'Dreams' & 'Realities' in University Access:
Mapping social differences in Higher Education aspirations and participation in England.

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Overview

The project ran from December 2011 to April 2012 and involved secondary data analysis of the Longitudinal Study of Young People in England (LSYPE). The LSYPE collects data over time from a cohort of young people born during the 1989/90 academic year. The 'dreams and realities' research project drew on data from the first seven LSYPE waves and spans the 2003/04 to 2009/10 academic years when the cohort were aged between 13/14 and 19/20. This document reports on the project and presents some key findings. It starts by outlining the research approach and issues that arose during the process. Headline findings are then summarised and dissemination and future directions of enquiry are discussed.

Approach & Process

The work of Pierrie Bourdieu (La Sociologie est un sport de combat, 2001) influenced the methodological approach (Bourdieu & Wacquant, 1992) and theoretical framework (Bourdieu, 1984 & 1986) of the project. The methodological approach was reflexive and involved what Bourdieu called 'objectifying the objectification' which resulted in the adoption of a thematic approach to the statistical analyses. This was done in order to distance ourselves from positivist notions on the unproblematic quantification of social reality and to avoid reification of individual variables. The project had two clear foci; 'Dreams' relating to the aspirations of young people towards higher education and 'Realities' relating to young people accessing higher educational establishments and courses; specifically, the focus was on young peoples aspirations towards higher education at ages 13 to 16 and their attendance of higher education institutes by the ages 18/19, 19/20 and 20/21..

Descriptive and inferential statistical analyses were followed by a (thematically structured) series of logistic regression models. A dynamic modelling approach was adopted through the inclusion and exclusion of thematic groups in a managed way. This mixture of deduction and induction reflected our desire for reflexivity and led to analyses that provided a rich level of detail on the nature and construction of social bias in aspirations towards and access to University.

Aspirations or 'dreams' amongst young people were quantified through the 'perceived likelihood' of applying to university between the ages of 13/14 and 16/17. The perceptions of parents and how these compared with those reported by their child were also examined. Changes over time in HE aspirations between age 13/14 and 16/17 were also examined directly. Access to university was captured at ages 18/19, 19/20 and 20/21 and these analyses separated out access to elite Russell Group and other higher education institutes (HEIs).

From the start, this project was interested in scrutinising how HE dreams and realities are influenced by 'Capital' in England. Through drawing on Bourdieu (1986), LSYPE variables were selected or derived to be placed under this 'Capital' theme. 'Capital' joined a number of other thematic groups during the planning of the project at which point the need to set out the scope and limits of the planned analyses became apparent. In all we initially identified eight themes of interest which included over 50 LSYPE variables. At this point the project was refocused. We decided that it was preferable to undertake an indepth analysis (scrutiny) that had a narrower scope rather than push ahead with all themes (and associated variables). This resulted in reducing the themes to four key groupings (Capital, Habitus, Ethnicity and Background) and one contextual grouping (Attainment) for the Aspiration analyses. For the HE Access analyses an additional (HE Aspirations) thematic group was included (see Appendix I). The themes that were dropped were on the whole perception based measures (respondents and their parents perceptions on education). Given that one strand of the planned analyses (aspiration) was perception based we felt that focusing on the more concrete and quantifiable was the best course and hope to return to explore the additional complexity in future research.

The models were built in stages through a process we call managed iteration. At stage 1, models were constructed up to a final set models for each thematic group. For example, under 'Capital'; models which included traces of economic capital (parental occupational social class), cultural capital (parent / grandparent education) and the use of economic to buy cultural capital (tuition, private education, ICT access) were modelled separately and then simultaneously where all variables under the theme were included. The second modelling stage explored how the thematic groupings came together to statistically account for variations in the outcome variables. For example, the Capital theme was included alongside Habitus, then alongside Attainment and finally (for the HE access models only) alongside HE Aspirations. The final stage of modelling was when all themes were included in the model - see Appendix II.

The purpose of the modelling was to scrutinise the nature and structure of HE aspirations and access in England. To do this we draw on the (managed) thematic modelling approach, the resulting model coefficients and, to provide a broader perspective, on relative strength of association statistics (Pseudo or McFadden r-square). It should be stressed that this modelling was accompanied by extensive descriptive analyses at the bivariate level - see Appendix III

Key Findings

Given that for each of the (eight) outcome variables the analyses involved a descriptive stage followed by around 50 separate models, the richness of detail cannot be communicated fully here. Instead the focus is on a selection of noteworthy findings presented in bullet point form. More detail will be communicated through planned conference presentations and publications. We report on the 'realities' (HE access) prior to the 'dreams' (HE aspirations) analyses. The HE access analyses include HE aspirations as contextual variables alongside attainment. We feel that an appreciation of how aspirations are associated with the realities of HE access is useful prior to considering influences on HE aspirations themselves.

