



Centre for
Longitudinal
Studies

CLS Cohort Studies

Data Note 2007/4

Derivation of Hope-Goldthorpe
Occupational Classification
for NCDS Sweep 6

Shirley Dex and Kelly Ward

Centre for Longitudinal Studies
Bedford Group for Lifecourse and
Statistical Studies
Institute of Education
20 Bedford Way
London WC1H 0AL
Tel: 020 7612 6860
Fax: 020 7612 6880
Email cls@ioe.ac.uk
Web <http://www.cls.ioe.ac.uk>

CLS Cohort Studies Data Note 2007/4

Derivation of Hope-Goldthorpe Occupational Classification for NCDS Sweep 6

Shirley Dex and Kelly Ward

Centre for Longitudinal Studies, Institute of Education.

This Data Note accompanies syntax devised to create a Hope-Goldthorpe scale classification of occupations for data from the 1958 National Child Development Study (NCDS) Sweep 6 (age 42). It is also possible to edit the variable names in the syntax in order to generate H-G scales for other birth cohort survey sweeps.

National Child Development Study (NCDS)

The National Child Development Study (NCDS) is a continuing, multi-disciplinary longitudinal study which takes as its subjects all those living in Great Britain who were born in one week in March, 1958. NCDS began as the Perinatal Mortality Survey (PMS), and since then seven further surveys have been carried out in order to monitor the physical, educational and social development of respondents. These surveys were carried out in 1965 (NCDS1), 1969 (NCDS2), 1974 (NCDS3), 1981 (NCDS4), 1991 (NCDS5); in 1999/2000 (NCDS6) and in 2004/5 (NCDS7).

User Support Group

This group, supported by CLS staff, provides advice and guidance on the use of NCDS data by:

- providing documentation about the data;
- collating and disseminating information on uses of the data;
- producing publications;
- producing and distributing a newsletter and working papers;
- providing access to non-computerised NCDS data;
- collecting additional information; and
- servicing the User Group.

The User Support Group can be contacted by post, 'phone, fax, or email as shown below:

Cohort Studies User Support Group,
Centre for Longitudinal Studies,
Institute of Education,
20 Bedford Way,
London WC1H 0AL
Tel: +44 0207 612 6864
Fax: +44 0207 612 6880
Email: cohort@cls.ioe.ac.uk
Internet: <http://www.cls.ioe.ac.uk/ncds>

The Hope-Goldthorpe scale

The Hope-Goldthorpe (H-G) scale is a classification system for measuring social or occupational prestige (Goldthorpe and Hope, 1974), based originally on men's occupations. The expressed intention of the H-G scale was 'to construct a scale, which we would interpret as a measure of "general desirability" of occupations, on which occupations of all economically active men could be projected with some small, uniform, and estimable degree of error' (Hope and Goldthorpe, 1974, p.22).

The original scale contained 124 categories arranged in a sequential rank with numbers from the highest, 82.05 (self employed doctors, lawyers and accountants) to the lowest, 17.52, (street vendors and jobbing gardeners). There is a well-established collapsed version of the H-G scale into 36 sub-groups (ibid, Table 6.6 pp 135-141). However, some of the H-G scores given to these 36 groups are the same; which means that the effective number of categories is 24 for this collapsed version.

The derivation of the Hope-Goldthorpe scale was subjected to a very large validation exercise. However, being devised using men's occupations, it has been criticised for this reason, especially when applications to women's occupations are concerned. The fact that it is so detailed in nature means that this is less of a problem compared with more aggregate scales that have lumped occupations held predominantly by women together into just a few categories.

The H-G scale in British Birth Cohorts data

The 1958 National Child Development Study (NCDS) Sweep 5 data contains a Hope-Goldthorpe (H-G) code for the occupations of individuals with current jobs held at the interview. These codes were produced from feeding textual data on occupations collected at the interview through the CASOC coding software, to produce an electronic coding of occupations. Where the electronic coding cannot be done, the software requests that manual intervention occurs from a coder in order to decide how to classify the occupation. This process introduces variability into the coding process.

