A Paternal Age Effect on Leftism is Detectable with Continuous Measurements

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Abstract

Previously, we showed that there is a paternal age effect on leftism (increasing leftism with increasing age of father when born), using a binary classification based on three items regarding Black Lives Matter, LGBT, and feminism [1]. The primary limitation of that study was the use of the binary measurement. In this paper, we show that the same effect is detectable with a new, near-Gaussian measurement of leftism. The correlation between this measurement and paternal age was $r = 0.12$ ($p < 0.001$). This measurement has high reliability (Cronbach's alpha = 0.93) which far outperforms the commonly used Wilson-Patterson Conservatism Scale (alpha = 0.71) [2] as well as high validity (leftism *d* for Republicans and Democrats was 2.31, $p < 0.001$). Likewise, we show that, as before, there is no correlation between general leftism and age when having a child in fathers, suggesting this result is not due to older fathers being more leftist.

Introduction

In a previous article, we showed that there is a paternal age effect on leftism (increasing leftism with increasing age of father when born), using a binary classification based on three items regarding Black Lives Matter, LGBT, and feminism [1]. As explained in the introduction of that article, this is indicative of mutational pressure increasing the incidence rate of leftism in the population. Furthermore, we showed, with the same binary measurement of leftism, that older fathers and their wives were not more likely to be leftist than younger fathers and their wives.

The primary limitation of that study was the use of the binary measurement. Binary variables can be problematic for a number of reasons [3]. Dichotomization at the mean can often lead to a reduction in effect sizes, occurrence of spurious significant main effects or interactions, risks of overlooking nonlinear effects, and problems in comparing and aggregating findings across studies.

In this article, we update our measurement to be continuous, and show that the paternal age effect is in fact present under the continuous metric. Our measurement is near-Gaussian, has high reliability (measured as Cronbach's alpha), high validity (measured as its ability to predict party alignment), and outperforms the commonly used Wilson-Patterson Conservatism Scale on these metrics.

Methods

In this paper, two studies are presented. The first surveys 1175 white American men, mean age 41.5 years (SD = 13.2 years) and gives them the general leftism test, and asks their father's age when they were born (mean = 61.3, SD = 7 years). The second surveys 148 fathers over 50 years old (white American men) and gives them the same test, while asking what ages they were when their children were born. The first study establishes the correlation between paternal

age (age of father when born) and leftism, while the second establishes that older fathers are not more leftist than younger fathers.

The continuous metric mirrors the binary metric in that it centers around three topics: LGBT, feminism, and race ideology. These dimensions are hypothesized to be common to empire decline, and covary due to being the result of mutational pressure on the same genes [1]. Each question was on a Likert scale with the following answer choices: Strongly disagree, disagree, neutral, agree, and strongly agree.
The questions were as follows:

G1. Is LGBT good?
G2. Homosexual behavior is fine when it is private and chaste.
G3. There is nothing wrong with public depictions of homosexual relationships.
G4. I support gay marriage.
G5. There is nothing wrong with attending a gay orgy.
G6. Children should be taught about gay sex in sex education classes.

F1. Is feminism good?
F2. The country would be better if women couldn't vote. (-1)
F3. Women should try to be married by the age of 25. (-1)
F4. The government should help ensure sexual equality by making sure women are not discriminated against in private hiring.
F5. Women should hold the majority of the positions of power in society.
F6. Marriage is oppressive for women, and monogamy should be moved away from.

R1. Is Black Lives Matter a good organization?
R2. Europe would be best if it remained all white. (-1)
R3. Immigration policy should be strict and heavily meritorious. (-1)
R4. The government should ensure racial equality by prohibiting racial discrimination in private business dealings such as hiring.
R5. Black people deserve reparations for the legacy of slavery.
R6. I support open borders.

