

A Note on a Proposed Census-based Irish Social Class Scale for Epidemiological Health Research

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Précis: The social class/prestige scales currently used in Irish research are examined and considered unsuitable for epidemiological research as they are not census-based. The historical development of Socio-Economic Groups in Ireland is outlined and a Social Class Scale based on such groupings is proposed.

I OCCUPATIONAL CLASSIFICATIONS

There are four occupational classifications commonly used in Ireland for research purposes, the British Registrar General's Social Class Scale, the Market Research Scale, the Hall Jones Prestige Scale and the Irish census socio-economic group classification.

The British Registrar General's Social Class Scale

This scale used by the Registrars General for England and Wales, Scotland and, with minor changes, for Northern Ireland, was first employed in the analysis and publication of the 1911 Census of Population for England and Wales. It was the work of T.H.C. Stevenson, the chief medical statistical officer in the General Registry Office, London. Based on occupation he devised an ordinal scale of five social class groupings.

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The scale currently in use is as follows:

- 1 Professional etc. occupations
- 2 Intermediate occupations
- 3 Skilled occupations — (N) = non manual, (M) = manual
- 4 Partly skilled occupations
- 5 Unskilled occupations.

The scale at its inception was probably a social class one in the sense that the income derived from the occupations coded was the deciding factor of position on the scale. However, today occupations are grouped into social class categories in terms of their general standing in the community. "This criterion is naturally correlated with, and its application conditioned by, other factors such as education and economic environment, but it has no direct relationship to the average level of remuneration of particular occupations" (England, 1970, p. x). Therefore the classification should more accurately be described as a social status rather than a social class scale.

This scale is frequently used in medical research in Ireland primarily because it is of long standing and has demonstrated a relationship between class and health status. In comparative research the use of the same social class scale has obvious advantages. But for survey work in Ireland the use of a British Scale has disadvantages, such as its lack of correspondence with Irish demographic and occupational features.

A good example is that of farmers. Whereas the British occupational guide distinguishes between employers and own-account workers without employees in industry and commerce, it does not do so for the farming group. In Ireland farmers, farmers' relatives and farm managers are an important section of the population, comprising 20 per cent in 1971. They also range from farmers with farms of large acreage and high valuation to own-account workers in receipt of "farmers' dole". To assign such a heterogeneous group to one class, as is required by the coding procedure of the British Registrar General's Scale, does not reflect Irish social class differences within the group. Nor is epidemiological investigation possible through the use of the British scale as there is no correspondence between Irish census population data and the five classes used in the scale.

The Market Research Scale¹

Another social class scale commonly used in Ireland is a Market Research one. Here occupation is the determinant of class and a sample of Irish census occupations is used as a glossary aid to coding.

1. Further information available from the Market Research Bureau of Ireland Ltd., Dublin.

The following class categories are used:

- A Upper middle class
- B Middle class
- C¹ Lower middle class
- C² Skilled working class
- D Other working classes
- E Unemployed – on the dole
- F 50+ Farmers with 50 acres or more
- 50- Farmers with less than 50 acres; farm labourers etc.

Very often in the reporting of findings, Classes A, B and C¹ are combined under the broader groupings of white-collar workers, and Classes C², D and E as blue-collar workers. The farming group is generally kept separate. Categories A to E are scaled in prestige, not in economic terms as, for example, lower middle class are higher on the scale than C² even though they may not earn as much money. However, the classes *in toto* can more accurately be regarded not as social-class but as socio-economic groupings because of the separate categorisation of farmers.

The Hall-Jones Scale of Occupational Prestige for Males

This scale is based partly on the findings of a survey of 1,000 representative British males, each asked to ascribe his own occupation, and partly on the judgement of expert sociologists (Hall and Jones, 1950, pp. 31-55).

It has seven categories of social status as follows:

- Class 1 Professionally qualified and high administrative
- Class 2 Managerial and executive (with some responsibility for directing and initiating policy)
- Class 3 Inspectional, supervisory, and other non-manual (higher grade)
- Class 4 Inspectional, supervisory, and other non-manual (lower grade)
- Class 5 (a) routine grades of non-manual work
- (b) skilled manual
- Class 6 Manual, semi-skilled
- Class 7 Manual routine.

