Cohabitation and Children's Living Arrangements: New Estimates from the United States

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Introduction

This paper examines recent trends in women's cohabitation and explores the impact of increased cohabitation for children's living arrangements. The most recent estimates of children's living arrangements currently date to 1995. Using the 2002 NSFG, we will produce new estimates of U.S. family structure from the perspectives of women and children, replicating (as much possible) Bumpass and Lu's (2000) analysis of the 1995 NSFG. Preliminary findings show continued increases in cohabitation experience for both adults and children. Additional analyses will examine whether rising cohabitation has resulted in growing instability in the unions women form and in children's living arrangements.

Background

The rapid growth in cohabitation during the past several decades has radically altered the structure of American families. Understanding how cohabitation continues to shape children's family contexts is important because U.S. cohabitation is associated with high levels of instability and lower child wellbeing. In addition, growing socioeconomic differences in family structure and family stability may exacerbate already-existing SES differences in child wellbeing (McLanahan 2004).

Bumpass and Lu (2000) estimate that by 1995, 45 percent of women ages 19-44 had ever cohabited, with increases in cohabitation experience for all age, education, and race/ethnic groups (Bumpass and Lu 2000). Since the mid-1990s, cohabitation rates have continued to increase while marriage rates have declined. Among female respondents to the 2002 NSFG, approximately 50 percent had ever cohabited, an increase of 9 percentage points since the 1995 NSFG (Abma, Chandra, Mosher, Peterson L, and Piccinino L. 1997; Chandra, Martinez, Mosher, Abma, and Jones 2005). Once again, substantial increases have occurred in all age groups (Abma et al. 1997; Chandra et al. 2005). More than half of all unions begin through cohabitation. .

Cohabitation's rapid growth among adults has made it an increasingly important context for childbearing and childrearing (Bumpass and Lu 2000; Seltzer 2004). By the period 1990-94, about forty percent of all children could expect to spend some time in a cohabiting union before age 16, most commonly through stepfamily formation (Bumpass and Lu 2000). Just over one in ten children were born into cohabiting unions during this period. More significantly, nearly one-third of all children born to non-cohabiting mothers were expected to enter a cohabiting family before age 16: three-quarters of children born to single mothers and one-fifth of children born to married parents (Bumpass and Lu 2000). New estimates of children's living arrangements are necessary in order to understand the impact of continued increase in cohabitation on the family lives of children.

Studying children's experience of cohabitation is important in part because of the unstable nature of U.S. cohabitation. Children born to cohabiting unions are more likely

to experience union dissolution than those born to marital unions (Manning, Smock, and Majumdar 2004). Graefe and Lichter (1999) estimate that about one-third of children born into cohabiting unions during the 1980s and early 1990s experienced the dissolution of their parent's marriage by age 5. Dissolution rates for all children living in cohabiting households are even higher, with 40 percent separating within five years of union start (Graefe and Lichter 1999). Many of these children go on to experience additional family transitions when mothers repartner (Graefe and Lichter 1999; Raley and Wildsmith 2004). Raley and Wildsmith (2004) find that transitions into and out of cohabitating households are important components of children's total family instability. Between the 1980s and 1990s, cohabiting unions became less stable, as fewer unions transitioned into marriages and more ended in separation (Bumpass and Lu 2000). Whether these trends have continued since 1995 is unclear.

The growth of cohabitation also raises concerns about child wellbeing. A large body of literature demonstrates that children fare better across a wide variety of outcomes when raised in a traditional, married parent family, than when raised by a single parent (Cherlin, Chase-Lansdale, and McRae 1998; Furstenberg and Kiernan 2001; McLanahan and Sandefur 1994). Children living with a cohabiting parent also have lower levels of behavioral and achievement outcomes (Thomson, Hanson, and McLanahan 1994; Dunifon and Kowaleski-Jones 2002; Raley, Frisco, and Wildsmith 2005). Because experiencing frequent transitions in family structure is related to lower well-being (Wu 1996), the high levels of family instability in cohabiting households may be one reason for these poorer outcomes. The more precarious economic position of cohabiting families likely contributes as well.

In addition, there is evidence that socioeconomic differences in children's family lives are growing. Between the 1980s and 1990s, the proportion of children born to unmarried and cohabiting mothers increased for all educational attainment groups except the children of college-educated mothers (Bumpass and Lu 2000). Educational differences in divorce have also increased over time (Raley and Bumpass 2003). McLanahan (2004) argues that these growing differentials in family structure are contributing to increasing socioeconomic differences in children's father involvement and children's access to economic resources.