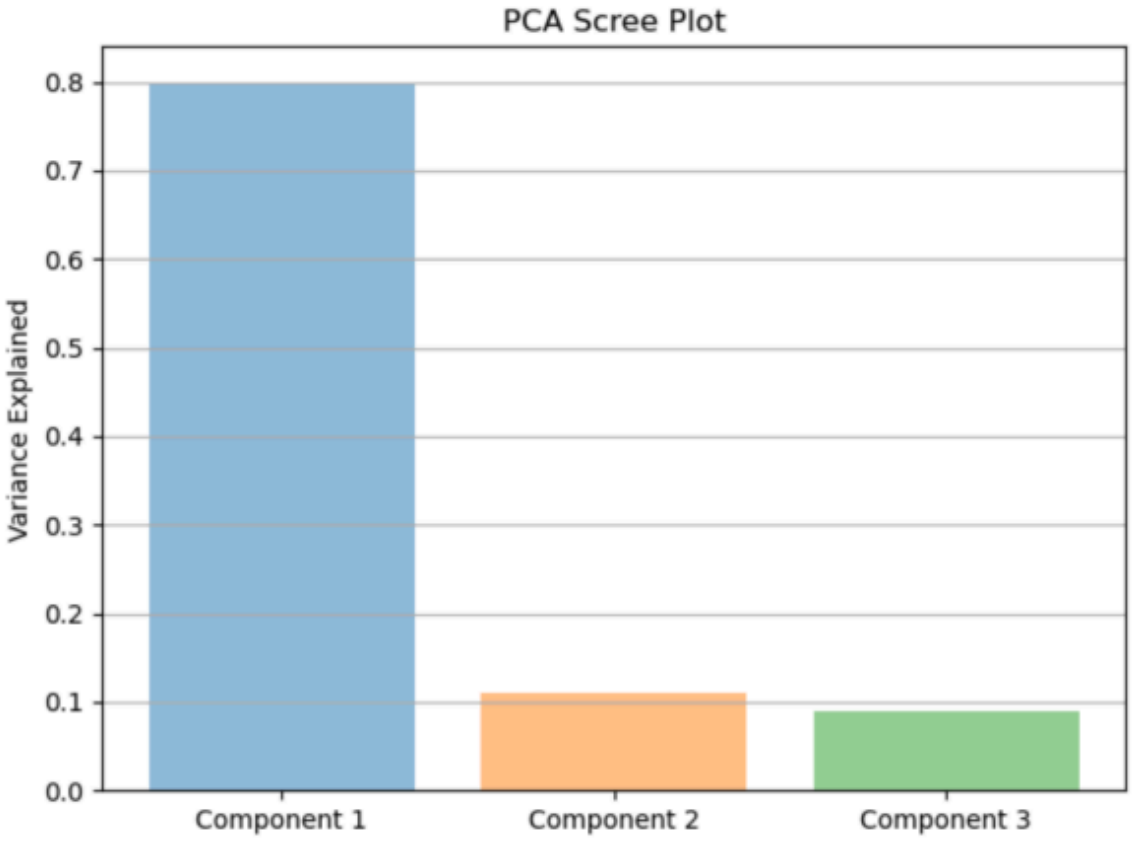
The questions were intended to get "harder" as they progressed in each category, meaning woker people tend to be the only ones to agree to the later questions, while a greater percent of respondents would agree with earlier questions.

Also, items F2, F3, R2, and R3 were reversed.

Each of the 3 sub-scales was designed to be added up into a sum score. From the three sum scores, a general factor was derived by factor analysis with varimax rotation. The sum-scores were near-Gaussian, with Q-Q plot R-squareds of 0.956, 0.97, and 0.981 respectively. We achieved factor loadings of 0.88, 0.87, and 0.78 for race, feminism, and gay respectively. Cronbach's alpha for the three sums was 0.86, which is far over the typical significance

threshold of 0.70. In contrast, Wilson-Patterson conservatism has had alphas as low as 0.71 [2]. Computing alpha over all the sums yielded a value of 0.93.

We also performed PCA as an alternative factor analysis method. We found one component explains 80% of variance, strongly indicating the appropriateness of a one factor solution. The PCA factor correlated with the varimax-rotated factor at r = 0.96. For the analyses in this paper, we used the varimax factor because it was slightly more Gaussian, with a Q-Q plot r^2 of 0.992 vs. 0.986 for PCA.



Scree plot for principal component analysis of Gay sum, Race sum, and Feminism sum.

Figure 1. PCA Scree Plot

These statistics suggest that the measurement has high reliability. We also have evidence of high validity in that it predicts party and wingness well.

