IOE LONDON

Leading education and social research
Institute of Education
University of London

MCS data note

Coding the aspirations of children in the Millennium Cohort Study

Eirini Flouri, Vanessa Moulton and Constantina Panourgia

September 2012

CLS

Centre for Longitudinal Studies
Following lives from birth and through the adult years
www.cls.ioe.ac.uk

CLS is an ESRC Resource Centre based at the Institute of Education, University of London

E·S·R·C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

MCS data note

Coding the aspirations of children at age 7 in the Millennium Cohort Study (MCS)

Eirini Flouri, Vanessa Moulton and Constantina Panourgia

September 2012

Acknowledgements

We are grateful for the useful comments of Heather Joshi, Alice Sullivan, Dick Wiggins, and Emily Midouhas.

This document is available in alternative formats.
Please contact the Centre for Longitudinal Studies.
tel: +44 (0)20 7612 6875
email: clsfeedback@ioe.ac.uk

Contents

1   Introduction

1.1 Description of the dataset

The Millennium Cohort Study (MCS; www.cls.ioe.ac.uk/mcs) is a longitudinal survey of more than 19,000 children. It draws its sample from children born in the UK over a period of 12 months, beginning on 1 September 2000 in England and Wales, and three months later in Scotland and Northern Ireland (Plewis, 2007)[1]. At the first four surveys, the MCS children were aged 9 months, 3 years, 5 years, and 7 years, respectively.

The age 7 survey (MCS4) included a new mode of data collection: the child paper self-completion questionnaire, which was completed by 13,244 cohort children. This document explains how we derived the variables (in boldface italics) related to children's responses to the question "when you grow up, what would you like to be?" in MCS4. Children's responses to this question have been recorded but not as yet coded for general use. Some children gave up to eight aspirations, and we coded all of the aspirations given.

1.2   Description of this project

The coding work we describe in this document was supported by a project grant from the Economic and Social Research Council (ESRC; ES/J001414/1, started on 1 January 2012) awarded to Eirini Flouri, Heather Joshi, Alice Sullivan, Dick Wiggins and Nikos Tzavidis, and employing Emily Midouhas. The aim of our ESRC funded project is to test how neighbourhood and family poverty and other adverse circumstances are associated with children's wellbeing, as gauged through emotional and behavioural outcomes. We also investigate how factors in the child, family, school and neighbourhood may dampen this association (that is promote resilience).

Our theoretical framework recognises that a child's emotional and behavioural functioning is fed by the interaction of the characteristics of the child and of his/her environment in a dynamic process. MCS has detailed information about children's emotional and behavioural problems and about neighbourhood and family poverty and adversity. We use children's, teachers', and parents' data as well as objective child measures, such as cognitive ability. We also use administrative data from the children's schools in order to explore in detail the role of school-wide factors in predicting children's emotional and behavioural problems and children's resilience. We exploit the hitherto under-used geographical potential of MCS by linking in fine-grained external data for the immediate vicinity from small area statistics. The use of low-level geography enables us to look in detail at the role of neighbourhoods in compromising or promoting child wellbeing. Aspiration is one of the factors we explore as promoting resilience.

A lot of the coding work of children's aspirations was based on the coding initially undertaken by the following postgraduate psychology students whose research projects in 2010-11 on aspirations using the MCS data were supervised by Eirini Flouri: Sarah Godwin, Laura Mora

---

[1] Plewis, I. (2007) *The Millennium Cohort Study: Technical report on sampling* (4th ed.). London: Centre for Longitudinal Studies.

Diaz, Christiana Christoforou, Elli-Natassa Xanthopoulou, Ioanna Konstantopoulou, and Eleni Lekka[2]. This initial coding was refined and extended by Vanessa Moulton whose ESRC project-linked PhD studentship (supervised by Eirini Flouri, Heather Joshi, and Alice Sullivan) investigates the association between aspirations and emotional and behavioural problems in the MCS children. This document describes this extended and more refined coding[3].

---

[3] Coding work is ongoing, and we welcome suggestions for improvement (to e.flouri@ioe.ac.uk).

2　General categorisation of the children's aspirations

(Variable name: *dcadct0a..h*)

In order to aid the use of the children's answers to the aspiration question in MCS4, we grouped the children's responses into categories. Most aspirations were occupational.

2.1　Occupational aspirations

In the main, the groupings were based on:

- the aspired job's type and function
- the broader area of the aspired work.

This distinction was made because there were some very popular occupational aspirations (for example, sports person, teacher, vet, doctor, singer), and these occupations were given their own category. Other aspirations were grouped together by task / function or by occupational area (such as business professionals, skilled trades, service sector).

We located children's occupational aspirations within these broad groupings, where possible. For example:

- sports players were categorised by type of sport. For example, the response "professional footballer" became "sports person (football)"
- teachers, where possible, were categorised by level, if given (for example "teacher (head)"), or by domain, if given (for example "teacher (art)")
- business professionals jobs such as "accountant" or "solicitor" became "business professional (accountant)", and "business professional (solicitor)", respectively
- skilled trades jobs such as "plumber" or "blacksmith" became "skilled trades (plumber)" and "skilled trades (blacksmith)", respectively.

