

The 'changing' nature of social inequality – how are young people's attitudes to school stratified and how are they changing?

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*The changing nature of social inequality: Gender, ethnicity, class and age in the 21st Century, Social Stratification Research Conference, Clare College, University of Cambridge, 10-12 September 2008*

## **Motivations**

### *Substantive:*

- \* Changing times consensus in youth research
  
- \* From the mid-1980s schools under pressure. Educational performance becomes more central in the public consciousness and discourse of ‘school effectiveness’ and ‘school quality’ emerges
  
- \* The *Education Reform Act 1988*, is sometimes regarded as the most important single piece of post-war education legislation. The result was that the early 1990s saw rapid changes in the curriculum, organisation, management and financing of schools (Spence 1993)
  
- \* What do young people think?
  
- \* Classical sociology of education (Willis’ Learning to Labour) disaffection with schooling
- \* Study of young people’s attitudes generally the domain of ‘qualitative’ approaches
  
- \* Are young people’s views stratified?

*Practical:*

- \* No obvious large scale data (especially nationally representative)
- \* The detailed study of 'trends' over time not normally possible. The comparative data window of the cohort studies is too wide (e.g. 1946, 1958, 1970, 2000/1?)
- \* The YCS is a stop gap for the missing 1980s and 1990 cohorts (see Gayle 2005)
- \* YCS has some (cross-sectional) repeated measures. Could it offer analytical possibilities?
- \* New data (SN 5765 -Youth Cohort Time Series for England, Wales and Scotland, 1984-2002)

*Methodological:*

- \* Attitudinal measures are often treated simply in research on young people e.g. CRFR (see Jamieson 2005)
- \* Can latent variable methods help?
- \* *Beware – new work in progress (death by graphs)*

# Youth Cohort Study of England and Wales (YCS) Data Structure

		Year Completed Compulsory Schooling																	
		84	86	88	90	93	95	97	99										
YCS COHORT																			
1		1	2	3															
2*			1	2	3														
3				1	2	3				4									
4					1	2	3												
5						1	2	3											
6*							1	2	3/4(A)										
7									1		2								
8											1		2		3(A)				
9													1	2	3/4(A)				
10															1/2(A)	3			
<b>Survey</b>																			
<b>Year</b>		<b>85</b>	<b>86</b>	<b>87</b>	<b>88</b>	<b>89</b>	<b>90</b>	<b>91</b>	<b>92</b>	<b>93</b>	<b>94</b>	<b>95</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>99</b>	<b>00</b>	<b>01</b>	<b>02</b>

\* YCS Cohort not included in the dataset SN5765

YCS Sweep 1 usually takes place in the spring of the year following sampling and subsequent sweeps normally in subsequent springs. Occasionally there are two sweeps of the same cohort in both spring and autumn of the same calendar year, these are shown e.g. 3/4(A) YCS Samples are drawn from school registers in the spring of year 11 (5<sup>th</sup> form)

## YCS Data Analyzed (Sample Sizes)

		Year Completed Compulsory Schooling							
		84	86	88	90	93	95	97	99
YCS COHORT									
1		8,064							
3			16,208						
4				14,116					
5					14,511				
7						18,021			
8*							15,899*		
9								14,662	
10									13,698
Survey Year		85	87	89	91	94	96	98	00

\* YCS Cohort does not include the attitudinal measures analysed below

# Outcome Variables

YCS Cohort 1 (1984) (Sweep1 Questionnaire)

YOU AND YOUR SCHOOL 1

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9.1.1

1. Here are some things, both good and bad, which people have said about their 4th and 5th years at school. We would like to know what you think. Please tick a box for each one to say whether you agree or disagree.

*One code only in each column*

*9 = N/A     "     "     "*

	Agree	Disagree	
— school has helped to give me confidence to make decisions	<input type="checkbox"/>	<input type="checkbox"/>	11.
— school has been a waste of time	<input type="checkbox"/>	<input type="checkbox"/>	11:
— school has done little to prepare me for life when I leave school	<input type="checkbox"/>	<input type="checkbox"/>	11+
— school has taught me things which would be useful in a job	<input type="checkbox"/>	<input type="checkbox"/>	11E

YCS Cohort 9 (1997) (Sweep1 Questionnaire)

1. Here are some things, both good and bad, which people have said about their 4th and 5th years at secondary school. We would like to know what you think. Please tick a box for each one to say whether you agree or disagree.

*8 = D/K on each col.*

*9 = N/A " " "*

	Agree	Disagree
— School has helped give me confidence to make decisions	<input type="checkbox"/>	<input type="checkbox"/>
— School has been a waste of time	<input type="checkbox"/>	<input type="checkbox"/>
— School has done little to prepare me for life when I leave school	<input type="checkbox"/>	<input type="checkbox"/>
— School has taught me things which would be useful in a job	<input type="checkbox"/>	<input type="checkbox"/>

YCS Cohort 8 (1995) These questions not asked

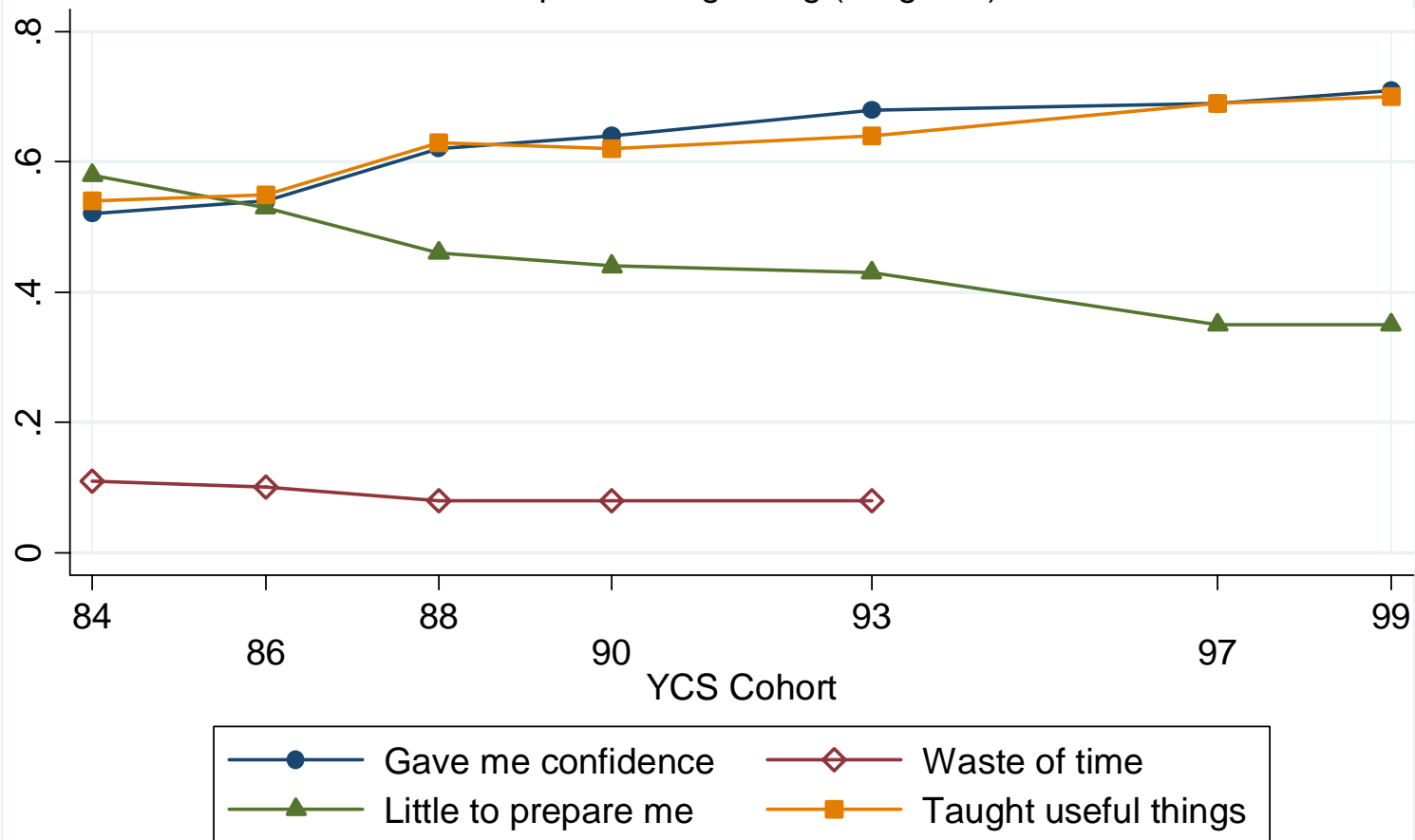
Q.T Here are some things, both good and bad, which people have said about their last two years at secondary school (Years 10 and 11/the 4th and 5th years). We would like to know what you think.

PLEASE PUT A CROSS IN A BOX FOR EACH ONE TO SAY WHETHER YOU AGREE OR DISAGREE

	Agree	Disagree
— School has helped give me confidence to make decisions	<input type="checkbox"/>	<input type="checkbox"/>
— School has done little to prepare me for life when I leave school	<input type="checkbox"/>	<input type="checkbox"/>
— School has taught me things which would be useful in a job	<input type="checkbox"/>	<input type="checkbox"/>
— School work is generally worth doing	<input type="checkbox"/>	<input type="checkbox"/>

## Attitudes to School

Proportions Agreeing (weighted)

