DEMOGRAPHIC RESEARCH
A peer-reviewed, open-access journal of population sciences

DEMOGRAPHIC RESEARCH

VOLUME 49, ARTICLE 29, PAGES 769–782
PUBLISHED 8 NOVEMBER 2023
https://www.demographic-research.org/Volumes/Vol49/29/
DOI: 10.4054/DemRes.2023.49.29

Descriptive Finding

Ultra-Orthodox fertility and marriage in the United States: Evidence from the American Community Survey

Lyman Stone

Contents

Demographic Research: Volume 49, Article 29
Descriptive Finding

Ultra-Orthodox fertility and marriage in the United States: Evidence from the American Community Survey

Lyman Stone[1]

Abstract

BACKGROUND
Amid low fertility rates in the industrialized world, some subpopulations have maintained high fertility rates. However, it has often been difficult to study these populations due to limitations in extant data sources.

OBJECTIVE
This paper will demonstrate a method of measuring key demographic indicators for Ultra-Orthodox Jews using demographic and language variables in the American Community Survey (ACS).

METHODS
Comparison of estimates of total fertility rates derived from ACS estimates of Yiddish and Hebrew speakers to related indicators from small surveys of American Jewish populations and data on same-sect fertility in Israel and the United Kingdom validates the use of Yiddish to identify Ultra-Orthodox Jewish respondents in the ACS.

RESULTS
ACS-derived demographic estimates for Yiddish speakers closely approximate estimates derived for Ultra-Orthodox Jewish communities using other methods. Ultra-Orthodox Jews in America have high fertility but very low rates of teen fertility and marriage, and fairly egalitarian marriage ages. Ultra-Orthodox Jewish fertility is high but not necessarily uncontrolled.

CONCLUSIONS
ACS language data can be used to study relatively small subpopulations with unique demographic characteristics.

CONTRIBUTION
Researchers can use ACS language data to study other demographically unique subpopulations or to study Ultra-Orthodox Jews in more detail than was previously possible.

[1] McGill University, Montreal, Quebec, Canada. Email: lyman.stone@mail.mcgill.ca.

1. Introduction

In virtually every country in the world, the fertility transition has begun, and in many countries, fertility rates have fallen considerably below two children per woman. However, within many now low-fertility societies, high-fertility subpopulations have persisted. For example, prior research has found that the Roma populations of Europe have maintained high fertility rates, especially by maintaining close within-group ties in relatively ethnically segregated communities (Battaglia, Chabé-Ferret, and Lebedinski 2021; Nestorová Dická 2021; Szabó et al 2021). Within classical demography, Hutterite populations have been extensively studied as an example of high fertility rates persisting amid generally low-fertility societies (Menken, Trussell, and Larsen 1986; Evans and Peller 2015). These groups have been studied because data about them are readily available: Roma, as members of an ethnic rather than a religious group, are often identifiable in surveys and censuses, while repositories of Hutterite family records have long been available (as have some limited repositories of Amish demography, such as those used in Ericksen et al. 1979; Greksa 2002; and Hurd 2006).

However, many high-fertility minorities are defined less by recognizable ethnic identity and more by religious identity, as is the case for Mormons (Heaton 1986), the Amish, and Ultra-Orthodox Jews. Despite high rates of endogamy and often shared language, the defining traits for these groups relate to religious confession more than kinship per se. (And indeed, all receive converts from outside their kinship groups, and all practice degrees of shunning and isolation of kin who exit the religious confession, demonstrating the importance of religion and not just ethnicity as a locus of community identity.) Because many government surveys and censuses do not ask about religion or do so only in fairly general ways, these religious minorities can be difficult to identify and study.

In this study, I leverage a unique feature of the American Community Survey (ACS) and the social structure of Jewish populations to study one particular high-fertility subgroup: Ultra-Orthodox Jews. This group's demography is difficult to study. Across two surveys conducted by the Pew Research Center in 2013 and 2020, sampling a total of 13,607 American Jews, only 198 Ultra-Orthodox Jewish respondents were identified; of these, only 92 were women over age 30 (Pew Research Center 2013, 2020). Both surveys asked about children ever born, with an average value of 6.08 children born per woman over age 30 for ultra-Orthodox Jews. The 2000–2001 National Jewish Population Survey sampled 4,383 American Jews, of whom only 12 reported being Ultra-Orthodox Jews (Cohen et al. 2001). Major recent studies of Ultra-Orthodox Jewish demography such as Comenetz (2006), Wodziński (2015), and Sheskin and Dashefsky (2022) do not attempt estimates of Ultra-Orthodox Jewish fertility, and many past studies of American Jewish demography (such as DellaPergola 1980) do not distinguish among Jewish sects.