The scale has been widely used, in particular by social researchers in Great Britain. In Ireland it is the only scale on which serious evaluative work has been done, principally by sociologists, to make it relevant to an Irish situation. Hutchinson (1969) in his Dublin studies used a modified version of this scale. MacGréil (1977, p. 594) adapted it to include farmers (and thus devised a seven point ordinal and nominal classification) females and “particularly Irish occupational preferences and designations”.

Whelan (1980) in his analysis of the employment conditions and job satisfaction of Dublin male full-time employees (farmers and agricultural workers were excluded) used a modified Hall-Jones scale which create an

extra category by separating the (a) and (b) parts of Class 5 "routine grades of non-manual" and "skilled manual" (see Moser and Hall, 1954). His findings concurred with views previously expressed by Goldthorpe and Hope (1974, pp. 5-6) that the Hall-Jones classification cannot be regarded as a prestige or status scale in the sociological sense. Its main value lies in differentiating between the socio-economic aspects of the different occupational strata. Interestingly, Whelan (1980, p. 41) uses four objective socio-economic groups formed by collapsing the eight category Hall-Jones classification. His occupational sample using these categories corresponded very closely to the census distribution for Dublin, again excluding agricultural occupations, (see pp. 143-144). This being so it makes better sense to use combinations of the Irish census socio-economic groupings and the accompanying comprehensive coding guide, which enables the objective allocation of occupations to each category. The Hall-Jones type of coding guide, on the other hand, covers only a fraction of existing Irish occupations, which presents considerable coding difficulty and unreliability.

II THE IRISH SOCIO-ECONOMIC GROUP CLASSIFICATION

The Irish Socio-Economic Group classification is not an ordinal scale (as is the British Registrar General's social-class scale) but a nominal grouping of occupations. The first census held in Ireland was in 1821. Although early censuses collected information on occupations, the data were framed on the English model, inappropriate for Ireland and resulting in a high percentage (over 50) of persons being placed in the "unspecified" group.

It was not until the Irish Census of Population in 1951 (Ireland 1954, Vol. 3) that national data by social group were given, but no explanatory notes were provided as to how the occupations were grouped and on what basis.

In the 1961 Census of Population (Ireland 1964, Vol. 3, p. v) there were explanatory notes relating to the classification of social groups. "The social group of each gainfully occupied person was decided by his or her occupation, or, in some cases, by a combination of occupation and employment status. Retired persons were classified to the social group corresponding to their former occupation, while other non-gainfully occupied persons were classified to the social group of the persons on whom these were deemed dependent". A detailed list showing the allocation of occupations to social groups was given, together with changes since the 1951 Census.

In 1966 the population was classified according to "socio-economic group" instead of the former "social group", on the basis of occupation or in some cases by a combination of occupation and employment status (Ireland 1969, Vol. IV). The 11 categories plus a residual one were similar to those used in

1961. The change was simply one of nomenclature: the changing of "social group" to that of "socio-economic group". The same 11 categories were used in the 1971 Census (Ireland 1975, Vol. IV), as follows:

- 0 Farmers, farmers' relatives and farm managers
- 1 Other agricultural occupations and fishermen
- 2 Higher professional
- 3 Lower professional
- 4 "Self employed, employs others" and managers
- 5 Salaried employees
- 6 Intermediate non-manual
- 7 Other non-manual workers
- 8 Skilled manual workers
- 9 Semi-skilled manual workers
- X Unskilled manual workers
- Y Unspecified

For the first time socio-economic group was described as containing occupations "considered generally similar as regards the level of skill or educational attainment required". Changes also occurred in the 1971 census. The main one was the allocation of retired persons to the "unspecified" category,² which greatly increased its numbers over the 1966 figures. Certain occupations were re-classified. Questions concerning occupation were not asked in the 1979 census of population.