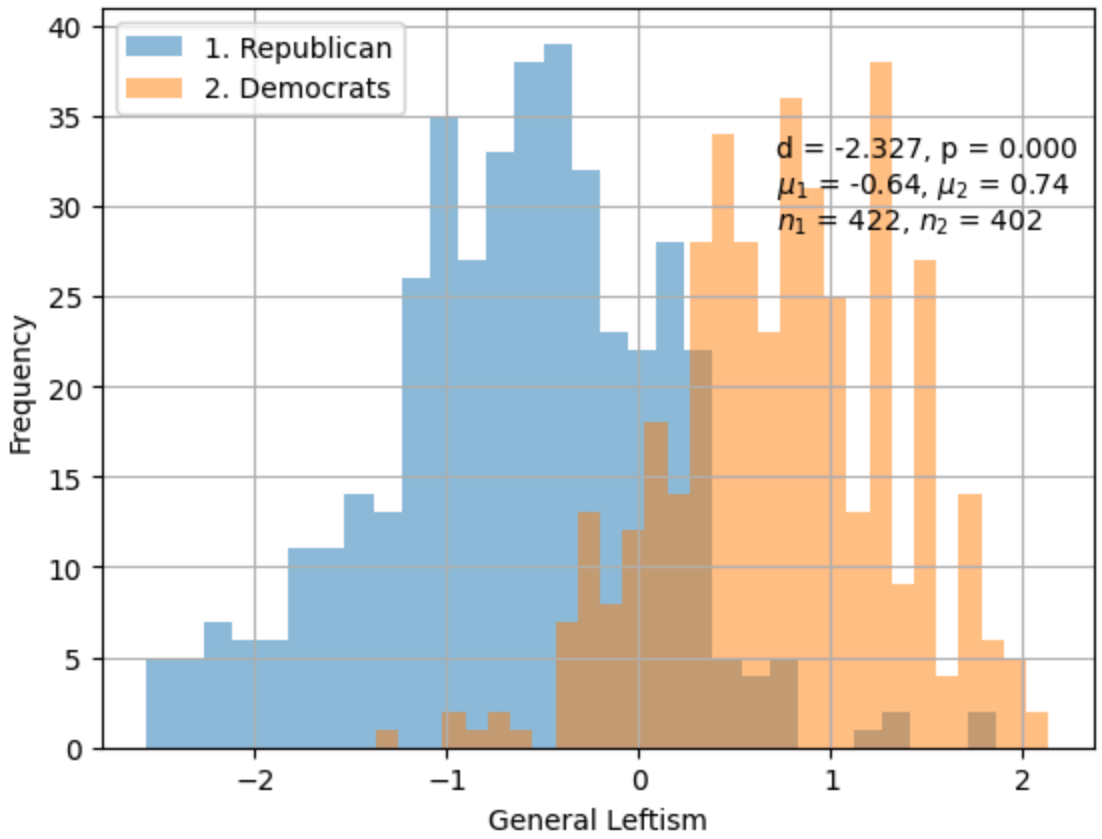


Figure 2. General Leftism and Party

Figure 2 shows general leftism is good at distinguishing between party loyalties. This *d* score is equivalent to an r of about 0.75, meaning general leftism correlates strongly with party alignment.

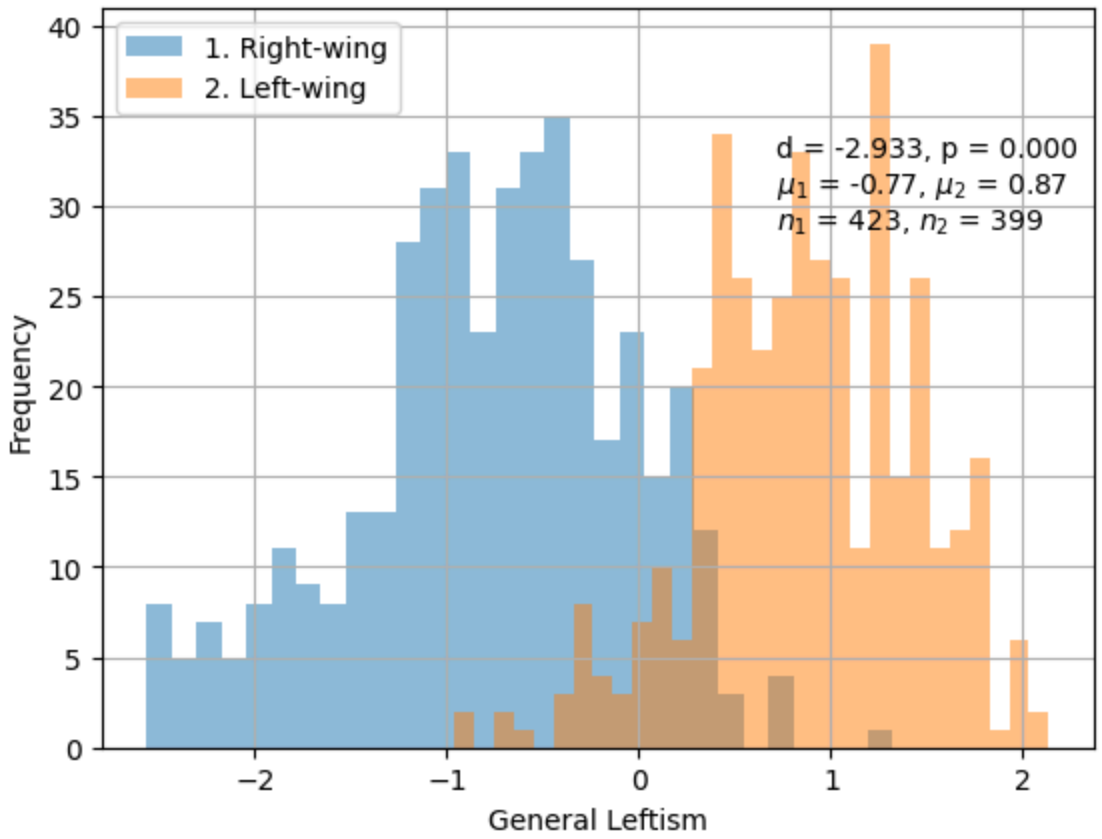


Figure 3. General Leftism and Wingness

Figure 3 shows those under -1 SD General Leftism are more than 90% likely to be right-wing and Republican, and same for those above 1 SD General Leftism.

