What proportion of PhDs are ESRC-funded?

Summary

Most social science PhDs are not ESRC-funded. ESRC funds between 2% and 40% of PhDs in the disciplines that comprise the majority of ESRC PhDs. This amounts to around 8% for all disciplines in which ESRC funds PhDs, or 13% excluding some disciplines in which a significant number of PhDs are outside ESRC's remit (such as Psychology), and 2% of all PhDs in all subjects.

The proportion of PhDs that are ESRC funded varies widely between disciplines. For every 20 PhDs in each of the following disciplines, ESRC funds one in Psychology and Management & business studies, two in Political science, four in Sociology and Economics, seven in Human geography, and 16 in Development Studies.

The number of PhDs that are ESRC funded, and the proportion of all ESRC PhDs submissions in each discipline, appears to be unrelated to the total number of PhDs in each discipline. This means that some disciplines are more significant in terms of total ESRC PhD submissions than ESRC PhDs are to the total number of PhDs completed in that discipline.

Data

This analysis brings together data from two sources: ESRC student records and published HESA data on PhD completions. ESRC recorded 2,725 doctorates submitted in the five academic years 2011/12 to 2015/6, an average of 545 per year. HESA data record 32,435 graduations in these subjects over the same period, or 6,487 per year, and a total for all subjects of 109,960 PhDs in the five years. The difference between submission and completion in a given year has been disregarded.

ESRC student records provide the primary discipline of a PhD as reported to ESRC, which may not exactly correspond to the primary social science discipline as recorded in relation to ESRC studentship awards. HESA reports headcount by subject (not discipline) using 19 JACS subject areas (eg B - Social studies), each of which contains a number of principal subjects (eg LI - Economics), as well as more detailed four digit subject codes (eg LI 13 Economic policy) not used here.²

Most ESRC studentships (95%) are in subject areas for which there is a close match between HESA subjects and ESRC disciplines. Only "Tools, technologies and methods" has significant numbers of ESRC PhDs but no direct HESA equivalent. The majority of subject areas with significant numbers of ESRC PhDs (at least 10 per year) are entirely within ESRC's remit, with the exception of Psychology and History.

This analysis is sensitive to the assumptions made about the correspondence between HESA subjects and ESRC disciplines, although this mapping is generally straightforward. "Others in social studies" has been mapped to "Tools technologies and methods" as this is the only

¹ HESA Students in Higher Education Table 16 - HE qualifications obtained by subject of study, level of qualification and class of first degree https://www.hesa.ac.uk/data-and-analysis/publications#students-higher-education (data rounded to the nearest multiple of 5)

² HESA JACS 3.0: Principal subject codes https://www.hesa.ac.uk/support/documentation/jacs/jacs3-principal

unmatched ESRC discipline within the HESA social studies subject area. A small number of other disciplines recorded in ESRC data (for example Animal science) are excluded from the comparison with HESA data.

Subject areas which are not solely in ESRC's remit have been matched to the corresponding principal JACS code, except in history which is mapped to the total for history-related subjects. This approach differs slightly from that used in previous analysis, which mapped one principle subject (history by topic) to ESRC's remit, but in practice this makes little difference to estimates of the proportion of all PhDs that are ESRC studentships.

Note that there was a significant increase in the range of disciplines recorded for ESRC studentships from 2011 onwards, which is reflected in ESRC PhD submissions towards the end of the period considered here. Demography & human geography was recorded as a single discipline for start dates before 2011 and as separate disciplines thereafter, so these have been combined for the purposes of this analysis.

The totals below do not match the number of PhD students in ESRC studentship reporting, because the latter relate to awards (ie PhDs started) not submissions and categorise PhDs in relation to social science disciplines. Although "other" disciplines amount to only 2% of the total, the difference between the two appears to be concentrated in some subjects, notably in Sociology. Nevertheless, testing indicates that estimates of the proportion of PhDs that are ESRC funded in each discipline are not sensitive to such small differences.

Analysis

The table below provides a summary of the proportion of PhD completions in each subject that are ESRC funded in the five academic years 2011/12-2015/16. Note that this only lists individual disciplines for which there is a corresponding subject in ESRC and HESA data.

Those listed as "other" are not social science disciplines (such as Animal science), and in all cases have fewer than 10 PhD completions per year on average. A full data table, listing the matching categories by individual years, is provided as an Annex.

