LEISURE CONTEXTS IN ADOLESCENCE AND THEIR ASSOCIATIONS WITH ADULT OUTCOMES: A MORE COMPLETE PICTURE

Karen Robson and Leon Feinstein

May 2007

Acknowledgements

The authors would like to thank the DCSF for commissioning this research. The following groups and individuals have provided helpful advice and comments along the way: the National Youth Agency, John Bynner, Kathryn Duckworth, Bryan Merton, Malcolm Payne, Dee O'Connell and Anne Longfield. All errors or omissions are our own.

Executive Summary

Overview and research questions

1. This report describes research undertaken by the Centre for Research on the Wider Benefits of Learning for the Department for Education and Skills as part of the development of an evidence-base to inform government thinking on provision for young people.

2. The five key research questions examined in this report are:

(i) What outcomes are associated with teenagers engaging in different combinations of out-of-school activities?
(ii) How is the 'structure' of youth clubs associated with later-life adult outcomes?
(iii) What are the background characteristics (family structure, gender, income, ethnicity, etc.) of young people who go to youth clubs and either a) do not experience adverse effects or b) for whom youth clubs are associated with improving life chances?
(iv) What combinations of outcomes at age 30 exist for those who attended youth clubs at age 16? and,
(v) How are the results affected by cohort attrition?

In the context of explaining the findings, we have also considered the question of what further insights can be gained into the life trajectories of those who went to youth clubs at 16 and their outcomes at age 30.

Method

3. The British Cohort Study of 1970 was identified as the data source best able to address the research questions. Limitations in applicability to questions of current provision notwithstanding, the data provide the best range of measures for undertaking the most robust analysis possible.

4. We considered the effects of a range of age 16 contexts, defined in terms of both participation or not, as well as in terms of level of participation. The contexts on which the analysis has focused were sports and community centres, youth clubs, uniformed clubs and church-based activities. We also considered *combinations* of participation in youth clubs and the other activities noted above. In addition to the combinations of activities, an indicator was created that measured if the youth clubs attended by cohort members were 'structured' or 'unstructured'.

5. We considered the later-life associations of these contexts on a wide range of (age 30) adult measures of social exclusion, drawing on a set of 23 binary indicators, each representing a status commonly linked with social exclusion and classified

according to the 5 target aspects of well-being described in the Green Paper "Every Child Matters."

6. We used a great array of control variables in an attempt to deal with the selection bias problem that follows from the fact that participation in the age 16 contexts is not random but is systematically related to the adult outcomes. The children who attended church-based or uniformed activities will not be representative of the general population and one cannot assume that if such children have a low level of adult social exclusion, this is due to their participation in the activities.

7. To the extent that the control variables measure these underlying differences in characteristics, then one can be more confident that statistical associations are causal. We use measures of socio-economic and demographic family background, age 5 and 10 personal development, ability, aspiration and behaviour, as well as age 16 development, behaviour and aspiration to attempt to condition out key confounding factors. In other words, the inclusion of several conditioning factors (or control variables) helps us to isolate the effects of the activities under consideration from other various, but relevant factors. By including these control variables, we are able to say that even though we have taken account of a vast array of individual, family, and peer group characteristics, the effects of the youth clubs and combinations of leisure activities on later-life outcomes is still observed.

8. The control measures available include age 16 criminal activity, truancy, smoking, the desire to stay on in education, mother-rated behaviour, age 10 teacher-rated behaviour, peer relations and educational success and family functioning in terms of maternal depression, parental hostility, parental interest in education, and measures of family income and social class.

9. Even with all these control variables, one must recognise that age 16 contexts are not raw causal catalysts but mediators. They are parts of the complex life histories of individuals, that individuals may choose or be selected into in other ways, but which, the analysis can determine, may or may not be important elements of those life histories. In the report, we talk about 'effects', but this is statistical shorthand. We do not mean to imply that youth club attendance directly impacted upon the range of outcomes that we examine here. We can only demonstrate that there are associations, and these associations must be interpreted within a larger overall framework which considers the detailed complexities of individual life courses.

Main findings

10. Youth club 'only' attendance (i.e. attending youth clubs not in combinations with other activities) at 16 increased the odds of poor educational outcomes, being in social housing at 30, and becoming a teen parent. The cohort members who only went to youth clubs and not the combinations of other activities we examined were the most at risk for negative later-life outcomes. It should be emphasized

that this may represent a ‘selection effect’, in other words, the youth who only went to youth clubs and not other activities might already be ‘different’ from other cohort members in some fundamental way and might be more ‘at risk’ due to other unmeasured characteristics.

11. The negative effects of only attending youth clubs were *offset* or *nullified* by attending *combinations of activities*. That is, attending youth clubs and sports/community centres, or youth clubs and church groups, for example, have the effect of reducing the overall negative effect of youth club attendance.

12. The benefits of attending combinations of events were also observed when the main leisure activity considered was sports club attendance. Although these generally have a beneficial association with later-life outcomes, attending combinations of sports clubs and other activities (except youth clubs) served to further reduce the odds of negative later-life outcomes.

13. In order to test assertions made by previous scholarly literature on the topic, an indictor was created to measure the extent of ‘structure’ in youth clubs. Consistent with previous research, outcomes for attendees of unstructured youth clubs were worse than those who went to structured clubs.

14. Youth clubs, particularly unstructured ones, attracted youth who were disadvantaged in terms of family background and individual characteristics. These clubs have the opportunity to make direct contact with high risk youth and possibly alter their high risk life trajectories.

15. Cohort members who went to youth clubs and had positive outcomes tended to be characterised by favourable psychological characteristics, advantaged family backgrounds, academic ability, positive peer groups, and positive orientations towards school.

16. Youth club attendance was also associated with an increase in negative combinations of later-life outcomes. We defined combinations of outcomes by grouping our 23 binary outcomes according to the 5 target aspects of well-being suggested by the *Every Child Matters* Green Paper. Youth club attendance was particularly associated with the grouped outcomes of not staying safe, not enjoying and achieving, and criminality.

17. Youth club attendance was associated with the total number of negative later-life outcomes experienced by cohort members at age 30. Those who attended *structured groups*, however, experienced significantly fewer negative later-life outcomes.

Adjusting by weighting for cohort attrition from birth to age 16 (to adjust for the large number of missing cases in the age 16 data) did not significantly alter the results.

1. Introduction

Following a wide consultation on *Youth Matters*, the Youth Green Paper, *Youth Matters: Next Steps*, was published in March, 2006 and set out the vision for empowering young people and giving them 'somewhere to go, something to do and someone to talk to' (DfES, 2006). As part of the background to that consultation, a team at the Institute of Education was funded to undertake an analysis of the 1970 Cohort data to investigate the correlates of youth clubs and other forms of provision on adolescent development and adult outcomes (Feinstein, Bynner, and Duckworth, 2005).

In order to assess whether or not success has been achieved in the area of youth well-being, several public service agreement (PSA) targets were established in the *Youth Matters* paper. These included reducing teenage substance abuse, teenage conceptions, and the numbers of youth not in employment, education in training (often referred to as "NEETs"). Increasing the proportions of young people achieving level 2 and 3 educational outcomes was also a target.

The research undertaken by WBL with regard to out-of-school activities identified some activities that benefited and others that hindered later-life outcomes. In particular, it was found that participation in youth clubs had a negative association with a wide variety of adult social and economic outcomes (whereas the effect of participation in sports clubs was more positive). These findings are not inconsistent with previous research on youth clubs. In an American study, Weber et al. (2001) found a positive association with youth club attendance and delinquency, while analyses from Sweden revealed that youth club attendance was associated with negative pathways towards adulthood (Mahoney Stattin, and Lord, 2004). Swedish research has also found that youth club participation was non-random, such that participants tended to children who had a range of less desirable social, family, and academic characteristics (Mahoney, Stattin, and Magnusson, 2001; Mahoney, Stattin, and Lord, 2004; Persson, Kerr and Stattin, 2004). These researchers also found that attending such clubs was associated with antisocial behaviour, even when a host of individual and family characteristics were taken into account. Mahoney, Stattin, and Lord (2004) also found that the worst outcomes were associated with youth centres that brought many anti-social youths together, with these clubs being more likely to encourage antisocial behaviour among newer attendees. Canadian research (Morris and Kalil, 2006) has also found that attending recreation and community centres were a specific activity (among many examined) that were associated with delinquency and low academic achievement.

In other research, however, youth club participation has been found to be inversely associated with delinquency (Agnew and Peterson, 1989; Eccles and Barber, 1999; Mahoney and Cairns, 1997; Mahoney and Stattin, 2000). One problem with resolving the disparate nature of these findings is that they span across cultures, age groups, and specific youth club contexts. In this new set of analyses we examine youth clubs and their relationships with a range of later-life outcomes in more detail in order to expand our understanding of how youth club attendance is associated with a range of adult outcomes.

1.1 Data and analytic strategy

The analyses in this report draw up the 1970 British Cohort Study, which is a longitudinal study following into adult life, all the individuals born in GB in the week April 5-11, 1970. Follow-up surveys were carried out at ages 5, 10, 16, 26, 30 and most recently, at age 33. The achieved sample at birth was 17,198, roughly 97% of the estimated target birth cohort. The responding sample was 14,940 at age 10, and 11, 628 at age 16. A lower response rate arose at 16 because a teachers' strike at the same time meant that many cohort members did not receive their questionnaires. A total of 11,261 interviews were achieved at age 30 and outcome measures were available for roughly two-thirds of the achieved age 16 sample.

The modeling in the analyses draws on the following data:

- Age 16 activities and contexts;
- Age 0 – 16 family background factors;
- Age 0 – 16 child development outcomes; and
- Age 30 outcomes.

We require data on each of these four sets of variables. In the analysis we first take the contexts at 16 as our independent variable of interest and focus on their associations with the age 30 outcomes (as the dependent variables of interest). We focus on the extent to which the age 16 leisure contexts and activities predict the outcomes, using the family background and child development variables as controls, i.e. to condition out selection bias.

The long-term adult outcomes used are all measures in the "negative direction" i.e. the kinds of outcomes – lack of qualifications, crime and so on – typically identified with social exclusion. They were assessed in 1999/2000 when the cohort members were age 30. The 23 age 30 outcome measures used fall into three broad domains of adult life. Not all of these, such as smoking and drinking, would be properly described as social exclusion indicators, but through the association with long term ill-health and marginalised life-style, they link to socially excluded statuses. All outcome measures were constructed as binary variables to define location in a socially excluded category.

The leisure context variables covered four major types of leisure activities:

- "Sports/community centre" linked the two kinds of venue and was mainly focused on sport;
- "Youth club" referred to out-of-school-hours clubs for young people. These are typically run by local education authorities but run quite separately from the schools the young people were attending;
- "Uniformed youth organisation" included boy scouts and girl guides, boys brigade and girls brigade and various kinds of cadet corps; and
- "Church groups" embraced the range of activities that churches run for young people outside religious services ranging from youth fellowship or group, to sports, to choir;

The control variables introduced address the distal and proximal factors referred to in Section 1 of the initial report upon which this research is an extension (Feinstein, Bynner and Duckworth, 2005), which included socio-demographic characteristics of the family and the neighbourhood, and child attributes including attainment measures. The variables were grouped in terms of type of influence – distal, proximal, child attribute – and the age at which they were measured – birth, 5, 10 or age 16. Descriptive statistics on these variables are available in the Appendix. Theoretical rationale for the inclusion of these factors as controls can be found in Feinstein, Bynner, and Duckworth (2005).
A new variable measuring the structure of youth clubs was also created, which is described in much detail later in this report.

2. Combinations of Activities

In previous research conducted by WBL on youth out-of-school leisure contexts (Feinstein, Bynner, and Duckworth, 2005), the focus of attention was on individual leisure activities. That is, various different types of activities were considered, but activities in combination with one another were not. While there is a considerable body of research on youth leisure contexts, there is a noticeable paucity of research on combinations of activities. American research has, however, provided evidence that participating in a variety of types of activities predicts favourable outcomes more strongly than participating for the same total amount of time in a single type of activity (e.g., sports versus music versus social service or civic engagement type of activities) (Bartko and Eccles, 2003). Pederson and colleagues (2005) found that multiple domains of participation (regardless of what they were and in comparison to single activity engagement) were positively associated with psychological wellbeing and served as a 'protective' factor against delinquency. As well, research from Canada (Morris and Kalil, 2006) on low-income children found that participation in a range of activities (rather than a single activity) resulted in better academic and behaviour-related outcomes. It is less clear whether similar variations in the associations will emerge in the UK.

2.1 Who engages in combination of activities?

Of course, one question naturally following from the research described above is, "What are the characteristics of those youth who go to combinations of activities?" In order to answer this question, variables that measure combinations of activities were created. We consider the possible combinations of going to youth clubs in addition to attending one of the following other activities: sports/community centres, uniformed groups, and church groups. These combinations of activities were regressed on a number of different cohort member characteristics to demonstrate and investigate the strength of different characteristics in predicting participation in activities. Table 2.1 presents a summary of these findings.

For purposes of interpretation, odds ratios that are above 1 indicate a percentage increase in the likelihood of that outcome, while odds ratios below 1 indicate a 1-(odds ratio) decrease in the likelihood of that outcome. It should also be noted that these results condition on a wide range of control variables, details of which can be found in the Appendix to this report.

The findings demonstrate that females were 25 percent less likely to go to youth clubs in combination sports/community centres compared to males, while they were 81 percent more likely to go to church groups in combination with youth clubs compared to males. There are no clear patterns, although parental education and class have some association with the combinations chosen by cohort members. For example, medium SES cohort members were almost 60 percent more likely to go to sports or community centres and youth clubs compared to their high SES counterparts, while the reverse is true in the case of church groups combined with youth clubs. Locus of control is also positively associated with membership to combinations of activities, suggesting that those who feel more in control of their lives are more likely to engage in multiple combinations of activities. Conduct disorders are negatively associated to membership to two of the combined activities considered here.

