

DEMOGRAPHIC DESTINIES

Interviews with Presidents of the Population Association of America

Interview with Sara McLanahan PAA President in 2004



This series of interviews with Past PAA Presidents was initiated by Anders Lunde
(PAA Historian, 1973 to 1982)

And continued by Jean van der Tak (PAA Historian, 1982 to 1994)

And then by John R. Weeks (PAA Historian, 1994 to present)

With the collaboration of the following members of the PAA History Committee:
David Heer (2004 to 2007), Paul Demeny (2004 to 2012), Dennis Hodgson (2004 to
present), Deborah McFarlane (2004 to 2018), Karen Hardee (2010 to present), Emily
Merchant (2016 to present), and Win Brown (2018 to present)

SARA McLANAHAN

PAA President in 2004 (No. 67). On 2 February of 2021, Dr. McLanahan provided us with written answers to questions from our Past President Interview Guide. We show those below. Then, on 5 February 2021, and again on 15 February 2021, we had Zoom meetings with her, and the transcripts of those sessions are also provided below.

CAREER HIGHLIGHTS: Sara McLanahan was born in 1940 in Tyler, Texas and she grew up in East Texas. She attended college after high school, but marriage and children kept her from completing her bachelor's degree in Sociology from the University of Houston until 1974. She then received her M.A. in Sociology from the University of Texas, Austin, in 1976, and her Ph.D. in Sociology from UT Austin in 1979, at which time she was awarded a two-year NIMH Postdoctoral Fellowship in the Department of Psychiatry at the University of Wisconsin, Madison. In 1981 she became an Assistant Professor of Sociology at the University of Wisconsin. She was promoted to Associated Professor in 1986, and Full Professor in 1989. In 1990 she accepted a position as Professor of Sociology and Public Affairs at Princeton University, where she has been since. She is currently the William S. Tod Professor of Sociology and Public Affairs and the Director of the Center for Research on Child Wellbeing at Princeton. She is a preeminent family demographer and has devoted a major portion of her academic life to the Fragile Families Project.

WRITTEN RESPONSES (in red) TO QUESTIONS ON THE PAA ORAL HISTORY

INTERVIEW GUIDE: The goals of the project are to provide a perspective on demography from Past PAA Presidents (leaders in the field, by definition) that goes beyond the written record:

1. **To understand what led you to demography and how you help lead others to demography:**
 - a. How did you become a demographer and how does your professional identity as a demographer relate to your disciplinary training (sociology, economics, history, etc.)? *I wasn't a demography trainee at UT where I got my PhD. However, during my last year of graduate school, I took a class taught by Teresa Sullivan where we read a book called – A Time of Transition – that reinforced my interest in single-mother families, and made me realize that divorce was a population phenomenon and that demography was important for understanding the topic. I continued this interest when I moved to Wisconsin as a Post Doc in 1979.*
 - b. Who were your mentors in graduate school and beyond? *In graduate school, I worked with Gideon Sjoberg. At Wisconsin, my key mentors were Larry Bumpass, who taught me some family demography, Aage Sorensen (who introduced me to the PSID) and Irv Garfinkel, the director of the Poverty Institute at UW who was heading up a project on the Wisconsin Child Support System. I also learned about the “identification problem” from Chuck Manski. Garfinkel has continued to be a mentor and collaborator. He is also my husband.*
 - c. What is your own approach to training graduate students and how has that changed over time? *Mentoring graduate students and post docs has been one of the more rewarding experiences of my career. I don't think my interest has changed much over time, but hopefully I've gotten better at what I do.*
 - d. What has been your experience as a student, faculty member, and administrator in university population research centers? *I've always liked the interdiscipline and collaborative environments of the pop centers. The grants management and computing support have been invaluable.*

- e. What have been the career trajectories of your students? *Most of my students are in academic jobs; a few are working in government jobs (e.g. the Census Bureau) or for research companies (e.g. Mathematica Policy Institute, Urban Institute).*
- f. How was your training and that of your students funded? *At Wisconsin, a public university, I funded my research assistants through grants. At Princeton, all graduate students were fully funded so I switched to including postdocs in my grants.*
- g. What is your assessment of the training that future demographers are receiving? *I don't have a good sense of what demography training looks like in other Pop Centers, but I think it should include a broad range of subfields and methods, including health, bio-demography and qualitative research.*

2. To appreciate your contributions to demography, and how demography has changed over time:

- a. How did your research agenda develop over the course of your career? *My interest in single mother families and poverty drove me to conduct research on the consequences of divorce for children. Ultimately, it drove me to launch the Fragile Families & Child Wellbeing Study (FFCWB) (with Irv Garfinkel) in order to understand the lives and conditions of children born to unmarried parents. Ron Mincy, our program officer at the Ford foundation was the person who coined the phrase 'Fragile Families' to highlight the fact that unmarried parents were families, though fragile in many ways. He was the inspiration. Ron has since joined the faculty at Columbia and continues to play an important role in the study. Most recently, I become interested in bio-demography, including the effects of families and other contexts on epigenetic markers and brain development.*
- b. Who are your collaborators and what is your relative emphasis on collaborative and solo research? *I very much enjoy collaborative research, and the FFCWB study has provided many opportunities for such collaborations. My first book, "Single Mothers and their Children: A new American Dilemma" (1986) was co-authored with Irv Garfinkel. My second book, "Growing up with a Single Mother" (1994), was co-authored with Gary Sandefur. My most recent book, "Children of the Great Recession" (2016), was coauthored with Irv Garfinkel and Chris Wimer. My current collaborators include Jeanne Brooks-Gunn (Developmental Psychology), Daniel Notterman (Molecular Biology), Colter Mitchell (Sociology and Bio-demography), Matt Salganik (Sociology and Machine Learning), Katherine Edin (Sociology), Jane Waldfogel (Public Policy) and several former graduate students and postdocs.*
- c. How has your research agenda fit with the research emphases of demography, and how has your research agenda and that of the discipline more generally changed over time? *Demography seems more interdisciplinary today than it used to be, which I think is good.*
- d. How has your research and that of demography more broadly been related to issues of national and global policy? *Not sure about this. [Editor's note: see discussion about this in the "in-person" interviews below.]*
- e. How has your research been funded? *Through grants from NICHD and private foundations.*
- f. Who are the major audiences (scholarly and otherwise) for your research, and for demographic research in general, and how have those audiences used your research? *In addition to my scholarly audience, my research has been used (and misused!) by political groups to promote their views about family structure and poverty.*
- g. What is your assessment of how demography has changed over time? From your point of view, have the changes been positive or negative overall? How useful do you think the research of demographers has been in formulating national and global policies capable of meeting current and future national and global challenges? *Not sure. [Editor's note: see discussion about this in the interviews below.]*

3. To learn about the workings of PAA and its relationship to the science of demography.

- a. What has been your experience with PAA throughout your career as a member and a board member? *Very positive.*
- b. What role do you see PAA playing in maintaining and organizing demography as a profession that includes members in academic, policy, and practical careers? *Very positive.*
- c. How do you see PAA facilitating interaction between demographers and their funders and audiences? *Very positive.*
- d. What do you see as the role that population research centers play in maintaining and organizing demography as an interdisciplinary field of research, and how is PAA involved in that? *I think the pop centers do an excellent job of introducing students and faculty to demography and its subfields. PAA brings demography to many people who don't have pop centers at their university.*
- e. What role has PAA played in the changes in the field of demography overtime? *[Editor's note: see discussion about this in the interviews below.]*
- f. How do you assess the relationship existing between funders and demographers/population research centers? Has the influence of funding flows on the composition of demographic research been beneficial for the field? Have they led to certain national and global demographic challenges being slighted by the field? *[Editor's note: see discussion about this in the interviews below.]*

Interview with Sara McLanahan on Friday, 5 February 2021 via Zoom with Karen Hardee, Emily Merchant, Win Brown, and John Weeks

Dr. McLanahan is in Stonington, CT, where she indicates it has been unusually cold.

McLANAHAN: Last March 31st our kids took us out of our apartment in New York City and drove us here, because they were afraid that President Trump was going to close the state border. They take good care of us! We're just renting this place until June, and then we're going back to New York.

WEEKS: When you were teaching at Princeton, were you living in New York and commuting down to Princeton?

McLANAHAN: No, we had homes in both places. I guess I didn't tell you when we first started the interview that I was diagnosed with lung cancer two years ago, so I'm retiring, but that is why our kids were so freaked out about our being in New York City, so we rented this house, and they took us to Connecticut.

WEEKS: So that diagnosis would have come at about the same that, you remember, we were hoping you were going to be able to join us in Austin at the PAA meetings so that we could interview you. I assume this is what came up and you weren't able to come to Austin.

McLANAHAN: Yes, that would be right. So, we sold our house in Princeton. We had an apartment in New York, because my husband works at Columbia, but we always had two places, which isn't as great as having a weekend place and a city place. You never know where anything is. It's very confusing. [Laughter]

BROWN: [Win Brown introduces himself and notes that he has been at the Bill and Melinda Gates Foundation since 2012]

McLANAHAN: The Gates Foundation has provided support to our Fragile Families Project. I think they are currently funding our work on attaching administrative records to individual individual records. Kathy Edin is taking my place as Princeton PI, and Jane Waldfogel is replacing Garfinkel at Columbia University. So, are we going to go over my responses, because I wasn't always sure what to say?

WEEKS: Well, that is why the in-person interviews are nicer. By the way, I am recording this so that we have a transcript. Since you've had a chance to go through the interview guide and know what we were looking for, today we just want to go into some detail. On that score, I'd like to start with some classic demographic detail. I've got in my records that you were born in 1940. Am I right about that?

McLANAHAN: Right.

WEEKS: Good. And I'm assuming, but I don't know for sure, that you were born in Texas. Is that correct?

McLANAHAN: That's correct. I was born in Tyler. I lived very close to the town where Patrick Mahomes (QB of the Kansas City Chiefs) grew up.

BROWN: And, Sara, we can still detect just a little bit of a Texas accent! It's very nice [Laughter]

WEEKS: So, you were born there in Tyler, Texas, but it was actually a while before you graduated from college. And so, I'm assuming that there's a story in there to tell.

McLANAHAN: Yes. So, I finished three years of college--the last of those at Smith College. I always wanted to live in the east. But I didn't graduate. I dropped out, got married, and had three children. I always wanted to go back to school, but we kept moving, and you had to live in a place for a couple of years before you were eligible for instate tuition; so I never did get the degree. And then in 1972, I divorced, so at that point I'd been married ten years and had three children and lived in Houston. So, then I was a single mother, but then I went back to school at the University of Houston and finished my degree.

And then I went to the University of Texas. I was always interested in single mothers, but I didn't think I should focus on something so close to myself. So, my master's thesis was on HMOs and my dissertation was on Health Planning Organizations. I was preparing to be a medical sociologist. I didn't know anything about demography, and I wasn't a demography trainee. I liked the demographers at UT and could see that they were doing the kind of collaborative research that I would have liked to have been a part of. But I was not in that group at all. I didn't even see what demography had to do with my interests. So, during my last year I took this course from Terry Sullivan, [renowned sociologist and labor force demographer] and in it she featured a book by Heather Ross and Isabel Sawhill called *The Time of Transition: The Growth of Families Headed by Women*, which I think came out in '74 [actually, 1975, published by the Urban Institute]. It was all about increases in divorce and interpreting those trends. So, anyway, I loved the course and I wanted to be Isabel Sawhill. [Editor's note: see jacket of Sawhill's *Generation Unbound: Drifting into Sex and Parenthood without Marriage*, Brookings Institution Press, 2014--below]:

Forty years ago, Isabel Sawhill inspired a generation of scholars, including myself, with her landmark research on divorce. Now she does it again, turning her sharp eye on nonmarital childbearing with equal success. Free of ideology and comprehensive in scope, her story highlights how the decline in marriage is affecting children's life chances and what might be done to reverse the trend.

