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Source: Population Studies, Vol. 54, No. 1, (Mar., 2000), pp. 29-41

Published by: Population Investigation Committee

Stable URL: http://www.jstor.org/stable/2584631

Accessed: 03/06/2008 14:36

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Trends in cohabitation and implications for children's family contexts in the United States

LARRY BUMPASS AND HSIEN-HEN LU

Abstract. This paper documents increasing cohabitation in the United States, and the implications of this trend for the family lives of children. The stability of marriage-like relationships (including marriage and cohabitation) has decreased – despite a constant divorce rate. Children increasingly live in cohabiting families either as a result of being born to cohabiting parents or of their mother's entry into a cohabiting union. The proportion of births to unmarried women born into cohabiting families increased from 29 to 39 per cent in the period 1980–84 to 1990–94, accounting for almost all of the increase in unmarried childbearing. As a consequence, about two-fifths of all children spend some time in a cohabiting family, and the greater instability of families begun by cohabitation means that children are also more likely to experience family disruption. Estimates from multi-state life tables indicate the extent to which the family lives of children are spent increasingly in cohabiting families and decreasingly in married families.

Cohabitation and unmarried childbearing have dramatically altered family life in the US as in most Western societies. Although official statistics, and much research, still focus on transitions associated with marriage, it is unarguable that family boundaries have become more ambiguous. Indeed, it is likely that the rapid spread of cohabitation both reflects, and reinforces, the declining significance of marriage as a family status, and as a life-course marker in our society (Bumpass 1995).

In the context of this rapid transformation, this paper seeks to update our knowledge on levels of cohabitation in the US, and to extend our understanding of the implications of these changes for the family life-course experiences of children. After a brief review of the relevant background, and a presentation of our data and methods, the analysis begins by updating estimates of cohabitation and union histories for women. This section ends with discussion of a new measure designed to make the transition between women's adult family histories and the family histories of children - i.e., one that focuses on families with children and tracks the stability of these families after the unit including two adults and a child is formed. We then turn to measures of children's family statuses including birth outside of a union, and birth into a cohabiting or married union. We examine differentials in key transitions affecting children's living arrangements, and then conclude with multistate life-table estimates of proportion of childhood spent in the various family types.

BACKGROUND

Family life in the US has undergone profound changes with serious implications for the lives of children. The trends in relevant factors are well known by now. While marital dissolution rates have been constant for almost two decades, the level remains high and involves over half of all marriages and over a million children each year (Castro Martin and Bumpass 1989). Cohabitation has grown from a rare and deviant behaviour to the majority experience among cohorts of marriageable age (Thornton 1988; Bumpass and Sweet 1989b). Marriage and remarriage rates have declined markedly, though these declines have been largely offset by increasing cohabitation (Bumpass, Sweet, and Cherlin, 1991). Unmarried childbearing has increased dramatically, as a consequence of the greater number of years spent unmarried, decreases in the propensity to marry on becoming pregnant, and increased childbearing rates among the unmarried (Bumpass 1995; Smith et al. 1996, National Center for Health Statistics 1998).

As a consequence, single-parent families have become an inescapable fact of American family life, with half of all children spending at least some time in such families (Bumpass and Sweet 1989a), and with serious consequences for the lives of many of the children involved (Cherlin et al. 1995). Children from single-parent families are more likely to experience poverty (Duncan and Rogers 1991; Eggebeen and Lichter 1991), to do less well in school (McLanahan and Sandefur 1994), to enter

sexual activity earlier and have premarital births (Wu, Cherlin, and Bumpass 1997), to cohabit (Thornton 1991), and to marry early and experience the disruption of their own marriages (McLanahan and Bumpass 1988; Kiernan and Hobcraft 1996). While no group is immune from them, all of the transformations are inversely related to socio-economic status.

As we will explain in this paper, it is also clear that cohabitation has substantial implications for children's family contexts, because many unmarried births occur in two-parent cohabiting families (Bumpass and Sweet 1989a), because half of all step-families are formed by cohabitation (Bumpass, Raley, and Sweet 1995), and because a significant proportion of 'single-parent' time (as usually classified by marital status in the US) is actually spent with two parents. While the divorce rate has been constant, we demonstrate here that children's family lives have become less stable as their mothers move into and out of cohabiting as well as marital relationships.

Critical to understanding these changes is the recognition that the patterns of change experienced in the US are not unique but are widely shared with other industrial societies (Coleman 1992; Kuijsten 1996; Klijzing and Macura 1997). This includes unmarried childbearing (Cooper 1991; Toulemon 1995), cohabitation (Lesthaeghe et al. 1993; Lelievre 1995; Prinz 1995, Toulemon 1997,), and divorce (Goode 1993; Sardon 1996). We plan future extensions of the present work to comparisons with other industrial societies in order to improve understanding of how cohabitation impinges upon and affects children's lives and their subsequent life course.

DATA AND METHODS

Data

National Survey of Families and Households (NSFH). The NSFH, conducted during 1987 and 1988, is a national sample survey covering a wide variety of issues on American family life. Interviews were conducted with 13,017 respondents, including a main cross-section sample of 9,643 persons aged 19 and older, plus an oversample of minorities and households containing single–parent families, stepfamilies, recently married couples, and cohabiting couples. (Post-stratification weights allow estimates to represent the US population properly.) In each household, a randomly selected adult was interviewed. In addition, a shorter, self-administered questionnaire was administered to the spouse or cohabiting partner of the primary respondent.

Interviews averaged about 100 minutes, although interview length varied considerably with the complexity of the respondent's family history. Topics covered included detailed household composition, family background, adult family transitions, couple interactions, parent-child interactions, education and work, economic and psychological well-being, and family attitudes. Critical for the current analysis are the inclusion of fertility, marriage, and cohabitation histories. (Sweet, Bumpass, and Call 1988).