Even in studying Orthodox Jewish communities, Shain (2019) does not distinguish between Ultra-Orthodox and other (Modern, Yeshivish) Orthodox Jewish communities. Only two recent studies provide specific estimates of fertility for Ultra-Orthodox Jews: Staetsky and Boyd (2015) studying Ultra-Orthodox Jews in the United Kingdom, and Hleihel (2020) in Israel. Hleihel uses official registry data from Israel and finds recent total fertility rates (TFRs) of 6.6 for Ultra-Orthodox Jews versus rates of 3 to 4.5 for other Orthodox Jews and 2 to 2.5 for other Jews. Staetsky and Boyd (2015) find an estimate of around six children per woman for strictly Orthodox Jews (essentially the same group I term Ultra-Orthodox Jews) using the original UK census data but suggest seven children per woman after correcting through use of community sources; other Jews had fertility rates of around two children per woman. Thus there is not at present a credible estimate of recent fertility and other demographic behaviors of Ultra-Orthodox Jews in the United States, even as international estimates range from six to seven children per woman, similar to the six children per woman estimated in Pew's US surveys with small Ultra-Orthodox samples.

2. Data and method

Since 2000 the ACS has asked approximately three million Americans each year a wide range of questions, most notably about the language usually spoken at home, whether they had a child in the prior year, and their age, sex, and marital status. Since 2008 the ACS has also asked about marriages, divorces, and widowhood in the prior year, as well as the number of marital unions. The ACS asks about language by asking respondents if they speak a language other than English at home and, if they do, to write in the name of the language. Census Bureau officials then recode these open responses into fixed categories, with one such category being "Yiddish, Jewish," which is separate from "Hebrew, Israeli."

Yiddish speakers are overwhelmingly Ultra-Orthodox Jewish adherents (Comenetz 2006; Shain 2019; Sheskin and Dashefsky 2022), and prior studies have used census data on language to study Jewish populations (albeit not their fertility) (Cohen and Haberfeld 1997; Chiswick 1999; Kislev 2014; Rebhun 2015). As a result, Yiddish speakers may be a credible proxy for Ultra-Orthodox populations writ large. Among older populations, some non-Ultra-Orthodox Eastern European immigrant speakers of Yiddish also exist. However, this study is primarily limited to reproductive-age individuals (ages 15 to 49). Thus Yiddish speakers in this study are likely to be almost uniformly Ultra-Orthodox Jews. That said, while almost all Yiddish speakers under age 50 are likely to be Ultra-Orthodox Jews, not all Ultra-Orthodox Jews speak Yiddish at home, so these data might not be valid for estimating total size of the Ultra-Orthodox Jewish population. On the

other hand, Hebrew speakers are not likely to be Ultra-Orthodox Jews and may be individuals who immigrated from or spent significant time in Israel. This population is included to provide a comparison case of another possibly Jewish population in the ACS. This paper tests the assumption that Yiddish speakers are a good proxy for Ultra-Orthodox Jews, determining if ACS-measured Yiddish speakers and Hebrew speakers have fertility rates similar to those estimated for Ultra-Orthodox populations (approximately 6–7 children per woman in the two Pew surveys, 6.6 in Israel, and 6–7 in the United Kingdom). Although Israel and the United Kingdom are very different contexts than the United States, they are the only sites of well-studied Ultra-Orthodox Jewish fertility, and many beliefs and value sets are shared by Ultra-Orthodox Jews across contexts. If Yiddish speakers in the United States had far lower fertility than well-measured Ultra-Orthodox Jewish communities in Israel, it could raise concern about the validity of using Yiddish language as a proxy. All data are queried in IPUMS (Ruggles et al. 2023), and estimates use standard population weights. All one-year ACS files from 2000 to 2021 were pooled for use.

