# Correction to: Sex Differences in the Association of Family and Personal Income and Wealth with Fertility in the United States 

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Because of an error in calculation of coefficients reported in the article "Sex Differences in the Association of Family and Personal Income and Wealth with Fertility in the United States" by Rosemary L. Hopcroft as originally published in the December 2019 issue of Human Nature, the following changes are made to the text and tables.

Revised Abstract Evolutionary theory predicts that social status and fertility will be positively related. It also predicts that the relationship between status and fertility will differ for men and women. This is particularly likely in modern societies given evidence that females face greater trade-offs between status and resource acquisition and fertility than males. This paper tests these hypotheses using newly released data from the 2014 wave of the Survey of Income and Program Participation by the US Census, which has the first complete measures of fertility and number of childbearing partners for a large, representative, national probability sample of men and women and also contains comprehensive measures of economic status as measured by personal and family resources, including income from all sources and all assets. Multivariate analyses show that personal income is positively associated with total fertility and number of childbearing unions for men only. These findings support evolutionary predictions of a positive relationship between status, access to mates, and reproductive success for males. Whereas personal income is negatively associated with total fertility and number of childbearing unions for women, family income (net of personal income) is positively associated with total fertility for women. For married men living with a spouse, family

[^0]income (net of personal income) is negatively associated with total fertility. These findings are consistent with evolutionary theory given the existence of greater tradeoffs between production and reproduction for women in an advanced industrial society. For both women and men, family net worth (net of personal net worth) is negatively associated with number of childbearing unions and fertility. Implications are discussed.
(Replacing three paragraphs in Results beginning on p. 486) Table 2 gives the results for men, women, and the difference in the effects of all variables on number of biological children. Model 1 includes all variables except the number of childbearing unions. For women all variables are significant predictors of total number of children except personal net worth; for men, family income and personal net worth are not significant predictors of number of children. All sex differences except for the effect of being black or Hispanic and personal net worth are significant.

The results show that personal and family resources influence fertility differently for men and women. For men, personal income net of other factors has a positive effect on number of children, whereas for women it has a negative effect (supporting hypotheses 1 and 2). For men, total family income net of other factors has no effect on number of children, whereas for women, total family income net of other factors has a positive effect on fertility (supporting hypothesis 3 but not hypothesis 4). Family net worth has a negative effect on fertility for men and women, although the negative effect of family net worth is significantly larger for men than it is for women. These results support hypothesis 8 , but not hypotheses 5, 6 and 7 .

Model 2 repeats these analyses for the subgroup of individuals who are married and living with their spouse. The results for this subgroup are similar to the results in model 1. For men, family income is significantly negatively associated with fertility (supporting hypothesis 4). So with this select group, more of the hypotheses are supported (all but hypotheses 5,6 , and 7 , since family net worth had a negative effect on women's fertility).
(Replacing one paragraph beginning at bottom of p . 486) Controlling for number of childbearing unions also mediates to some extent the relationship between family net worth and fertility for men and women seen in model 1 . For women, the negative effects of family net worth are smaller but are still significant when number of childbearing unions is controlled. This suggests that women from high-net-worth families have fewer children regardless of their number of childbearing unions. For men, the negative coefficient for family net worth also becomes smaller when number of childbearing unions is controlled, suggesting that men in higher-net-worth families have fewer children in part because they have fewer childbearing unions, but men from high-networth families have fewer children regardless of their number of childbearing unions.
(Replacing four paragraphs beginning bottom third of p. 489) Model 4 repeats this analysis controlling for number of childbearing unions for the subgroup of married individuals living with their spouse. For this subgroup, results are largely similar to the results for all families, with a few notable differences. For married men living with their spouse, all else being equal, controlling for number of childbearing unions does not change the positive effects of personal income on number of children seen in model 2, showing that it does not mediate this relationship for this group of individuals. For married men living with a spouse, a higher income is associated with higher fertility
Table 2 General Linear Regression Models of Number of biological children ever born by Income, Net worth, Number of childbearing unions, and Sex for all cases over 18 years of age living in households with one family. Unstandardized regression coefficients