Table 2.1: Logistic Regressions of Attendance at Youth Clubs and Other Activities on Cohort Member Characteristics (only those who went to youth clubs, N= 1796))

Odds Ratios

Characteristic	YC+ Sports or Community Centre	YC+ Uniformed	YC+ Church Groups
Female (1=yes)	0.751*	0.834	1.810***
Parents Low Education (ref=high)	0.768	0.692*	0.822
Parents Medium Education (ref=high)	0.628*	0.807	1.238
Medium SES (ref=high)	1.585**	1.023	0.698*
Low SES (ref=high)	1.373	0.950	0.856
Mother age 19-24 (ref=mothers 35+)	1.518	1.057	0.621*
Mother age 25-34 (ref=mothers 35+)	1.483	1.159	0.719
Maths Test Age 10	1.085	1.145	1.090
Reading Test Age 10	1.113	1.235*	1.143
Copying Test	1.006	0.998	1.000
Parents Approve of Friends	0.977	0.994	0.799*
Does Homework After School	1.074	1.145	1.361*
Locus of Control at 16	1.055*	1.044*	1.145***
General Conduct Disorder	0.858*	0.986	0.871*
Smoker at 16	0.880	0.871	0.691**
Truant at 16	1.215	0.929	0.870

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

2.2 What are the later-life associations of teenagers engaging in different combinations of out-of-school activities?

The results in Table 2.2 examine the association of going to youth clubs and other activities with later-life outcomes. The 23 outcomes considered here were grouped into

categories consistent with those specified in the *Every Child Matters* Green Paper: being healthy (with an additional category for parenthood and marital status), staying safe, enjoying and achieving, making a positive contribution, and economic well-being. These are the same outcomes that were examined in previous WBL work (Feinstein, Bynner and Duckworth, 2005).

It should be noted that frequency of going to youth clubs was measured by an interval level variable which ranged from 0 to four (0= never, 1=less than once a month, 2= once or twice a month, 3=once a week, 4=more than once a week). Three combinations of activities were examined alongside youth club attendance: going to youth clubs and sports/community centres, going to youth clubs and uniformed groups, and going to youth clubs and church groups. These three other activities were selected after exploratory analyses revealed that they were the most highly associated with youth club attendance and later-life outcomes. In contrast to the frequency of going to youth club indicator, the combinations indicators were measured on a simple yes/no basis – in other words, we examine whether a cohort member engaged in these combinations *at all*, rather than the frequency of these combinations..

The results in Table 2.2 are a summary of the 23 separate logistic regression estimations that were undertaken. Table 2.2 reports only the instances where frequency of youth club attendance was statistically significant, at least one of the 'combinations' was statistically significant, or both frequency and a combination were statistically significant. It is the instance where both frequency *and* at least one combination were statistically significant that is the most relevant for answering the research question at hand.

Overall, youth club attendance and combinations of other activities appear to have effects on education-related outcomes, as well as other indicators that are suggestive of economic disadvantage (i.e. teen parenthood and living in social housing). In a few instances, (i.e. being an offender, a serious offender, and not voting), just the youth club indicator was statistically significant and not the combinations. As well, in three, it was only the combinations that were statistically significant (e.g. low income) and not the main effect of youth clubs, but in the two of these instances, the statistical significance was relatively weak ($p<.10$ in the case of obesity and psychiatric disturbance).

Again, the five outcomes for which youth club attendance and combinations of activities were statistically significant were becoming a teen parent, being in social housing at age 30, and all three educational outcomes (no qualifications, no Level 2, and no Level 4). With regard to teenage parenthood, the odds ratio was 1.184, meaning that every unit increase on the frequency of going to youth club measure (so as we move from 0 to 1, or 1 to 2, or 2 to 3 on the scale of frequency of attendance) increased the odds of becoming a teenage parent by 18 percent. Looking across the table to the column entitled 'Went to YC and Sports/Com Centre' the corresponding odds ratio here is 0.740. This means that

Table 2.2: Outcomes at Age 30 Regressed on Frequency of Going to Youth Clubs and Combinations of Other Activities

Odds Ratios

Outcomes at	Frequency of YC	Went to YC and	Went to YC and	Went to YC and

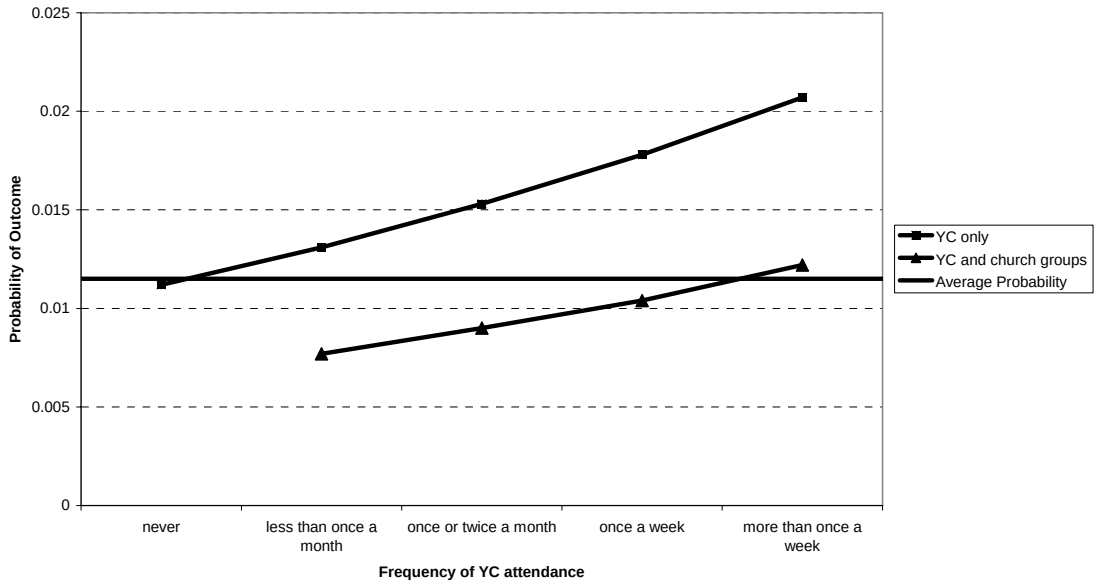
30	attendance	Sports/Community Centres	Uniformed	Church Groups
Being Healthy		Main	Main	Main
Obesity	0.980	0.920	0.948	1.332+
	(0.054)	(0.170)	(0.159)	(0.164)
Psychiatric Disturbance	0.959	0.981	1.269+	1.266+
	(0.046)	(0.145)	(0.134)	(0.138)
Parenthood & marital status				
Single, Separated, Divorced	1.042	0.828	1.028	0.785+
	(0.039)	(0.125)	(0.116)	(0.124)
Teen Parent	1.184*	0.740	1.218	0.592+
	(0.079)	(0.270)	(0.260)	(0.304)
Staying safe				
Social Housing	1.169**	0.648*	0.829	1.044
	(0.056)	(0.186)	(0.182)	(0.196)
Achieving				
No Qualifications	1.137**	0.942	0.965	0.731*
	(0.046)	(0.149)	(0.139)	(0.155)
No level 2	1.213***	0.839**	0.820	0.645***
	(0.047)	(0.149)	(0.137)	(0.152)
No Level 4	1.139**	1.439*	0.650**	0.732*
	(0.058)	(0.173)	(0.155)	(0.159)
Making a Positive Contribution				
Being an offender	1.124*	0.866	1.062	1.283
	(0.050)	(0.162)	(0.147)	(0.163)
Being a Serious Offender	1.332**	0.778	1.077	1.422
	(0.098)	(0.327)	(0.303)	(0.346)
Not voting	1.097*	0.823	0.916	0.824
	(0.039)	(0.124)	(0.114)	(0.123)

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

going to a combination of youth clubs and sports/community centres reduces the odds of teen parenthood by 1-.740, or 26 percent. However, because this odds ratio did not achieve statistical significance, it is interpretable as having no effect. However, turning to the column 'Went to YC and Church Group, it can be observed that the odds ratio in here is 0.592 and it is statistically significant. This means that going to a combination of youth clubs and church groups reduces the odds of teenage parenthood by 1-.592 or about 40 percent. So while going to youth clubs on its own has a positive effect on the likelihood of this outcome (teenage parenthood), the combined activity of going to both *acts to nullify this effect.*

The various figures accompanying this report plot the probabilities the negative outcomes by youth club attendance and the combinations of youth club attendance and other activities that achieved statistical significance (from Table 2.2). The predicted probabilities that are plotted in these figures represent the probability of having a negative outcome if particular conditions are met. In Figure 2.1 to 2.5, for example, the probability of achieving negative later life outcomes is plotted if a cohort member went to youth clubs only. These predicted probabilities were generated by creating an equation that estimated the probability of persons ending up with the negative outcome if they attended youth clubs never, less than once a month, once or twice a month, once a week, or more than once a week. The predicted probabilities for this line, therefore, represent a person who reported attended at the specified frequency. The predicted probability assigned mean values to the various controls variables in the models, so that the resulting predicted probabilities represent the 'average person'. Likewise, predicted probabilities were similarly generated in this way for persons who reported going to youth clubs in combination with other activities.

Figure 2.1: Youth Club Attendance and Probability of Becoming a Teenage Parent

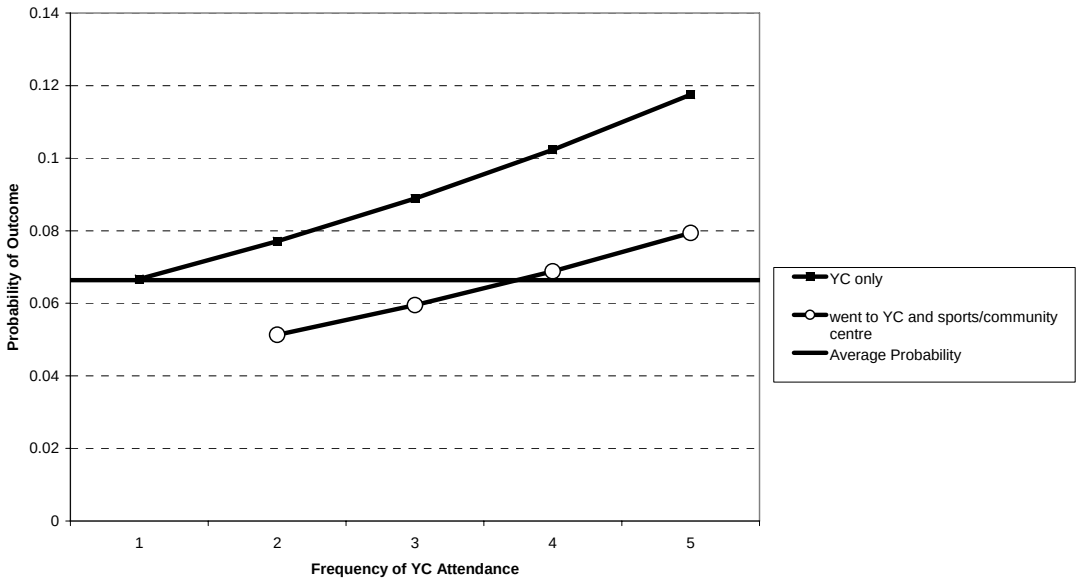


In Figure 2.1, the horizontal line at .0015 presents the 'average' risk for this outcome. Therefore, the average risk of teenage parenthood for cohort members was just over one percent. The upper line represents the youth who went *only* to youth clubs, while the lower line represents those that went to both youth clubs *and* church groups. As frequency of youth club attendance increased, the trajectory for both groups is one of increased risk. It is however the case that the risk remains much higher (almost double the probability) for those who only attended youth clubs. The risk of teenage parenthood was higher than average for cohort members who went to youth clubs *at all*, while if youth club participation was done in tandem with church group attendance, the risk was

not above average except for those who went more than once per week. It should not be inferred from these findings that youth club attendance caused teenage pregnancy. Rather, a more likely case is that youth clubs (particularly unstructured youth clubs, discussed later) tended to attract 'at risk' youth. The finding that attending youth clubs was associated with a higher risk of teenage parenthood compared to going to combinations of activities more likely reflects the peer groups of such youth. Those who went to both youth clubs and church groups would be less likely to have a peer group that was comprised of mostly other 'at risk' teens, which would, in turn, lower their likelihood of participating in risk-taking behaviour (i.e. unprotected sex). It should also be noted that the average risk for teenage parenthood was just over one percent – in other words, it was not an outcome experienced by many cohort members.

We can see a similar pattern repeated in the social housing outcome, as well as in the education-related outcomes (no qualifications, no level 2, and no Level 4). In these cases, the different combinations that act to reduce or nullify the negative effect of youth club attendance, but the overall finding is that going to youth clubs *and* other activities in combination acts to reduce the likelihood of these negative later-life outcomes.

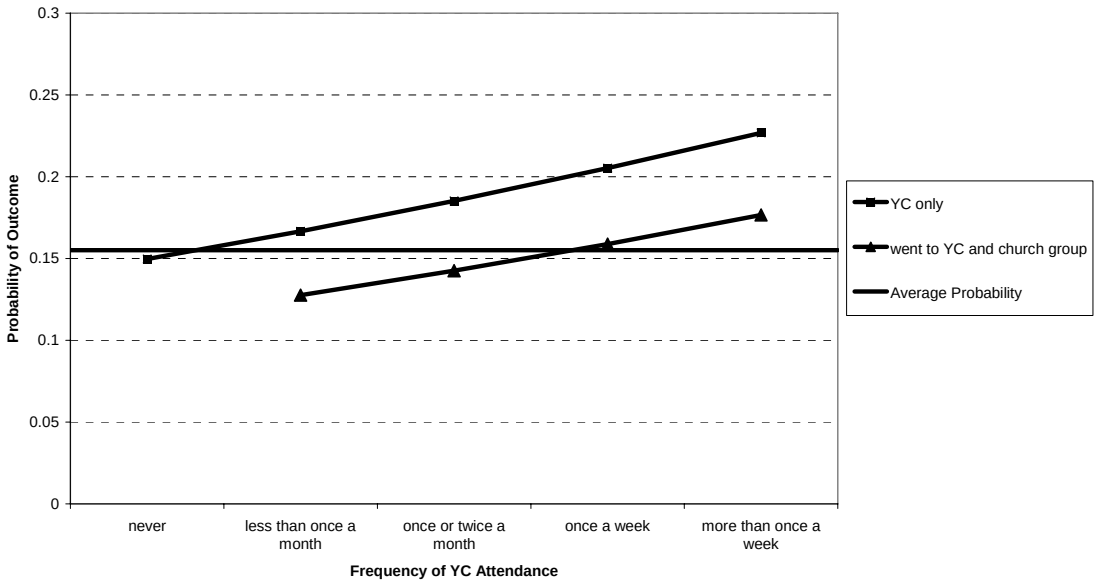
Figure 2.2: Youth Club Attendance and Probability of Being Social Housing at Age 30



With regard to the social housing outcome considered here, Figure 2.2 shows that compared to youths who went to youth clubs and sports/community centres, youths who attended youth clubs only again had a much higher probability of being in social housing, particularly as their attendance at youth clubs increased. The horizontal line illustrates the average risk of being in social housing for cohort members -- which was around 6.6 percent. In the category of attendance "more than once a week", the probability of being in social housing at age 30 was 11.75 percent, while for those who went to youth clubs this frequency, but also attended sports and community centres, the corresponding figure

was 7.9 percent. The trajectories displayed Figure 2.2 also show that the for those who went to only youth clubs, the probability of social housing was greater than average, and this increased as frequency of attendance increased. But when sports/community clubs were attending in tandem with youth clubs, the risk of later-life social housing was only slightly higher than average when youth club attendance became weekly or greater.