—Sara S. McLanahan, William S. Tod Professor of Sociology and Public Affairs,
Princeton University

But, then I went off to Wisconsin on a post-doc, and there I began to write about single mothers. I realized that I needed to know some demography to know how to think about this topic. So, that's where I realized that the reason for studying demography was not just to be a demographer. I didn't really know what that was. I just got into it. And, of course, there were some great family demographers at Wisconsin: Larry Bumpass [PAA President in 1990], Jim Sweet, Elizabeth Thomson and Judith Seltzer [PAA president in 2016]. So, I was a NIMH-funded post-doc and my office was in the medical school/hospital. But I had contact with people in the Sociology department. When I first got to Wisconsin, I met Aage Sørensen--he was chair of the Sociology Department. He knew I was interested in single motherhood. I had shown him a paper I had written based on qualitative interviews, and he came to my office one day with this great big yellow PSID [Panel Study of Income Dynamics] codebook. It was huge and included the first five years of the survey, and I remembering him saying, "If you want to study single mothers, this is the data set with a lot of these mothers." And that really got me started on using the PSID. The PSID was trying to extend its user-base and I believe Aage was on the board.

I was also part of the Poverty Institute at Wisconsin. That's where I met Irv [Irwin] Garfinkel, who is also my spouse, and long-time collaborator. He isn't a demographer--he trained as a social worker and an economist. Finally, I learned something about the 'identification problem' from Chuck Manski. So, I guess those are the main people I mentioned in my written response. Larry Bumpass taught me demographic techniques--how you need to look at things if you want to study them correctly.

WEEKS: And I assume that when you were at UT Austin you had a good quantitative background. That's always been one of their strengths.

McLANAHAN: I had a decent quantitative background. I was [family sociologist] Norval Glenn's research assistant and I ran the data analysis for a couple of papers we were writing together. In those days you went to the building with the large computers and submitted your cards.

WEEKS: Thinking about Larry Bumpass being an important mentor at Wisconsin, I was re-reading your presidential address and it really struck me how many past PAA presidents you referenced in your talk. I'm sure it wasn't a deliberate thing, but this is why you people become PAA presidents, right? You're doing important stuff.

McLANAHAN: Yes, everyone needs to know some basic demography. What bugs me with the news about the coronavirus is the media often focus on the absolute number rather than a rate. "California had the most deaths today!" [laughter] It's terrible! Drives me crazy.

So, what happened then? I don't think I put this in my question/answer [see above], but I'll tell you that as a post-doc I used to attend the demography seminars and the Poverty Institute brown bags, both of which offered students great training. One day I went to a Poverty workshop where we discussed a series of articles published in the New Yorker about the failure of an anti-poverty program – Supported Work. The journalist, Ken Auletta, argued that part of the failure was due to being raised by a single mother. I was shocked because in graduate school I had learned there was nothing wrong with single motherhood. Single mothers can do the job just as well as married mothers, and of course I was a single mother. So, anyway, the fact that this guy said that single motherhood was very bad for children surprised me because I had learned that, no, the research showed otherwise.

So, I went running around talking to people, including demographers and people in the Poverty Institute, and it turns out that the famous review article that made the argument for no negative effects had criticized the existing research (for using biased samples), but hadn't gone further; that is, researchers hadn't looked at studies based on representative samples. So, I set out to show that single

motherhood wasn't a problem. That if you looked at better data, things would be OK. Pretty early I got started on this in my post-doc, and then they gave me a job at Wisconsin, and every data set I looked at showed a negative association--even after controlling for things like income and race--things you might think would be correlated with single motherhood. And so I searched and searched to find evidence that single motherhood was not a problem once the analysis was done correctly. But that is not what I found. My first book – *Single mothers and their Children: A New American Dilemma* (with Garfinkel--Washington DC: The Urban Institute Press, 1986) - shows that the proportion of children living in households headed by single women was more than one in five. It includes a chapter on the negative effects of divorce/single motherhood on children and an analysis of programs designed to help single mothers. The book was part of a larger project commissioned by the Urban Institute to investigate the effects of changes in welfare policies during the Reagan administration.

I continued my analyses using different data sets which culminated in a book that I wrote with Gary Sandefur in 1994 after I had gone to Princeton [Sara McLanahan and Gary Sandefur. *Growing Up with a Single Parent*, Cambridge, MA: Harvard University Press, 1994]. It took a while to get it written and revised and published, and by that time I was at Princeton. But we showed that even with all these representative data sets, and even if we controlled for things that people thought might be causing these problems, single motherhood continued to be problematic. So then I got into a lot of trouble, of course, with the feminists, because they didn't want to hear what I found. You had a similar problem in the debate over the negative effects of mother's employment. Many feminists rejected the argument that mother's employment had negative consequences for children, which made it harder to argue for policies such as paid family leave and high-quality daycare. I realized that the situation was similar for single mothers. If there isn't a problem, it doesn't need fixing.

So, now the feminists were mad at me, which I hated because I considered myself a feminist and wanted them to like me. But it just wasn't what I found, and at that point I realized I really just wanted to get it right, more than being liked or appreciated. Then we started the Fragile Families project, to study unmarried parents. Because a lot of people would say, well if the father lives in the household--if he's there all the time, what's the difference with having a marriage license? And we were also interested in whether non-resident fathers were involved with the kids. What was the nature of the family relationships? Again, in countries like France and Sweden you had a lot of cohabiting couples, and in Sweden they didn't typically get married until they'd had the second child. The difference was that these cohabiting unions were very stable--like a marriage, you know.

WEEKS: Let's think for a moment about your career trajectory, and your policy initiatives...

McLANAHAN: So, I've always been interested in policy issues. I think that single motherhood is an important source of poverty. I think that income is the single most important cause of the problem for single mothers, but it turns out that cohabiting mothers in the US have a very high break-up rate, and when they break up, they look for another partner. So, a social father comes in for a year or two and then they break up. Now, I'm not all for marriage--I don't think that if you got everyone married, that would be solution at all. I think it is somehow easier to leave a cohabiting union than to leave a marriage.

WEEKS: One of the things you've talked about in your research is the role of infidelity, and obviously infidelity might be higher in a cohabiting relationship than in a marriage.

McLANAHAN: Exactly. And that is what we found. But it turned out non-marital childbearing led to a lot of instability in the male partnerships among single mothers. This morphed into the idea that what was bad about single motherhood was that it was so unstable, and that some of the stepfathers that moved in weren't such good guys. Paul Amato has shown that in divorces where the parental

relationship is poor before the divorce--lots of conflict--a divorce can make things better for children. For those in a good relationship, a divorce can make things worse--that has a very strong negative association for the child.

WEEKS: Now, thinking about your time at Wisconsin, you went through the ranks [from Assistant Professor to Professor] pretty quickly, so obviously you were doing all the right things. How did it transpire, then, that you wound up leaving Wisconsin and going to Princeton?

McLANAHAN: It's funny. At Wisconsin, I had gotten an inquiry from Texas, asking if I wanted to interview for a job, which I turned down. And the next thing I knew, someone else in our department was invited to interview. And I found myself envious and realized I should have checked it out, because I still had ties in Austin. Plus, Wisconsin was very cold, so, I did wind up going down to Texas and ended up declining their offer. A lot of my former professors were still there and saw me as a student, you know. And, plus, I had moved into demography, which I hadn't been in before. After I went, I realized "I don't want to do this." Meanwhile, Paul Starr at Princeton heard that I was on the job market. So, he invited me to Princeton. Princeton seemed like a good fit. It had demography, and a policy school, which gave me access to any of that sort of thing that I wanted.

I also liked the size of Princeton. There were 44,000 students at Wisconsin, and 4,400 at Princeton when I got there. And Princeton was warmer. So, I thought I'm going to give this a try. But I had to be accepted into OPR [Office of Population Research], because I was getting grants by this time, and I needed to have all the help the Pop Center can give you, but Sociology at Princeton didn't have that. Even the policy school wasn't trained on managing NIH grants. So, I couldn't go to Princeton unless OPR made me a member, and they did. Then, Burt Singer came pretty soon after I was there. He was the first one who thought health should be a part of demography. Really. And he also thought that social demography had a place, and he kind of egged me on. He protected me and helped me get what I needed. And the computing services and grants management services were just excellent. So, I got access to all of that.

And then slowly, OPR hired more social demographers--Alex [Alejandro] Portes and Marta Tienda [PAA President in 2002] and then Doug Massey [PAA President in 1996], all of whom were doing work on immigration. Marta was trained as a demographer, but I don't think Alex was, but he may have been [*Editor's note: he was not trained in demography, but he did receive his PhD in Sociology at the University of Wisconsin*]. Doug was trained at Princeton.

WEEKS: Now, Marta got her doctorate at Austin. She wasn't there when you were there?

McLANAHAN: She left the year after I arrived, but when I got the offer for the post-doc at Wisconsin, I called Marta [who was teaching there at the time], and I stayed with her! Wisconsin didn't offer to pay for my visit.

MERCHANT: Can I just ask when it was you went to Princeton?

McLANAHAN: It was 1990. I was at Wisconsin from 1979-1990. I was a post-doc for the first two years, and then I was Assistant Professor, and I did get an early tenure vote. That was very nice. Hal Winsborough left a note on my door that said "Now you can do what you really want. Take advantage. You've got tenure!" [Laughter]

In 1990 I went to Princeton, and my husband got a job at Columbia. It meant a lot that he was willing to follow me. When I was a kid in college, I had a boyfriend at Princeton, so it was familiar, and felt more like home. There was no push from Wisconsin. I liked it a lot. I liked the people.

WEEKS: Now, on a more personal note. At this time, when you go off to Princeton, and your husband goes off to Columbia, your kids are grown, am I right?

McLANAHAN: Yes, yes. I had kids in college, at several different places. But kids living at home was not an issue. We sold the Wisconsin house, and off to Princeton and New York.

WEEKS: What I was thinking was that it would be difficult to have the two households, and the children divided between them.

McLANAHAN: I know people in that situation, and the kids don't like that. They want to be in with a group of friends, right? They don't want to go off every weekend to a different town. I was a full professor when I arrived at Princeton, and I liked it.

WEEKS: Maybe since we're on that topic, we can expand it just a bit, since obviously your research has tremendous policy implications. Have you been thinking about that? As you started the Fragile Families project, were you thinking about how to improve lives for people?

McLANAHAN: Yeah, I think one of the biggest deals is having a baby early. I think what happens is that they have this child, a third of them are co-habiting when they have the child--they're not all single mothers. But, then they are doing their marital search at the same time they're having their babies. We found that the single mothers who re-partnered after a break up were partnering with guys who had better work histories and less prison history. They were more mature and better able to support a family. I think getting all these young couples married wouldn't do much for anybody. They're just too young, and they have their babies, and having babies is a nice thing.

WEEKS: Now, we know this happens more often among African-American women and men than among whites...

McLANAHAN: Definitely.

WEEKS: ...Does your research suggest a role for systemic racism or other kinds of things that are part and parcel of that?

WEEKS: I meant especially in terms of incarceration, because we know...