National Survey of Family Growth Cycle 5 (NSFG-5). The NSFG is a periodic survey conducted by the National Center for Health Statistics with the primary goal of providing estimates of factors affecting the US birth rate and the reproductive health of US women 15–44 years of age. Marital and fertility histories have long been a part of the content of this survey, but Cycle 5 provides complete cohabitation histories for the first time (along with education, employment, and living arrangement histories). Interviews averaging 105 minutes were conducted with 10,847 respondents over the first ten months of 1995 (Potter et al. 1997).

Methods

In updating estimates of women's current union status, whether they have ever cohabited, or whether their first union began as cohabitation, we can make comparisons between our data sources for the same ages at interview. However, when we move to measuring events reported in the NSFG that may have occurred some time before interview, we encounter limitations for events that occurred at older ages, since these are not represented for women who would be over age 45 at interview (Rindfuss, Palmore, and Bumpass 1982). This obviously affects our concerns with children's experience, because these estimates must include union dissolution and the formation of subsequent unions.

The earlier the time before interview, the more the upper age limit of 45 in NSFG-5 censors the age of the mother at the time of transitions. The seriousness of this censoring is illustrated by estimates we prepared from a pooled file of the 1985 and 1990 June CPS data. For example, for a period 15 years before interview, only 57 per cent of first-marriage disruptions (those before age 30) are represented in the NSFG. This is less a problem for first marriages (and cohabitations), but becomes very serious for union disruptions or second-union formations.

We use two strategies to deal with this issue. Where appropriate, we make comparisons between surveys for women who experienced an event before the age at which such censoring occurs (but which is

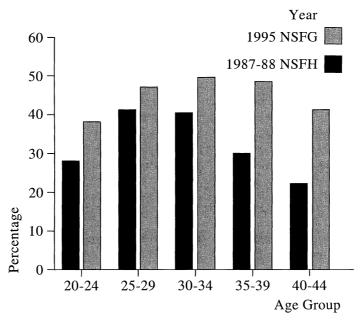


Figure 1. Percentage of women in the United States who have ever cohabitated, by age: 1987-88. NSFH and 1995 NSFG.

old enough to capture most of the experience of interest). The second strategy is to calculate period life-tables based on experience at all ages under 40 during the five years before survey. The period lifetable estimates are left truncated with exposure and events beginning with the start of the period (e.g. 1990) or (for child-based estimates) the child's birth if the birth occurs within the 5-year period. The estimates are right censored with the end of that period (e.g. 1995) or (for child-based estimates) the child's reaching age 16, if that occurs within this period. We conclude with period multi-state lifetables to estimate the number of years children spend in single-parent, cohabiting and married families before age 16. We focus on the family experience of children under age 16 and censor observations at age 16 in the life-tables to avoid the more problematic assumptions of our procedures if applied at age 18, given the increasing home-leaving around that age.

As in our earlier and related work on estimating children's family histories, women's histories of cohabitation, marriage, and births are compared to estimate children's living arrangements by age. The procedure is to create a file in which each birth is treated as a unit of analysis that is then compared with the mother's history of marriage and cohabitation (Bumpass and Rindfuss 1979; Bumpass 1984a, 1984b). The estimation proceeds as if all children lived with their mothers after separation, and hence misrepresents the universe of all children to the extent that the small proportion of children living with their fathers have markedly

different rates of subsequent transitions. Checks against external estimates have repeatedly demonstrated the robustness of this estimation procedure (Bumpass 1985; Bumpass and Sweet 1989b, Bumpass, Raley, and Sweet 1995).

Finally, we should note that the NSFG limits our comparisons to women's experiences (as contrasted to some of our earlier estimates from NSFH), so that levels reported here for NSFH are sometimes different from some of the earlier ones based on the total sample. Nonetheless, when we restrict our comparisons to appropriate samples we get very close replication between NSFH and NSFG for transitions and statuses in the 1980–84 period. For example, the proportion of the 1995 NSFG women who had ever cohabited by the time they were 19-34 in 1988 is within one percentage point of our estimate for these ages from the 1987-88 NSFH, and the estimated transitions out of marriage and cohabitation are virtually identical between the two sources (Bumpass and Lu 1998).

RESULTS

Trends in cohabitation

Cohabitation has continued to increase, both within and between cohorts. There are numerous ways to represent this increase in life-course and current prevalence of cohabitation and we will summarize them briefly here.

(1) Increasing proportions of the population have lived in a cohabiting relationship at some time. In Figure 1 (and Table 1, columns 1 and 2), we see

Table 1. Trends by age in the percentage ever cohabiting and currently cohabiting: Women in the United States 1987–88 National Survey
of Families and Households (NSFH) and 1995 National Survey of Family Growth (NSFG).

			Percentage currently cohabiting of not currently married								
	Percentage ever cohabiting		Total		Never married		Previously married		Of current unions		
	1987	1995	1987	1995	1987	1995	1987	1995	1987	1995	
19–24	29	38	14	15	14	14	18	21	29	31	
25–29	41	47	20	21	17	19	23	26	10	16	
30-34	40	49	17	21	14	19	19	24	7	10	
35-39	30	48	11	17	6	12	13	21	4	7	
40-44	22	41	14	13	11	8	14	16	5	6	
Total	33	45	15	17	14	16	17	21	10	12	

the dramatic role of cohort replacement as the cohorts on the leading edge of the shift to cohabitation have progressed through the age structure. For example, the proportion of 40–44 year olds who had ever lived in a cohabiting relationship increased by about one half as younger cohorts aged into this category. By 1995, half of the women in their thirties had cohabited outside of marriage. This process is particularly important because it represents the way cohort succession is likely to continue the increasing tolerance of cohabitation in the population as a whole. Of course, there were also increases within cohorts as more women cohabited for the first time over this period.