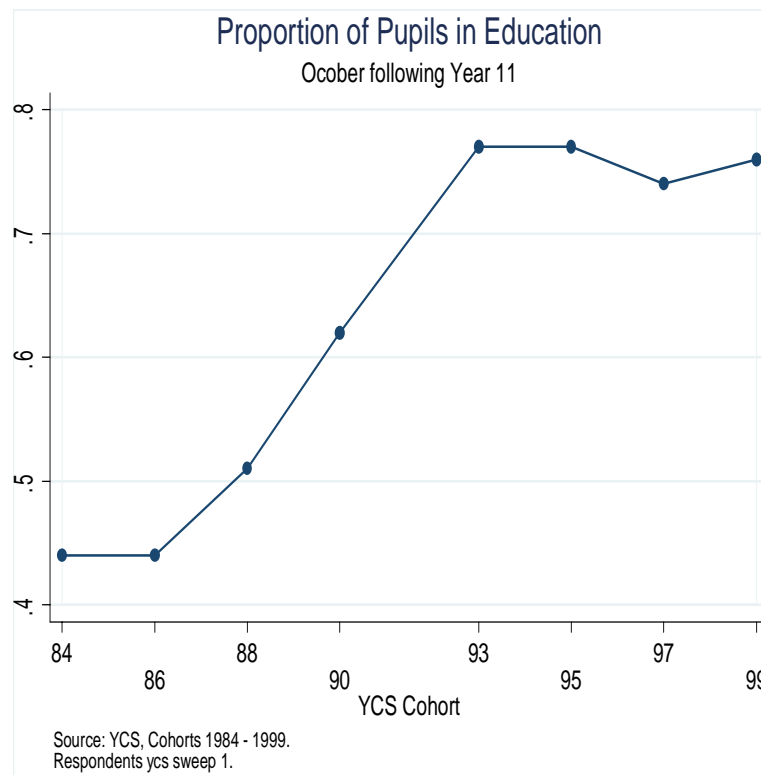


Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

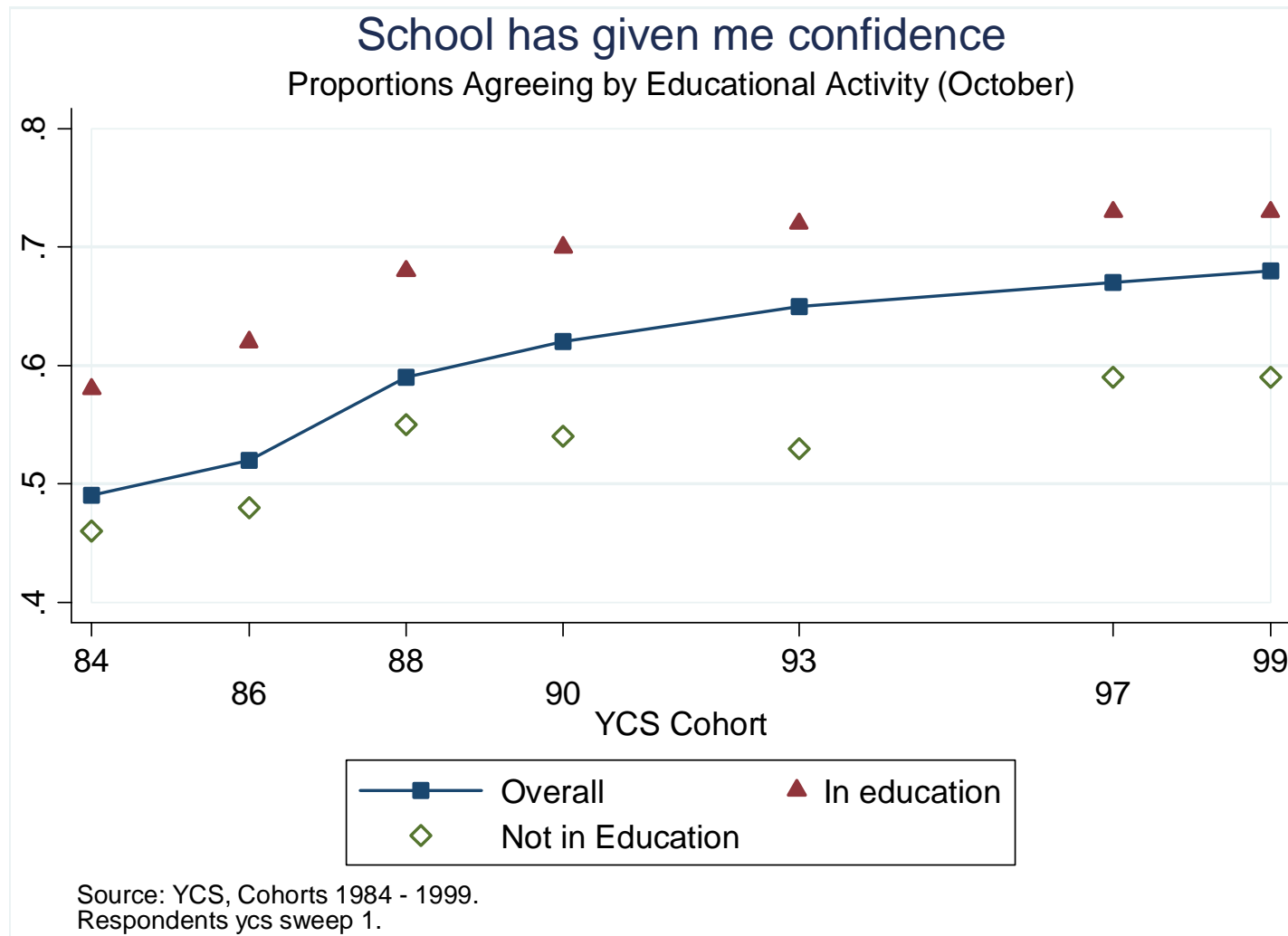


\* Overall an encouraging picture

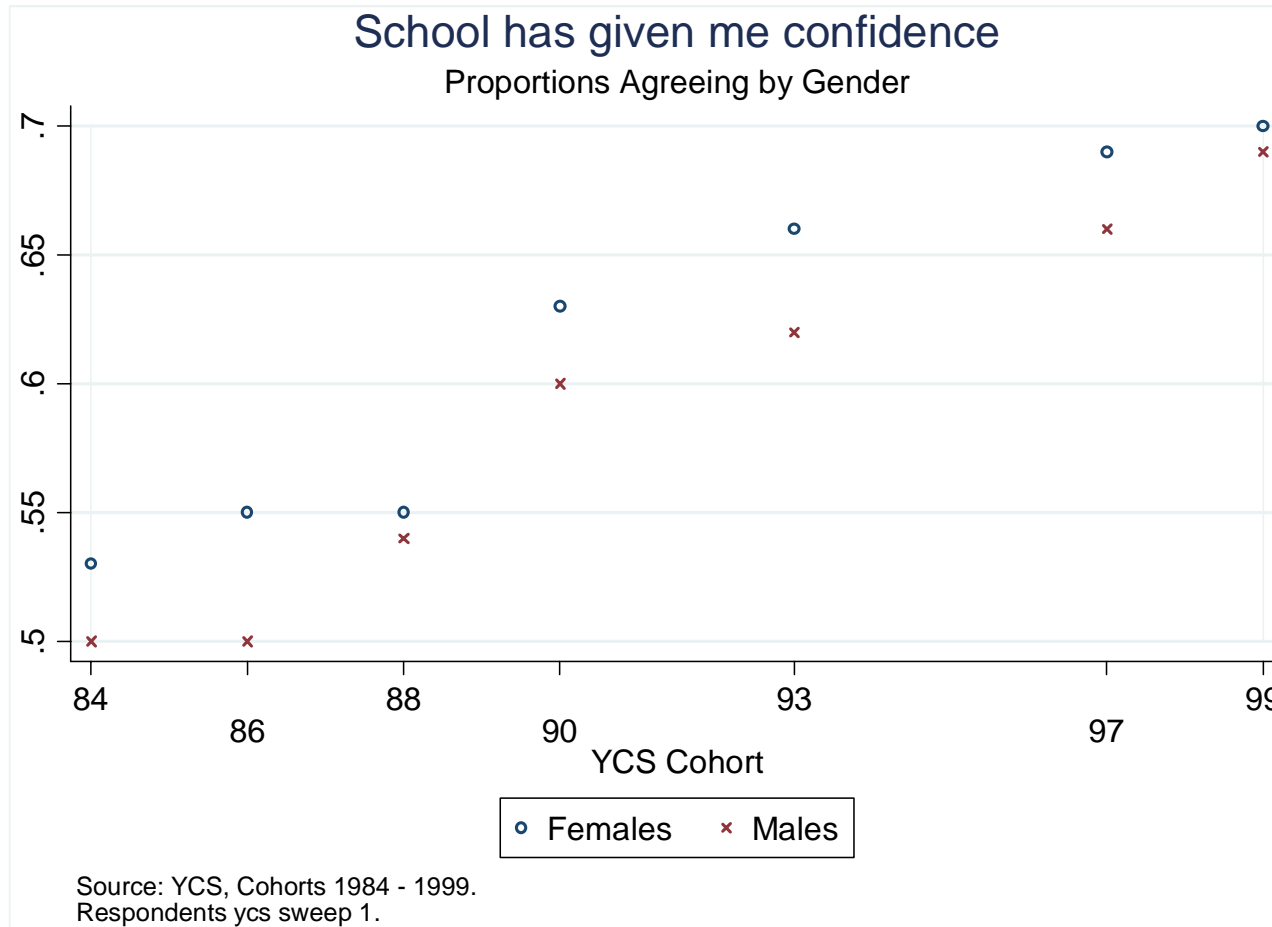
\* Caveat – changing levels of educational participation – we are asking ‘more’ 17 year olds who are still involved in education about their experience of school