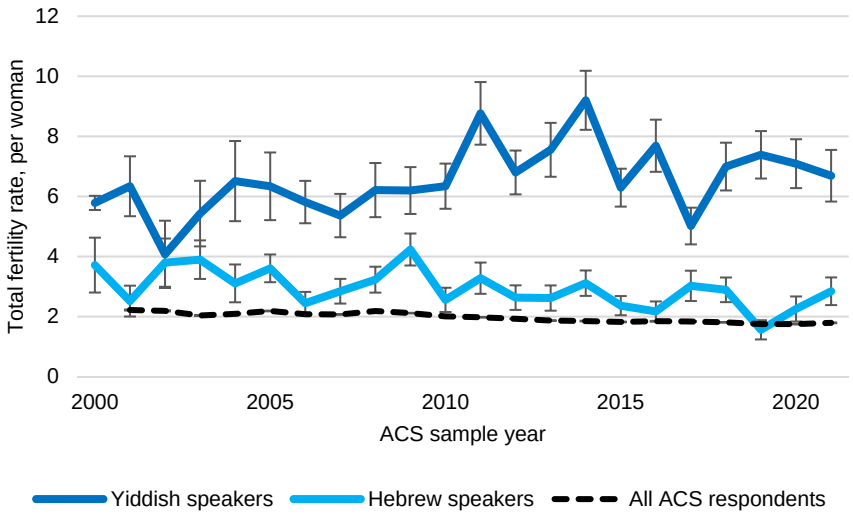
Table 1: Descriptive statistics of Yiddish and Hebrew speakers, ACS 2000–2021

	Yiddish speakers		Hebrew speakers	
age	women	with a birth	women	with a birth
15 to 19	1,530	19	1,435	5
20 to 24	995	322	1,221	92
25 to 29	939	311	1,156	162
30 to 34	899	294	1,483	300
35 to 39	647	165	1,557	198
40 to 44	559	72	1,384	59
45 to 49	472	21	1,250	18
	men		men	
15 to 19	1,670		1,428	
20 to 24	1,123		1,354	
25 to 29	1,004		1,278	
30 to 34	980		1,596	
35 to 39	701		1,657	
40 to 44	569		1,630	
45 to 49	478		1,394	

3. Fertility of Yiddish and Hebrew speakers

Figure 1 shows estimates of annual total fertility rates for Yiddish and Hebrew speakers in the ACS as well as for all ACS respondents. Across all years, the ACS includes 30,176 Yiddish speakers and 37,898 Hebrew speakers, of whom 6,150 and 9,766 are reproductive-age women, respectively. This is a vastly larger sample than is available in other sources. Period fertility rates among Yiddish speakers have ranged from 4 to 10 children per woman, with no clear time trend, averaging around 6.6 children per woman. Fertility rates for Hebrew speakers have fallen from around 3 to 4 children per woman before 2010 to around 2 to 3 children per woman in more recent years, averaging 2.9 across all periods. Meanwhile, fertility rates for all ACS respondents range from 2.2 in 2005 to 1.75 in 2020. ACS fertility estimates do not precisely match official vital statistics data from the US National Center for Health Statistics but are very similar in general level and trend.

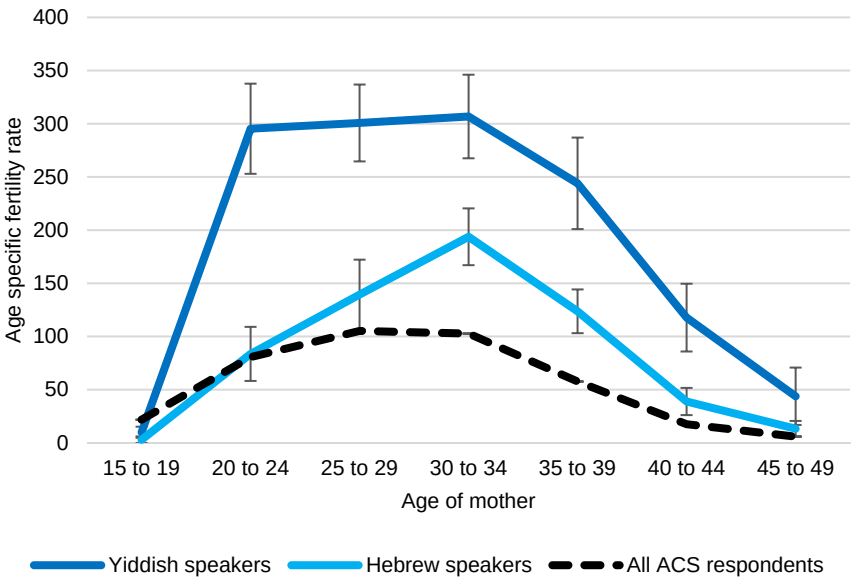
Figure 1: Total fertility rates by year and language spoken at home, ACS 2000–2021, 95% C.I.



