Online Supplement

Demography's Changing Intellectual Landscape: A Bibliometric Analysis of the Leading Anglophone Journals, 1950-2020

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Table S1. Counts of references cited by papers in *Demography*, *Population Studies* and *Population and Development Review*, by Web of Science subject category

		Count
Rank	Web of Science Subject Category	of
		References
1	Demography	34,647
2	Sociology	25,113
3	Economics	15,034
4	Public, Environmental & Occupational Health	7,241
5	Family Studies	5,874
6	Public Environment, Health	3,265
7	Medicine, General & Internal	3,132
8	Multidisciplinary Sciences	2,831
9	Social Sciences, Mathematical Methods	2,219
10	Statistics & Probability	2,161
11	Planning Development	1,891
12	Industrial Relations	1,857
13	Anthropology	1,730
14	Political Science	1,665
15	Gerontology	1,625
16	Social Science, Interdisciplinary	1,604
17	History	1,378
18	Psychology, Social	1,324
19	Area Studies	1,215
20	Geography	1,179
21	History, Social Science	1,174
22	Environmental Studies	1,130
23	Obstetrics & Gynecology	1,114
24	Psychology, Multidisciplinary	1,041

Table S2: Coefficients estimated from logit models of citation patterns, 1947-2020

Table 52. Coefficients (nics Refere		b) Sociolo		
Parameter	Estimate	Std Err	P-value	Estimate	Std Err	P-value
Intercept	8.37	4.81	0.0820	10.39	4.17	0.0127
year	0.00	0.00	0.0699	-0.01	0.00	0.0062
Abortion	-1.11	0.38	0.0032	-0.80	0.26	0.0024
Africa	-0.47	0.22	0.0372	-0.38	0.20	0.0531
Birth Intervals	0.02	0.22	0.9225	-0.84	0.27	0.0018
Birth Spacing	-1.08	0.47	0.0209	-1.22	0.37	0.0009
Child Mortality	-0.26	0.19	0.1627	-0.95	0.25	0.0001
Child Well-being	-0.14	0.10	0.1495	-0.34	0.11	0.0019
China	-0.72	0.29	0.0122	0.39	0.13	0.0037
Dem Tech	-0.65	0.16	<.0001	-0.87	0.14	<.0001
Dem Transition	-0.12	0.11	0.2556	-0.11	0.10	0.244
Divorce	-1.06	0.20	<.0001	0.47	0.10	<.0001
Education	-0.13	0.11	0.2558	0.16	0.11	0.1541
Family Planning	-0.58	0.16	0.0003	-0.62	0.13	<.0001
Fecundability	-1.92	1.02	0.0610	-2.75	1.22	0.0241
HH & Living Arrang.	-0.57	0.15	<.0001	0.11	0.11	0.3005
HIV/AIDS	-1.62	0.32	<.0001	-1.17	0.25	<.0001
Health & Aging	-0.90	0.14	<.0001	-1.23	0.19	<.0001
Income & Poverty	0.57	0.10	<.0001	-0.63	0.15	<.0001
Infant Mortality	-0.84	0.20	<.0001	-0.80	0.18	<.0001
Life Exp & Longevity	-0.95	0.14	<.0001	-1.05	0.14	<.0001
Marriage & Cohabitation	-0.90	0.20	<.0001	0.54	0.10	<.0001
Marriage Patterns	-0.67	0.21	0.0014	-0.01	0.14	0.9358
Mathematical Dem	-1.53	0.49	0.0019	-1.10	0.23	<.0001
Migration	0.11	0.10	0.2630	-0.46	0.11	<.0001
Mortality transition	-1.18	0.19	<.0001	-1.52	0.23	<.0001
Number of children	-0.22	0.12	0.0605	0.08	0.10	0.3982
Occupational Mobility	-1.46	0.48	0.0022	0.46	0.16	0.0047
Political demography	0.24	0.17	0.1558	0.09	0.19	0.6405
Population Growth	0.13	0.10	0.2052	-0.77	0.12	<.0001
Population Policy	-0.34	0.18	0.0624	0.03	0.14	0.8073
Racial Segregation	-0.95	0.13	<.0001	0.55	0.09	<.0001
Same-sex Families	-0.32	0.20	0.1118	0.01	0.19	0.9568
Sex Ratio	-0.49	0.19	0.0098	0.06	0.11	0.5739
Social Security	0.13	0.41	0.7469	-0.33	0.46	0.4766
Status of women	-0.06	0.22	0.7896	-0.48	0.20	0.0179
Women's Labor Force	0.39	0.10	<.0001	-0.14	0.11	0.1977
Immigration	Omitted					
Demography	-50.48	5.78	<.0001	26.11	4.64	<.0001
PDR	-9.02	6.97	0.1958	3.19	6.37	0.6158
Population Studies	Omitted					
year* <i>Demography</i>	0.03	0.00	<.0001	-0.01	0.00	<.0001
year* <i>PDR</i>	0.00	0.00	0.1807	0.00	0.00	0.6431
N References	-0.01	0.00	<.0001	0.00	0.00	0.3473
Prop Cites to demography	-4.06	0.15	<.0001	-1.29	0.07	<.0001
AIC/BIC	-6218.41	/ -5929.87		-4083.55	/ -3795.01	

