

Evidence of correlations between human partners based on systematic reviews and meta-analyses of 22 traits and UK Biobank analysis of 133 traits

[Tanya B. Horwitz](#) , [Jared V. Balbona](#), [Katie N. Paulich](#) & [Matthew C. Keller](#) 

[Nature Human Behaviour](#) 7, 1568–1583 (2023) | [Cite this article](#)

... we incorporated 480 partner correlations from 199 peer-reviewed studies of co-parents, engaged pairs, married pairs and/or cohabitating pairs that were published on or before 16 August 2022. We also calculated 133 trait correlations using up to 79,074 male–female couples in the UK Biobank (UKB). ... Across analyses, political and religious attitudes, educational attainment and some substance use traits showed the highest correlations, while psychological (that is, psychiatric/personality) and anthropometric traits generally yielded lower but positive correlations.

Consistency between individuals' past and current romantic partners' own reports of their personalities

Yoobin Park  and Geoff MacDonald [Authors Info & Affiliations](#)

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved May 13, 2019 (received for review February 19, 2019)

June 10, 2019 | 116 (26) 12793-12797 | <https://doi.org/10.1073/pnas.1902937116>



*Do people have a “type” when it comes to their romantic partners’ personalities? In the present research, we used data from a 9-y longitudinal study in Germany and examined the **similarity between an individual’s ex- and current partners** using the partners’ self-reported personality profiles. Based on the social accuracy model, our analyses distinguished similarity between partners that was attributable to similarity to an average person (normative similarity) and resemblance to the target participant himself/herself (self-partner similarity) to more precisely examine similarity from partner to partner (distinctive similarity). The results **revealed a significant degree of distinctive partner similarity, suggesting that there may indeed be a unique type of person each individual ends up with**. We also found that distinctive partner similarity was weaker for people high in extraversion or openness to experience, suggesting that these individuals may be less likely to be in a relationship with someone similar to their ex-partner (although the individual difference effects were not mirrored in an alternative analytic approach). These findings provide evidence for stability in distinctive partner personality and have important implications for predicting future partnering behaviors and actions in romantic relationships.*

Does natural selection favour taller stature among the tallest people on earth?

[Gert Stulp](#)^{1,2,✉}, [Louise Barrett](#)^{3,4}, [Felix C Tropf](#)², [Melinda Mills](#)⁵



- the height of Dutch man increased over 20 cm in 150 years, while Americans increased only 6 cm
- stronger sexual selection for tall men in Netherlands
- taller Dutch men had more children
- tall Dutch women were less likely to have children than middling-height Dutch women, the tall women who did have children had more children than their shorter counterparts.
- study accounted for diet, social inequality, and the availability and quality of healthcare

Friendship and natural selection

Nicholas A. Christakis and James H. Fowler  [Authors Info & Affiliations](#)

Edited by Francisco J. Ayala, University of California, Irvine, CA, and approved March 7, 2014 (received for review January 15, 2014)

July 14, 2014 | 111 (supplement_3) 10796-10801 | <https://doi.org/10.1073/pnas.1400825111>

F.R.I.E.N.D.S



Across the whole genome, friends' genotypes at the single nucleotide polymorphism level tend to be **positively correlated** (homophilic). In fact, the **increase in similarity relative to strangers is at the level of fourth cousins**. However, certain genotypes are also **negatively correlated** (heterophilic) in friends. And the degree of correlation in genotypes can be used to create a "friendship score" that predicts the existence of friendship ties in a hold-out sample. A focused gene-set analysis indicates that some of the overall correlation in genotypes can be explained by specific systems; for example, an **olfactory gene set is homophilic and an immune system gene set is heterophilic**, suggesting that these systems may play a role in the formation or maintenance of friendship ties. Friends may be a kind of "functional kin." Finally, homophilic genotypes exhibit significantly **higher measures of positive selection**, suggesting that, on average, they may yield a synergistic **fitness advantage** that has been helping to drive recent human evolution.