- At age 18/19, 7% of respondents were at a Russell Group (RG) HEI and 22% were at a non-RG HEI. By age 19/20, 9% were in RG and 30% were in non-RG HEIs. At the start of the 2010/11 academic year, when the cohort would be aged 20/21, 41% of respondents were in or about to join an HEI.
- The RG-access models accounted for twice the explanatory power as the non-RG access models and this difference is largely attributed to attainment at GCSE.

- Both attainment and HE aspirations accounted for substantially more variation in HE access compared with Capital, Habitus, Ethnicity or Background. We found that HE aspirations accounted for a greater proportion of variation in access to non-RG HEIs compared with (GCSE) attainment. Conversely, variations in access to RG universities were (notably) more influenced by attainment compared with HE aspirations. This suggests that access to RGs is more 'fixed' at the GCSE stage (age 15/16) whilst access to non-RGs seems to be link more to post compulsory education.
- Both Capital and Habitus have a stronger influence on accessing RG compared with non-RG HEIs. Whilst fewer than 1 in 10 of respondents were at an RG institute by the age of 19/20, this minority is strikingly more socially homogenous (or elite) when compared with the 3 in 10 respondents attending non-RG HEIs at the same age.
- In terms of Capital, access to RG HEIs was found to be shaped more through cultural rather than economic capital. The educational background of parents and grandparents accounted for 4 times the proportion of variation in RG compared with non-RG access. The influence of (mainly cultural) capital on RG access remained once attainment and aspirations were controlled for in the models. In terms of non-RG access, the influence of economic capital is almost entirely accounted for once attainment and aspiration are controlled for. Interestingly, controlling for attainment results in marked changes to the coefficients relating to parental education within the non-RG models. Assuming comparable GCSE attainment, respondents with more highly educated parents were found to be *less* likely to be at a non-RG HEI compared with respondents with less highly educated parents. The exchange of economic for cultural capital (tuition, private schooling) accounted for around twice the proportion of variation in RG access compared with non-RG access. Similarly, this remained once attainment and aspiration were controlled for within the RG models but was nearly entirely accounted for once within the non-RG models.
- In terms of habitus, engaging in (culturally valued) activities including 'reading for pleasure' and playing a musical instrument were found to account for over 3 times the proportion of variation in RG access compared with non-RG access. However, once attainment and aspiration are controlled for, the influence of Habitus was nearly entirely accounted for (in both RG and non-RG models) suggesting that these activities play a more indirect role (e.g. via attainment and/or aspiration) in shaping patterns of HE access.
- With ethnicity, both religion and ethnic group were found to have an association with HE access. Use of English was also seen to be associated with access but more weakly than either religion or ethnic group. Ethnicity accounted for slightly more variation in non-RG access compared with RG access. Some interesting detail emerges within the models. Wthin the non-RG analyses, respondents who identified as having a religion at age 13/14 (regardless of what this faith was) were found to be more likely to attend compared with respondents who did not identify themselves as religious at this age. This was most striking amongst the non-Christian (Hindu, Muslim, Sikh) faiths, remained present when attainment and aspiration were controlled for and increased between age 18/19 and 19/20. Within the RG models, any religious advantage in HE access was found to be localised to respondents who identified as 'Catholic'. No advantage across the non-Christian faiths was found here, however respondents who identified as Muslim were found to be less than half as likely to be at an RG institute compared with respondents who did not identify themselves as religious (this was the only example we found of where being religious had a seemingly negative impact on educational success - accessing RG HEIs in this case). The Catholic advantage and Muslim disadvantage in access to RG HEIs remains fairly static once attainment is controlled for. Controlling for aspiration results in a slight decrease in the Catholic advantage and an increase in the Muslim disadvantage at age 19/20. Skills in the use of languages other than English were found to be associated with an increased likelihood of being at an RG but not of being at a non-RG HEI.
- In terms of background, in order of strength of association SEN, family composition and geography were found to account for similar proportions of variation in both RG and non-RG access. These associations were found to be relatively weak compared to the other themes but some interesting detail did emerge. Geographically, a London advantage was apparent for both RG and non-RG access. In the non-RG models, this London advantage remained largely consistent once attainment was controlled but a different picture emerged from the RG models. Assuming comparable GCSE attainment, respondents living in North West or West Midlands were found to be more likely to be at an RG HEI by 19/20 compared their London peers. The association between access and gender is on the whole weak and largely accounted for once attainment and aspiration are controlled for with one exception. Assuming comparable GCSE attainment, females were found to be less likely to be at an RG HIE by 18/19 compared with males. This female disadvantage was found to diminish by age 19/20 but not completely.