Note: GLM fit via maximum likelihood and logit link. Used for Figures 6 and S7. PDR = Population and Development Review

Table S3. Coefficients estimated from negative binomial model of citation counts

Parameter	Estimate	Std Err	P-value
Intercept	-8414.62	426.8630	<.0001
Abortion	0.2932	0.1690	0.0829
Africa	0.7556	0.1634	<.0001
Birth Intervals	0.1883	0.1457	0.1964
Birth Spacing	0.6602	0.1561	<.0001
Child Mortality	1.0659	0.1437	<.0001
Child Well-being	1.1506	0.1005	<.0001
China	0.4986	0.1476	0.0007
Dem Transition	0.7694	0.0824	<.0001
Divorce	0.9193	0.1149	<.0001
Education	1.2480	0.1111	<.0001
Family Planning	0.1493	0.0911	0.1013
Fecundability	0.8198	0.1436	<.0001
HH & living arrangements	0.6204	0.1082	<.0001
HIV/AIDS	1.0366	0.1422	<.0001
Health & Aging	0.8831	0.1096	<.0001
Income & Poverty	0.5516	0.1261	<.0001
Infant Mortality	0.5662	0.1287	<.0001
Life Exp & Longevity	0.8817	0.0914	<.0001
Marriage & Cohabitation	1.1726 0.8206	0.1058	<.0001 <.0001
Marriage Patterns Mathematical Dem	0.8200	0.1343 0.1249	0.0656
Migration	0.2299	0.1249	<.0001
Mortality transition	0.7119	0.0878	<.0001
Number of children	0.6610	0.1007	<.0001
Occupational Mobility	0.8603	0.2062	<.0001
Political demography	-0.2865	0.1935	0.1386
Population Growth	0.1164	0.0896	0.1937
Population Policy	-0.1872	0.1316	0.1551
Racial Segregation	1.0439	0.0981	<.0001
Same-sex Families	0.8447	0.2079	<.0001
Sex Ratio	0.9642	0.1096	<.0001
Social Security	0.3171	0.4689	0.4989
Status of women	0.8836	0.1701	<.0001
Women's Labor Force	0.5624	0.1041	<.0001
Immigration	0.7550	0.1099	<.0001
Dem Tech	Omitted		
year	8.4735	0.4293	<.0001
year*year	-0.0021	0.0001	<.0001
Demography	-3081.66	560.0233	<.0001
PDR	-35.0837	7.0287	<.0001
Population Studies	Omitted		
year*Demography	3.0825	0.5629	<.0001
year*PDR	0.0178	0.0035	<.0001
year*year*Demography	-0.0008	0.0001	<.0001
Dispersion	1.2584	0.0223	

Note: Used for Figure 7. *PDR* = *Population and Development Review*

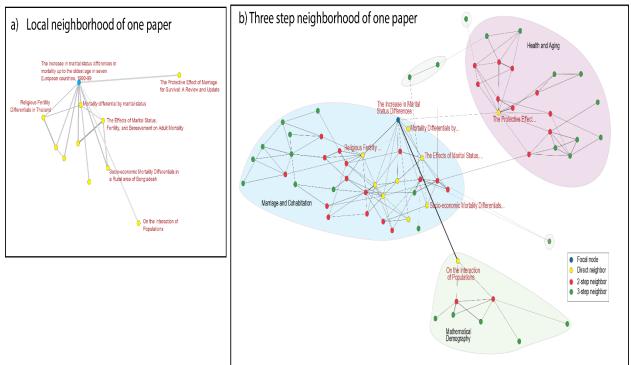


Figure S1. Example paper similarity network surrounding "Increases in marital status differences..."