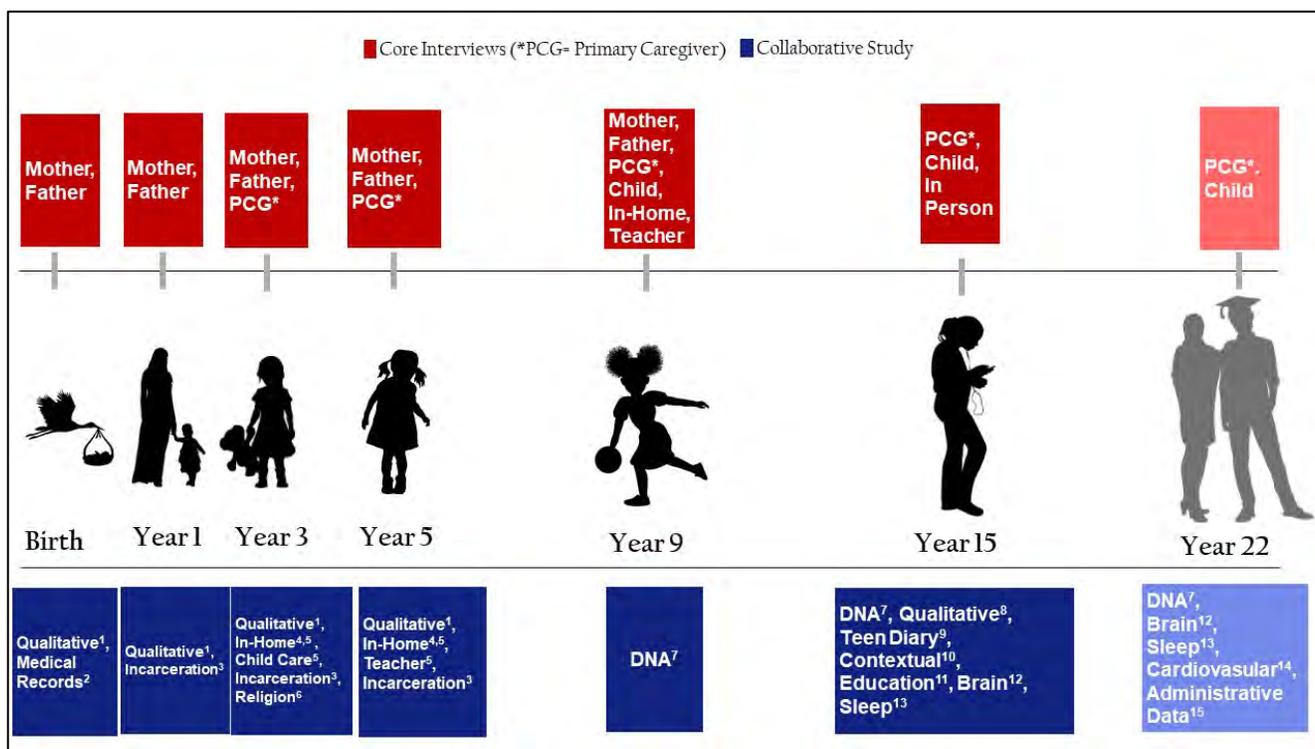
McLANAHAN: Yes, I think there is a lot of structural racism in the prison system which disproportionately affects young black men. Being in prison and having a prison record affects job opportunities and housing stability, making it harder to support a family. And a lot of our unmarried fathers have been in prison. We also find evidence of racial discrimination in school punishment.

Fragile Families started out in two cities, and then we moved forward with the other 18 cities. In the first round of interviews we found that a substantial proportion of new fathers were in jail. We figured if 5% of new fathers were in prison at one point in time, the number who had ever been (or would be) in prison would be much higher. So we added more questions about penal histories to both parent surveys. The fact that we started in California and Texas – the highest incarceration states in the country – probably overstated the situation. But it got us thinking about the issue and adding good questions.

MERCHANT: Can I ask a question about the Fragile Families Project? It involves a lot of biodemography, and health and genetic measures. So, I'm interested in how you decided to get into genetic and epigenetic measures in Fragile Families, and what you learned from it.

McLANAHAN: We didn't collect genetic data until year 9, so it was a ways in before we started thinking about that. I got interested in the genetic piece first. Originally, we were planning to work with a biologist at NIH, but then he moved to South Africa. At the same time Dan Notterman, a molecular biologist, left being a medical doctor (running a child's ICU unit in New York--I can't imagine anything more stressful) came to Princeton and was looking for new research projects. So Dan took over that part of the project, supervising all of the lab work and teaching us some biology. But that doesn't explain why I asked for money in year 9 for biodemography. I don't remember exactly why at this point. [See next interview for more on this.]

Early on, we realized that we had this amazing sample, and that a way to enrich it was to partner with colleagues to raise money to add additional components to the study. So we partnered with Nancy Reichman and Julien Teitler to append mothers' medical records. We partnered with Kathy Edin and Paula England to conduct qualitative interviews with a subset of mothers during the first few years, with Bruce Western to add questions about incarceration in years 1, 3 and 5 and we partnered with Brad Wilcox to add questions about religion to the year 3 interview. Finally, we partnered with a group at Columbia to add in-home interviews with parents and assessment of children's cognitive development at ages 3 and 5. We also added new data on child care and teacher quality at years 3, 5 and 9. Genetic data were added in years 9 and 15, and actigraphy data and a smart phone survey of teen relationships were added in year 15. At age 15 we also partnered with neuroscientists at Michigan who took a sub-sample of adolescents from Toledo, Detroit, and Chicago, brought them down to Ann Arbor, and put them through all these tests--MRI's and all these things. We have funding to do another round of the sleep study and the brain study, which will give us longitudinal data on these variables. Finally, a new collaborative study headed by Dan Notterman, Noreen Goldman and Donald Lloyd-Jones has been funded by the National Heart, Lung, and Blood Institute to conduct cardiovascular tests on a large sample of young adults (age 22). They plan to bring respondents into a clinic and take their blood, and all kinds of things.



[Editor's note: The figure above represents the longitudinal timeline of the Fragile Families project. The table below details the collaborations that have emanated from the project.]

	Study	Principle Investigator(s)
1	Qualitative in-depth interviews with a subset of parents (at birth and Years 1, 3, & 5)	Kathryn Edin and Paula England (MacArthur Foundation)
2	Medical records extraction for mothers and children (at birth)	Nancy Reichman and Julien Teitler (NICHD)
3	Fatherhood and Incarceration in FFCWS (Years 1, 3, & 5)	Bruce Western (Mott Foundation)
4	In-person assessments of child development, home and neighborhood environment (Years 3 & 5)	Christina Paxson, Jeanne Brooks-Gunn, Jane Waldfogel, Neil Guterman (NICHD & NIMH)
5	Child care Providers, Teachers and Maternal Employment at (Years 3 & 5)	Jeanne Brooks-Gunn & Deborah Phillips (NICHD)
6	Religion and Relationships in Urban America (Year 3)	W. Bradford Wilcox & Byron Johnson (CRRUCS at the University of Pennsylvania)
7	Saliva collection for genetic research (Years 9, 15, & 22)	Daniel Notterman & Colter Mitchell (NIH, NIMHD)
8	Qualitative interviews with a subset of teens and primary caregivers (Year 15)	Kathryn Edin, Timothy Nelson, Ian Lundberg, Barbara Engelhardt, Sara McLanahan, and Matthew Salganik (Overdeck Family Foundation)
9	Smart phone survey on teen dating relationships with a subset of the sample (Year 15)	Rachel Goldberg and Marta Tienda (The Center for Health and Wellbeing, Princeton University)
10	Appending neighborhood contextual data (Year 15)	Sara McLanahan & Kathy Neckerman (Robert Wood Johnson Foundation)
11	Appending education records data pilot (Year 15)	Sara McLanahan, Christopher Neilson, Louis Donnelly, and Lisa Pithers (Overdeck Family Foundation)
12	fMRI scans with a subset of the sample (Year 15 & 22)	Colter Mitchell, Christopher Monk and Luke Hyde (NIMH)
13	Actigraph data collection and survey monitoring sleep patterns with a subset of the sample (Year 15 & 22)	Lauren Hale and Orfeu Buxton (NICHD)
14	Cardiovascular health assessment of young adults (Year 22)	Daniel Notterman and Donald Lloyd-Jones (NHLBI)
15	Appending Administrative Data	Kathryn Edin & Jane Waldfogel (The Bill and Melinda Gates Foundation)

McLANAHAN: We're also finding interesting results for biological outcomes such as telomere length and methylation. And then we did this thing with Matt Salganik, did you read about that?

WEEKS: No, I haven't.

McLANAHAN: Oh my God. This is the most recent project. Matt is a data scientist as well as a sociologist, and he organized something called the Fragile Families Challenge: <https://www.fragilefamilieschallenge.org> We were cleaning the 15-year data, but we hadn't made it public it yet. What Matt did was to invite people to join this challenge. So we chose six outcomes. And the idea was participants had all this information on people since they were born. All of this stuff. How well can they predict what's going to happen? Who's going to lose their job? Who's going to lose their house? Who's going to do better than expected? [Well, that came a little later]. But we tried to see how well the participants could actually predict individual-level behavior. And so we had like 104 authors [see the list of authors in the Reference section at the end of this interview]. People signed up from all over the world. We gave them half the year 15 data, and held back the other half. They developed their models, and then we tested their models using the held back data to see how well they performed. We did a special issue in *Socius* [Volume 5, September, 2019], and also published a paper in *PNAS (Proceedings of the National Academy of Sciences)* about it (see Salganik et al. 2020).

Again, Matt is a great colleague, and it was no burden on our project. We had some computer scientists go over the data and see if they could identify anybody in our sample. And they found a few variables that didn't protect privacy and needed to be changed or fiddled with. The main thing we learned from the challenge was that the predictions based on machine learning were very poor --not much better than you'd get from your regular models that we all use. Again, for me the study has been a way of staying in school. I like to learn about new things, and I like to work with people, and I must say that all of the colleagues I've worked with that have helped with Fragile Families in one way or another have been wonderful. I've never had a bad experience.

WEEKS: That's very good. And, of course, your research helps to illustrate the growing diversity of demography. It helps to underscore the fact that demography is involved in everything. It isn't some specialty.

McLANAHAN: Everything! And I will say that at the end [of the interview guideline questions--see above] I wasn't sure how to answer those questions, because I was never the administrator of a Pop Center. All I've been is a user.

WEEKS: But let's talk a little bit about your involvement with the PAA because, as you know, it's a three-year commitment: you're president-elect, then president, then past-president. So you're on the board for those periods of time, and I know you've been on the board at other times [as vice-president].

AT THIS POINT IN THE INTERVIEW, DR. MCLANAHAN NEEDED TO LEAVE, AND SO WE AGREED TO FOLLOW UP WITH ANOTHER ZOOM MEETING TO FINISH THE INTERVIEW (see below).

Reference:

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Goode, Eaman Jahani, Ridhi Kashyap, Antje Kirchner, Stephen McKay, Allison C. Morgan, Alex Pentland, Kivan Polimis, Louis Raes, Daniel E. Rigobon, Claudia V. Roberts, Diana M. Stanescu, Yoshihiko Suhara, Adaner Usmani, Erik H. Wang, Muna Adem, Abdulla Alhajri, Bedoor AlShebli, Redwane Amin, Ryan B. Amos, Lisa P. Argyle, Livia Baer-Bositis, Moritz Büchi, Bo-Ryehn Chung, William Eggert, Gregory Faletto, Zhilin Fan, Jeremy Freese, Tejomay Gadgil, Josh Gagné, Yue Gao, Andrew Halpern-Manners, Sonia P. Hashim, Sonia Hausen, Guanhua He, Kimberly Higuera, Bernie Hogan, Ilana M. Horwitz, Lisa M. Hummel, Naman Jain, Kun Jin, David Jurgens, Patrick Kaminski, Areg Karapetyan, E. H. Kim, Ben Leizman, Naijia Liu, Malte Möser, Andrew E. Mack, Mayank Mahajan, Noah Mandell, Helge Marahrens, Diana Mercado-Garcia, Viola Mocz, Katariina Mueller-Gastell, Ahmed Musse, Qiankun Niu, William Nowak, Hamidreza Omidvar, Andrew Or, Karen Ouyang, Katy M. Pinto, Ethan Porter, Kristin E. Porter, Crystal Qian, Tamkinat Rauf, Anahit Sargsyan, Thomas Schaffner, Landon Schnabel, Bryan Schonfeld, Ben Sender, Jonathan D. Tang, Emma Tsurkov, Austin van Loon, Onur Varol, Xiafei Wang, Zhi Wang, Julia Wang, Flora Wang, Samantha Weissman, Kirstie Whitaker, Maria K. Wolters, Wei Lee Woon, James Wu, Catherine Wu, Kengran Yang, Jingwen Yin, Bingyu Zhao, Chenyun Zhu, Jeanne Brooks-Gunn, Barbara E. Engelhardt, Moritz Hardt, Dean Knox, Karen Levy, Arvind Narayanan, Brandon M. Stewart, Duncan J. Watts and Sara McLanahan. 2020. "Measuring the Predictability of Life Outcomes with a Scientific Mass Collaboration." *Proceedings of the National Academy of Sciences* 117(15):8398-403. doi: 10.1073/pnas.1915006117.

THE INTERVIEW WITH DR. MCLANAHAN CONTINUED ON 15 FEBRUARY 2021 VIA ZOOM. COMMITTEE MEMBERS PARTICIPATING ALONG WITH JOHN WEEKS WERE DENNIS HODGSON, KAREN HARDEE, AND EMILY MERCHANT.