Small numbers of respondents available for any specific year make detailed age-specific fertility rates difficult to estimate over time. However, pooling all years and respondents, Figure 2 shows estimated age-specific fertility rates (ASFRs) for Yiddish

and Hebrew speakers, as well as for all ACS respondents. Yiddish-speaking women have higher ASFRs than Hebrew-speaking women at all ages. However, teen fertility rates are appreciably lower for both Yiddish- and Hebrew-speaking women than for ACS respondents generally; detailed year-of-age data show that fertility for Yiddish and Hebrew speakers alike is near zero at ages 15, 16, and 17. Although Yiddish speakers have very high overall TFRs (around 6.6 children born per woman in the pooled data), these high birth rates are driven not by high rates of youth fertility but by high rates of adult fertility. Hebrew-speaking women have ASFRs similar to those of other women until their late 20s; their fertility rates remain elevated later in their reproductive lives. Hebrew-speaking women's total fertility rates are comparable to Israel's, perhaps pointing to relevant cultural or norm transmission, or continuing life course patterns related to migrant origin.

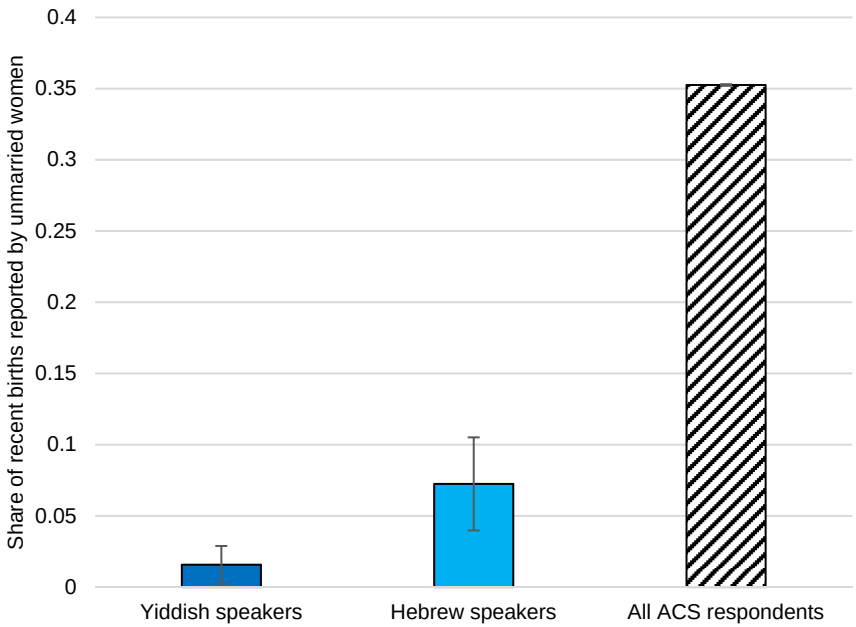
Figure 2: Age-specific fertility rates by age and language spoken at home, ACS 2000–2021, 95% C.I.



Finally, because the ACS includes data about mothers' marital status, it is possible to estimate non-marital fertility proportions. Proportions of non-marital fertility are very low for both Yiddish and Hebrew speakers, so annual estimates are very volatile. Figure 3 shows the share of births to non-married mothers pooled across the whole time period

for Yiddish and Hebrew speakers and all ACS respondents. Among ACS respondents in general, 35% of reported births in the last year were to women who reported not being married. Some women may have married after a birth but before completing the ACS or may have exited a union in that period, so this non-marital birth share is not a precise match for marital status at birth. Nonetheless, it is striking that Yiddish speakers report just 2% of recent births among mothers who are unmarried and Hebrew speakers report just 7%. Non-marital birth shares are extremely low in these communities, likely explaining the low prevalence of teen births.