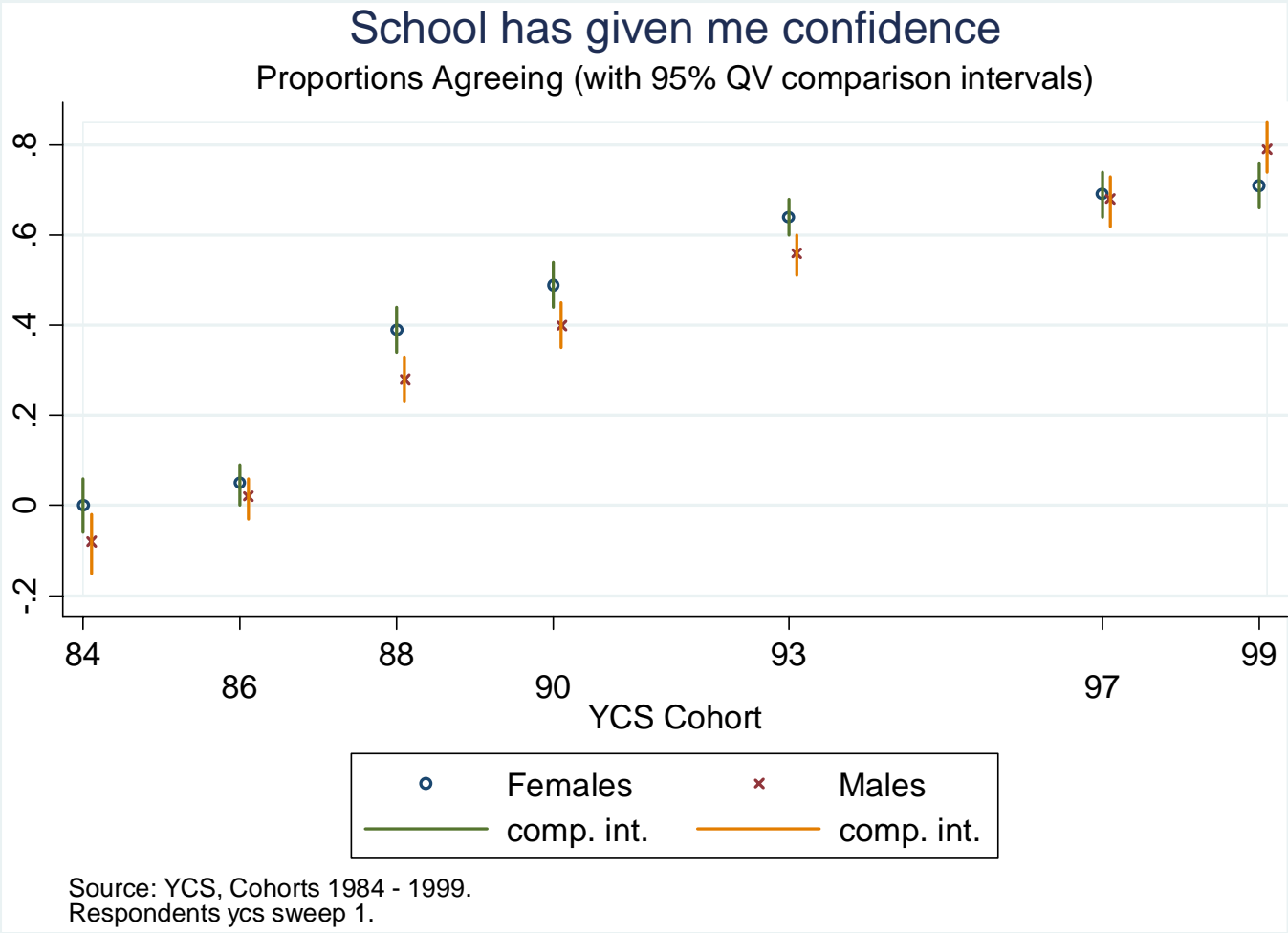
\* A general upward trend is observed



# Gender

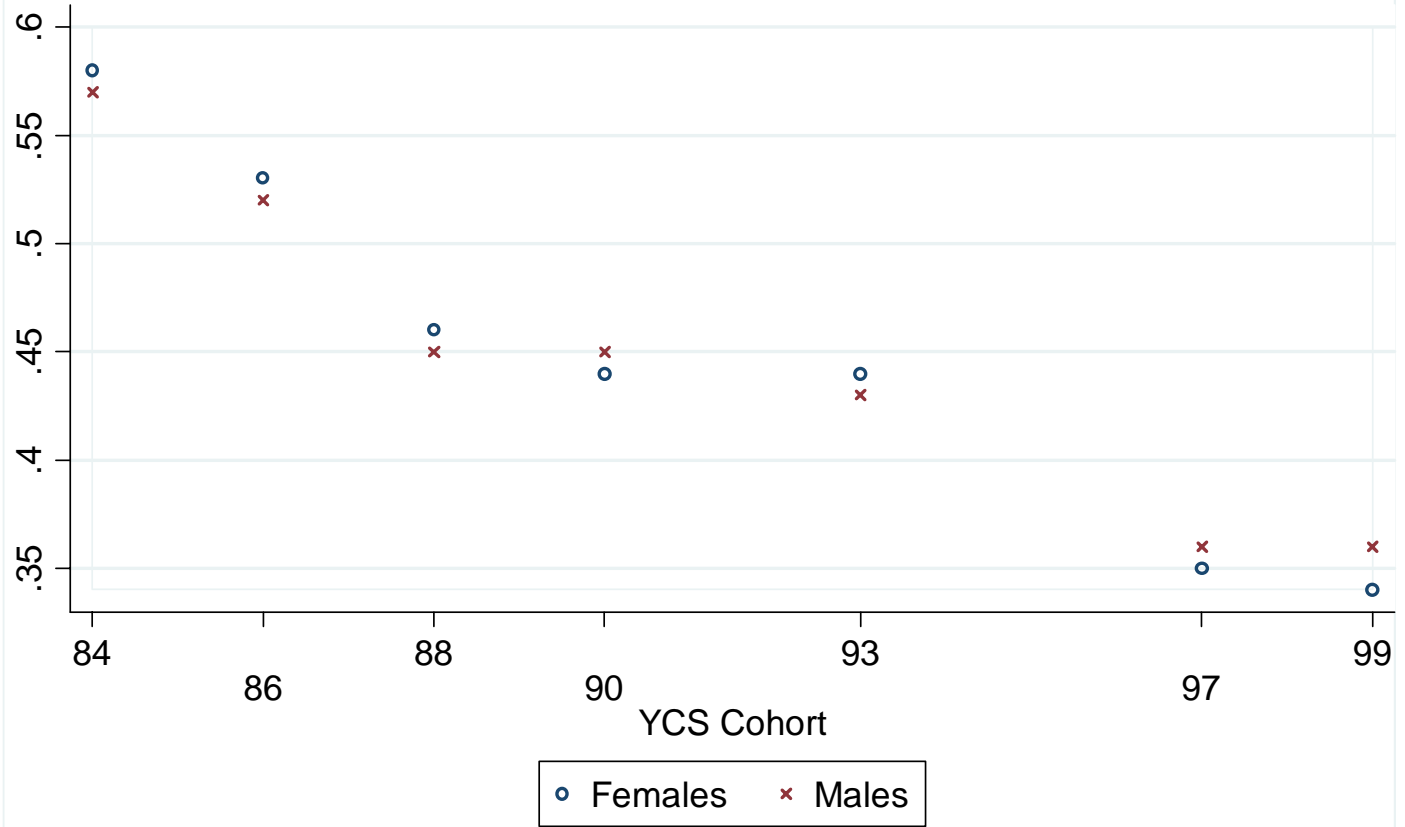


# Logistic Regression Model (cohort \* gender interaction)



# School has done little to prepare me

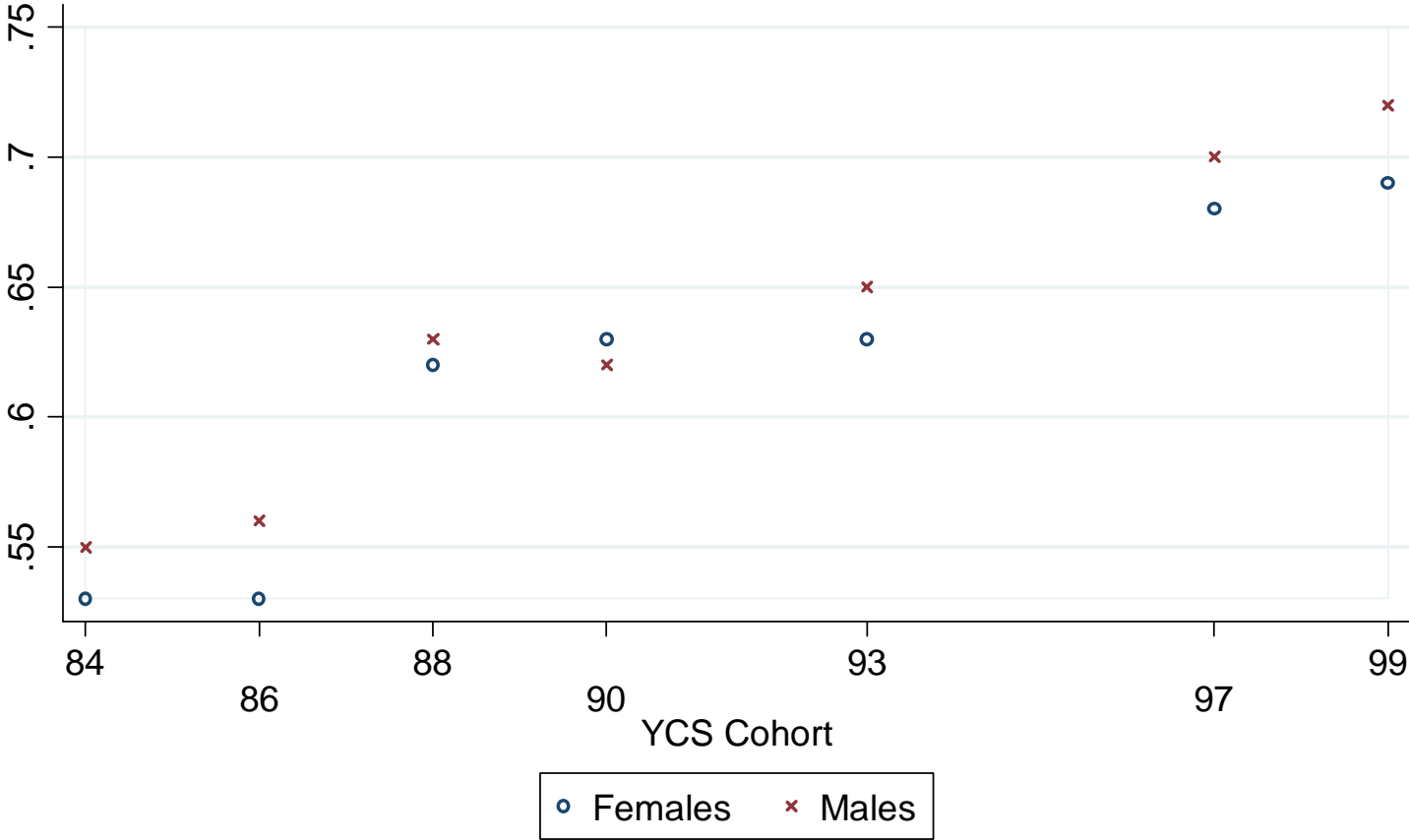
## Proportions Agreeing by Gender



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

# School has taught useful things for job

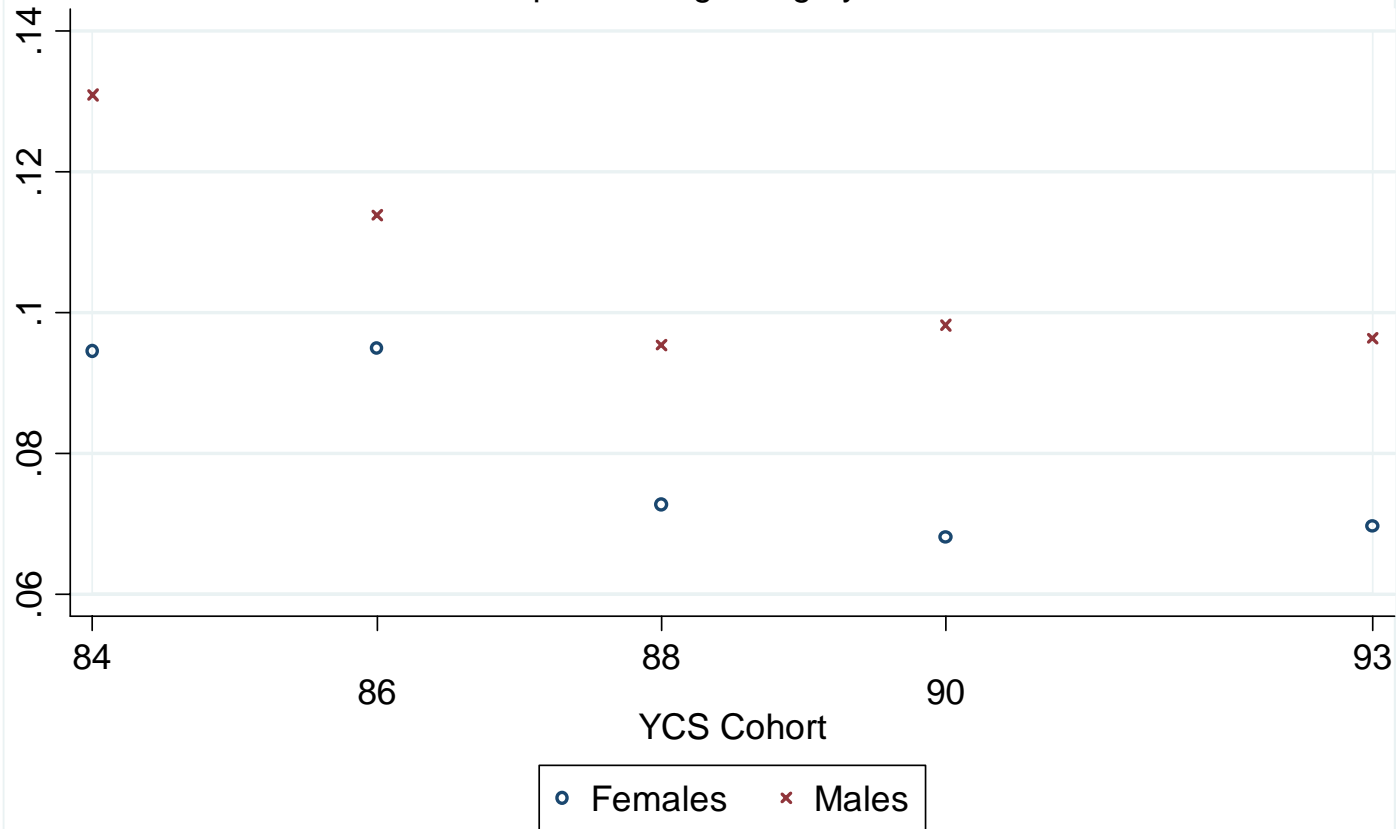
## Proportions Agreeing by Gender



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

# School has been a waste of time

Proportions Agreeing by Gender



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

# Ethnicity (three examples of question styles and categories)

YCS 1 (1984) (Sweep 2 Questionnaire)	YCS5 (1990) (Sweep 1 Questionnaire)	YCS 10 (1999) (Sweep 1 Questionnaire)
<p>5. Please tell us which one of the following ethnic groups you belong to. Your answer will help us to know how the equal opportunities policies are working.</p> <p>Please tick one box only ✓</p> <p>Black/African/Caribbean origin <input type="checkbox"/></p> <p>Indian origin <input type="checkbox"/></p> <p>Pakistani origin <input type="checkbox"/></p> <p>Bangladeshi origin <input type="checkbox"/></p> <p>White <input type="checkbox"/></p> <p>None of these <input type="checkbox"/></p> <p>Prefer not to say <input type="checkbox"/></p>	<p>5. Please tell us which of the following groups you belong to. Your answer will help us to know how the equal opportunities policies are working.</p> <p>white <input type="checkbox"/></p> <p>black <input type="checkbox"/></p> <p>Asian <input type="checkbox"/></p> <p>Indian <input type="checkbox"/></p> <p>Pakistani <input type="checkbox"/></p> <p>Bangladeshi <input type="checkbox"/></p> <p>Chinese <input type="checkbox"/></p> <p>Any other ethnic group (Please describe): <input type="checkbox"/></p> <p>Other Asian (Please describe): <input type="checkbox"/></p> <p>Handwritten notes: 9=N/A on 751, P 751/3, 9=N/A</p>	<p>Which of the following groups do you belong to?</p> <p>Your answer will help us to know how the equal opportunities policies are working.</p> <p>White <input type="checkbox"/></p> <p>Black: Caribbean <input type="checkbox"/></p> <p>African <input type="checkbox"/></p> <p>Other black <input type="checkbox"/></p> <p>Asian: Indian <input type="checkbox"/></p> <p>Pakistani <input type="checkbox"/></p> <p>Bangladeshi <input type="checkbox"/></p> <p>Chinese <input type="checkbox"/></p> <p>Other Asian <input type="checkbox"/></p> <p>Any other ethnic group (please specify below) <input type="text"/></p>



## Ethnicity Harmonised

\* White; Black; Indian; Pakistani; Bangladeshi; Other

*e.g. YCS 10 (1999) n=13,347; White =11,821; All other groups =1,526  
Black = 331; Indian = 360; Pakistani = 343; Bangladeshi = 134; Other = 358*

\* Mixing of African and West Indian pupils; Others e.g. East African Asians

\* No information on

country of birth

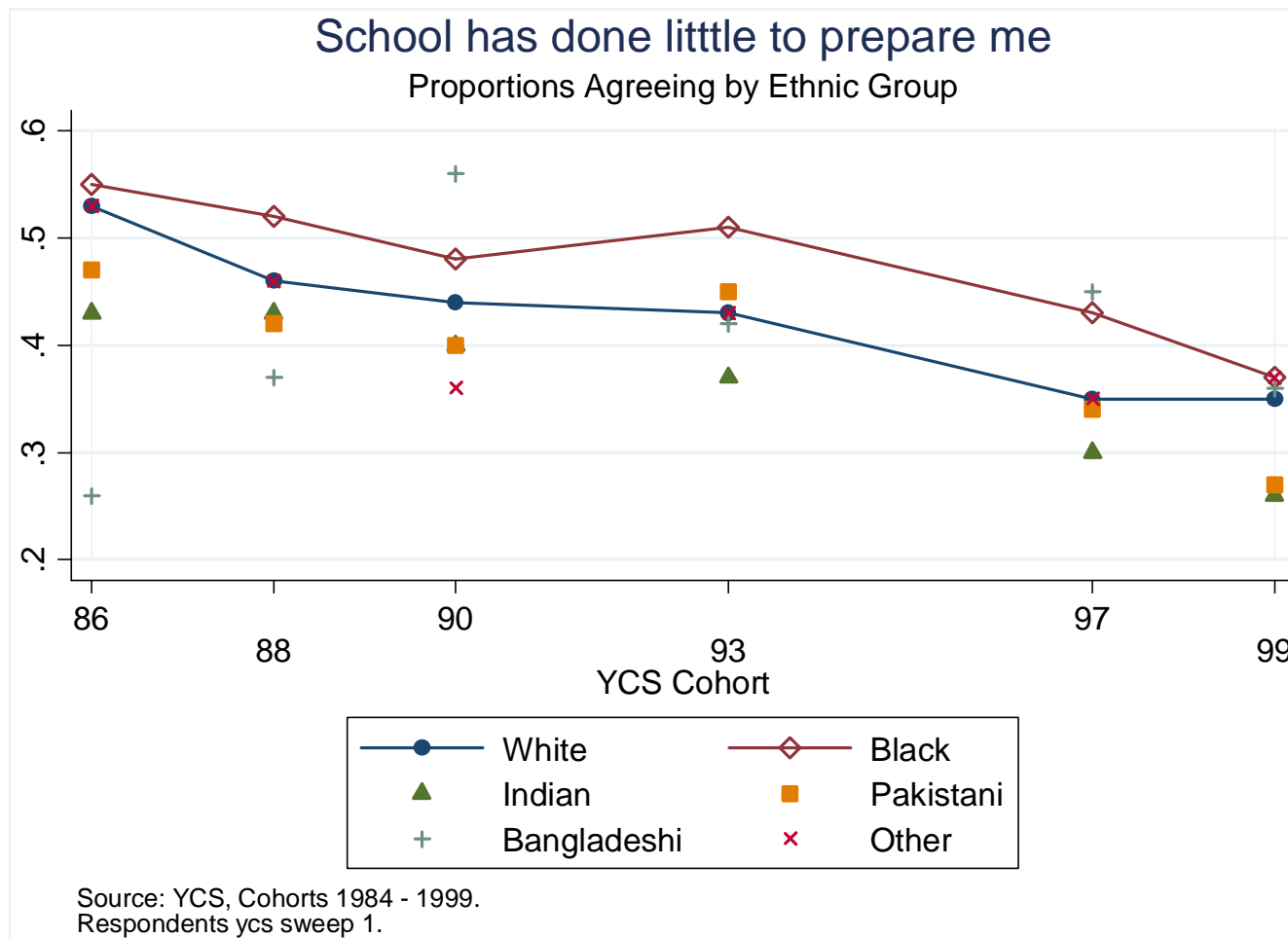
immigration (years in UK education system)

language spoken at home

religion

\* Ethnicity question asked in Sweep 2 of YCS 1 (1984) after 25% attritions (approx. 2,000 cases) - YCS 1 omitted from these analyses

