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The Height of Irishmen and Englishmen
in the 1770s: Some Evidence
from the East India Company Army Records

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THE HEIGHT OF IRISHMEN AND ENGLISHMEN IN THE 1770S :
SOME EVIDENCE FROM THE EAST INDIA COMPANY ARMY RECORDS¹

Joel Mokyr and Cormac Ó Gráda

This note uses information on the heights of about one thousand men recruited on behalf of the East India Company for service in India in the late 1770s and early 1780s as a basis for an estimate of the mean height of the population from which they came.² About half of the recruits were Irish, the other half English. The results add to the inventory of heights data being built up all over the world during the last decade or so as a guide to changes in nutritional status and, more tentatively, economic welfare (see Floud, 1983 ; Fogel et al., 1983).

The Irish soldiers were recruited by somebody quite familiar to students of eighteenth-century Irish economic history, Robert Brooke. Brooke, born in County Kildare, Ireland c. 1746, was the fifth and youngest son of Robert Brooke and his wife Honor. He spent most of his life in the service of the East India Company, as soldier, entrepreneur, and administrator. Starting off as an ensign in 1764, Brooke served under General Clive, putting down a revolt in Corah, whereby he received a large booty. He then apparently returned to Ireland. However, the Dictionary of National Biography's claim that he had been out of touch with the

¹Part of a longer investigation into the heights of E.I.C. recruits. The financial support of the National Science Foundation and the research assistance of James Hamilton are hereby gratefully acknowledged. Preliminary draft : not for quotation without permission.

²East India Library, E.I.C./Mil/7.

Company between 1775 and 1787, having overstayed his leave, ignores Brooke's efforts on behalf of the Company described below. In 1787 the Court of the E.I.C. appointed Brooke Governor of St. Helena, where he presided with distinction for many years. He died in Bath 25 Jan 1811.³

In Irish economic history Brooke is best remembered as founder of the giant cotton mill at Prosperous, County Kildare. This venture, which received a great deal of government assistance, and succeeded for a time, only to fail spectacularly in 1787, has most recently been described by Kelly (1987; see also Longfield, 1964). The initial investment in this cotton venture was probably saved-up Indian plunder. However, between 1778 and 1783, i.e. after his return to Ireland but before embarking on Prosperous, Brooke served the Company in Ireland as recruiting agent or 'crimp' for its European battalions (on this recruiting method see Callahan, 1972 : 5-6).

At this time the E.I.C. rules forbade recruiting Catholics. The suspicion against Catholics may have stemmed from a fear that they would side with the French enemy in India. The exclusion of Catholics would reduce the representativeness of the E.I.C. data used below. However, even early on, in practice keeping out Catholics was not feasible : only in the artillery were they effectively excluded. By the 1770s the religion of the rank and file was no longer an issue. Clive was arguing strongly for Irish Catholic recruits, "confident that in a few months they would

³The D.N.B. is in error here also, assigning Brooke to a premature grave with 'd. 1802 ?': Dictionary of National Biography (Oxford, 1920), VI, p. 432.

have no religion at all".⁴ As the case prepared by the Court of the E.I.C. on his behalf for Weymouth (see below) suggests, Brooke probably turned a blind eye to the ruling against Catholics.

The high proportion of men with native Irish surnames and given names among Brooke's recruits suggests strong Catholic representation. Here, for example, are the names of the first twenty listed for the 'Granby' which sailed out in September 1778

:

Patrick Stephens	Sam Hutson	Malakee Kiggan
Neil Carrol	Peter Flemmon	Edward Maguire
James Spittle	John Carrol	Michael Dillon
Patrick Landy	Arthur Owens	William Brophy
Thomas Jones	John O'Hara	John Leedham
Thomas Johnston	Alex Carrol	James Murray

A more serious problem for Brooke was opposition in the Irish House of Commons from supporters of the regular army, who saw Company recruiting as a threat. One of them, the redoubtable Sir Lucius O'Brien, drew attention to newspaper advertisements about a "rendez-vous to enlist men in the town of Naas". O'Brien's objections forced Brooke to Dublin to defend his methods, and the man hired to distribute his posters was arrested and his release obtained only with difficulty. The young Duke of Leinster's support was enough to ensure the life of Brooke's rendez-vous at Naas, but recruiting outside County Kildare was apparently