To summarise, the analyses found clear evidence of social and cultural elitism in access to university in England. This elitism was far stronger in access to RG compared with non-RG HEIs. Capital was shown to matter substantially more for the transmission of capital within the RG compared with the non-RG academic field. Access to RG institutes appears more determined (or fixed) by the age 15/16 compared with access to non-RG institutes. Relatively low GCSE attainment at this age places access to RG institutes out of reach for many whilst access to non-RG institutes remain more open. Overall, the analyses confirm greater levels of social and cultural diversity within the non-RG compared with the RG student body. This could be seen as a reflection of the elitism of RG HEIs but also may reflect efforts within non-RG HEIs to widen access to under-represented and disadvantaged groups.

As the findings above highlight, aspiration towards HE has a notable association with the realities of actually accessing university. HE aspirations at ages 13/14 and 16/17 were modelled. Change over time focused on respondents who reported that they were likely to apply to HE at age 13/14 but report that they were unlikely to do so at age 16/17 - known as the 'fallers'

- At age 13/14, 69% of respondents reported that they were likely or very likely to apply for HE. This figure drops to 63% by age 14/15; to 61% by age 15/16 and finally to 56% by age 16/17 (following GCSE examinations and results). In all 19% of respondents are 'fallers' in terms of HE aspirations between age 13/14 and 16/17. 7% of respondents were
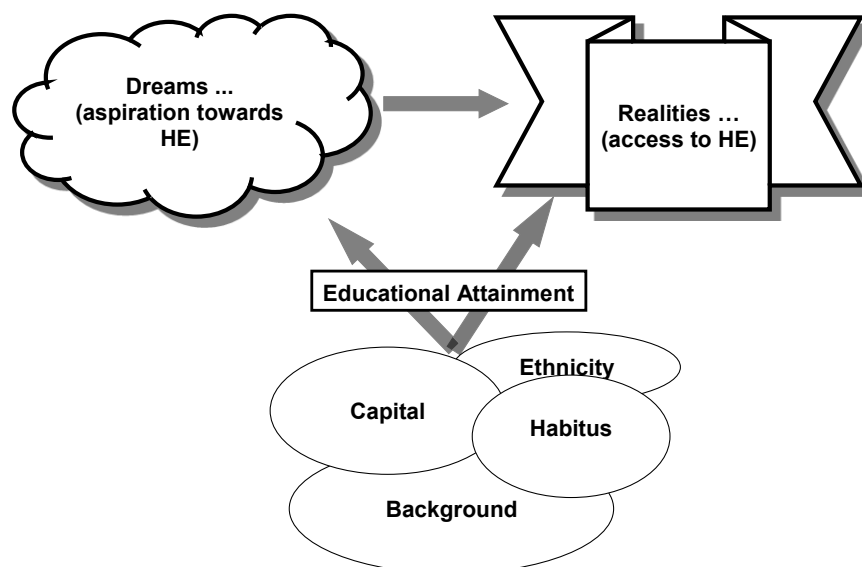
- found to be 'risers' in that they were unlikely to apply to HE at age 13/14 but likely to do so at age 16/17 - exploratory analyses revealed little evidence of any systematic influences on this ('risers') change and we conclude that this appears to largely be a random event - unlike what we found with 'fallers'.
- At age 13/14, the HE aspiration responses of the (main) parent agreed with their child 84% of the time - the main disagreement was where respondents reported that they were likely to apply and their parent reported that this was unlikely (11%). Following GCSEs, at the age of 16/17 the agreement between parent and child was up to 94%.
- Across all themes, associations with HE aspiration increased (or intensified) over time. Applying to an HEI was more of a universal aspiration at age 13/14 which becomes increasingly socially stratified over time and was strongest at age 16/17 where it would have been informed through the hindsight reality of GCSE attainment.
- Attainment was found to have the strongest association with HE aspiration and this clearly intensified over the four years. Key stage 3 attainment accounted for under 14% of the variation in HE aspiration at age 13/14 whilst key stage 4 (GCSE) attainment accounted for over 27% of the variation in HE aspiration at age 16/17.
- Across the main themes, 'Capital' and 'Habitus' were found to have the strongest association with HE aspiration. In terms of 'Capital', HE aspiration was shaped more through cultural rather than economic capital - although this imbalance was not the same scale as we found with RG access.   The influence of capital on HE aspiration reduced but remained once attainment was controlled for in the models. Cultural capital also had a stronger association with the 'fallers' compared with economic capital. The exchange of economic for cultural capital (tuition, private schooling) accounted for slightly less of the proportion of variation in HE aspiration compared with what was seen with cultural and economic capital but does seem to play an important part. Respondents who had attended private schools, private tuition and/or had good ICT at home were more likely to aspire towards HE compared with those that did not have these experiences and resources. This also remained once attainment was controlled for. In terms of 'Habitus', engaging in cultural activities including 'reading for pleasure', attending the theatre, film or concert and playing a musical instrument were found to account for a significant proportion of variation in HE aspiration. Participation in sport was found to have a weaker association than more cultural activities. The involvement of parents (as captured by attendance of parents evenings) was also associated with HE aspiration. For reported aspirations at age 13/14 and 16/17, the association with 'Habitus' was found to have a similar strength to what was found with Capital. However, it seems clear that (cultural) capital was the key element associated with the 'fallers'.