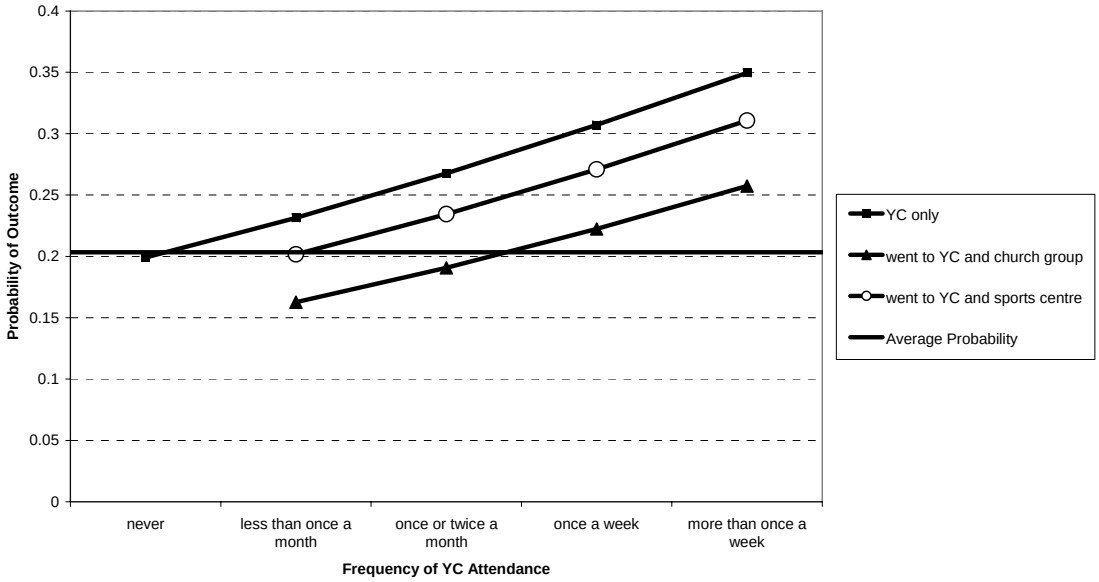
Figure 2.3: YC Attendance and Probability of No Qualifications at Age 30



We examined three educational outcomes in these analyses: the probability of not getting any qualifications, not getting Level 2 qualifications, and not getting Level 4 qualifications. "Level 2" qualifications refer to five GCSE/'O' level passes (grades A* - C, which is generally the requirement to go on to study for Level 3. "Level 4" qualifications refer to having a university degree (or vocational equivalent).
The relationship between youth club attendance and all these educational outcomes share a common feature: while youth club attendance increases the odds that cohort members will not attain these educational outcomes, *going to youth clubs in combination with church groups acts to moderate this effect.* The effect of this combination of effects (going to youth clubs and church groups) is illustrated by line demarcated by triangular plot markers in Figures 2.3, 2.4, and 2.5.

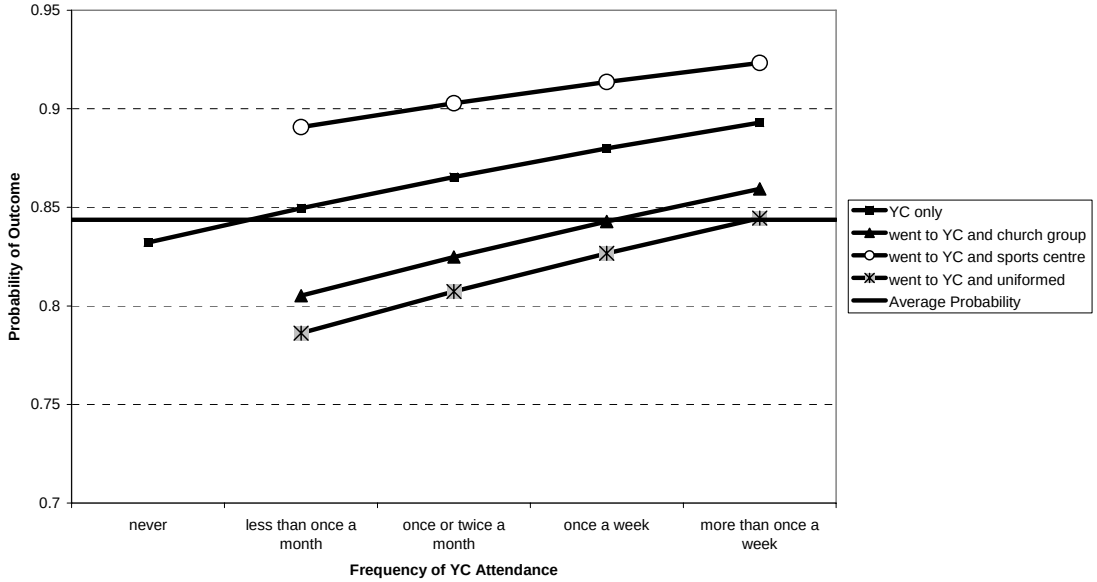
With regard to having no qualifications at age 30, it was only the particular combination of going to youth clubs and church groups that acted to reduce the negative effect of youth club attendance. In Figure 2.3, the upper line illustrates that any youth club attendance puts cohort members at risk of attaining no qualifications at rates higher than the overall average (which is illustrated by the heavy horizontal line at .155). The combination of youth clubs and church groups reduces this risk – as demonstrated in Figure 2.3. Youth who engage in this combination of activities, however, still have higher than average probabilities for having no qualifications if they attend youth clubs once a week or more.

Figure 2.4: YC Attendance and Probability of Having No Level 2 at Age 30



When examining the effects of combinations of activities on the odds of having no Level 2 and no Level 4 qualifications, other combinations of activities were found to be important. In addition to going to youth clubs and church groups, going to youth clubs *along with* sports/community centres were also found to reduce the overall negative effect of youth club attendance with regard to getting Level 2 qualifications. However, it should be noted that this particular combination (youth clubs and sports/community centres) did not decrease the odds of not achieving Level 4 qualifications. In both Figures 2.4 and 2.5, the combination of sports/community centre and youth club participation is denoted by the line with circular plot markers. In Figure 2.4, this line is well below the line representing youth club one – however, in all but one instance, people in this combination still had above average (represented by the horizontal line at 0.21) odds of not attaining Level 2. In Figure 2.5, this combination has the highest odds of not achieving Level 4 qualifications – even greater than youth club participation alone.

Figure 2.5: YC Attendance and Probability of Having No Level 4 at Age 30



To interpret these unexpected findings, educational qualifications should be put in the context of this particular cohort. In this data, just under 66 percent of cohort members achieved Level 2 qualifications, and this number drops to just under 22 percent when Level 4 qualifications are considered. These figures contrast sharply with findings from the 2006 Labour Force Survey, which show that just under 74 percent of adults in the workforce have Level 2 (or equivalent) qualifications (DfES, 2007). Cohort members who went to both youth clubs and sports/community centres may be youth who are less 'academically orientated' than those who attend other forms of joint activity. We shall return to the question of the role of sports activities in combination with other activities in the next section. Our findings here, however, suggest that sports activities in combination with youth club attendance only moderately reduce the negative 'youth club effect' in the case of Level 2 qualifications. When Level 4 qualifications are considered, those who engage in this particular combination of activities are also the most likely not to achieve these educational credentials.

Finally, with regard to Level 4 qualifications, going to youth clubs in addition to uniformed groups greatly reduced the negative 'youth club effect'. The bottom line in Figure 2.5 represents the predicted probabilities of not getting Level 4 qualifications for those who went to youth clubs and uniformed groups. Even at the highest level of youth club attendance (more than once a week), attending uniformed groups as week only increased the odds of not achieving Level 4 to the cohort average (just over .84). Again, these findings suggest that what these combinations of activities are actually measuring is the effect of the peer group. Youth who went to youth clubs and sports centres may not have been as academically orientated, while those who went to uniformed activities may have been surrounded by peers who were more likely to have aspirations for higher education.

2.3 Do combinations of activities have similar beneficial effects when a different 'main activity' is considered?

We have shown that while youth club attendance is associated with an increase in the probability of some negative later-life outcomes, these negative outcomes can be offset by attending other activities in addition to youth clubs. But does this hold true only for youth clubs? Research from the United States has found that participation in sports alone and in combination with other activities had a positive association with a range of psychological outcomes, reduced substance misuse and vandalism, and increased the odds of doing homework (Harrison and Narayan, 2003). As well, American researchers have also found that sports participation predicted favourable educational outcomes (Eccles and Barber, 1999; Eccles, Barber, Stone, and Hunt, 2003). Guest and Schneider (2003) have suggested that although the association between sports participation and

Table 2.3: Outcomes at Age 30 Regressed on Frequency of Going to Sports Clubs and Combinations of Other Activities

Odds Ratios

Outcomes at 30	Frequency of Sports Club attendance	Went to Sports/YC	Went to Sports and Uniformed	Went to Sports and Church Groups
Smoking	0.990	0.901	0.970	1.365*
	0.027	0.111	0.140	0.206
Obese	0.998	0.891	0.853	1.455*
	0.033	0.140	0.157	0.273
Psychiatric Disturbance	1.022	0.768	1.485+	1.295*
	0.029	0.107	0.233	0.204
Teen Parent	0.879*	1.365	0.968	0.655
	0.057	0.319	0.295	0.228
Single, Separated, Divorced	0.934**	0.956	1.06	0.727*
	-0.023	-0.108	-0.143	-0.103
Social Housing	0.851***	1.109	0.646*	1.22
	-0.036	-0.187	-0.141	-0.281
No Qualifications	0.902***	1.440**	0.842	0.806
	-0.028	-0.186	-0.135	-0.14
No level 2	0.888***	1.545***	0.731*	0.665*
	-0.027	-0.196	-0.115	-0.114
Low Income	0.926*	1.014	0.650*	1.658*

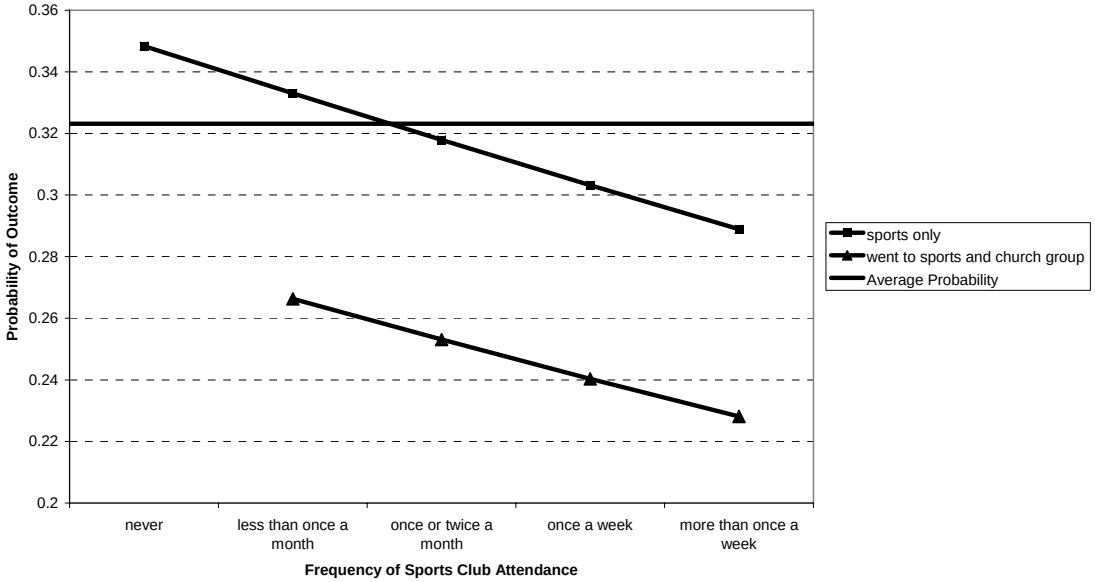
+p<0.10, *p<0.05, **p<0.01, ***p<0.001

academic achievement is clearly established in their (American) data, that participation in other non-sports extracurricular activities were more consistently and positively associated with higher academic achievement. Specifically, they found that the

socioeconomic characteristics of the school had a strong influence on how much participation in sports impacted upon academic achievement, with the results being more pronounced in lower and middle-class schools.

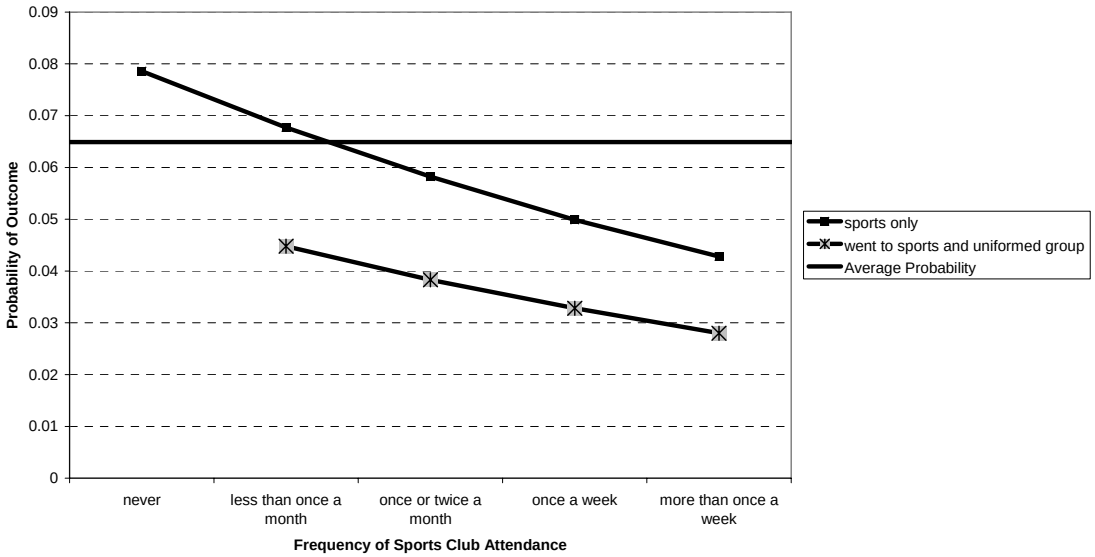
Additional analyses were undertaken to examine what types of associations the frequency of sports club attendance had with the outcomes considered here, particularly in combination with other activities. The overall objective of this exercise was to test whether the positive effects of 'combinations' of activities and their association with reducing the overall negative association of youth club attendance was a phenomena specific to the nature of youth clubs, or if this pattern could be observed in other types of activities. Table 2.3 presents a summary of the results of age 30 outcomes regressed on frequency of sports club attendance and combinations of other activities, namely going to sports clubs and youth clubs, going to sports clubs and uniformed groups, and going to sports clubs and church groups. Again, the summary of results is limited to the outcomes where the frequency of sports clubs attendance achieved statistical significance or at least one of the combinations achieved statistical significance. Of particular interest here, however, are cases where both the main effect of sports club attendance and at least one combination were statistically significant. It should be noted that only once was the statistical significance of the sports club indicator observed without any of the combinations being statistically significant as well, and this was in the case of teenage parenthood. For smoking, obesity, and psychiatric disturbances, the one combination (church groups and sports clubs) were found to be statistical significant, while the main effect of sports groups did not have an effect. There was also some suggestion that sports group attendance and uniformed groups in combination were predictive of psychiatric disturbance. While in general, the *benefits* of sports groups and uniformed activity have been observed, this combination does appear to be associated with certain later-life risk factors as well.