\* Generally no clear relationship with ethnicity (except black pupils here)



# Parental Social Class

YCS 1 (1984) (Sweep 1 Questionnaire)

3. Which of the following apply to your parents (or step parents) — *Final. has not Dr. No any other that cannot be re-coded*

Please tick one box for your father and one for your mother. *One code only in each column*

	Father	Mother
— in a full-time job	<input type="checkbox"/> 1	<input type="checkbox"/> 1
— in a part-time job	<input type="checkbox"/> 2	<input type="checkbox"/> 2
— unemployed	<input type="checkbox"/> 3	<input type="checkbox"/> 3
— retired	<input type="checkbox"/> 4	<input type="checkbox"/> 4
— doing full-time housework	<input type="checkbox"/> 5	<input type="checkbox"/> 5
— something else (please describe): <i>Re-code if possible otherwise Final for 1984 Soc. No.</i>	<input type="checkbox"/> 6	<input type="checkbox"/> 6
— Not sure	<input type="checkbox"/> 7	<input type="checkbox"/> 7

4. Please tell us about your parents' (or step parents') jobs. If they are not working at the moment please tell us about their most recent jobs. *\* COLS 517-536 ARE ONLY TO BE CODED WHERE INFORMATION IS GIVEN*

	Father	Mother
a) What is the name of the job?		
b) What kind of work do they do?		
c) What sort of place or organisation do they work for (e.g. shop, factory, office, hospital, school etc.)		
d) Are they self-employed?	Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2	Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2

*1980 CLASSIFICATION OF OCCUPATIONS / EMPLOYMENT STATUS*  
*1980 STANDARD IND. CLASSIFICATION*  
*SEE SEPARATE INSTRUCTION...*

YCS 7 (1993) (Sweep 1 Questionnaire)

2. Are your parents (or step-parents) employed full-time at the moment?

Please tick one box for your father, and one for your mother. *q = N/A on each col*

	Yes	No
Father	<input type="checkbox"/> 1	<input type="checkbox"/> 2
Mother	<input type="checkbox"/> 1	<input type="checkbox"/> 2

3. Please tell us about your parents' (or step-parents') jobs. If they are not working at the moment, please tell us about their most recent jobs.

	FATHER	MOTHER
a) What is the name of the job?	<i>INFORMATION TO BE KEYED</i>	<i>INFORMATION TO BE</i>
b) What kind of work do they do there?	<i>ON COLS 2312 2580</i>	<i>KEYED ON COLS 2612 2880</i>
c) What sort of place, or organisation do they work for?	<i>(CASOC) NA = Completely blank</i>	<i>(CASOC) NA = Completely blank</i>
d) Are they self-employed?	<i>q = N/A</i> Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2	<i>q = N/A</i> Yes <input type="checkbox"/> 1 No <input type="checkbox"/> 2

# Parental Social Class

YCS 9 (1997) (Sweep 1 Questionnaire)

**57** Please tell us about your parents (or stepparents).

FATHER (STEPFATHER)	MOTHER (STEMOTHER)
<p>a) Is your father employed full-time at the moment?</p> <p>a57fa Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p style="text-align: center;">↓                      ↓</p> <p style="text-align: center;">His current job    His most recent job</p>	<p>a) Is your mother employed full-time at the moment?</p> <p>a57ma Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p style="text-align: center;">↓                      ↓</p> <p style="text-align: center;">Her current job    Her most recent job</p>
<p>b) What is his current job (or if he is not employed full-time at the moment, what was his most recent job)?</p> <p>a57fb</p>	<p>b) What is her current job (or if she is not employed full-time at the moment, what was her most recent job)?</p> <p>a57mb</p>
<p>c) What kind of work does/did he do there?</p> <p></p>	<p>c) What kind of work does/did she do there?</p> <p></p>
<p>d) What sort of firm or organisation does/did he work at?</p> <p></p>	<p>d) What sort of firm or organisation does/did she work at?</p> <p></p>
<p>e) Is/was he self-employed?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> a57fe</p>	<p>e) Is/was she self-employed?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> a57me</p>

YCS 10 (1999) (Sweep 1 Questionnaire)

For Q.57a-57h please tell us about your parents or stepparents who you are currently living with.

Q.57a Are your parents (or stepparents) employed full-time at the moment?

PLEASE PUT A CROSS IN A BOX FOR FATHER AND MOTHER

	Father (stepfather)	Mother (stepmother)	
Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.57b What are your parents (or stepparents) current jobs (or if they are not employed full-time at the moment, what were their most recent jobs)?

Father (stepfather) \_\_\_\_\_ Mother (stepmother) \_\_\_\_\_

Q.57c What kind of work do/did your parents (or stepparents) do there?

Father (stepfather) \_\_\_\_\_ Mother (stepmother) \_\_\_\_\_

Q.57d What sort of firm or organisation do/did your parents (or stepparents) work at?

Father (stepfather) \_\_\_\_\_ Mother (stepmother) \_\_\_\_\_

Q.57e Are/were your parents (or stepparents) self-employed?

	Father (stepfather)	Mother (stepmother)	
Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q.57f Do or did your parents (or stepparents) supervise or manage a group of people?

	Father (stepfather)	Mother (stepmother)	
Yes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Parental Social Class

- \* Some early cohorts do not include detailed occupational codes
- \* Generally there is self-employment information but not detailed employment status information (e.g. Employers; Managers; Supervisors etc.)
- \* Varying measures deposited with the data

*Some cohorts include a SEG measure (e.g. standard 16 categories in YCS 7 1993) there is no clear information on how these are derived*

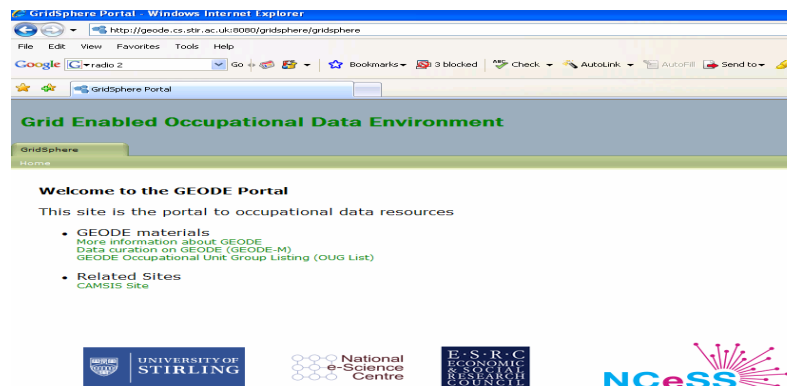
*Cohort 9 (1997) variable labelled as SEG but in practice RGSC with Class I and Class II merged*

## Parental Social Class 1990s Cohorts

\* The 1990s YCS Cohorts offer more analytical potential – better data collection but documentation is still poor (compared with many other surveys)

\* Croxford *et al.* (SN 5765) deposited an 8 and a 3 category NS-SEC measure for father, mother and family

\* In addition we computed alternatives e.g. RGSC, CASMIN, CAMSIS alternative NS-SEC (using [www.geode.stir.ac.uk](http://www.geode.stir.ac.uk) )



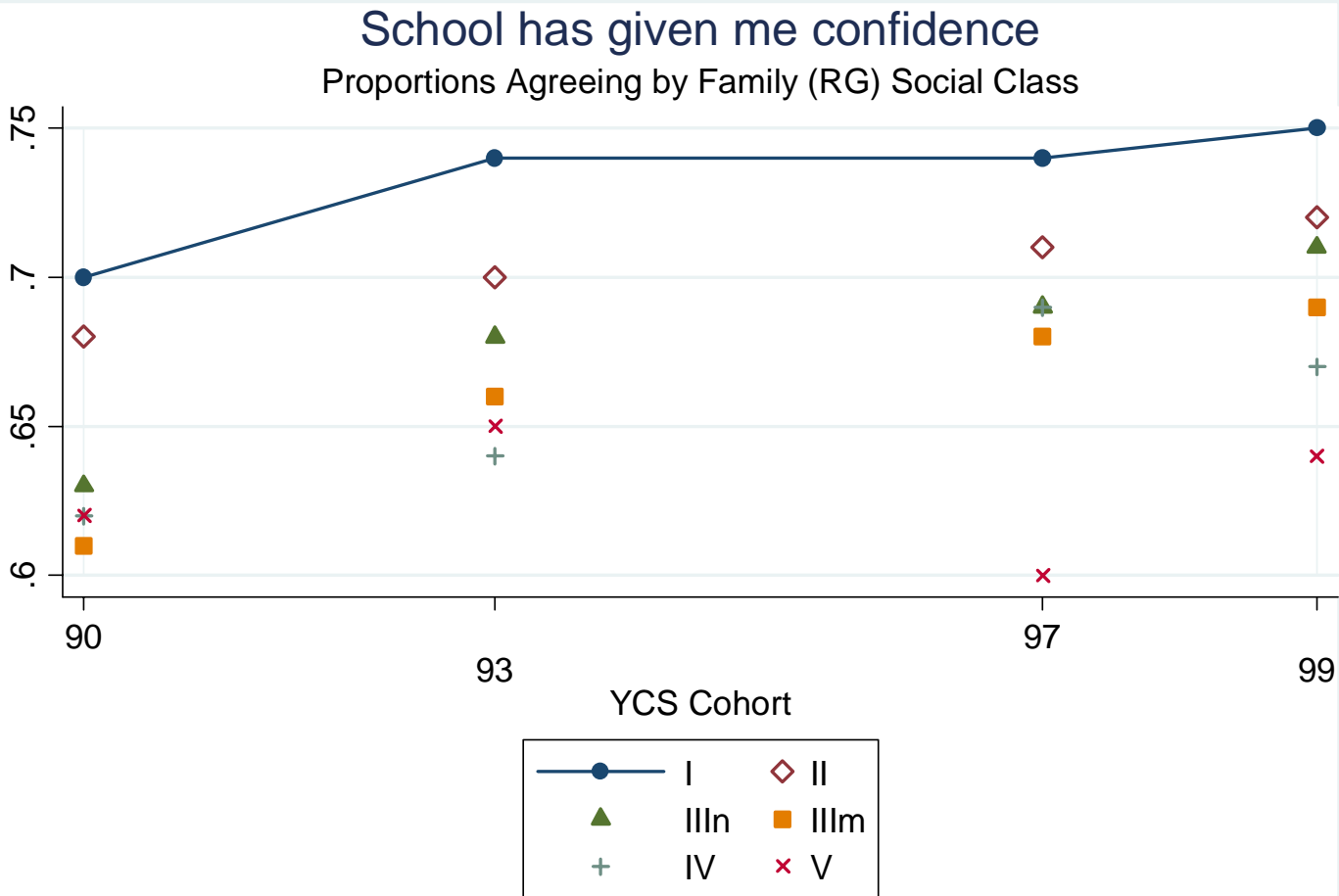
## Data Quality

- \* In the present analysis we use a ‘dominance’ approach
- \* Remember... young people aged 17 being asked about their parents
- \* Registrar General S.C. between 12% and 14% missing data in 1990s cohorts
- \* Promising results from a paper at RC33 last week Nobel *et al.* reported an experiment with LSYPE cohort testing pupils with YCS question and interviewing their parents

*Over 60% of young people correctly reported their parents’ occupation at 4 digit OUG(disappointingly only approx. 74% get it at 1 digit level)  
No significant social class pattern to the errors (using NS-SEC)!*

# Family Social Class

School has given me confidence  
Proportions Agreeing by Family (RG) Social Class

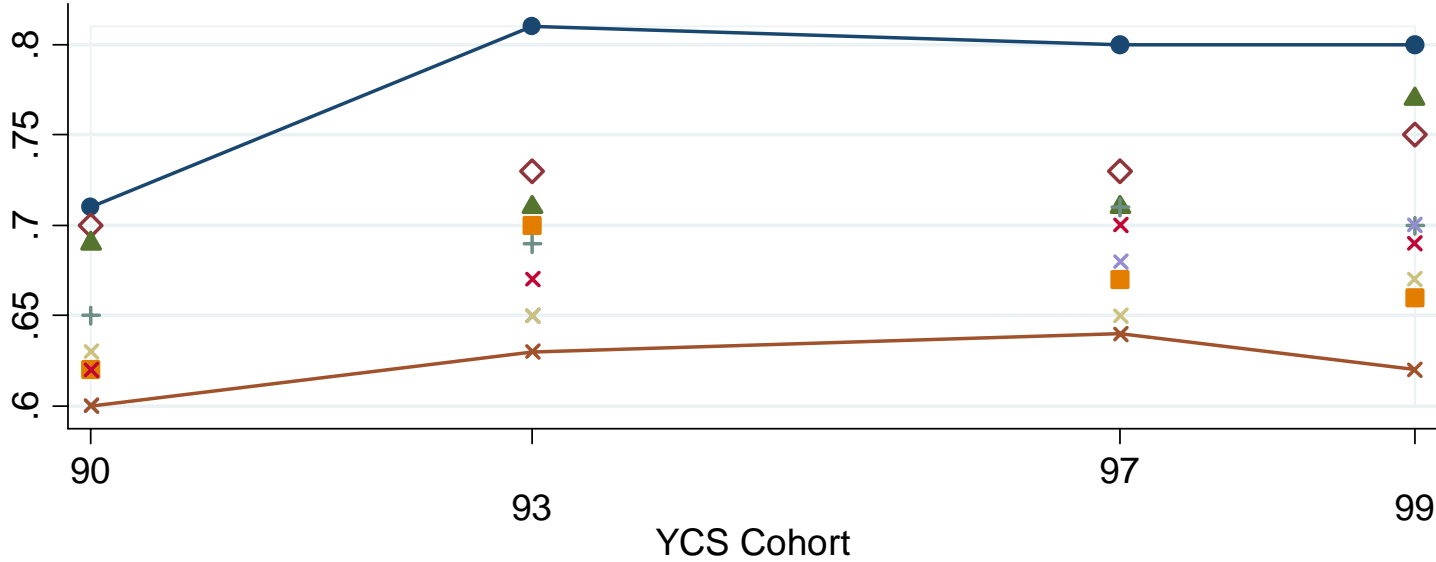


Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.



