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SUMMARY of *several* MALE LIFE TABLES.

By Dr. WILLIAM OGLE, M.A., M.D., F.R.C.P.

THE following compendious table has been drawn up in a form that will facilitate ready comparison between several life tables, based on the mortality of males, either in different ranks of life, or living under different conditions of time or place, or selected as being in a healthy condition at the date when they first came under observation. It has been thought that such a summary table may be of use to those who are interested in the question of class mortality—a subject that has been recently discussed before this Society.

The table gives in its successive columns the percentage of males of 10, 15, 20, &c., years of age, who, according to the data in the several life tables, survive 5, 10, 15, &c., years.

The life tables thus summarised are—

(1.) *The New English Life Table*.—This is a table based on the mortality of all males in England and Wales in the decennium 1871-80. It was constructed by myself, and published in the supplement to the Forty-fifth Annual Report of the Registrar-General.

(2.) *The Old English Life Table*.—This is the well known table constructed by Dr. Farr, on the basis of the mortality in England and Wales in the seventeen years 1838-54.

(3.) *The Healthy Males Table*.—This is the Healthy Males table of the Institute of Actuaries, and is based on the experience of the principal insurance societies in regard to insured, and therefore exceptionally healthy, lives.

(4.) *The Healthy Districts Table*.—This is a table constructed by Dr. Farr, on the basis of the male mortality in 1849-53 in sixty-three selected districts of England and Wales, in none of which had the mean annual death-rate during the decennium 1841-50 exceeded 17 per 1,000. It is printed in the Thirty-third Annual Report of the Registrar-General.

(5.) *The Upper Class Experience Table*.—This is a table constructed by Mr. C. Ansell, from data collected by him as to men in the upper and the professional classes. It is given in his "Statistics of Families in the Upper and Professional Classes."

(6.) *The Clerical Experience Table*.—This is a table based on data collected by the Rev. John Hodgson as to rather more than 5,000 clergymen who lived between 1760 and 1860. The table is

published in Mr. Hodgson's "Observations on Duration of Life among the Clergy of England and Wales."

It is not proposed to enter here on a detailed comparison of these tables; still a few remarks upon them may be permissible.

A. The Old and the New English Tables may be compared in order to see what change has occurred in the general male mortality in the interval between 1838-54 and 1871-80. The comparison shows that at the earlier date the chances were less favourable at the younger ages, and more favourable at the older ages than at the more recent date.

E.g., of 100 children just 10 years of age 89 would survive after twenty more years by the new table, but only 86 by the old table; while on the other hand after an interval of fifty years the survivors by the old table would be 52, but only 51 by the new table.

B. The Healthy Males Table may be compared either with the Old or the New English Table, but preferentially with the Old Table as nearer it in date. It shows, as might be anticipated in a table based on male lives that have been insured and were presumably healthy at the date of insurance, considerably larger survival figures throughout than does the English Life Table.

C. The Healthy Males Table may also be compared with the Healthy Districts Table. Such comparison tells in favour of the H.M. Table for the earlier ages and for short survival periods; while the reverse is the case, and the advantage is on the side of the Healthy Districts, at the more advanced ages and for long survival periods.

E.g., of 100 males aged 15 there are 26 survivors after an interval of sixty years by the H.M. Table, but 31 by the H.D. Table; whereas after shorter intervals up to 25 years, there are more survivors of the Healthy Males than in the Healthy Districts.

This is readily intelligible. The H.D. Table was based on the mortality in certain selected districts which were considered to have been healthy because the general death-rate had been exceptionally low, districts therefore in which most probably the death-rate had been exceptionally low at every age-period; but the H.M. Table was based on males exceptionally healthy only at the start, that is at the date of insurance. Thus the difference at starting between the two tables is very small, and such difference as exists is in favour of the healthy males; but in course of time the advantage derived by them from their original selection becomes smaller and smaller, and at last is entirely wiped out and surpassed by the effects of what may almost be called the continuous selection of healthy lives in the Healthy District Table.