Figure 2.6: Sports Club Attendance and Probabiliy of Being Unpartnered at Age 30



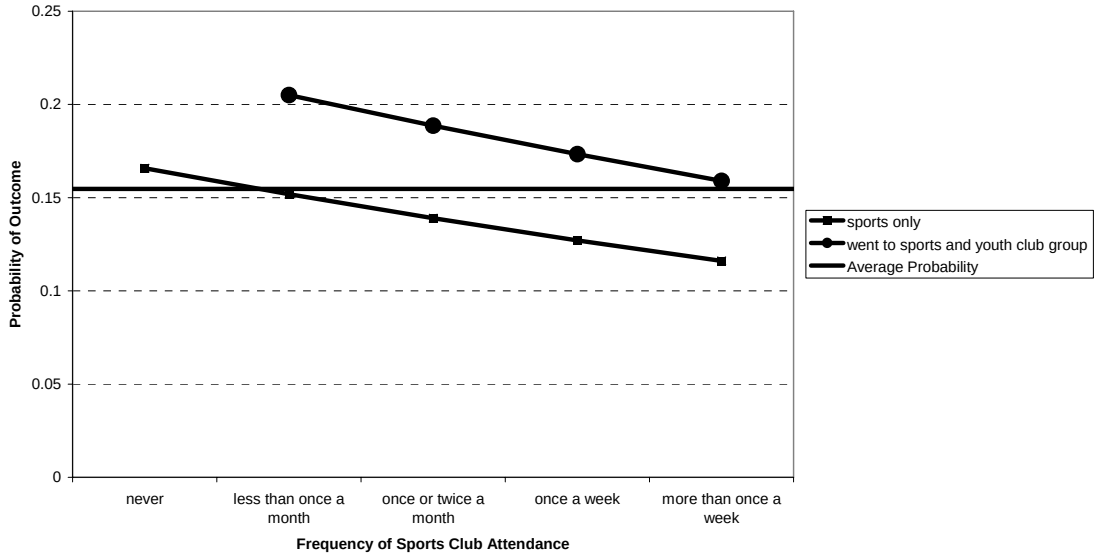
The figures that accompany this section were created with the same estimation procedure described earlier in this report. Frequency of sports club attendance and combinations of activities were significant predictors for five of the 23 age-30 outcomes considered here: being unpartnered, being in social housing, having no qualifications, having no Level 2 qualifications, and having low income. In all of these cases, frequency of sports club attendance acted to reduce these outcomes, as all of the odds ratios reported are under 1.

Figure 2.7: Sports Club Attendance and Probability of Being in Social Housing at Age 30



As can be observed in Figures 2.6 and 2.7, the downward trajectory of the 'sports only' line indicates that the frequency of sports club attendance steadily decreased the probability of being unpartnered and in social housing in age 30. In the case of being unpartnered, the combined activity of sports groups and church groups further reduced this likelihood. In the 'more than once a week category', for example, those attending sports clubs only had a probability of about 29 percent for being unpartnered, while the corresponding figure for those who went to church groups and sports groups was just 23 percent. The overage cohort average on this outcome was just over 32 percent. Similarly, for the social housing outcome, for those who engaged in sports as well as uniformed groups reduced the probability of being in social housing from 4.3 percent to 2.8 (for sports attendance of more than once a week), bringing those engaging in combinations of activities at probabilities well below the cohort average of .065.

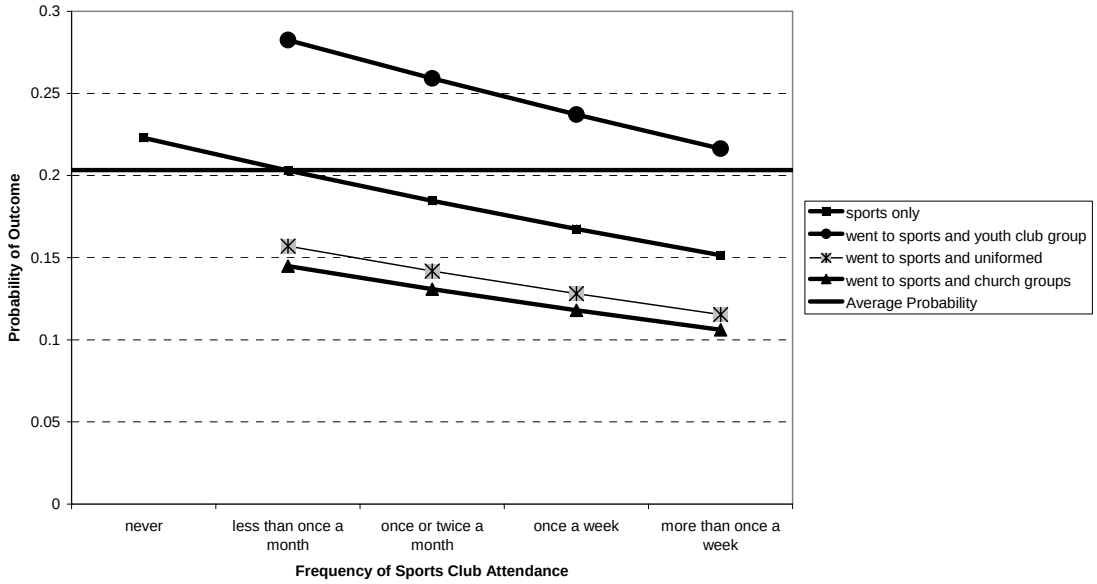
Figure 2.8: Sports Club Attendance and Probability of Having No Qualifications at Age 30



Turning to the educational outcomes considered here, the odds ratios for the combinations of sports clubs and youth clubs (1.440 and 1.545) indicate that these combinations served to increase the odds of these (negative) outcomes, which add further support to the results reported above. In Figures 2.8 and 2.9, the with circular markers representing the combination of going to sports clubs and youth clubs is the line associated with the *highest* probability of have either of these educational outcomes. The average probability of having no qualifications at age 30 was just over 0.15, while the predicted probabilities for sports and youth club attendance are all above this number. The line steadily decreases with increased sports participation, however even at the highest frequency (more than once a week), cohort members were still slightly over the average probability for having no qualifications in later-life. In Figure 2.9, it can be observed that the lines representing combinations of sports and church groups and sports and uniformed groups are well below the 'sports only' line, demonstrating that these combinations have additional 'protective' characteristics. The cohort average for the

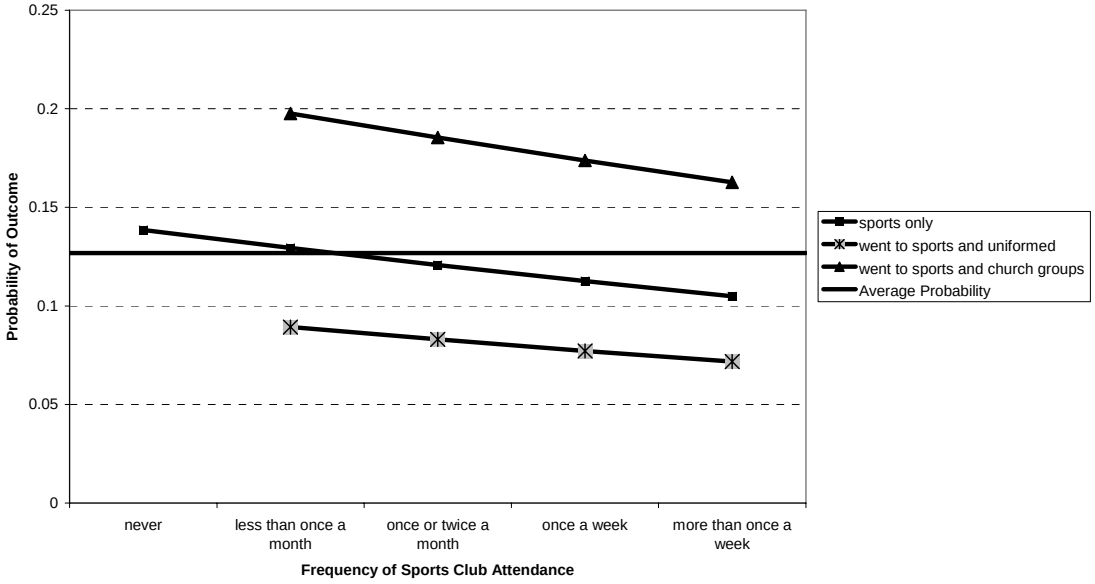
probability of having no Level 2 was just over .20. Figure 2.9 demonstrates how the more a cohort member attended sports clubs the more his or her odds of having no Level 2 qualifications were reduced. This reduction in the odds of having no Level 2 was even more pronounced if a cohort member when to sports clubs and uninformed groups. The case of attending sports groups and church groups, however, was the combination that was associated with the lowest probability of having no Level 2 qualifications at age 30. *Those who attended sports clubs more than once a week and went to church groups as well had a probability of 10.6 percent for not achieving Level 2; the corresponding figure for those who went to youth clubs and sports clubs was over double this at 21.6 percent.*

Figure 2.9: Sports Club Attendance and Probability of Having No Level 2 at Age 30



The positive effects of sports club attendance and the additional protective effects of going to the combination of sports and uniformed groups is also demonstrated in Figure 2.10 with regard to having a low income at age 30. The average cohort probability for having low income at age 30 was just under .13, which is represented by the horizontal line. The combination of sports club attendance and uniformed groups is well below the average probability for all categories of attendance frequency. Surprisingly, however, combination of sports group and church groups, was strong and positive (odds ratio=1.658), which means that this combination actually increased the likelihood of having a low income. As is illustrated in Figure 2.10, the line representing the combination of sports and church groups is well above the cohort average and continues to stay above the average probability, even at the highest category of sports club participation. Although there are many benefits associated with church group attendance, it does appear to be a risk factor for some outcomes.

Figure 2.10: Sports Club Attendance and Probability of Low Income at Age 30



2.4 Summary

The objective of this section was to answer the question "What are the later-life associations of teenagers engaging in different combinations of out-of-school activities?" We have found that for those outcomes where youth club attendance increased the likelihood of negative outcomes (teenage parenthood, being in social housing, and educational outcomes), combinations of activities acted to reduce this effect. The activities varied by the outcome considered, although the combination of going to church groups and youth clubs had the most 'protective' effects (in four of the five outcomes in the summary table).

Further analyses were carried out to examine if the observed benefits of such combinations of activities could be observed when the main activity under consideration was changed from youth clubs to something else, in this case, sports clubs. Unlike youth clubs, the overall effect of sport club participation reduced the likelihood of negative adult outcomes. In other words, going to sports clubs was already a predictor of favourable later-life outcomes. The combined activities, however, acted to enhance this reduction further, with the notable exception of when attending youth clubs/sports clubs was considered as a combination. Surprisingly, church group attendance along with sports club attendance was also found to exhibit a strong effect on *increasing* the odds low income in later-life.

3. How is the 'structure' of youth clubs associated with later-life adult outcomes?

The element of 'structure' of such extracurricular activities has been shown to be a very important feature by a host of previous researchers. Mahoney (2000) asserted that in order for youth activity programs to be 'effective' (i.e. produce positive outcomes rather than negative ones), they must meet four important criteria: 1) they must be highly structured, 2) they must meet regularly, 3) they must focus on the development of some skill, and 4) they need to be led by at least one competent adult. According to Mahoney, extracurricular activities which contribute to negative outcomes in youth generally have been shown to lack at least one of these key components. But what is 'structure'? Mahoney (2000) lists the following as features of highly structured youth leisure activities:

> "regular participation schedules, rule-guided engagement, direction by one or more adult activity leaders, an emphasis on skill development that is continually increasing in complexity and challenge, activity performance that requires sustained active attention, and clear feedback performance" (p. 115).

Other research on youth activity has also found that adult presence and mentoring outside of out-of-school activities is an important feature in positive youth development (Larson, 2006) and in forming positive relationships with adults and community members (Dworkin, Larson, and Hansen, 2003; Hanson, Larson, and Dworkin, 2003). Related research has also found that there are benefits of both "youth-driven" (i.e. programs where youth are given much decision-making and planning responsibility, but is still under supervision of adults) and "adult-driven" youth programs, such that those that those in the former tend to result in feelings of empowerment and leadership-building skills, while the latter fostered development of youths' specific talents. Both types of programs were found to have benefits in terms of building the youths' self confidence (Larson, Walker, and Pearce, 2005).

With regard to 'structure', most youths participate in both structured and unstructured leisure activities to varying degrees. The important point, however, is that there are more opportunities to engage in antisocial behaviours during 'unstructured' leisure (Mahoney, 2000; Osgood et al, 1996). Related research has found that participation in structured youth activities that involved perceived support from activity leaders was associated with lower levels of depression (Mahoney, Schweder, and Stattin, 2002). Previous studies have also found that young people who had friends in structured activities tend to remain attending structured activities and tend to have positive feelings about their family (Persson, Kerr, and Stattin, 2007).

While previous research has also found that participation in unstructured activities with peers can actually contribute to antisocial behaviours (Mahoney and Stattin, 2000), participation in structured extracurricular activities can lead to a host of benefits, including increased school satisfaction (Gilman 2001; Mancini and Huebner, 2004), less risk-taking behaviours (Mancini and Huebner, 2004), fewer behavioural problems (Hoffeth and Sandberg, 2001), greater school success (Mancini and Huebner, 2004;

Hofferth and Sandberg, 2001), and reduced risk of drop-out among high-risk youth (Mahoney, 2000.)