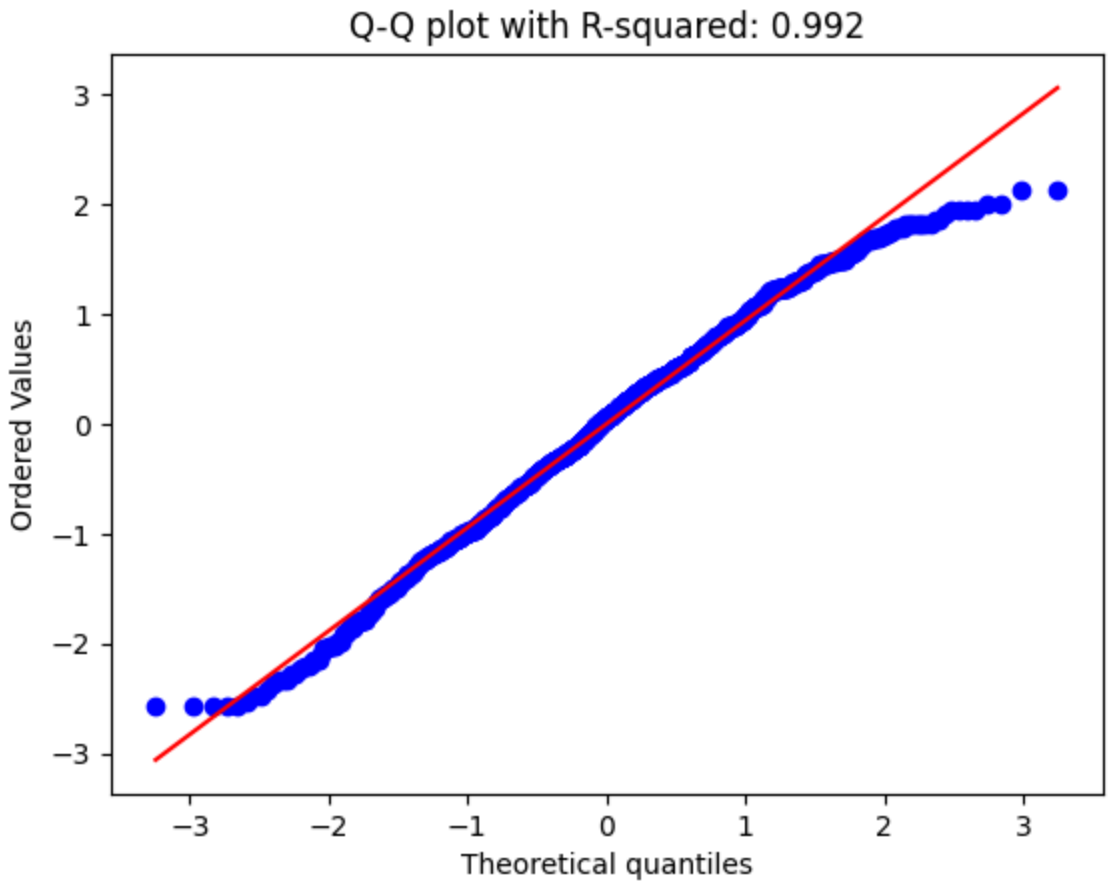


Figure 4. Q-Q Plot of General Leftism

Finally, Figure 4 shows the distribution of General Leftism was nearly gaussian. We had trouble at the tails, but it was accurate up to the 98th percentile.