2.2　Non-occupational aspirations

Some aspirations were not occupational. These were grouped into two main categories: "descriptive" and "fantasy".

- **"Descriptive"** was given to responses reflecting states of mind or characteristics. For example, responses such as "happy", "helpful" and "tall" became "descriptive (happy)", "descriptive (helpful)" and "descriptive (tall)", respectively.
- **"Fantasy"** was given to aspirations that were not occupational and did not appear achievable. For example, responses such as "superhero" and "fairy" became "fantasy (superhero)" and "fantasy (fairy)", respectively.

2.3   Other categories

There were three other main groups categorised separately:

- "royalty", distinguished by sub-groups (for example, "king", "queen", "princess")
- "mum", given as "mum generic" (for example, if children wrote only "mum"), "a mum", "like mum" and "work with mum"
- "dad", given as "dad generic" (for example, if children wrote only "dad"), "a dad", "like dad" and "work with dad".

2.4   Detailed children's responses

Some of the children offered explanations for their aspirations or gave very detailed responses. We attempted to capture some of the richness of those answers. For example:

- "I want to be a rich footballer, playing for Chelsea" was categorised as "sports person (football) rich Chelsea"
- "a famous popstar" was categorised as "singer (popstar) famous"
- "a cleaner like my mum", was categorised as "cleaner, like mum".

2.5   Nonresponse, "don't know", "nothing", not interpreted, and multiple aspirations

A number of children's responses could not be categorised as they could not be easily understood (e.g., "A DETER", "ASLNREMAN"). These responses were categorised as "not interpreted".

As for the rest, these were categorised as follows:

- no response at all = blank
- "don't know" = "don't know"
- "nothing" = "nothing".

Some children wrote more than one aspiration, and, as mentioned earlier, we categorised all the aspirations given. If the child's first response was "don't know" or could not be interpreted, but a second response was given, then the first aspiration was coded as "don't know" or "not interpreted", and the second was coded as appropriate.

For 1,433 of the 13,244 children, the first aspiration was "don't know" (N = 607), "blank" (N = 633), "not interpreted" (N = 171), or "nothing" (N = 22).

3 Classifying occupational aspirations into the major Standard Occupation Classification (SOC2000) groups

(Variable name: dcasoc0a..h)

Occupational aspirations were classified using the one-digit Standard Occupation Classification 2000 (SOC2000) from the Office for National Statistics (ONS; www.ons.gov.uk). The SOC2000 classifies occupations into nine major groups, from 1 to 9, with 1 indicating the highest level of occupational status and 9 the lowest. The nine major SOC2000 groups are:

1. Managers and Senior Officials
2. Professional Occupations
3. Associate Professional and Technical Occupations
4. Administrative and Secretarial Occupations
5. Skilled Trades Occupations
6. Personal Service Occupations
7. Sales and Customer Service Occupations
8. Process, Plant and Machine Operatives
9. Elementary Occupations.

For some occupations where the level of SOC2000 is determined by professional vs. non-professional status, we assumed the child was referring to the professional occupation, unless other information was given that would indicate otherwise. For example, "engineer" was assumed to be professional (therefore attracting a value of 2 in **dcasoc0a..h**).

In coding children's answers, we made a number of assumptions. For example,

- an "astronaut" is a scientist rather than a pilot (therefore attracting a value of 2 in ***dcasoc0a..h****);*
- a driver of a sports car (for example, "a racing driver" or "a Formula 1 driver") is coded as a "sports person", whereas a "motorbike rider" is assumed to be a courier and a "car driver" a taxi driver
- "someone who works for the FBI" is a senior policeman
- a "games maker"/"games designer" is someone who designs computer games
- a "painter" is a painter and decorator (and not an artist)
- a "spy" works in military intelligence (therefore attracting a value of 1 in ***dcasoc0a..h***).

In all, for 11,366 of the 13,244 children the first aspiration was an occupational aspiration (and could, therefore, be assigned a SOC value). Therefore, the remaining 1,878 first aspirations were "blank", "don't know", "not interpreted", "nothing", or non-occupational aspirations.

4   Classifying into masculine and feminine aspirations

(Variable name: dcamfx0a..h)

We coded the femininity/masculinity of each aspiration, using the proportion of UK working age women in that occupation. We used the following cutoffs[4]: "masculine" (< 25% women), "integrated" (25% to 49.9% women), "feminine" (50% to 74.9% women), and "ultra-feminine" (>=75% women). The per cent value was the proportion of women in that occupation (SOC2000 Unit Group[5], where possible) using the Quarter 2 (April - June) 2008 Labour Force Survey (LFS; Office for National Statistics). We used the LFS data from the second quarter of 2008, the same year the MCS children were asked what they would like to be when they grow up.

Where information about the percentage of UK working age women in an aspired occupation was not available for a particular unit group in SOC2000, the relevant minor group, sub-major group or major group code in SOC2000 was used. The most detailed classification available was used.