⁴East India Library, Mss. Eur., F128/4 (paper by Clive c. 1770-1), quoted in Bryant (1975 : 293).

checked for a time.⁵ The Company forwarded to Weymouth a list of arguments in favour of Brooke's plan. We think these are worth reporting for what they infer about the background of those enlisted :

From the time of their first institution the East India Company have been enabled by their charter to raise men for the defence of their settlements abroad. The Kingdom of Great Britain has hitherto been the source from whence they drew their supplies as being more convenient for the shipping off the recruits to the East Indies. The American War has turned this channel into another direction, and the prodigious bounty offered by His Majesty for every recruit has entirely put a stop to the furnishing of our possessions in India with their annual quota of men. In this distress the Company turned to this Kingdom for relief and gladly listened to Captain Brooke's proposal for recruiting their armies from hence.

The parliament of Great Britain have granted acts which regulate the martial laws of her subjects who may employed in the service of the Company, by which it must be presumed that the right in the Company of raising men is established though it has hitherto been uncontested. Their immense territorial possessions in the East require numerous armies to preserve them to these Kingdoms. And now America seems mouldering from our side, it behoves us to have a stricter attention to the welfare of that quarter which may hereafter prove the richest jewell in the British crown.

Those gentlemen who have the interest of the Company most at heart may judge of the expediency of this salutary measure, by comparing the good and bad effects of it together, should it be allowed that it thins the country of its inhabitants, on the other hand let it be considered that the evils are outweighed by the benefits that will attend this temporary emigration of the natives. Idle and dissolute mechanics will find that employment of which they were deprived at home, and the industrious tradesman obtain a greater field for the exertion of his talents. The kingdom will no longer wear a face of poverty, the parishes will be discharged of a heavy load for the succour of the distress, and Ireland will be purged of a notorious peasantry, that often pass

⁵Brooke to Court of Directors, March 7 1778, Home Misc. 139(1).

their lives in beggary, and generally conclude them in jail. How different will be the situation of those who seek their fortunes in an honourable service. If unworthy of favour they no longer become a burthen to their country; But if their conduct merits promotion success shall attend their honest endeavours, and bring them back with riches and honour to the bosom of their native land. Thus will this kingdom find a new source of wealth and the example of some monied gentlemen now in these kingdoms who embarked for India in the station of private soldiers, will surely justify the trial. Thus will the armies of France and Spain the natural enemies of our crown cease to be reunited with the natives of Ireland and thus will those natives find a provision for success in our own service which that of a foreign prince is unable to afford.

The behaviour at least of Captain Brooke does not appear liable to censure on this occasion. He has no recruiting party abroad, beats no drum nor gives arms to any man. His advertizement for volunteers is in everybody's hands, and its tenor therefore well known. If it is apparent that he inveigles no man by false representations, trespass them with no liquor, if he robs no master of his prentice, and no father of his son, he rather claims the praise than the censure of his country, for giving bread to the indigent and occupation to the idle.

. . . The Chairman and Deputy Chairman of the East India Company present their respectful compliments to Lord Weymouth, and beg to lay before his Lordship the enclosed letter from Captain Brooke, employed in the Company's recruiting service in Ireland, together with a paper therein referred to. And being persuaded that his Lordship will please to consider the success of the business in which Captain Brooke is engaged, as a matter of the highest importance to the security and advantage of the East India Company, the Chairman and Deputy Chairman earnestly desire that his Lordship will be favourably pleased to cause such countenance and protection to be granted on the present occasion to Captain Brooke as may promote the successful performance of his endeavour on behalf of the company.⁶

At the time of Brooke's venture the prospects of those who went to India were grim indeed. Bryant (1975) quotes figures from the early 1770s suggesting that a European private in the

⁶E.I.L., Home Misc 139(1), 12 March 1778.