Figure 3: Non-marital birth share by language spoken at home, ACS 2000–2021, 95% C.I.

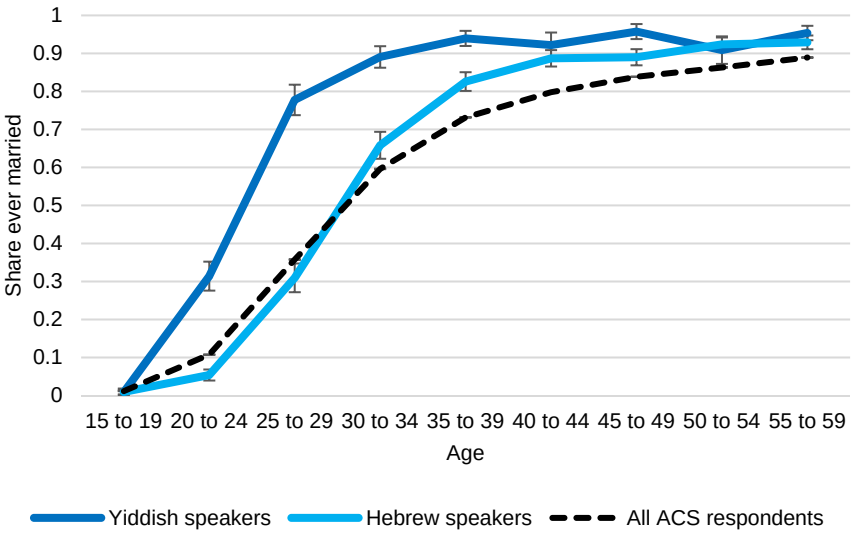


4. Marital patterns of Yiddish and Hebrew speakers

The ACS also includes indicators of marital status and behaviors. To begin with, Figures 4a and 4b show the share of Yiddish and Hebrew speakers (and also all ACS respondents) who have ever been married, pooling all available years. Among Yiddish-speaking males,

shown in Figure 4a, the ever-married share reaches 90% by their early 30s. For Hebrew-speaking males, 90% have married by their early 40s; for all male ACS respondents, this does not occur until the late 50s or early 60s. Even in their 40s and 50s, Yiddish and Hebrew speakers have higher married shares than other ACS respondents. Yiddish and Hebrew speakers not only enter marriage earlier but at every adult age have higher married shares, suggesting not only a tempo difference at entrance but an overall difference in prevalence of marriage.

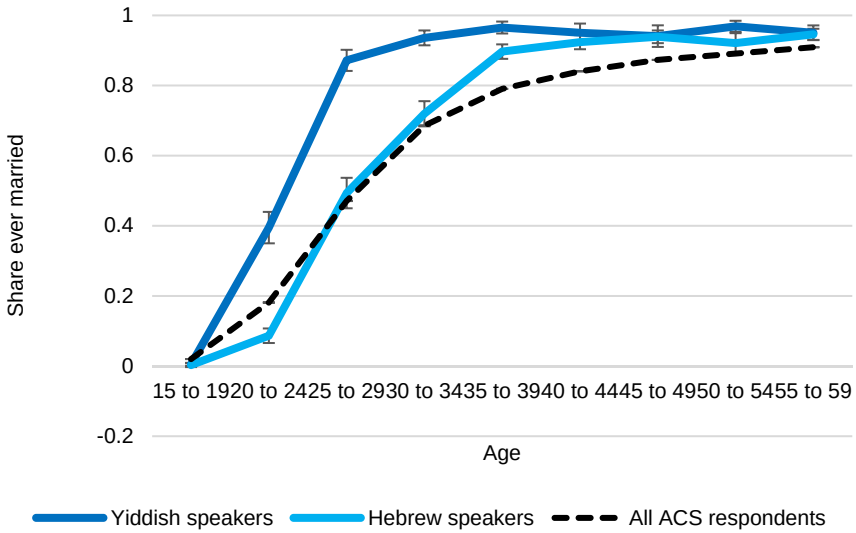
Figure 4a: Share ever married by age and language spoken at home, males only, ACS 2000–2021, 95% C.I.