Results

Study 1

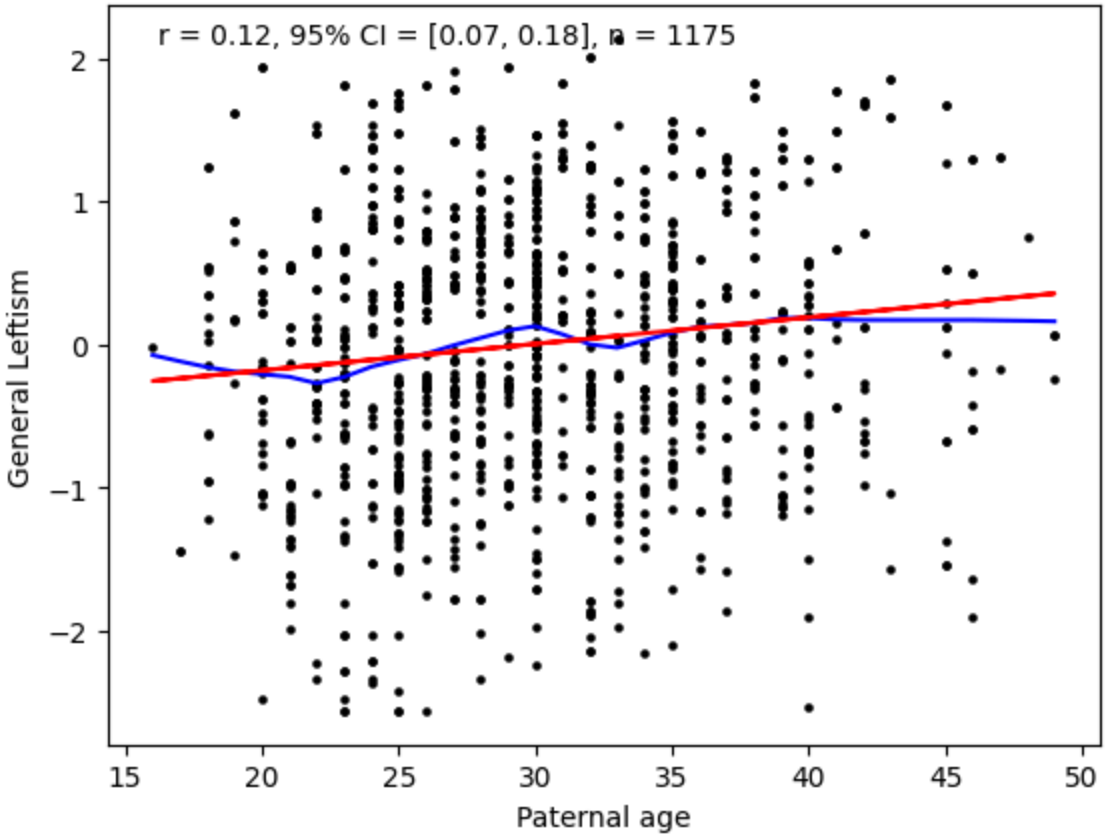


Figure 5. Leftism and Paternal Age

Figure 5 shows the correlation between leftism and paternal age ($p < 0.001$). There is a significant positive correlation. In this data, we cut off the tails of paternal age (>2.5 SD), but this did not change the results. The full data will be publicly available on the author's Github.