- In terms of ethnicity, religion, ethnic group and use of English were all found to have an association with HE aspiration. We found that ethnic group and religion accounted for a similar proportion of variation in the HE aspiration models but once attainment and other factors were controlled for, ethnic group was found to account for a slightly higher proportion of variation in HE aspiration.   Some striking detail emerges within the models. Respondents who identified as having a religion were found to be more likely to aspire towards HE compared with respondents who did not identify themselves as religious. This was most striking amongst the non-Christian faiths, particularly Hindus and Muslims who were found to be over five times and over three times as likely to aspire towards HE respectively when compared with their non-religious peers. This relatively high HE aspiration amongst Muslim respondents may account for the increasing disadvantage in RG access that was found with Muslims once HE aspiration was controlled for - in other words, despite having relatively high levels of aspiration towards HE, Muslims are less likely to get access to RG HEIs compared with their peers without religion or of other faiths (even when attainment is controlled for). Across ethnic groups, most groups were found to be more likely than the White British/Irish group to report HE aspirations and this was most striking amongst respondents who classified themselves as African or Caribbean. Interestingly, this difference widens further when attainment is controlled for suggesting that HE aspiration amongst the African and Caribbean groups is more able to transcend the impact of attainment compared with the White / British group. Ethnicity was found to have a clear association with reported HE aspiration at ages 13/14 and 16/17   However, ethnicity was found to have a weaker association with 'fallers' but African and Caribbean respondents were found much more likely to maintain their HE aspiration between 13/14 and 16/17 compared with their White British peers.
- The association between HE aspiration and background was relatively weak compared with the other themes but some notable points did emerge. Respondents with a SEN were less likely to aspire towards HE compared with respondents without a SEN but once attainment is controlled for things change. The inclusion of attainment accounts for nearly all of the difference (in HE aspirations) between respondents without a SEN and those with a SEN but without a statement. However we found that, assuming equal attainment, respondents with a statemented SEN were more likely to aspire towards HE compared with respondents without a SEN. Females were more likely to aspire towards HE at both time points and less likely to change this aspiration between them compared with males - and this remains once attainment is controlled for.

To summarise, the analyses found that aspirations towards HE are shaped through 'Capital', 'Habitus' and Ethnicity. Attainment is also a key influence which accounts for some (but not all) of the stratification of HE aspirations we found. As young people approach the end of their compulsory period of education this social stratification of HE aspirations intensifies, perhaps as the reality of attainment at this age is realised.

Both 'Capital' and 'Habitus' play central roles in shaping aspiration towards HE and in gaining access to HE institutions (particularly RG). As mentioned at the start of this report, more detail on these analyses will be provided within planned publications and conference presentations - we feel that this would require three papers. As mentioned above, the key challenge we met was dealing with the complexity of our initial (perhaps over-ambitious) plans, this led us to narrow the focus but we hope to revisit themes that were dropped to build on this work. We also would like to extend the focus beyond HE aspiration and access and onto attainment as this is clearly a vital contextual factor in accounting for the social elitism found in England's high status universities.