Bengal army stood a one-in-seven chance of returning home. Between 1770 and 1775 over sixty percent of those who enlisted perished, another ten percent deserted, and fourteen percent transferred to the invalid corps (Bryant, 1975 : 298). The Company saw to it that some returned to "Remove the vulgar Opinion that the Soldiers who enter into the Company's Service are never Permitted to Return", but it also apparently prevented others who wanted to return home from doing so (Bryant, 1975 : 295n). In the circumstances, it seems only fair to assume that those who joined Brooke were not comfortably off.

For the purpose of this exercise we took down the age, height, region of origin, and occupation of 1,446 of Brooke's Irish recruits, and 1,614 of Englishmen similarly recruited by other crimps. The need to control for age is obvious ; we noted occupation on the assumption (common in the literature) that a recruit's previous occupation contains information about his socio-economic background. Before applying the algorithm generating an estimate of mean height of the reference population, let us first note the occupational and regional breakdown of the recruits (as defined in the appendix). Brooke's men were overwhelmingly listed as labourers, much more than a contemporary English sample. This is presumably due in part to poor reporting, but the pattern endured into the nineteenth century. The men hailed disproportionately from Dublin (Region 14) and the rest of Leinster (Region 16). Leinstermen accounted for 75.6 percent of the total in 1778-9 and 63.7 percent in 1780-3.

Table 1 : Occupational Code by Region, Ireland

OCCODE	REGION						Total
	11	12	13	14	15	16	
1	64	116	133	419	81	504	1317
2	2	1	7	0	0	0	10
3	1	1	1	7	1	6	17
4	0	0	0	3	0	4	7
5	1	2	0	0	0	0	3
6	0	3	1	4	3	5	16
7	1	1	0	1	0	0	3
8	0	1	1	9	5	3	19
Total	69	125	143	443	90	522	1392

As Figure 1a shows, the recruits contained a high proportion of young men and boys ; they included three eleven- and three twelve-year olds. The age distribution of the Englishmen was somewhat different (Figure 1b), with a higher proportion in their late teens.

AGE	IRISH	ENGLISH
Under 18	35.4	43.4
18-21	41.8	28.5
22-29	19.3	17.3
30 +	3.6	10.8

Like the Irish, the English recruits were overwhelmingly described as labourers, as the following table shows.

Table 2 : Occupational Code by Region, England

OCCODE	REGION							All
	1	2	3	4	5	6	7	
1	17	57	162	237	209	274	186	1142
2	0	4	13	4	3	7	12	43
3	0	11	21	17	19	32	28	128
4	0	5	3	1	5	3	7	24
5	0	2	4	3	6	3	2	20
6	1	2	3	5	4	6	7	28
7	1	4	4	4	6	10	5	34
8	4	19	42	14	29	23	28	159
Total	23	104	252	285	281	358	275	1578

All English regions were thus well represented except the northernmost counties (Region 1).

THE RESULTS :

The mean heights reported below use the standard Quantile Bend Estimator method (for a clear, non-technical explanation see Wachter, 1981). They purport to measure the average height of the population whence the men came, not the mean height of the recruits. The QBE 'corrects for' heights underrepresented in the sample of recruits, either because a minimum height standard is enforced or for some other reason. Only men aged 20 years and above (and hence born before 1758) were used. Figure 2 reports the heights frequencies of Irish and English data bases. Though the data are more approximate than those available for the post-1800 period - heights are usually given in round inches in the 1770s, especially so in the case of Irish recruits - the algorithm estimates are consistent, with a clear minimum Sum of Squared Residuals (again, Wachter, 1981) in all cases. We report estimated mean and standard deviation, and the extent of shortfall, i.e. the proportion of the full distribution affected by missing heights. The estimates provided of rural heights are very crude : they were obtained merely by excluding Dublin and London. Mean height is calculated for all men over 20, 21, and 22 years (indicated by 20 +, 21 +, and 22 + in the table below).

The results tell a few obvious, if nevertheless somewhat surprising, stories :

1. By modern standards the mean height of men in the populations from which Brooke and his English counterparts

recruited were very small indeed. In this they were not exceptional at the time, however (compare Floud, 1983).