However the H-G scale was not coded in other sweeps of NCDS or BCS data. In part this is because it is felt to be getting out of date. Over time, occupations die out and new occupations are generated. In addition, occupations can change their prestige status either by becoming more or less prestigious. Some elements which are out of date in the H-G scoring include for example, accountancy and nursing, that have become occupations with graduate entry since the scale was originally devised. This is a common problem in longitudinal data. Over time, instruments and codes ideally need to change to reflect changes in society. However implementing such changes can prevent analysis of change where the same survey instruments and codes are required to measure change. Researchers have continued to use the H-G scale despite its limitations since it has been found to offer an

ordered scale with finely differentiated categories and be highly correlated with other scales (see Johnes, 2006; Evans, 1999).

In order for researchers to be able to analysis change using the H-G scale in NCDS data, a syntax version of the 36- point H-G scale has been devised by CLS researchers which can be applied to NCDS6 data. The devising of the syntax was an iterative process. First, the clear-cut uncontroversial occupations listed in Goldthorpe and Hope’s (1974) description of the 36-point scale were coded. Occupations which failed to be coded were then inspected manually and further syntax devised to code them up until the coding was as complete as possible. Inevitably some occupation codes could not be coded.

It would be possible for researchers to edit the variable names embedded in this syntax to generate H-G scores for other sweeps of British birth cohort data if they so wish.

In drawing up the syntax, use was made of the following NCDS6 variables:

NCDS6 Variable name used in syntax	Description of variables
soc	Occupational SOC90 3 digit codes -
Only available from CLS	Text of occupation codes – use for sample testing of whether coding accurate /plausible
econact	Economic activity status at interview (1 =Full time employee; 2=Part time employee; 3 = fulltime self employed; 4= part time self employed).
cjemps	Size of employer/number of employees. (1=1-9; 2=10-24; 3=25-99; 4=100-499; 5=500 or more)
cjsup2	Whether employee is manager of supervisor. (1=manager; 2=supervisor; 3= neither of above)

An equivalent set of syntax was also devised to apply to the NCDS5 data and this was compared with the existing H-G codes offered in the data. There were some systematic differences in a minority of cases between the codes resulting from these two methods. **Researchers are advised, therefore, if they intend to use this syntax in order to analyse change, to apply the same syntax to all of the sweeps they wish to analyse, rather than compare the codes resulting from this syntax with CASOC plus manual intervention codes.** This will avoid any systematic bias in the coding of the H-G scale from using different methods to code the H-G scores.

Paper using the syntax

Dex, S. Ward, K. and Lindley, J. (2007) *Vertical occupational mobility and its measurement*, Working Paper of ESRC Gender Network, GeNet.

References

Evans, P. (1999) Occupational downgrading and upgrading in Britain, *Economica*, Vol.66, pp.79-96.

Goldthorpe, J. and Hope, K. (1974) *The Social Grading of Occupations: A new approach and scale*, Oxford: Oxford University Press.

Johnes, G. (2006) *Career interruptions and labour market outcomes*, EOC Working Paper Series No.45, Manchester: Equal Opportunities Commission.

