

EVALUATION
OF
BOYS AND GIRLS CLUBS OF METRO
DENVER

FALL 2007



Submitted to

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Introduction

In 2005, the Boys and Girls Club of Metro Denver (BGCMD) partnered with OMNI Institute to develop and conduct a larger, longitudinal and cross-sectional evaluation effort that is systematic and examines overall Club impact on a broad range of desired outcomes. A pilot evaluation was conducted in May 2006 with three branches of Boys and Girls Clubs of Metro Denver – Broncos, Cope, and Wilfley. A report developed at the end of the pilot phase outlined the development of the evaluation plan, training of staff and other elements regarding this process.

In October of 2006, the first full-scale implementation of the evaluation was conducted across all six branches (Boettcher, Broncos, Cope, Johnson, Owen, and Wilfley). In April of 2007, BGCMD conducted the evaluation once again, in accordance with its plan to evaluate all club members twice a year – once in the Spring and once in the Fall. Again, in accordance with this plan, the evaluation was conducted in each of the six branches, as well as in the newly-added branch, Shopneck. With data collected across the six original branches at a minimum of three time points, and data collected in the pilot branches at four time points, the data can be examined in multiple ways to assess the relationship between club participation (as measured by hours spent in one's Club) and desired outcomes.

- Using the full representative sample of club members across all branches who took the survey in Fall 2006, Spring 2007, and/or Fall 2007 (with no club member counted twice), we can draw comparisons between youth with greater versus lesser levels of participation and ask the question: *Do club members who have spent more time in their Clubs show better outcomes than club members who have spent less time in their Clubs?*
- Using only those club members who participated in multiple survey administrations, we can ask the question: *Do club members show improvement in outcomes over time?*

Method

Please see the Report of the BGCMD Evaluation for Fall 2006 for detailed information on the survey measures and analytical approaches to the data.

In October of 2007, 845 members across the 7 BGCMD Clubs participated in the club-wide survey, 773 of whom provided data that could be linked to their information in the KidTrax database.

Analytical Approaches

For analyses comparing *different* club members to each other on the basis of participation levels, each member could only be counted once. For members with multiple surveys (i.e., those who took the survey in both Fall 2006 or Spring 2007 and Fall 2007), only data from their primary survey were included in these comparisons.

Members were divided into 5 groups based on number of hours spent in Club over previous 6 months. These groups were based on percentile, as follows:

- 0-20%ile = <1 to 42 hours ($n = 257$)
- 21-40%ile = 43 to 83 hours ($n = 250$)
- 41-60%ile = 84 to 143 hours ($n = 262$)
- 61-80%ile = 144 to 258 hours ($n = 264$)
- 81-100%ile = > 259 hours ($n = 247$)

Analyses were also run to determine if participation levels in PowerHour were associated with more positive school-related outcomes, and if participation in leadership activities was associated with more positive outcomes across all measures. As with the previous analyses, PowerHour and leadership analyses also took into account pre-existing parental support levels, as well as overall time spent in the Club.

The PowerHour and Leadership analyses were conducted only for those completing the survey in Fall 2007. An important caveat is that Powerhour participation levels were based only on data from the three months prior to the survey (i.e., August-October 2007) whereas PowerHour analyses for the previous report were based on the previous 9 months of participation corresponding to the school year schedule (i.e., August 2006 through April 2007). It is therefore expected that PowerHour analyses in this report may not be sufficiently sensitive to detect impact of participation in the program.

For analyses on the *same* members over time, only those members who took the survey at all four time points (Spring 2006 pilot; Fall 2006; Spring 2007; and Fall 2007) were examined.

For graphs illustrating differences in data from the Fall time-points to the Spring time-points, changes might partly reflect seasonal differences (e.g., attitudes at the beginning versus end of the school year). Examining members with four time points enables us to

examine differences over two years' time, with both the first and third time points occurring in the Spring and the second and last time points occurring in the Fall.

Results

Club Time

Of interest to BGCMD is the nature and scope of members' participation in various program areas. These program areas are: the computer lab; the learning center; the game room/rec area; sports/gym; art room; and health programs. Members were asked how often they spend time in each of these program areas on a scale from *Never* to *All the Time*. The responses for each program area are displayed below. As also observed in the Spring 2007 survey, the gym and rec area are the most popular areas for members, whereas comparatively fewer members report spending any time in the art room or in health programs.

How often do you spend time in ...?					
	Never	Not very often	Some of the time	A lot of the time	All the time
Program Area	%	%	%	%	%
<i>Computer Lab</i>	12.3%	26.8%	41.1%	11.8%	8.0%
<i>Learning Center</i>	18.9%	26.3%	33.8%	13.8%	7.1%
<i>Game Room/Rec Area</i>	6.9%	12.4%	28.6%	30.4%	21.7%
<i>Sports/Gym</i>	5.3%	11.1%	24.0%	24.1%	35.6%
<i>Art Room</i>	30.0%	25.2%	23.6%	10.6%	10.6%
<i>Health Programs</i>	46.5%	17.4%	17.5%	9.1%	9.4%

The total number of program areas that members indicated spending any amount of time in (i.e., more than *never*) is displayed below. Consistent with past results, the vast majority of members report participating to some extent in most or all of BGCMD's program areas.

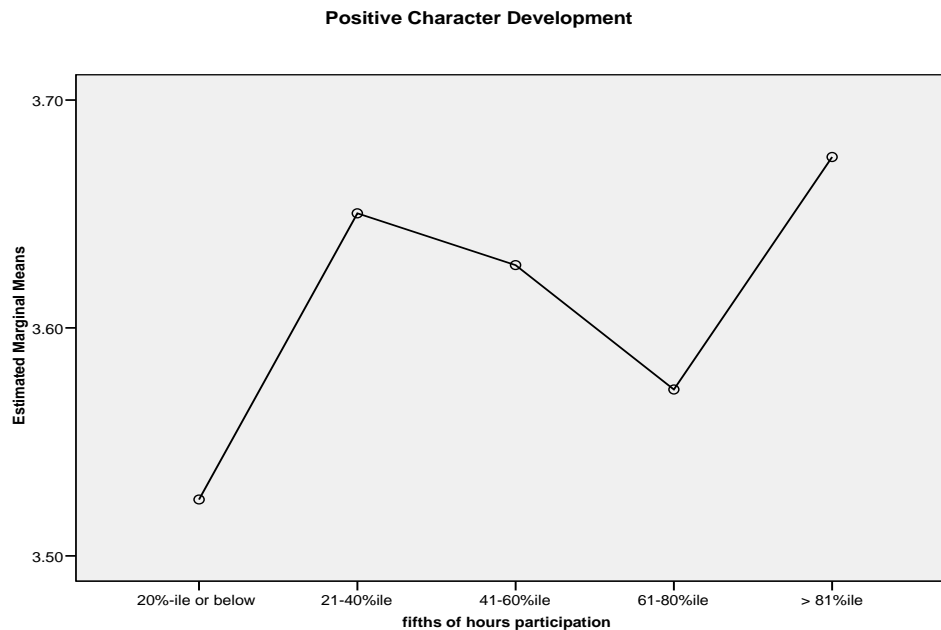
Program Participation	
# programs participated in	%
0	1.6
1	4.4
2	5.0
3	11.3
4	16.7
5	28.6
6	32.5

Positive Character Development

Comparison across members

Positive character development was highest for members in the 81-100% group ($M = 3.68$) and lowest for those in the 20%ile or below (3.53); however the difference between these two groups was not significant.