2. The Irish poor~~s~~ from whom Brooke recruited were nearly an inch taller than the English poor.

3. Irish labourers were no smaller than other Irishmen, but English labourers were considerably smaller than other Englishmen.

4. In both countries mean height was higher in rural areas. In Ireland the difference was about a quarter of an inch, but in England it was trivial.

5. In England, northern recruits were well over half an inch taller than southern. Within rural Ireland, Leinstermen were smaller than in the rest of the country.

These results have some tantalizing implications for the relative health and nutritional status, if not for the measurement of economic wellbeing more broadly defined, of the Irish and English poor at this juncture. They suggest that the socio-economic environment which produced Robert Brooke's men, however much poorer in conventional terms, was healthier than its English counterpart⁴. We aim to set out the implications of these and related results in another place in due course.



Table 3 : QBE Estimates for Irish and English Recruits

Group	Number	Mean Height	Std Deviation	Shortfall
Irish, 20 +	570	65.65	2.57	4
Irish, 21 +	453	65.70	2.49	3
Irish, 22 +	377	65.70	2.53	4
English, 20 +	522	64.74	2.70	9
English, 21 +	472	64.77	2.72	9
English, 22 +	434	64.79	2.75	9
Labourers :				
Irish, 20 +	528	65.68	2.57	4
Irish, 21 +	418	65.74	2.48	3
Irish, 22 +	346	65.74	2.54	4
English, 20 +	286	64.76	2.68	8
English, 21 +	258	64.87	2.67	7
English, 22 +	228	64.77	2.67	8
Irish 'Rural' :				
20 +	461	65.87	2.50	2
21 +	358	65.93	2.44	1
22 +	295	65.97	2.46	1
English 'Rural' :				
20 +	432	64.78	2.77	12
21 +	396	64.80	2.80	11
22 +	362	64.86	2.80	10

English Regions :

1-4 20 +	245	64.90	2.73	11
1-4 21 +	220	64.92	2.76	11
1-4 22 +	202	65.11	2.66	8
5-7 20 +	277	64.37	2.66	11
5-7 21 +	252	64.24	2.80	14
5-7 22 +	231	64.17	2.86	15

Leinster (excl. Dublin) :

20 +	235	65.63	2.52	4
21 +	184	65.67	2.45	3

APPENDIX

REGIONS :

1. Northumberland, Cumberland, Westmoreland, Yorkshire (North and East Ridings)
2. Yorkshire (West Riding), Lancashire, Cheshire
3. Notts, Derby, Staffs, Salop, Leicester, Warwick, Northampton
4. Hereford, Worcester, Gloucester, Oxford, Buckingham, Bedford, Hertford
5. Cornwall, Devon, Somerset, Dorset, Wiltshire, Berkshire, Hampshire, Sussex, Surrey
6. Essex, Norfolk, Cambridge, Suffolk, Lincoln, Rutland, Kent, Huntingdon
7. Middlesex
11. Antrim, Armagh, and Down
12. The rest of Ulster
13. Connacht plus Clare and Kerry
14. Dublin
15. The rest of Munster
16. The rest of Leinster

OCCUPATIONAL CODES (OCCODE) :

1. Labourer, servant
2. Weaver
3. Textile and clothing worker
4. Constuction
5. Agriculture
6. Literate workers
7. Trade
8. Coal and iron
9. Other