For aspiration categories where no SOC2000 classification could be given (for example, for "fantasy" or "descriptive" responses), we allocated an appropriate gender category where possible. For example, responses such as "mum" and "dad" were coded as "ultra-feminine" and "masculine", respectively. Where we could make no inference about the masculinity/femininity of the aspiration (for example, with descriptive responses such as "happy"), the response was coded as missing.

In all, for 11,652 of the 13,244 children the first aspiration could be coded as feminine, ultra-feminine, masculine, or integrated. Therefore, the remaining 1,592 first aspirations were "blank", "don't know", "not interpreted", "nothing", or missing.

---

[4] Building on the previous work of Alice Sullivan, Heather Joshi and Diana Leonard (Sullivan, A., Joshi, H. and Leonard, D. (2011) Single-sex schooling and labour market outcomes. *Oxford Review of Education* 37, pp. 311-332) and Catherine Hakim (Hakim, C. (1998) *Social change and innovation in the labour market*. Oxford: Oxford University Press).

[5] http://www.ons.gov.uk/ons/guide-method/classifications/archived-standard-classifications/standard-occupational-classification-2000/about-soc-2000/index.html

5   Classifying into extrinsic and intrinsic goals

(Variable name: dcaext0a..h)

Intrinsic aspirations are goals that directly satisfy basic human needs, such as affiliation, personal growth and community. Conversely, extrinsic aspirations are goals such as wealth, fame, and image (Ryan and Deci, 2000[6]). We coded each of the children's aspirations as "extrinsic", "extrinsic-intermediate", "intrinsic-intermediate" or "otherwise". The children's responses were not coded to the usual dichotomy of extrinsic vs. intrinsic because in MCS4 the children were asked what they would like to be when they grow up, but not the reason for their aspiration. Instead, our coding scheme broadly reflected the self-determination continuum (for example, Figure 1 in Ryan and Deci, 2000).

"Extrinsic" were those aspirations reflecting materialistic goals (such as financial success) or concerns about image, power or popularity. Aspirations such as "supermodel", "billionaire" or "popstar" were coded as "extrinsic". "Extrinsic-intermediate" aspirations were goals that could reflect concerns about or preoccupations with financial success, image, praise or popularity (for example, "actor", "singer, "hairdresser", "beautician", "fashion designer"). There were very few children who, unprompted, gave responses reflecting intrinsic goals such as community (for example, "look after poor people"). Therefore, we merged these aspirations with those which could be intrinsic as they involved helping or caring for people and animals, such as "nurse", "vet", "teacher", "doctor" and "clergy". We coded all such responses as "intrinsic-intermediate". Aspirations that we could not identify as "extrinsic", "extrinsic-intermediate" or "intrinsic-intermediate" (such as "farmer") we coded as "otherwise".

In all, for 11,811 of the 13,244 children the first aspiration could be coded as extrinsic, extrinsic-intermediate, intrinsic-intermediate, or otherwise. Therefore, the remaining 1,433 first aspirations were "blank", "don't know", "not interpreted", or "nothing".

---

[6] Ryan, R. M. and Deci, E. L. (2000) Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, pp. 68-78.

Appendix: Variable names and descriptions[7]

Variable name	Variable description	Aspiration
dcadct0a	General categorisation of the child's aspirations	First
dcadct0b		Second
dcadct0c		Third
dcadct0d		Fourth
dcadct0e		Fifth
dcadct0f		Sixth
dcadct0g		Seventh
dcadct0h		Eighth
dcasoc0a	Classifying occupational aspirations into the major Standard Occupation Classification (SOC2000) groups	First
dcasoc0b		Second
dcasoc0c		Third
dcasoc0d		Fourth
dcasoc0e		Fifth
dcasoc0f		Sixth
dcasoc0g		Seventh
dcasoc0h		Eighth
dcamfx0a	Classifying into masculine and feminine aspirations	First
dcamfx0b		Second
dcamfx0c		Third
dcamfx0d		Fourth
dcamfx0e		Fifth
dcamfx0f		Sixth
dcamfx0g		Seventh
dcamfx0h		Eighth
dcaext0a	Classifying into extrinsic and intrinsic goals	First
dcaext0b		Second
dcaext0c		Third
dcaext0d		Fourth
dcaext0e		Fifth
dcaext0f		Sixth
dcaext0g		Seventh
dcaext0h		Eighth

[7] We request that users of these variables acknowledge our work described in this document, and cite as follows: Flouri, E. and Panourgia, C. (2012) *Do primary school children's career aspirations matter? The relationship between family poverty, career aspirations, and emotional and behavioural problems*. CLS Working Paper 2012(5). London: Centre for Longitudinal Studies.

Centre for Longitudinal Studies
Institute of Education
20 Bedford Way
London WC1H 0AL
Tel: 020 7612 6860
Fax: 020 7612 6880
Email cls@ioe.ac.uk
Web www.cls.ioe.ac.uk