APPENDIX I: Dreams & Realities in University Access - Overview

KEY

Label	Detail & Variables
Dreams ... (aspiration towards HE)	This is the reported Likelihood of applying to HE, ages 13-17 and how this changes over time. Parental perceptions on how likely their child would apply for HE (ages 13-16) and how this compares with their child's perception
Realities ... (access to HE)	This was measured as the participation in HE at ages 18/19; 19/20 and 20/21. Russell Group & non Russell Group participation analysed seperately.
Educational attainment	This was measured using the overall attainment at age 13/14 (key stage 3) and age 15/16 (key stage 4, GCSEs)
Capital	The 'Capital' theme draws on the ideas of Bourdieu (1986) and includes measures of the economic capital (parental occupational social class), cultural capital (parent and grandparent education) and the exchange of economic for cultural capital (private education, private tuition, telecomunications access at home). We accept that it is unfeasible to fully capture the dimensions of capital within mutually exclusive variables, this is illustrated by the association between parental social class and education (Cramers V = 0.32) but we feel that the variables selected capture a greater amount of one form of capital compared with another (i.e. social class - economic; education - cultural). Social Capital is not measured directly at all, quantifying the social networks of young people and their parents was beyond the scope of this project. However, traces of social capital will be present indirectly through both cultural and economic capital. The exchange of economic for cultural capital will be to some extent influenced by the Habitus of the family. In essence it is a balance of economic capital (having the funds), social capital (education) and Habitus (practicing their cultural capital and having a comprehension and subconsious appreciation of the future value of making this exchange).
Habitus	The 'Habitus' theme also draws on Bourdieu (1984) and is a complex concept which, frankly, we acknowlegde could not be quantified in a comprehensive way. Bourdieu defined the habitus as the relationship between 'the general principal of objectively classifiable judgements and the system of classification of these practices' (Bourdieu, 1984 p172). It can be considered as an non-consious (near inate) understanding of what a society holds in high (and low) status along with an internalised personal acceptance of this. This context shapes an individual's perception and behaviour (agency) and account for patterns of social stratification (structure). Bourdieu argued that 'Habitus' explains how a society can exist in which a few people have highly privalaged lives and live them with a sense of entitlement along with other (many) people who live deprived lives with a sense that their position is 'fixed', 'natural' or 'deserved'. For example, people with high capital participate in activities of high status (art appreciation, classical music, Henley regatta etc.) and develop an 'effortless superiority' through the participation and the continued ubiquitous classification of the activity (or behaviour) as being of social value. From another perspective, people with low capital participate in activities of lower status (TV soaps, popular music, FA cup final etc.) and develop an acceptence of their (low capital) position by accepting a general status (or social value) classification of activities/behaviours - the ubiquitous social classification of perception and behaviour smothers ideas of injustice . This is an example of what Bourdieu called 'symbolic violence' in which people with low capital conspire to maintain their low capital position in a non-consious way. The definition and examples above provide a very broad overview of the habitus. It should be noted that people can possess high levels of some forms of capital and low levels of others at the same time and that the value of this capital (and the associated habitus) is dependent on the 'field' in which they are operating (academic, economic, sport etc.). In the analyses we included 4 measures of habitus for young people; Reading for pleasure, playing sport, attending a concert, theatre or cinema and playing a musical instrument. We also included one measure that captures an element of habitus from parents; attendence of parents evenings. In all we felt that these come together to provide traces of habitus but accept that they are some way short of completely capturing the concept.
Ethnicity	We used three variables under the ethnicity scheme; ethnic group, religion and the use of the English language. We feel . We accept that this is still some way from completely capturing ethnicity but feel that this multi-dimensional approach is a step forward using a single variable such as ethnic group in that cultural and language dimensions of the concept of ethnicity are acknowledged.
Background	The background theme included variables relating to health (disability, GHQ12, SEN) along with gender, family composition and geographical region.

APPENDIX II: Overview of the 'managed iteration' modelling approach

Stage 1 - the 'component' models

CAPITAL	Bivariate Models Parental social class, parent and grandparent educational background Private education, private tuition and access to ICT. ALL Capital variables	These models seperate out the 'latent' Capital stemming from a young persons parents from the exchange of one capital (economic) for another (cultural).
HABITUS	Bivariate Models Reading and Sport (ages 13/14 and 16/17) Playing a musical instrument and attending a concert, theatre or cinema ALL Habitus variables	These models seperate out regularity in reading and playing sport from playing an instrument and attending a concert, theatre or cinema
ETHNICITY	Bivariate Models Ethnic group and Religion Ethnic group and use of the English Language Religion and use of the English Language ALL Ethnicity variables	These models examine how ethnic group and religion come together to account for variation in aspiration and access. Following this the role of (English) language use in relation to ethnic group and religion are examined.
BACKGROUND	Bivariate Models Gender, Geography & Family Composition Disability, SEN & GHQ12 ALL Background variables	These models examine the influence of background and health seperately and then within the same model.