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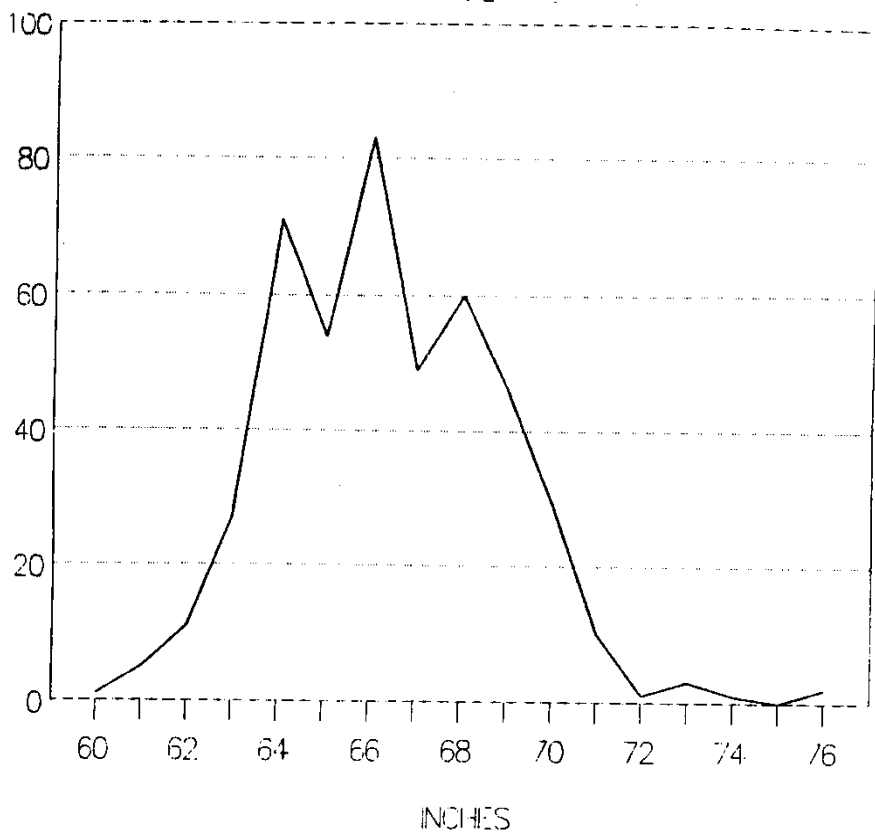
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