- homophilic genes - olfactory transduction pathway is significantly overrepresented
- genetic heterophily between for HLA haplotypes

The evolution of menopause in toothed whales

[Samuel Ellis](#) , [Daniel W. Franks](#), [Mia Lybkær Kronborg Nielsen](#), [Michael N. Weiss](#) & [Darren P. Croft](#)

[Nature](#) 627, 579–585 (2024) | [Cite this article](#)

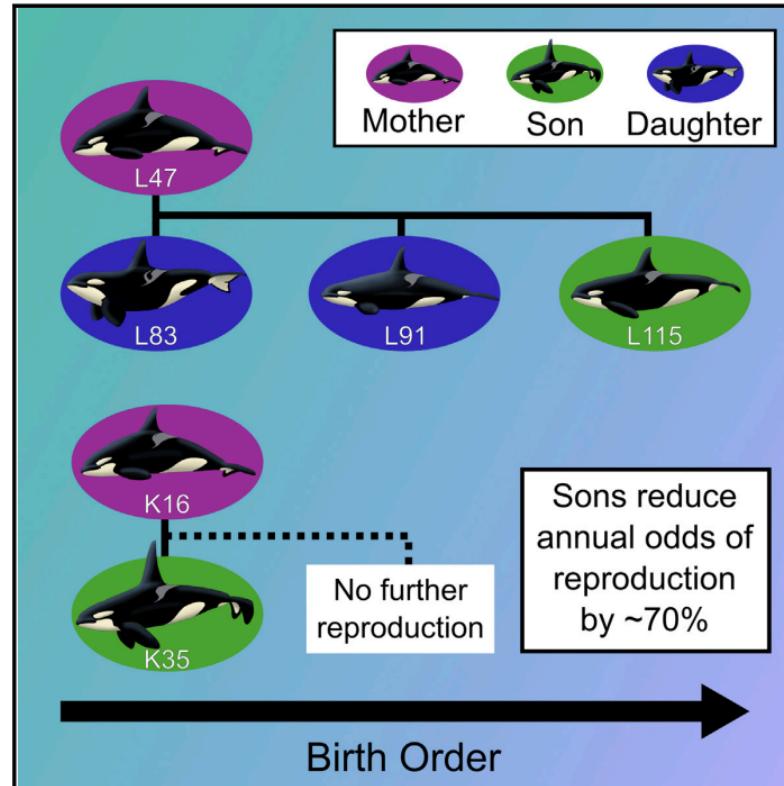
58k Accesses | 36 Citations | 1302 Altmetric | [Metrics](#)

- **the live-long hypothesis vs the stop-early hypothesis**
- **no evidence for the male-driven menopause hypothesis**
- **investment in male offspring (males larger)**
- **species with menopause are reproducing more slowly**
- **grandmother and mother hypotheses**

Although progress has been made in understanding the adaptive value of menopause in humans^{3,4}, the generality of these findings remains unclear. To toothed whales are the only mammal taxon in which menopause has **evolved several times**⁵, providing a unique opportunity to test the theories of how and why menopause evolves in a comparative context. Here, we assemble and analyse a comparative database to test competing evolutionary hypotheses. We find that menopause evolved in toothed whales by females **extending their lifespan without increasing their reproductive lifespan, as predicted by the 'live-long' hypotheses**. We further show that menopause results in females increasing their opportunity for **intergenerational help** by increasing their lifespan overlap with their grandoffspring and offspring without increasing their reproductive overlap with their daughters. Our results provide an informative comparison for the evolution of human life history and demonstrate that the same pathway that led to menopause in humans can also explain the evolution of menopause in toothed whales.

Costly lifetime maternal investment in killer whales

Graphical abstract



Authors

Michael N. Weiss, Samuel Ellis,
Daniel W. Franks, ..., David K. Ellifrit,
Kenneth C. Balcomb III, Darren P. Croft

Correspondence

michael@whaleresearch.com

In brief

Killer whale mothers are known to provide survival benefits to their adult offspring, especially their sons. Weiss et al. show that providing these benefits comes at a significant reproductive cost to mothers. These costs imply lifetime parental investment in killer whales, an extreme and unique life history strategy.

Highlights

- Providing care to weaned sons reduces female killer whales' reproductive output
- These effects cannot be explained by lactation costs or group composition
- Sons do not become less costly as they grow older

Volume 33, Issue 5, 13 March 2023, Pages R194-R197

Dispatch

Animal behavior: Killer whale mamas' boys

Janet Mann

<https://www.youtube.com/watch?v=S1gg5-sNRAo>