3.1 Measuring Structure

One assumption that has been made in the previous WBL work on the topic of youth out-of-school activities (Feinstein, Bynner and Duckworth, 2005) is that the reason for the negative association between youth club attendance and later-life outcomes was due to the unstructured nature of the youth clubs in the UK during the mid 1980s. The concept of 'structure', however, was not measured in previous estimates, but was offered as an explanatory discourse around the findings.

In order to add further substantiation to these claims, it is necessary to be able to assess just how structured these youth activities were. In 1986, youths who went to youth clubs were asked about their frequency of attendance (in the categories that are used in the analyses in this report) as wells as about what they did at the youth club.
The questionnaire items read as follows:

C24. Have you been to a youth club(s) in the past 12 months? Yes/No
If yes, please answer 24a and 24b.

24(a): On how many occasions have you been:

More than once a week
Once a week
Once or twice a month
Less than once a month

24(b). What sort of things do/did you do there?
1._____
2._____
3._____
4._____

With regard to question 24(b), the respondent was given four lines (numbered) to write in whatever he or she wanted. From a random sample the cases where this answer was filled in, some examples of what cohort members wrote (verbatim) in the four spaces were:

	Activity 1	Activity 2	Activity 3	Activity 4
1	FIVE A SIDE FOOTBALL	TABLE TENNIS	BADMINTON	SNOOKER
2	SNOOKER, POOL	TABLE TENNIS	DISCO, BADMINTON	GAMBLING
3	PLAY HOCKEY	SNOOKER	TALK TO GIRLS	PLAY HOCKEY
4	TALKED TO FRIENDS	LISTENED TO MUSIC	DRANK COKE ETC	TALKED TO FRIENDS

5	DEBATES	GAMES	DRY SKIING, HIKING	SEMINARS,CONFERENCES
6	POTTERY, BASKETS ETC	DISCUSSED PROBLEMS	TO SPORTS CENTRES	COMPETED WITH OTHERS
7	WATCH T.V.	ORGANISE TRIPS	PLAY POOL	WATCH VIDEOS
8	PLAYED TABLE TENNIS	RAG HOCKEY	RELIGIOUS DISCUSSION	SINGING
9	MUSIC	DRAMA	SPORTS	
10	PLAY SNOOKER	LISTEN TO RECORDS	CHAT TO FRIENDS	TABLE TENNIS
11	TALKS ON DRUGS ETC	PLAY SPORTS	MEET FRIENDS	
12	FUND RAISING EVANTS	CAMPING	BARBEQUES	QUIZ NIGHTS
13	HELP GUIDES	FIRST AID COURSE	PLAYED GAMES	PRACT.FOR DISPLAY

Until now, these data have been string variables – that is, each line in the data spreadsheet consisted of the verbatim written answers that cohort members gave to these questions. Such data are not possible to do quantitative analyses on unless they are converted to numeric codes, which can be a time-consuming task.

In converting these string values to numeric codes, just under 100 codes were developed, with activities ranging from playing pool, to taking trips, to singing, to 'being bored'. Codes were collapsed to a more manageable number of categories, so that all outdoor sports, for example, were grouped together instead of having in excess of twenty different codes. By far, the most frequently occurring codes were 1) playing football (retained as its own code due to its very high occurrence), 2) playing pool/snooker, 3) playing table tennis, 4) playing darts, 5) listing to music, 6) watching television or videos, 7) chatting with friends/hanging out, and 8) attending a disco or dancing.

Using Mahoney's (2000) definition of structure provided earlier in the section, a variable was created that tapped into the extent of structure that appeared to be present in the youth club. It should be emphasised that this variable can only roughly estimate the extent of structure, based upon what cohort members reported doing at the clubs. There is no information on what activities were available to which the cohort member declined participation, for example. Examples of activities that would require "regular participation schedules, rule-guided engagement, direction by one or more adult activity leaders, an emphasis on skill development that is continually increasing in complexity and challenge" (Mahoney, 2000:115) were conceptualized as being characterized as activities that required some degree of organization and supervision, particularly beyond that of the eight most reported youth club activities.

In the above set of examples, cases that would have been coded 'structured' were 5 (because of debates, seminars, and hiking), 6 (because of the crafts and discussions), 7

(because of the trip organisation), 8 (because of the discussion and singing), 9 (because of drama), 11 (because of the talks on drugs), 12 (all events), and 13 (all events). The vast majority of accounts from the cohort members, however, resembled examples 1 through 4 and case number 10

The majority of cohort members described youth clubs that fit the definition of 'unstructured', in the sense that the activities that were listed (i.e. the most popular eight items listed above) required very little 'organisation' and direction by supervising adults. This is not to say that such activities had no value or that they were not supervised by adults. The objective here, however, was to identify clubs that offered activities that were more likely to fit into Mahoney's conceptualisation of structure.

Because the objective was to find out if 'structure' was indeed a large part of the answer to youth club association with negative outcomes, an indicator was developed that was a simple dichotomous structured/unstructured indicator. Again, it wa not possible to get to the extent of *how much* structure existed in these clubs, given the type of information that was collected from cohort members. In general, a club was coded as structured if some activity beyond the eight described above was mentioned and it required some degree of organisation, e.g. going on outings, doing arts and crafts, doing an outdoor activity, practicing some skill, being trained in something, or playing music. Although this is admittedly a fairly crude measure of 'structure', it is at least a proxy, and makes use of previously unused data. Using these criteria, of the 1,782 cohort members who reported going to youth clubs, just 357 went to 'structured' youth clubs (using the criteria given here) while 1,425 went to unstructured clubs. . It should be reemphasised that a youth club was considered structured if just one item that was listed by the CM fell within the structured definition (i.e. three of the items could be 'unstructured').

3.2 Who goes to structured and unstructured clubs?

Of course, a next logical question following from the creation of a variable measuring structure is "How do the youths who go to structured youth clubs differ from those who go to unstructured clubs?" This question was investigated by regressing the structured variable on the series of characteristics that have been serving as the control variables for the estimates previously discussed earlier in this report. Table 3.1 reports a summary of the characteristics found to be significantly predictive of attending structured youth clubs. It should be noted that only the statistically significant predictors are reported here and that the outcome variable was going to *structured* youth clubs.

Females were almost 50 percent more likely to go to structured clubs, compared to males. The cohort members who went to structured clubs were also more likely to have older mothers (35+ at age of birth) and come from the higher socioeconomic classes. Externalising behaviours (i.e. physically aggressive behaviours) at age 10 were negatively associated with structured club attendance, as were eating problems at age 10. Youths who reported doing their homework after school were about 40% more likely to go to structured youth clubs, as were youths who reported reading for pleasure. Cohort members who had been to a pub in the two weeks prior to the survey were about 27

percent less likely to go to structured clubs, while those where had engaged in criminal acts were 11 percent less likely to go to structured clubs.

Table 3.1 Characteristics Associated with Structured Youth Club Attendance
Odds Ratio

Characteristic	
Female	1.494*
Mother age 25-34	0.524*
SES 1/2(%)	1.010+
Externalising Behaviours Age 10	0.770*
Eating Problems age 10	0.827*
Homework after school	1.405*
Reads for pleasure	1.396*
Has been to pub in last 2 weeks	0.732*
Engaged in criminal antisocial acts	0.894**

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

Overall, the pattern suggests that youth from better off socioeconomic backgrounds, without behavioural problems at age ten, and pro-academic orientations at age 16 were more likely to go to structured youth clubs. *The flipside to this, however, is that disadvantaged youth were more likely to go to unstructured clubs.*

Table 3.2 Outcomes at Age 30 Regressed on Frequency of Going to Youth Clubs and Whether Youth Club Was Structured
Odds Ratios

Outcomes at 30	Frequency of Youth Club attendance	Unstructured (1=yes)
No qualifications	1.224**	1.773**
	(0.080)	(0.377)
No Level 2 Qualifications	1.251**	1.878**
	(0.081)	(0.386)
No Level 4 Qualifications	1.169+	1.587*
	(0.095)	(0.321)

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

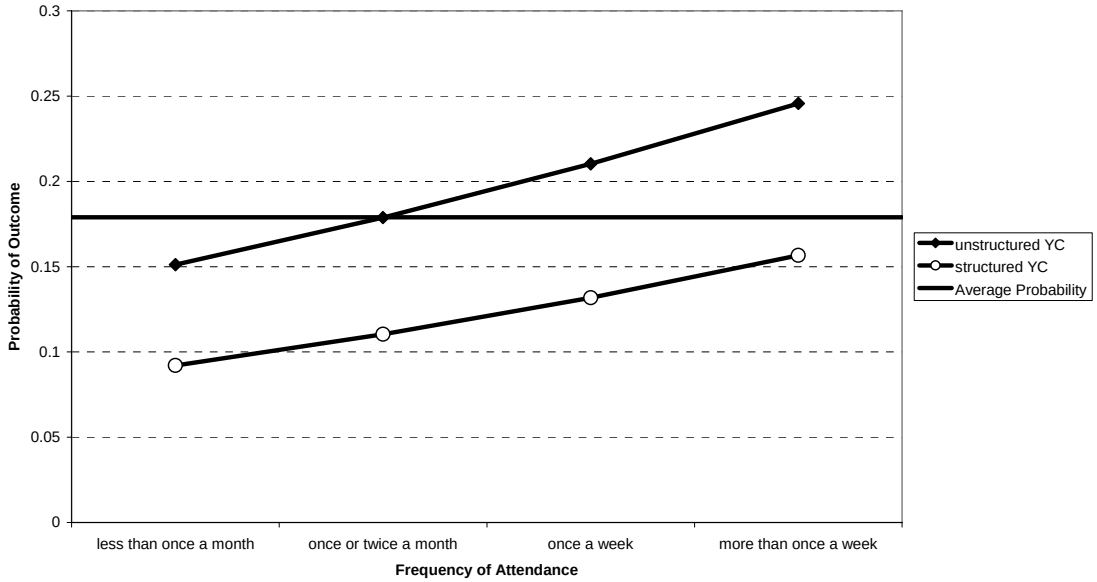
3.3 The Association of Youth Club Structure with Educational Outcomes

The new variable measuring 'structured-ness' was added to the previous regressions that were discussed in the first part of this paper, using all the same control variables and retaining the original frequency of youth club attendance measurement as well as the combinations. The unstructured/structured variable was a strong statistically significant predictor of all three educational outcomes. Results are reported only for outcomes where both frequency of attendance at youth clubs and the structured/unstructured variable were statistically significant. Table 3.2 presents the odds ratios associated with these estimations. The results indicate that attendance of unstructured clubs significantly

increased the odds of negative educational outcomes at age 30. it should be noted that in the next estimations, the sample is limited only to those who attended some form of youth club. *This explains why 'average probabilities' for reported outcome variables in the next set of figures differ somewhat from those reported in earlier figures.*

Figure 3.1 illustrates how youth who went to youth clubs deemed 'structured' faired significantly better on getting qualifications. For infrequent visitors of youth clubs, the probability of having no qualifications at 30 is about 15 percent for those who went to unstructured clubs, compared to around 9 percent for those who went to structured clubs. This gap grows as frequency of attendance increases. The corresponding figures for those who went more than once a week were 25 percent and 15 percent, respectively.

Figure 3.1: YC Attendance and No Qualifications at Age 30



The narrative is almost identical when Level 2 qualifications are considered. In Figure 3.2, the gap between those who go to structured clubs versus unstructured clubs more than once a week is 12 percent.

Again, this effect is seen when Level 4 (Figure 3.3) characteristics are examined as the outcome, although in this instance, the differences are much smaller (4 to 6 percent), partly due to the overall low uptake rate of university education for this age cohort.

Figure 3.2: YC Attendance and No Level 2 at Age 30

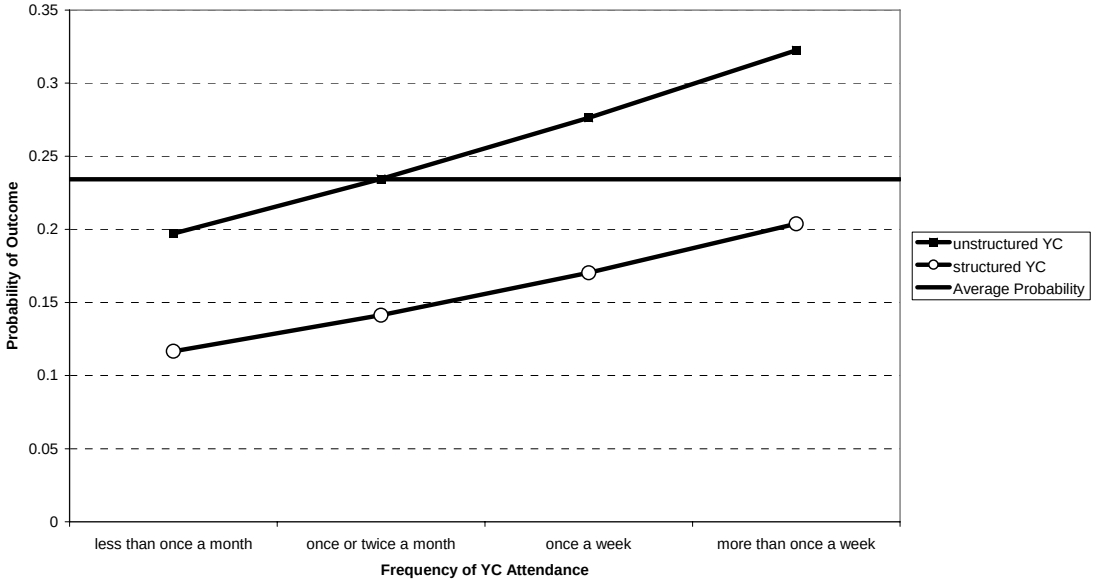
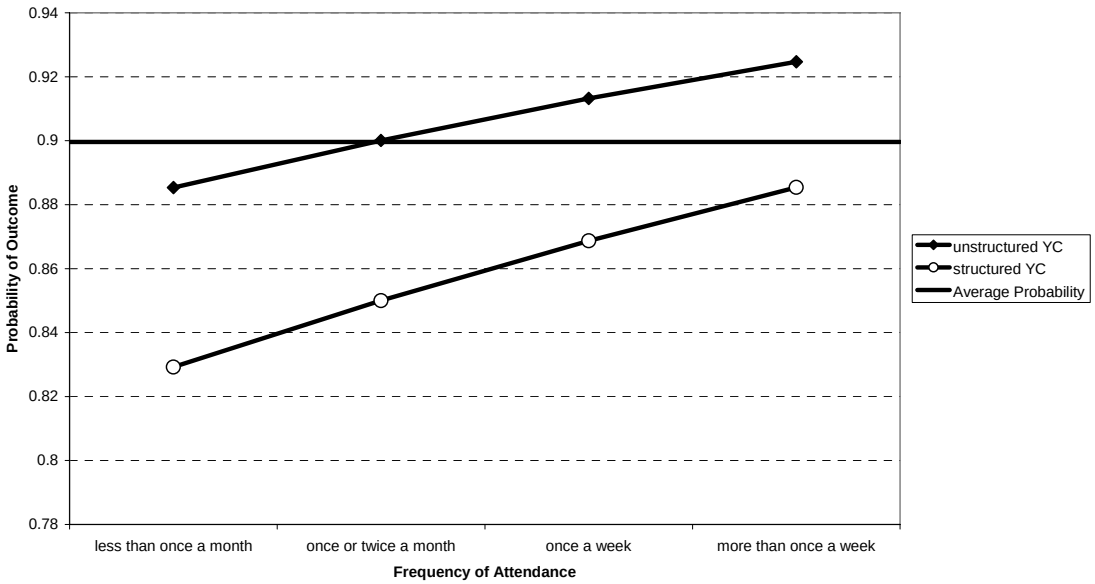


Figure 3.3: YC Attendance and No Level 4 at Age 30



4. What are the characteristics (family structure, gender, income, ethnicity, etc.) of young people who go to youth clubs and either a) do not experience adverse effects or b) for whom youth clubs were associated with improving life chances?