Stage 2 - the 'plus' models

CAPITAL plus ...	...Habitus ...Attainment ...HE Aspiration	These models examine how Capital overlaps with Habitus and Attainment in being associated with HE aspiration and access. The access models also examined how Capital overlapped with aspiration.
ETHNICITY plus ...	...Capital ...Habitus ...Attainment ...HE Aspiration	These models examine how Ethnicity overlaps with Capital, Habitus and Attainment in being associated with HE aspiration and access. The access models also examined how Ethnicity overlapped with aspiration.
BACKGROUND plus ...	...Capital ...Habitus ...Attainment ...HE Aspiration	These models examine how Background overlaps with Capital, Habitus and Attainment in being associated with HE aspiration and access. The access models also examined how Background overlapped with aspiration.

Stage 3 - the final models

Capital, Habitus, Ethnicity & Background	Excluding both attainment & HE aspiration ... Including attainment ...including HE aspiration ...including both attainment & HE aspiration	The final (full) models including attainment and HE aspiration in a staged way.

APPENDIX IIIa: Summary Table of 'Dreams' & 'Realities' Models using strength of association statistics

McFadden's (Pseudo) R-Square Values

	HE Aspiration			HE Access					
				Non-RG University		RG University			ANY University
Age of Respondent	Age 13/14	16/17	'Fallers' 13/14 - 16/17	Age18/19	Age19/20	Age18/19	Age19/20		Age 20/21
Academic Year	2003/04	2006/07	2003 - 2007	2008/09	2009/10	2008/09	2009/10		2010/11
Univariate % within full sample	68.7%	56.3%	19.1%	22.2%	30.2%	7.2%	9.4%		40.7%
FULL MODELS	**22.0%**	**38.0%**	**8.4%**	**21.9%**	**26.4%**	**41.0%**	**45.8%**		**49.6%**
...excluding Attainment	19.1%	28.0%	6.2%	20.9%	25.6%	27.1%	31.5%		42.1%
...excluding HE Aspiration	/	/	/	16.5%	19.5%	40.3%	44.5%		43.5%
...excluding both Attainment and HE Aspiration	19.1%	28.0%	6.2%	11.5%	14.0%	21.2%	24.5%		27.1%
ATTAINMENT & ASPIRATION (ALL)	**13.7%**	**27.2%**	**4.2%**	**19.7%**	**24.3%**	**38.2%**	**42.0%**		**46.4%**
Single Variable Bivariate Models									
KS3 Attainment	13.7%	20.1%	2.5%	9.8%	11.2%	30.3%	32.3%		24.7%
KS4 (GCSE) Attainment	/	27.2%	4.2%	13.6%	15.7%	37.1%	40.1%		35.6%
HE Aspirations	/	/	/	17.6%	22.4%	17.2%	19.0%		35.2%
CAPITAL (ALL)	**9.7%**	**13.8%**	**3.3%**	**5.3%**	**7.1%**	**15.6%**	**18.4%**		**16.7%**
Single Variable Bivariate Models									
Parental Education	6.4%	8.5%	2.2%	2.6%	3.7%	11.7%	13.7%		10.3%
Grandparent Education	1.4%	1.6%	0.4%	0.4%	0.5%	2.3%	2.4%		1.7%
Parental NSSEC	4.6%	6.1%	1.0%	2.8%	3.2%	8.0%	9.1%		7.7%
Telecom Connectivity (W1 or 3)	2.6%	2.9%	0.2%	2.1%	2.5%	2.5%	2.7%		3.9%
Use of Private Tuition	3.0%	6.1%	1.4%	2.5%	3.4%	4.8%	5.7%		6.8%
Private Schooling	2.0%	2.2%	0.8%	0.5%	0.7%	4.0%	5.5%		3.5%
Components of Capital									