- (2) The proportion of unmarried women currently cohabiting has increased progressively with age between ages 25 and 39. By 1995, about a quarter of unmarried women between the ages of 25 and 39 were living with an unmarried partner, and with about a fifty per cent increase for women in their late thirties (Table 1, columns 3–8)
- (3) The proportion of *current unions* that are unmarried cohabitations has increased markedly, nearly doubling in the age range 25–39. As marriage is being delayed, nearly a third of all unions to women under the age of 25, and a fifth of those of women age 25–29 are unmarried (Table 1, last 2 columns).
- (4) The trend in cohabitation has continued to be led by the less educated (Table 2 column 3). The greatest relative increase between surveys occurred among high school graduates (44 per cent) and the least among college graduates (19 per cent). Thus the gradient steepened, so that by 1995 the proportion who had ever lived in a cohabiting relationship was 59 per cent of those who had not completed high school compared to 37 per cent among college graduates. This differential would, of course, be consistent with an explanation that focused on economic well-being as a factor in

Table 2. Percentage of women in the US aged 19–44 who have ever cohabited: 1987–88 NSFH and 1995 NSFG

	Percentag	Percentage ever cohabited				
	1987–88	1995				
	NSFH	NSFG	1995/1987–88			
Education						
Lt12	43	59	37			
12	32	46	44			
Col 1-3	30	39	30			
Col 4+	31	37	19			
Race/ethnicity						
White non-Hispanic	32	45	41			
Black	36	45	25			
Hispanic	30	39	30			

cohabitation, given the increased inequality in earnings. At the same time, it is important to emphasize that cohabitation is extremely common even among college graduates. While economic stress may be playing some role in the increase in cohabitation in the context of delayed marriage, the almost two-fifths of college educated women who have cohabited suggest that economic constraints, per se, are not likely to be the key to our understanding of these trends.

- (5) This argument is further supported when we realize that, while cohabitation increased among both blacks and majority whites, increases were greater among whites. By 1995 there was no racial difference in the proportion who had ever cohabited. Given the persisting dramatic differences in marriage rates, and the role cohabitation has played in reducing the apparent racial divide in union formation (Raley, 1996), it will be important to see how these changes have affected racial differences in the formation and dissolution of couples' unions.
- (6) The proportion of women's first marriages that were preceded by cohabitation increased steadily, from 41 per cent among the 1980–84 marriage cohort to 56 per cent for marriages ten

Table 3. Percentage of women in the US aged 19–44 who cohabited before first marriage and percentage of first unions that were cohabitation, by marriage or union cohort*

	Percentage c	Percentage cohabited before marriage							
	Total	With husband only	With husband and others	Others only	Percentage first unions begun by cohabitation				
80–84	41	34	5	2	43				
85–89	46	35	8	3	49				
90-94	56	40	12	4	54				

^{* 1980-84} cohort from the 1987-88 NSFH, 1985-89 and 1990-94 cohorts from the 1995 NSFG.

years later (Table 3, column 1). There were similar increases among those who had cohabited with only their husband and those who had also (or only) cohabited with someone else. Hence, at the same time that the boundaries of marriage have become more ambiguous for couples who cohabit and then marry, an increasing proportion are also enterering 'first' marriage after having lived in a marriage-like relationship with a different partner.

(7) Not only is marriage no longer a prerequisite for an intimate co-residential relationship, it is no longer even the modal form for the first such relationship. The proportion of all first unions that began as cohabitation rose from 43 per cent in 1980–84 to 54 per cent for unions formed in 1990–94 (last column, Table 3).

(8) As we reported in our earlier work (Bumpass, Sweet, and Cherlin 1991), cohabitation continues to offset much of the decline in marriage in terms of the formation of joint households. While the proportions married by age 25 declined consistently from 71 to 52 per cent between the 1950–54 and 1965–69 birth cohorts (whose members reached age 25 around 1977 and 1992), there was much less change over these cohorts (from 78 to 70 per cent) in the proportion of women who had lived in a union before age 25 – and virtually none over the last 15 years.

Union transitions

When we replicate for ten years later the estimates of key transitions from cohabitation, marriage, and all unions presented in our earlier paper (Bumpass and Sweet 1989), we find both continuity and change. Cohabitation continues to be a short-term status (remembering that many turn into marriage), with about half lasting a year or less, only one-sixth lasting three years, and about a tenth lasting five years or longer. Consistent with the plateau in the divorce rate, we see no change in separations from marriage, and the higher disruption rate of marriages preceded by cohabitation persists. Despite apparent declines in crude measures of

divorce, such as the rate per 1000 population, or per 1000 married population, we find that life-table estimates of survival up to 15 years reveal no change since the 1980–84 marriage cohort.

On the other hand, the most important change in these transitions is in the substantial increase in the instability of unions (from 30 to 38 per cent disrupting within ten years) despite the plateau in the US divorce rate of the last two decades. This decreasing stability results from a decline in the proportion who marry their cohabiting partner (from 60 to 53 per cent over this period). Similarly, unions begun by cohabitation have become less stable: ignoring whether or not the couple married, the proportion who had separated by five years increased from 45 to 54 per cent.

These trends are what we might well expect with the increasing expansion of cohabitation. As cohabitation becomes increasingly accepted, cohabitations may include a greater proportion of couples with less serious commitments — who decide to cohabit as a matter of temporary convenience — leading to lower marriage and higher dissolution rates for the cohabiting population as a whole.

One consequence of trends in marriage transitions in contrast to transitions including all unions can be seen by comparing trends in the proportion of women married more than once to those in the number who have lived with multiple partners. While there was little change over the ten years in the proportion of women married more than once (and some decline among women in their late twenties as remarriage was delayed), the proportion who had lived in more than one coresidential union went up quite considerably, e.g. from a quarter to a third of women aged 35–39.

