FERTILITY BEHAVIOR

Fertility rates have been decreasing over the last decades in developed and developing countries. The psychological basis of parenthood and family formation is surprisingly poorly understood. So why do people have children? It is unlikely that parents can give accurate answers to this question, so we have examined how various individual characteristics and family circumstances predict having children.

1. PERSONALITY AND PARENTHOOD

Using data from several different cohort studies (Young Finns; MIDUS, Wisconsin Longitudinal Study), we have shown that parenthood and family size are dependent on people’s personality dispositions. Higher fertility rates are associated with higher extraversion, lower neuroticism and lower openness to experience in both sexes. Higher agreeableness and lower conscientiousness are associated with higher fertility only in women.

Figure 1. Associations between Five Factor Model personality traits (Z-scores) and number of children. Regression coefficients of linear regression models.

Some of these associations may reflect almost universal dynamics of mating behavior (e.g., extroverts’ tendency to engage with the opposite sex) while others may be more dependent on social circumstances. Support for the latter hypothesis is provided by birth-cohort effects in the associations of openness to experience and women’s conscientiousness (Figure 2). These traits have become significant predictors of fertility only in younger cohorts (e.g., those born in the 1960’s) but not in older cohorts (e.g., those born in the 1920’s).

Figure 2. Associations between personality and fertility rate by birth cohort (standardized odds ratios of survival analysis) in the 20th century United States.

2. OBESITY AND LOWER FERTILITY

Several studies in reproductive epidemiology have shown that obesity increases the risk of infertility and difficulties of becoming pregnant. Obesity has also been associated with poorer reproductive physiology in men. Although these findings imply that obesity might affect fertility rates, earlier studies have not examined how obesity predicts achieved family size. We showed that obesity was associated with approximately one-third lower fertility in obese adolescents compared to normal-weights (Figure 3).

This association was observed in women and men, and in the American NLSY79 cohort as well as in the Young Finns cohort. These results suggest that the increasing obesity epidemic may contribute to the decreasing fertility rates.

Figure 3. Probability of parenthood by age (x-axis) and adolescent weight category in women of the NLSY79.

3. OFFSPRING CHARACTERISTICS

Psychological and physical characteristics of the parents do influence the probability of having children, but what about the characteristics of the offspring? Presumably experiences with the first child modify the perceptions and attitudes toward parenthood. The behavior of the first child may therefore affect the parents’ probability of having another child. This was examined in the British Millennium Cohort Study with almost 8,000 families. Parents whose first child had high cognitive ability and could be characterized as having an “easy temperament” were more likely to have a second child during the 5-year follow-up (Figure 4). Apparently the interaction with such first-borns encourage parents to have more children.

Figure 4. Probability of having the second child within ~5 years after the first child’s birth by levels of temperament characteristics and cognitive ability of the first child.

REFERENCES


FURTHER READING


Markus Jokela
and colleagues
markus.jokela@helsinki.fi