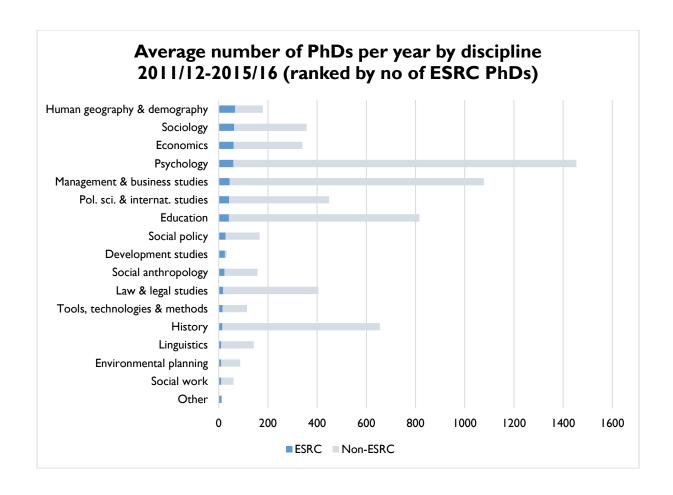
	ESRC PhDs	% of ESRC PhDs	All PhD completions	ESRC as % all PhD completions			
Human geography & demography*	332	12%	895	37%			
Sociology*	314	12%	1785	18%			
Economics*	304	11%	1700	18%			
Psychology	298	11%	7270	4%			
Management &	223	8%	5390	4%			
business studies*							
Political science &	210	8%	2245	9%			
international studies*							
Education	208	8%	4080	5%			
Social policy*	143	5%	830	17%			
Development studies*	130	5%	130	78%			

Social anthropology*	114	4%	790	14%
Law & legal studies	90	3%	2025	4%
Tools, technologies & methods*	80	3%	575	14%
History	72	3%	3275	2%
Linguistics	51	2%	710	7%
Environmental	50	2%	435	11%
planning*				
Social work*	49	2%	300	16%
Other	57	2%		
Total – all disciplines	2725	100%	32435	8%
Total - * only	1949	72%	15075	13%
Total - all PhDs			109960	2%

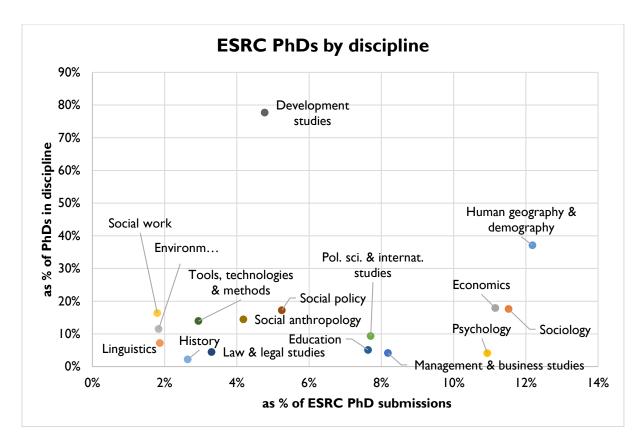
In the table above, core ESRC disciplines that can be matched to HESA subject areas are **in bold**. Disciplines that are not wholly in ESRC's remit are *in italics*, indicating that ESRC studentships in Psychology and History are unlikely to be similar to other PhDs in those disciplines. It is also likely that ESRC PhDs in other disciplines, for instance in Socio-legal studies and Education, may not be substantially similar in nature and subject matter to other PhDs (for example professional doctorates).

This means that the overall proportion of PhDs that are ESRC funded depends on which disciplines - and whether all PhDs in each discipline - are included. The total for all ESRC disciplines (8%) is arguably less robust than for those that are starred in the table above (13%), but the latter excludes over a quarter (28%) of ESRC studentships. The extent of variation between disciplines means that the overall proportion is less meaningful than that for individual disciplines.

The chart below presents the numbers in the table above, ranked by the number of ESRC PhDs in each discipline. This indicates that the number and proportion of ESRC PhDs is largely unrelated to total numbers in each discipline, even for those disciplines which are solely within ESRC's remit. As noted above, ESRC PhDs represent a small proportion of PhDs in disciplines which are partly or mainly outside ESRC's remit.



These data also enable comparison between disciplines in terms of the proportion of ESRC PhDs in each and the proportion of all PhDs that are ESRC-funded. The scatter plot below presents an overview of the proportions in the table above. The proportion of PhDs that are ESRC funded varies significantly between disciplines, and appears to be unrelated to the proportion of ESRC PhDs in each subject/discipline, even excluding disciplines that are not solely in ESRC's remit.



There is no straightforward relationship between the proportion of all PhDs that ESRC funds and the proportion of ESRC PhDs funded in each discipline. For example, ESRC funds 16% of PhDs in Social work, which amount to about 2% of ESRC PhDs. A similar proportion (18%) of Economics PhDs are ESRC-funded, but this accounts for 11% of all ESRC PhDs. In turn, Human geography accounts for a similar proportion (12%) of ESRC PhDs as Economics, but over 1 in 3 PhDs in Human geography are ESRC funded, which also has the highest number of ESRC PhD completions.