The stability of two-parent families

In thinking about the implications of the stability of unions for children, one soon recognizes that our conventional measures provide no direct evidence on this point, even from the point of view of

Table 4. Percentage of births to unmarried mothers and cohabiting mothers, and proportion of unmarried births to cohabiting parents: for children born to US women under age 40, 1980–84 and 1990–94*

	1980–84			1990–94			
	Not marrie	d		Not marrie			
	Total	Cohabiting	Cohabiting unmarried	Total	Cohabiting	Cohabiting unmarried	
Total	21	6	29	28	11	39	
Mother's education							
Lt 12	43	16	37	51	21	41	
12	24	6	25	31	12	39	
Col 1–3	13	3	23	20	7	35	
Col 4+	5	1	20	5	1	20	
Mother's age							
Lt 24	37	10	27	52	19	37	
24–26	14	4	29	23	10	43	
27–29	10	4	40	16	7	44	
30+	11	4	36	13	6	46	
Race/ ethnicity							
Non-Hispanic white	12	4	33	18	9	50	
Black	62	13	21	72	16	22	
Hispanic	21	10	48	32	17	53	

^{* 1980–84} cohort from the 1987–88 NSFH and 1990–94 cohort from the 1995 NSFG.

marriage. We know that the divorce rate has been constant since 1980, but we have less direct information on the likelihood that families with children will disrupt. The most relevant measure, the percentage of disrupting marriages which involve children, is extremely crude. (This proportion increased from 40 per cent in 1965 to 53 per cent in 1988.) Trends in disruptions among couples with and without children need not even move in the same direction. The link relating children's experiences of family transitions and marital (or union) disruption overall is the extent to which separation probabilities are the same after children enter the picture (by birth or marriage) as they are for the aggregate measures. Trends will also be affected by the number of children per divorcing couple, but we do not include this dimension in the present analysis.

To address this issue, we have begun to use a measure of disruption timed from the formation of a family with children (first birth within marriage, or marriage if a birth occurred before marriage).² While unusual, it is simply a measure of the stability of two-parent families – including biological and step-families – that measures stability of the adult relationship from the time children enter the picture. We will move to children as units of analysis in the next section, but the relevance of this 'two-parent stability'measure is that it is applied at the level of aggregation at which decision making occurs – two parents with children present – whereas child-based measures capture the consequences for children's family contexts.

While CPS data limit attention to married families, life-table estimates using the 1995 June CPS³ file reveal that the disruption of two-parent families within ten years of formation increased from 17 per cent in the 1960-64 cohort to 30 per cent in the 1980-84 cohort. This, of course, represents the known period of rapid increase in the divorce rate, but this finding documents that the dissolution among two-parent families as we have defined them here increased less over this period than among marriages overall. While this trend existed among both first and second marriages, it was reinforced by the increase in the proportion of such families that were second marriages, as well as by the increase in the proportion of marriages which began with children (Waite and Lillard 1991).

CHILDREN'S FAMILY EXPERIENCES

Family status at birth

We turn now to how increases in cohabitation have affected the family life-course experiences of children. We must begin, of course, with the relationship between cohabitation and unmarried childbearing. Table 4 reports the proportion of all births that were to unmarried mothers and the proportion of those that were to cohabiting parents. The trends, the levels, and the differentials are all very impressive.

The US is rapidly moving towards the position of several European countries where an 'unmarried birth' is more likely to occur in a two-parent family than it is to create a mother-only family (Ermisch, 1998). Among births to unmarried women 1990–94, two-fifths occurred to cohabiting parents (up from 29 per cent in 1980–84), and this proportion is half for majority whites as well as for Hispanics. Increases in the proportion of all births that were to unmarried women (Columns 1 and 4 of Table 4) occurred for all groups except among mothers with a college degree, and increases in the proportion of births to unmarried women that were to cohabiting parents occurred for all categories except black women and college educated. The proportion of all births among black women that occurred in cohabiting unions increased, but only slightly more rapidly than the increase in unmarried childbearing overall.

The main story to be told is that the 'decreasing significance of marriage' continues apace with respect to childbirth – as increasing proportions of children begin life with cohabiting parents. One measure that we left out of Table 4 to reduce its complexity can be obtained by subtraction: the proportion of births that occurred outside of any union. This proportion only increased from 15 to 17 per cent over this ten-year period, a period when the non-marital birth ratio was increasing dramatically. We tested this result in a logit analysis controlling for mother's age and education and found that, while there was a large and significant trend in births to cohabiting women, there was no trend in births to single women. Hence the increase in unmarried childbearing appears to be almost completely associated with cohabiting two-parent families. This, again, has implications for how we conceptualize 'families' on the one hand, and 'unmarried childbearing' on the other.

Children's cumulative experience:

Cohabitation. We can address two related issues. The first is the proportion of children expected ever to live with their mother and a cohabiting partner, no matter what their mother's marital status at the time of the child's birth, whereas the second issue concerns transitions into cohabiting families for children not born to cohabiting mothers. The first estimate is both surprising and consistent with what we know about women's fertility and union histories. Rates from the early 1990s suggest that about two-fifths of all children will spend some time in a cohabiting family before age 16. We have already seen that most of the increase in unmarried childbearing was among births to cohabiting women, and, by definition, these children start life in a cohabiting union (and hence, also account for

much of the increase in children's experience with cohabitation.) In addition, we will see in a moment that a large proportion of children of single mothers enter cohabitation as do a non-trivial proportion of children born to married mothers. Whether the mother goes on to marry or remarry or not, this surely is likely to be yet another feedback loop in the inter-generational aspects of the declining significance of marriage. Parents who shared a cohabiting family with their children are likely to find it difficult to argue effectively that their children should abstain from either unmarried sex or cohabitation.

