Loose Ties between Fertility and Marriage and Stronger Ties between Marriage and Fertility

Recent research suggests that marriage and fertility are becoming increasingly disconnected (Cherlin 2009; Edin and Kefalas 2005; Gibson-Davis 2009). In past decades there were tight connections between marriage and fertility and individuals who wished to live with an opposite sex romantic partner or have children had few options except marriage. Childbearing, sexual intimacy, cohabitation, and contraception were socially acceptable only within the confines of a marital union. However, over time stigma related to cohabitation, sexual intimacy, and childbearing outside of marriage has declined substantially. Now marriage is no longer considered a prerequisite for childbearing (Cherlin 2009; Gibson-Davis 2009). As a result of these changes, marriage and childbearing have become separate decisions with different motivations and expectations, especially for the poor (Edin and Kefalas 2005; Gibson-Davis 2009). Qualitative research suggests low-income individuals believe marriage should not occur until high economic and relational standards are achieved (Gibson-Davis 2009). As the practical importance of marriage has declined, it has become a symbol to others that couples have "made it" with good jobs, savings, and high quality relationships (Cherlin 2004). In contrast, childbearing among low-income individuals is thought to give meaning in life when good jobs, savings, and high quality relationships are difficult to achieve. Thus, childbearing is not delayed, while marriage is postponed until its exacting standards are met. This differing expectations and motivations regarding marriage and childbearing highlight the disconnect between marriage and fertility.

However, it is possible for the concept of fertility to be disconnected from marriage while marriage is connected to fertility. For example, individuals may believe to have a child one *does not* have to be married, but if one is married then they *should* have children. If marriage is a symbol of attaining very high economic and relational standards then childbearing is important to solidify this relationship while also signaling to others the importance of this specific relationship. In contrast, childbearing is meaningful with or without the bonds of marriage and marrying solely because of a child may be considered reckless (or not in line with the symbolic importance of marriage).

We will test this assertion with novel data and methodology. Our data come from Becoming Partners and Parents Project (BPP), a qualitative study of Black unmarried, childless young adults. Our in-depth interviews include 27 women and 42 men. The 1-3 hour in-depth interviews were transcribed. We asked about the meanings and associations of marriage, family, childbearing, and cohabitation. The methodology we plan to use includes network text analysis combined with traditional qualitative coding.

Network text analysis is particularly well suited for this type of question. This type of analysis can map out co-occurrences of specific words that are embedded within a larger text network. This technique connects words that occur in the same paragraph. Then we examine percent of paragraphs that connect two words. For example, equation 1 shows the percent of paragraphs in which the terms marriage and baby co-occur out of the total paragraphs which mention marriage. Equation 2 shows the percent of paragraphs which the terms marriage and baby co-occur out of the total paragraphs which mention baby. Thus, we can use the asymmetric ties between words to understand connections of these concepts for our respondents.

Eq 1.
$$co - occurrance = \sum_{i=1}^{p} (marriage \& baby) / \sum_{i=1}^{p} marriage$$
 Eq 2.
$$co - occurrance = \sum_{i=1}^{p} (baby \& marriage) / \sum_{i=1}^{p} baby$$

Here we show network text analysis used to examine the asymmetric connections between marriage and fertility by exploring the co-occurrence of words related to childbearing and marriage. For this preliminary analysis we chose the words baby, child, kid, marriage, married, and wedding. In Table 1 we see the percent of paragraphs that mention a marriage related word (i.e. marriage, married, and wedding) which also mention a fertility related word

(i.e. baby, child, and kid). We can see that about 8% of the paragraphs which mention marriage also mention baby and 19% of the paragraphs that mention marriage also mention child. Table 1 shows no less than 6% of the paragraphs containing marriage related words also contain fertility related words. Table 2 shows the percent of paragraphs which mention fertility related words that also mention marriage related words. Table 2 stands in contrast to Table 1 with lower percentages of paragraphs mentioning fertility related words also mentioning marriage related words (with the exception of fertility related terms and married). Of the paragraphs that mention baby only 3% mention marriage, 16% mention married, and 0.28% mention wedding.

Table 3 shows the relative proportion of paragraphs that mention marriage related terms to those that mention fertility related terms. For example, the percent of paragraphs containing marriage which also mention baby are 2.81 times more prevalent than the percent of paragraphs that containing baby and also marriage. Marriage related terms are much more likely to also contain fertility related terms compared to fertility related terms being mentioned with marriage related terms (with the exception of married and wedding and child).

Table 1. % of Paragraphs Marriage is Mentioned with Fertility (marriage-->fertility)

Fertility Related Terms

	_	Baby	Child	Kid
<u>Marriage</u>	Marriage	8%	19%	14%
Related	Married	10%	16%	15%
<u>Terms</u>	Wedding	6%	16%	20%

Table 2. % of Paragraphs Fertility is Mentioned with Marriage (fertility-->marriage)

Marriage Related Terms

		Marriage	Married	Wedding
Fertility	Baby	3%	16%	0%
Related	Child	5%	20%	1%
<u>Terms</u>	Kid	5%	23%	1%

Table 3. Proportion of Paragraphs

Mentioning Marriage Terms to those

Mentioning Fertility Terms

(Marriage-->Fertility) /

(Fertility-->Marriage)

_	Baby	Child	Kid
Marriage	2.81	1.20	50.11
Married	1.88	0.78	25.77
Wedding	1.26	0.69	22.75

This analysis give preliminary support to our hypothesis that marriage is more highly connected to fertility than fertility is connected to marriage. Previous research clearly demonstrates the loosening ties between fertility and marriage(Cherlin 2004; Cherlin 2009; Edin and Kefalas 2005; Gibson-Davis 2009). However, our analysis suggests that ties between marriage and fertility are still strong. This gives a more nuanced view of the multifaceted connections between marriage and fertility. We plan to explore these links further using both qualitative coding and network text analysis. Qualitative analysis will elucidate specifically *how* Black low-income respondents connect marriage and fertility. Network text analysis will quantify these relations and allow statistical testing of these differences.

References

- Cherlin, Andrew J. 2004. "The deinstitutionalization of American marriage." *Journal of Marriage and Family* 66:848-861.
- —. 2009. The marriage-go-round: The state of marriage and the family in America today. New York: Knopf.
- Edin, Kathryn, and Maria J. Kefalas. 2005. *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley: University of California Press.
- Gibson-Davis, Christina M. 2009. "Money, Marriage, and Children: Testing the Financial Expectations and Family Formation Theory." *Journal of Marriage and Family* 71:146-160.