WEEKS: When we ended last time, we were trying to get into the topic of your involvement, Sara, with the PAA. We've gotten through your career, I think, pretty well, though, obviously, anything that you want to add before we finalize the interview you're very, very welcome to do that. Add or subtract, whatever. But one of the things we want to know is how you have interacted over the years with the Population association of America. We're the history committee of the PAA and so we're interested in the history of the organization, not just the field of demography. But then I guess that gets to the issue of how those two things are connected. And so we kind of like to have a feel first for the ways in which you've been involved. I know you've been on the board, obviously, as you know, we talked about that last time, as President elect, President, and past President and you'd also been elected as Vice President.

McLANAHAN: In the old days they elected Vice President, and President separately, it was years later I was elected President.

WEEKS: Well, having been elected Vice President doesn't put you on track, never has put you on track, to be president, no.

McLANAHAN: But I did serve in both positions.

WEEKS: And so, were there things that came up? For example, you were President in 2004 and Phil Morgan was right before you, and Charlie Hirschman came right after you. Were you talking with them about things? Were there issues that came up during that period of time that you remember in terms of policy or how the meeting should be organized or anything on that score?

McLANAHAN: For my talk I got help from many colleagues. John Hobcraft came up with the title "Diverging Destinies" [*appended to this file*]. and Josh Goldstein was the first to point out that my talk was part of the second demographic transition.

WEEKS: Okay, very good.

McLANAHAN: I think the best thing I ever did for the PAA was I helped hire Mary Jo Hoeksema. I think John Haaga and I were on that committee and that turned out really well.

WEEKS: Okay, John would have been Secretary-Treasurer at that time?

McLANAHAN: I don't know. [*Editor's note: John Haaga had been Secretary-Treasurer in 2000 when Sara was Vice-President. Lynn Casper was Secretary-Treasurer when Sara was President in 2004.*]

MERCHANT: Okay. Question about that. Was somebody else doing that job of public affairs before Mary Jo or was she the first one hired?

McLANAHAN: I think Jane De Lung had an organization [the Population Resource Center], where she would do this kind of work, although it was more limited. There was also a woman named Anne Harrison Clark who did public and government relations for PAA. But I think Mary Jo expanded the role a lot, and on my visits with her to Congress, I was very, very impressed with her. Anyway, that was my main administrative contribution to PAA.

In general, you know, everything ran smoothly. It was, I think, the year I was Vice President that Germán Rodríguez [of Princeton's Office of Population Research] created this program where you could do all of this meeting stuff on the internet [*Editor's note: Germán was undoubtedly working on the software when Sara was VP, although its use didn't begin until 2002, and then lasted to 2015*]. So that was important and creating the program was less of a problem when I had to do it.

WEEKS: Right. That Internet program for the meeting was really, really important. I mean, I think it really did get people more involved in the meeting itself, because you could actually figure out who was who and what was going on.

McLANAHAN: It was great, yeah.

WEEKS: And, of course, when he retired, PAA had to move on to a different software package, but...

McLANAHAN: But I think he's the one that first got that going.

WEEKS: Yes, he is for sure, certainly for us. Thinking about hiring Mary Jo Hoeksema, that obviously required additional funding. And as I recall talking to Charlie Hirschman, this was the period of time that the Board created the Development Committee to raise funds which would help pay for additional salaries and other expenses. Were you involved in any of that?

McLANAHAN: No. but it was a good idea.

WEEKS: So, just keeping things running smoothly--that was your job?

McLANAHAN: When I was President?

WEEKS: yeah.

McLANAHAN: Well, I was working on my talk!

WEEKS: Okay.

McLANAHAN: Okay, well, it was well run. I don't remember the name of the person in Washington, who was the main administrator.

WEEKS: That would have been Stephanie Dudley.

McLANAHAN: You know, it was a pleasure to be on the board. There was no fighting, at least during the years I was on the board.

HODGSON: Now, Sarah, do you remember the first PAA meeting you went to? When was that?

McLANAHAN: Oh boy. I don't remember. It would have been before I left Wisconsin, sometime after 1980 and before 1990. And the meetings were just interesting and fun. Again, I found it just very intellectually stimulating.

HODGSON: Have you noticed any changes taking place over the time period you were attending PAA?

McLANAHAN: No.

HODGSON: The topics were about the same? The mix of topics was about the same?

McLANAHAN: Oh, you mean substantively. Well, yes, I think in general that social demography has gotten much more important, and I think I talked about that in my move to Princeton from Wisconsin, in which there was lots of social demography at Wisconsin, but not much at Princeton. But then things began to change. I was there when people like Burt Singer, Doug Massey, Marta Tienda, and Alex Portes arrived. Now, of course, it's hugely social demography at OPR.

WEEKS: But, now you were one of, if not the first, of those people. Were you involved at all in seeing people like Doug Massey, Marta Tienda, and others come on board?

McLANAHAN: Yes, I was. You remember I told you that I called Marta when I was going to Wisconsin and she invited me to stay with her? Well, she stayed with me when she came to interview for the job at Princeton. And, yes, I recruited very strongly for her and for Alex Portes. They were concerned about where they were going to get graduate students, because all of the students at Princeton were fully funded, and I explained to Alex that he could hire postdocs. This was a real expansion from Ansley Coale's day. I just remember that when I first came to OPR, I didn't really feel like I belonged because I was a social demographer, but then over the next decade there was a huge change.

WEEKS: And of course, that was happening everywhere.

MERCHANT: I was going to ask you that--did you see those same trends everywhere?

McLANAHAN: I wasn't really aware. At Wisconsin I think we had only one formal demographer--Alberto Palloni [PAA President in 2006]. Princeton was different, but I didn't realize this change was going on.

WEEKS: Is that because, given the broad scope of the Fragile Families project, that was taking pretty much all of your time?

McLANAHAN: No, I don't think so. It's just that over time there were more papers written by people like me, that's all.

WEEKS: One of the things that we have discussed with everybody is the fact that there are not a lot of departments of demography--you've got one at Berkeley, and one at UT-San Antonio. Am I missing any? I think that's it in the US. So, when we talk about demographers, only at the PAA do people who think of themselves as demographers get together on sort of an informal basis. Otherwise, you may be off in a population center, as you are at Princeton. Do you, for example, still have an office there at the building that houses the Office of Population Research?

McLANAHAN: Yes. I couldn't have gone to Princeton if they hadn't had a Pop Center. All the computer help, grant management--neither Sociology nor the policy school had these capabilities.

WEEKS: But my follow-up is that you are a professor of sociology and of public affairs...

McLANAHAN: But not a professor of demography

WEEKS: ...But have you ever had an office anywhere else on campus, or is OPR the only spot where you really reside?

McLANAHAN: When I first came to Princeton, OPR was in its own building--the Cannon Club--do you know the Cannon Club at Princeton?

WEEKS: Yes, I've been there.

McLANAHAN: Apparently Jane Fonda swung from the chandeliers...

WEEKS: I don't remember that story. [Laughter]

McLANAHAN: Anyway, it had a big cannon out front and was called the Cannon Club.

WEEKS: Right, an eating club. [*Editor's note:* It was at 21 Prospect Avenue and in the 1970's "The property came into the possession of the University, which spent 3/4 of a million dollars on renovations and deferred maintenance to turn the clubhouse into an academic building, Notestein Hall, which housed the Office of Population Research for over 30 years." Source: https://en.wikipedia.org/wiki/Cannon_Club.]

McLANAHAN: Anyway, that's when OPR and Sociology were far apart physically. Sociology was a couple of streets and several buildings away. So, my office was in OPR and it wasn't easy to go back and forth. I never had an office in Sociology, I don't think.

HODGSON: I have a question for you, in the context of the focus that you had for an awfully long time--the Fragile Families. Can you remember any changes over time in policy or in focus that might have impacted the ability to fund your studies? I'm thinking like in the 1990s, there was a big upheaval in the whole welfare system that obviously had a connection to Fragile Families, and single moms, and all this. Did it ever work down to you personally, in the context of the ability to do the kind of research you wanted or to have it properly funded? In the context of Clinton compared to Bush?

McLANAHAN: I didn't notice any change. I remember hearing from somebody that said that one year the government gave a lot of money to NIH--they were really flush. And I think our year 9 budget was bigger and more generous, and then they started asking for a special approval if you were going to ask for more than \$500,000 a year. Again, I've always had really good project managers, and they've given me really good advice.

MERCHANT: I'm just trying to put together the timing of it. So, year 9 would have been--When did the study start?

McLANAHAN: We started in '98. At the end of the first two years, we switched survey companies and we made some changes based on what we had learned from the first round of interviews.

MERCHANT: So, you said it was in year 9 that you were flush with money, and I'm just wondering if that would have been the Stimulus Act after the 2008 recession?

McLANAHAN: Yes, of course. It was the stimulus. We had all this money. And that's when we added the genetic component.

MERCHANT: And who was your program officer at NIH at that time?

McLANAHAN: Originally it was Jeff Evans; when he retired, Regina Bures took over. They were both extremely helpful.

MERCHANT: How did you get the idea to start doing genetic analysis?

McLANAHAN: I got interested in the "Orchids and Dandelions" hypothesis which argued that some people (orchids) were very sensitive to their environments – for better or worse, whereas other people (dandelions) did pretty much the same in nearly all environments. Tom Boyce [W. Thomas Boyce, Professor of Pediatrics and Psychiatry at the University of California, San Francisco] made it famous. I got very excited about this idea, and we published several papers that examined the hypothesis early on. But that's what drew me into the idea of wanting to collect the genetic data. Once we collected the genetic data at year 9, Dan Notterman at Princeton and Colter Mitchell, who is at Michigan, got several grants to conduct GWAS (Genome-wide Association Studies) for 3,000 kids and analyze epigenetic markers, such as telomere length and DNA methylation. We also got funding to collect and analyze another round of genetic data at year 15 so we could look at changes in these markers.

WEEKS: Now, have you had any contact over the years with people like those at Chapel Hill--Dick Udry (PAA President in 1994) or Kathy Harris (PAA President in 2009) with their Add Health [National Longitudinal Study of Adolescent to Adult Health] Project?

McLANAHAN: I never knew Dick Udry--I knew who he was. But I do know Kathy quite well and she has always been very, very helpful. Were they among the first to get into biodemography?

WEEKS: Yes, that project was one where members of Congress actually wanted to shut it down, and there's a whole book about that controversy [Morton Hunt, *The New Know-Nothings: The Political Foes of the Scientific Study of Human Nature*; New Brunswick: Transaction Publishers, 1999], but that did get the whole biodemography field off and running.

MERCHANT: And they started doing genomics about the same time that you did. Again, using money from the Stimulus Act.

McLANAHAN: Well, the money led to something! [laughter]

WEEKS: And those are the kinds of linkages that we are interested in, because it is sort of accidental that a crisis comes along, the government tries to do something, and it works well.

McLANAHAN: Oh, you remember Jeff Evans?

WEEKS: Yes, he was PAA Secretary-Treasurer in the 1990s.

McLANAHAN: Yes, he was our program officer at NICHD before Regina Bures.

WEEKS: He was very good. In fact, he was the one--you were talking about Pop Centers and what they needed to get funding--he was the one who actually put forward the proposal for the funding of Pop Centers.

McLANAHAN: Wow--well, he was very interested in fathers. He was very interested in what role fathers were playing. I was thinking also that under Clinton they passed a fatherhood program, and the idea was to get the unmarried dads more involved with their children. Then when Clinton left and George Bush came in, they immediately changed the name to "marriage programs," but they were run by many of the same organizations.

WEEKS: So, were you ever involved in anything related to the fatherhood project?

McLANAHAN: Oh, yeah. They took a lot from our findings. Because what we found was that half of the unmarried couples in our sample were living together at the time of the birth. Another large group was planning to marry. This was a big shock to a lot of people who thought these births were just one-night stands or something. But they also showed that a substantial number of fathers were involved and gave money. And, at birth, something like 96% of the mothers wanted the fathers to be involved. There was a lot of stuff that was promoting policies that would make these much more stable families. We argued that starting at birth would yield the biggest benefits. We would give talks, probably inspired by Jeff Evans--he cared a lot about that, so that was a big thing to him.