Panel A of Figure S1 represents the paper similarity network when we walk out from the focal paper titled "The increase in marital status differences in mortality up to the oldest age in seven European countries, 1990-99" (Murphy, Grundy and Kalogirou 2007) to the local network neighborhood. This paper investigates mortality differentials by marital status among older age groups. It is adjacent to 10 informatically similar papers, most of them on the relationship between mortality and marital status, with the bottom paper in this network being Nathan Keyfitz's "On the interactions of populations" (Keyfitz 1965) which focuses on the formal demography of the dynamic interactions of population groups by age, sex and marital status.

Stepping out two more links as shown in panel B, we present a couple of dozen other papers that form the three-step neighborhood of the focal paper. As similar papers are pulled together by the graph layout algorithm, we see clusters emerge in the network diagram as papers are pulled into these clusters. So, for example, Keyfitz's paper is pulled into a cluster with other similar papers on the formal demography of the dynamics of population change. These clusters are indicated by shaded areas and labeled based on the most commonly used terms and our knowledge of the field. The topic cluster on the left is labeled "Marriage and Cohabitation," the one on the right "Health and Aging," and the one at the bottom "Mathematical Demography." Our cluster procedure places nodes in the network (i.e., papers) either within or between clusters. The three nodes in gray are interstitial papers bridging multiple clusters.

Figure S2: Percent distribution of papers by topic cluster

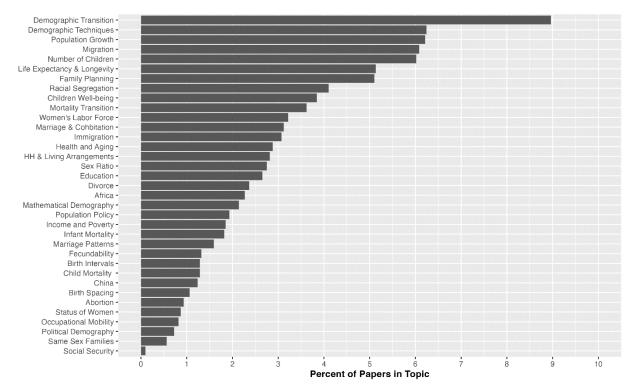


Figure S3: A visualization of the growing volume of articles published in *Demography*, *Population and Development Review*, and *Population Studies* scattered across the intellectual landscape represented in Figure 1

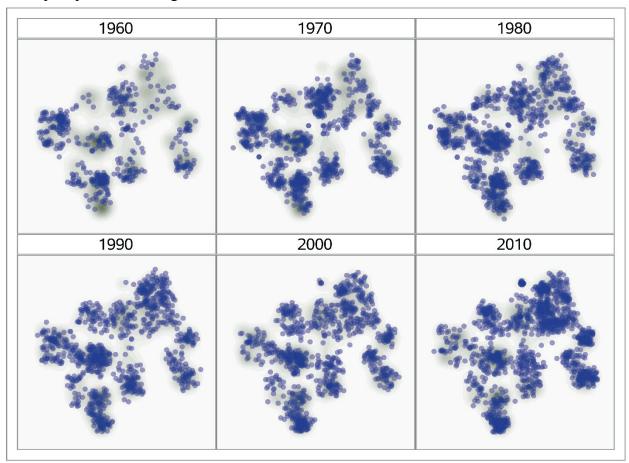


Figure S4. Counts of papers on demography core topics and on social and behavioral demography topics and their ratios, by decade and journal