We know from research in the USA that there are differences in activities based upon socioeconomic status and race (Simpkins, Ripke, Huston and Eccles, 2005), with low-income youth being more likely to use community centres and activities at religious organisations. We also know that these activity patterns are related to the psychological and behaviour functioning of youth, with 'types' of youth being more likely to be involved in certain patterns of youth activity (Bartko and Eccles, 2003). Parental characteristics, family size and marital status of parents have been found to be associated with the amount of time that children spend in structured, educational, and family-related activities (Hofferth and Sandberg, 2001). Research by Huebner and Mancini (2003) has also demonstrated that various personal and family characteristics were associated with type of out-of-school activity participation, including SES, ethnicity, grades, parental monitoring, and family structure.

For the UK, previous WBL research indicated similar patterns of association and also interesting differences in terms of the predictive factors for participation in different sorts of activities and contexts. The objective in the next set of analyses was to identify characteristics of individuals who went to youth clubs and did not experience negative effects, or for whom youth club attendance was actually associated with positive outcomes.

Table 4.1 presents a summary of the predictors of ***positive*** *age-30 outcomes* for those who went to youth clubs at age 16. *Previous estimates in this report have focused on negative outcomes, but for this section of the report, the items were recoded so that they represented positive outcomes.* The outcomes here are grouped according to ECM categories. The estimations below are restricted to those 1,796 cohort members who reported going to youth clubs. Detailed results of the 23 separate estimates can be found in the statistical appendix to this report. The criteria for selection into the summary table was either: 1) each characteristics had to be statistically significant at the .05 for at least two of the outcomes in the grouped category, or 2) each characteristic had to be significant at the .10 level for at least two outcomes and at the .05 level for at least one.

From the table, it can immediately been observed that a number of characteristics are repeated in the table under the various outcomes. For example, sex is important in four of six outcomes (although the sex associated with the positive outcome varies), as is internalising behaviours at age 16. Low aggression and moderate internalising (which is characterised as behavioural problems that are directed inward and manifest themselves in the form of social withdrawal, depression, and anxiety) at 16 also predicted a range positive outcomes: being healthy, achieving, making a positive contribution, and

Table 4.1 Characteristics Associated with Positive Outcomes

Characteristic	*Being Healthy*	*Parenthood and Marital Status*	*Staying Safe*	*Achieving*	*Making a Positive Contribution*	*Economic Well-Being*
Sex	Being Male	Sex – effect varied by outcome			Being Female	Being Male
Family Background	Being from a middle or high SES group	Number of older siblings (mixed)		Being from a middle or high SES group	Being of UK Ethnicity	
	High maternal interest in the child			Having Educated Parents		
Behavioural and Psychological Characteristics at 5 and 10	Self Efficacy				Internalising at 10	Not having soiling problems between 5 & 10
Cognitive Abilities at 5 and 10				Maths Test Age 10		
				Copying Score Age 5		
Behavioural Characteristics at 16				Doing Homework After School	Not having truanted at 16	Not smoking at 16
					Not Smoking at 16	
					Doing Homework After school	
Peer Group Characteristics at 16			Not having close friends engaged in antisocial acts	Not having close friends engaged in antisocial acts	Not Engaged in Antisocial Acts at 16	
Psychological and Attitudinal Characteristics at 16	Low aggression and moderate internalising at 16	Locus of Control 16		Low aggression and moderate internalisin g at 16	Low aggression and moderate internalising at 16	Low aggression and moderate internalising at 16
	Self Efficacy			Locus of Control 16		Locus of Control 16
				Wanting to Stay On at 16		

economic well-being. Another personality characteristic that appear several times was locus of control. Locus of control refers to the extent to which one feels in control of events in his or her life, and this trait at age 16 was associated with the parenthood and marital status outcomes, achieving, and economic well-being.

Peer group characteristics, particularly not having close friends who were engaged in antisocial acts or being personally involved in antisocial acts were positively associated with staying safe, achieving, and making a positive contribution. Doing homework after school was positively associated with achieving and making a positive contribution, while not smoking at 16 was associated with making a positive contribution and economic well-being. Class background was associated with being healthy and achieving.

There were also characteristics that only cropped up under a single outcome, such as maternal interest in the child and self-efficacy (one's belief that s/he is able to obtain certain goals) in the case of the being healthy outcome. With regard to the achieving outcome, test scores appeared here (maths test at age 10, copying at age 5) as well as having educated parents, and wanting to stay on after 16. All of these characteristics are consistent with high scholastic achievement, which would explain why these features would protect young people from any negative effects associated with youth club attendance.

Returning to the question, "What are the characteristics of young people who go to youth clubs and either do not experience adverse effects or for whom youth clubs were associated with improving life chances?" The answer appears, unsurprisingly, to be that individual personality characteristics, school achievement, and family background characteristics appear the major determinants of 'overcoming' the negative trajectories that appear to be associated with youth club attendance.

5. What combinations of outcomes at age 30 exist for those who attended youth clubs at age 16?

In addition to examining cohort members' combinations of leisure activities during youth, another area of interest focused upon in these analyses was the combination of possible later-life outcomes experienced by the cohort members at age 30.
For each of the dimension of the ECM outcomes (discussed above), a summated score was created to measure the extent to which cohort members experienced combinations of these similarly-grouped outcomes. For example, a summated count variable was created out of the 4 'being healthy' outcomes which added up the numbers of these outcomes experienced by cohort members in adulthood. As the original binary variables had values of zero and one, the summated score thus ranges from zero, for individuals with none of these adverse outcomes, to four, for those who experienced all of them. It should be noted not all the summary count measures up have a maximum value of the total of the summed binary items. The economic well-being summed count measure has a maximum value of 2, because this is the maximum number of outcomes reported by any of the cohort members. As well, as separate summated measure was created for parenthood and marital status, as these items seemed distinct from the other staying healthy items and logically grouped together. Descriptive characteristics of the indicators used in the subsequent analyses are presented in Table 4.1. All the indicators in this table represent undesirable outcomes, so higher scores on the summated scores are indicative of more disadvantage.

Table 5.1: Summary statistics for age 30 binary and grouped variables

Variable	Definition	N	Mean	S.D.	Min	max
Being healthy						
Mental health & well-being						
Smoker	Currently smokes cigarettes	11,170	0.37	0.48	0	1
Obesity	Currently obese				0	1
Depressed	Depressed (Malaise score of 7 or more)	11,082	0.17	0.38	0	1
Psychiatric disturbance	Psychiatric disturbance (GHQ score of 4 or more)	11,071	0.20	0.40	0	1
Summary count measure	A count variable that measures how many negative health and well-being outcomes a respondent has.	11069	0.88	0.91	0	4
Parenthood & marital status						
Single, separated or divorced	Single, separated or divorced	11,121	0.34	0.47	0	1
Parent before age 19	Parent before age 19	11,226	0.01	0.07	0	1
Single parent	Single parent	11,226	0.06	0.23	0	1
Summary count measure	A count variable that measures how many negative parenthood and marital status well-being outcomes a respondent has.	11121	0.45	.64	0	3
Staying safe						
Temporary or social housing	Lives in temporary or Local Authority/Housing Association-rented accommodation	11,115	0.15	0.35	0	1
Homelessness	Has been homeless since last interview	10,219	0.07	0.25	0	1
Crime victim	Has been victim of assault, mugging, or sexual assault.	11262	0.07	0.26	0	1
Summary count measure	A count variable that measures how many negative safety outcomes a respondent has.	10219	0.29	0.57	0	3
Enjoying & achieving						
Dissatisfied	Dissatisfied with how life has turned out so far	11,070	0.15	0.36	0	1
No qualifications	No qualifications	11,188	0.28	0.45	0	1
Not level 2 qualifications	Not obtained level 2 qualifications	11,188	0.37	0.48	0	1
Not level 4 qualifications	Not obtained level 4 qualifications, i.e. degree or above.	11,188	0.78	0.40	0	1
Summary count measure	A count variable that measures how many negative enjoying and achieving outcomes a respondent has.	11070	1.59	1.19	0	4
Making a positive contribution						
Criminality						
Offender – minor level	Arrested, cautioned or found guilty in court at least once since last interview	11,073	0.23	0.42	0	1

Offender – serious level	Found guilty in court at least twice since last interview	11,073	0.05	0.21	0	1
Summary count measure	A count variable that measures how many criminality outcomes a respondent has.	11073	0.27	0.54	0	2
Attitudes						
Racially intolerant	Intolerant of people from different races	11,081	0.05	0.21	0	1
Not Voting	Voted in last election	11183	0.38	0.48	0	1
No Civic participation	Memberships of groups	11117	0.25	0.73	0	1
Summary count measure	A count variable that measures how many attitudinal outcomes a respondent has.	11060	0.67	0.71	0	3
Economic well-being						
Low income	In receipt of low income	8,067	0.19	0.39	0	1
Benefits	Cohort member or their partner is claiming Job Seeker's Allowance, Income Support or Housing Benefit	11,191	0.11	0.31	0	1
Workless household	In a workless household	11,226	0.10	0.30	0	1
Workless household with children	In a workless household with children	11,226	0.05	0.23	0	1
Summary count measure	A count variable that measures how many negative economic outcomes a respondent has.	8067	0.21	0.45	0	2

In Table 5.2, the summary results of seven Poisson regression estimations of the various summated scores (representing various dimensions of the ECM outcomes) are presented. Poisson regression techniques are appropriate when the dependent variable of interest is a count variable. That is, the variable measures the number occurrences of an event, in this case negative outcomes. The results are presented as incident rate ratios, which are, in general, interpreted the same as odds ratios. The incident rate ratios presented are the main effects of frequency of youth club attendance on the summated outcome scores, independent of the effects of the numerous control variables.

Table 5.2: Poisson regressions of ECM outcomes groups on youth club attendance

Incident Rate Ratios (standard errors in parentheses)

	Healthy	Family	Staying Safe	Enjoying and Achieving	Criminality	Attitudes	Economic
Frequency of YC attendance	0.995	1.047	1.075*	1.041**	1.099**	1.043+	1.043
	(0.019)	(0.028)	(0.037)	(0.015)	(0.038)	(0.067)	(0.044)
YC+sports community	0.951+	0.863	0.839	1.018	0.919	0.929	0.909
	(0.059)	(0.074)	(0.097)	(0.047)	(0.104)	(0.023)	(0.127)
YC+uniformed	1.062	1.028	0.913	0.952	1.026	0.977	0.767+
	(0.061)	(0.084)	(0.102)	(0.042)	(0.110)	(0.067)	(0.108)
YC+church groups	1.129*	0.842*	1.033	0.891*	1.174	0.879+	1.284+
	(0.068)	(0.074)	(0.125)	(0.044)	(0.141)	(0.066)	(0.183)

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

Frequency of youth club attendance had significant associations with four of the eight summated scores (measuring negative outcomes) considered here. In other words, *increased attendance at youth clubs was associated with an increased score in these summated scores*. For example, with each additional increase in youth club attendance (on the 0 to 4 scale) the expected score on the staying safe summated score increased by a factor of 1.075 (or 7.5 percent) when the other variables in the model were held constant. Similarly, such increases were found on the enjoying and achievement dimension (4.1 percent), the criminality score (19 percent) and the attitude score (4.3 percent), although this last incident rate ratio is only significant at the 0.10 level.

Again, there is evidence of the protective effect of attending combinations of events. The incident rate ratios below 1 and asterisked for the combinations of activities indicate that participating in these combinations reduced the score by a factor of (1-incident rate ratio). There is some suggestion, however, that youth club and church group attendance in combination, is not beneficial in reducing the risk of negative outcomes, as the incident rate ratio is positive and significant for the poor health summated measure and the economic well-being, although the latter is significant only at the .10 level, and in both cases, the main effect of frequency of youth club attendance is not statistically significant.