HODGSON: I've got a question in terms of this time period, when we had a couple of dramatic trends: a big decline in teenage unwed mothers, especially black teenage unwed mothers; and at the same time, you have an increase in the percentage of babies being born to moms who weren't married. And you had the age at marriage going up. It's almost as though you had contradictory things occurring, in the context of what had been happening before. There was tremendous success in the context of both much more use of contraceptives, especially by minority females, and at the same time the general population avoiding marriage and being much more accustomed to giving birth outside of marriage.

How did those two things, working in almost the opposite directions, have an impact on this topic of fragile families? Did it make an impact on what you were studying?

McLANAHAN: Yes. We started in 1996--getting the idea together about pilot studies and what we wanted to do. And I don't think I was even aware at the time of the decline in teen pregnancy. But, we didn't have any mothers under the age of 18. That was just a restriction--we couldn't do under 18.

WEEKS: Now, thinking about fragile families, we know from news reports that during this pandemic, fragile families have become in many cases more fragile. Is this something that your project is following, or digging into, or we just have to wait and see?

McLANAHAN: We were funded to collect retrospective data on the pandemic in the year 22 survey so we'll be looking at that. Right now, we're focusing on the biomarker stuff--the brain data and the telomere length and methylation data.

WEEKS: Taking you back to your post-doc when you were actually working at the hospital!

McLANAHAN: That's true [Laughter]

HARDEE: You were saying that there was no one under age 18 in your sample. Would you have preferred to have younger people?

McLANAHAN: If we had done that, we would have needed mother's permission, and that would have complicated what was already a complicated sample.

WEEKS: Right, human subjects issues are obviously very important.

McLANAHAN: Right. They wouldn't just let us go directly to the young girls.

MERCHANT: You said just now that you were focused on telomere length and methylation, and I'm wondering if there's a reason you're focusing on the epigenetics, rather than on the genetics.

McLANAHAN: Well, the epigenetic markers change over time which makes them especially interesting.

MERCHANT: Yes, so that's my question. You're focusing on the epigenetics as an outcome, rather than genetics as an independent variable.

McLANAHAN: And we have the data at age 9, and at age 15, and we'll have it again at age 22, so we can look at changes in these epigenetic phenomena. You can't look at changes in your genes...They are what they are.

MERCHANT: Right. And there aren't that many other sources of data for epigenetics over time.

McLANAHAN: Yes, that's very unusual, especially for the methylation. If we were just going to look at the genetics--looking at GWAS effects on some outcome, it wouldn't change. At first we looked at "candidate genes," or scales composed of candidate genes, and we found a lot of support for the orchid dandelion hypothesis, but that whole approach has fallen out of favor, and people started doing GWAS. Dan Notterman and Colter Mitchell raised funding to create GWAS and epigenetic data –

telomere length and methylation data. It's funny to think that we're doing all of this stuff, and we weren't even sure for a while that health was a part of demography. [Laughter]

WEEKS: I do think, though, that if you went around the country at about that time [early 1990s] you would have found a lot of different ideas about the role of health and social demography. Things were emerging.

McLANAHAN: You're right, and I just happened to be at two very extreme places.

WEEKS: Yes, you went from one extreme to the other. Well, does anyone have other questions?

HARDEE: Sara, I'm thinking of the PAA program, and how that changes over time. How long is there between changes in departments/centers like you were experiencing and a noticeable shift in the PAA program? What's the time lag?

McLANAHAN: That sounds like a good analysis [laughter]. I don't know, but I think they have reciprocal effects. You go and hear about a bio paper and you get interested in it. Or, you get interested in the bio, and you submit your paper, and it gets accepted. So, it would be interesting to look even at submissions--what kinds of papers that were accepted over time? But I definitely think they go back and forth and affect each other.

WEEKS: Sara, are there things we didn't ask you that you were expecting us to ask? Or that you want to make sure gets on the record?

McLANAHAN: Well, I just wanted to make sure that we had it on the record that my first book was *Single Mothers and Their Children: A New American Dilemma*, and it was commissioned by the Urban Institute and by Isabelle Sawhill, and it talked about the trends. There was one chapter on the consequences of single motherhood. But there was a lot of stuff on how the policy changes under Reagan affected the way welfare was offered to single mothers. So, there was a lot about child support. My husband was very much into child support in Wisconsin. In fact, he had contracts with the state on what child support should be. And they came up with a plan for a national program, but there were changes to that program. The states were sold on these child support programs, because they thought they were going to save welfare costs. But it turned out that most fathers who weren't paying child support were very poor. There were only a few fathers that were responsible for all the unpaid debt.

Anyway, I wanted to add that, and then there's the *Growing Up With a Single Parent* that I did. And then, the last thing, I kind of think of the *Fragile Families* as the book that can be written by lots of people. And you had asked how *Fragile Families* has affected policy? I would say the father involvement stimulated the fatherhood and marriage programs. We told Congress if they started at the time of the birth—fatherhood programs might make a difference. And, of course, our findings about high rates of incarceration were astounding – and very sad. In the National Academy report on the consequences of high incarceration--this was a while ago [Travis, Jeremy and Bruce Western (eds.) *The Growth of Incarceration in the United States*, Washington D.C., the National Academies Press, 2014]- I drafted the chapter on the effects of father's incarceration on families and children. I think we were one of the few national datasets that had information on this topic. There were even judges who incarcerated poor fathers because they hadn't paid their child support!

WEEKS: Makes no sense!

McLANAHAN: I was trying to think what else came out of the data that was sort of a surprise and affects policy. I think that it is the very high level of instability in the families. The mothers were having their children at the same time they were searching for a partner. When we looked at the data, the married mothers had experienced just as many partnerships in the past as the unmarried mothers; they just hadn't had children with those partners. So, it really gave an emphasis to finding a good partner before having a child. And, of course, that supports the delaying of the pregnancy.

WEEKS: And was that related to access to abortion, or access to birth control? The fact that there were differences in getting pregnant, even though women had a similar number of partners?

McLANAHAN: I think that's certainly a part of it. We didn't ask about this. There is a lot written about the fact that for many poor women becoming a mother is viewed as a good thing.

WEEKS: Gives them status.

McLANAHAN: And it settles them down. Certainly the policies that ease access to birth control, especially things like the morning-after pill, are important.

HODGSON: You think about Obama Care, which made long-term hormonal contraception accessible to people--I think it's had a huge impact on teenage births. It also makes the act of becoming a parent volitional across class lines. You can sort of decide when you want to become a parent, like middle and upper-middle class get to do it. It may not be related to marriage because marriage may not be accessible to working class and lower-income females.

McLANAHAN: Why would marriage not be accessible?

HODGSON: Because you can't find a man you want to marry.

McLANAHAN: OK, yeah. Kathy Edin wrote a paper on "Pay to Play" or something like that, saying these women don't want men who can't contribute. [*Editor's note:* see Katherin Edin, 2019 "Taking Care of Mine" or "Just another Bill to Pay: Can the US Child Support System be a Family Building Institution?" *Journal of Family Theory* 11(1): 79-91.

HODGSON: Why would you?

McLANAHAN: Well, I think in the 50's you might have stuck it out. Being a spinster or 'old maid' was shameful. I don't know.

WEEKS: There are many respects, Sara, in which reading your research you see the uneducated men, especially white men, who then helped form the January 6th group that stormed the Capitol. In my mind, I can see these interactions. People are getting left behind. It just seems like your research feeds into the ability to think about those issues.

WEEKS: Well, we've taken another hour of your time. Are there any other questions?

HODGSON: It's been enjoyable.

HARDEE: Yes, very.

WEEKS: Thank you for your service!

MERCHANT: Thanks so much, Sara

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Approved by Sara McLanahan, 16 April 2021

DIVERGING DESTINIES: HOW CHILDREN ARE FARING UNDER THE SECOND DEMOGRAPHIC TRANSITION*

SARA MCLANAHAN

In this article, I argue that the trends associated with the second demographic transition are following two trajectories and leading to greater disparities in children's resources. Whereas children who were born to the most-educated women are gaining resources, in terms of parents' time and money, those who were born to the least-educated women are losing resources. The forces behind these changes include feminism, new birth control technologies, changes in labor market opportunities, and welfare-state policies. I contend that Americans should be concerned about the growing disparity in parental resources and that the government can do more to close the gap between rich and poor children.

During the first demographic transition, which began in the early 1800s and continued into the early 1900s in Western industrialized countries, mortality and fertility declined and investment in child quality grew (Coale and Watkins 1986; Notestein 1945). For children, the decline in mortality meant fewer parents lost through death, and the decline in fertility meant fewer siblings with whom to share resources. The growing concern about child quality meant increased investment in public education. Children growing up in 1950 were more likely than those growing up 100 years earlier to live in traditional nuclear families, to be in good health, and to attend school. These changes were society wide, with rich and poor children benefiting alike.

How children are faring under the second demographic transition, which began around 1960, is less certain. The primary trends of the second transition include delays in fertility and marriage; increases in cohabitation, divorce, and nonmarital childbearing; and increases in maternal employment (Lesthaeghe 1995; Lesthaeghe and Surkyn 1988; Mason and Jensen 1995). Some of these trends, such as delays in childbearing, imply gains in parental resources, while others, like divorce and nonmarital childbearing, imply losses. Still others, like increasing maternal employment, suggest both.

Many scholars have argued that the trends associated with the second demographic transition are all of one piece and are fueled by a common factor, such as modernization or women's growing economic independence.¹ They have also contended that people, especially women, who are in the vanguard of change are the most advantaged and best able to deal with its consequences.² Much of the general public shares the idea that

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1. Lesthaeghe (1995) provided an excellent review of the different explanations of the trends, including both economic and ideological explanations.

2. This argument was true of the first transition, and it is implied by theories of the second transition, including those that emphasize ideational change (Aries 1980) and those that emphasize economic change

highly educated women are responsible for the changes in family formation. Former Vice President Dan Quayle drew widespread support when he chastised Murphy Brown, a character on a television sit-com, for having a child outside marriage. For many Americans, Murphy Brown symbolized the new, professional woman who was eschewing marriage in favor of a career (Morrow 1992).

In this article, I argue that the forces that are driving the transition are leading to two different trajectories for women—with different implications for children. One trajectory—the one associated with delays in childbearing and increases in maternal employment—reflects gains in resources, while the other—the one associated with divorce and nonmarital childbearing—reflects losses. Moreover, the women with the most opportunities and resources are following the first trajectory, whereas the women with the fewest opportunities and resources are following the second.³

As a consequence, the second demographic transition is widening social-class disparities in children's resources (Cherlin 1996; Haveman et al. 2004; Hernandez 1993). Children who were born to mothers from the most-advantaged backgrounds are making substantial gains in resources. Relative to their counterparts 40 years ago, their mothers are more mature and more likely to be working at well-paying jobs. These children were born into stable unions and are spending more time with their fathers. In contrast, children born to mothers from the most disadvantaged backgrounds are making smaller gains and, in some instances, even losing parental resources. Their mothers are working at low-paying jobs. Their parents' relationships are unstable, and for many, support from their biological fathers is minimal. Although their parents are more educated than they were 40 years ago, children's claims on their parents' resources are weaker (Coleman 1988).

I argue that the growing disparity in children's resources is related to four trends: the reemergence of the feminist movement (the "second wave"), the development of new birth control technologies, changes in labor market conditions, and changes in welfare-state policies. These changes interacted in ways that increased opportunities for some groups of women relative to others. Specifically, women from more-advantaged backgrounds seized the new opportunities and moved ahead quickly, whereas women from less-advantaged backgrounds lagged behind. Wilson (1980) made a similar argument about the effects of the civil rights movement on African Americans.

I also contend that Americans should be concerned about these growing disparities, especially the increase in single motherhood among less-educated women. Although some analysts have argued that single motherhood is an indicator of women's greater economic independence and parity with men, the rejection of this status by college-educated women suggests otherwise. Finally, I argue that the government has an important role to play in managing the changes in family behavior and protecting children from the loss of parental resources. Just as the government created old age pensions to cope with the changes associated with the first demographic transition, it must develop institutions for ensuring the provision of child care and child support to cope with the changes associated with the second transition.

The outline for this article is as follows. First, I present evidence to document my claim that the trends reflect the two trajectories and increasing disparities in children's resources. Data for the United States and other Western countries tell the same story. Next,

(Becker 1981). For example, Blossfeld et al. (1995:203) examined the relationship between education and divorce and argued that "people with higher levels of education tend to have a greater willingness to dissolve an unhappy marriage and greater ability to cope with the consequences." They also hypothesized that the educational gradient will be weaker in countries with more generous welfare-state provisions.