# School has given me confidence

Proportions Agreeing by Family (NS-SEC) Social Class

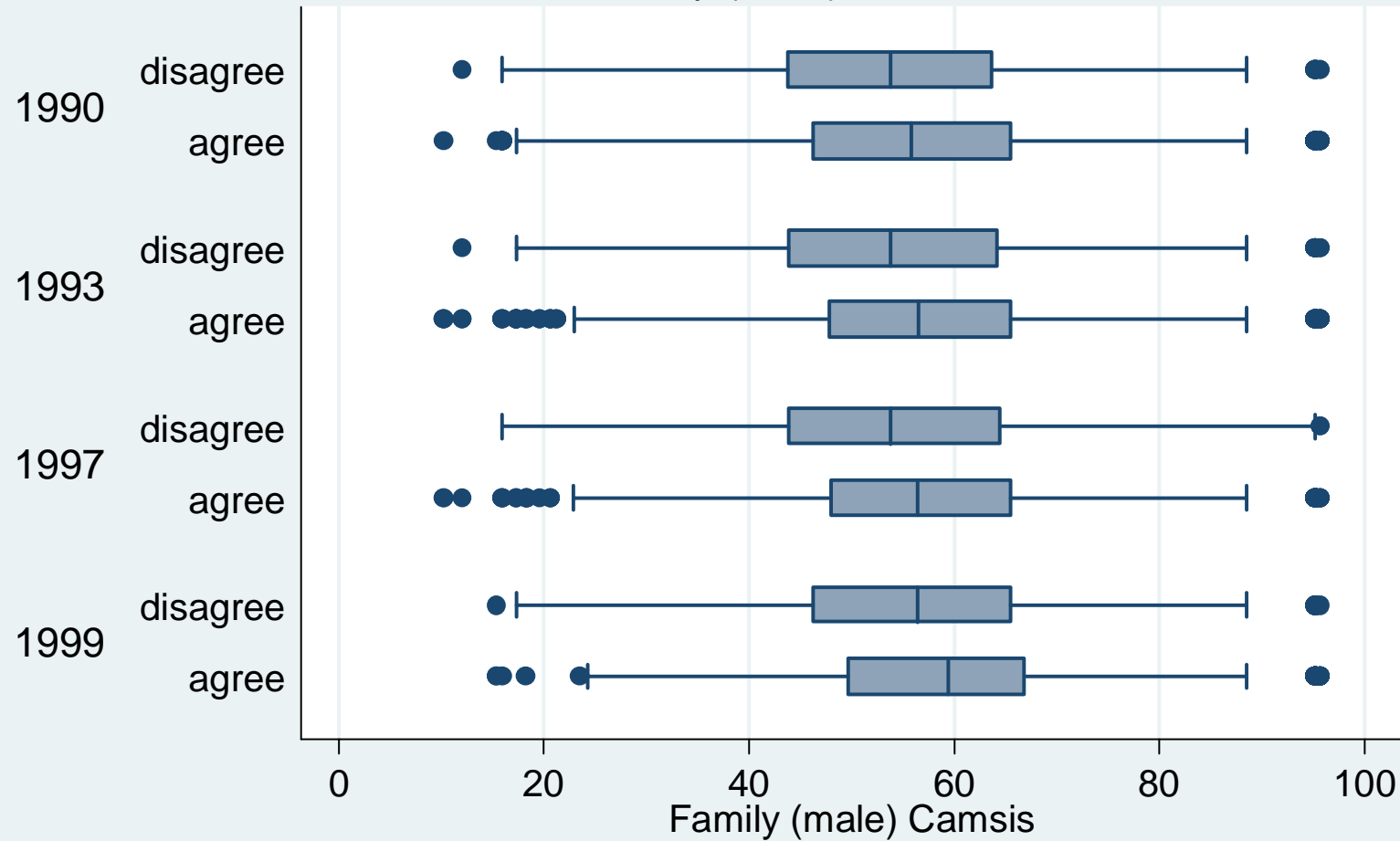


- Large Emp. & Higher Man.
- ▲ Lower Man. & Professionals
- + Small Employers & Own Acc
- × Semi-Routine Occupations
- × Never Worked & Unemployed
- ◇ Higher Professionals
- Intermediate Occupations
- × Lower Sup. & Technical
- × Routine Occupations

Source: YCS, Cohorts 1984 - 1999.  
 Respondents ycs sweep 1.

## School has given me confidence

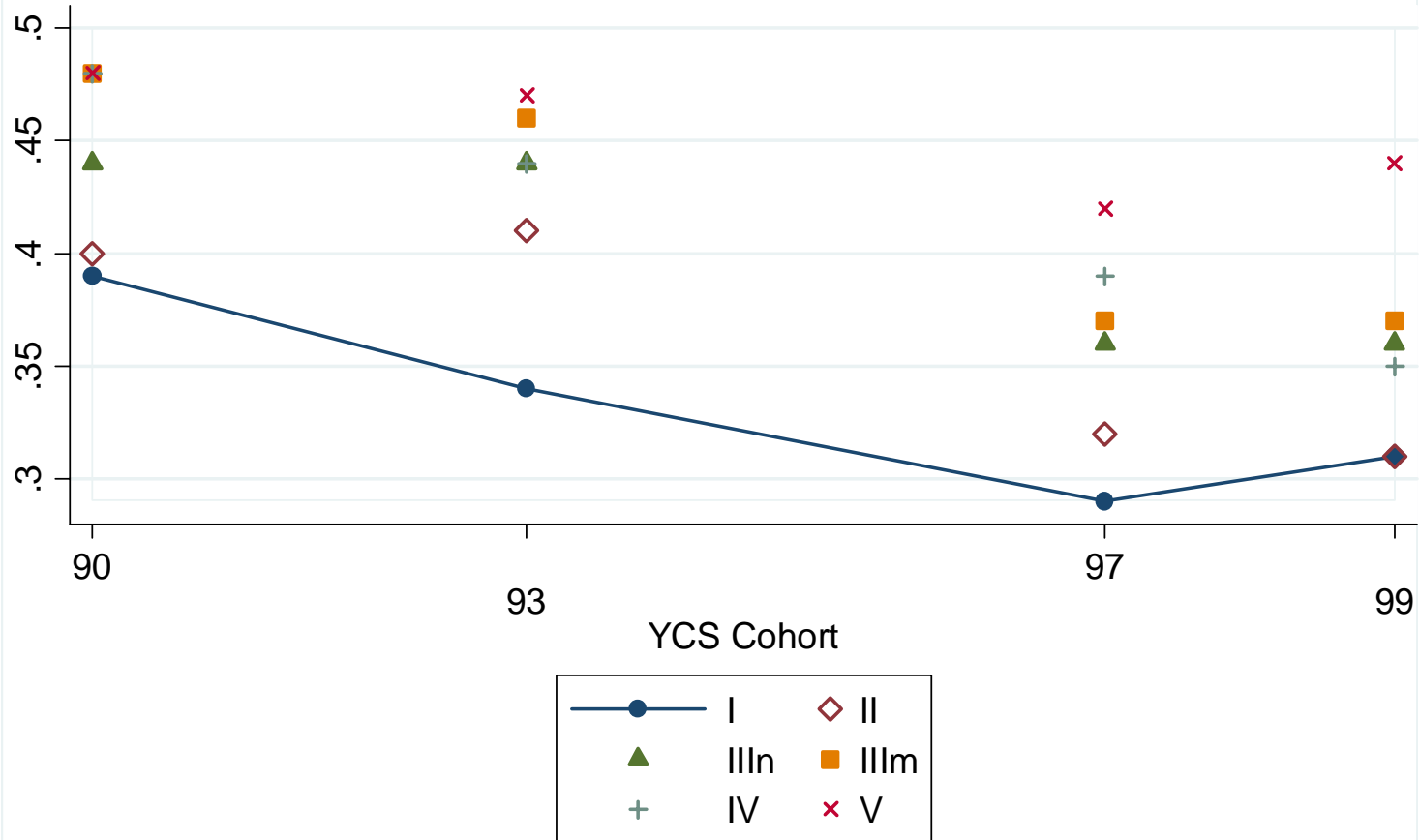
### Family (male) Camsis Score



Source: YCS, Cohorts 1990-1999; Unweighted data

## School has done little to prepare me

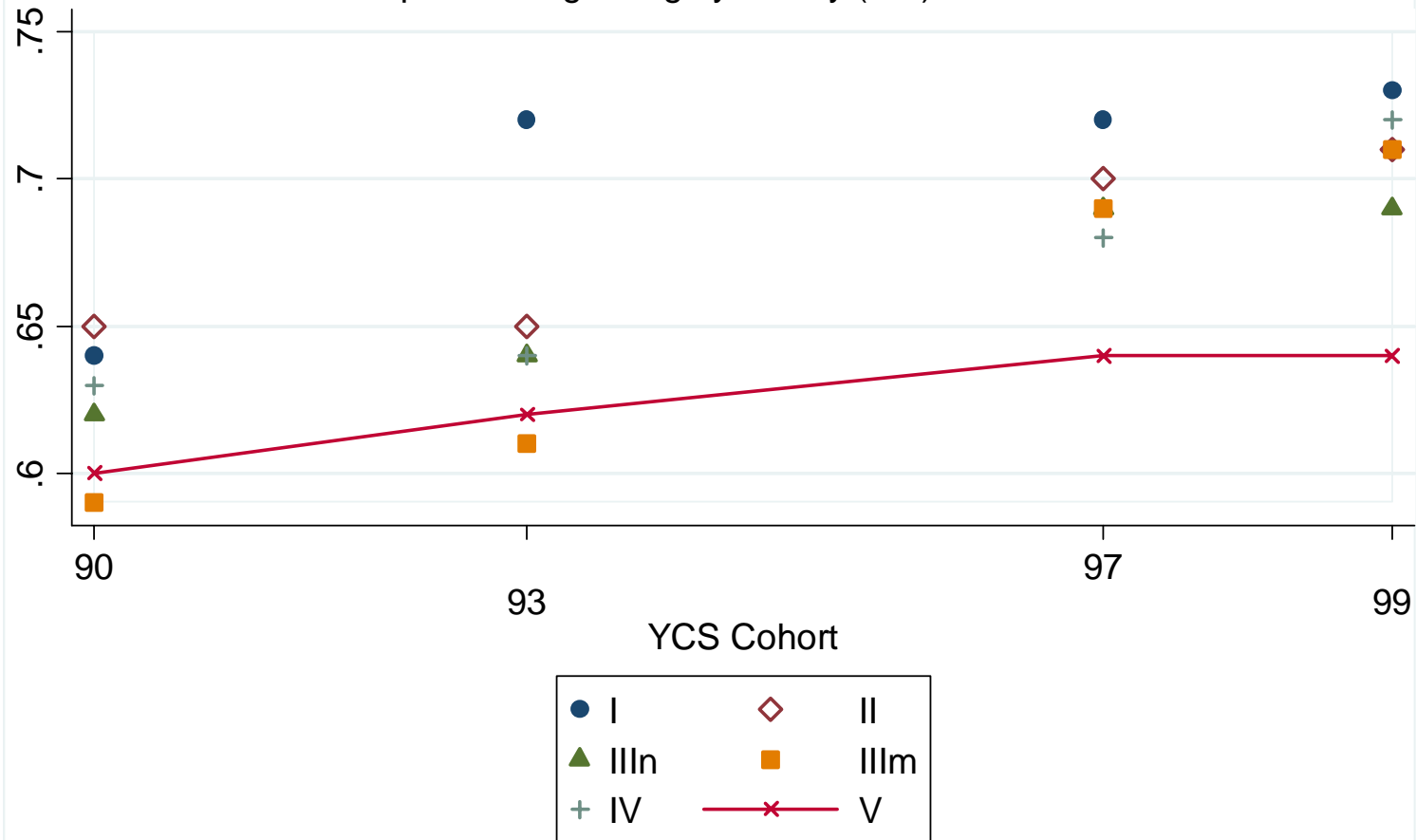
Proportions Agreeing by Family (RG) Social Class



Source: YCS, Cohorts 1984 - 1999.  
 Respondents ycs sweep 1.