As with fertility, however, high Yiddish-speaker married shares are not driven by teen or child marriages. At ages 15, 16, and 17, Yiddish speakers have the same married shares as ACS respondents generally. High Yiddish-speaker married shares arise through extremely dense entrance into marriage between ages 18 and 24 – marriages that are comparatively early but are nonetheless not child marriages. Figure 4b shows the same data for females, showing essentially the same overall trend: unexceptional prevalence of child marriages, nearly universal entrance into marriage in early adulthood, and persistently higher prevalence of marital experience than among other ACS respondents. Hebrew speakers do not exhibit the same nearly universal entrance into marriage in early

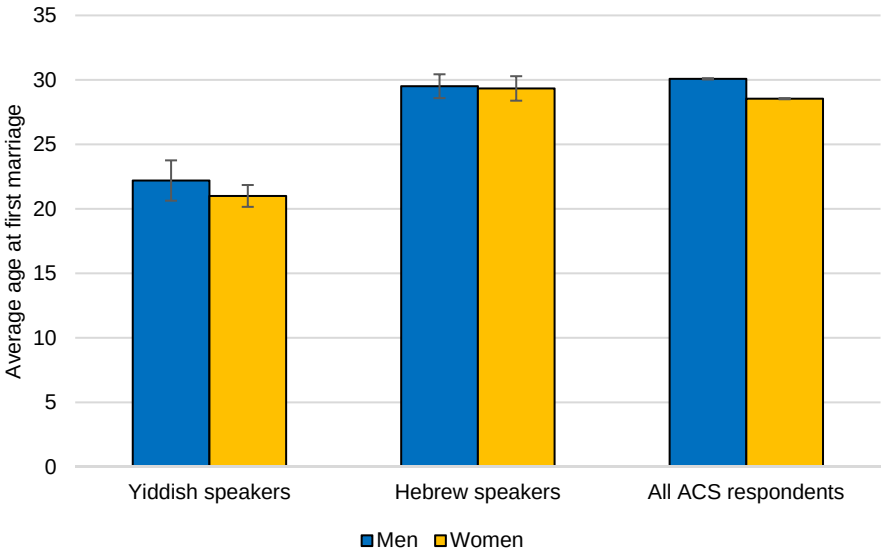
adulthood but do reach higher prevalence of marital experience than other ACS respondents.

Figure 4b: Share ever married by age and language spoken at home, females only, ACS 2000–2021, 95% C.I.



Finally, Figure 5 shows the average age of first marriages pooled across the sample period for Yiddish- and Hebrew-speaking males and females, as well as all ACS respondents. Since 2008 the ACS has asked respondents their lifetime number of marriages, if they were married in the last year (making it possible to identify first marriages in a given year), and their age, making a calculation of mean age at marriage possible. Only 613 first-marriage occurrences are observed for Yiddish and Hebrew speakers. Thus the sample is too small to estimate any variation over time. Among Yiddish speakers, the mean age of first marriages recorded in the ACS from 2008 to 2021 is 22.2 years for males and 21 years for females. This is nearly a decade younger than what is observed for Hebrew speakers (29.5 and 29.3, respectively) or for all ACS respondents (30 and 28.5 years, respectively). Thus Yiddish speakers are characterized by very early marriage, though, as shown above, with no elevated proportion of child marriage. There is no evidence that highly age-unequal marriages are more common among Yiddish or Hebrew speakers, though error margins are too large to offer conclusive statements about gender age gaps at marriage.

Figure 5: Mean age at first marriage by sex and language spoken at home, ACS 2008–2021, 95% C.I.



