

Exploring the Relationship Between Academic Achievement and Co-curricular Involvement



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International Boys' Schools' Coalition
The Role of Sport in Boys' Schools

The 'Independent School' Claim

Students who participate widely in school activities tend to have higher levels of *self-confidence*, are prepared to organise their time well, and are self managing and commit more fully to the areas they take up. These qualities are transferred to *academic* goals. Students with a broad involvement are also those who in the long term demonstrate greater service commitment to their *communities*.

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**Victorian values of morality and character:
'team spirit' 'fair play' and 'stiff upper lip'**

The Four Pillars (or Tenets) of a Boy's Education

- Christianity ("Spiritual Awareness")
 - Gentlemanly Conduct ("Community Service")
 - Scholarship ("Scholastic Attainment")
 - Character Building ("Personal Growth")
- (Dr Thomas Arnold, The Rugby School, 1828)

Thomas Arnold's son Matthew was the Inspector of Schools when Australian Public Schooling commenced in the 1880s. Independent Schools such as King's, Melbourne, Geelong, St Peter's, Guildford and Brisbane were founded on the English GPS Schools' principles, as represented by Rugby School.

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**Victorian values of morality and character:
'team spirit' 'fair play' and 'stiff upper lip'**

"...they found ample scope for character training and the inculcation of moral excellence in the two games: cricket and football...this way of looking at games in schools is still more or less taken for granted by some, but it was a novelty then...it appears to have grown up the notion, not only that games-playing is a specific preparation for leadership roles, but also that the English nation derives some of its particular virtues...from an addiction to games...it would have seemed morally unsound to Thomas Arnold" (Goodwin, 1984).

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Character Development - Personal Growth

“We should not over-estimate the newness of this, after all, the middle class has always been denoted by an orientation to the future. It is the increased ubiquity and sophistication, and also its technicisation, that is remarkable; ...the pressure of planning and expectations on parents is not only growing quantitatively, but also assuming qualitatively new forms” (Ball 2006).

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Questions Posed

Are a boy's academic performances improved or reduced by their participation in other non-classroom activities?

Are there particular types of activities which assist or detract from academic performance?

Do social or 'team' activities have a different effect on academic performances, to individual performance based pursuits?

Are there gender differences in these fields?

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Study Methodology

Mixed-methods approach:

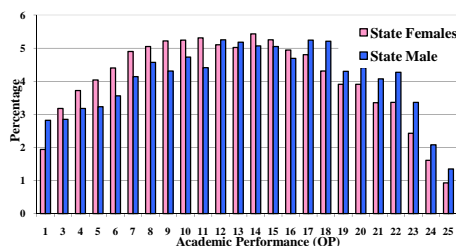
1. Statistical analysis of (estimated) time spent in each co-curricular activity during Years 8 to 12 (Qld high school) and OP score - 431 students (252 males and 179 females)
 - surveys combined with final tertiary entrance ranking scores (OP).

2. Gathering of stories about young people’s experiences in juggling their curricular and co-curricular expectations and investments
 - semi-structured interviews (15 students).

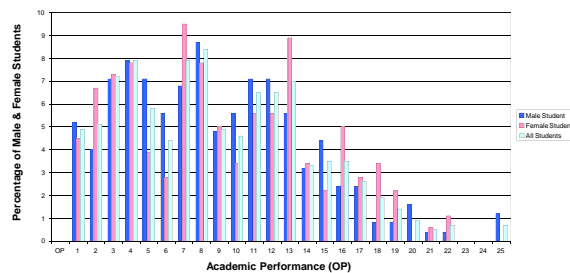
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Findings – Academic Performance