D. The Upper Class Experience Table may be compared with

the Old English Life Table to show the effects of comparatively easy circumstances. Doubtlessly were the figures given for children under 10, the comparison would be enormously in favour of the Upper Class Table; but taking children of 10 years of age, with whom the tables begin, there is not much advantage on the side of the upper class for short periods of survival; the survivors after five years are the same in number in each table; then 95, 91, 87, 83 are the survivors per cent. after 10, 15, 20, 25 years by the Upper Class Table, while the figures are one less at each interval by the English Table. So also at 20 and 25 years of age, the chances of survival for the short periods of 5 or 10 years are almost as good for the general population as for the upper classes. But the difference between the two becomes very great when either more advanced ages are taken as the starting point, or longer periods of survival considered. Thus of 100 children just 10 years old, 32 survive after sixty years' interval by the English Table, but 43 by the Upper Class Table; and of 100 men 55 years of age, 87 are alive after five years' interval by the English Table, but 91 by the Upper Class Table. It is in the latter part of life that the advantages of easy circumstances are most conspicuous. In youth or early manhood, so far as immediate chances of living go, there is much more equality.

E. The Clerical Experience Table may be most appropriately compared with the Upper Class Table, which includes men engaged in all the higher professions. The advantage is largely on the side of the clergy in all the earlier periods of life, as might be anticipated, seeing that no very unhealthy men are admitted into the clerical ranks; but strangely the advantage appears to be on the other side for the later ages or for long survivals. Thus of clergymen aged 35 a larger percentage survives than is the case with the upper classes generally at each quinquennium until 60 years of age are reached; then in the next quinquennium the number of survivors in the two groups is the same, namely, 62; and after this the percentage of survivors is lower for the clergy than for the upper classes generally. It is not easy to see any satisfactory explanation of this, for the wear and tear of a clergyman's life is probably much less on an average than the wear and tear of other professional lives, and clerical habits are surely favourable to vitality in a more than average degree, so that it might fairly be expected that the advantage enjoyed by clergymen in the earlier ages would increase rather than diminish with the advance of years. It is impossible therefore to avoid the suspicion that these tables, or one or other of them, have been based on too small a number of observations.

Age	Life Table.	Percentage of Males that Survive												
		5 years.	10 years.	15 years.	20 years.	25 years.	30 years.	35 years.	40 years.	45 years.	50 years.	55 years.	60 years.	65 years.
10	New English	98	96	93	89	84	79	74	67	60	51	42	31	20
	Old	98	94	90	86	82	77	72	66	59	52	43	32	21
	Healthy Males	98	96	93	90	86	82	78	73	67	59	49	38	26
	„ Districts.....	98	96	92	89	85	81	77	73	68	62	53	43	30
	Upper Class Experience	98	95	91	87	83	79	75	70	65	59	51	43	?
	Clerical Experience.....	—	—	—	—	—	—	—	—	—	—	—	—	—
15	New English	98	94	90	86	81	75	68	61	52	43	32	21	—
	Old	97	93	88	84	79	74	68	61	53	44	33	22	—
	Healthy Males.....	98	95	91	88	84	79	74	68	60	50	39	26	—
	„ Districts.....	97	94	90	86	83	79	74	69	63	54	43	31	—
	Upper Class Experience	97	93	88	84	80	76	71	66	60	52	43	?	—
	Clerical Experience	—	—	—	—	—	—	—	—	—	—	—	—	—
20	New English	97	93	88	83	77	70	62	54	44	33	21	—	—
	Old	96	91	87	82	76	70	63	55	45	34	23	—	—
	Healthy Males.....	97	93	90	86	81	76	69	61	51	40	27	—	—
	„ Districts.....	96	93	89	85	81	76	71	65	56	45	32	—	—
	Upper Class Experience	96	91	87	83	78	73	68	62	54	45	?	—	—
	Clerical Experience	—	—	—	—	—	—	—	—	—	—	—	—	—
25	New English	96	91	86	79	73	65	56	45	34	22	—	—	—
	Old	95	90	85	79	73	66	57	47	36	24	—	—	—
	Healthy Males.....	97	93	88	84	78	71	63	53	41	28	—	—	—
	„ Districts.....	96	92	88	84	79	74	67	58	46	33	—	—	—
	Upper Class Experience	95	91	86	82	76	71	65	56	47	?	—	—	—
	Clerical Experience.....	97	94	91	87	82	76	68	58	46	33	—	—	—
30	New English	95	89	83	76	67	58	47	35	23	—	—	—	—
	Old	95	89	83	77	69	60	49	38	25	—	—	—	—
	Healthy Males.....	96	92	87	81	74	66	55	42	29	—	—	—	—
	„ Districts.....	96	92	87	82	77	70	60	48	34	—	—	—	—
	Upper Class Experience	95	91	86	80	75	70	59	49	?	—	—	—	—
	Clerical Experience.....	97	94	90	85	78	70	60	47	34	—	—	—	—
35	New English	94	87	80	71	61	50	37	24	—	—	—	—	—
	Old	94	88	81	73	63	52	40	26	—	—	—	—	—
	Healthy Males.....	95	90	84	77	68	57	44	30	—	—	—	—	—
	„ Districts.....	96	91	86	80	73	63	50	36	—	—	—	—	—
	Upper Class Experience	95	90	84	79	71	62	51	?	—	—	—	—	—
	Clerical Experience.....	96	92	87	81	72	62	49	35	—	—	—	—	—
40	New English	93	85	75	65	53	39	26	—	—	—	—	—	—
	Old	93	86	77	67	55	42	28	—	—	—	—	—	—
	Healthy Males.....	95	88	81	72	60	46	31	—	—	—	—	—	—
	„ Districts.....	95	90	84	76	66	53	37	—	—	—	—	—	—
	Upper Class Experience	95	88	83	75	65	54	?	—	—	—	—	—	—
	Clerical Experience	96	90	83	75	64	51	36	—	—	—	—	—	—
45	New English	91	81	70	57	43	28	—	—	—	—	—	—	—
	Old	92	83	72	59	45	30	—	—	—	—	—	—	—
	Healthy Males.....	93	85	76	63	49	33	—	—	—	—	—	—	—
	„ Districts.....	94	88	80	69	55	39	—	—	—	—	—	—	—
	Upper Class Experience	93	87	79	69	57	?	—	—	—	—	—	—	—
	Clerical Experience.....	94	87	78	67	53	38	—	—	—	—	—	—	—