New estimates from the NSFG will help us determine whether children's family structures and access to a stable family life of children continue to diverge.

Data and Methods

Data

We use data from the 2002 National Survey of Family Growth. Interviews were conducted with 7,643 women ages 15-44. The interview included cohabitation and marriage histories, along with data on respondents' biological, adoptive, and stepchildren. The NSFG is the most recent and comprehensive data source on U.S. families, and enables us to study the cohabitation experience of women and their children.

There is one important limitation of the 2002 NSFG: marriage dissolution data are missing for over one-third of all marriages that subsequently dissolved. Data are missing entirely for women whose husbands had children from a previous relationship, and for over 90 percent of currently separated respondents. Minority women and women who married or separated more recently have particularly high rates of missing data.

Missing data are particularly problematic for researchers studying recent trends in family dissolution. Because data are almost entirely missing for two important groups of respondents, standard imputation techniques may be inappropriate. In addition, if trends in family formation and dissolution have changed over time, using imputed marital dissolution data may underestimate the magnitude of any changes. Because of these limitations, we will not use the marriage separation dates in our analyses.

Methods

This paper will follow the approach used in Bumpass and Lu (2000) to produce new estimates of cohabitation experience for women and children, and to describe more fully children's family structures. The approach will differ slightly due to differences between the data sets.

For women, we can estimate the proportion currently cohabiting, the proportion who have ever cohabited, and the proportion of first unions that began through cohabitation rather than direct marriage. These estimates can be compared by age group with the Bumpass and Lu (2000) estimates to assess change since the 1995 survey. We can also estimate differentials by race and ethnicity, and by mother's educational attainment, in the proportion of women who ever cohabited. Finally, we can examine transitions out of cohabitation, through marriage and separation.

For children, we are only able to replicate some of the analyses produced by Bumpass and Lu (2000). In particular, we can estimate the proportion of births to unmarried and cohabiting women—as mother's union status at birth is missing for only a small proportion of children. It is also possible to produce period estimates (1997-2001) of the proportion of children born to single or married mothers who will experience maternal cohabitation by age 16. We can examine differences by mother's education and race/ethnicity.

Because of the extent of missing data on separation dates, we are unable to produce any life table estimates that require information on the timing of marital dissolution. Specifically, because we do not know the date at which many marriages ended, we are unable to assign the dissolution of marriages to a particular period. We are also unable to calculate the duration of marriages and well as the duration of time a child born to a married mother spends in a single-parent household

Instead, we will produce birth cohort estimates of the proportion of children ever experiencing family dissolution. We plan to restrict our estimates to children 10 years and younger for two reasons. First, we want to capture recent experiences, and by restricting child ages we ensure that the marriages dissolved within the past 10 years

(with little overlap from the previous survey). In addition, because the survey contains data on women age 44 and younger, it is impossible to accurately capture family experiences from earlier periods. The mother of a 10-year old child, for instance, could be no older than age 34 at the time of the birth, while the mother of a 15-year old child would be no older than 30 at her child's birth. Capping our estimates at age 10 should help preserve the representativeness of our children's experience.

Although we are limited in our ability to study recent trends in marriage dissolution, the 2002 NSFG provide the information necessary to study recent trends in cohabitation and, in particular, the ways in which cohabitation continues to alter children's family contexts and family stability.

Preliminary findings

Women's union formation

Table 1 presents estimates of women's cohabitation experience in 2002. These estimates can be compared to Bumpass and Lu's (2000, hereafter B&L) estimates for 1995, and show that cohabitation has continued its dramatic increase. The percentage of women who have ever cohabited increased from 45 percent to 54 percent, with increases observed in all ages except 19-24. We find large increases in cohabitation among never married women in key premarital age groups (19-24, 25-29). Finally, women ages 19-24 shows a substantial increase in the proportion of current unions that are cohabitation—to 43 percent (compared to B&L's estimate of 31% for 1995).

Table 2 presents the percentage of women in 2002 who have ever cohabited by women's educational attainment and race/ethnicity. We find that the largest increases have occurred among the women with high school degrees; these women are now as likely to have ever cohabited as women without high-school degree (two-thirds have cohabited). Four-year college graduates continue to be the least likely to cohabit, but by 2002 nearly half have cohabited.

Finally, these results show very smaller differences by race and ethnicity: about 55-60 percent of women in all groups have ever-cohabited. Cohabitation increased most rapidly among Hispanics (B&L estimate that 39% of Hispanic women had ever cohabited in 1995).