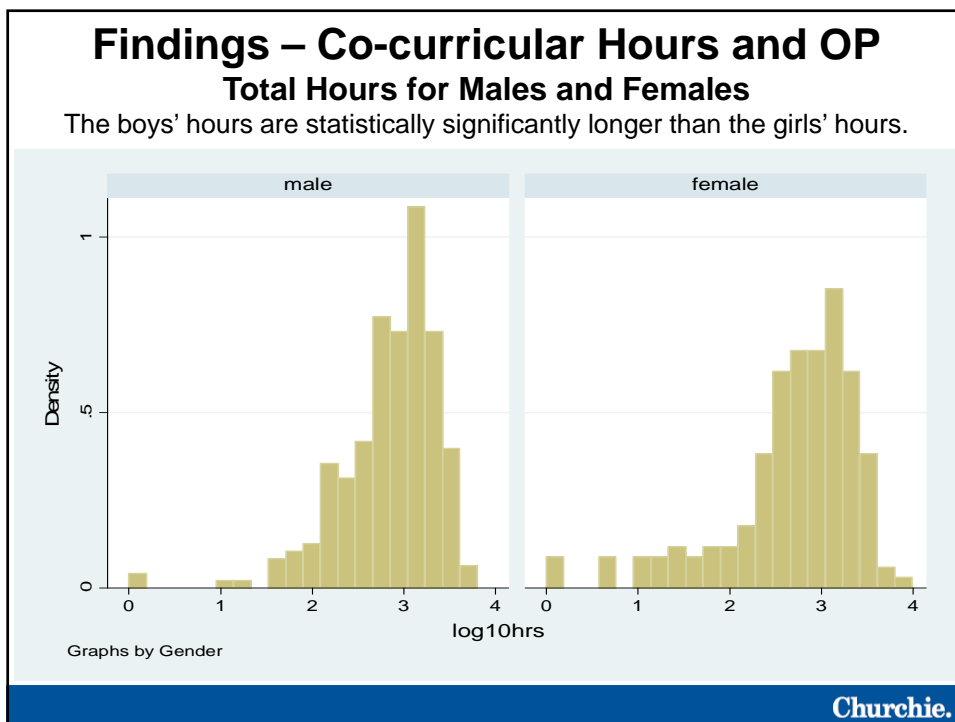
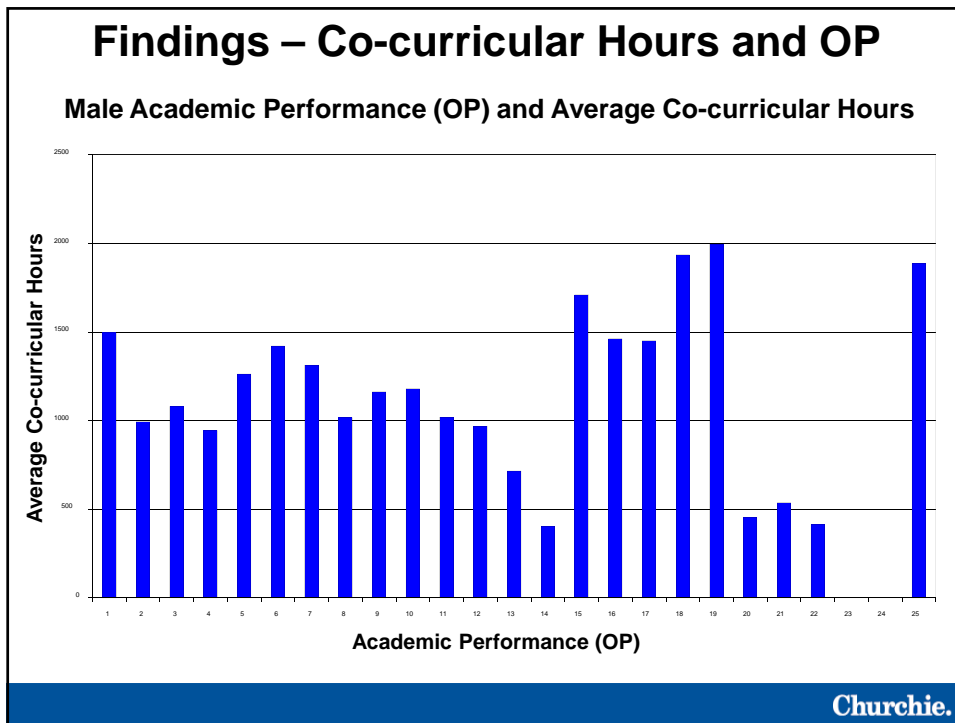
2004 State Females & Males Academic Performance (OP)