3. Many of the ideas presented in this article were stimulated and reinforced by the project on "The Social Dimensions of Inequality," which is funded by the Russell Sage Foundation and the Carnegie Foundation (Neckerman 2004).

I discuss the causes and consequences of the trends and present data from a new survey of unmarried parents—the Fragile Families and Child Wellbeing Study. Finally, I talk about what could be done to ensure that all children have sufficient resources. Although most of the trends I discuss affect all adults, not just those who have children, my focus is on parents because my primary concern is what will happen to the next generation.

THE TRENDS

To measure trends in children's resources, I used four indicators: mothers' age, mothers' employment, single motherhood, and fathers' involvement. Each indicator measures at least one type of parental resource—time or money—and some measure both. To measure socioeconomic status, I used mothers' position in the educational distribution: whether a mother is in the top, bottom, or one of the middle two quartiles. I used relative education, rather than actual education, because I wanted to compare women in the same social strata in each decade.⁴ Mothers' education has increased dramatically over the past 40 years, and children have certainly benefited (Haveman et al. 2004). But my primary concern in this article is with the changes in children's *relative* resources. Growing inequality in family resources is expected to reduce children's life chances by isolating children from mainstream social institutions and by undermining society's commitment to them (see Neckerman 2004). The data tell the same story over and over: children of mothers in the top socioeconomic quartile are gaining resources faster (or losing resources more slowly) than children of mothers in the bottom quartile.

I begin by examining trends in mothers' age (see Figure 1),⁵ which I treat as an indicator of parenting quality. Older mothers are more educated and more psychologically mature than younger mothers and are more likely to bear and raise children within stable unions (Martin 2004b). All these factors are positively associated with parenting quality (e.g., cognitive stimulation and warmth), which, in turn, is positively linked with children's cognitive and social development (Brooks-Gunn forthcoming; Heckman, Krueger, and Friedman 2004; Phillips et al. 1998). Thus, an increase in mothers' age is viewed as an increase in parental resources.⁶

Figure 1 shows trends in the median age of mothers of young children (age 5 or younger). Among mothers in the top education quartile, the median age declined slightly between 1960 and 1970 because of declines in higher-order births. After 1970, however, it grew steadily, from a low of 26 years in 1970 to a high of 32 years in 2000. For mothers in the bottom educational quartile, the story is different. After dropping from 24 to 22 in the 1960s, the median age remained relatively flat, rising only one year between 1970 and 2000. The result has been a widening of the age gap between mothers in the top and bottom quartiles.

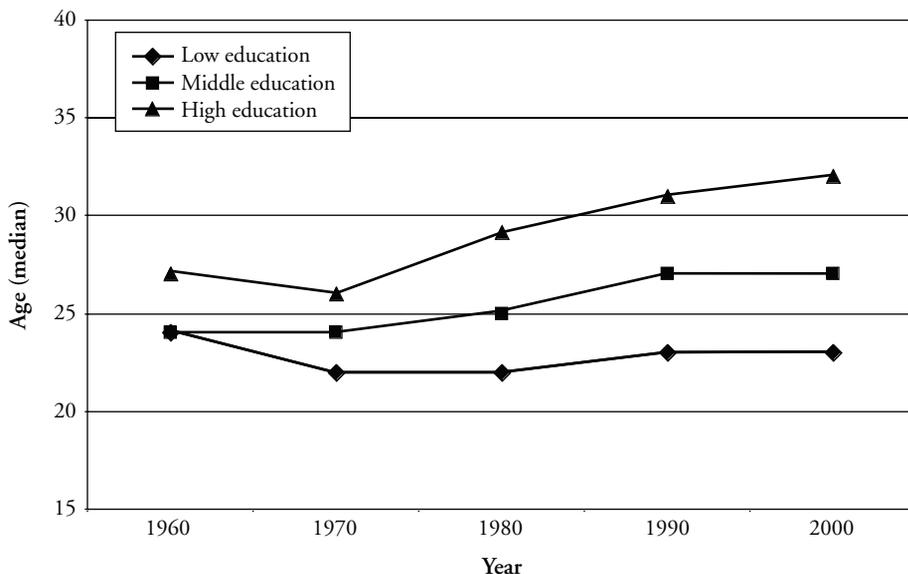
Next, I look at trends in mothers' employment, defined as working outside the home at least 27 weeks per year for 15 hours per week.⁷ An increase in mothers' employment represents a gain in children's financial resources—and possibly a loss of time, which I discuss later. Financial resources are expected to increase children's well-being by increasing parents' ability to purchase material and social goods, such as good-quality health care and good-quality child care and education (Becker 1981; Bergstrom 1997),

4. Some of the mothers in my sample may not have completed their education. This limitation is not likely to affect the ranking of mothers, however, since it affects mothers in all parts of the distribution.

5. The numbers in Figures 1–3 were provided by Tara Watson and are based on data from the U.S. Census Bureau's Public-Use Microdata Samples (PUMS) for 1960 to 2000. The sample is restricted to mothers with children younger than age 6 and excludes mothers older than age 50.

6. Most of the research on the effects of mothers' age has focused on teenage childbearing (see Maynard 1997 for a review).

7. Hours worked is the number of hours worked in the past week in 1960–1990 and the usual hours worked in 2000. Weeks worked refers to the previous year.

Figure 1. Trends in Mothers' Median Age, 1960 to 2000

Note: Low education includes mothers in the bottom education quartile, middle education includes mothers in the middle two education quartiles, and high education includes mothers in the top education quartile.

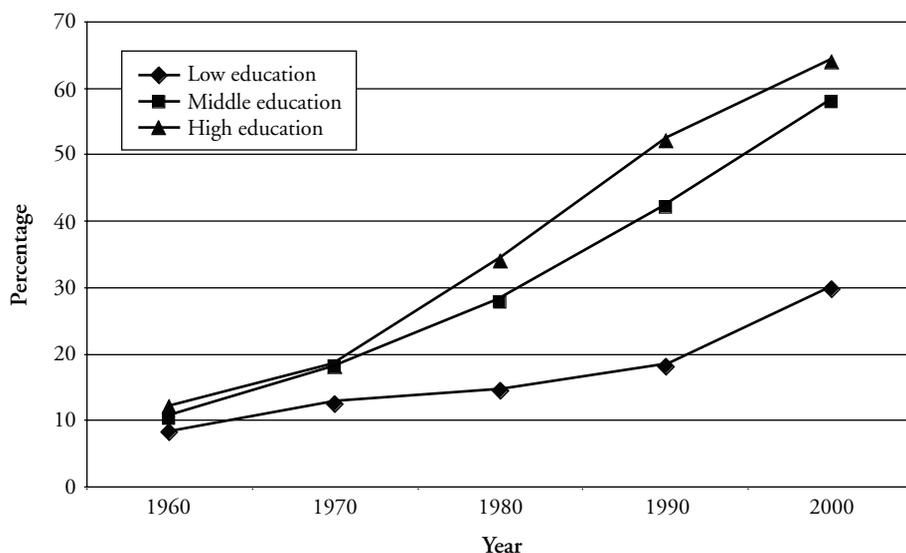
Source: PUMS (1960–2000).

and by lessening family stress (McLoyd 1990). Although researchers have disagreed about whether and how much money matters (Blau 1999; Mayer 1997), recent evidence, based on experimental data, indicates that increases in income increase school achievement among preschool children from low-income families (Morris, Duncan, and Rodrigues 2004).

In 1960, few mothers of small children worked outside the home, and the gap between mothers in the top and bottom quartiles was small (see Figure 2); only 12% of mothers in the top quartile were working, compared to 8% of mothers in the bottom quartile. Between 1960 and 1970, mothers' employment increased among all groups. After 1970, however, the trends diverged. Among mothers in the top quartile, employment grew more than threefold, from 18% in 1970 to 65% in 2000. Among mothers in the bottom quartile, it more than doubled, with much of the growth occurring during the late 1990s. The much higher hourly wages of mothers in the top quartile further exacerbates the disparity in financial resources generated by mothers' employment. The overall pattern is the same, regardless of whether I looked at "any work" or "full-time work."

Children's economic gains from maternal employment, however, do not appear to be offset by the loss of their mothers' time. Bianchi (2000) noted that although nonemployed mothers spend about twice as much time at home as employed mothers, most of the additional time is spent cooking and doing housework, rather than playing and engaging in educational activities with their children. Analyses by Bianchi and others have indicated that the time mothers spend interacting with their children has not been affected by the increases in maternal employment (Sandberg and Hofferth 2001).⁸

8. For reviews of the literature on the effects of maternal employment on children, see Waldfogel, Han, and Brooks-Gunn (2002) and Brooks-Gunn, Waldfogel, and Han (2002).

Figure 2. Trends in Mothers' Employment, 1960 to 2000

Note: Employment is defined as working at least 27 weeks per year for 15 hours per week.

Source: PUMS (1960–2000).

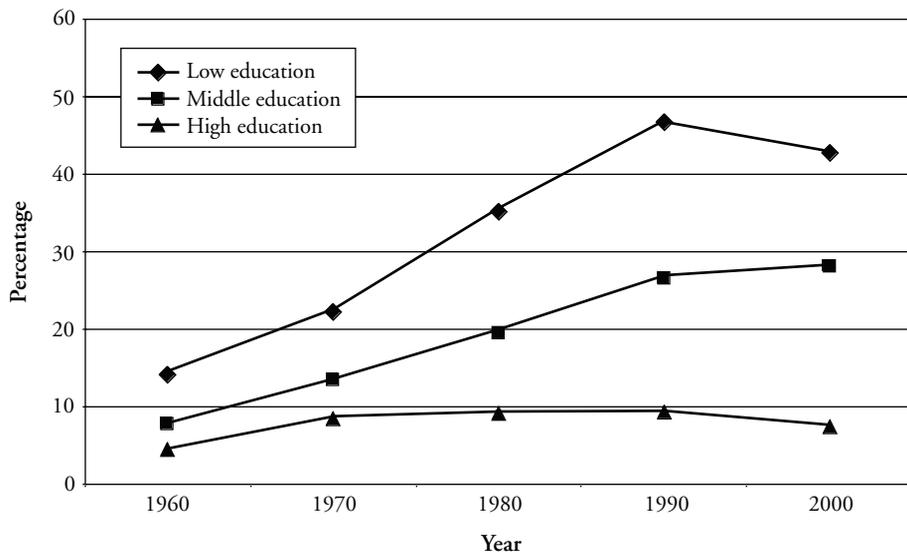
Figure 3 shows trends among single mothers, defined as mothers who are not married or not living with their husbands.⁹ An increase in single motherhood is viewed as a loss in children's resources. Children who live with single mothers receive less financial and emotional support from their biological fathers (Garfinkel and McLanahan 1986), and their family lives are less stable and more stressful. As a consequence, they have lower educational attainment, poorer mental health, and more family instability when they grow up (Amato and Keith 1991; McLanahan and Sandefur 1994).¹⁰

For this trend, which indicates a loss in children's resources, the increase has been the greatest among children in the bottom quartile. In 1960, about 14% of mothers in the bottom quartile versus 4.5% of mothers in the top quartile were single. By 2000, the percentages were approximately 43% and 7%, respectively. Over the four decades, the disparity in single motherhood grew from 10 percentage points to 36 percentage points. For more details about the trend in single motherhood, see Ellwood and Jencks (2004).

9. I did not take account of unmarried mothers who were living with cohabiting partners because these data were not available prior to 1980. In 1998, 13% of single mothers were cohabiting, up from 5% in 1978 (Bianchi and Casper 2000). Treating cohabiting mothers as married would reduce the proportion (and lower the increase) of single mothers, but it would not narrow the gap insofar as more-advantaged single mothers are more likely to cohabit than less-advantaged mothers.

10. For a review of the literature on the effects of family structure, see Sigle-Rushton and McLanahan (2004). Most of this literature is based on regression analyses of survey data. A few studies have used statistical techniques to control for unobserved differences that may cause a spurious association between family structure and child outcomes. The evidence from these studies, which have used sibling comparisons (Bjorklund and Sundstrom 2004; Case, Lin, and McLanahan 2001; Ermish and Francesconi 2001; Gennetian forthcoming; Ginther and Pollak 2004), instrumental variables (Gruber 2000; Johnson and Mazingo 2000), natural experiments (Gertler et al. 2004), and growth-curve analysis (Cherlin, Chase-Lansdale, and McRae 1998), is mixed, with some researchers finding negative effects of family structure and others finding no effects.