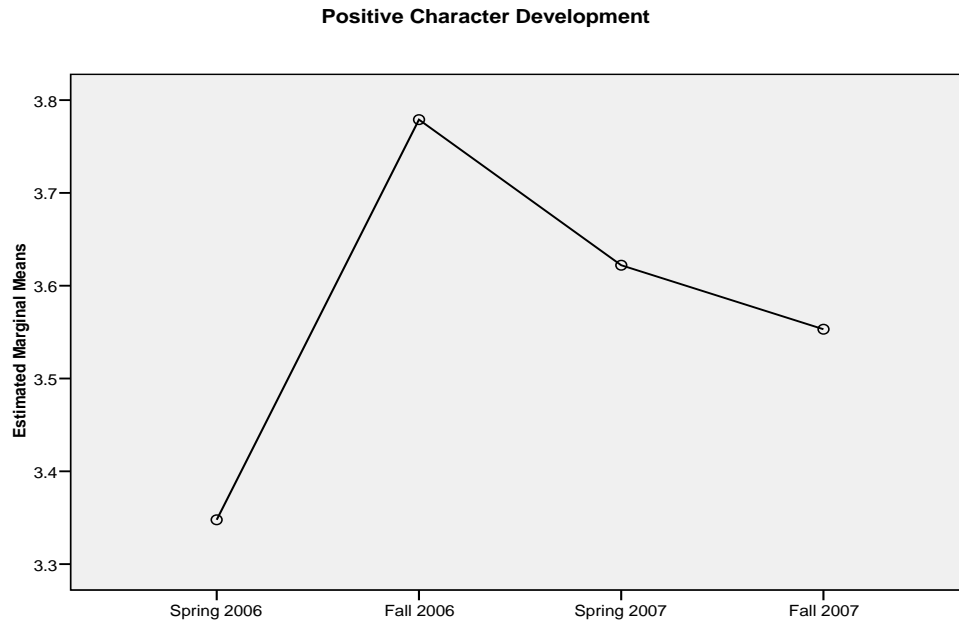
Graph 1a: Character scores for members with different participation levels



Same members over time

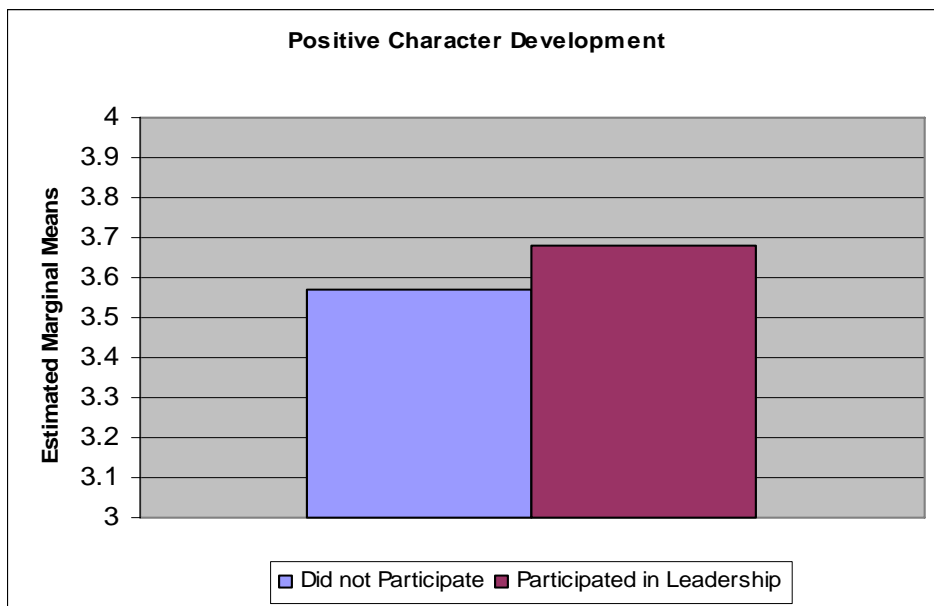
Examination of character development scores for the subset of members who were measured across multiple time points revealed an interesting pattern, with the Fall 2006 score being the most positive ($M = 3.78$). Scores did shift positively from the first time point, Spring 2006, which was the lowest ($M = 3.35$), to the last time point ($M = 3.55$) at Fall 2007; however, this shift was not significant. See Graph 1b.

Graph 1b: Character scores for same members over time



Leadership analysis

Positive character development scores for those who did not participate in leadership activities ($M = 3.57$) were marginally lower than those who participated ($M = 3.68$); however, the difference in scores between the two groups was not significant.

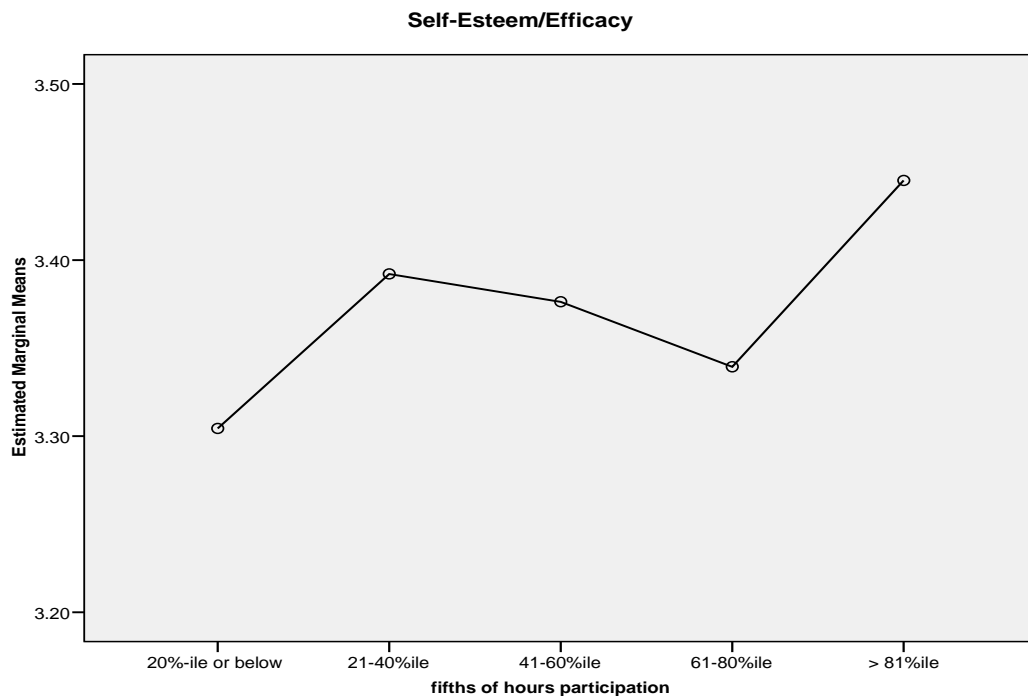


Self-Esteem and Efficacy

Comparison across members

Self-esteem was higher for members who had spent 259 or more hours in the Club. The lowest participation group had the lowest adjusted mean score on self-esteem ($M = 3.30$), with all other groups having higher scores (ranging from 3.34 to 3.45). None of the differences between the groups proved to be significant. See Graph 2a below.