Age.	Life Table.	Percentage of Males that Survive											
		5 years.	10 years.	15 years.	20 years.	25 years.	30 years.	35 years.	40 years.	45 years.	50 years.	55 years.	60 years.
50	New English	89	77	62	47	30	—	—	—	—	—	—	—
	Old „	90	78	65	49	32	—	—	—	—	—	—	—
	Healthy Males	91	81	68	52	35	—	—	—	—	—	—	—
	„ Districts.....	93	85	73	59	42	—	—	—	—	—	—	—
	Upper Class Experience	94	85	74	61	?	—	—	—	—	—	—	—
	Clerical Experience	92	83	71	56	40	—	—	—	—	—	—	—
55	New English	86	70	52	34	—	—	—	—	—	—	—	—
	Old „	87	72	55	36	—	—	—	—	—	—	—	—
	Healthy Males	88	74	57	39	—	—	—	—	—	—	—	—
	„ Districts.....	91	79	63	45	—	—	—	—	—	—	—	—
	Upper Class Experience	91	79	65	?	—	—	—	—	—	—	—	—
	Clerical Experience.....	90	77	61	43	—	—	—	—	—	—	—	—
60	New English	81	61	40	—	—	—	—	—	—	—	—	—
	Old „	83	63	42	—	—	—	—	—	—	—	—	—
	Healthy Males	84	65	44	—	—	—	—	—	—	—	—	—
	„ Districts.....	86	69	49	—	—	—	—	—	—	—	—	—
	Upper Class Experience	87	72	?	—	—	—	—	—	—	—	—	—
	Clerical Experience.....	85	68	48	—	—	—	—	—	—	—	—	—
65	New English	75	49	—	—	—	—	—	—	—	—	—	—
	Old „	76	50	—	—	—	—	—	—	—	—	—	—
	Healthy Males	77	52	—	—	—	—	—	—	—	—	—	—
	„ Districts.....	80	57	—	—	—	—	—	—	—	—	—	—
	Upper Class Experience	83	?	—	—	—	—	—	—	—	—	—	—
	Clerical Experience	79	56	—	—	—	—	—	—	—	—	—	—
70	New English	65	—	—	—	—	—	—	—	—	—	—	—
	Old „	66	—	—	—	—	—	—	—	—	—	—	—
	Healthy Males	67	—	—	—	—	—	—	—	—	—	—	—
	„ Districts.....	71	—	—	—	—	—	—	—	—	—	—	—
	Upper Class Experience	?	—	—	—	—	—	—	—	—	—	—	—
	Clerical Experience	71	—	—	—	—	—	—	—	—	—	—	—