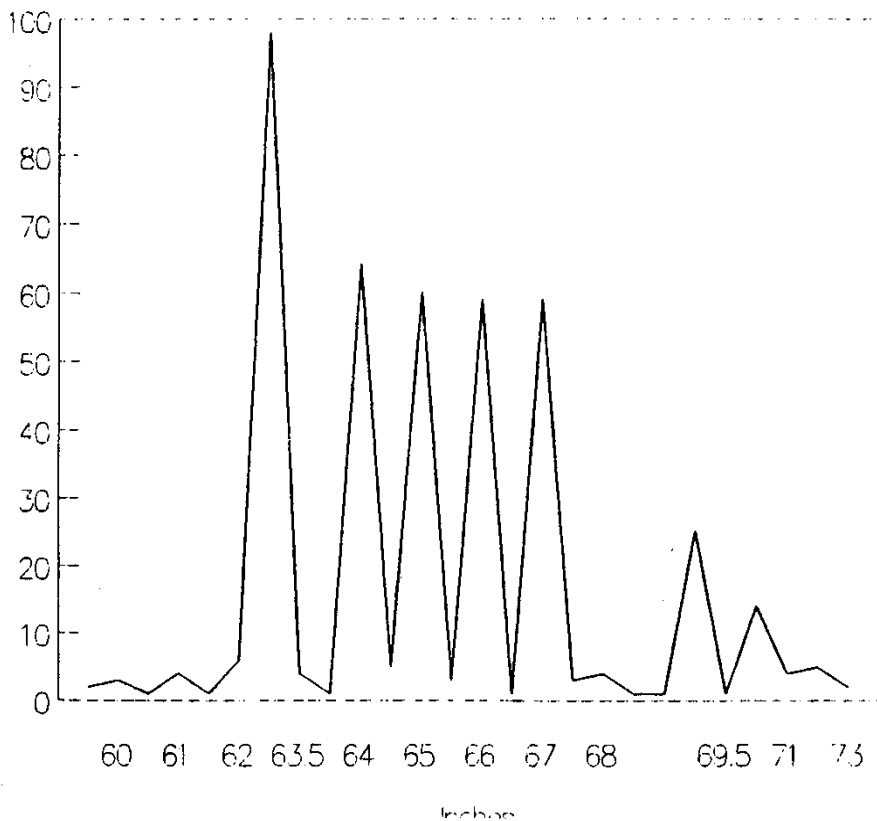
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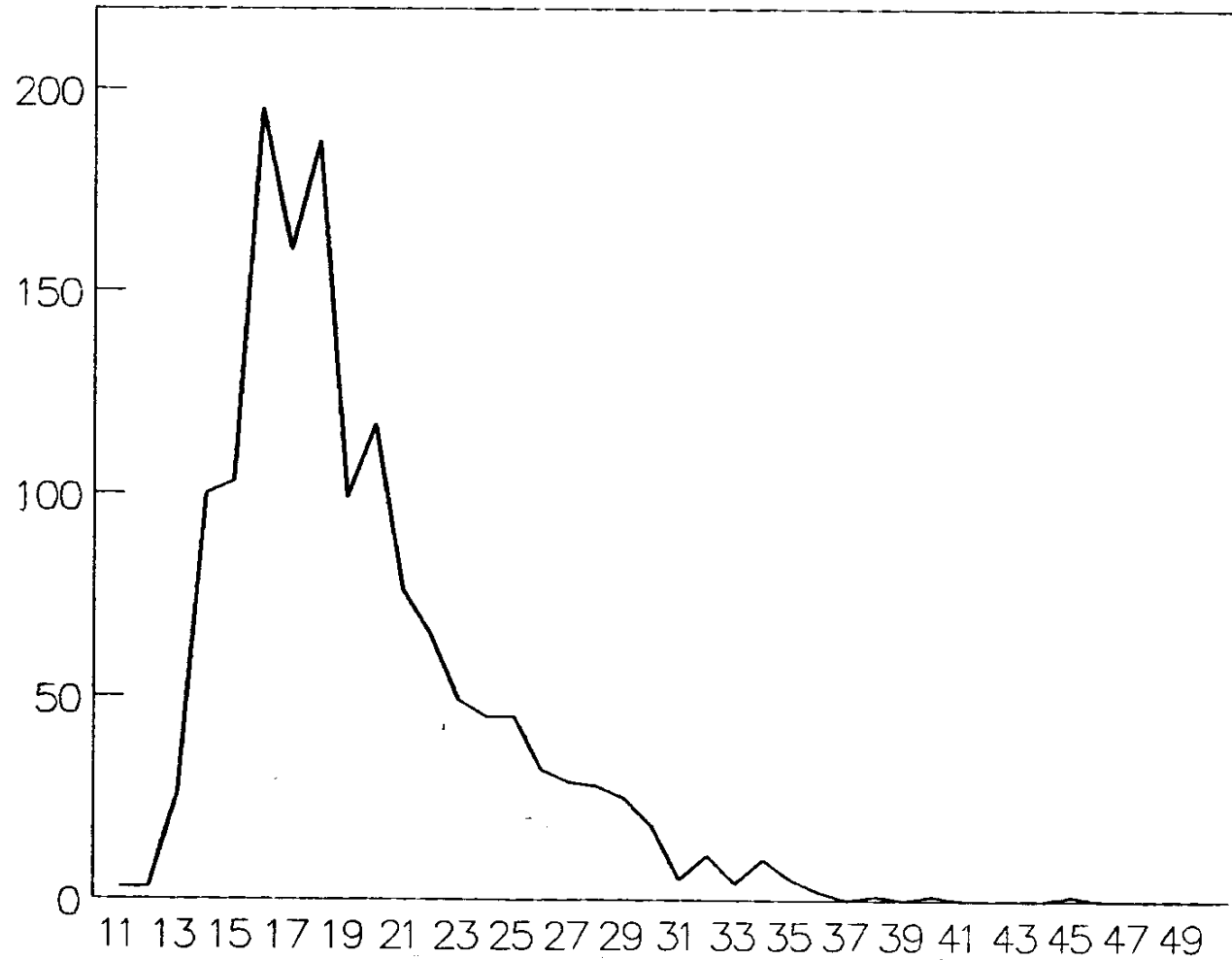
Heights of Irish Recruits Aged 21 +