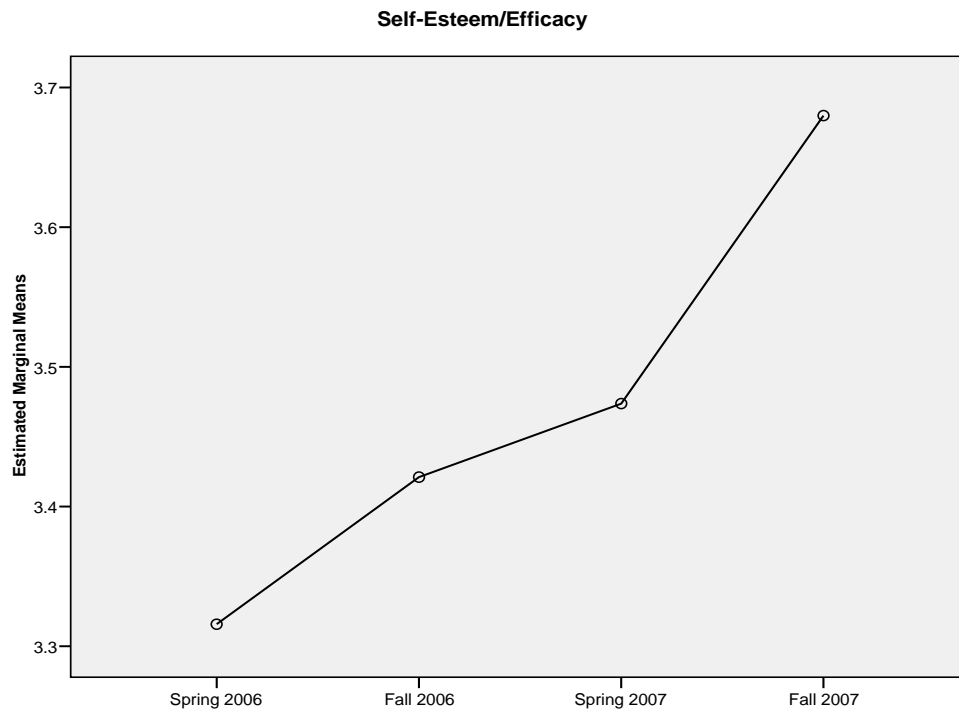
Graph 2a: Self-esteem scores for members with different participation levels



Same members over time

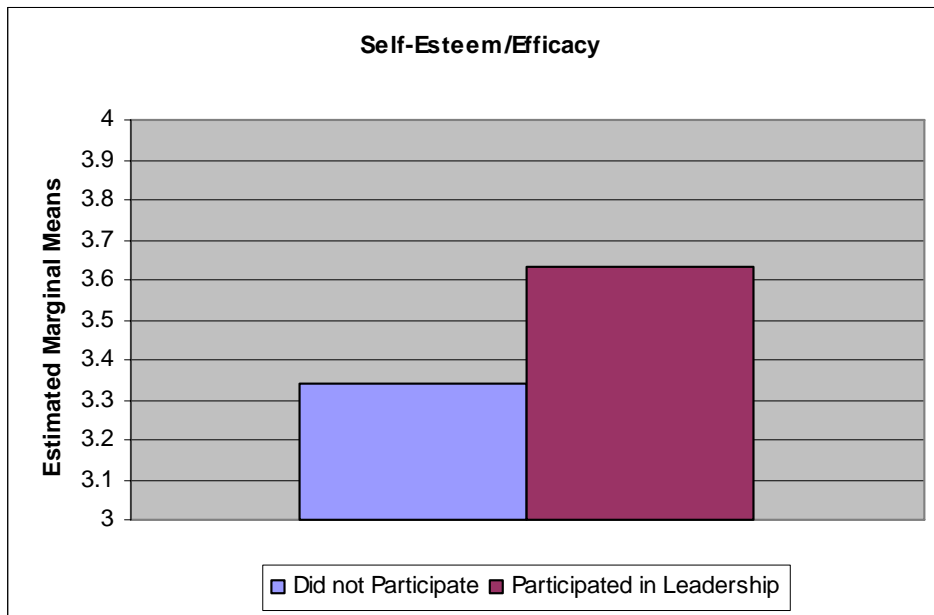
Self-esteem scores for the subset of members who took the survey at all four time points increased significantly over time ($p < .04$). Mean scores over time were as follows: Spring 2006: $M = 3.32$; Fall 2006: $M = 3.42$; Spring 2007: $M = 3.47$; Fall 2007: $M = 3.68$.

Graph 2b: Self-esteem scores for same members over time



Leadership analysis

Self-esteem scores showed a significant difference ($p < .004$) between those who participated in leadership programs ($M = 3.63$) and those who did not ($M = 3.34$). The graph below illustrates the difference between these two groups.