III A PROPOSED IRISH SOCIAL CLASS SCALE

In a study of mental illness by the Medico-Social Research Board a social class scale, based on the existing Central Statistics Office (CSO) socio-economic groupings, was devised to see whether a relationship existed between social class and treated rates for mental illness in three geographically defined study areas. Occupation was used as an index of class. The value scaled was not exclusively income derived from occupation, but as in the Weberian tradition (see Runciman, 1969, p. 47) consideration was given to "opportunities for upward mobility, advantages in kind, provisions for retirement and security of employment". These class criteria are more easily quantified than considerations of social status or standing in the community. A class scale seems more appropriate to Irish society which, unlike Britain, has little tradition of a hierarchy of status. The view expressed by Weber (see Gerth and Mills, 1948, p. 190) almost 100 years ago on the class situation is still valid today that the "possibility of a style of life expected for members of a status group is usually conditioned economically".

The three basic requirements of a scale are that it:

2. It is proposed to return to the practice of assigning retired people to their former occupational category in the analysis of the 1981 census data.

- 1 Fulfils the research purpose, in this case, an epidemiological investigation;
- 2 Is reliable, in that occupations encountered can be coded to the scale categories;
- 3 Is valid and measures what it purports to.

As far as the first requirement is concerned, by using combinations of the 11 Socio-economic Groups (SEGs) one ensures that baseline census data are always available. SEG information is obtainable by District Electoral Division, the smallest geographical unit used by the CSO.

The CSO classification of occupations for 1971 (latest available) lists approximately 7,200 different occupations assigning each to one of the 135 occupational unit groups and to one of the 11 SEGs. By using this index it is possible to code with reliability the occupational data from any study to a social class category. It also ensures high inter-rater reliability between coders. This index is updated at every full census.

The validity of the scale poses problems. Ideally each of the dimensions of the value scaled (*viz*: income; opportunities for upward mobility; advantages in kind; provision for retirement, and security of employment) should receive a relative weight to yield a score for each social class category. Then a sample of occupations within the category should be randomly selected from the general population to check that they meet the pre-determined score or score range of the category. If the *raison d'être* of such a scale gained acceptance in Ireland, considerable investigation would be required to validate the criteria used. Useful work of this nature associating income and fringe benefit rewards to Irish occupations has been done by Whelan (1980).

The proposed social class scale comprises six mutually exclusive groups as follows:

<i>Social Class Scale</i>			
<i>Social Class Scale</i>	<i>SEG Code</i>	<i>Description of occupations</i>	<i>Per cent of 1971 population</i>
1	2	Higher professional	3.00
2	3	Lower professionals	
	4	Employers and managers	
	0	Farmers with land valuation of £100 or more	10.11

3	5	Salaried employees	
	0	Farmers with land valuation of £20 and under £100	11.93
4	6	Intermediate non-manual workers	
	8	Skilled manual workers	
	0	Farmers with land valuation of under £20	37.32
5	7	Other non-manual workers	
	9	Semi-skilled manual workers	
	1	Other agricultural occupations and fishermen	20.30
6	X	Unskilled manual workers	8.66
	Y	Unspecified	8.22

The census occupational unit groups assigned to each class is shown on pp. 213-215.

Farmers were divided on the basis of land valuation because this information is collected by the Census office. The figure of £100 was selected as one cut-off point because farmers with that valuation and over were liable to income tax. The lower figure of £20 was selected as farmers with land valuation below £20 were eligible for the "farmers' dole" in 1976, when the scale was devised.

In Social Class 1, are the "higher professional" occupations, of judges, doctors, architects etc., comprising three per cent of the 1971 population.

Social Class 2, contains the combined "lower professional" occupations such as, those of teachers, nurses, actors and librarians, those of "self-employed, employs other and managers" and "farmers with land valuation of £100 and over". They make up 10 per cent of the population.

In Social Class 3 are "salaried employees" of senior rank and "farmers with land valuation of £20 to under £100" — 12 per cent of the population. To date it has been customary to maintain a distinction between manual and non-manual workers, but farmers with the security of their farms and the financial and other advantages accruing to them under the EEC could legitimately be combined with "salaried employees" of senior rank.