APPENDIX

Conversion of SOC 90 to Hope Goldthorpe scale (36 categories) in NCDS age 42 data.

```
recode soc (sysmis =-2) (else=copy).
recode cjemps2 (sysmis =-2) (else=copy).

compute hg=-1.
if ( (econact eq 3) and
    (soc eq 220 or soc eq 221 or soc eq 223 or soc eq 222 or
     soc eq 224 or soc eq 240 or soc eq 241 or soc eq 242 or
     soc eq 250 or soc eq 251 or soc eq 260 or soc eq 361 or
     soc eq 210 or soc eq 211 or soc eq 212 or soc eq 213 or
     soc eq 214 or soc eq 215 or soc eq 216 or soc eq 217 or
     soc eq 218 or soc eq 219 or soc eq 222 or soc eq 252 or
     soc eq 253 or soc eq 312 or soc eq 313) )
    hg=75.

if ( (soc eq 199 or soc eq 139) and
    (econact eq 3 or econact eq 4) )
    hg=75.

if ( (econact ne 3) and
    (soc ge 210 and soc le 224) or
    (soc eq 250 or soc eq 251 or soc eq 262 or soc eq 200 or
     soc eq 201 or soc eq 202 or soc eq 209 or soc eq 253 or
     soc eq 261 or soc eq 260 or soc eq 230 or soc eq 240 or
     soc eq 241 or soc eq 242 or soc eq 252 or soc eq 127 or
     soc eq 231 or soc eq 331 or soc eq 332 or soc eq 270 or
     soc eq 271 or soc eq 312 or soc eq 313 or soc eq 330) )
    hg=71.

if ( ( soc ge 100 and soc le 103) or (soc eq 113 or soc eq 120
    or soc eq 121) )
    hg=69.

if ( (cjemps2 ge 5) and
    (soc eq 110 or soc eq 111 or soc eq 112 or soc eq 122 or
     soc eq 123 or soc eq 130 or soc eq 131 or soc eq 139 or
     soc eq 140 or soc eq 191 ) )
    hg=69.

if ( soc eq 191 and ( econact eq 1 or econact eq 2 ) )
    hg=69.

if ( (iempstat eq 1 or cjemps2 ge 5 ) and
    (soc eq 110 or soc eq 111 or soc eq 112 or soc eq 122 or
     soc eq 123 or soc eq 124 or soc eq 125 or soc eq 126 or
     soc eq 131 or soc eq 139 or soc eq 199) )
    hg=66.

if ( ( soc ge 171 and soc le 179 ) and
    ( econact eq 1 or econact eq 2 ) and
    cjemps2 eq 5)
```

```

hg=66.
if ( soc eq 142 and cjemps2 eq 5)
hg=66.

if ( soc eq 150 or soc eq 151 or soc eq 152 or soc eq 153 or
soc eq 154 or soc eq 155)
hg=65.

if ( soc eq 364 or soc eq 300 or soc eq 301 or soc eq 302 or
soc eq 303 or soc eq 304 or soc eq 309 or soc eq 310 or
soc eq 320 or soc eq 141 or soc eq 390 )
hg=64.

if ( soc eq 710 and (econact eq 1 or econact eq 2) )
hg=64.

if ( (econact eq 3 or econact eq 4) and
(cjemps2 eq 5 or iempstat eq 1) and
(soc ge 171 and soc le 179) )
hg=63.

if ( (cjemps2 le 4) and
(soc eq 110 or soc eq 111 or soc eq 112 or soc eq 122 or
soc eq 123 or soc eq 124 or soc eq 130 or soc eq 131 or
soc eq 139 or soc eq 140 or soc eq 199 or soc eq 125 or
soc eq 126 or soc eq 142) )
hg=62.

if ( (econact eq 3 or econact eq 4) and
(soc eq 292) or (soc ge 380 and soc le 387) or
(soc eq 350 or soc eq 360 or soc eq 361 or soc eq 362 or
soc eq 363) )
hg=62.

if ( (soc ge 171 and soc le 179) and
(econact eq 1 or econact eq 2) and
(cjemps2 eq 3 or cjemps2 eq 4) )
hg=62.

if ( soc eq 710 and (econact eq 3 or econact eq 4) )
hg=62.

if ( (soc eq 123 or soc eq 124) and
(econact eq 3 or econact eq 4) )
hg=62.

if ( (econact eq 1 or econact eq 2) and
(soc eq 190 or soc eq 292) or
(soc ge 380 and soc le 387) or
(soc eq 350 or soc eq 360 or soc eq 361 or soc eq 362 or
soc eq 363) )
hg=61.

if (soc eq 232 and (econact eq 1 or econact eq 2))hg=61.
if (soc eq 233 or soc eq 234 or soc eq 235 or soc eq 239 or
soc eq 132 or soc eq 293

