The letter by Garenne responding to Stone (2023) raised essentially two novel points, for which the author is grateful; first, a theoretical comment about natural fertility; second, an empirical argument that Ultra-Orthodox Jewish fertility is in fact similar to fertility in non-contracepting, natural fertility societies (such as rural Niger 1982–2012). Garenne's comment is appreciated. Due to space constraints in the Empirical Findings format, the original paper could not provide a full discussion of marital fertility; however, Garenne has independently replicated marital fertility estimates produced in the course of Stone (2023) but not published and which were referred to in the concluding discussion. A successful replication is always encouraging.

"Natural fertility" (meaning, fertility without evidence of parity-specific control within marriage, the usual definition since at least Henry 1961) received only a single mention in Stone (2023), since data on parity-specific birth rates is not available in the ACS. Ultra-Orthodox Jewish fertility is indeed lower than most documented natural fertility populations as shown in Figure 1 below, however, the introduction of rural Niger as a possible natural fertility population with similar or lower fertility is an interesting exception I had not anticipated at the time of writing.

However, Stone (2023) did not comment on whether Ultra-Orthodox Jews were or were not a natural fertility population. Without data on parity-specific birth data, this cannot be conclusively assessed. Rather, Stone (2023) remarked on the exceptional fact that Ultra-Orthodox Jews *did have* "pretransitional" (i.e., very high) fertility rates *alongside* well-documented contraceptive usage, abortion access, and (not mentioned in the paper) documented *numeric* family size preferences in surveys (DellaPergola 2009) around 4 children per woman. This leads to one strong agreement with Garenne's note: Ultra-Orthodox Jewish fertility is *surprising*, given its evident "modernity" in some quite salient respects. Whether these high fertility rates constitute "natural fertility" will necessarily depend on assessments of parity-specific stopping behavior, and in particular *how* Ultra-Orthodox Jewish women use contraception (spacing, stopping, etc.), questions Stone (2023) could not answer.

Finally, one caveat to Garenne's comparison must be noted. Figure 1 in Garenne's note excludes marital fertility at ages 15-19, yet births at very young ages can be a large part of fertility, especially if marriage ages are young, as they are in rural Niger and for Ultra-Orthodox Jews. Figure 1 below replicates marital fertility rates for Yiddish-speakers in the ACS as Garenne did, and compares them to rural women in Niger in the 1992 DHS wave (I did not have access to 1982 data as Garenne had, and given documented contraceptive usage in this population in 1998 and later waves, felt 1992 was the most appropriate available possibly natural fertility population). As can be seen, women in Niger had considerably higher fertility rates once births before age 20 are considered: marital fertility of 8.2 in total for Yiddish-speakers, vs. 8.9 for rural married women in Niger in 1992. The low birth rates of young *married* Ultra-Orthodox Jews are a remarkable feature of their demography, and point to at least the possibility fertility control within marriage at least for the youngest marriages.

Lyman Stone

References

DellaPergola, S. (2009). Actual, intended, and appropriate family size among Jews in Israel. *Contemporary Jewry* 29(2): 127–152.

Henry, L. (1961). Some data on natural fertility. *Eugenics Quarterly* 8(2): 81–91.

Stone, L. (2023). Ultra-Orthodox fertility and marriage in the United States: Evidence from the American Community Survey. *Demographic Research* 49(29): 769–782