## School has taught me useful things for job

Proportions Agreeing by Family (RG) Social Class

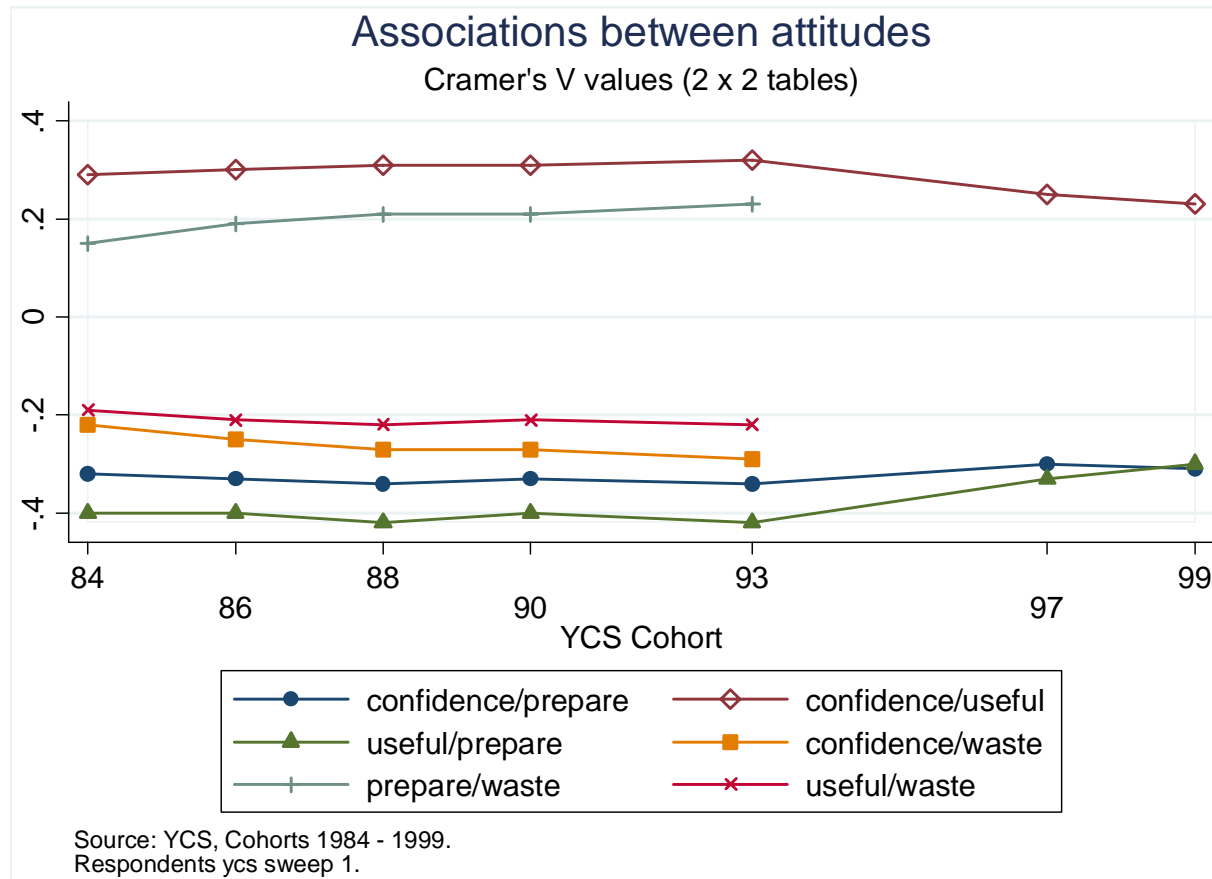


Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

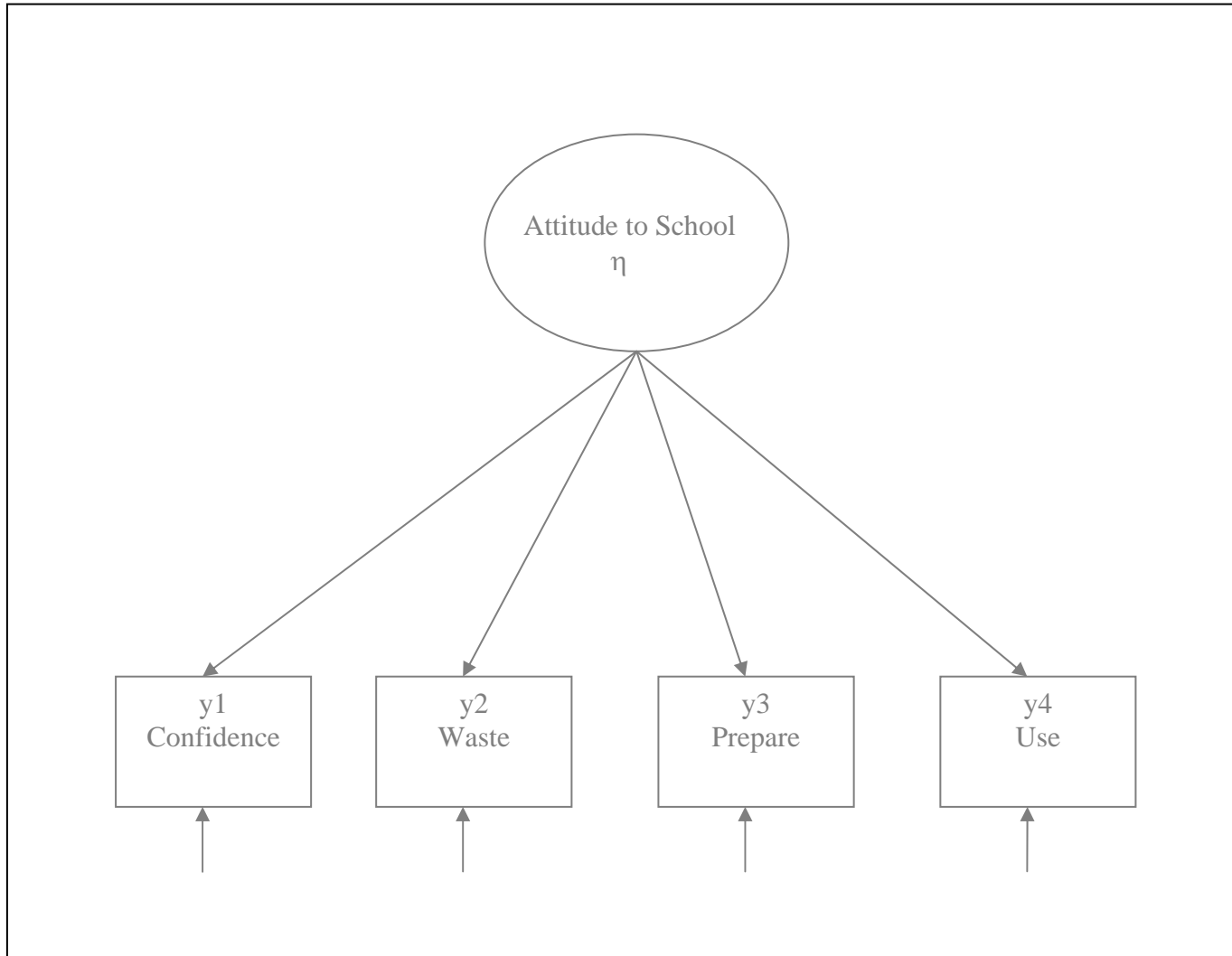
## Exploring a Latent Variable Approach

- \* Are these 4 attitudinal variables indicators of a latent response (attitude towards school or experience of school)?
- \* In essence there are 16 ( $2 \times 2 \times 2 \times 2$ ) response patterns for pupils in cohorts 1984 – 1993
- \* Can we model these response patterns with a latent class model?

\* Associations between the 4 outcome variables



\* Associations are relatively stable across the cohorts

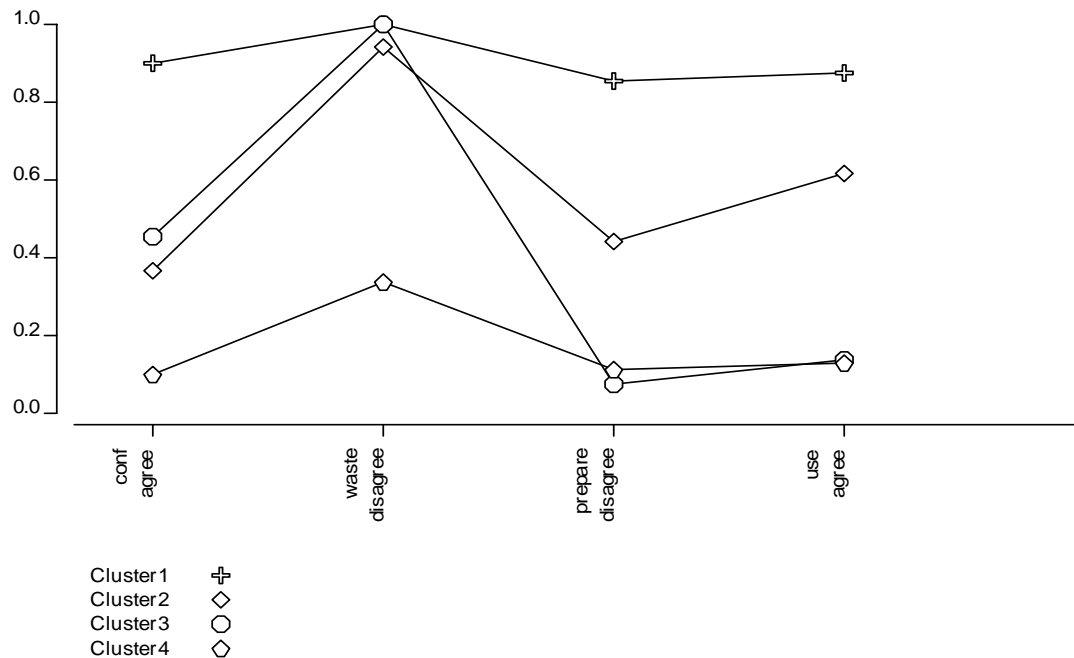


I've noticed lately that everyone shows a latent variable graphic?

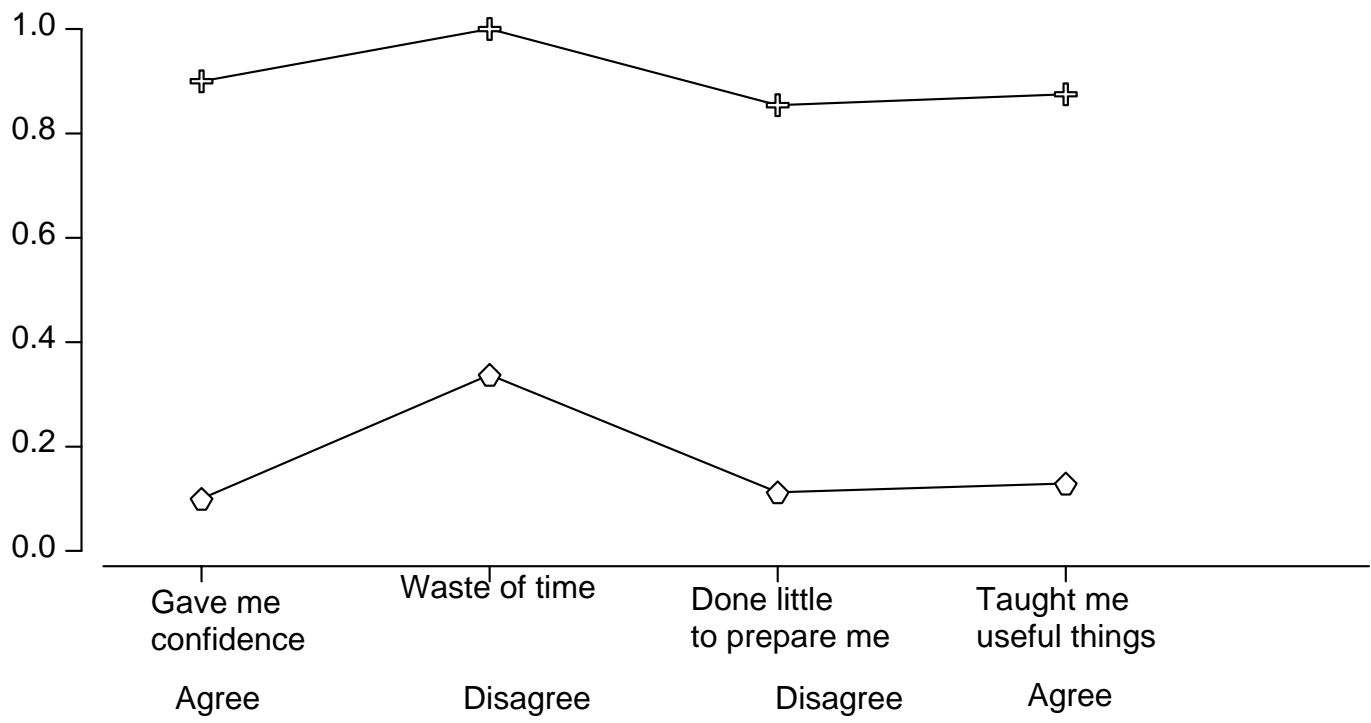
\* Latent Class Model – estimated in Latent Gold software

\* Simple Exploratory model (including cohorts and gender as explanatory variables)