Social Class 4, contains the highest percentage, 37, of the 1971 population. It includes "intermediate non-manual workers" such as, stationmasters, commercial travellers, clerks, typists, gardai; "skilled manual workers", such as,

builders, plumbers, electricians and "farmers with land valuation of under £20". Some of the reasons for combining these occupations are the current high wages paid to skilled manual workers and their opportunity for upward mobility from, for example, electricians or builders to employers. Farmers always have the security of their land which compensates for their lower income *vis-à-vis* other occupations in that category. It would be possible to sub-divide this SEG as in Britain into non-manual (SEG 6) and manual (SEG 8 and 0). Whelan (1980, p. 126) stressed the importance of maintaining the distinction of manual and non-manual categories. His study findings showed that while skilled manual workers' average gross weekly earnings were somewhat higher than those of routine non-manual workers, the distribution of fringe benefits such as sick pay, pension and incremental scale favoured the non-manual workers rather than the manual ones.

Social Class 5, 20 per cent of the population, contains "other non-manual workers"; "semi-skilled manual workers", such as, coal, gas and chemical workers, textile workers, and "other agricultural occupations and fishermen". Our reason for according a lower class position to the "other non-manual", category than to the skilled manual group is that if the occupations were coded using the British Registrar General's Glossary of Occupations, almost 60 per cent would be considered either semi- or unskilled manual. This "other non-manual" category contains an extremely varied group of occupations ranging from school matrons, cooks and air hostesses to domestic workers, street vendors and hawkers, and was the most difficult to scale. It comprises 10 per cent of the total population and placing these occupations in the Social Class 5 category misclassifies about four per cent of the population.

The final, Social Class 6, group consists of "unskilled manual workers", examples of which are labourers and navvies. They make up nine per cent of the population.

A major constraint in the construction of this Social Class Scale was the existing census occupational or socio-economic categories and their corresponding population figures. It was not possible to interfere with these groupings if study findings were to be rated.

Output from the 1981 Census of Population should be able to provide, on request, information on SEG and farmers' valuation for the Irish District Electoral Divisions cross tabulated by age, sex and marital status. Representation to this effect has already been made to the CSO as lack of such detail from the 1971 census created problems for the investigation of social class.

A question concerning the employers' number of employees should be asked at the next census of population. This information would then allow for employers with 25 or more employees to be placed in Social Class 1. Their income, and payment in kind, would justify their inclusion with the

higher professional group.

Consideration should be given to the elimination of the “other non-manual workers” Category (SEG 7) and the re-distribution of occupations to more appropriate categories (the allocation of a dual code to these occupations would get around the problem of comparison with former years).

It is not denied that the Social Class Scale just described could be improved with the discussion and co-operation of the Central Statistics Office, researchers and social scientists.

In conclusion, “epidemiologists and other socio-medical scientists may take comfort that, in the past, simple and crude methods have yielded rich results. Insistence on perfectly valid and reliable measures can only paralyse research” (Susser and Watson, 1971, p. 123). A census-based Social Class Scale is urgently required for health research in Ireland.

Social class groups in proposed scale and the Irish CSO occupational unit groups assigned to them

<i>Social Class 1</i>	Technical and related workers
Professed clergymen and nuns	(n.e.s.)
Other religious occupations	Proprietors (self employed, employs others) and managers in wholesale or retail trade
University professors and lecturers	Garage proprietors (self employed, employs others) and managers
Medical practitioners	Proprietors (self employed, employs others) and managers – Service Workers
Dental practitioners	Senior officials – Civil Service and Local Authority
Engineers	Directors, managers and company secretaries
Surveyors and architects	Farmers and farmers’ sons, daughters and other relatives, assisting on the farm, with land valuation of £100 or more
Chemists and other scientists	<i>Social Class 3</i>
Accountants	Inspectors and supervisors
Judges, barristers and solicitors	Aircraft pilots, navigators and flight engineers
Veterinary surgeons	Ships’ officers
Professional workers (n.e.s.)	
<i>Social Class 2</i>	
Teachers	
Nurses	
Pharmacists and dispensers	
Other medical workers	
Authors, journalists and editors	
Actors, entertainers and musicians	
Painters, sculptors and commercial artists	
Social workers	