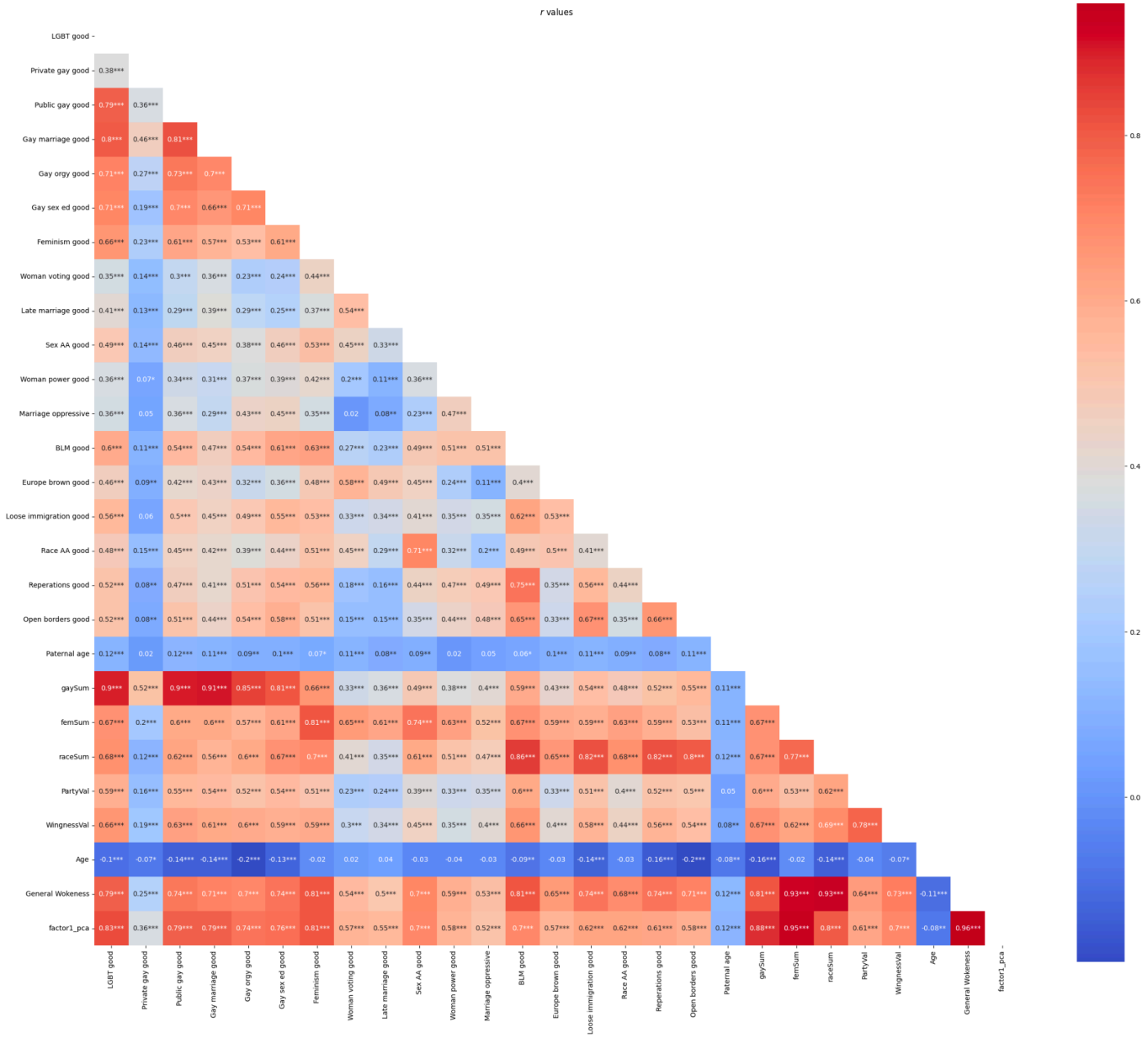


Figure 6. Correlation matrix of study variables.

Figure 6 shows all of the correlation coefficients between all study variables. One star means $p < 0.05$, two means $p < 0.01$, and three means $p < 0.001$. Paternal age correlates with both factors, as well as the 3 sum scores, at .11 or .12 in all cases, $p<0.001$ in all cases.

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                            OLS Regression Results
==============================================================================
Dep. Variable:        General Leftism   R-squared:                       0.025
Model:                            OLS   Adj. R-squared:                  0.022
Method:                 Least Squares   F-statistic:                     9.479
Date:                Fri, 17 Nov 2023   Prob (F-statistic):           3.45e-06
Time:                        22:11:55   Log-Likelihood:                -1585.1
No. Observations:                1175   AIC:                             3178.
Df Residuals:                    1171   BIC:                             3198.
Df Model:                           3
Covariance Type:                  HC3
==============================================================================
                 coef    std err          z      P>|z|      [0.025      0.975]
------------------------------------------------------------------------------
const      -1.527e-16      0.027  -5.59e-15      1.000      -0.053       0.053
Paternal_age_n     0.1104      0.028      3.911      0.000       0.055       0.166
Age_n             -0.0901      0.027     -3.386      0.001      -0.142      -0.038
Interaction_n     -0.0065      0.027     -0.239      0.811      -0.059       0.047
==============================================================================
Omnibus:                       16.939   Durbin-Watson:                   0.994
Prob(Omnibus):                  0.000   Jarque-Bera (JB):               15.798
Skew:                          -0.241   Prob(JB):                     0.000371
Kurtosis:                       2.699   Cond. No.                         1.15
==============================================================================

Notes:
[1] Standard Errors are heteroscedasticity robust (HC3)
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Table 1 Multiple Regression with Paternal age, participant age, on General Leftism. All standardized.

Table 1 shows that the paternal age effect is present across father birth years. It is predicted by mutational load theory that age as well as paternal age will both independently predict general leftism. Age allows one to estimate the base mutational load of an individual's generation while paternal age allows one to estimate the expected deviation from that mean. We find that in the multiple regression model, the partial correlation of paternal age (.1104) with leftism was less than 0.01 under the correlation of leftism with paternal age (0.12), vindicating this prediction. Also, an interaction variable was included, paternal age * age, to see if the paternal age effect varied with age, as Woodley et al. [11] found such an interaction when studying religiosity. We find no evidence of such an interaction in this study, the interaction being essentially 0. Also, by default heteroskedasticity robust SEs were used; these did not change the SE from homoskedastic SEs.