|  | Model 1 |  |  | Model 2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Families |  |  | Married, Spouse Present |  |  |
|  | Women | Men | Diff | Women | Men | Diff |
| Intercept | $\begin{gathered} -0.006 \\ (0.029) \end{gathered}$ | $\begin{aligned} & \hline-0.548 * * * \\ & (0.028) \end{aligned}$ |  | $\begin{aligned} & 0.886^{* * *} \\ & (0.057) \end{aligned}$ | $\begin{aligned} & 0.590 * * * \\ & (0.052) \end{aligned}$ |  |
| Age | $\begin{aligned} & 0.037 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.041^{* * *} \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.005^{* * *} \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.024 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.027 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.003 * * * \\ & (0.001) \end{aligned}$ |
| Black | $\begin{aligned} & 0.309^{* * *} \\ & (0.028) \end{aligned}$ | $\begin{aligned} & 0.273 * * * \\ & (0.028) \end{aligned}$ | $\begin{gathered} -0.036 \\ (0.036) \end{gathered}$ | $\begin{aligned} & 0.332 * * * \\ & (0.045) \end{aligned}$ | $\begin{aligned} & 0.421 * * * \\ & (0.045) \end{aligned}$ | $\begin{gathered} 0.089 * \\ (0.042) \end{gathered}$ |
| Hispanic | $\begin{aligned} & 0.532 * * * \\ & (0.033) \end{aligned}$ | $\begin{aligned} & 0.481 * * * \\ & (0.036) \end{aligned}$ | $\begin{gathered} -0.051 \\ (0.027) \end{gathered}$ | $\begin{aligned} & 0.507 * * * \\ & (0.049) \end{aligned}$ | $\begin{aligned} & 0.595^{* * *} \\ & (0.047) \end{aligned}$ | $\begin{gathered} 0.088^{*} \\ (0.041) \end{gathered}$ |
| Monthly Personal Income (\$ thousands) | $\begin{aligned} & -0.031 * * * \\ & (0.004) \end{aligned}$ | $\begin{aligned} & 0.009 * * * \\ & (0.002) \end{aligned}$ | $\begin{aligned} & 0.041^{* * *} \\ & (0.004) \end{aligned}$ | $\begin{aligned} & -0.037 * * * \\ & (0.004) \end{aligned}$ | $\begin{aligned} & 0.003 * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.040 * * * \\ & (0.004) \end{aligned}$ |
| Monthly Family Income (\$ thousands) | $\begin{aligned} & 0.007 * * * \\ & (0.001) \end{aligned}$ | $\begin{gathered} 0.000 \\ (0.002) \end{gathered}$ | $\begin{aligned} & -0.006 * * * \\ & (0.002) \end{aligned}$ | $\begin{aligned} & 0.004 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & -0.014 * * * \\ & (0.003) \end{aligned}$ | $\begin{aligned} & -0.018 * * * \\ & (0.003) \end{aligned}$ |
| Personal Net Worth (\$ millions) | $\begin{gathered} -0.058 \\ (0.037) \end{gathered}$ | $\begin{gathered} -0.001 \\ (0.013) \end{gathered}$ | $\begin{gathered} 0.057 \\ (0.041) \end{gathered}$ | $\begin{gathered} -0.034 \\ (0.031) \end{gathered}$ | $\begin{gathered} 0.001 \\ (0.011) \end{gathered}$ | $\begin{gathered} 0.035 \\ (0.034) \end{gathered}$ |
| Family Net Worth (\$ millions) | $\begin{gathered} -0.020 * * \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.071 * * \\ (0.024) \end{gathered}$ | $\begin{gathered} -0.051 * \\ (0.026) \end{gathered}$ | $\begin{aligned} & -0.013 * * \\ & (0.005) \end{aligned}$ | $\begin{gathered} -0.045^{*} \\ (0.022) \end{gathered}$ | $\begin{gathered} -0.031 \\ (0.023) \end{gathered}$ |
| Number of Childbearing Unions N <br> $\mathrm{R}^{2}$ | 334,864 0.187 | $\begin{array}{r} 288,708 \\ 0.233 \end{array}$ |  | $\begin{array}{r} 165,746 \\ 0.088 \end{array}$ | $\begin{array}{r} 165,154 \\ 0.093 \end{array}$ |  |

