

THE IMPACTS OF MARRIAGE AND FERTILITY ON FEMALE LONGEVITY Isabelle G. Fernandez (Shane J. Macfarlan) Department of Anthropology

Reproductive ecological theory suggests a tradeoff exists between growth and reproduction, such that as energy is diverted away from growth and maintenance to reproduction, individuals should experience greater morbidity and mortality. Furthermore, this tradeoff is presumably more acutely experienced by women relative to men due to biological impacts of gestation and lactation. There are at least two ways in which this process could impact women: earlier initiation of reproduction, or greater lifetime fertility. However, research shows mixed evidence regarding how these factors influence mortality in women. Here, we examine the tradeoffs between reproduction and morality in a historical dataset - the *Knapp Genealogy*, an archive spanning 400 years of American history containing the birth, marriage, and death records of over 12,000 descendants of Nicholas Knapp. Using reconstitution methods, I assembled a dataset of 1,517 women spanning from 1726 to 1924 including their age at marriage, age at first reproduction, total fertility, and age at death. After controlling for the year of death, linear regression analysis indicates that earlier initiation of reproduction was associated with earlier ages at death, and counterintuitively, greater lifetime fertility was associated with later ages at death. While the former finding is consistent with both theory and previous research regarding the tradeoffs between growth and reproduction, the latter finding is not. We speculate that in American history, social support provided by offspring was an important mechanism to assist women in older ages in the absence of economic rights. Our research provides additional support for arguments against female child marriage. Furthermore, we believe our findings might be applied to understanding female health and wellbeing as societies transition from high to low fertility.