Student Survey Cohort Academic Performance (OP) Percentages

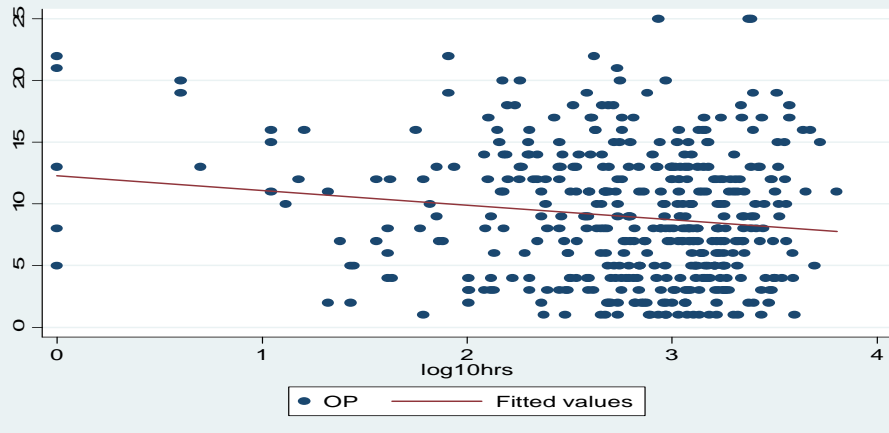


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Findings – Co-curricular Hours and OP

Total Hours All Students – Line of Best Fit

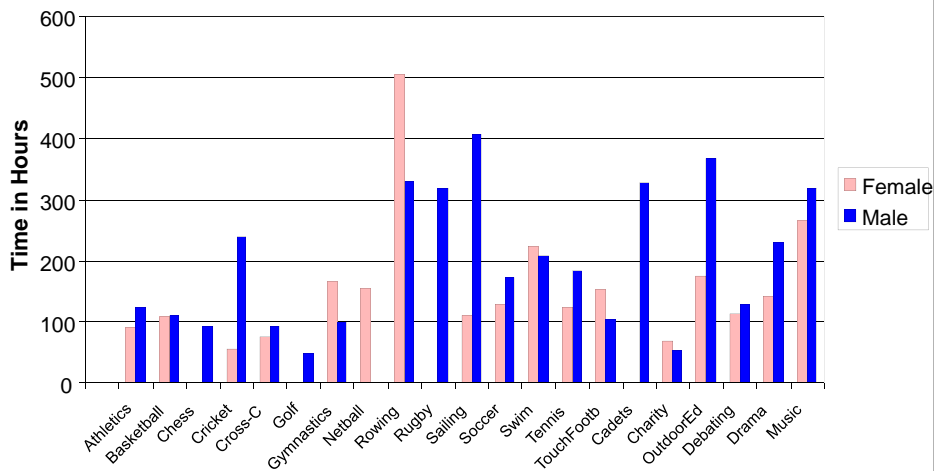


The more hours students are engaged in co-curricular activities their academic performance is improved. The y-axis is the OP score and x-axis is hours of co-curricular involvement during Years 8 to 12 of school.

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Findings – Co-curricular Hours By Activity

Female and Male Co-curricular Hours By Activity



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Findings – Co-curricular Hours and OP

Co-curricular Activity	Fem Nos	Fem OPAv	Fem AvHrs	Male Nos	Male OPAv	Male AvHrs
Athletics	59	9.3	91	85	8.5	123
Basketball	37	9.1	108	96	8.9	111
Chess				19	7.5	94
Cricket	30	8.8	56	120	8.5	240
Cross-Country	68	8.6	75	81	7.8	94
Golf	1	16	1000	29	9.3	49
Gymnastics	29	7.9	167	19	10.6	100
Netball	55	8.9	156			
Rowing	57	9.9	505	48	10.2	329
Rugby				142	9.3	329
Sailing	7	6.4	111	7	11.7	408
Soccer	43	9.2	128	85	8.2	172
Swimming	68	9.2	223	64	7.8	208
Tennis	27	8.8	125	66	8.5	184
Touch Football	42	9.4	152	53	8.6	104
Cadets			10	44	10.8	327
Charity	72	7.6	69	86	7.2	53
Outdoor Ed	43	8.2	174	76	8.5	367
Debating	41	7.6	114	41	5.9	128
Drama	32	8.9	142	33	8.2	230
Music	92	8.1	266	93	7.8	318