Turning to the second question concerning transitions into cohabiting families, the first column of Table 5 presents the relative risks (from period Cox models) of entering a cohabiting family before age 16 for children born to mothers who were not cohabiting at the time of the child's birth. The relative risks are based on pooled data from 1980-84 and 1990-94. The coefficients and associated standard errors are in columns 2 and 3. To provide a sense of scale associated with these estimates, column 4 of this table presents the unadjusted (i.e. zero order) percentage expected to enter a cohabiting family before age 16 based on the 1990–94 data. We see in the top row that slightly less than a third of the children who were not born to cohabiting mothers enter a cohabiting family at some time before their 16th birthday. This proportion is three-quarters for children of single mothers. Even among children born to married mothers, one-fifth are expected to enter a cohabiting family – after the dissolution of that marriage and before they reach age 16.

A model (not shown) that includes mothers cohabiting at the child's birth in the base but excludes union status has a positive and significant co-efficient for period – indicating a 30 per cent higher risk of cohabitation in the most recent period. However, once we control for union status in the model in Table 5, the effect of period is negative.

Both mother's education and age have a significant negative relationship with transitions into cohabiting families, net of the other variables in the model. Nonetheless, it is noteworthy that one-sixth of the children born to mothers who were college graduates are expected to enter a cohabiting family subsequently. While children of black mothers are more likely to enter a cohabiting relationship than children of majority whites (46 vs 26 per cent), this is solely a consequence of the higher proportion born to single mothers. In the full model in Table 5, the relative risk of entering a

Table 5. Relative risks of mother's cohabitation and of mother's marriage for children by mother's characteristics: US children aged 0–16, weighted period Cox model estimates and period life-table estimates of proportions, from 1980–84 and 1990–94a

	Cohabitation				Married after unmarried birth			
	Percentage net relative risk ^b	β̂	S.E.	Percentage cohabited 1990–94	Percentage net relative risk	β̂	S.E.	Percentage married 1990–94
Period								
1980–84	100	_	_	100	_	_		
1990–94	88	-0.13	0.09	29	84	-0.17	0.14	59
Mothers' union status at child's birth								
Single	100	_	_	76	95	-0.05	0.18	55
Cohabiting	_	_	_		100			66
Married	15	-1.88	0.11	20	_	_	_	_
Mother's education								
<12	100	_	_	45	100	_		55
12	108	0.1	0.12	32	126	0.23	0.23	58
Col 1–3	70	-0.36	0.14	22	86	-0.15	0.28	67
Col 4+	66	-0.41	0.18	15	259	0.95	0.34	91
Mother's age ³								
< 24	100	_		48	100	_	_	61
24–26	61	-0.49	0.09	25	92	-0.08	0.21	61
27–29	39	-0.95	0.13	15	61	-0.49	0.26	46
30+	26	-1.35	0.16	12*	71	-0.34	0.36	36*
Race/Ethnicity								
White non-Hispanic	100	_	_	26	100	_	_	83
Black	48	-0.73	0.13	46	45	-0.79	0.18	39
Hispanic	61	-0.50	0.14	28	132	0.28	0.30	56

^a 1980-94 estimates are from the 1987-88 NSFH, 1990-94 estimates are from the 1995 NSFG.

cohabiting family for black children is about half that of white children. Again, when we ran a model excluding marital status, the coefficient for black children was positive and significant – it becomes negative and significant once the mother's marital status at the child's birth is controlled. A similar, though smaller, contrast exists for Hispanic children. Though the life-table estimate of the proportion expected to enter a cohabiting family is identical to that of white children, the likelihood of cohabitation for Hispanic children is 40 per cent of that for white children.

Marriage following birth to an unmarried mother: Figure 2 presents trends between 1960–64 and 1985–89 in the proportions marrying within 5 and 10 years after a first unmarried birth. White women who were unmarried at their first birth experienced a decline and then recovery in the proportion marrying within 10 years of this birth, which returned to around 80 per cent. At the same time, marriage was substantially delayed among these women, as the proportion marrying within 5 years declined from 67 to 50 per cent. Declines in

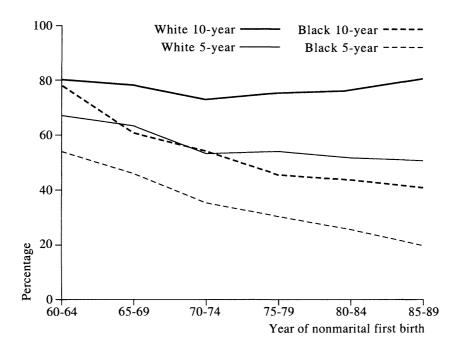
marriage after a first unmarried birth were much more dramatic among black mothers. The proportion marrying with 5 years dropped from 54 to 19 per cent over these cohorts, and the proportion within 10 years from 78 to 40 per cent. Hence about one-third of all first births to an unmarried mother will essentially spend their entire childhood without entering a married family: one-fifth among white children and three-fifths among black children. Our estimates comparing 1980–84 to 1990–94 suggest a plateau in these trends.

Consistent with the stability over this decade in the unadjusted estimates, the Cox model results in Table 5 indicate no significant decline in children's rate of entering a married family net of the other variables in the model. The greater observed likelihood of marriage among cohabiting than among single mothers – 65 vs 55 per cent (Manning, 1993) appears to be the result of differences in the education and age at marriage of cohabiting women and disappears once the other variables are controlled.

The strong positive effect of mother's education

^b Percentage net relative risk is defined by $\exp(\beta)*100$ and estimated by Cox Model, and frequency weights are applied. A residual category for Race/ethnicity is controlled in the model but not reported in the table. Standard errors are robust standard errors by considering children of a mother as a cluster. In each of the 100 resampling for our bootstrap estimation, we set the sample size equal to the original sample size, and the bootstrap procedure also considered children of a mother as a cluster.

