
- Kirby, D., Lepore, G. and Ryan, J. (September 2005). "Sexual Risk and Protective Factors: Factors Affecting Teen Sexual Behavior, Pregnancy, Childbearing And Sexually Transmitted Disease: Which Are Important? Which Can You Change?" The National Campaign To Prevent Teen Pregnancy.
- Kost, K., Henshaw, S., & Carlin, L. (2010). U.S. Teenage Pregnancies, Births and Abortions: National and State Trends and Trends by Race and Ethnicity. Retrieved January 2010, from <http://www.guttmacher.org/pubs/USTPtrends.pdf>
- Laird, Jenifer, DeBell, Mathew, and Chapman, Chris. (2007), "Dropout Rates in the United States: 2004," US Department of Education, Washington DC National Center for Educational Statistics.
- Males, Michael. (2006). "Testing Incapacitation Theory: Youth Crimes and Incarceration in California," Center on Juvenile and Criminal Justice, San Francisco.
- Maynard, Rebecca, A. (1999), *Kids having kids: Economic costs and social consequences of teen pregnancy*, Published by John Wiley and Sons on behalf of Association for Public Policy Analysis and Management.
- Miller, TR, Levy, DT, Spicer, RS, & Taylor, DM. (2007), Societal costs of underage drinking *Journal of Studies on Alcohol*, 67(4) 519-528.
- National Archive of Criminal Justice Data. National Incident-Based Reporting System, 2008: Extract Files [Computer file], <http://ojjdp.gov/ojstatbb/offenders/qa03301.asp?qaDate=2008>
- National Governors Association. (2005). Graduation Counts: A Report of the National Governors Association Task Force on High School Graduation Rate Data. Washington, D.C.
- National Institute of Statistical Sciences and Education Statistics Services Institute. (2004). National Institute of Statistical Sciences/Education Statistics Services Institute Task Force on Graduation, Completion, and Dropout Indicators (NCES 2005-105). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- National Opinion Research Center, 2013, 2012 Experiment Topic Module

“Not Just Another Single Issue: Teen pregnancy prevention’s link to other critical social issues.” (2002),  
The national campaign to prevent teen pregnancy.

Orfield, Gary, Losen, Daniel, Wald, Johanna and Swanson, Christopher B. (2004). “Losing our future: How  
minority youth are being left behind by the graduation rate crisis.” (Cambridge, MA): The Civil  
Rights Project at Harvard University.

Oster, Gerry et al. “Lifetime Health and Economic Benefit of Weight Loss Among Obese Persons.”  
American Journal of Public Health. Vol. 89, No. 10. October 1999.

Pacific Institute for Research and Evaluation, 2010.

Pacific Institute for Research and Evaluation (2009), “Cost of underage drinking.”

Petersilia, Joan. (2006), “Understanding California Corrections, A policy Research Program report,”  
California Policy Research Center of California.

Pew Charitable Trusts, 2012

Reinberg, Steven. “Almost 10 Percent of US Medical Costs Tied to Obesity.” Business Week. 27 July  
2009.

Rotermund, Susan. (2007), “California dropout project,” UC Santa Barbara Gervirtz Graduate School of  
Education: Statistical Brief # 5.

Rumberger, Russell W. (2007), “What is California’s High School Graduation Rate?, California Dropout  
Research Project, UC Santa Barbara.

Russo, Frank D. (2008), “Failure on California High School Exit Exam Can be Predicted as early as the  
Fourth Grade,” *California Progress report*.

Schaefer, Stephanie, Kass, David, Roger, Mark, and Kirsch, Jeff. (2006). “High-Quality Pre-Kindergarten  
Can Prevent Teenage Pregnancy and Future Crime in Tennessee,” Fight Crime: Invest in Kids  
Tennessee.

State Department of Justice, Total Arrests, 2004-2009, published in 2010.

<http://ag.ca.gov/cjisc/pubs.php#crimeCAUS>.

“State's youth prisons mired in hopelessness and California’s Criminal Justice System.” (2007), San  
Francisco Chronicle.

Turner, Susan et al (2007), Los Angeles County Juvenile Crime Prevention Act, Fiscal Year 2005-2006  
Report.

“United Nations” (2003), United Nations Demographic Yearbook, 2001. New York, USA.

U.S. Census, American Community Survey (ACS) various years.

U.S. Census Bureau (various years).

U.S. Census, American Community Survey, various years.

U.S. Department of Education. Washington, DC: National Center for Education Statistics.

U.S. Department of Education (2008), High School Graduation Rate, a non regulatory guidance, Washington D.C.

Vexler, E. and Suellentrop, K. (2006). "Bridging Two Worlds: How Teen Pregnancy Prevention Programs Can Better Serve Latino Youth." Washington, DC: The National Campaign to Prevent Teen Pregnancy.

WestEd. (2004). *California Graduation Rate: the Hidden Crisis*.

Wilkins, David. "Childhood Obesity: Costs, Treatment Patterns, Disparities in Care, and Prevalent Medical Conditions." Thomson Medstat Research Brief. 2006.

Woolf, Steven H. et al (2007), "Giving everyone the health of educated: An examination of whether social change would save more lives than medical advances." The American Journal of Public Health, Vol.97. No. 4.