Cultural & Economic Capital (Education & NS-SEC)	7.9%	10.3%	2.5%	3.6%	4.8%	13.4%	15.5%		12.4%
Use of Capital (telecom, tuition, private school)	5.9%	8.8%	1.9%	4.1%	5.2%	8.6%	10.6%		11.2%
Capital PLUS									
... PLUS Habitus	13.6%	20.5%	4.4%	8.1%	9.9%	18.4%	21.6%		21.2%
… PLUS Attainment	16.2%	30.9%	6.0%	14.2%	17.0%	38.3%	41.7%		38.4%
… PLUS HE Aspiration	/	/	/	18.8%	23.9%	24.1%	28.0%		40.7%
HABITUS (ALL)	**8.3%**	**13.7%**	**2.4%**	**6.0%**	**6.5%**	**9.8%**	**11.1%**		**12.2%**
Single Variable Bivariate Models									
Reading for Pleasure	4.5%	4.3%	0.5%	1.1%	1.4%	3.3%	3.5%		3.0%
Playing Sport	0.7%	1.4%	0.6%	0.8%	1.1%	1.4%	2.0%		2.0%
Attending a concert / theatre / cinema	1.9%	4.4%	0.5%	1.7%	1.9%	1.6%	1.7%		3.0%
Playing a Musical Instrument	2.5%	3.4%	1.0%	0.5%	0.6%	3.2%	4.2%		2.6%
Parental Attendence of parents evenings	4.1%	5.4%	0.8%	3.9%	3.8%	3.8%	3.6%		5.8%
Components of Habitus									
Reading & Sports	5.0%	5.5%	1.0%	1.7%	2.3%	4.4%	5.2%		4.8%
Concert & Musical Instrument	4.0%	7.0%	1.3%	2.0%	2.3%	4.3%	5.3%		5.0%
ETHNICITY (ALL)	**4.0%**	**5.6%**	**1.5%**	**1.7%**	**3.0%**	**1.9%**	**2.0%**		**3.7%**
Single Variable Bivariate Models									
Ethnic Group	3.0%	4.2%	1.4%	0.9%	2.0%	1.0%	0.7%		2.4%
Religion	3.0%	4.1%	0.9%	1.4%	2.3%	0.9%	1.0%		2.7%
Use of English Language	2.1%	2.8%	0.9%	0.5%	0.5%	0.2%	0.2%		1.4%
Components of Ethnicity									
Ethnic Group & Religion	3.9%	5.4%	1.5%	1.7%	2.9%	1.8%	1.8%		3.6%
Ethnic Group & Eng Lang	3.1%	4.4%	1.4%	0.9%	2.1%	1.2%	0.8%		2.5%
Religion & Eng Lang	3.4%	4.6%	1.1%	1.6%	2.4%	1.2%	1.4%		3.0%
Ethnicity PLUS ...									
… PLUS Capital	13.8%	19.3%	4.5%	7.3%	10.4%	17.0%	19.8%		10.4%
… PLUS Habitus	11.9%	19.1%	3.8%	7.2%	9.1%	11.0%	12.3%		15.4%
… PLUS Attainment	19.1%	29.2%	5.5%	14.8%	18.4%	37.5%	40.6%		39.1%
… PLUS HE Aspiration	/	/	/	18.2%	23.2%	18.5%	20.7%		36.0%
BACKGROUND (ALL)	**5.0%**	**7.6%**	**1.2%**	**4.5%**	**4.9%**	**4.6%**	**5.2%**		**7.8%**
Single Variable Bivariate Models									
Gender	0.4%	1.0%	0.2%	0.4%	0.3%	1.0%	0.1%		0.4%
Family Composition	1.0%	1.6%	0.4%	1.9%	1.8%	1.6%	1.8%		2.9%
GOR	/	1.3%	0.4%	0.5%	0.8%	0.9%	0.9%		1.2%
Disability	1.0%	0.9%	0.0%	0.6%	0.8%	0.5%	0.4%		0.9%
SEN	4.1%	4.2%	0.2%	2.3%	2.6%	2.2%	2.1%		3.7%
GHQ12	/	1.1%	0.1%	0.1%	0.2%	0.4%	0.9%		0.7%
Components of Background									
Background (Gender, Family, GOR)	1.4%	3.9%	1.0%	2.8%	3.0%	2.6%	2.8%		4.5%
Wellbeing (Disability, SEN, GHQ12)	4.2%	4.8%	0.3%	2.4%	2.7%	2.5%	2.8%		4.2%
Background PLUS ...									
… PLUS Capital	13.0%	18.6%	4.0%	8.2%	9.7%	17.9%	20.9%		20.7%
… PLUS Habitus	11.1%	18.7%	3.4%	8.5%	9.6%	12.0%	13.5%		16.9%
… PLUS Attainment	14.1%	29.4%	5.6%	13.9%	15.9%	37.9%	41.7%		36.9%
… PLUS HE Aspiration	/	/	/	18.7%	23.1%	18.2%	21.0%		37.1%

APPENDIX IIIb: Summary of 'Dreams' & 'Realities' Models using strength of association statistics - KEY