^c Numbers marked by * are for age 14 which is the highest age that can be estimated in the NSFG data



Life-table estimates for the US from June CPS 1995

Figure 2. Cumulative proportion married after a nonmarital first birth.

on marriage and the negative effect of age are best understood in the context of the results we saw earlier for cohabitation. The more educated a woman is, the more likely she is to marry and the less likely she is to cohabit. Consequently a favourable marriage market interpretation of the effects of education on cohabitation and marriage, seems more appropriate than an economic independence argument. This is consistent with Oppenheimer's (1995) position. Mother's age, on the other hand, reduces the likelihood that a child will enter either a cohabiting or a married family. The older the unmarried woman is at the time of a child's birth, the less inclined she may be ever to marry (having remained unmarried to this age) and the less likely she may be able to find a partner because of preferences of both men and women concerning a partner's age.

We noted that, for women, much of the decline in marriage rates had been offset by increased rates of cohabitation. We get the same result for children. A hazard analysis (not shown) of entry into any union (whether cohabitation or marriage) shows no trend whatsoever between the early 1980s and the early 1990s, despite the decline in marriage over this period.

Children's experience of disruption of family of birth:

A final component of the transitions that affect the time children spend in various statuses is the stability of unions. Of children born into unions (either cohabiting or married), life-table estimates suggest that 34 per cent will experience a disruption by age 16. In a multivariate hazard model (not shown), we examined the stability of unions for children born into either a marriage or a cohabitation. The differentials by mother's age, education, and race/ethnicity match the well-known patterns for marriages. The key finding from our multivariate analysis of the disruption of children's families is that there was a significant increase between 1980–84 and 1990–94.

Distribution of childhood years by family statuses

The time spent in various family contexts is the complex outcome of circumstances at birth, transitions into and out of marriage, and durations in those various states. Table 6 reports the results of using period multi-state life-table procedures to estimate the person years under age 16 spent in single-parent, cohabiting, and married families. In a steady state, these represent the distributions of children we would expect to find in the cross-section. We think they are useful summary indicators of the complex of family transitions that are affecting children's living arrangements: conditions at birth, and transitions into and out of cohabitation and marriage.

Having documented above, once again, that cohabitation is a relatively short-lived status, it is no

Table 6. Expected percentage of childhood years spent in cohabitation, marriage, or single-mother families: Multi-state period life-table estimates by characteristics of mother: Children in the US aged 0–16, 1980–84 and 1990–94*

	1980–84			1990–94			
	Non-union	Cohabitation	Marriage	Non-union	Cohabitation	Marriage	
Total	20	7	73	20	9	71	
Mothers' union status at child's birth							
Non-union	48	12	40	48	18	33	
Cohabitation	24	24	53	26	28	46	
Marriage	14	2	84	13	4	84	
Mother's education							
<12	27	14	60	30	17	53	
12	19	4	76	21	9	70	
Col 1–3	21	4	75	18	6	76	
Col 4+	8	1	91	10	2	88	
Mother's age							
< 24	26	10	64	29	16	56	
24–26	12	3	85	18	8	75	
27–29	18	5	77	15	5	80	
30+	13	2	86	15	4	82	
Race							
White non-Hispanic	14	3	83	13	7	80	
Black non-Hispanic.	49	10	41	65	. 11	16	
Hispanic	14	6	80	21	12	67	

^{*1980-84} cohort from the 1987-88 NSFH and 1990-94 cohort from the 1995 NSFG.

surprise to find that it occupies only a small proportion of the childhood years in the US as a whole, and does not dominate the childhood experience of any subgroup represented here. Nonetheless, our estimates must be put in proper context for their importance to be understood. Is a large proportional increase in a small number important? For the US as a whole, the proportion of childhood years spent with a cohabiting parent increased by 29 per cent; but from only seven to only nine per cent. On the other hand, this nine per cent represents a third of the time children spend outside of a married family and underscores how our measures of the duration of single-parent experience can misrepresent either trends or levels if based only on marriage (Bumpass and Raley 1995).

Further, the role of cohabitation looms much larger for some groups in the population. Perhaps of greatest interest is the first variable of Table 6: whether a child is born outside of a union, in a cohabiting union, or to a married mother. Children born outside of any union (i.e., to an unmarried mother who is not cohabiting) are likely to spend about half of their childhood in a single-parent family, almost a fifth with a cohabiting parent, and about a third with a married parent. Children born to cohabiting parents, on the other hand, may spend about a quarter of their childhood years with a single-parent, a quarter with a cohabiting parent, and less than half with married parents. This latter

distribution may seem surprising, given the usually short duration of cohabitation before marriage, but we must remember that the distribution also reflects the unions that do not result in marriage, the high instability of those begun by cohabitation, and the formation of subsequent cohabiting unions.

Children born to married parents spend the vast majority (84 per cent) of their childhood in two-parent families. This is true in spite of the fact that about a third will experience marital disruption and that only about half of those will experience a subsequent married family (Bumpass and Sweet 1989).

These results underscore the fact that measuring cohabitation matters for how we think about the family contexts of children. We have already documented the increasingly high proportion of unmarried births that occur to cohabiting women. The implications of this trend, and of the present results, depend on the effects of different family contexts for children in cohabiting families. On the one hand, children born to cohabiting mothers are more like those born to single mothers than they are to those of married mothers in the proportion of their childhood they will spend with married parents: 46 compared to 37 per cent and 84 per cent respectively. On the other hand, time in cohabiting families substantially moderates these differences in terms of experience with two-parent families. Here, children of cohabiting mothers are much more like those of married mothers: 74 vs 88 per cent of childhood in two-parent families, compared to only 52 per cent among children of single mothers.

Differences in circumstances at birth, union stability, and in the likelihood of cohabitation and remarriage after disruption combine to create substantial differences by mothers' education and age in the time children spend in each of these three family statuses. About one sixth of childhood is spent with cohabiting parents by children of mothers who did not complete high school or who were under age 25 at the child's birth. Married families represent only about half of the childhood experience of children of young mothers and of mothers with low education, (one sixth for black children). The corresponding figure for the experience of living with a single mother is about 30 per cent among children of young or low-education mothers (two-thirds for black children).

