Supplementary Materials

Only Death Will Separate Us:
The Role of Extramarital Partnerships Among Himba Pastoralists

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Additional Methodological Details

Details of relationship survey

Participants who completed the relationship history survey portion of the study answered the following questions about all current marital and non-marital partners. These questions included:

- Length of relationship - response in years
- Time since last sexual activity - response in days
- Frequency of contact - with Likert scale response rarely/sometimes/often
- Frequency of phone contact - with Likert scale response rarely/sometimes/often
- Whether the participant loves this partner - yes/no response
- Whether the participant feels that the partner loves them - yes/no response
- Whether the participant feels that the partner would help them if they needed help - yes/no response
- Whether the participant believes that the partner in question has many additional informal partners - yes/no response
- Whether the participant believes that they will still be with this partner in one year - yes/no response

If the relationship in question was an informal one, then participants also answered

- Whether or not partner is also married - yes/no response
- Whether or not the partner would make a good spouse - yes/no response

Modeling details for relationship history variables

To predict relationships history questions with a binary outcome, the following model was used:

$$Outcome \sim Bernoulli(p)$$
$$Logit(p) = \alpha + \alpha_{ID} + \beta_{age} * Age + \beta_{Male} * Male + \beta_I * Male * Age$$

Similarly, to predict relationship history question regarding whether an informal partner is married, the following model was used:

$$Outcome \sim Bernoulli(p)$$
$$Logit(p) = \alpha + \alpha_{ID} + \beta_{age} * Age + \beta_{Male} * Male + \beta_{Married} * Married + \beta_I * Male * Age$$

To predict length of relationships, the following model was used, with participant age modeled using the spline function *s()* as part of the *brms()* package using default priors, defined as $\sum w_k A_k$ below:

$$Log(Length + 1) \sim Normal(\mu, \sigma)$$
$$\mu = \alpha + \alpha_{ID} + \sum w_k A_k + Type * \beta_{Type}$$
$$\sigma = \alpha + Type * \beta_{Type} + Age * \beta_{Age}$$

Additional Statistical Details

All analyses were run in R (R Core Team, 2020) using RStudio (RStudio Team, 2020). Multilevel models were fitted to *RStan* (Stan Development Team, 2019) using the *brms* package (Bürkner, 2017), and convergence assessed by examining $\hat{r}$ values. All models used 5000 iterations, 2000 of which were warm-up, run on 3 chains. All models included regularizing priors for predictors, and variance parameters. Other packages packages used include *tidyverse* (Wickham, 2017), *cowplot* (Wilke, 2017), *broom* (Robinson & Hayes, 2019), *modelr* (Wickham, 2020), *tidybayes* (Kay, 2020), *janitor* (Firke, 2021), and *ggthemr*(Tobin, 2020).

Additional Plots

Figure S1 - Posterior prediction for relationship length A: Posterior prediction for relationship length by relationship type, B: Posterior prediction for relationship length by respondent age

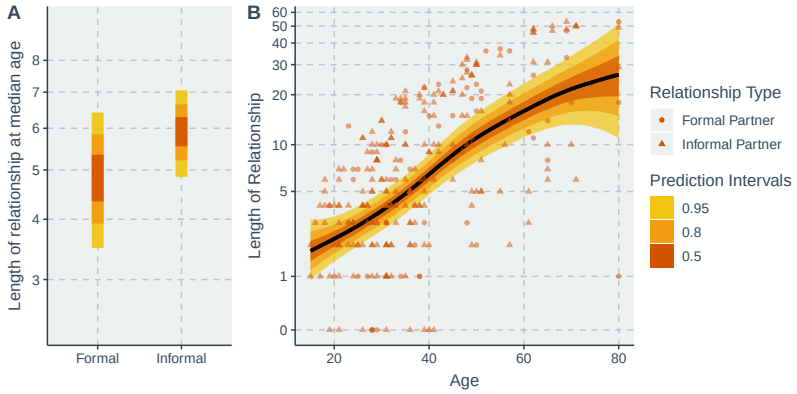


Figure S2 - Posterior distribution of model coefficients for relationship length

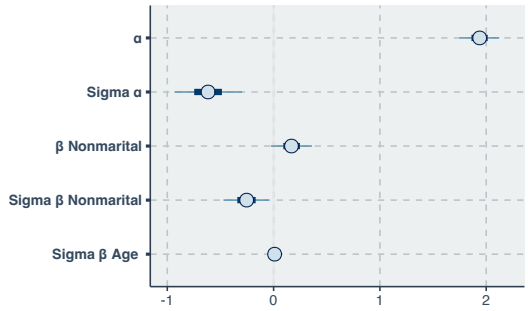


Figure S3 - Posterior prediction for age by sex interaction on whether the informal partner is married