Table 3 looks at first unions formed among women ages 19-44 during the period 1997-2001. Overall, cohabitation has become even more prevalent as the context of first union formation--nearly 70 percent of first unions formed through cohabitation rather than direct marriage. This represents an enormous increase since the early 1990s, when B&L estimated that just over half of first unions began with cohabitation.

We also find substantial increases in cohabitation experience among newly married women. Among women who first married during the period 1997-2001, 70 percent had ever-cohabited before this marriage. (B&L's estimate was 56% for first marriages in 1990-94). During the late 1990s, only half of the women with cohabitation experience

prior to marriage in 1997-2001 had cohabited with only their husbands (35% of all first marriages). A substantial proportion (27% of all first marriages) had cohabited both with their husband and with a previous partner, while a small proportion had cohabited with another partner but not with their husband (8%). The proportion of women cohabiting with a prior partner appears to have increased since the early 1990s, while the proportion cohabiting only with her husband declined slightly. We will stratify these estimates by age, education and race/ethnicity to better understand if this dramatic increase in women's cohabitation experience is widely shared.

These findings indicate that cohabitation has rapidly become the primary route for union formation. While this is most obvious among new marriages and new unions, the majority of women have ever cohabited in all age groups except the youngest and all race/ethnic groups. College-graduates are the one subgroup where fewer half have ever-cohabited; further analyses are necessary to determine whether this reflects delayed union formation of younger college-graduates, or perhaps the more stable marriages of older-college graduates.

In addition, we will examine the degree to which younger women are delaying union formation, and particularly marriage. Finally, we will examine the overall stability of cohabiting unions and transition between cohabitation and marriage.

Children's family contexts

Nonmarital childbearing continued to grow throughout the 1990s (see Table 4). During the period 19977-2001, over 35 percent of children were born to unmarried parents, and just over half of these births were to cohabiting parents. This represents a dramatic change from 1990-1994 where B&L estimate that only one-quarters of children were born to unmarried mothers (Bumpass and Lu 2000). The proportion of births to single-mothers remained stable, while the proportion of births to cohabiting mothers increased during the 1990s.

Table 5 presents educational and race differences in children's family structure at birth for the period 1997-2001. In the United States, children's chances of being born to unmarried parents continue to differ greatly by socioeconomic status and race/ethnicity. Educational differences, already large in 1990-94, persisted through the turn of the century. For women without high school degrees (an increasingly selective group), nonmarital childbearing has increased to 64 percent. By the late 1990s, births for these women were about evenly split between single, married, and cohabiting parents. For women with a high school degree or some college, married births remained most common, but fell to 58 and 69 percent by the late 1990s. Nonmarital childbearing also increased for four-year college graduates, but remained rare as fewer than 10 percent of all births were to single or cohabiting parents.

Race and ethnic differences remained substantial, but appear to have decreased slightly over time. In the late 1990s, the vast majority (77 percent) of non-Hispanic white births were marital, but this represents a five percentage point decline over the 1990-1994

period (Bumpass and Lu 2000). In contrast, marital childbearing increased slightly for African-Americans, to 30 percent. Notably, the proportion of births to single mothers decreased substantially for African-Americans (44 percent, compared to B&L's estimate of 56%), while cohabiting births increased. The most dramatic changes, however, occurred in Hispanic families. Marital childbearing decreased to just half of all births in the late 1990s. Both single-parent and, especially, cohabiting-parent births increased for Hispanic mothers.

The increase in cohabiting births is concerning if the level of instability of cohabiting unions remains high. Table 6 presents the proportion of children born into any union (marital or cohabiting) who experienced their parents' separation by the time of the interview. As discussed earlier, we use this measure because of the missing separation dates in the NSFG. These are birth cohort measures, rather than period measures; while younger children necessarily experienced union dissolution in the late 1990s, many of the separations experience by older children date to the earlier part of the 1990s. An additional limitation of this approach lies in the smaller samples it yields at each age compared to synthetic cohort approaches.

Consistent with previous studies, Table 6 shows that stark contrast in family instability experienced by children born to cohabiting rather than married parents. In the U.S., at all ages children in cohabiting unions are at least 2.5 times more likely to experience parental separation. At ages 0-2, only 4 percent of children born to married parents experience family dissolution, compared to 25 percent of children born to cohabiting unions. At ages 9-10, we find that about 25 of marital births and 60 percent of cohabiting births have experienced parental separation. Overall, about 25-30 percent of US children ages 6-10 have experience parental separation.