5. Conclusion

Total fertility rates (a period fertility indicator) for Yiddish speakers in the ACS are comparable to completed fertility rates (a cohort fertility indicator) estimated for American Ultra-Orthodox Jews in two Pew Research Center surveys (6.6 versus 6.1) and are almost identical to total fertility rates (period) estimated for Ultra-Orthodox Jews in Israel (6.6 in both cases) and the United Kingdom (6.6 versus 6 to 7). This supports the idea that the Yiddish language use can be used as a valid proxy for Ultra-Orthodox Jewish demographic characteristics in the United States. In general, it appears that Ultra-Orthodox Jews in the United States have high fertility due to nearly universal marriage in the early 20s as well as persistently high fertility across all adult ages. Ultra-Orthodox Jews have lower teen birth rates than Americans generally and comparable teen marriage rates. Low teen birth rates likely arise from extremely low rates of non-marital birth (2% among Yiddish speakers versus 35% for the United States on the whole) interacting with unexceptional rates of child marriage.

Although Ultra-Orthodox Jews do have high fertility, they stand in sharp contrast to various natural fertility populations, such as those reviewed in Menken, Trussell, and Larsen (1986). For example, among women married in Canada from 1700 to 1730, there were about 500 births per 1,000 wives between the ages of 20 and 24; among Yiddish speakers from 2000 to 2021, there were 430, a marital fertility rate 14% lower. By ages 35 to 39, the rates were 410 among Canadian wives in 1700–1730 versus 260 among Ultra-Orthodox Jewish wives in 2000–2021, 37% lower. That this gap is larger at higher ages points to the possibility of age- and parity-specific stopping or spacing among Ultra-Orthodox Jewish couples. However, because the ACS does not provide prior birth parity data, this possibility cannot be formally tested. Traditional Jewish law may influence fertility behavior by regulating times and periods when married couples may have sex. But likely more consequentially, most Ultra-Orthodox Jewish communities permit the use of some kinds of contraceptives in some cases. In fact, majorities of Ultra-Orthodox Jewish women have used contraception by age 30 (Sabiner et al. 2020), while a 1987–1988 survey of Israeli women found little evidence of religious influence on contraceptive method choice and a contraceptive prevalence of 48% among Ultra-Orthodox Jewish women (Okun 2000). Many schools of Jewish law and theology also permit abortions in some circumstances. Thus Ultra-Orthodox Jews represent a case of a population with fairly widespread access to contraception and abortion, heavily exposed to norms of fertility as a conscious choice, and yet still with "pretransitional" fertility rates.

Future study could use ACS data to explore other variables (education, income, urbanization, housing, and so on) that might mediate fertility among Yiddish speakers or even account for some of the fertility gap between Yiddish speakers and other ACS respondents. Understanding how much of Ultra-Orthodox Jewish fertility exceptionalism is caused by unique norms and values versus specific material or structural circumstances (such as the availability of social support and kin who provide child care), or the interplay of the two, might provide valuable insights about fertility behaviors in other, less-exceptional populations. More broadly, the method demonstrated here can be extended to a wide range of subpopulations in the United States too small to be captured in smaller demographic surveys, such as the National Survey of Family Growth. While high-fertility populations such as the Amish (who speak primarily Pennsylvania Dutch, a variant of German) may be of interest, low-fertility populations like ACS respondents who speak Korean or Japanese might also be of interest.

References

Battaglia, M., Chabé-Ferret, B., and Lebedinski, L. (2021). Segregation, fertility, and son preference: The case of the Roma in Serbia. *Journal of Demographic Economics* 87(2): 233–260. doi:10.1017/dem.2020.8.

Chiswick, B.R. (1999). The occupational attainment and earnings of American Jewry, 1890 to 1990. *Contemporary Jewry* 20(1): 68–98. doi:10.1007/BF02967960.

Cohen, S.M., Mott, F., Blass, L., Schwarts, J., Ament, J., Klaff, V., and Kotler-Berkowitz, L. (2001). 2000-01 National Jewish Population Survey. Berman Jewish DataBank.

Cohen, Y. and Haberfeld, Y. (1997). The number of Israeli immigrants in the United States in 1990. *Demography* 34(2): 199–212. doi:10.2307/2061699.

Comenetz, J. (2006). Census-based estimates of the Hasidic Jewish population. *Contemporary Jewry* 26: 35–74. doi:10.1007/BF02965507.

DellaPergola, S. (1980). Patterns of American Jewish fertility. *Demography* 17(3): 261–273. doi:10.2307/2061103.

