Revue, Informatique et Statistique dans les Sciences humaines
XX, 1-4, 1984, pp. 203-216

WHO MARRIES WHOM ? AGE PREFERENCES IN THE 1970 U.S. MARRIAGE MARKET

RESUME

Marriage preferences, which combine male and female marriage rates and measure marriage behavior independent of the age-sex composition of the population, were calculated from census and vital statistics data for the United States, 1970. Figure 1 shows the great concentration of preferences at the young ages, and Table 1 presents the full array of preferences by age of male and age of female. Summary measures presented in Table 2 show that a greater diversity characterizes marriages among older persons, and that for males - but not for females - the preferred mean age difference between spouses increases with age.

For both males and females, marriage behavior varies dramatically by age, and it is well known that most marriages are concentrated in a relatively narrow band of ages. The joint distribution of marriages (i.e., marriages cross-tabulated by age of bride and age of groom) provides additional information, for example that the groom is typically older than the bride. Joint marriage distributions have been published by quite a few official statistical agencies, and have been discussed and described in a number of publications (e.g., Carter and Glick, 1976; Mielke and Smith, 1977; Mønnesland et al., 1982; Presser, 1975; and Wilson, 1982).

While such arrays of marriages yield useful information on marriage patterns, they are subject to the influences of the age and sex composition of the population in two significant ways. First, the number of marriages alone does not reflect the population at risk of marrying. Second, since marriage involves both males and females, it is subject to "two sex" effects, specifically the phenomenon known as the "marriage squeeze", which results from an imbalance in the relative number of males and females.

The objective of the present paper is to go beyond earlier descriptions of joint male and female marriage distributions by introducing age-specific measures of marriage behavior that are independent of the age-sex composition of the population. Those measures will be applied to data for the United States in 1970, and the results examined to see what light they can shed on contemporary marriage patterns.

Measuring Marriage Preferences

Recent work on two-sex marriage patterns and the marriage squeeze (Schoen, 1981, 1983) has distinguished between the observed male and female marriage rates and the implicit marriage preferences (or marriage magnitudes). The male occurrence/exposure marriage rate for males aged x marrying females aged y, ${}^{m}W(x,y)$, is given by

$$(1) \qquad {}^{m}W(x,y) = \frac{C(x,y)}{M(x)}$$

and the corresponding female (x,y) marriage rate, ${}^{f}W(x,y)$, by

$$(2) \qquad {}^{f}W(x,y) = \frac{C(x,y)}{F(y)}$$

where C(x,y) represents the number of marriages between males aged x and females aged y;

M(x) is the number of unmarried males aged x; and

F(y) is the number of unmarried females aged y.

Those male and female marriage rates will vary with changes in the age-sex composition of the population, because each depends on the availability of persons of the other sex. For example, in a marriage squeeze, a relative shortage in the number of males aged x can cause a drop in ${}^{f}W(x,y)$. At the same time, however, the "marriage market" will become more favorable for males aged x, and ${}^{m}W(x,y)$ will rise. The changes in ${}^{m}W(x,y)$ and ${}^{f}W(x,y)$ offset one another, and it can be shown that their sum will remain constant, as long as the degree of mutual attraction between males aged x and females aged y does not change (Schoen, 1981; see derivation in the Appendix). If we call that mutual attraction relative to marriage the marriage *preference*, we can write H(x,y), the marriage preference between males aged x and females aged y, as

$$(3) \qquad H(x,y) = {}^{m}W(x,y) + {}^{f}W(x,y)$$

Thus, H(x,y) is readily found from the observed marriage rates but, unlike those rates, H(x,y) is unaffected by changes in age-sex composition. Moreover, H(x,y) is neither a "male" nor a "female" measure, as it reflects the mutual behavior of both sexes in a symmetric manner. For these reasons, the analyses to be presented here will focus on the array of H(x,y) marriage preferences. The treatment is incomplete because the marriage preferences only recognize age and sex, while many other factors are known to significantly affect marriage behavior. Nonetheless, it represents a first step, as a discussion of the age patterns of marriage preferences has not previously appeared in the literature.