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Findings – Co-curricular Hours and OP

Statistically Significant Findings All Students

1. Total Hours of Co-curricular Involvement
2. Music Hours
3. Tennis Hours
4. Rowing Hours

Statistically Significant Findings Females

1. Total Hours of Co-curricular Involvement
2. Athletics Hours
3. Cross-country Running Hours
4. Tennis Hours
5. Outdoor Education Hours

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Findings – Co-curricular Hours and OP

Males

There was a *strong relationship* for males with the amount of hours co-curricular involvement and academic performance but it was not large enough to be statistically significant. There are many heavily involved boys who achieve lower academic results. Thirteen male OP 1 students experience on average fifty percent more co-curricular activity than the forty eight OP 2, 3 and 4 males. Students in the highest performing academic band OP 1 average 1,197 co-curricular hours per student during their final five years of schooling. This is an average of six hours and twenty minutes of co-curricular involvement each school week.

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Findings – Co-curricular Hours and OP

Males

The OP mean in the survey cohort of males was 8.8 (in Qld OP 8.8 = 39% of males).

Activities where males achieved an OP better than this mean were:

athletics 8.5; **chess 7.5**; cricket 8.5; **cross-country running 7.8**; soccer 8.2; **swimming 7.8**; tennis 8.5; touch football 8.6; **community service 7.2**; outdoor education 8.5; **debating 5.9**; and **music 7.8**.

Activities where males achieved an OP less/worse than this mean were:

basketball 8.9; gymnastics 10.6; rowing 10.2; rugby 9.3; sailing 11.2; cadets 10.8.

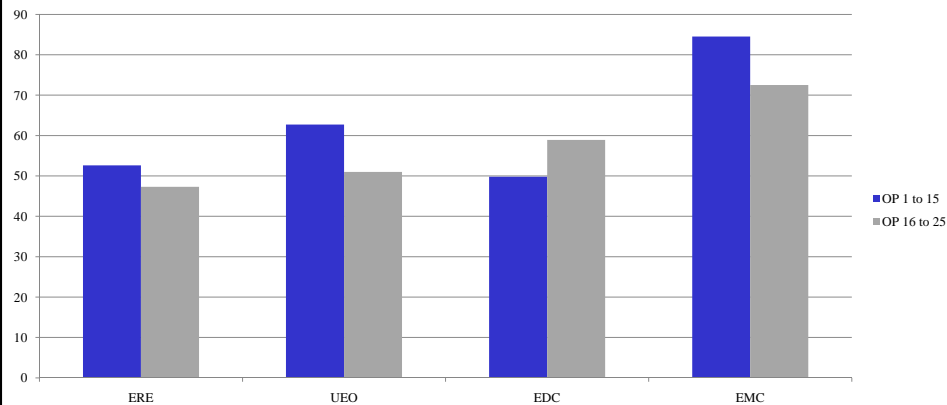
This may indicate more about the enrolments these activities attract than their influence on the boys' cognitive abilities. I wonder if the physical team sports allow some boys to be emotionally engaged, but without too much personal effort to be noticed in the team supportive environment.

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EMOTIONAL INTELLIGENCE AND OP RESULT

Emotional Intelligence Means by OP Band Year 12 2010

ERE – Emotional Recognition and Expression
 UEO – Understanding the Emotions of Others
 EDC – Emotions Direct Cognition
 EMC – Emotional Management and Control



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EMOTIONAL INTELLIGENCE AND OP RESULT

- Early days in research terms!
- Linked to leaving school prematurely (Teese, 2002)
- Better academic performance (Lam and Kirby, 2002)
- Higher EI = Better social support and satisfaction with social support (Ciarrochi et al., 2001)
- High levels of EI co-occur with effective leaders (Goleman, 2010; Stough, 2010)
- Bullied and the bullied both lower than average EI scores.

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EMOTIONAL INTELLIGENCE AND OP RESULT

"I can just forget about everything else and just run. It's a very simple equation, you just put one foot in front of the other and you just run, and you run as fast as you can or as hard as you can and, you hurt at the end of it but it's still a break, and, it's just yeah, something to do" (Chris, OP-1).