Guide for reading the APPENDIX III table

All of the percentages represented in the APPENDIX IIIa table relate to an individual logistic regression model. The table summarises 132 HE Aspiration models and 260 HE Access models. The statistics presented are the Pseudo R-square values (also known as McFadden R-Square) from each of these 392 models. Pseudo R-square is conceptually comparable to the Pearson R-square statistics used within OLS Linear Regression and represents the proportion of the variation in an outcome that is accounted for by variation across the model variables. This is sometimes known as explanatory power but, given that statistics on their own are unable to 'explain', we prefer to think of these as indicators of strength of association. Higher values represent models that have accounted for a greater amount of variation in the outcomes (3 relate to HE aspiration, 5 relate to HE Access).

Using the first column as an example, where the outcome was HE aspiration at age 13/14:

FULL MODELS	The full model is shown to account for 22% of variation in HE aspiration. Below this first figure is the Pseudo R-square for the model once KS3 attainment has been dropped (19.1%). No HE aspiration variables were used in ths model and this is indicated by '/ ' in the table above.
ATTAINMENT & ASPIRATION (ALL)	The first pseudo R-square value (13.7%) represents the amount of variation in HE aspiration that is accounted for by both attainment and aspiration. However, because HE aspiration is not used as an explanatory variable in this first model, this percentage is the same as the bivariate model which just includes (KS3) attainment alone. If you compare this with the first column of the HE access models (19.7%) where attainment at KS3 (9.8%), KS4 (13.6%) and HE aspiration (17.6%) were all modelled in seperate bivariate models but when (KS4) attainment and HE aspiration are combined, 19.7% of the variation in access to non-RG HEIs is accounted for.
CAPITAL	The first pseudo R-square value (9.7%) represents the amount of variation in HE aspiration that is accounted for by all 6 of the variables under the 'Capital' theme. Below this are the bivariate model Pseudo R-square values are reported which range from 6.4% (Parental Education) to 1.2% (Grandparent Education). This is followed by the Pseudo R-square values for the stage 1 ('components') models which seperate the 'Capital' theme into two groups - latent capital (parent & grandparent education and social class - 7.9%) and examples of the exchange of economic for cultural capital (private school, private tuition, ICT access at home - 5.9%). The next collection of Pseudo R-square values represent the stage 2 ('plus') models where the 'Capital' theme is joined by 'Habitus' (13.6%) and Attainment (16.2%) - and because HE aspiration is not included in these models it is represented as '/' .
HABITUS	The first pseudo R-square value (8.3%) represents the amount of variation in HE aspiration that is accounted for by all 5 of the variables under the 'Habitus' theme. Below this are the bivariate model Pseudo R-square values are reported which range from 4.5% (reading for pleasure) to 0.7% (paying sport). This is followed by the Pseudo R-square values for the stage 1 ('components') models which seperate the 'Habitus' theme into two groups - first, reading & playing sport (5%) and second playing an instrument and visiting a concert, theatre or cinema (4%).
ETHNICITY	The first pseudo R-square value (4%) represents the amount of variation in HE aspiration that is accounted for by all 3 of the variables under the 'Ethnicity' theme. Below this are the bivariate model Pseudo R-square values are reported which range from 3% (ethnic group and religion) to 2.1% (use of English). This is followed by the Pseudo R-square values for the stage 1 ('components') models which seperate the 'Ethnicity' theme into three groups -ethnic group and religion (3.9%); ethnic group and language (3.1%); religion and language (3.4%). The next collection of Pseudo R-square values represent the stage 2 ('plus') models where the 'Ethnicity' theme is joined by 'Capital' (13.8%) 'Habitus' (11.9%) and Attainment (19.1%) - and, again, because HE aspiration is not included in these models it is represented as '/' .
BACKGROUND	The first pseudo R-square value (5%) represents the amount of variation in HE aspiration that is accounted for by all of the variables under the 'Background' theme (4 in this first model, 6 in the rest). Below this are the bivariate model Pseudo R-square values are reported which range from 4.1% (SEN) to 0.4% (gender). This is followed by the Pseudo R-square values for the stage 1 ('components') models which seperate the 'Background' theme into two groups - gender, family composition and geography (1.4%); disability, SEN and GHQ12 (4.2%). The next collection of Pseudo R-square values represent the stage 2 ('plus') models where the 'Background' theme is joined by 'Capital' (13%) 'Habitus' (11.1%) and Attainment (14.1%) - and, again, because HE aspiration is not included in these models it is represented as '/'.