In future analyses, we will use the 1995 NSFG to produce comparable estimates. This will enable us to compare the relative stability of children's family lives between the two surveys. If, for instance, the stability of marital and cohabiting unions remained fairly constant, then the shift in births to cohabiting rather than married parents would likely increase children's overall experience of parental union dissolution.

Table 5 presents the dissolution proportions for educational subgroups and by race/ethnicity. Concerns about small sample sizes are particularly important here, and so caution must be used in interpreting these results.

For the United States, large educational differences in union dissolution are evident for children born into both marital and nonmarital unions. The primary difference is between children born to college-graduates, compared to children whose mothers have lower educational attainment. For children born to married parents, only about 10 percent of children ages 9-10 in the highest SES group experience parental separation, compared to about 25-30 for less advantaged children. Large differences are evident at younger ages as well. Cohabiting unions appear to be highly unstable across education categories—but again, the unions of more educated mothers are more stable (although the sample size here is small and very selective). Because cohabiting births are extremely rare for

college-graduates, the children in less advantaged families are about 3-4 times more likely to experience parental separation at all ages.

Differences by race and ethnicity are substantially larger for all unions combined than within union types. Differences in marriage are relatively large, with African-American children experiencing greater union dissolution (34 percent, compared to 23 and 20 for whites and Hispanics.) For cohabiting unions, large differences appear only at ages 3-8, and rates are high for all groups at all ages.

Finally, we will produce life table estimate children's experience of cohabitation throughout their childhood. Our initial estimates indicate that about three-quarters of children born to single-mothers and about one-quarter of children born to married-mothers will experience mother's cohabitation by age 15. We will stratify our estimates by race and educational background. In addition, we will examine the marriage experiences of children born to single or cohabiting mothers.

Conclusions and further analysis

Our initial findings show that cohabitation is becoming a more and more prevalent context for American family life. Cohabitation has become the predominant path into first union and into first marriage, and the majority of women ages 19-44 have cohabited at some point in their lives. Although educational differences in cohabitation have persisted over time, further analysis is necessary to determine whether this holds true for newly formed unions and among younger women. In addition, we plan to examine trends in the stability of cohabiting unions and in the transition from cohabitation to marriage.

Children are also increasingly experiencing cohabitation as a result of the growth in childbearing among unmarried couples. In future analyses we will examine whether children are also experiencing an increase in cohabitation experience during the remainder of their childhood (through step-family formation). In addition, we will estimate whether increases in cohabitation imply overall increases overall in children's experience of family dissolution and single-parenthood.

Finally, we will consider whether children's family lives continue to diverge by socio-economic status. Our initial results show that educational differences in union dissolution remain quite large. Combined with the persistently low levels of cohabiting childbearing among college graduates, this suggests that the educational differences in family instability and children's experience of single-family life may have continued to increase during the 1990s.

Reference List

Abma, JC, A. Chandra, WD Mosher, Peterson L, and Piccinino L. 1997. *Fertility, Family Planning, and Women's Health: New Data From the 1995 National Survey of Family Growth*. Vital and Health Statistics 23(19). National Center for Health Statistics.

Andersson, Gunnar. 2002. "Children's Experiences of Family Disruption and Family Formation: Evidence From 16 FFS Countries." *Demographic Research* 7:343-64.

Bumpass, Larry and Hsien-Hen Lu. 2000. "Trends in Cohabitation and Implications for Children's Family Contexts in the US." *Population Studies* 54:29-41.

Chandra, A., GM Martinez, WD Mosher, JC Abma, and J. Jones. 2005. *Fertility, Family Planning, and Reproductive Health of U.S. Women: Data From the 2002 National Survey of Family Growth*. Vital and Health Statistics 23(25). National Center for Health Statistics.

Cherlin, Andrew, P. L. Chase-Lansdale, and Christine McRae. 1998. "Effects of Divorce on Mental Health Throughout the Life Course." *American Sociological Review* 63(2):239-49.

Dunifon, Rachel and Lori Kowaleski-Jones. 2002. "Who's in the House? Race Differences in Cohabitation, Single Parenthood, and Child Development." *Child Development* 73(4):1249-64.

Furstenberg, Frank F. Jr. and Kathleen Kiernan. 2001. "Delayed Parental Divorce: How Much Do Children Benefit?" *Journal of Marriage and the Family* 63(2):446-57.

Graefe, Deborah R. and Daniel T. Lichter. 1999. "Life Course Transitions of American Children: Parental Cohabitation, Marriage, and Single Motherhood." *Demography* 36(2):205-17.

Manning, W. D., P. J. Smock, and D. Majumdar. 2004. "The Relative Stability of Cohabiting and Marital Unions for Children." *Population Research and Policy Review* 23(2):135-59.