Study 2

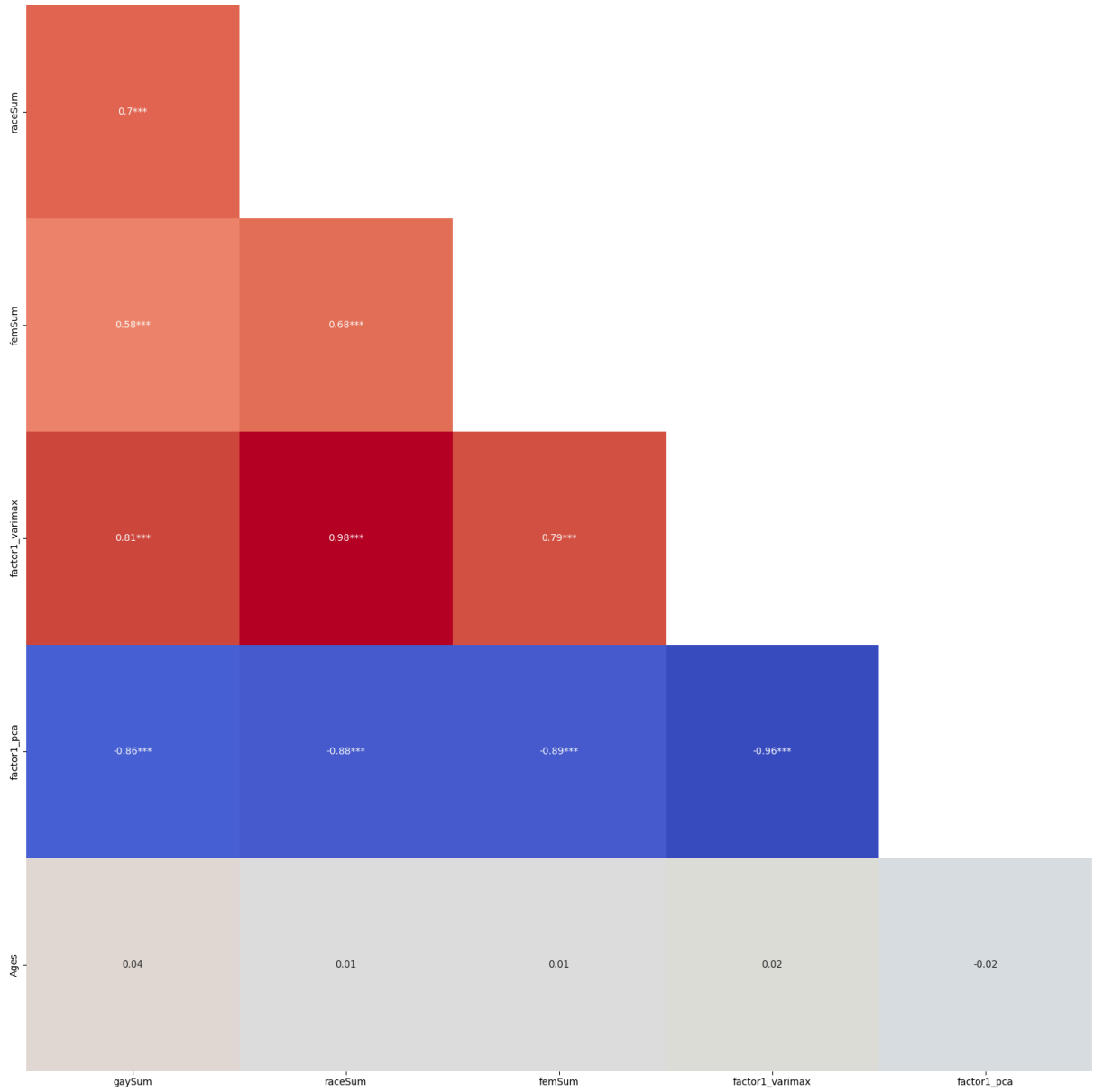

Figure 7. Age of Fathers and Father's Politic

In study 2, we sampled n=148 men over the age of 50 who had had at least one child. We asked them at what ages they had had their children, and administered the general leftism test. We recovered n=307 children and correlated their father's politics with their paternal age. If the association between paternal age and child leftism is explained by additive heritability or shared environment, then the fathers of children with higher paternal age will be more leftist. Thus, father's politics will correlate with paternal age. However, as with the binary measurement from Bronski [1], we found no evidence of such a correlation.

The bottom row of figure 7 shows that father's age when his children are born had no correlation with any sum scores, the varimax rotation factor, or the PCA factor.