Table 2 (continued)

|  | Model 3 |  |  | Model 4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Families |  |  | Married, Spouse Present |  |  |
|  | Women | Men | Diff | Women | Men | Diff |
| Intercept | $\begin{aligned} & -0.546 * * * \\ & (0.021) \end{aligned}$ | $\begin{aligned} & -0.527 * * * \\ & (0.021) \end{aligned}$ |  | $\begin{aligned} & -0.257 * * * \\ & (0.037) \end{aligned}$ | $\begin{aligned} & -0.477 * * * \\ & (0.039) \end{aligned}$ |  |
| Age | $\begin{aligned} & 0.022 * * * \\ & (0.000) \end{aligned}$ | $\begin{aligned} & 0.017 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & -0.005 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.017 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.018 * * * \\ & (0.001) \end{aligned}$ | $\begin{gathered} 0.001 \\ (0.001) \end{gathered}$ |
| Black | $\begin{gathered} -0.019 \\ (0.021) \end{gathered}$ | $\begin{gathered} -0.021 \\ (0.020) \end{gathered}$ | $\begin{gathered} -0.002 \\ (0.026) \end{gathered}$ | $\begin{gathered} 0.064 \\ (0.042) \end{gathered}$ | $\begin{gathered} 0.038 \\ (0.036) \end{gathered}$ | $\begin{gathered} -0.027 \\ (0.036) \end{gathered}$ |
| Hispanic | $\begin{aligned} & 0.302 * * * \\ & (0.030) \end{aligned}$ | $\begin{aligned} & 0.276 * * * \\ & (0.026) \end{aligned}$ | $\begin{gathered} -0.026 \\ (0.023) \end{gathered}$ | $\begin{aligned} & 0.371 * * * \\ & (0.037) \end{aligned}$ | $\begin{aligned} & 0.387 * * * \\ & (0.039) \end{aligned}$ | $\begin{gathered} 0.016 \\ (0.026) \end{gathered}$ |
| Monthly Personal Income (\$ thousands) | $\begin{aligned} & -0.021^{* * *} \\ & (0.002) \end{aligned}$ | $\begin{gathered} 0.002 * \\ (0.001) \end{gathered}$ | $\begin{aligned} & 0.023 * * * \\ & (0.002) \end{aligned}$ | $\begin{aligned} & -0.024 * * * \\ & (0.003) \end{aligned}$ | $\begin{aligned} & 0.003 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.027 * * * \\ & (0.003) \end{aligned}$ |
| Monthly Family Income (\$ thousands) | $\begin{aligned} & 0.006^{* * *} \\ & (0.001) \end{aligned}$ | $\begin{gathered} 0.002 \\ (0.001) \end{gathered}$ | $\begin{aligned} & -0.004 * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & 0.004 * * * \\ & (0.001) \end{aligned}$ | $\begin{aligned} & -0.012 * * * \\ & (0.002) \end{aligned}$ | $\begin{aligned} & -0.016 * * * \\ & (0.002) \end{aligned}$ |
| Personal Net Worth (\$ millions) | $\begin{gathered} -0.027 \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.002 \\ (0.010) \end{gathered}$ | $\begin{gathered} 0.025 \\ (0.021) \end{gathered}$ | $\begin{gathered} -0.020 \\ (0.018) \end{gathered}$ | $\begin{gathered} -0.003 \\ (0.010) \end{gathered}$ | $\begin{gathered} 0.017 \\ (0.021) \end{gathered}$ |
| Family Net Worth (\$ millions) | $\begin{gathered} -0.009 * \\ (0.004) \end{gathered}$ | $\begin{gathered} -0.013 * \\ (0.006) \end{gathered}$ | $\begin{gathered} -0.005 \\ (0.008) \end{gathered}$ | $\begin{gathered} -0.009 * \\ (0.004) \end{gathered}$ | $\begin{aligned} & -0.023 * * \\ & (0.008) \end{aligned}$ | $\begin{gathered} -0.014 \\ (0.010) \end{gathered}$ |
| Number of Childbearing Unions | $\begin{aligned} & 1.464 * * * \\ & (0.011) \end{aligned}$ | $\begin{aligned} & 1.637 * * * \\ & (0.011) \end{aligned}$ | $\begin{aligned} & 0.173 * * * \\ & (0.014) \end{aligned}$ | $\begin{aligned} & 1.493 * * * \\ & (0.019) \end{aligned}$ | $\begin{aligned} & 1.627 * * * \\ & (0.017) \end{aligned}$ | $\begin{aligned} & 0.133 * * * \\ & (0.022) \end{aligned}$ |
| $N$ | 334,864 | 288,708 |  | 165,746 | 165,154 |  |
| $\mathrm{R}^{2}$ | 0.542 | 0.633 |  | 0.419 | 0.472 |  |