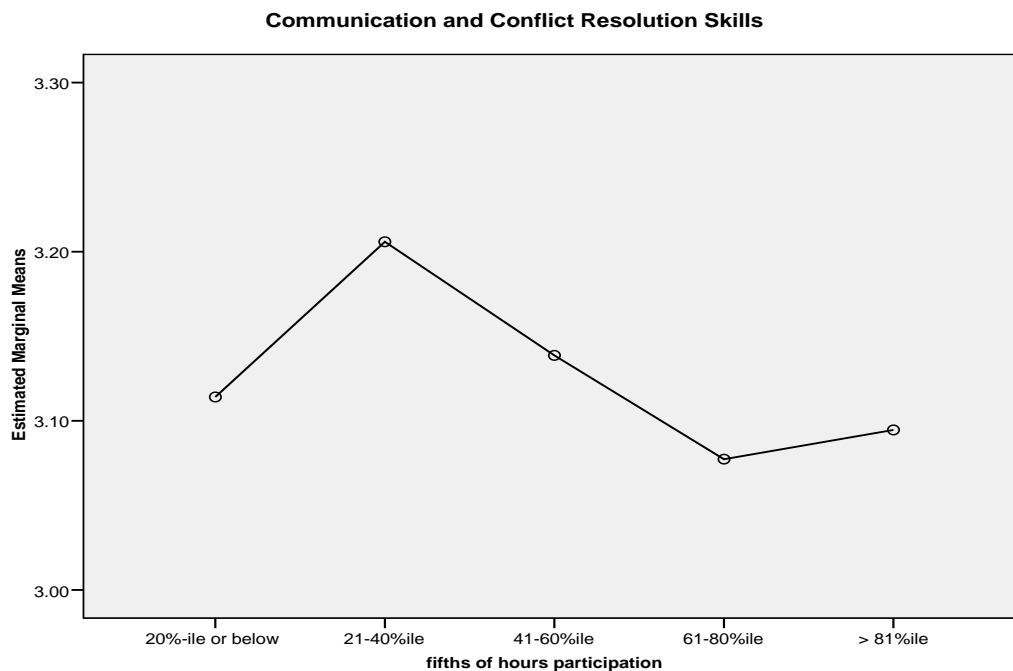


Communication and Conflict-Resolution Skills

Comparison across members

Members with different participation levels did not differ significantly on communication and conflict resolution skills. The 21-40%ile group had the highest mean score ($M = 3.21$) and the 61-80%ile group had the lowest ($M = 3.08$); no clear pattern in the estimated scores emerged.

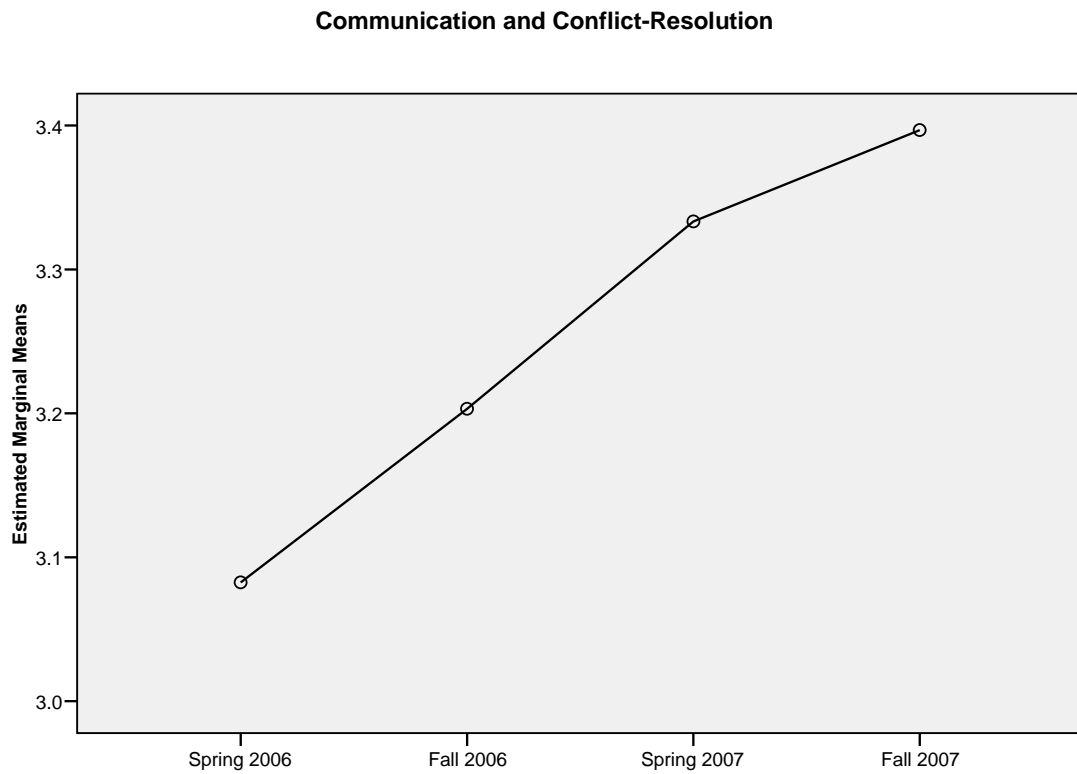
Graph 3a: Communication scores for members with different participation levels



Same members over time

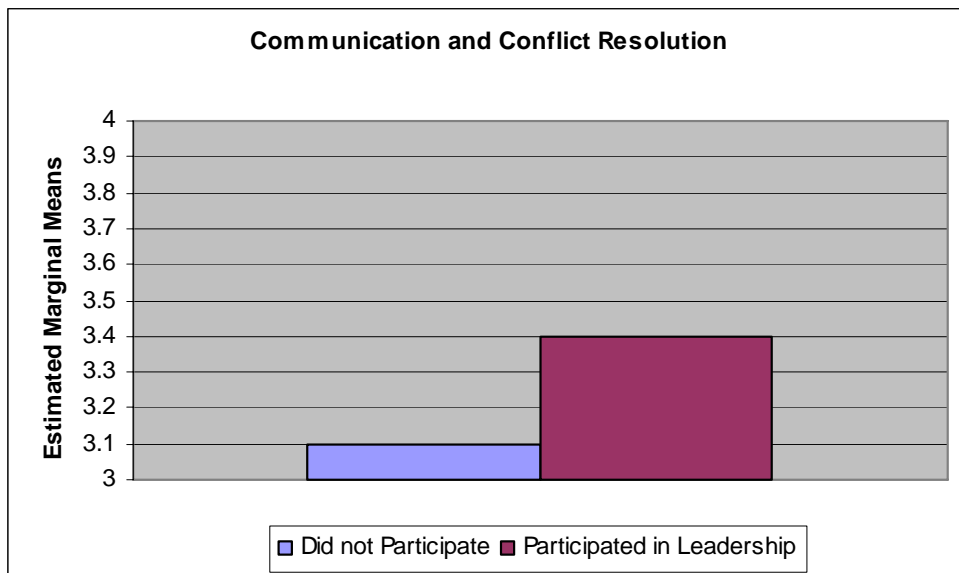
Looking at the same group of youth over time, a significantly positive trend was seen in communication and conflict resolution skills. Mean scores over time were as follows: Spring 2006: $M = 3.08$; Fall 2007: $M = 3.20$; Spring 2007: $M = 3.33$; Fall 2007: $M = 3.40$.

Graph 3b: Communication scores for same members over time



Leadership analysis

Communication and conflict resolution skill scores differed significantly ($p < .000$) from those who participated in leadership activities ($M = 3.40$) and those who did not ($M = 3.10$).