There are a few outliers in the chart above. It is perhaps not surprising that in subjects that are not wholly in ESRC's remit, such as Psychology and History, the proportions are unrelated. Among core disciplines, Management and business studies appears to be an outlier: ESRC funded only 4% of PhDs but these amount to 8% of all ESRC PhD completions. Development studies is at the opposite end of the scale: ESRC funded nearly all of the PhDs completed in this area, but they account for only 5% of all PhDs funded by ESRC.

Conclusions

This analysis confirms that most social science PhDs are not ESRC-funded. The proportion of PhDs that are ESRC-funded varies widely between disciplines. This variation appears to be independent of the overall numbers of PhDs in each discipline. This implies that the importance of each discipline in terms of overall ESRC PhD numbers differs from the importance of ESRC PhD funding to each discipline. It is unclear why this is the case, as is the rationale for significant investment in disciplines in which ESRC PhDs represent a very small proportion of the total.

Overall, ESRC funds between 8% and 13% of PhDs in social science, depending on which disciplines are included. This is broadly consistent with previous estimates that ESRC funds around 10-15% of relevant UK doctoral students overall, so 'nine out of ten ... do not receive ESRC-funding.³

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³ ESRC (2015) Review of te ESRC Doctoral Training Centres Network <a href="https://esrc.ukri.org/skills-and-careers/doctoral-training/doctoral-training-centres/development-and-training-of-the-doctoral-training-centres/development-and-training-of-the-doctoral-training-centres/development-and-training-doctoral-training-centres/development-and-training-doctoral-training-centres/development-and-training-doctoral-training-centres/development-and-training-doctoral-training-doctor

Annex: Data table

	ESRC PhD completions									All PhD completions							
ESRC discipline	2011/12	2012/13	2013/14	2014/15	2015/16	Total	Average per year	ESRC %	HESA subject	2011/12	2012/13	2013/14	2014/15	2015/16	Total	Average per year	ESRC as % all
Human geography & demography*	63	59	69	67	74	332	66	12%	Human & social geography	185	180	170	190	170	895	179	37%
Sociology*	58	72	60	68	56	314	63	12%	Sociology	345	375	355	350	360	1785	357	18%
Economics*	50	50	70	66	68	304	61	11%	Economics	335	335	340	355	335	1700	340	18%
Psychology	62	62	56	63	55	298	60	11%	Psychology	1375	1485	1370	1500	1540	7270	1454	4%
Management & business studies*	36	40	43	54	50	223	45	8%	Business & administrative studies total	955	1040	1070	1150	1175	5390	1078	4%
Pol. sci. & internat. studies*	43	38	48	46	35	210	42	8%	Politics	425	465	430	480	445	2245	449	9%
Education	35	37	42	44	50	208	42	8%	Education total	735	885	790	850	820	4080	816	5%
Social policy*	29	30	26	30	28	143	29	5%	Social policy	155	140	155	180	200	830	166	17%
Development studies*	29	32	34	20	15	130	25	5%	Development studies	0	30	30	30	40	130	33	78%
Social anthropology*	19	27	19	26	23	114	23	4%	Anthropology	145	185	150	160	150	790	158	14%
Law & legal studies	12	17	17	22	22	90	18	3%	Law total	355	400	385	430	455	2025	405	4%
Tools, technologies & methods*	5	12	21	25	17	80	16	3%	Others in social studies	130	105	120	130	90	575	115	14%
History	12	21	13	12	14	72	14	3%	History (by topic/period/area)	605	660	625	680	705	3275	655	2%
Linguistics	8	16	6	5	16	51	10	2%	Linguistics	130	130	145	145	160	710	142	7%
Environmental planning*	12	9	9	17	3	50	10	2%	Planning (urban, rural & regional)	80	80	70	105	100	435	87	11%
Social work*	8	10	11	10	10	49	10	2%	Social work	50	65	60	60	65	300	60	16%
Other	0	0	0	15	42	57	11	2%									
Total – ESRC disciplines	481	532	544	590	578	2725	545	100%	Total	6005	6560	6265	6795	6810	32435	6487	8%
									All subject areas	20435	22160	21240	22780	23345	109960	21992	2%
Total (excl Psychology & History)	407	449	475	500	467	2298	460	84%		4025	4415	4270	4615	4565	21890	4378	10%
Total (* only)	352	379	410	429	379	1949	390	72%		2805	3000	2950	3190	3130	15075	3015	13%

Development studies is not included in HESA data before 2012/13, so the previous year is excluded from the average, and in 2011/12 and 2012/13 it appears that there were more ESRC PhDs completed in this subject/discipline than the HESA total. Apart from this there is relatively little variation between years in ESRC PhDs as a proportion of all PhDs, so the five year average provides a reasonably robust indicator of typical volumes, and was used to calculate the overall percentages in the final column above. Note that HESA data are rounded to the nearest multiple of five.