CONCLUSIONS

That cohabitation has continued to increase is shown by a broad array of measures, from the proportion of women who have ever cohabited, to the proportion of unmarried women – and of all couples – that are currently cohabiting. As Toulemon asserts in his recent title, cohabitation is clearly 'Here to stay' (1997). If these trends were only an extension of dating – the move of (now commonly accepted) premarital sex into shared households – we might well regard them as 'interesting' – but not as central to family change. However, the present analysis should make it clear that families with children are very much affected by the increased time spent in cohabitation rather than marriage.

The rapid increase in unmarried childbearing was largely the consequence of births to cohabiting parents – and occurred at the same time as a rapid decline in the likelihood that those parents would marry each other. Now that about two-fifths of all children spend some time living with their mother and a cohabiting partner, and about a third of the time children spend with unmarried mothers is spent in cohabitation, we simply cannot address the changing family experiences of children while ignoring cohabitation. We need to know much more about how cohabitation affects the parenting contexts of children (Thomson, Hanson, and McLanahan 1994), the economic circumstances of their families (Manning and Smock 1995), the attitudes and values of the next generation (Thornton and Camburn 1987), and how transitions to and from cohabiting unions contribute to the

family-stress effects of multiple transitions (Wu and Martinson 1993). This will require sample sizes sufficiently large to contrast effects for various living arrangements conditional on age at occurrence, duration, and number of prior episodes. For example, it may make a large difference for the social transmission of values and control of children's early sexual behaviour whether the time spent 'with a cohabiting mother' occurs when the child is an infant or a teenager.

Increasing cohabitation raises issues about the changing boundaries of family life, and consequent effects on children, that are too important to be left to the occasional question on cohabitation. Like the NSFH, the 1995 NSFG made a major contribution in including full cohabitation histories. These data have been extremely useful in documenting the patterns identified in this paper. In the future, we need to invest substantial thought and resources to provide sufficient substantive coverage, and large enough samples, to allow us better to understand this critical aspect of changing family life in America. Changing reality has once again outstripped the capabilities of existing data, and we must struggle to meet the challenge of this ever moving target.

NOTES

Larry Bumpass and Hsien-Hen Lu are at the Center for Demography and Ecology, University of Wisconsin-Madison. An earlier version of this paper was present at the 1998 Annual Meeting of the Population Association of America (CDE WP-98–15), Research conducted under a grant from the Center for Population Research of the National Institute of Child Health and Human Development (HD 22433), using Centre Grant Facilities provided under HD 05876.

¹ Scheon and Owens (1991) make this point from comparisons by age in the proportion of cohabiting persons who had married their partner – comaprison that does not control for changes in the durations of exposure by age.

² Simultaneously and independently, LeBourdais and Neill (1998) employ a simi; ar measure in the paper they presented at the 1998 Annual Meeting of the Population Association of America at which an earlier version of this paper was presented.

³ We began these estimates using a pooled file across the 1975 to 1995 Current Population Surveys, but it became clear on closer examination (in comparison to data from the National Centre for Health Statistics) that the quality of reporting of births to unmarried women improved over time. It thus appears that declining stigma has improved the quality of the data, and for this reason only the 1995 data are used here.

REFERENCES

Bumpass, Larry L. 1984a. "Children and marital disruption: a replication and update", *Demography* 21: 71–82.

Bumpass, Larry L. 1984b. "Some characteristics of children's second families", *American Journal of Sociology* **90**(3): 608–623.

Bumpass, Larry L. 1985. "Bigger isn't necessarily better: A comment on Hofferth's 'Updating children's life course", *Journal of Marriage and the Family* 47: 797–799.

- Bumpass, Larry L. 1995. "L'enfant et les transformations du milieu familial aux Etats-Unis", Cahiers Quebecoise de Demographie 23: 27–52. A somewhat restructured revision is circulated as "The declining significance of marriage: changing family life in the United States." NSFH Working Paper No. 66.
- Bumpass, Larry L. and Hsien-Hen Lu. 1998. "Children's increasing experience in cohabiting families", CDE Working Paper No. 98-15. Madison: University of Wisconsin–Madison Center for Demography. www.ssc.wisc.edu/cde/cdewp/home.htm
- Bumpass, Larry L. and R. Kelly Raley. 1995. "Redefining single-parent families: cohabitation and changing family reality", Demography 32: 97–109.
- Bumpass, Larry L., R. Kelly Raley and James A. Sweet. 1995. "The changing character of stepfamilies: implications of cohabitation and nonmarital childbearing", *Demography* 32: 1–12.
- Bumpass, Larry L. and Ron R. Rindfuss. 1979. "Children's experience of marital disruption", *American Journal of Sociology* 85(July): 49-65.
- Bumpass, Larry L. and James A. Sweet. 1989a. "Children's experience in single-parent families: implications of cohabitation and marital transitions", *Family Planning Perspectives* 21(6): 256–261.
- Bumpass, Larry L. and James A. Sweet. 1989b. "National estimates of cohabitation: cohort levels and union stability", *Demography* 26(4): 615–625.
- Bumpass, Larry L., James A. Sweet, and Andrew Cherlin. 1991. "The role of cohabitation in declining rates of marriage", *Journal of Marriage & the Family* 53(4): 913–927.
- Castro Martin, Teresa and Larry L. Bumpass. 1989. "Recent trends and differentials in marital disruption", *Demography* **26**(1): 37–51.
- Cherlin, Andrew, Kathleen Kiernan, and P.I. Chase-Lansdale. 1995. "Parental divorce in childhood and demographic outcomes in young adulthood", *Demography* 32: 299–318.
- Cooper, J. 1991. "Births outside of marriage: recent trends and associated demographic and social changes", *Population Trends* **63**: 8–18.
- Coleman, David. 1992. "European demographic systems of the future: convergence or diversity", in *Human Resources in Europe at the Dawn of the 21st Century.* Luxemburg: Office for Official Publications of the European Communities. pp. 137–179.
- Duncan, Greg, and Willard Rodgers. 1991. "Has Children's poverty become more persistent?", American Sociological Review 56: 538-550.
- Eggebeen, David J. and Daniel T. Lichter. 1991. "Race, family structure, and changing poverty among American children", *American Sociological Review*. **56**: 801–817.
- Goode, William J. 1993. World Changes in Divorce Patterns. New Haven: Yale University.
- Kiernan, Kathleen. 1989. "The family: formation and fission", in Heather Joshi (ed.), *The Changing Population of Britain*. Oxford: Basil Blackwell Ltd, pp. 27-41.
- Kiernan, Kathleen and John Hobcraft. 1996. "Parental divorce during childhood: age at first intercourse, partnership and parenthood", *Population Studies* **51**: 41–56.
- Klijzing, Eric and M. Macura. 1997. "Cohabitation and extramarital childbearing: early FFS evidence", in International Population Conference/Congrès International de la Population: Beijing, 1997, Vol. 2. Liège, Belgium: International Union for the Scientific Study of Population (IUSSP), p. 885–901.
- Kuijsten, Anton. 1996. "Changing family patterns in Europe: a case of divergence?", European Journal of Population 12: 115–143.
- LeBourdais, Celine, and Ghyslaine Neill. 1998. "Are mom and dad married? And does it matter for the future of the family?", Paper presented at the 1998 Annual Meetings of the Population Association of America, Chicago, Ill.
- Lelievre, E. 1995. "Couple formation and fertility outside of