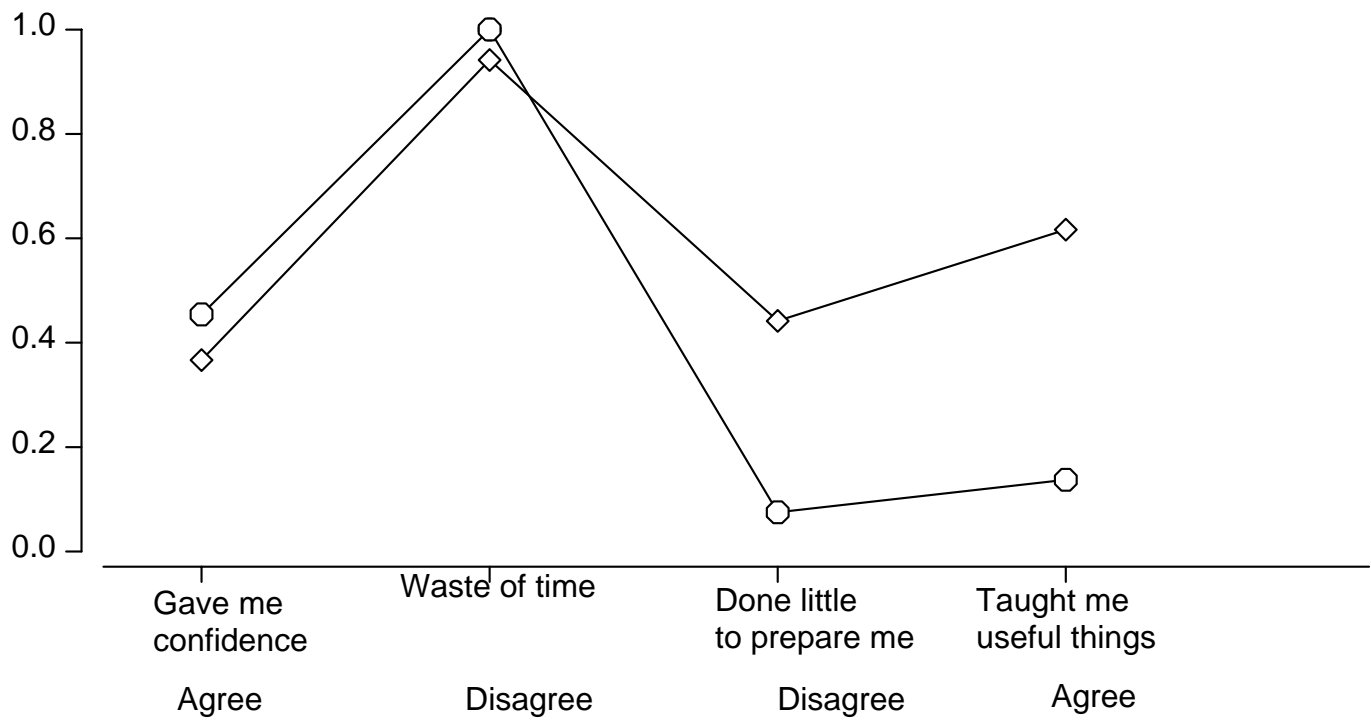
\* 4 clusters identified empirically through goodness of fit measures







Cluster1    +    Pro-school (positive) school experience  
 Cluster4    ◇    Anti-school (negative) school experience



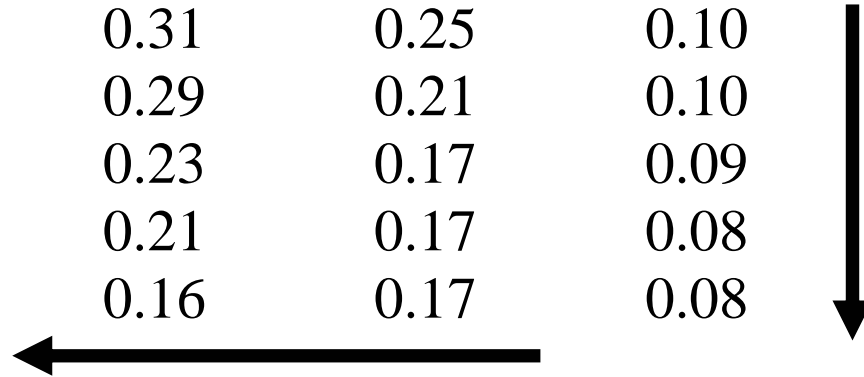
- Cluster2 ◇ Generally pro-school – lower confidence, but school did do something to get them ready for later life
- Cluster3 ○ Generally pro-school – but school did not get them ready for later life

\* Some Preliminary Results

YCS

Cohort

	<i>Year</i>	<i>Cluster 1</i>	<i>Cluster 2</i>	<i>Cluster 3</i>	<i>Cluster 4</i>
Cohort 1	1984	0.35	0.31	0.25	0.10
Cohort 3	1986	0.39	0.29	0.21	0.10
Cohort 4	1988	0.51	0.23	0.17	0.09
Cohort 5	1990	0.55	0.21	0.17	0.08
Cohort 7	1993	0.59	0.16	0.17	0.08

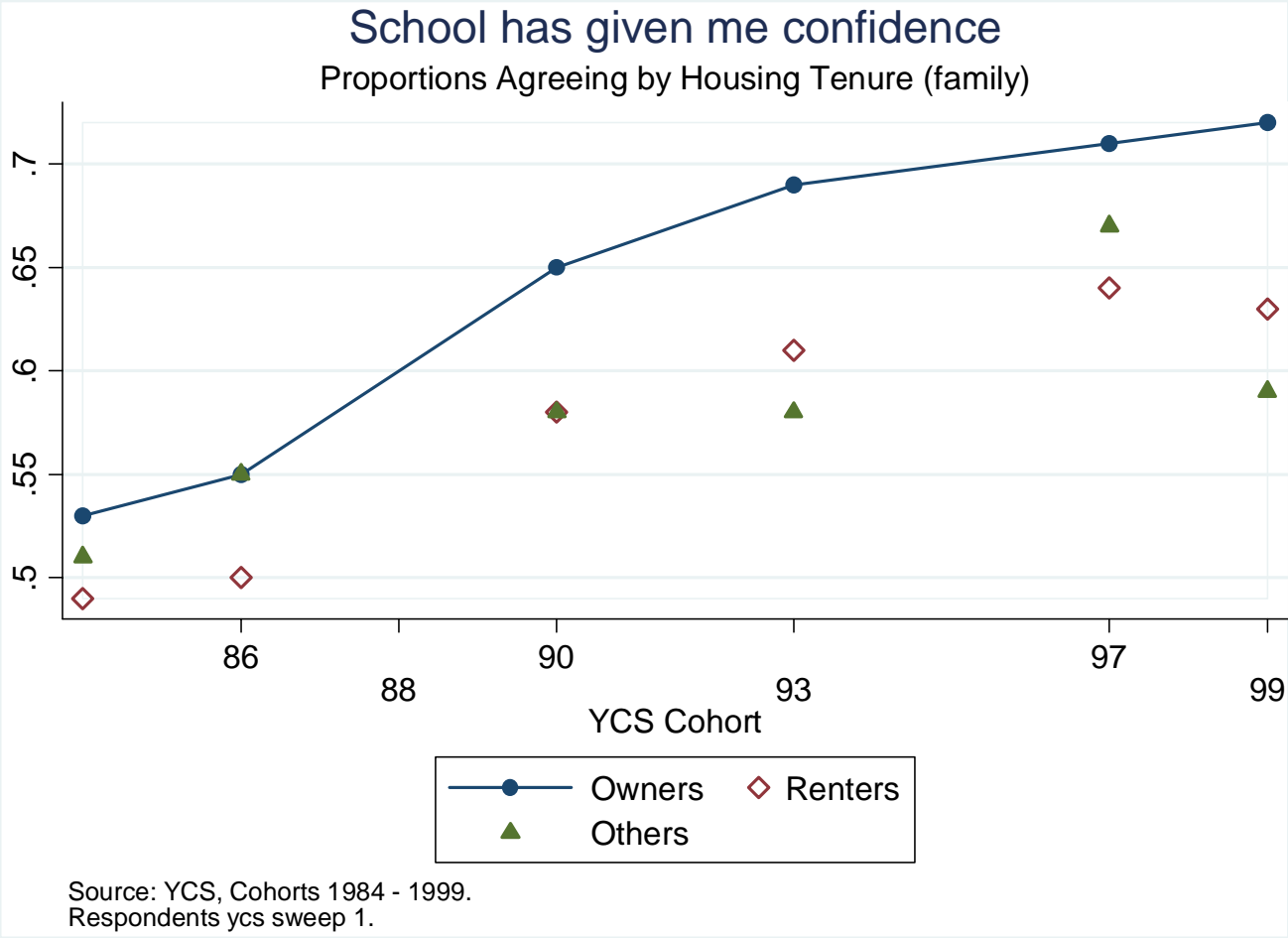


Prob Means (across clusters)

## **Preliminary Conclusions**

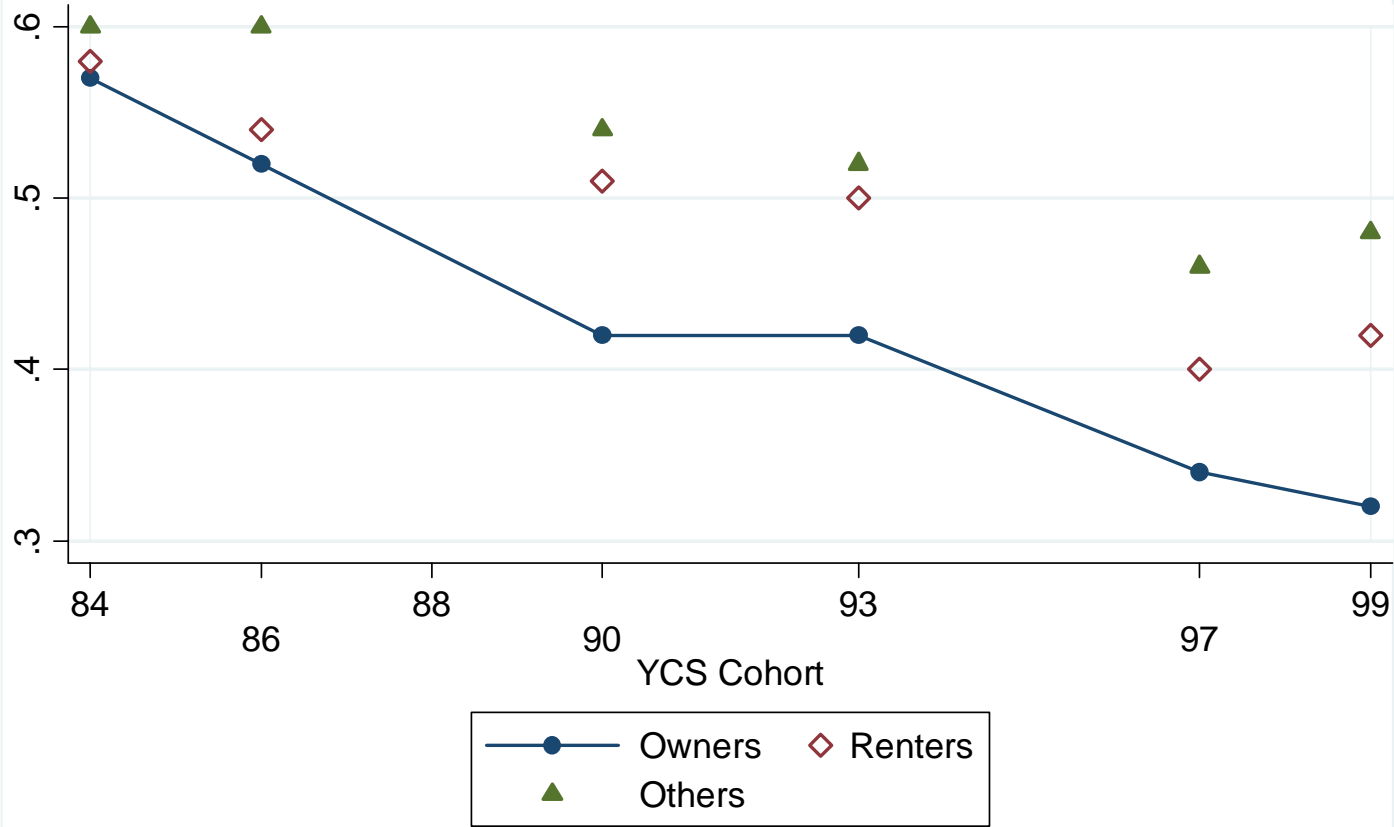
- \* A potentially encouraging picture – overall the school experience seems to be becoming more positive
- \* Descriptive Results suggest that
  - Gender – some small differences; girls more positive experience
  - Ethnicity – no clear patterns except for black pupils e.g. preparation
  - Social Class – observed effect with RGSC and NS-SEC
  - Other effects (not shown today) Year 11 school type & Parental Housing
- \* Latent class approach is promising
  - Detecting a small, but persistent, group (cluster 4) who are disaffected
  - What is the difference between cluster 2 and cluster 3 pupils?
- \* What next?
  - Expand the latent class model (incorporate more variables)