Table 5.3: Ordinary Least Squares Regression of Summary Outcome Measures on Youth Club Attendance

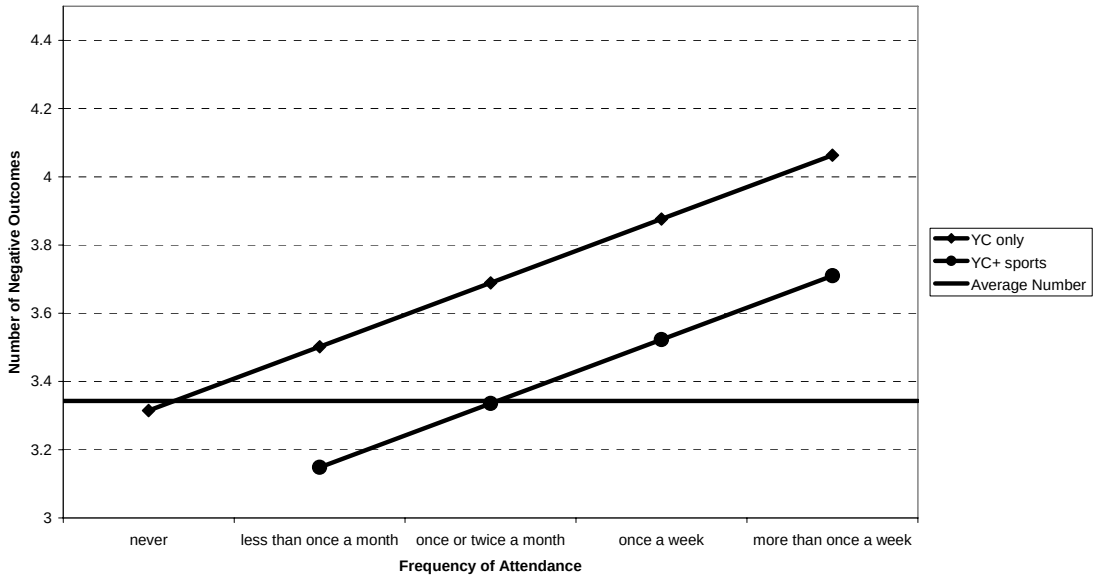
Unstandardised Regression Coefficients

	All Outcomes	**All Outcomes Except Income**
Frequency of YC attendance	0.187***	0.165***
	(0.043)	(0.043)
YC+sports or community centre	-0.353*	-0.325*
	(0.137)	(0.135)
YC+uniformed	-0.144	-0.046
	(0.127)	(0.124)
YC+church groups	-0.067	-0.112
	(0.135)	(0.131)
N	**3502**	**4677**
Adjusted R-Squared	0.335	0.336

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

Table 5.3 presents a summary of results from regressions of a summated score of all outcomes on youth club attendance. To create this score, all 23 binary items considered above were added together to create an overall summary score of social exclusion on the dimensions considered here. With regard to the overall summary score of the 23 items, the mean was 3.85 with a standard deviation of 2.6. Theoretically, the score could range from zero (for individuals with no negative outcomes) to 23 (for individuals who indicated that they experienced all the negative outcomes considered in this analysis). In practice, the score ranged from 0 to 15 and was fairly normally distributed (skewness 0.869) to the extent that ordinary least squares regression could be used (normal distribution of the dependent variable is an assumption of OLS regression).

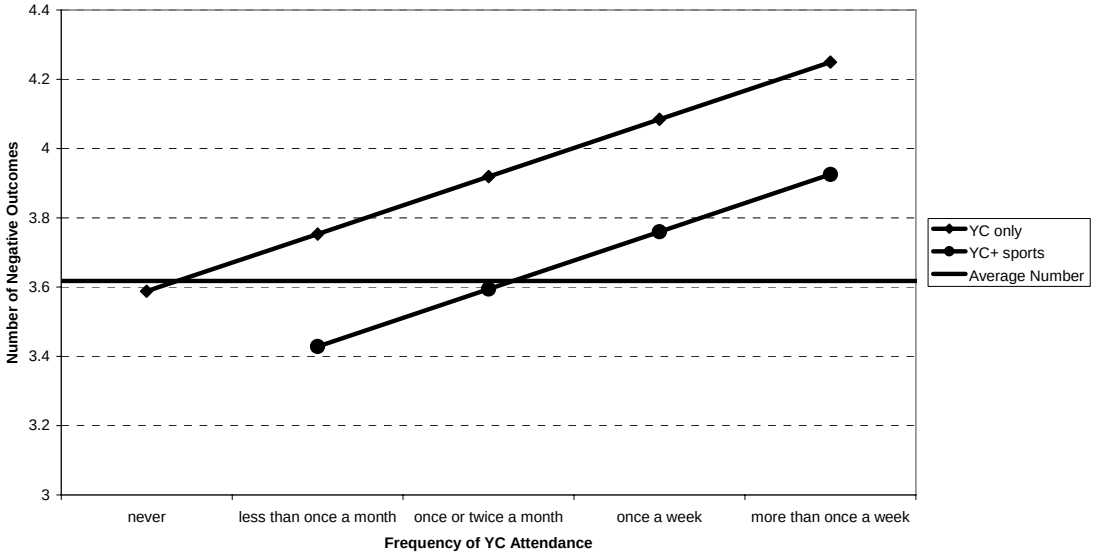
Figure 5.1: YC Attendance and Predicted Number of Negative Outcomes at Age 30



The results from Table 5.3 are graphically presented in Figure 5.1. From this graph, it can be seen the frequency of youth club attendance is associated with an increase in the number of negative later-life outcomes. The 'protective' feature of going to both youth clubs and sports/community centres is also demonstrated by the line with circular markers that runs beneath the 'youth clubs only' line. For example, for frequent attendees of youth clubs, those who only went to youth clubs had about 4.1 total negative outcomes, while for frequent attendees who also went to sports/community clubs had a respective score of 3.8.

An additional summary score was created that omitted the low income item, as this item was missing for a high number of respondents. The mean for this variable was 4.29 with a standard deviation of 3.1 and the range was 0 and 18 (skewness=1.116). Again, the findings of the regression of the 'alternate' summary outcome revealed very similar results, which are graphically presented in Figure 5.2. A one unit increase in the youth club attendance variable (which ranged from 0 to 4) was associated with a 0.187 increase in the outcomes considered in the first model and a .0165 increase in the outcomes considered in the second model. Attending sports clubs or community centres as well as attending youth clubs reduced this negative effect, however, in both models. In other words, the observed negative effect of youth club attendance can be significantly reduced by participation at sports and community centres.

Figure 5.2: Youth Club Attendance and Predicted Number of Negative Outcomes at Age 30 (Not Including Income)



5.1 Returning to the question of unstructured versus structured youth clubs

The findings presented in the previous section lend support to a body of previous research asserting that the degree of structure within youth clubs has an association with their benefits to users. The structured/unstructured indicator was added to the estimates discussed in the previous paragraphs, and a summary of the revised estimates can be found in Table 5.4, while Figure 5.3 graphically illustrates the findings from the first column of Table 5.4.

As observed in the previous exploratory analyses using the 'structured/unstructured' indicator, the higher risk associated with the unstructured clubs is again demonstrated in these analyses. The coefficient associated with the structured/unstructured indicator (0.412) suggests that *attending an unstructured group adds 0.412 additional later-life negative outcomes to cohort members*. In other words, compared to those who went to structured youth clubs, those who went to unstructured youth clubs had .412 more negative outcomes in adulthood. This increases to over .50 if we examine the outcomes apart from income (the second column of Table 3.3). These may seem like small numbers, but the average number of negative outcomes for cohort members who went to youth clubs was 3.63 (all outcomes) and 3.91 (all outcomes except income), and therefore this increase associated with attending unstructured clubs is substantial. Again, while .50 might seem like a tiny number, it should be recalled that an entire outcome (i.e. 1) is a major disadvantage in adulthood, like being in a low income group or having no educational qualifications. An increase the likelihood of having one of these outcomes by .50 is therefore fairly substantial.

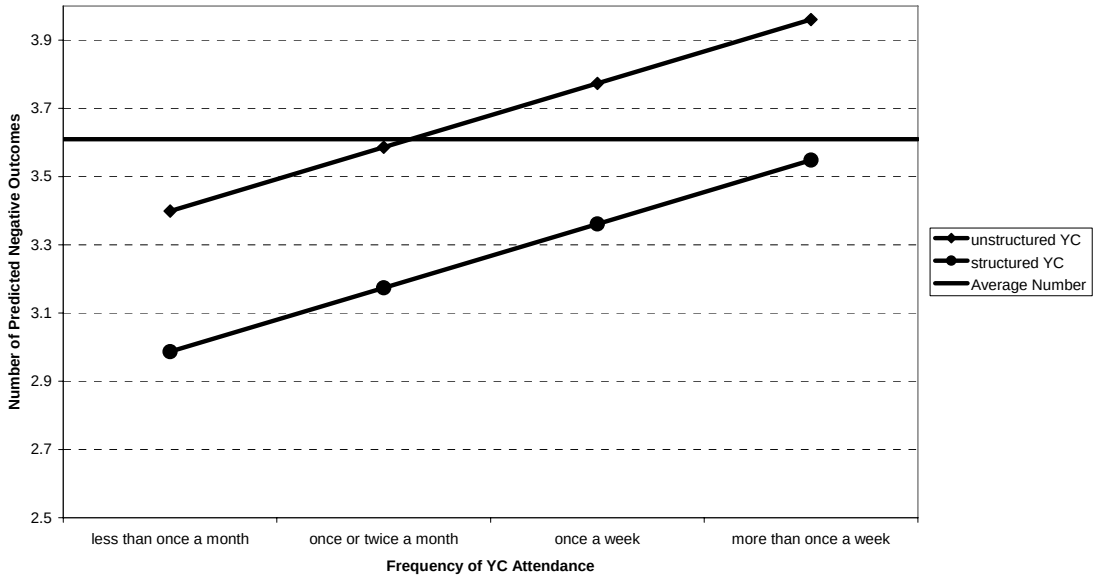
Table 5.4: Ordinary Least Squares Regression of Summary Outcome Measures on Youth Club Attendance (only those who went to YC)

Unstandardised Regression Coefficients

	All Outcomes	**All Outcomes Except Income**
Frequency of YC attendance	0.187**	0.182**
	(0.063)	(0.061)
Youth Club Structured	0.412*	0.517**
	(0.178)	(0.170)
YC+sports or community centre	-0.344*	-0.339*
	(0.173)	(0.163)
YC+uniformed	-0.147	-0.049
	(0.139)	(0.135)
YC+church groups	0.078	0.063
	(0.154)	(0.148)
N	**965**	**1323**
Adjusted R-Squared	0.364	0.361

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

Figure 5.3: YC Attendance and Number of Predicted Negative Outcomes at 30



6. How are the results affected by cohort attrition?

One concern with using the age 16 data from the BCS70 has always been 'missingness'. As is well documented, a teachers strike during the 1986 seriously affected the success of the data collection attempted in that year. There is also the added complexity that there were several different instruments involved in the age 16 sweep, and many cohort members who did take part only completed a fraction of them.

Using the age 16 data, then, always leads to the question of data quality. We know that when we use the instruments that we have drawn the majority of analyses from, we end up with around 6000 cases, which is substantially less than the originally birth cohort of approximately 17000.

To address this concern, an attrition weight was constructed, which adjusted for the differences between the birth cohort and the age 16 sample. This weight adjusted for the region of birth of both parents, parents' class and education, mother's age at birth, and sex.

In Table 6.1, results from the estimations in Table 5.3 were adjusted with birth to age 16 attrition weight. As it can be seen in the results presented below, the overall pattern of results has not been affected by these adjustments. The overall message of the findings remains the same, once basic factors influencing attrition are accounted for.

Table 6.1: Ordinary Least Squares Regression of Summary Outcome Measures on Youth Club Attendance

Unstandardised Regression Coefficients

	All Outcomes - unweighted	**All Outcomes - weighted**	**All Outcomes Except Income-- unweighted**	**All Outcomes Except Income - weighted**
Frequency of YC attendance	0.187***	0.179***	0.165***	0.162***
	(0.043)	(0.045)	(0.043)	(0.043)
YC+sports or community centre	-0.353*	-0.326*	-0.325*	-0.309*
	(0.137)	(0.149)	(0.135)	(0.145)
YC+uniformed	-0.144	-0.136	-0.046	-0.039
	(0.127)	(0.129)	(0.124)	(0.127)
YC+church groups	-0.067	-0.053	-0.112	-0.102
	(0.135)	(0.135)	(0.131)	(0.131)
N	3502	3502	4677	4677
Adjusted R-Squared	0.335	0.346	0.336	0.344

+p<0.10, *p<0.05, **p<0.01, ***p<0.001

7. Conclusions

The analyses carried out in the prior sections have provided evidence that life trajectories may be affected by the types of leisure activities within which youth choose to participate.

- We have shown that youth club attendance is associated with five negative later-life outcomes.
- We have also shown that the negative effects associated with youth club attendance are offset by participation in a combination of youth club attendance and other activities.
- We have also provided some evidence that whether or not the youth club is 'structured' also has an association with adult later-life outcomes. In particular, less risk is associated with attending structured youth clubs.
- We have also shown that attendance to unstructured clubs appears to be taken up by youths who already exhibit characteristics of risk – they have behavioural characteristics, for example, that are associated with unfavourable later-life outcomes. These youth, for reasons that we are unable to explore in these analyses, appeared to be attracted to unstructured youth clubs.

7.1 The importance of frequency and structure

Of particular interest to policy makers is the finding that frequency of youth club attendance and the indicator measuring 'structuredness' were consistently associated with the education outcomes examined here. The more that cohort members attended youth clubs, the more that they were likely to get no qualifications, no Level 2 qualifications, and no Level 4 qualifications. The 'structuredness' of the youth club was also associated with the likelihood of qualifications being obtained, as youth who attended unstructured clubs were significantly less likely to have educational qualifications at age 30. Very few other later-life outcomes (from the full range of 23 that were considered) were significantly associated with youth club attendance and structure. Nonetheless the relationship between going to these clubs, whether the clubs are structured, and later-life educational outcomes cannot be ignored.

7.2 The importance of attracting 'at risk' young people

The analyses in this report added an important dimension to previous WBL work on youth leisure contexts: the issue of 'structure'. From the descriptions of the clubs given by the cohort members, unstructured youth clubs were less likely to be heavily supervised by adults and such youth clubs provided a place for these youth to socialise with others. It is very likely the case, as suggested by Mahoney, Statton, and Magnusson (2001) in their study of Swedish youth clubs, that "youth centre involvement could be indicative of a more general preference for unstructured leisure pursuits" (p. 519) rather than a direct causal link to later-life disadvantage. Like the Swedish researchers just mentioned, we have also shown in previous WBL work that disadvantaged youth are over-represented among youth club users.

While the negative later-life associations with these clubs has been repeatedly emphasised in this report, one very important caveat is that these sorts of clubs attract 'at risk' youth – and by doing so, they theoretically have the ability to have offer new forms of contact and communication with and between such young people. In other words, the 'at risk' youth have come to these clubs and creative, non-threatening ways of introducing 'structure' may be our best way to alter the negative trajectories on which such youth may appear to be set. However, the clubs attract this group in part because of the absence of adult control. Therefore, success depends on being able to provide facilitation to the users of the youth clubs, rather than through enforcement of adult control. Structured settings, as we are using the term, does not mean imposition of adult values and activities but empowerment, through adult scaffolding and support of young people to act collaboratively and in the service of a wider group objective. We cannot say why these youth have chosen unstructured clubs – it may be due to prior negative experiences in structured settings (as suggested by Mahoney, Stattin and Lord, 2004), or barriers may exist that prevent these youth from attending structured activities (Caldwell and Baldwin, 2005).