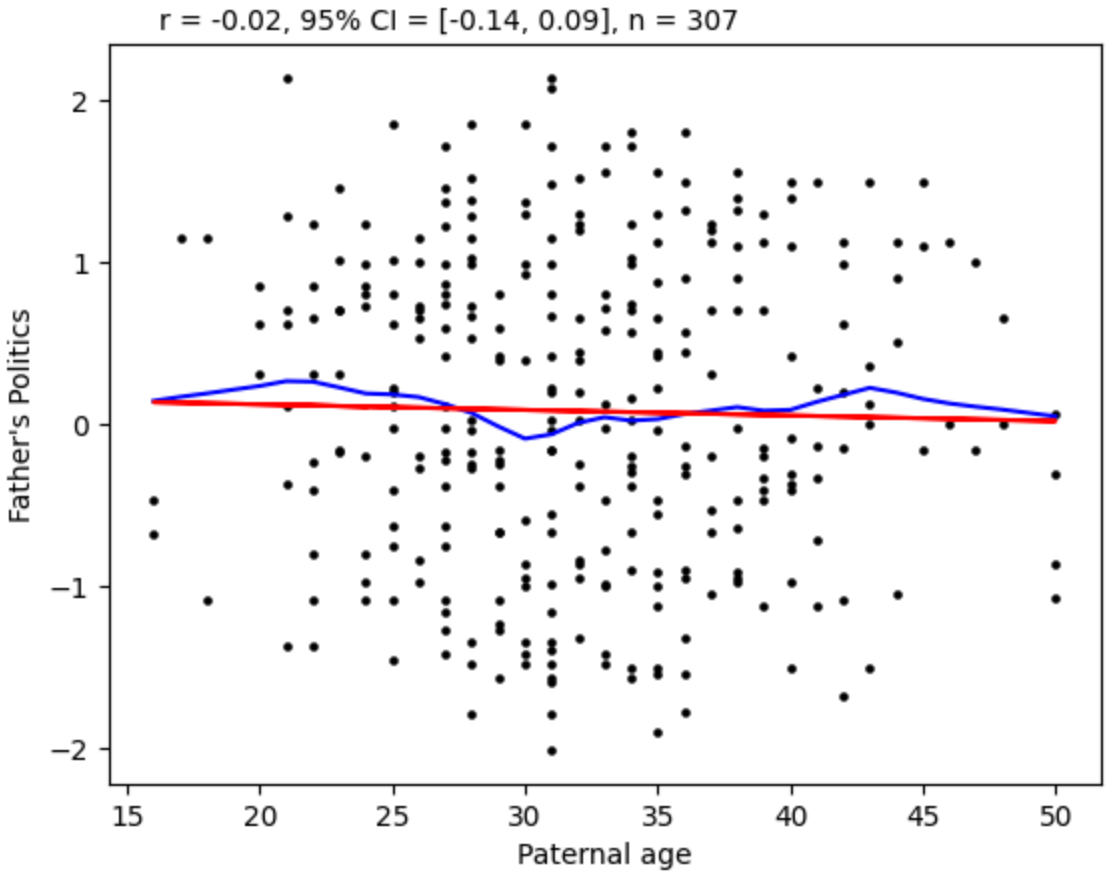

Figure 8. Paternal Age and Father's Politics (factor1_pca)

Figure 8 shows that paternal age and father's politics did not correlate, and gives the confidence interval.

Limitations

The key limitation in this analysis is the lack of controls for maternal age and birth order effects. However, it is unlikely that this matters. IQ has a similar polygenic structure to conservatism, and a paternal correlation of a similar magnitude has been found by Wang [8]. This correlation did not weaken when controlled for maternal age, but the analysis lacked the power to properly control for birth order, so it is unclear what the independent effect of birth order on IQ is and how this confounds the paternal age correlation. Mental illness, however, correlates with leftism on other scales [10], and paternal age effects do not weaken when birth order is controlled for in mental illness [9]. It is unlikely birth order explains much of the paternal age correlation, but it would be advantageous to verify this directly for leftism as well as IQ.

Conclusion

Based on the results, we conclude that there is compelling evidence for a paternal age effect for leftism. The paternal age correlation with leftism is robust to controls for age, and older fathers have again been confirmed to not be more leftist. Furthermore, the p-values are extremely small, with $p < 0.001$.

The next step is molecular confirmation. Studies which confirm the role of de novo mutation in being more leftist than parents, as well as studies which show increasing polygenic scores for leftism associated traits like openness and individualizing through time can molecularly confirm the role of mutational load and genetics more generally in the rise of leftism.

The decline of asabiyyah (defined as a population's ability for collective action and exapnsion) [5] seems to be a general feature of empire decline. We propose that the mechanism of asabiyyah decline is in fact mutational load increasing leftism in a population, potentially alongside immigrant gene flow. Further quantitative studies investigating the universality of the rise of features of leftism like feminism (decreased fertility, increased female driven sexual selection), homosexuality, and mass immigration of foreigners can further confirm this view. It may even happen in animals, especially social mammals with similar patriarchal societies to humans like lions, chimpanzees, gorillas, and wolves. An interesting, though expensive and time consuming experiment, could be to take one of these species and give them great wealth in an area over many generations. We might expect them to begin by defending their wealthy territory from outsiders. Over the generations, free from selective pressures, we would expect to see the decline of fertility and increases in female driven sexual selection, with decreases in the ability and drive for males to dominate the females. We might expect to see the ability to defend the territory weaken; gene flow from outsiders increases. And perhaps homosexual behavior would increase as well. This could be done most easily with wolves, because they can reproduce the fastest among the animals listed (2 year generations) and they are found outside of Africa, in Western nations. Just 20 years would be enough to simulate 10 generations, which is 250 years for humans, approximately the time since the American and French Revolutions. An experiment of similar reach, the aim of which is to domesticate foxes, has been run for the last 60 years in Siberia, with good results [4], so this is not unprecedented.

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