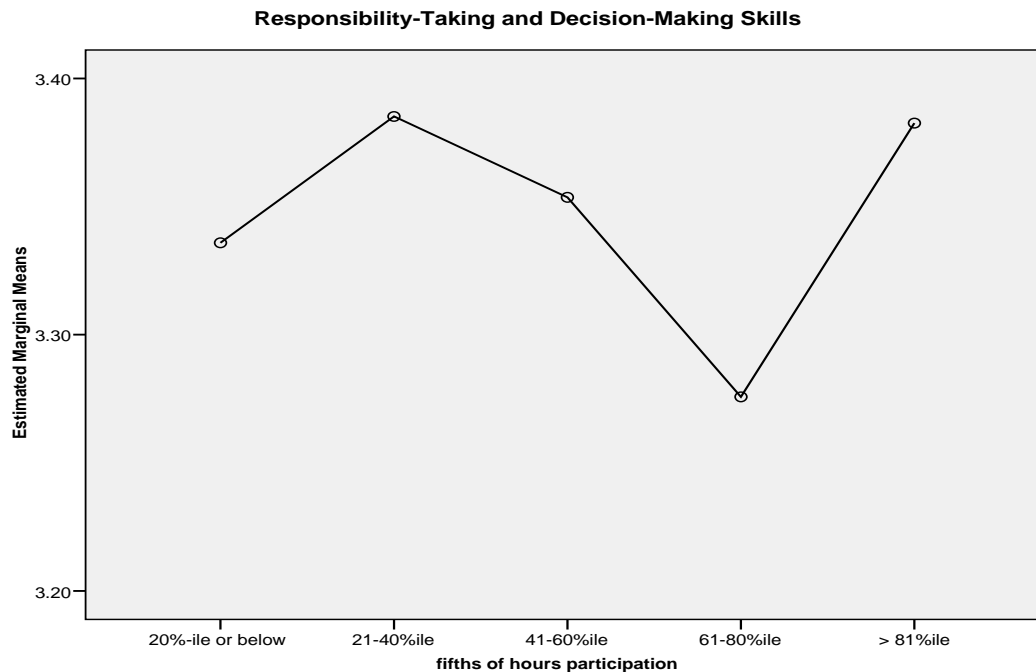


Responsibility-Taking and Decision-Making Skills

Comparison across members

Responsibility-taking and decision-making skills scores showed an odd trend, with all participation groups having similar adjusted mean scores, except for the second highest participation group (61-80%ile) which reported a somewhat lower level of this skill set than all other groups: 0-20%ile, $M = 3.34$; 21-40%ile, $M = 3.38$; 41-60%ile, $M = 3.34$; 61-80%ile, $M = 3.27$; 81-100%ile, $M = 3.40$. There were no significant differences across groups.

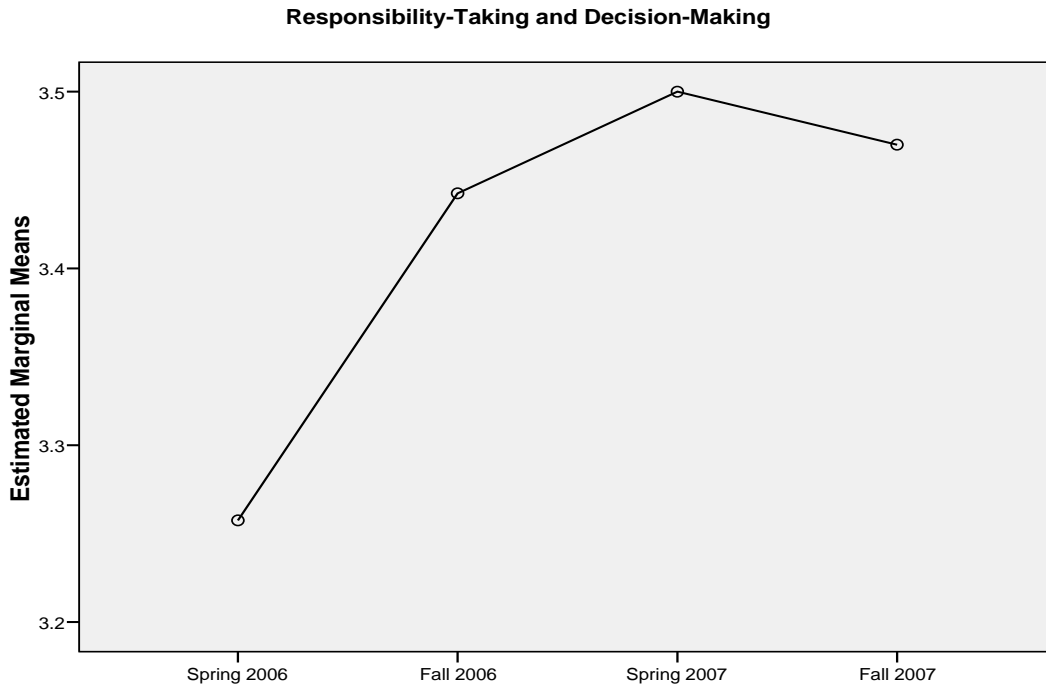
Graph 4a: Responsibility scores for members with different participation levels



Same members over time

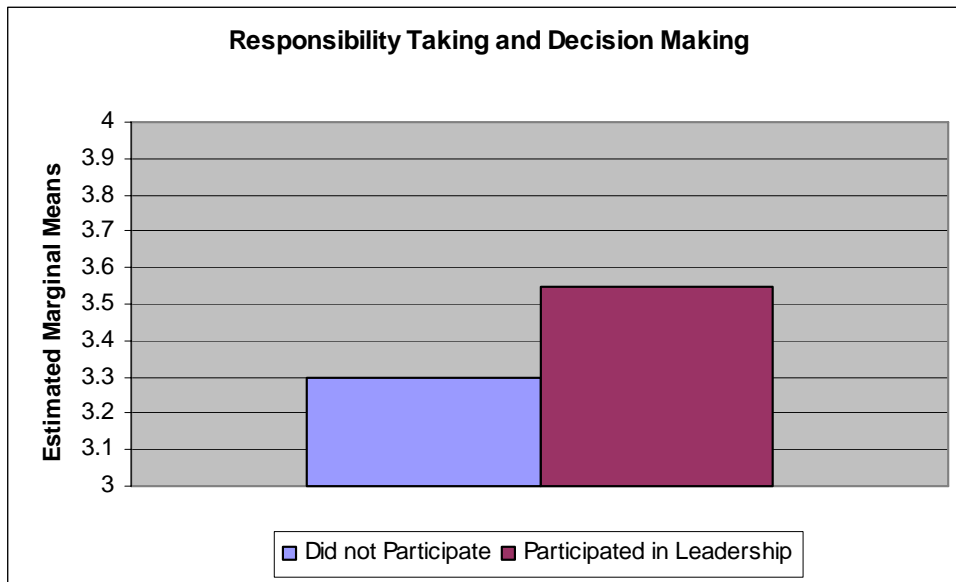
For members measured over time, responsibility-taking and decision-making scores trended upward between the first three survey time points (Spring 2006 $M = 3.26$; Fall 2006 $M = 3.44$; Spring 2007 $M = 3.50$); however, scores shifted slightly downward at the last survey time point in Fall 2007 ($M = 3.47$). The overall shift in scores was not significant.

Graph 4b: Responsibility scores for same members over time



Leadership analysis

Members who participated in leadership activities versus those who did not differed significantly on responsibility and decision-making skills scores ($M = 3.55$ and $M = 3.30$ respectively with $p < .004$).