Figure 3. Trends in Single Motherhood, 1960 to 2000



Note: Single motherhood is defined as not being married or not living with a spouse.

Source: PUMS (1960–2000).

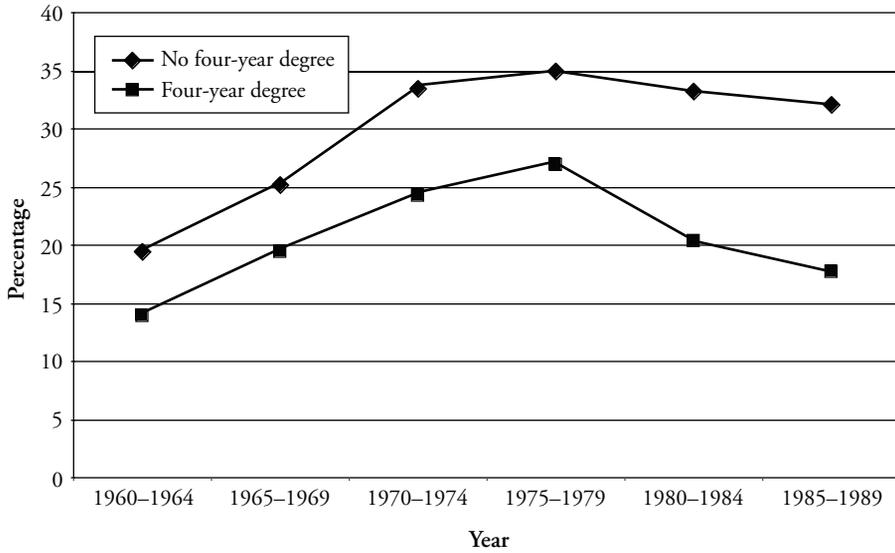
The story for marriage and divorce is similar to the story for single motherhood (see Figure 4). Goldstein and Kenney (2001) found that college-educated women are *more likely* to marry than other women, and Martin (2004a) showed that they are *less likely* to divorce. In his examination of divorce rates for marriage cohorts of college-educated and non-college-educated women, Martin found that divorce rates increased for both groups (although slightly more for less-educated women) from the early 1960s through the late 1970s. After 1980, however, the trends diverged, with divorce rates *falling* among college-educated women and continuing to rise among less-educated women. The trends in marriage, divorce, and single motherhood all contradict the argument that the most economically independent women are choosing single motherhood over marriage.

A fourth indicator of children's access to parental resources is primary time with fathers, defined as time spent by a father interacting with or directly caring for his children. Fathers' involvement is expected to increase children's exposure to cognitive stimulation and warmth, both of which are related to high-quality parenting and ultimately to cognitive and social development.¹¹ Figure 5 shows the trends in fathers' involvement between 1965 and 1998 for fathers with and without a college education. The solid lines, taken directly from Bianchi (2000), show the trends for married fathers. The dotted lines show Bianchi's estimates adjusted for the share of fathers who lived apart from their children.

Consistent with previous patterns, children of college-educated men spend more time with their fathers than do children of non-college-educated men. Moreover, fathers' involvement has increased since 1965. Before 1985, the trends in fathers' involvement for the two educational groups were a mirror image of each other, with college-educated fathers showing a decline and then an increase, and less-educated fathers showing an

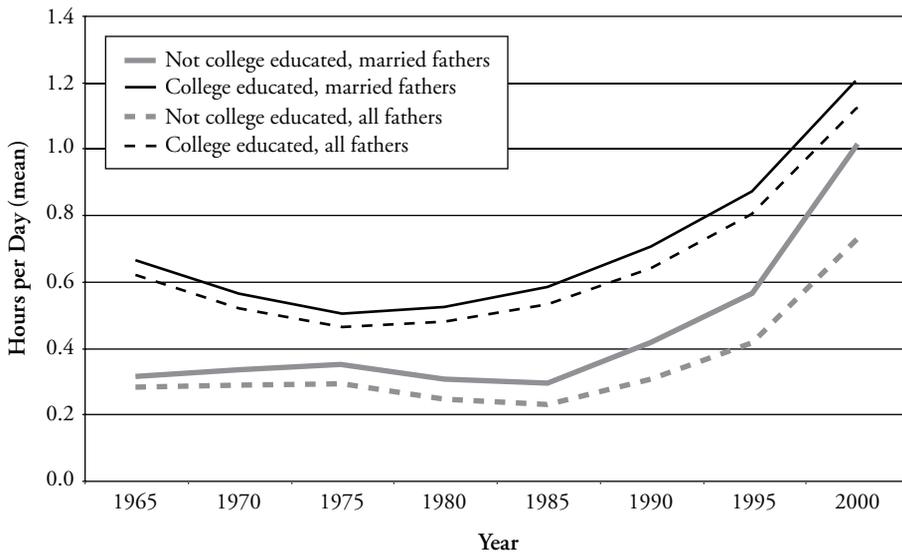
11. For a review of theory and research on fathers' involvement, see Lamb and Tamis-LeMonda (2004).

Figure 4. Trends in Divorce During the First 10 Years of Marriage for Marriage Cohorts, 1960–1964 to 1985–1989



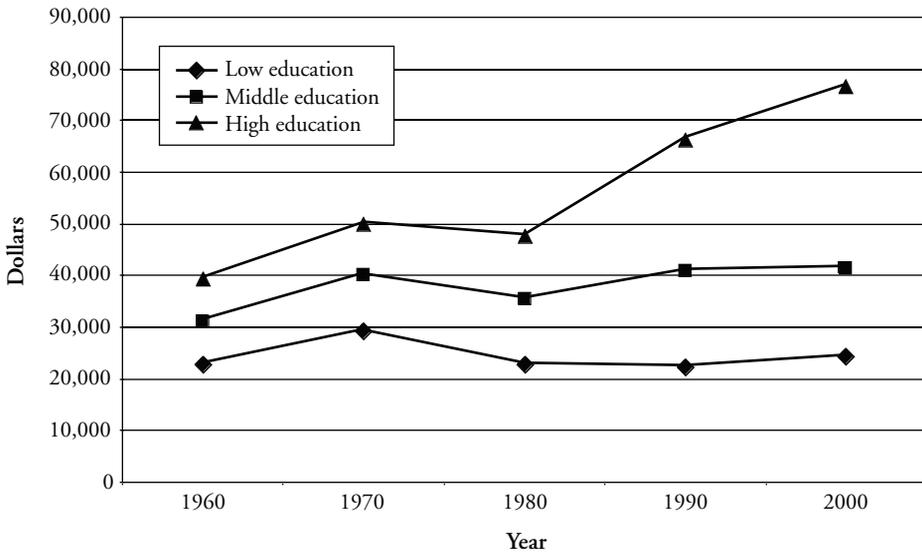
Source: Martin (2004a).

Figure 5. Trends in Fathers' Involvement, 1965 to 1998



Source: Bianchi (2000).

Figure 6. Trends in Median Family Income, 1960 to 2000



Source: PUMS (1960–2000).

increase and then a decline. After 1985, however, the trends are parallel, with both groups showing large increases. For married fathers only (the solid lines), the gap between college-educated and less-than-college-educated fathers appears to be narrowing. But for all fathers (the dotted lines), the gap remains more or less constant. Together, the lines tell us that the gap in children's access to fathers' time has remained constant, although resources would have narrowed in the 1990s if single motherhood had not increased (see Sandberg and Hofferth 2001; Yeung et al. 2001).

Finally, changes in assortative mating during the past four decades are likely to have exacerbated the growing disparities in children's resources. Assortative mating on education increased between 1960 and 1990 (Mare 1991), which means that the children of mothers in the top quartile are more likely to have fathers in the top quartile today than they were in the past. Similarly, children of mothers in the bottom quartile are more likely to have fathers in the bottom quartile than they were 40 years ago. Some evidence suggests that increases in assortative mating have led to increases in family income inequality and reductions in intergenerational mobility (Fernandez and Rogerson 2001; Kremer 1997).

To sum up, the demographic changes associated with *increases* in children's resources—mothers' age and employment and fathers' involvement—are happening the fastest among children in the top socioeconomic strata, whereas the changes associated with *decreases* in resources—single motherhood and divorce—are happening the fastest among children in the bottom strata. These trends are leading to greater disparities in children's resources, measured as parents' time and money. The bifurcation in children's access to parental time is documented in Figure 3, which shows the increase in single-mother families. The bifurcation in family income is documented in Figure 6, which shows the trends in median family income. Whereas the family income of children in the bottom quartile changed little (in real dollars) between 1960 and 2000, the income of

Table 1. International Comparisons of Mothers' Age, Employment, and Single Motherhood, by Mothers' Education

Variable	Sweden	Finland	Germany	Netherlands	Canada	United Kingdom	United States
Mothers' Age (median)							
Low education	24	26	27	29	26	25	23
Middle education	30	30	31	31	29	29	26
High education	32	32	34	33	31	31	32
Mothers' Employment							
Low education	51.4	33.3	44.0	57.7	40.2	43.1	52.3
Middle education	85.9	44.9	49.7	78.9	60.4	55.7	74.5
High education	89.4	63.2	57.2	84.2	78.8	62.8	75.5
Single Motherhood							
Low education	24.8	14.0	31.9	8.9	31.8	43.4	29.9
Middle education	14.1	14.4	8.3	4.5	19.6	26.0	20.4
High education	6.2	4.5	6.9	2.1	10.0	14.0	7.7

Source: Calculations by Timothy Smeeding and Susanna Sundstrom, using data from the Luxembourg Income Study.

children in the top quartile nearly doubled.¹² Data on poverty rates are similar. The risk of poverty among children in the bottom quartile was about the same in 2000 (38%) as it was in 1960 (37%). In contrast, the risk among children in the top quartile fell more than 50%, from 7% to 3%.

INTERNATIONAL COMPARISONS

Given that the changes associated with the second demographic transition are common to all Western countries, one may expect to find similar disparities in other countries. At the same time, there are reasons to expect the patterns to be different. Marriage rates are lower and nonmarital childbearing rates are higher in many other countries, and some analysts have argued that more-educated couples are choosing cohabitation over marriage. The data in Table 1 show cross-national differences in mothers' age, mothers' employment, and single motherhood. In each of the countries, mothers are grouped into low-, middle-, and high-education categories. Unlike the U.S. figures, these categories represent levels of education, rather than quartiles, and may not be entirely comparable across countries. Nevertheless, they do a pretty good job of showing within-country disparities in children's resources in the late 1990s. As with the U.S. figures, the estimates are based on families with young children.

According to Table 1, although mothers' age varies across the different countries, the educational gap in mothers' age is similar. The same pattern holds for mothers' employment, which is defined as "any employment." As was true in the United States, mothers with the least education are much less likely to be in the labor force than mothers with the most education. In three of the countries—Sweden, the Netherlands, and the United Kingdom—the gap between mothers in the lowest educational category and other mothers is much larger than the gap between mothers in the middle and upper categories, as was true for the United States.¹³ The same pattern can be seen for single motherhood. These data

12. For more on income inequality among American children, see Lichter (1997) and Lichter and Eggebeen (1993).

13. For more information on maternal employment in European countries, see Bradshaw et al. (1996).

Table 2. International Comparisons of Exposure to Single Motherhood by Age 15, by Mothers' Education

Mothers' Education	Sweden	Finland	Norway	Germany	Austria	France	Italy	United States
Low Education	36.0	29.0	36.0	39.0	36.0	28.0	9.0	63.0
Middle Education	30.0	19.0	27.0	31.0	33.0	26.0	10.0	51.0
High Education	25.0	19.0	23.0	29.0	33.0	24.0	11.0	33.0

Source: Calculations by Larry Bumpass and Hsien-Heu Lu, using the Family Fertility Surveys.