Ericksen, J.A., Ericksen, E.P., Hostetler, J.A., and Huntington, G.E. (1979). Fertility patterns and trends among the old order Amish. *Population Studies* 33(2): 255–276. doi:10.2307/2173531.

Evans, S.M. and Peller, P. (2015). A brief history of Hutterite demography. *Great Plains Quarterly* 35(1): 79–101. doi:10.1353/gpq.2015.0013.

Greksa, L.P. (2002). Population growth and fertility patterns in an Old Order Amish settlement. *Annals of Human Biology* 29(2): 192–201. doi:10.1080/03014460110075684.

Heaton, T.B. (1986). How does religion influence fertility? The case of Mormons. *Journal for the Scientific Study of Religion* 25(2): 248–258. doi:10.2307/1385480.

Hleihel, A. (2020). Fertility of Jewish and other women in Israel, by level of religiosity, 1979–2019. (Central Bureau of Statistics Working Paper). https://www.cbs.gov.il/en/publications/Pages/2020/Fertility-Jewish-Other-Women-Israel-Level-Religiosity-1979-2019.aspx.

Hurd, J.P. (2006). The shape of high fertility in a traditional mennonite population. *Annals of Human Biology* 33(5–6): 557–569. doi:10.1080/03014460600931137.

Kislev, E. (2014). The effect of minority/majority origins on immigrants' integration. *Social Forces* 92(4): 1457–1486. doi:10.1093/sf/sou016.

Menken, J., Trussell, J., and Larsen, U. (1986). Age and infertility. *Science* 233(4771): 1389–1394. doi:10.1126/science.3755843.

Nestorová Dická, J. (2021). Demographic changes in Slovak Roma communities in the New Millennium. *Sustainability* 13(7): 3735. doi:10.3390/su13073735.

Okun, B.S. (2000). Religiosity and contraceptive method choice: The Jewish population of Israel. *European Journal of Population* 16: 109–132. doi:10.1023/A:1006322125744.

Pew Research Center (2013). A Portrait of Jewish Americans. (Pew Research Center Report). https://www.pewresearch.org/religion/2013/10/01/jewish-american-beliefs-attitudes-culture-survey/.

Pew Research Center (2020). Jewish Americans in 2020. (Pew Research Center Report). https://www.pewresearch.org/religion/2021/05/11/jewish-americans-in-2020/.

Rebhun, U. (2015). English-language proficiency among Israeli Jews and Palestinian Arabs in the United States, 1980–2000. *International Migration Review* 49(2). doi:10.1111/imre.12064.

Ruggles, S., Flood, S., Sobek, M., Brockman, D., Cooper, G., Richards, S., and Schouweiler, M. (2023). IPUMS USA: Version 13.0 [dataset]. Minneapolis, MN: IPUMS. doi:10.18128/D010.V13.0.

Sabiner, Y., Rottenstreich, M., Grisaru-Granovsky, S., and Seidman, D.S. (2020). Use of contraception among Ultra-Orthodox Jews: A matched case-control study. *Fertility and Sterility* 114(3): e173. doi:10.1016/j.fertnstert.2020.08.492.

Shain, M. (2019). Understanding the Demographic Challenge: Education, Orthodoxy and the Fertility of American Jews. *Contemporary Jewry* 39: 273–292. doi:10.1007/s12397-018-9249-6.

Sheskin, I.M. and Dashefsky, A. (2022). United States Jewish Population, 2021. In: Dashefsky, A. and Sheskin, I.M. (eds.). *American Jewish Year Book 2021*. American Jewish Year Book, vol 121. Cham: Springer. doi:10.1007/978-3-030-99750-2_6.

Staetsky, L.D. and Boyd, J. (2015). Strictly Orthodox rising: What the demography of British Jews tells us about the future of the community. Institute for Jewish Policy Research.

Szabó, L., Kiss, I., Šprocha, B., and Spéder, Z. (2021). Fertility of Roma minorities in Central and Eastern Europe. *Comparative Population Studies* 46. doi:10.12765/cpos-2021-14.

Wodziński, M. (2015). Historical demography of Hasidism: An outline. In: Grim, B.J., Johnson, T.M., Skirbekk, V., and Zurlo, G.A. (eds.). *Yearbook of International Religious Demography 2015*. Boston: Brill. doi:10.1163/9789004297395_009.