School Outcomes

Measures assessed both commitment/bonding to school and self-reported interest/performance in school. To examine relationships of club participation to these school outcomes, several sets of analyses were conducted. As with all other outcomes of interest, we first examined differences between youth as a function of how much time they had spent in the Club in the previous six months and, second, examined changes over time in youth who took the survey at multiple time points.

We then ran additional analyses to see whether participation specifically in PowerHour was associated with more positive educational outcomes. As noted above, data on number of hours in Powerhour was only available for August through October 2007. As with overall participation levels, members were categorized into different PowerHour participation groups based on quartile. For hours spent in PowerHour between August and October 2007, the groups were as follows:

- 0-25%ile = 0 to .77 hours
- 26-50%ile = .78 to 2.32 hours
- 51-75%ile = 2.33 to 6.38 hours
- 76-100%ile = > 6.39 hours

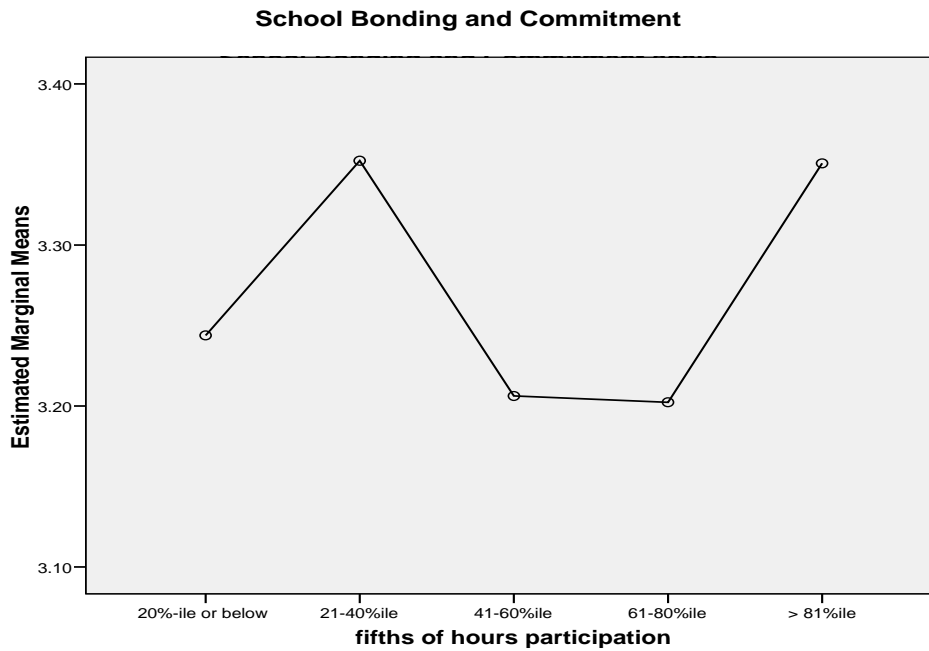
Again, it must be noted that these data are based only on a few months of participation, in contrast to the Spring 2007 report for which Powerhour participation levels were based on an entire school year's worth of data (i.e., 9 months from August 2006 to April 2007). As with other analyses, all comparisons between kids took into account pre-existing parental support levels. All PowerHour calculations additionally took into account overall time spent in the Club. Thus, any differences observed between members can not be attributable to different levels of support in the home or to different amounts of Club participation more generally.

School bonding and commitment

Comparison across members

Levels of school bonding and commitment did not show a consistently positive trend as a function of participation levels (see graph below). There was a marginally significant increase ($p < .078$) between those in the 61-80%ile ($M = 3.20$) and those in the 81-100%ile ($M = 3.35$), although those participating at the 21-40% had the same estimated mean as those in the 81-100%ile.

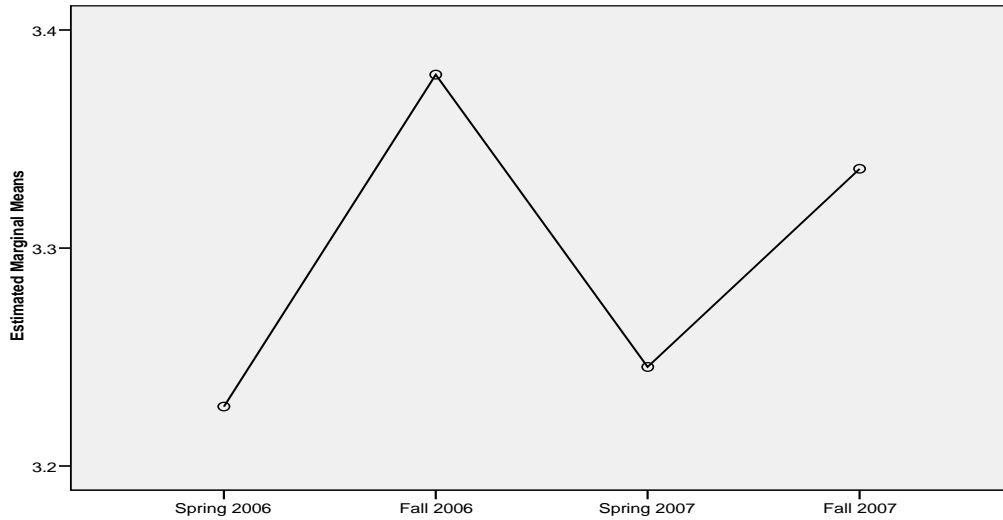
Graph 5a: School bonding scores for members with different participation levels



Same members over time

Examination of school commitment scores for the subset of members who were measured three times over the past year reveal an interesting pattern that is likely attributable to seasonal differences. As can be seen below, scores were most positive in Fall 2006 and 2007 ($M = 3.38$ and $M = 3.34$ respectively), and lower in Spring 2006 ($M = 3.23$) to Spring 2007 ($M = 3.25$). The scores for the fall time points remained fairly stable as did the scores from the spring time points. There were no significant differences across these scores.

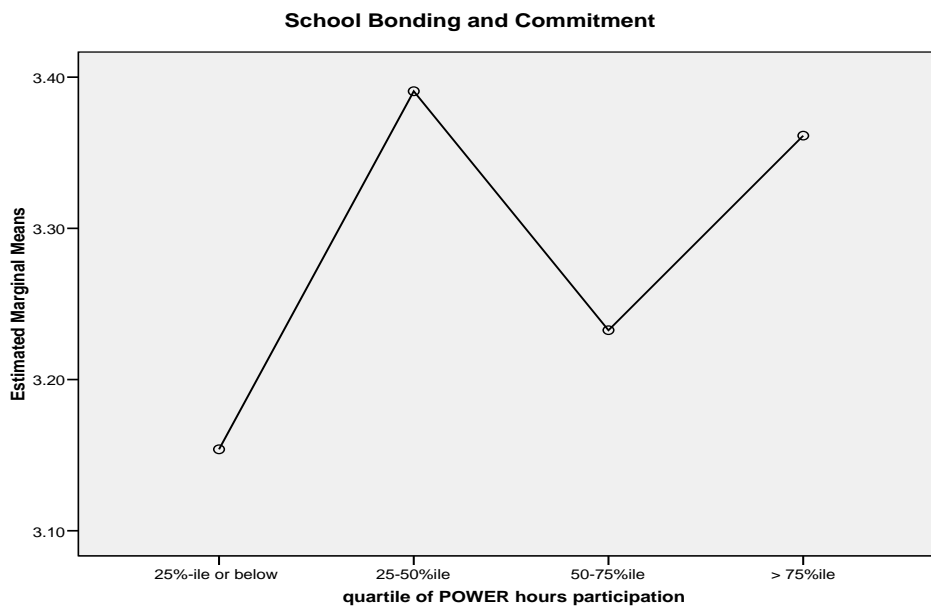
Graph 5b: School commitment scores for same members over time
School Bonding and Commitment