```



```

    or soc eq 340 or soc eq 341 or soc eq 342 or soc eq 343 or
    soc eq 344 or soc eq 345
    or soc eq 346 or soc eq 347 or soc eq 348 or soc eq 349 or
    soc eq 290 or soc eq 291
    or soc eq 370 or soc eq 371 or soc eq 394 or soc eq 395 or
    soc eq 396 or soc eq
    399 or soc eq 391 or soc eq 392) hg=61.

if (soc eq 160 or soc eq 169 or soc eq 170) hg=58.

if ((cjsup2 eq 2) and (soc ge 400 and soc le 440) or (soc eq
452 or soc eq 459 or soc
eq 460 or soc eq 462)) hg=57.

if ((econact eq 3 or econact eq 4) and (cjemps2 le 4 or
iempstat eq 2 or iempstat eq 3)
and (soc ge 171 and soc le 179)) hg=57.

if (soc eq 620) hg=57.
if (soc eq 111 or soc eq 110 and (econact eq 3 or econact eq
4))hg=57.

if ((soc ge 171 and soc le 179) and (econact eq 1 or econact
eq 2) and (cjemps2 eq 1 or
cjemps2 eq 2)) hg=53.

if (soc eq 450 or soc eq 451 or soc eq 463 or soc eq 490 or
soc eq 491 or soc eq
522 or soc eq 525 or soc eq 526 or soc eq 529 or soc eq 543
or soc eq 540 or
soc eq 610 or soc eq 611 or soc eq 612 or soc eq 613)
hg=51.

if ((cjsup2 eq 2) and (soc eq 670 or soc eq 710 or soc eq 720
or soc eq 721 or soc eq
722 or soc eq 730 or soc eq 792)) hg=48.

if (soc eq 515 or soc eq 519 or soc eq 524 or soc eq 311 or
soc eq 860) hg=47.

if (soc eq 516 or soc eq 520 or soc eq 521 or soc eq 523 or
soc eq 541 or soc
eq 544 or soc eq 598) hg=46.
if ((soc eq 393) and (econact eq 1 or econact eq 2)) hg=46

if ((soc eq 393) and (econact eq 3 or econact eq 4)) hg=43.
if ((econact eq 3 or econact eq 4) and (soc eq 393 or soc eq
690 or soc eq
691)) hg=43.
if ((soc ge 171 and soc le 179) and (econact eq 3 or econact
eq 4) and (cjemps2=-2))
hg=43.

if (soc eq 892 or soc eq 896) hg=42.

if (cjsup2 eq 2 and soc eq 441) hg=42.

```

```

if (soc eq 592 or soc eq 800 or soc eq 802 or soc eq 810)
hg=42.

if ((cjsup2 ne 2) and (soc ge 400 and soc le 440) or (soc eq
452 or soc eq 459 or soc
eq 460 or soc eq 462)) hg=40.

if (soc eq 701 or soc eq 702 or soc eq 703)
hg=40.

if (soc eq 430)
hg=40.

if ((soc ge 400 and soc le 440) and
(econact eq 3 or econact eq 4) )
hg=40.

if ( soc eq 510 or soc eq 511 or soc eq 512 or soc eq 513 or
soc eq 514 or soc eq 517 or soc eq 537 or soc eq 550 or
soc eq 551 or soc eq 554 or soc eq 556 or soc eq 557 or
soc eq 560 or soc eq 561 or soc eq 562 or soc eq 563 or
soc eq 569 or soc eq 590 or soc eq 593 or soc eq 600 or
soc eq 601)
hg=38.

if ( soc eq 500 or soc eq 501 or soc eq 502 or soc eq 503 or
soc eq 504 or soc eq 505 or soc eq 507 or soc eq 509 or
soc eq 532 or soc eq 570 or soc eq 571 or soc eq 572)
hg=38.

if ( (econact eq 3 or econact eq 4) and
(soc eq 594 or soc eq 595 ) )
hg= 37.

if ( soc eq 660 or soc eq 661 or soc eq 640 or soc eq 641 or
soc eq 643 or soc eq 644 or soc eq 650 or soc eq 651 or
soc eq 652 or soc eq 659 or soc eq 671 or soc eq 700 or
soc eq 719 or soc eq 790 or soc eq 791 )
hg=37.

if ( (soc eq 690 or soc eq 691) and
(econact eq 1 or econact eq 2 ) )
hg=37.

if ( soc eq 544 or soc eq 814 or soc eq 820 or soc eq 821 or
soc eq 822 or soc eq 829 or soc eq 801 or soc eq 809 or
soc eq 811 or soc eq 812 or soc eq 813 or soc eq 861 or
soc eq 864 or soc eq 869 or soc eq 870 or soc eq 871)
hg=36.

if ( soc eq 533 or soc eq 534 or soc eq 535 or soc eq 536 or
soc eq 597 or soc eq 599 or soc eq 882 or soc eq 885 or
soc eq 886 or soc eq 887 or soc eq 889 )
hg=36.