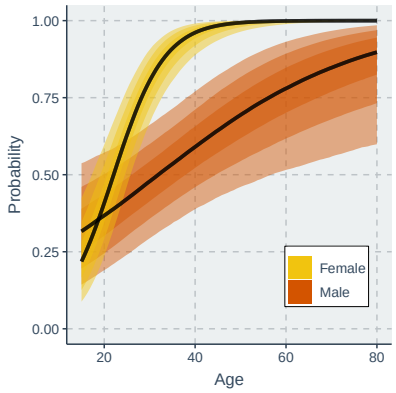
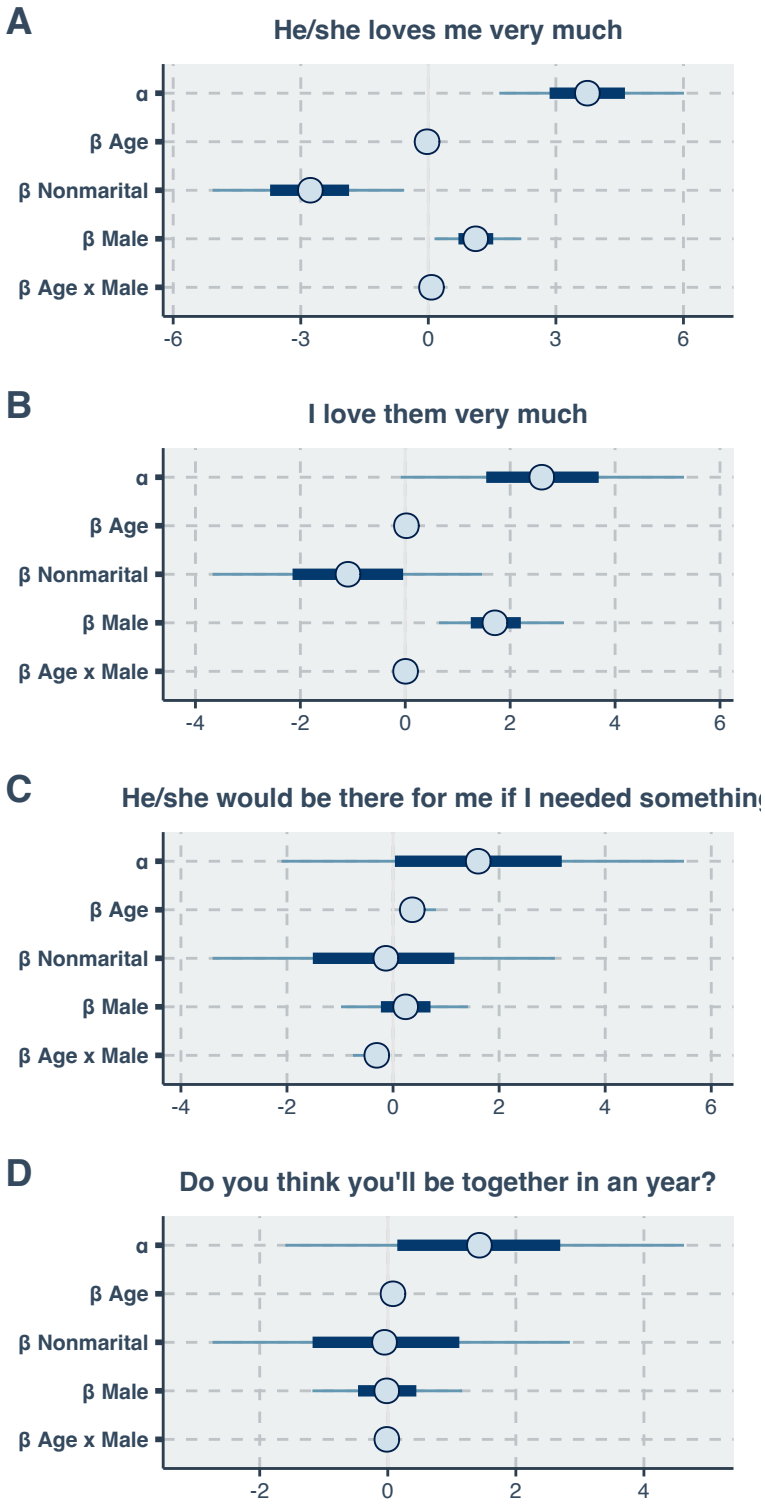


Figure S4 - Posterior distribution of coefficients in relationship history models



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