- marriage in Great Britain, differences with the French situation." *Population: an English Selection* 7: 67–94.
- Lesthaeghe, R, G. Moors, and L. Halman. 1993. "Living arrangements and values among young adults in the Netherlands, Belgium, France and Germany, 1990." IPD-Working Paper, 1992–93 Brussels.
- Lichter, Daniel and Deborah Graefe. 1997. "Parental cohabitation, marriage, and single motherhood: life course transitions of American children." Paper presented at the 1997 Annual Meetings of the Population Association of America.
- Waite L.J., Lillard L.A. 1991. "Children and marital disruption", *American Journal of Sociology* 96(4): 930–53.
- Manning, Wendy 1993. "Marriage and cohabitation following premarital conception", *Journal of Marriage and the Family* **55** (4): 839–850.
- Manning, Wendy and Daniel Lichter. 1996. "Parental cohabitation and children's economic well-being", *Journal of Marriage and the Family* **58**: 998–1010.
- Manning, Wendy and Pamela Smock. 1997. "Children's living arrangements in unmarried mother families", *Journal of Family Issues* **18**: 526–44.
- McLanahan, Sara and Larry L. Bumpass. 1988. "Intergenerational consequences of family disruption", American Journal of Sociology 94: 130–152.
- McLanahan, Sara and Gary Sandefur. 1994. *Growing Up With a Single Parent*. Cambridge, MA: Harvard University Press.
- National Center for Health Statistics. 1998. "Monthly vital statistics report: Advance report of natality." *Final Natality Statistics*, 1995.
- Oppenheimer, Valerie. 1995. "American marriage formation in the 1980s: How important was women's economic independence?", in Karen Oppenheim Mason and An-Magritt Jensen (eds.), Gender and Family Change in Industrialized Countries. Oxford: Clarendon Press, pp. 105–137.
- Potter, F.J., F.G. Iannachione, W.D. Mosher, R.E. Mason, J.D. Kavee, and S.L. Botman. 1997. "National survey of family growth cycle 5: design, estimation and inference." *Vital and Health Statistics*. Series 2.
- Prinz, Christopher. 1995. Cohabiting, Married, or Single: Portraying, Analyzing and Modeling New Living Arrangements in the Changing Societies of Europe. Brookfield, Vermont: Ashgate Publishing Co.
- Rindfuss, Ronald, James Palmore, and Larry Bumpass. 1982. "Selectivity and the analysis of birth intervals with survey data", *Census Forum* 8(3).
- Raley, R. Kelly. 1996. "A shortage of marriageable men: a note on the role of cohabitation in black-white difference in marriage rates", "American Sociological Review 61: 973–83.
- Sardon, Jean-Paul. 1996. "L'Evolution du divorce en France", Population 51(3): 717-750.
- Schoen, Robert and Dawn Owens. 1991. "A further look at first unions and first marriages", in Scott J. South and Stewart E. Tolnay (eds.), *The Changing American Family*. Boulder: The Westview Press.
- Smith, Herbert L., S. Philip Morgan, and Tanya Koropeckyj-Cox. 1996. "A decomposition in the nonmarital fertility ratios of blacks and whites in the United States, 1960–1992", Demography 33: 141–152.
- Sweet, James A., Larry L. Bumpass, and Vaughn R.A. Call. 1988. "The design and content of the National Survey of Families and Households." NSFH Working Paper No. 1. National Survey of Families and Households, University of Wisconsin, Madison.
- Thornton, Arland. 1988. "Cohabitation and marriage in the 1980s", *Demography* **25**(4): 497–508.
- Thornton, Arland. 1991. "Influence of marital history of parents on the marital and cohabitational experiences of children", *American Journal of Sociology* **96**: 868–894.
- Thornton, Arland, and Donald Camburn. 1987. "The influence of the family on premarital sexual attitudes and behavior", *Demography* **24**(3): 323–340.

Toulemon, Laurent. 1997. "Cohabitation is here to stay",

Population: an English Selection 9: 11–56.
Toulemon, Laurent. 1995. "The place of children in the history of couples", Population: an English Selection 7: 163–186.
Wu, Lawrence L., Andrew J. Cherlin, and Larry L. Bumpass.

1997. "Family structure, early sexual behavior, and premarital births", CDE Working Paper No. 96–25.
Wu, Lawrence L., and Brian C. Martinson. 1993. "Family Structure and the Risk of a Premarital Birth." *American Sociological Review* 58 (April): 210–232.