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EMOTIONAL INTELLIGENCE AND OP RESULT

"I haven't done a sport, I've done cadets and musicals during the time. It hasn't hindered it that much because a lot of it's, like, music's before school and that just means getting up an hour earlier. When you're there doing it you can sometimes think, oh, you know, I could be somewhere else getting an assignment done but the amount of time I put into it, in the whole scheme of things, is pretty small" (Nigel, OP-3).

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EMOTIONAL INTELLIGENCE AND OP RESULT

“Rowing was the only one I've ever had conversations or anything from. My rowing coach made it pretty clear to us that if we were struggling with schoolwork we had to let him know because we were at school and academic work comes first. Apart from that, no one has said anything really” (David, OP-18).

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“It's a bit tough when you do sports that take a lot out of you and then still be able to come to school and learn...like with rowing with five o'clock start and two hours on the water and then go and sit in classes until 3.00... I like to do team sports because I find with individual ones I've got pretty bored, like athletics and cross country, so I've always been more into the team sports with my friends... But when I'm doing a lot of training I'm a lot tired at school so probably not learning as well in the classroom” (Brett, OP-21) .

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EMOTIONAL INTELLIGENCE AND OP RESULT

“Adolescents who perceived they were valued within their classroom by their peers reported higher levels of self-efficacy and mastery, intimacy, and responsibility goals. In turn, students who related well with others felt better about their place in school, and achieved better academic outcomes (Nelson and De Backer, 2008).”

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EMOTIONAL INTELLIGENCE AND OP RESULT

First XV Rugby EI Profile

Position	Recognition and Expression	Understanding Others	Reasoning	Manage and Control
Fullback	78	73	86	66
Wing	95	87	80	95
Open Side Flanker	36	90	80	96
Lock	36	64	73	74
Centre	66	55	27	84
Number 8	59	51	89	60
Open Side Flanker	95	94	86	95
Hooker	2	4	58	63
Wing	36	41	73	95
Wing	85	31	27	86
Lock	44	87	21	99
Centre	59	84	86	99
Scrum Half	52	35	80	78
Prop	44	73	2	99
Fly Half	29	45	41	71

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EMOTIONAL INTELLIGENCE AND OP

“The capacity of cognitive ability and personality to predict academic success is limited, accounting for 30% of variability in academic grades at most. 70% of the variance remains to be explained” (Hansen, 2010).



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CONCLUSIONS

Boys need to be closely monitored by school administrators to ensure they do not academically underachieve having neglected or rejected academic learning goals in favour of team sports rewards that are highly valued by peers.

Co-curricularly disengaged males and females need to be encouraged by school administrators to participate in diverse co-curricular learning activities that provide opportunities for them to succeed in multiple ways. This should allow them to raise their social status and encourage further engagement with their school's academic programmes.

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CONCLUSIONS

Males and females should be further encouraged to participate in community service and creative arts experiences as these are the domains of the highest achieving scholars. For males and females learning in debating, music, drama, community service (and chess) provides profound skills development experiences.

Males' involvements in the non team based sports events of cross-country running, swimming and athletics should be encouraged to promote the disciplines required in high achieving academic male scholars.

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CONCLUSIONS

Top male scholars should be encouraged to continue to participate extensively in co-curricular learning activities; and top female scholars should be offered increasingly diverse opportunities and encouragement to learn from school co-curricular experiences.

The rewards for co-curricular involvement should not be seen to be too great before a young person has developed their learning skills, goals and academic potential to a level where their self-esteem is enhanced and not penalised by attempting to learn with open enthusiasm. Schools accept a duty and responsibility to do all they can to care for each of their students.

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CONCLUSIONS

The health and social benefits to individual students from co-curricular activities need to continue to be encouraged and particularly for the highest achieving scholars.

Crucially, the vital time management considerations as well as the rewards from co-curricular activities need to be carefully managed for the least academically engaged students.

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CONCLUSIONS

"...individuals *desire* and *seek* to act in ways that are likely to be rewarded and avoid actions likely to be penalized" (Cherryholmes, 1988).

For some boys these rewards can be most readily obtained by playing schoolboy sports with the added lure of glamorous professional sports careers following their departure from school (Sherrington, 1983; Hickey and Fitzclarence, 2001; and Light and Kirk, 2001).

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