Therefore, the balance between adult facilitation and youth control is both crucial and delicate. Success in this area depends on the very great skill of the youth workers who have to make day to day judgements about the appropriate levels of risk and support, autonomy for challenging and challenged young people and directive management of group dynamics. This capability of youth workers depends on training and the wider framework of public and voluntary family, adult and children's services within which they operate.

7.3 Mechanisms

The complete set of causal mechanisms at work here are not clear, as there is a 14 year gap between the data points. A possible explanation is that youth club attendance and in particular, attraction to unstructured clubs, is itself an indicator of academic and social disengagement. Our analyses of the characteristics associated with *positive* outcomes of youth club attendance suggests it is the advantaged (in terms of family background, and psychological and behavioural characteristics) youth who remain 'resilient' from the 'contaminating' effects of the youth club. What can be interpreted from these findings is that youth who were already at risk and who attended unstructured clubs were likely to have the worst outcomes at 30.

7.4 Pathways

The questions examined in the analyses here have examined a variety of pathways between childhood, youth and adulthood. Figure 7.1 illustrates the pathways examined in the analyses undertaken in this report. In our statistical analyses where the outcome of interest has been youth leisure activities, we have conditioned on a host of birth, age 5, and age 10 characteristics, essentially looking at those direct and indirect pathways between young childhood and youth. Our models condition for the effects of early childhood family and individual characteristics on age 16 characteristics. In the analyses examining adult outcomes, we condition on birth, age 5, age 10, and age 16

characteristics, indirectly estimating the paths among these pre-30 ages (e.g. from birth → 5→ 10), and directly estimating the paths between these ages and adulthood.

The findings in our model clearly support the hypotheses that disadvantaged in early life (or conversely, advantage) on a host of characteristics serve to direct youth onto particular life paths. Youths who have particular psychological and family characteristics are more drawn to unstructured youth clubs, perhaps as an escape from adult-supervised environments (i.e. school and home). Youths who have relative advantage with regard to these types of characteristics are still negative affected by youth club attendance, but are 'protected' by their personal and family characteristics such that they are not as negatively affected by such activities as those youth who are already at risk.

7.5 Generalising from the data

It is difficult to make definitive generalisations about the data, as by the time we limit our analyses to youth club attendees, we are at just over 1700 cohort members, which is roughly just 10 percent of the original birth cohort. But if trying to explain what has happened between age 16 and 30, it seems fair to say that youth who were on risky paths at age 16 were more than likely to continue on them and have a range of negative outcomes in adulthood. We have, however, employed weighting techniques that adjust for attrition from birth to age 16, and we have found that our results are not altered in any significant way. From these adjustments for cohort attrition, it can be surmised that the subsample of the cohort we are examining does not appear to be especially different from the original 1970 birth cohort.

It has been highlighted by critics of the previous WBL research (Smith, 2006) on adolescent leisure contexts (Feinstein, Bynner, and Duckworth, 2005) that the subsample of youth club users were not distributed evenly throughout the various counties. It is indeed true that the teacher's strike of 1986 resulted in unequal representation of respondents by Local Education Authority (LEA). This report has not broken down the analyses by LEA, but we have employed weighting that adjusts for characteristics at birth (mothers' and fathers' place of birth, which was strongly correlated with CM's region of birth). We believe that this weighting will adjust for some of these regional anomolies, but add the caveat that our sample was not distributed evenly across urban and rural areas, with a majority (52 percent) of youth club users living in rural areas, and around 12 percent living in large cities.

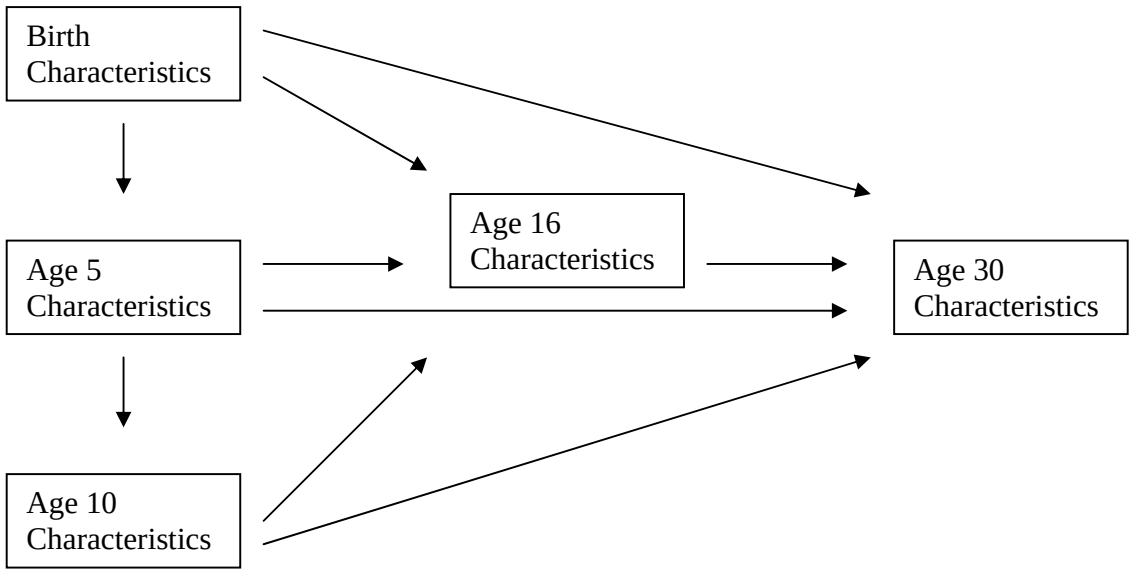
While we concede that not all areas are represented equally, our findings suggest that unstructured youth clubs, particularly for disadvantaged youth, are associated with adult forms of social exclusion and socio-economic disadvantage. We would not expect this finding to change significantly even if all regions and urban/rural areas were perfectly represented. The findings echo those of previous research by other researchers in other countries, as discussed earlier in the paper. Our findings point to the *average* associations of youth clubs and later-life outcomes when looking at around six thousand youths, of whom around just under a third attended some form of youth club.

We must consider the historical contexts of the present study. Our study has examined youth that attended various forms of out-of-school leisure contexts in 1986, with analyses that examined these forms of leisure consumption and later-life outcomes. These findings have pointed to a negative association between youth club attendance and later-life outcomes, particularly education-related outcomes. We must merge such findings with evidence provided by practitioners in the area of youth work to understand if and how such youth centres have changed over the past twenty years. We have not been able to examine if various ranges of structure were particularly effective, of how these associations may have varied by region or urban/rural setting. We also cannot know what would have happened to the disadvantaged youth attending the unstructured youth clubs (i.e. those who had the worst outcomes) if the youth clubs had not been available.

To conclude, we close this report with a quote from Mahoney, Stattin and Magnusson (2001), who reported similar findings about Swedish youth clubs and had the similar mandate of emphasising that the overall message of the research was **not to say** that youth clubs were objectively harmful:

> "The results suggest that we cannot take for granted that well-intentioned public funds to provide youth with meaningful leisure experiences will inevitably be beneficial. The critical questions for future research are to specify *what aspects of leisure activities are beneficial, the conditions under which leisure activities may be problematic, and the ways in which peer groups can be effectively organised during leisure time to facilitate positive social adjustment*" (p. 519, emphasis added).

Figure 7.1 BCS70 Pathways from Childhood, Youth, and Adulthood



References:

Agnew, R., and Peterson, D. M. 1989. “Leisure and Delinquency,” Social Problems 3694): 332-350.

Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). “Whatever Happened to the Jock, the Brain, and the Princess? Young Adult Pathways Linked to Adolescent Activity Involvement and Social Identity. *Journal of Adolescent Research, 16*, 429-455.

Bartko, W. Todd and Eccles, Jacquelynee S. (2003). “Adolescent Participation in Structured and Unstructured Activities: A Person-Oriented Analysis,” *Journal of Youth and Adolescence*, 32(4): 233-241.

Caldwell, L.L., and Baldwin, C.K. (2005). “ A Developmental Approach to Understanding Constraints to Adolescent Leisure,” pp. 75-89 in E. Jackson (Ed.) *Constraints to Leisure.* State College, PA: Venture.

DfES (2007) “ONE MILLION MILESTONE EXCEEDED AS GOVERNMENT STEPS CLOSER TO REACHING LEITCH’S AMBITION” http://www.dfes.gov.uk/pns/DisplayPN.cgi?pn_id=2007_0045 Accessed May 14, 2007.

Dworkin, Jodi B.; Larson, Reed; and Hansen, David. (2003). “Adolescents' Accounts of Growth Experiences in Youth Activities. *Journal of Youth and Adolescence*, 32: 17-26.

Eccles, Jacquelynne S., and Bonnie L. Barber. (1999). “Student Council, Volunteering, Basketball, or Marching Band: What Kind of Extracurricular Involvement Matters?” *Journal of Adolescent Research* 14(1): 10-43.

Eccles, Jacuqelynne S., Barber, Bonnie L., Stone, Margaret, and Hunt, James (2003). “Extracurricular Activities and Adolescent Development,” *Journal of Social Issues* 59(4): 865-559.

Feinstein, Leon; Bynner, John; Duckworth, Kathryn (2006). Young People’s Leisure Contexts and their Relation to Adult Outcomes. Journal of Youth Studies, 9(3): 305-327.

Feinstein, Leon, Bynner, John and Kathryn Duckworth. (2005). “Leisure contexts in adolescence and their effects on adult outcomes,” Centre for Research on the Wider Benefits of Learning Research Report 15.

Gilman, Rich. (2001). “The Relationship Between Life Satisfaction, Social Interest, and Frequency of Extracurricular Activities Among Adolescent Students,” *Journal of Youth and Adolescence* 30(6): 749767.

Hansen, David; Larson, Reed; and Dworkin, Jodi. (2003).”What Adolescents Learn in Organized Youth Activities: A Survey of Self-Reported Developmental Experiences”, *Journal of Research on Adolescence*,13(1): 25-56.

Harrison, Patricia A., and Narayan, Gopalakrishnan. (2003). “Differences in Behavior, Psychological Factors, and Environmental Factors Associated with Participation in School Sports and Other Activities in Adolescence,” *Journal of School Health* 73(3): 113-120.

Hofferth, Sandra L. and John F. Sandberg (2001). “How American Children Spend Their Time,” *Journal of Marriage and the Family* 63(May): 295-308.

Huebner, Angela J. and Jay A. Mancini (2003). “Shaping Structured Out-of-School Time Use Among Youth: The Effects of Self, Family, and Friend Systems,” *Journal of Youth and Adolescence* 32(6): 453-463.

Larson, Reed. (2006). Positive Youth Development, Willful Adolescents, and Mentoring. *Journal of Community Psychology* .34(6): 677-689.

Larson, Reed, Walker, Katherin, and Pearce, Nickki. (2005). “Youth-Driven and Adult-Driven Youth Development Programs: Contrasting Models of Youth-Adult Relationships”, *Journal of Community Psychology*, 33:57-74.

Mahoney, Joseph L. (2000). “School Extracurricular Activity Participation as a Moderator in the Development of Antisocial Patterns,” *Child Development* &1(2): 502-516.

Mahoney, Joseph, L., and Cairns, R. B. 1997. “Do Extracurricular Activities Protect Against Early School Dropout?” Developmental Psychology 33: 241-253.

Mahoney, Joseph L. and Stattin, Hakan. (2000). “Leisure activities and Adolescent Antisocial Behavior: The Role of Structure and Social Context,” *Journal of Adolescence,* 23:113-127.

Mahoney, J., Stattin, H. and Lord, H. (2004). "Unstructured Youth Recreation Centre participation and Anti-Social Behavior Development: Selection Influences and the Moderating Role of Anti-Social Peers", International Journal of Behavioural Development, 28: 553-560.

Mahoney, J. L., Stattin, H., & Magnusson, D. (2001). "Youth Leisure Activity Participation and Individual Adjustment: The Swedish Youth Recreation Center," *International Journal of Behavioral Development*, 25(6): 509-520.

Mahoney, J. L., Schweder, A. E., & Stattin, H. (2002). "Structured After-school Activities as a Moderator of Depressed Mood for Adolescents with Detached Relations to their parents," *Journal of Community Psychology*, 30(1), 69-86.

Mancini, Jay A. and Angele J. Huebner (2004). "Adolescent Risk Behavior Patterns: Effects of Structured Time-Use, Interpersonal Connections, Self-System Characteristics, and Socio-Demographic Influences," *Child and Adolescent Social Work Journal*, 21(6): 647-668.

Morris, P., & Kalil, A. (2006). Out of school time use during middle childhood in a low-income sample: Do combinations of activities affect achievement and behavior? In A. C. Huston & M. N. Ripke (Eds.), *Developmental Contexts in Middle Childhood: Bridges to Adolescence and Adulthood* (pp. 237-259). New York: Cambridge University Press.

Osgood, D. W., Wilson, J. K., O'Malley, P. M., Bachman, J. G. and Johnston, L. D. (1996). Routine activities and individual deviant behavior. *American Sociological Review*, 61, 635-655.

Pedersen, S., Seidman, E., Yoshikawa, H., Rivera, A. C., Allen, L., & Aber, J. L. (2005). Contextual competence: Multiple manifestations among urban adolescents. *American Journal of Community Psychology, 35*(1-2), 65-82.

Persson, A., Kerr, M., & Stattin, H. (2007). "Staying In or Moving Away From Structured Activities: Explanations Involving Parents and Peers," *Developmental Psychology*, 43(1): 197-207.

Persson, A., Kerr, M. & Stattin, H. (2004). "Why a Leisure Context is Linked to Normbreaking for Some Girls and not Others: Personality Characteristics and Parent-Child Relations as Explanations," *Journal of Adolescence*, 27: 583-598.

Simpkins, S. D., Ripke, M., Huston, A.C., & Eccles, J. S. (2005). Predicting participation and outcomes in out-of-school activities: Similarities and differences across social ecologies. In H. B. Weiss, P. M. D. Little, & S. M. Bouffard (Eds.), *New directions for youth development: Participation in youth programs: Enrollment, attendance, and engagement* (Vol. 105; G. Noam, Series Ed., pp. 51-70). San Francisco: Jossey-Bass.

Smith, Douglas I. (2006). An Analysis of Youth Club Users and Non-Users Identified in the British Cohort Study 1970 (BCS70), Youth Affairs Unit, De Montfort University.

Weber, Linda R., Miracle, Andrew, Rosicky, John, and Crow, Tom. 2001. "Bonding to Youth Clubs and Delinquency". Sociological Practice: A Journal of Clinical and Applied Sociology, 3(4): 319-339.