Commercial travellers and manufacturers' agents
 Insurance agents
 Insurance brokers and financial agents
 Auctioneers, valuers and other salesmen
 Armed forces – commissioned officers
 Farm managers, market gardeners and nurserymen
 Farmers and farmers' sons, daughters and other relatives assisting on the farm, with land valuation of £20 and under £100

Social Class 4

Clerks
 Typists
 Proprietors (self employed, without employees) in wholesale or retail trade
 Garage proprietors (self employed, without employees)
 Shop assistants and barmen
 Proprietors (self employed, without employees) – Service workers
 Garda sergeants and lower ranks
 Draughtsmen
 Armed forces – other ranks
 Mine and quarry workers
 Turf workers
 Telephone installers and repairers
 Linesmen and cable jointers
 Electricians and electrical fitters
 Radio and television mechanics
 Fitters and mechanics
 Vehicle builders and assemblers
 Plumbers and gas fitters
 Sheet metal workers
 Structural metal and metal plate workers

Welders and cutters
 Machine tool setters and operators
 Precision instrument and watch and clock makers
 Goldsmiths, silversmiths and jewellery makers
 Carpenters, joiners and cabinet makers
 Sawyers and woodworking machinists
 Other woodworkers
 Boot and shoe makers (factory)
 Boot and shoe makers and repairers (not factory)
 Other leather and leather substitute workers
 Weavers and related workers
 Bleachers, dyers and finishers
 Tailors and dressmakers
 Cutters
 Upholsterers and coach trimmers
 Millers
 Bakers, pastrycooks and biscuit makers
 Makers of beverages
 Compositors, monotype and linotype operators
 Printers (so described)
 Printing press operators
 Other paper and printing workers
 Glass and ceramics workers
 Workers in metal manufacture
 Workers in rubber and rubber products
 Craftsmen (n.e.s.)
 Builders, contractors and clerks of works
 Bricklayers
 Masons and stone cutters
 Plasterers
 Other tradesmen
 Painters and decorators

Crane and hoist operators	Sportsmen and related workers
Earth moving and other construction machinery operators	Other electrical and electronic workers
Foremen and supervisors of manual workers	Other engineering and related trades workers
Railway engine drivers	Spinners, doublers, winders and reelers
Sailors	Knitters and knitting and hosiery machine operatives
Farmers and farmers' sons, daughters and other relatives assisting on the farm, with land valuation of under £20	Sewers, embroiderers and machinists
	Other textile and clothing workers
	Makers of sugar and chocolate confectionery, jams and jellies
<i>Social Class 5</i>	Milk processors and makers of dairy products
Signalmen and level crossing keepers	Meat curers, canners and preservers
Porters and ticket collectors	Other makers of food
Drivers of buses	Makers of tobacco products
Drivers of other road passenger vehicles	Makers of paper and paper products
Drivers of roads goods vehicles	Coal gas and chemical workers
Bus conductors	Workers in plastics
Postmen and post office sorters	Other workers in other products
Telephone, telegraph and radio operators	Stationary engine operators, boiler firemen and stokers
Other transport and communication workers	Dock labourers
Warehousemen and storekeepers	Lorry drivers' helpers
Roundsmen	Messengers
Street vendors, hawkers and newspaper sellers	Packers and bottlers
Housekeepers and matrons of schools, etc.	Charwomen and office cleaners
Chefs and cooks	Laundry workers, dry cleaners and pressers
Waiters and waitresses	Agricultural labourers
Maids and related workers	Jobbing gardeners, groundsmen and gardeners' labourers
Barbers and hairdressers	Other agricultural workers
Caretakers	Foresters and forestry labourers
Watchmen and related workers	
Hospital and ward orderlies, hospital porters and attendants	<i>Social Class 6*</i>
Other service workers	Labourers and unskilled workers (n.e.s.)

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