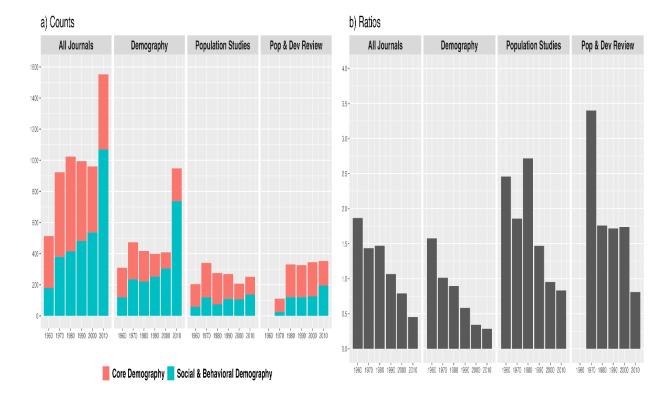
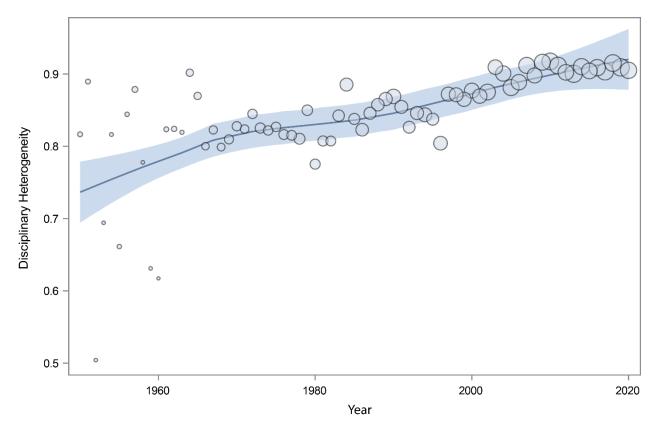


Figure S5: Disciplinary Heterogeneity over Time, 1957-2020



Note: Disciplinary heterogeneity of references based on Web of Science subject categories

Figure S6. Counts of references cited by papers in *Demography*, *Population and Development Review*, and *Population Studies*, by Web of Science subject category and decade

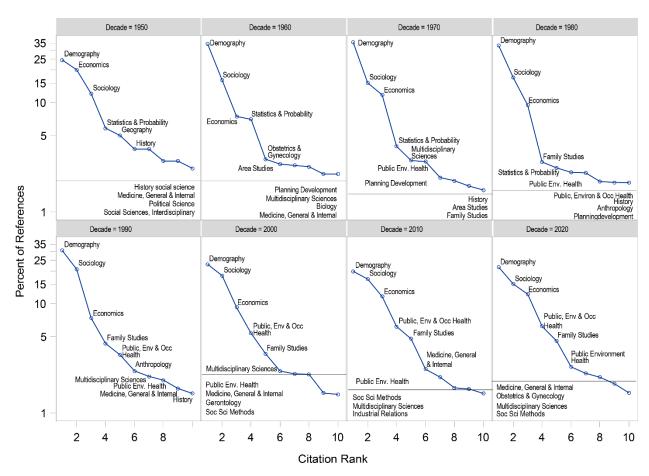
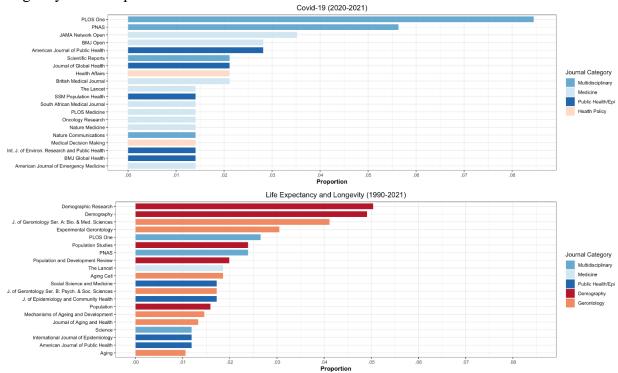


Figure S7. Predicted proportions of a paper's references to sociology and economic journals from logit models of citation patterns



Figure S8. Top 20 journal and journal subject categories in which contemporary core demographers published papers with COVID-19 in the title and papers with Life Expectancy, Longevity or Life Span in the title.



COVID-19 N for 2020-2021=140; Life Expectancy and Longevity N for 1990-2021 = 754.

References to Online Supplement

Keyfitz, Nathan (1965). On the interaction of populations. Demography, 2 (1): 276–288.

Murphy, Michael, Emily Grundy and Stamatis Kalogirou (2007). The increase in marital status differences in mortality up to the oldest age in seven European countries, 1990–99. *Population Studies*, 61:3, 287-298.