McLanahan, Sara. 2004. " Diverging Destinies: How Children Are Faring Under the Second Demographic Transition." *Demography* 41(4):607-27.

McLanahan, Sara and Gary Sandefur. 1994. *Growing Up With a Single Parent: What Hurts, What Helps*. Cambridge, MA: Harvard University Press.

Raley, R. K. and Larry Bumpass. 2003. "The Topography of the Divorce Plateau: Levels and Trends in Union Stability in the United States After 1980." *Demographic Research* 8:245-60.

Raley, R. K., Michelle L. Frisco, and Elizabeth Wildsmith. 2005. "Maternal Cohabitation and Educational Success." *Sociology of Education* 78(April):144-64.

Raley, R. K. and Elizabeth Wildsmith. 2004. "Cohabitation and Children's Family Instability." *Journal of Marriage and Family* 66:210-219.

Seltzer, Judith A. 2004. "Cohabitation in the United States and Britain." *Journal of Marriage and the Family* 66:921-28.

Thomson, Elizabeth, Thomas L. Hanson, and Sara S. McLanahan. 1994. "Family Structure and Child Well-Being: Economic Resources Vs. Parental Behaviors." *Social Forces* 73(1):221-42.

Wu, Lawrence L. 1996. "Effects of Family Instability, Income, and Income Instability on the Risk of a Premarital Birth." *American Sociological Review* 61(3):386-406.

Table 1. Trends by age in the percentage ever cohabiting and currently cohabiting, U.S. Women 2002

	% ever cohab	Percentage currently cohabiting of not currently married			% cohab
Age	All women	Total	Never married	Previously married	Of current unions
19-24	39	18	19	15	43
25-29	60	26	28	16	19
30-34	63	19	20	18	11
35-39	61	18	18	18	9
40-44	57	17	13	18	7
Total	56	20	20	18	15

Table 2. Percentage of women ages 19-44 who have ever cohabited, 2002

Education	
< 12	66
12 years	65
Col 1-3	50
Col 4+	46
Race/ethnicity	
Non-Hisp. white	56
Black	58
Hispanic	54

Table 3. % of women in the US aged 19-44 who cohabited before first marriage, and % first unions that were cohabitation, 1997-2001

Percent of first unions begun by cohabitation	
Entered first union 1997-2001	
Total	68
Percent cohabited before marriage	
First marriage cohort 1997-2001	
Total	70
Cohab w/husband only	35
Cohab w/husb and others	27
Others only	8

Table 4. Parent union status at birth, United States 1997-2001

Nonmarital birth	35.5
Single parent	17.4
Cohabiting parent	18.1
Married parent	64.5

Table 5. Parental union status at birth by Parental Background, US 1997-2001

	Single	Cohabiting	Married
Educational attainment			
< 12 years	32.1	32.3	35.7
12 years	20.0	21.9	58.1
Some college	13.9	16.7	69.4
4 years college	5.7	2.8	91.5
Race/ethnicity			
Non-Hispanic White	10.0	12.7	77.3
Black	43.9	26.5	29.6
Hispanic	20.0	29.1	50.8

Table 6. Proportion of kids experiencing parental separation, by child's age at interview and parent's marital status at birth

United States, 2002

Child age	All unions	Married	Cohabiting
0-2	8	3	26
3-5	19	12	43
6-8	25	18	52
9-10	29	23	58
n (ages 0-10)	4512	3354	1158

*Child age at 2002 interview.

Table 7. Proportion of kids experiencing parental separation, by child's age at interview* and parent's marital status at birth
United States 2002

	All unions					Marital births					Cohabiting births				
United States, 2002	0-2	3-5	6-8	9-10	n	0-2	3-5	6-8	9-10	n	0-2	3-5	6-8	9-10	n
Educational attainment															
< 12 years	16	29	38	32	849	7	14	23	23	466	28	45	58	51	383
12 years	12	29	28	36	1402	6	22	18	29	932	26	48	52	63	470
Some college	7	16	31	34	1233	3	12	27	28	981	24	36	50	64	252
4 years college	2	4	9	12	1028	2	3	8	11	975	25	4	24	40	53
Race/ethnicity															
Non-Hispanic White	7	16	21	27	2382	4	13	17	23	2020	28	38	43	65	362
Black	20	38	53	47	661	12	20	29	34	332	30	61	75	60	329
Hispanic	7	22	27	28	1253	2	10	18	20	827	18	41	48	51	426

*Child age at 2002 interview.