Heights of English Recruits Aged 21 +

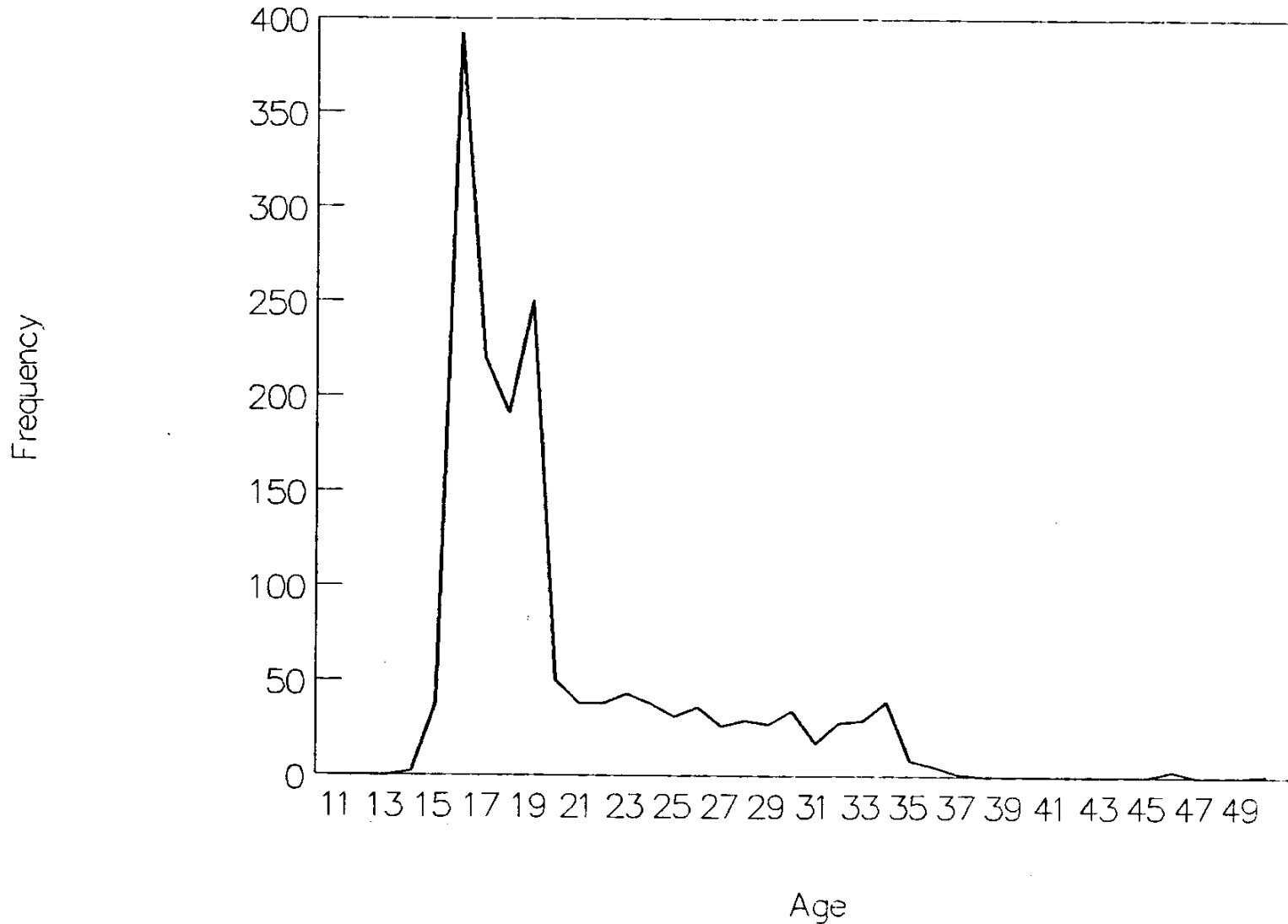


Age Distribution of Irish Recruits



Age

Age Distribution of English Recruits



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