

SHORT REPORT

The historical specificity of early life car ownership as an indicator of socioeconomic position

A Ellaway, S Macintyre, L McKay

J Epidemiol Community Health 2003;57:277-278

It has consistently been shown in the UK that those living in households with access to a car have lower mortality rates than those without household car access.¹ It has usually been inferred from this that car ownership is a good marker of material living standards,² and it has therefore been incorporated in several measures of area deprivation. It is often used in epidemiological studies as a measure of socioeconomic status in the absence of good data on income or occupational social class. Increasing attention has recently been given to a life course approach to socioeconomic determinants of health, with various indicators including car ownership being used to measure early in life conditions.³ The way in which the meaning of car access, and its role as a predictor of health outcomes, might vary across place and time has rarely been explored. We present data here suggesting that its significance may differ historically within the UK.

PARTICIPANTS, METHODS, AND RESULTS

Two cohorts, born around 1932 (n=706) and 1952 (n=717), participating in the West of Scotland Twenty-07 study⁴ were asked in 1995, as part of a suite of questions about childhood socioeconomic conditions: "how old were you when you or your household first owned a car?". Table 1 compares across the cohorts the proportion who: had never had a car, and age in groups, and mean age, at which respondents reported their household first having a car, by social class (using the registrar general's classification of the current or most recent occupation

of the head of household). A much higher proportion of those in the 1932 cohort (23%) than in the 1952 cohort (8%; $\chi^2=213.3$, $df=3$, $p<0.001$) reported that their household had never owned a car. The mean age at which respondents' households first had a car varied by social class in the expected direction, but was younger in the 1952 cohort; for example, the mean age at which households in social class II in the 1932 cohort acquired a car was the same as for those in social class V in the 1952 cohort.

COMMENT

We suggest it is important take account of the historical context of measures such as household car access. The 1932 cohort were children in the depression and second world war, the 1952 cohort were born during the postwar baby boom and experienced the end of food rationing and establishment of universal health and welfare system. Car ownership was comparatively rare when the older cohort was born (around 50 per thousand population), and doubled to around 100 per thousand population when the later cohort was born. Car ownership was likely to have been a more potent marker of family advantage in childhood among the older compared with the younger cohort. One should therefore be cautious in using household car access in childhood or youth as a measure of socioeconomic position or access to material resources in all age samples, as the significance of the measure may well vary by age cohort. Although the need to be wary about the

Table 1 Distribution within social class groups of age at which respondents or their household first had a car

	Age at which you or your household first had a car									
	Never had a car		<18 years of age		19-30 years of age		31+ years of age		Mean age (y)	
	%	n	%	n	%	n	%	n	Mean	n
<i>1952 cohort</i>										
Social class										
I	-	-	9.7	7	81.9	59	8.3	6	23.6	72
II	4.6	11	16.7	40	67.1	161	11.7	28	23.9	229
III non-manual	8.2	7	20.0	17	64.7	55	7.1	6	22.6	78
III manual	11.0	26	12.3	29	58.1	137	18.6	44	25.4	210
IV	18.8	12	3.1	2	50.0	32	28.1	18	28.4	52
V	20.0	4	5.0	1	45.0	9	30.0	6	30.2	16
All 1952 cohort	8.4	60	13.4	96	63.2	453	15.1	108	24.7	657
										p<0.001
<i>1932 cohort</i>										
Social class										
I	-	-	3.8	2	67.9	36	28.3	15	29.1	53
II	10.9	16	4.8	7	48.3	71	36.1	53	30.4	131
III non-manual	22.7	25	0.9	1	31.8	35	44.5	49	33.6	85
III manual	19.4	47	1.2	3	43.8	106	35.5	86	32.1	195
IV	39.6	44	0.9	1	18.0	20	41.4	46	37.1	67
V	65.1	28	-	-	11.6	5	23.3	10	35.6	15
All 1932 cohort	22.7	160	2.0	14	38.7	273	36.7	259	32.3	546
										p<0.001
All respondents who never had a car	15.5	220	7.7	110	51.0	726	25.8	357	28.2	1203

supposed continuity of indicators has been noted in relation to occupational social class,⁵ it also applies to other commonly used measures such as housing tenure, education, sharing a bedroom, having indoor toilet facilities, etc. Contextualising measures of socioeconomic position in terms of the nearest census or available routine surveys is advised.

ACKNOWLEDGEMENTS

All authors are funded by the UK Medical Research Council, who also funded the West of Scotland Twenty-07 Study. We are grateful to Kate Hunt for suggesting comparing the two generations, Geoff Der for comments on an earlier draft, and all the participants and interviewers in the Twenty-07 Study.

.....

Authors' affiliations

A Ellaway, S Macintyre, L McKay, MRC Social and Public Health Sciences Unit, Glasgow, UK

Conflicts of interest: none.

Correspondence to: Dr A Ellaway, MRC Social and Public Health Sciences Unit, 4 Lilybank Gardens, Glasgow G12 8RZ, UK; anne@msoc.mrc.gla.ac.uk

Accepted for publication 12 September 2002

REFERENCES

- 1 **Filakti H**, Fox J. Differences in mortality by housing tenure and by car access. *Popul Trends* 1995;**81**:27–30.
- 2 **Davey Smith G**, Shipley MJ, Rose G. Magnitude and causes of socioeconomic differentials in mortality—further evidence from the Whitehall Study. *Journal Epidemiol Community Health* 1990;**44**:265–70.
- 3 **Davey Smith G**, Hart C, Blane D, *et al*. Adverse socioeconomic conditions in childhood and cause specific mortality: prospective observational study. *BMJ* 1998;**316**:1631–5.
- 4 **Macintyre S**, Annandale E, Ecob R, *et al*. The West of Scotland Twenty-07 Study: health in the community. In: Martin C, McQueen D, eds. *Readings for a new public health*. Edinburgh: Edinburgh University Press, 1989.
- 5 **Rose D**, O'Reilly K, eds. *Constructing classes: towards a new social classification for the UK*. Swindon: ESRC/ONS, 1997.

Find out what's in the latest issue
the moment it's published

Email Alerts

Sign up to receive the table of contents by email every month. You can select from three alerts: Table of Contents (full), TOC Awareness (notice only); *Journal of Epidemiology and Community Health* related announcements.

www.jech.com