# EXTRA MATERIAL



# School has done little to prepare me

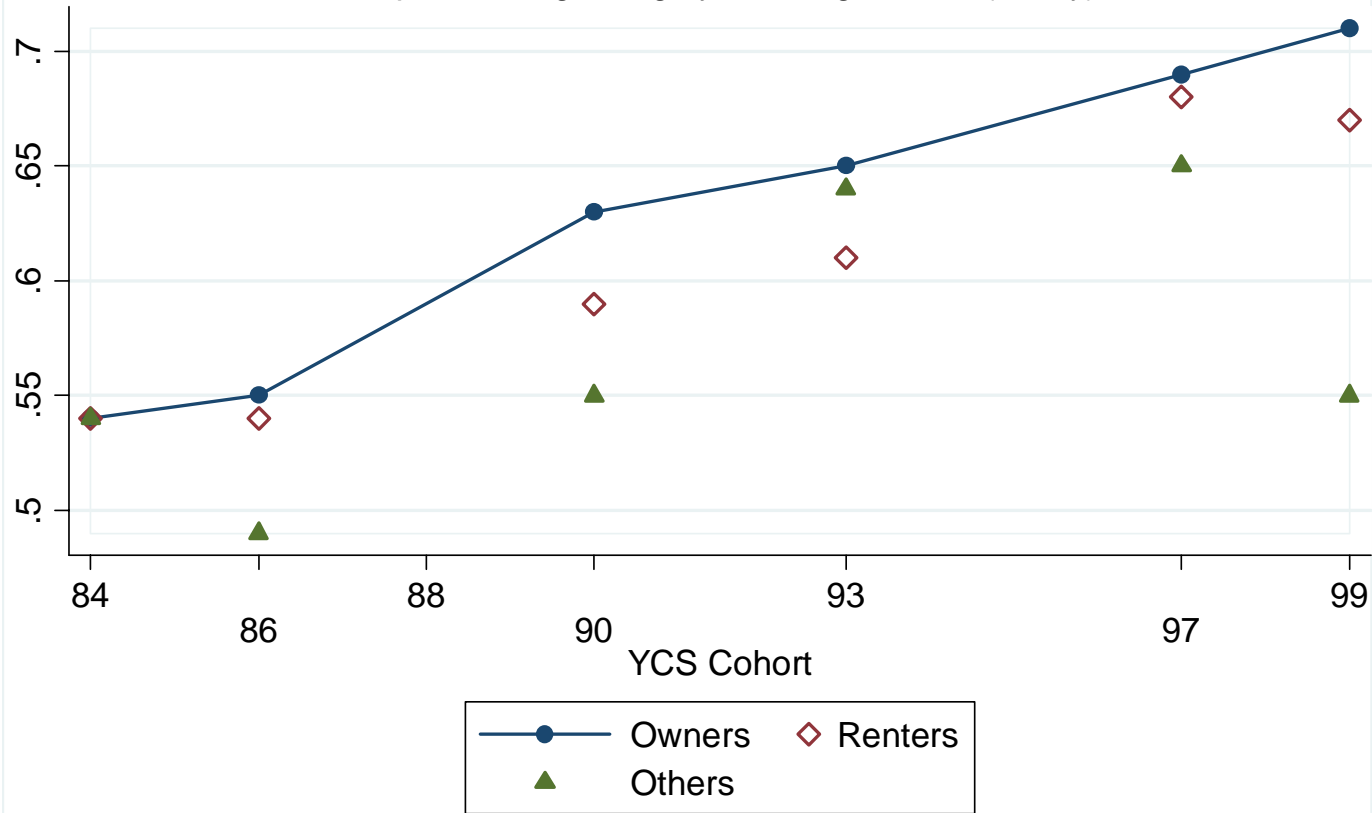
Proportions Agreeing by Housing Tenure (family)



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

## School has taught useful things for job

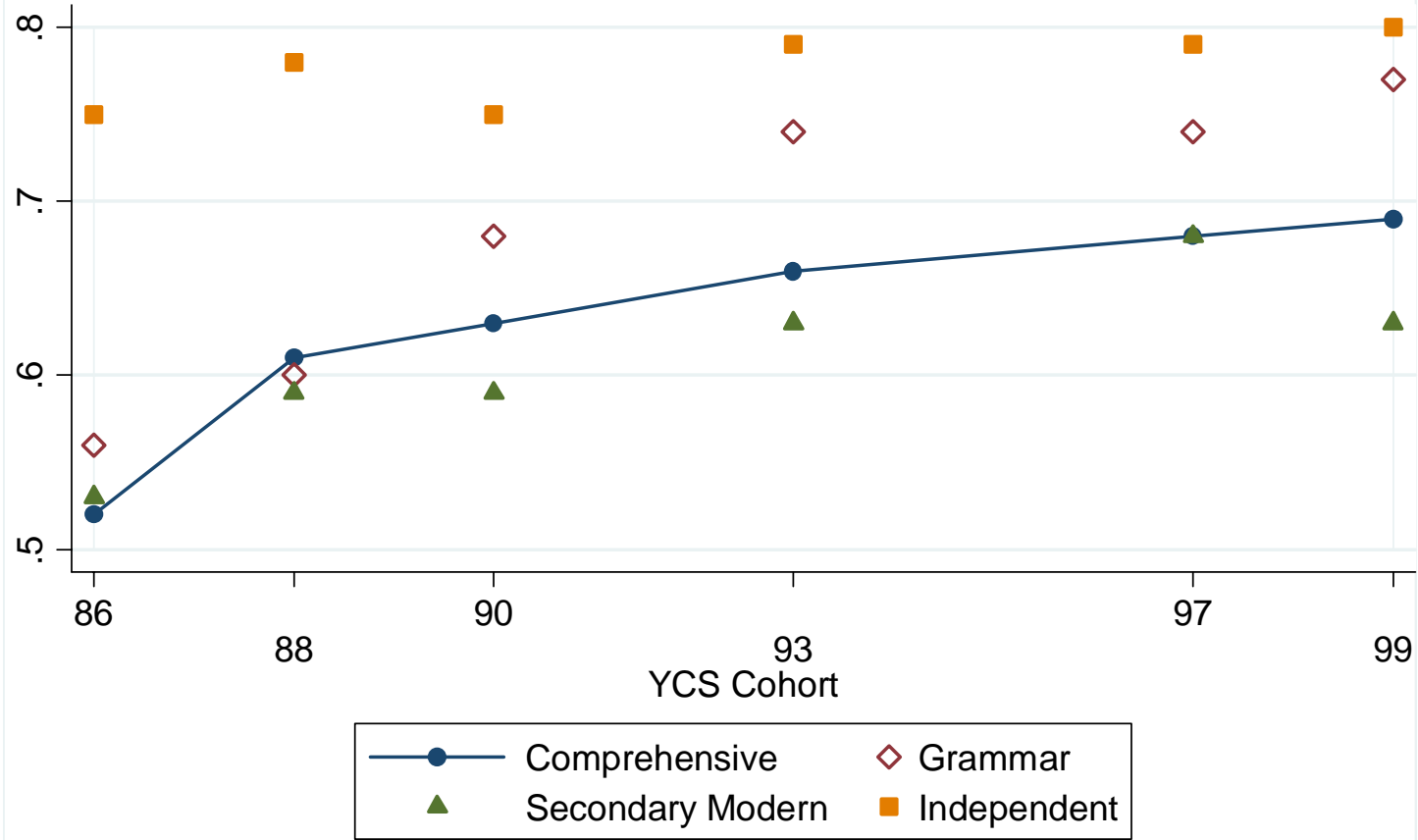
Proportions Agreeing by Housing Tenure (family)



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

# School has given me confidence

Proportions Agreeing by School Type (year 11)

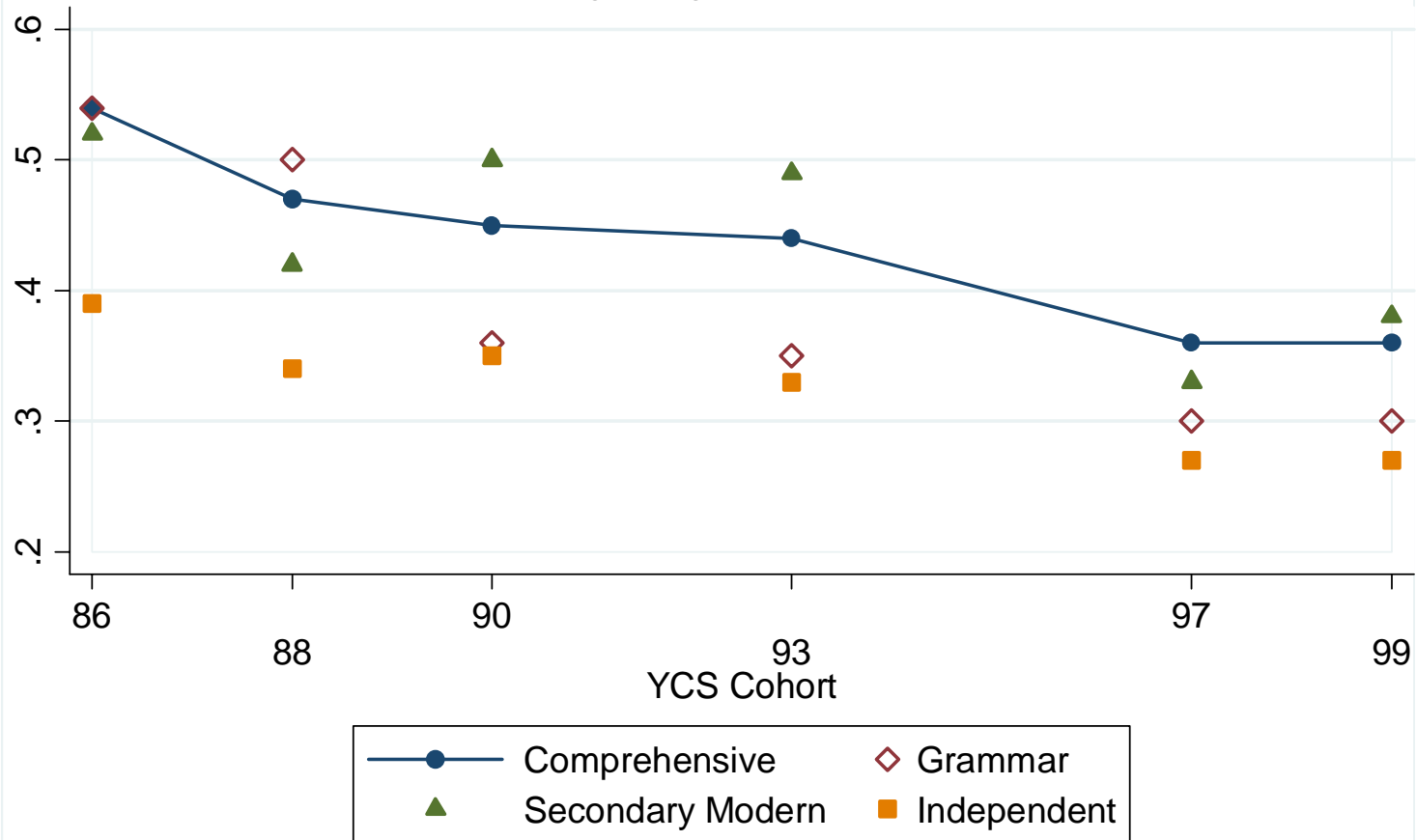


Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.



# School has done little to prepare me

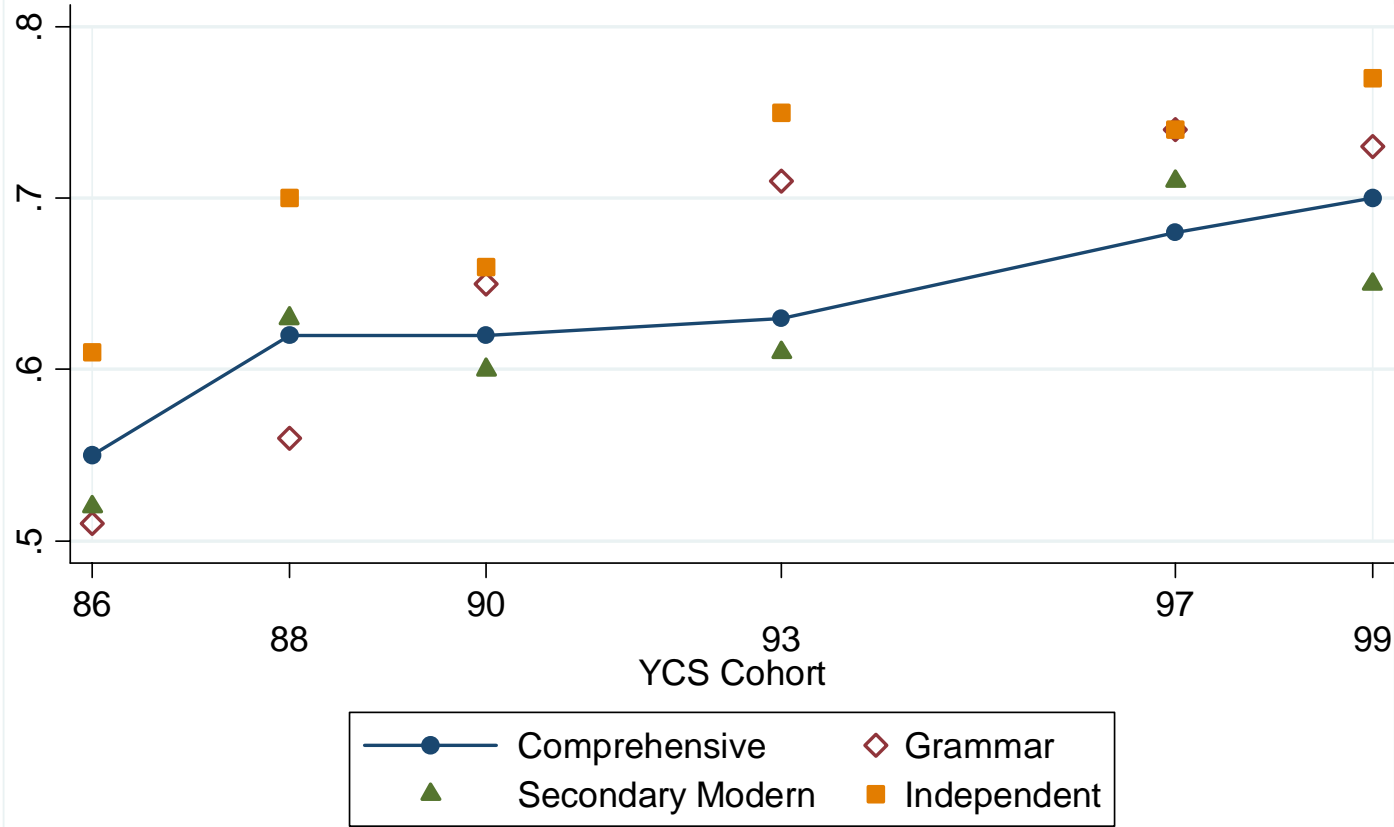
Proportions Agreeing by School Type (year 11)



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.

# School has taught me useful things for job

Proportions Agreeing by School Type (year 11)



Source: YCS, Cohorts 1984 - 1999.  
Respondents ycs sweep 1.