```

```

if ( (econact eq 1 or econact eq 2) and
      (soc eq 733 ) )
  hg=36.

if ( (cjsup2 gt 2) and
      (soc eq 670 or soc eq 710 or soc eq 720 or soc eq 721 or
       soc eq 722 or soc eq 730 or soc eq 792) )
  hg=35.

if ( soc eq 670 )
  hg=35.

if ( soc eq 721 and (econact eq 1 or econact eq 2))
  hg=35.

if ( soc eq 792 and (econact eq 3 or econact eq 4))
  hg=35.

if ( soc eq 730 and (econact eq 3 or econact eq 4))
  hg=35.

if ( soc eq 720 and (econact eq 1))
  hg=35.

if ( (econact eq 3 or econact eq 4) and
      (soc eq 733 or soc eq 874))
  hg=35.

if ( soc eq 542 or soc eq 518 or soc eq 530 or soc eq 531 or
      soc eq 552 or soc eq 553 or soc eq 555 or soc eq 559 or
      soc eq 573 or soc eq 579 or soc eq 580 or soc eq 581 or
      soc eq 582 or soc eq 591 or soc eq 596 or soc eq 823 or
      soc eq 824 or soc eq 825 or soc eq 826 or soc eq 830 or
      soc eq 831 or soc eq 832 or soc eq 833 or soc eq 834 or
      soc eq 839 or soc eq 840 or soc eq 841 or soc eq 842 or
      soc eq 843 or soc eq 850 or soc eq 851 or soc eq 859 or
      soc eq 899 or soc eq 897 or soc eq 895 or soc eq 894 or
      soc eq 893 or soc eq 891)
  hg=33.

if (soc eq 900 or soc eq 901 or soc eq 902 or soc eq 903 or
      soc eq 904) hg=31.

if (soc eq 506 or soc eq 898 or soc eq 844 or soc eq 890 )
  hg=30.

if (cjsup2 ne 2 and soc eq 441) hg= 28.

if ((econact eq 1 or econact eq 2) and (soc eq 594 or soc eq
      595 or soc eq 874))
  hg= 28.

```

```

if ( soc eq 630 or soc eq 631 or soc eq 642 or soc eq 731 or
    soc eq 862 or soc eq 863 or soc eq 873 or soc eq 880 or
    soc eq 922 or soc eq 923 or soc eq 930 or soc eq 933 or
    soc eq 934 or soc eq 940 or soc eq 673 or soc eq 872 or
    soc eq 881 or soc eq 884)
    hg=28.

if ( soc eq 461 or soc eq 615 or soc eq 619 or soc eq 614 or
    soc eq 953 or soc eq 875 or soc eq 672 or soc eq 699)
    hg=27.

if ( soc eq 621 or soc eq 622 or soc eq 931 or soc eq 932 or
    soc eq 941 or soc eq 950 or soc eq 951 or soc eq 952 or
    soc eq 954 or soc eq 955 or soc eq 956 or soc eq 957 or
    soc eq 958 or soc eq 959 or soc eq 990 or soc eq 999 or
    soc eq 929 or soc eq 921 or soc eq 920 or soc eq 910 or
    soc eq 911 or soc eq 912 or soc eq 913 or soc eq 919 or
    soc eq 883 or soc eq 924)
    hg=18.

if (soc eq 732)
    hg=18.

if ((cjsup2 eq 2) and
    (HG eq 46 or HG eq 38))
    hg=47.

if ( ( cjsup2 eq 2) and (HG eq 36 or HG eq 33 or HG eq 30 or
    HG eq 28))
    hg=42.

if (soc=-2)
    hg=-2.

if (soc=998)
    hg=-3.

if (soc=997)
    hg=-3.

variable labels HG "AGE 42 HOPE GOLDTHORPE SCORE".

value labels HG
-1 'unaccounted for'
-2 'not applicable'
-3 'don t know soc code'.

missing values hg (-9 thru -1).

freq hg.

```

Centre for Longitudinal Studies

Bedford Group for Lifecourse and
Statistical Studies

Institute of Education

20 Bedford Way

London WC1H 0AL

Tel: 020 7612 6900

Fax: 020 7612 6880

Email cls@cls.ioe.ac.uk

Web <http://www.cls.ioe.ac.uk>