PowerHour analysis

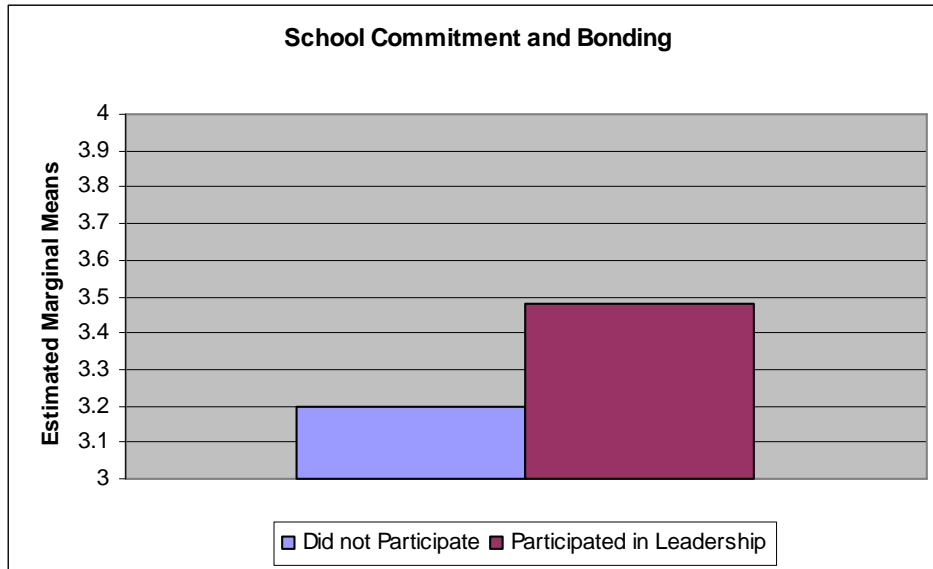
For the members who took the survey in Fall 2007, there was a less clearly positive pattern of school bonding and commitment scores as related to level of participation in PowerHour than was observed for those taking the survey in Spring of 2007. As with before, however, those with the highest participation level in the previous three months showed better outcomes than those with the lowest participation level. The mean scores, from lowest to highest participation group, respectively were: 3.15; 3.39; 3.23; and 3.36.

Graph 5c: School bonding scores across POWERHOUR Hours



Leadership analysis

School bonding and commitment scores between those who participated in at least one leadership program and those who did not were significantly different ($p < .004$), as shown in the graph below. The mean score was 3.34 for those who did not participate and 3.63 for those who did participate.

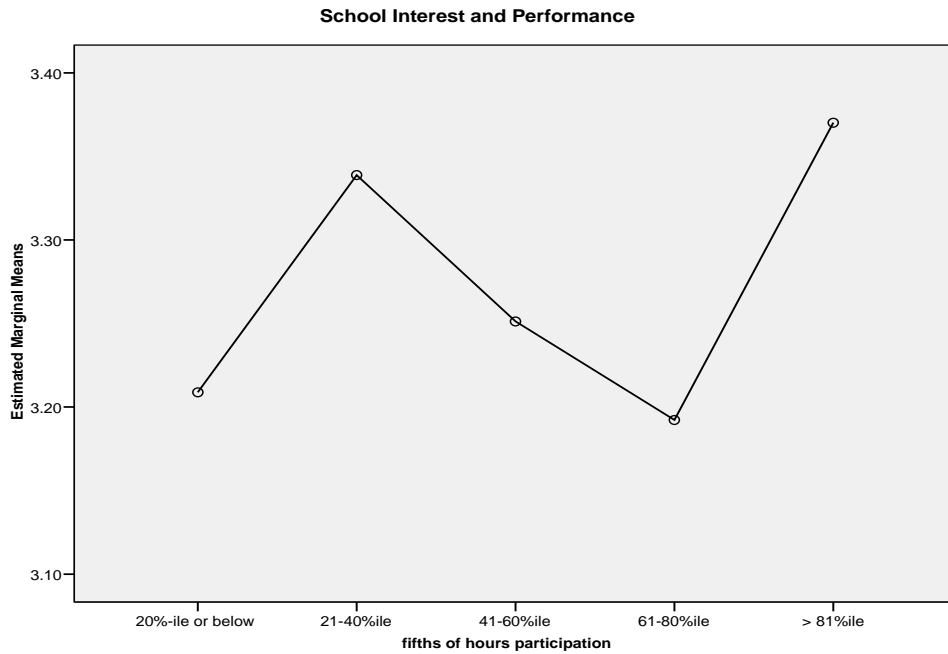


School Interest and Performance

Comparison across members

School interest and performance scores showed an unclear trend across club participation groups (see graph below) and, similar to school bonding and commitment, scores peaked with the 21-40%ile and 81-100%ile groups. There was a marginally significant difference ($p < .072$) between the lowest score ($M = 3.19$ from the 61-80%ile group) and the highest score ($M = 3.37$ from the 81-100%ile group).

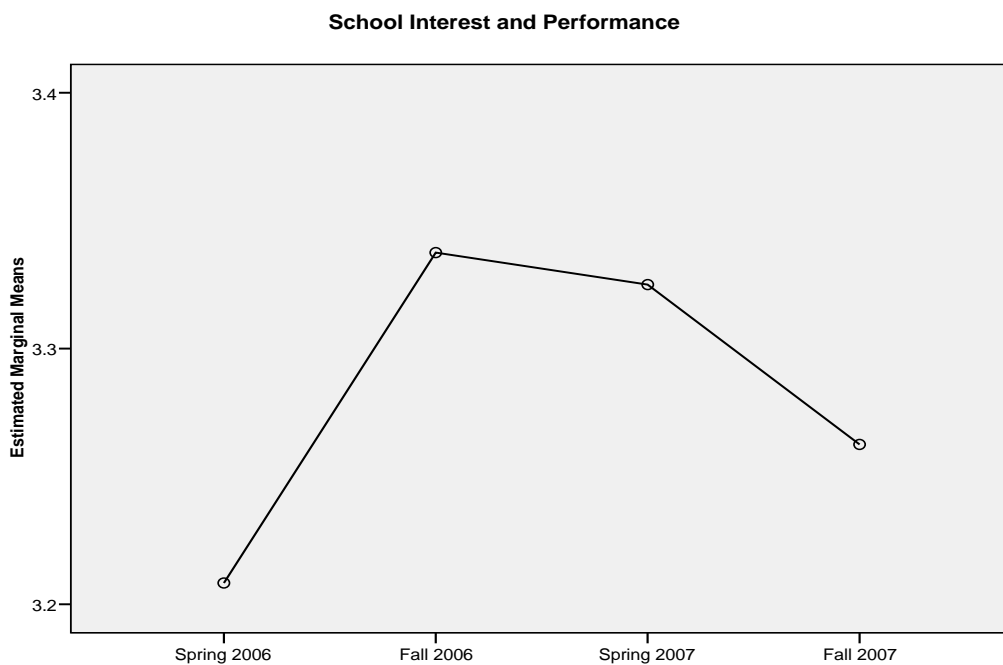
Graph 6a: School interest scores for members with different participation levels