[^1]regardless of their number of childbearing unions. As with the results for all families, the negative effect of family net worth on number of children for both men and women becomes smaller when number of childbearing unions is controlled, suggesting that men and women in households with high net worth have fewer children regardless of their number of childbearing unions. Once again, number of childbearing unions has a significantly larger effect on fertility for men than for women in this subgroup.

The previous analyses suggest that number of childbearing unions mediates to some extent the relationship between personal and family resources and fertility for men and women. Given this, personal resources should be associated with number of childbearing unions for men and women. The analyses of predictors of number of childbearing unions in Table 3 help us determine if this is the case. Model 1 in Table 3 shows that, for women, all factors except personal net worth and monthly family income are significantly associated with number of childbearing partners. For women, the variables age, black, and Hispanic are all positively associated with number of childbearing partners, while monthly personal income and family net worth are negatively associated with number of childbearing partners. These results are consistent with the results shown in Table 2.

For men in model 1 of Table 3, all factors except personal net worth and monthly family income are significantly associated with number of childbearing partners. For men, the variables age, black, Hispanic, and personal income are positively associated with number of childbearing partners, while family net worth is negatively associated with number of childbearing unions. Repeating the analysis for the subgroup of married individuals with their spouse present in Model 2 gives largely the same results, except in this analysis monthly personal income is no longer positively associated with number of childbearing unions for men.

These results support the causal scenario that the negative effects of personal income and family net worth on fertility for women exist in part because higher personal income and family net worth are associated with fewer childbearing unions for women. The results also suggest that the positive effect of personal income on fertility for men exists in part because personal income has a positive effect on number of childbearing partners for men. Last, the negative effect of family net worth on fertility for men exists in part because men from families with high net worth have fewer childbearing partners, on average. These findings support hypothesis 9 .
(Replacing four paragraphs in Discussion and Conclusion beginning bottom of p. 491) The effects of personal and family net worth on number of children ever born did not always conform to predictions. For men, the prediction that personal net worth would be positively associated with number of children was not found in the models, nor was personal net worth negatively associated with number of children for women. As predicted, the effect of family net worth (net of personal net worth) is negative for men. Yet family net worth is also negatively associated with number of children for women, the opposite of what was predicted.

There are a variety of possible reasons for these mixed effects of the wealth variables on number of children. The measures of family and personal net worth used in this analysis include the value of assets that are illiquid (values of homes and other real estate) or to which individuals do not have current access (money in retirement accounts, trust funds, etc.) and these assets may be less likely to influence reproductive

| Table 3 <br> coefficients |
| :--- |

[^2]decision-making than individual income, which is immediately available. Alternatively, individuals who have more children may be diverting more resources into those children and less into the acquisition of the kinds of assets measured by the net worth variables in this analysis. Thus, the finding of a negative relationship between family net worth and number of children may reflect a reverse causality-more children leads to fewer accumulated assets.

These mixed results on the effect of net worth do not conform to those of Stulp et al. (2016), who found positive effects of lagged measures of net worth on fertility for US men and women in their longitudinal study. Yet Stulp et al. (2016) did not make any distinction between personal net worth and family net worth in their analysis. Further, the results shown here are based on cross-sectional analysis only; the SIPP does not yet contain longitudinal data for the measures included in this study. Perhaps future longitudinal analysis will yield different findings of the effect of net worth on subsequent fertility for men and women.

The results of this analysis also show that, for men and women, number of childbearing unions mediates the relationship between personal income and total number of children ever born to some extent. Men with higher personal incomes have more childbearing unions on average, all else being equal, and this helps account for their higher fertility. Women with higher personal incomes have fewer childbearing partners on average, and this helps account for their lower fertility.


[^0]:    The online version of the original article can be found at https://doi.org/10.1007/s12110-019-09354-4

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[^1]:    * $p<0.05{ }^{* *} p<0.01{ }^{* * *} p<0.001$

[^2]:    *p<0.05, **p<0.01, *** $p<0.001$