Same members over time

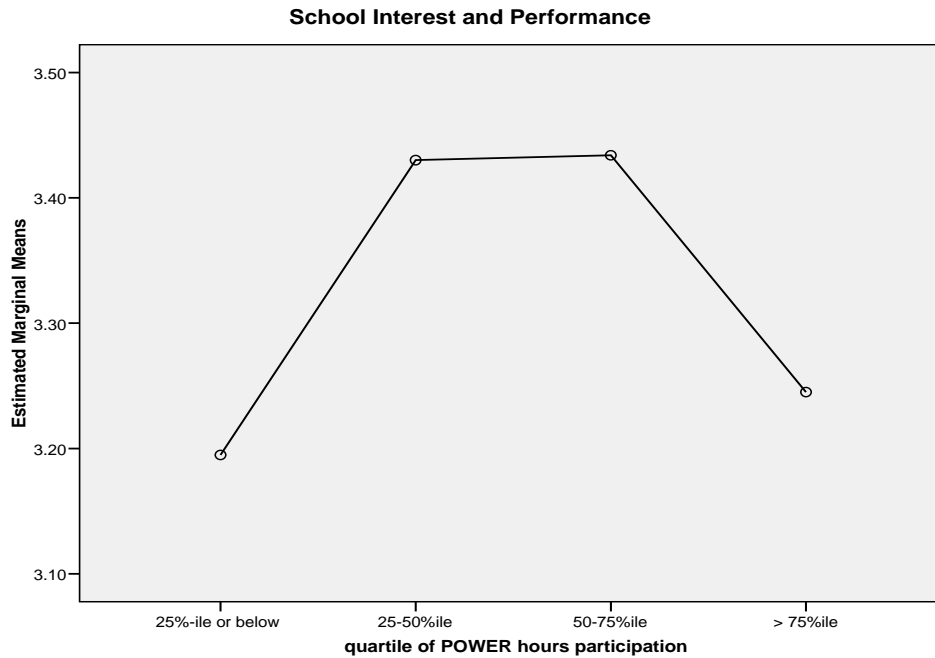
School interest and performance showed an interesting pattern across time, with scores in Fall 2006 and Spring 2007 ($M = 3.34$ and $M = 3.33$) being marginally higher than the other two time points (Spring 2006 $M = 3.21$; Fall 2007 $M = 3.26$). None of these scores was significantly different from each other.

Graph 6b: School interest scores for same members over time



PowerHour analysis

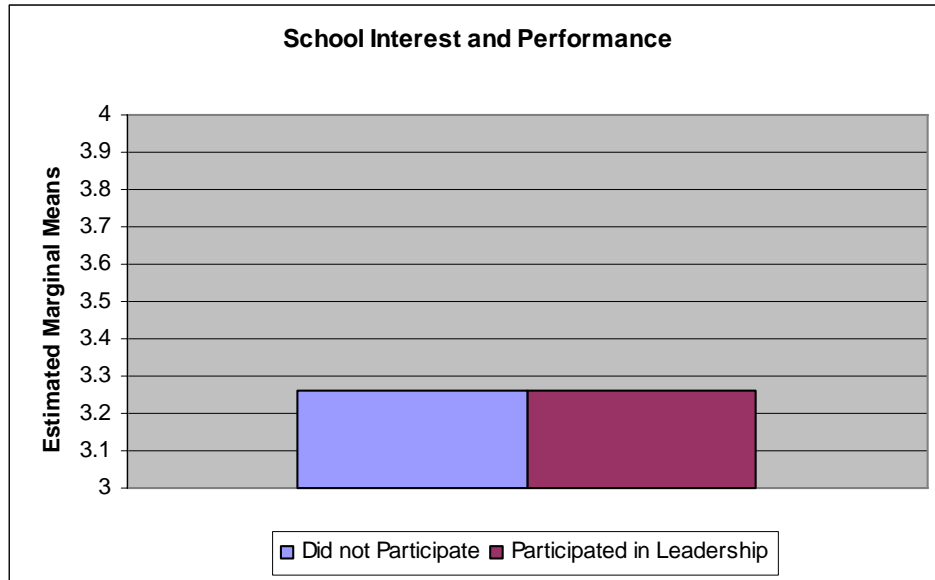
School interest and performance scores were higher for the middle two participation groups and lower for those in the 25%ile or below ($M = 3.20$) and 76%ile and above ($M = 3.25$) groups. The other two groups (25-50%ile and 51-75%ile) had the same mean score ($M = 3.43$). None of these scores was significantly different from each other.



Graph 6c:
School
interest
scores
across
POWERH
OUR
Hours

Leadership analysis

The estimated marginal mean scores of those who did not participate in a leadership program ($M = 3.26$) versus those who participated ($M = 3.30$) for school interest and performance were not significantly different.



Conclusion

Although many of the outcomes for multiple participation groups and for multiple timepoints appeared to exhibit unclear patterns or to 'zig zag,' it should be noted that – in most cases – the general trend is positive. That is, those in the top 20th percentile of Club participation scored higher than those in the bottom 20th percentile for all but one of the targeted outcomes (it is the kids in the mid-ranges of participation that seem to score less predictably). It is also apparent that longitudinal analyses that track the same kids over time generally show steady improvement over time. Although it may well be that improvements in outcomes such as responsibility taking may be related to age, other outcomes such as self-esteem would not necessarily be expected to increase with age. Another 'highlight' of the results observed here is the positive association of participation in leadership activities with desired outcomes. Members who had participated in one or more leadership activities scored significantly higher than those who had not participated on measures of self-esteem, communication skills, responsibility-taking and decision-making skills, and school bonding and commitment.

As noted in the previous report issued for Spring 2007, it is recommended that BGCMD continue to supplement survey data and overall Club participation data with records of attendance/participation in programming targeted specifically to one or more of these outcomes. This allows for examination of Club impact to take into account specific program impacts, as well as overall Club impacts, and to discern differences between members who do and do not participate fully in programs and services offered by BGCMD.