Table 3. International Comparisons of Married Fathers' Time (in Mean Hours) With Children, by Mothers' Education

Mothers' Education	Sweden	Norway	Germany	Austria	Italy	Canada	United States
Low Education	0.7	0.6	0.5	0.7	0.3	0.5	0.0
Middle Education	0.9	0.9	0.6	0.6	0.5	0.6	0.8
High Education	0.8	0.8	0.6	0.9	0.6	0.8	1.1

Source: Gauthier (2004), using data from the Multinational Time Use Survey.

treat cohabiting couples as married. So in this table, single motherhood indicates mothers who are neither married nor cohabiting. Once again, single motherhood is the most common among mothers with the least education. Finland is the only exception, and even here the most-educated mothers are the least likely to be single mothers.¹⁴ With the use of a different data set and a slightly different set of countries, one sees that cumulative exposure to single motherhood by age 15 follows a similar pattern (see Table 2). Children of less-educated mothers are more likely to experience single motherhood by age 15 than are children of more-educated mothers. As was true in the United States, the most-educated women in other Western countries are *not* choosing single motherhood over shared parenting. Although, in many countries, educated women are delaying marriage and having children within cohabiting relationships, the latter should not be confused with single motherhood. Finally, in all the countries, fathers in the top educational category are spending more time with their children than are fathers in the bottom category (see Table 3). In a few countries, fathers in the middle educational category report higher or lower involvement than expected. But the basic story is the same. Note that these estimates represent time contributions from married fathers. If I factored in the percentage of children who do not live with their fathers, the differences between the top and bottom educational categories would be greater.

In sum, at the end of the twentieth century, the disparities in other Western countries were similar to those in the United States. The demographic behaviors associated with the greatest gains in children's resources were concentrated among the most-educated parents, while the behaviors associated with the fewest gains (or absolute losses) were concentrated among the least-educated parents.

14. For more information on family formation and single motherhood in European countries, see Kiernan (1992), (2002), and (2004).

THE CAUSES

Throughout the twentieth century, broad changes both in ideas about individual autonomy and gender equality and in economic opportunities for women undoubtedly helped fuel the changes in women's employment and single motherhood.¹⁵ But these general trends cannot account for the dramatic shift after 1960. Nor can they explain why women from different socioeconomic backgrounds started following such different trajectories. To account for these patterns, I focus on four causes: feminism, new birth control technologies, changes in the labor market, and welfare policies. I argue that these factors and their interactions can account for much of the diverging behavior in the United States and may help explain international differences as well.

Although I have little hard evidence, I believe that the second wave of feminism, which began in the mid-1960s and spread throughout college campuses during the 1960s and 1970s, played an important role in promoting the demographic changes among women, especially those in the top quartile (Chafetz 1995; Chafetz and Dworkin 1986). Feminism promoted women's independence and gender equality on multiple fronts. It provided women with an identity other than "wife" and "mother" and encouraged them to invest in education and careers, criticized the gender-role specialization that was the mainstay of traditional marriages and provided new standards for more-egalitarian marriages, and argued against the stigmatization of single motherhood. Feminism also gave birth to a political movement that fought against gender discrimination in the labor force and higher education and argued that the government should support women's right to bear children and establish independent households. Finally, I suspect that feminism deserves some credit for softening the hearts and opening the minds of college-educated men and making them more accepting of women's demands for more-egalitarian marriages.

Whereas feminism gave women the motivation to pursue an education and a career, new birth control technology gave them the capacity to do so. Given the high risk of pregnancy, delaying marriage and investing in advanced education were risky options for women before the birth control pill. After the pill became available and abortion was legalized, women had much greater control over fertility, and their risk of pregnancy was lower. The pill also encouraged women's pursuit of professional education (Goldin and Katz 2002). Goldin and Katz noted that although the Food and Drug Administration approved the pill in 1960, single women did not use it widely until the end of the decade, when states began changing their laws about the age of majority. They showed that the spread of the pill was causally related to the increase in women's enrollment in professional schools during this period.

Along with giving women the ability to control their fertility, the pill and legalized abortion made it easier for men to shirk their paternal responsibilities. Before the pill, a woman could not afford to have sex with a man without obtaining a promise of marriage (Akerlof, Yellen, and Katz 1996). After the pill, such promises were no longer necessary because the risk of pregnancy was low and abortion was also available. The willingness of an increasing number of women to engage in sexual relationships without a promise of marriage thus lowered the bargaining power of women who wanted to marry and have children. The changes in bargaining power were reinforced by changes in social norms about the acceptability of single motherhood and women's right to an abortion, which increased women's control over fertility and children more generally.

The third explanation for the changes in demographic behavior is the changes in labor market conditions during the 1970s and 1980s. First came the recession of 1974, which was followed by back-to-back recessions in the late 1970s and early 1980s.

15. For additional discussions of these trends and their causes, see Bianchi and Casper (2000), Goldin (1990), and Goldscheider and Waite (1991).

Low-skilled men were the hardest hit by these recessions, which made them less “marriageable” in the eyes of women (Oppenheimer, Kalmijn, and Lim 1997; Wilson 1987). Next came the increase in wage inequality, which began at the end of the 1970s and continued throughout much of the 1980s. The ratio of the wages of college-educated men to high school-educated men showed double-digit increases during the 1980s, and the increase was even greater among women (Katz and Autor 1999). The gender wage gap also narrowed during the 1980s (Spain and Bianchi 1996). Both changes provided strong incentives for women to get a college education and enter the labor force. At the same time, growing wage inequality further worsened the prospects of men with low education.

The changing labor market conditions not only spurred women to invest in careers, they also affected the family-formation behavior of women who followed this pathway. Some of these women decided to forgo motherhood entirely (Martin 2004b); others delayed fertility until they were well established in their careers. Ultimately, when the time came for them to have children, these women were in a much stronger bargaining position relative to men than were women with less education. Not only did they have more options outside motherhood, they also were more mature and more knowledgeable about the kind of partnerships they wanted (Oppenheimer 1988). And they had a great deal to offer their potential partners in terms of economic resources. It is not surprising, then, that these women were able to form partnerships with men who were willing to provide the emotional support and help with child rearing that were valued by the feminist movement.

The final explanation for the changes in behavior is the change in welfare policies for single mothers. Two aspects of these policies are important: the level of support and the degree of income testing. The higher the benefit level, the lower the price of children for poor single mothers. The greater the income-testing in the benefit (i.e., the higher the rate at which benefits are reduced as income increases), the higher the price of work and marriage. Cash benefits for single mothers increased between 1955 and 1975, and access to benefits was greatly expanded during the late 1960s. The federal government also added Medicaid and food stamps to the welfare-benefit package during this period, and single-mother families were given preference for limited housing and child care subsidies. After the mid-1970s, the real value of cash benefits declined, while the value of in-kind transfers increased. All the new benefits were income tested, and, when taken together, the implicit tax rates (or benefit reductions) imposed on these programs were much higher than the highest tax rates in the income tax system. In other words, when low-income mothers (i.e., women in the bottom quartile) worked or married, most of the money they earned and most of their partners’ income was deducted from their welfare benefits.

Economic theory suggests that welfare will increase nonmarital childbearing by making it easier for men to shirk their parental responsibilities (Willis and Haaga 1996), and there is a large empirical literature on the effects of welfare receipt on union formation and dissolution. While the general consensus is that the effects of welfare programs are small, they are not zero (Moffitt 1998). And none of these studies has examined the effects of all the programs combined. Moreover, when considered in conjunction with other factors—such as the decline in low-skilled men’s earnings and the reduction in men’s willingness to support children—the effects of welfare are likely to be even larger.

That the most economically independent mothers have the highest marriage rates and highest employment rates suggests that the degree of income testing (the high tax rate) on benefits may be more important than the generosity of benefits in discouraging work and marriage. Indeed, recent evidence suggests that increases in welfare generosity may increase marriage when combined with employment requirements (Gennetian and Knox forthcoming; Harknett and Gennetian 2003). Variation in welfare policy may also account for some of the international differences in the prevalence of single motherhood and the extent to which single mothers are concentrated among women with low education. For example, the English-speaking nations have lower benefits and more income testing than

the Scandinavian and continental European nations. They also have the highest levels of single motherhood.

To sum up, different forces were driving the behavior of women in the top and bottom strata. For women from the most-advantaged backgrounds, feminism was providing a new identity, advances in birth control technology were providing the capacity, and increases in economic opportunities were providing the incentives to delay marriage and childbearing and to invest in careers. The promise of a new identity and the new birth control technologies, however, were of much less value to women in the bottom strata, who had little incentive to delay motherhood and pursue a career. At the same time, changes in the labor market conditions of low-skilled men were making the potential partners of these women less “marriageable,” while changes in norms, bargaining power, and welfare benefits were making it easier for men to shirk their fatherhood responsibilities.

At this point, I do not think we know how much of the increase in single motherhood is due to women’s unwillingness to commit to low-skilled men and how much is due to men’s unwillingness to commit to women and children. What we do know is that the second demographic transition changed both the set of opportunities that men and women face and the balance of power between them. We also know that the men and women with the most education and the most resources appear to have established a new equilibrium that is based on more-equal gender roles (Goldscheider and Waite 1991).

WHY SHOULD WE CARE?

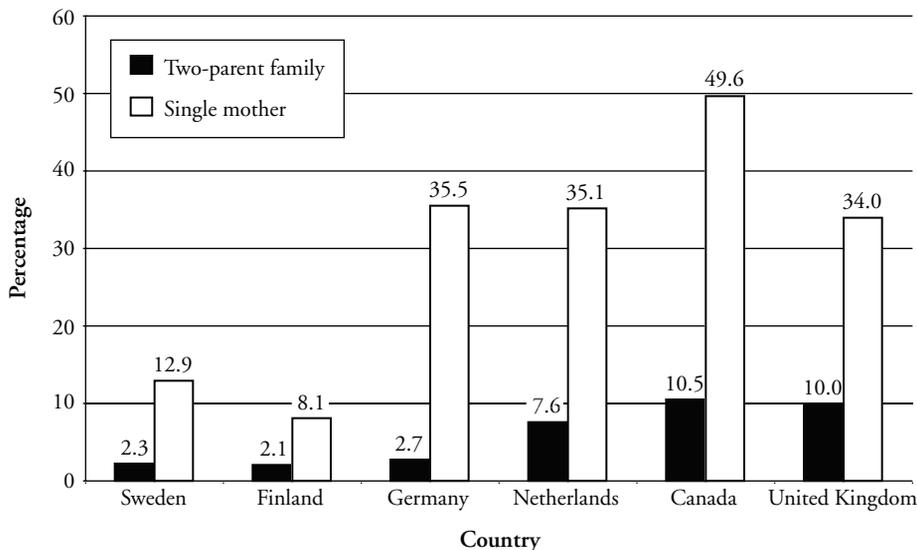
Thus far, I have documented several trends that are associated with the second demographic transition and provided evidence of growing disparities in children’s resources. I have also proposed several causes for the trends and disparities. Now I discuss why we should be concerned about the changes and what the government could do to ameliorate their impact. Some people argue that as long as the absolute level of children’s resources is not declining, we should not worry too much about the growing disparities. According to this view, during periods of social change, those in a position to take advantage of the new opportunities will move ahead faster than the rest of the population. Eventually, the gap will narrow as the less-advantaged group adopts the behavior of the leaders and catches up. Such was the pattern during the first demographic transition, and it may well be true for the second. Although the convergence story has merit, I believe there are reasons to be concerned about the changes.

First, inequality may lead to social isolation (or social exclusion, as it is called in Europe), which, in turn, may have negative feedback effects. For example, as marriage becomes more concentrated among high-income groups, couples in the bottom part of the distribution may come to see it as less attainable for them, thus losing whatever benefits are associated with this universal institution (Waite 1995). This idea is consistent with what unmarried parents in the Fragile Families Study (McLanahan et al. 2001) have said.¹⁶ When asked why they are not married, parents often say that they are waiting until they can achieve a certain lifestyle that they associate with marriage. One young Hispanic father in his twenties put it this way:

I want to be secure I don’t want to get married and be like we have no money or nothing. I don’t want to live here. I want to get my little house in Long Island, you know, white-picket fence, and two-car garage, me hitting the garbage cans when I pull up in the driveway. You know stuff like you see on TV. (Gibson, Edin, and McLanahan 2004)

16. The Fragile Families Study is following a birth cohort of approximately 5,000 children who were born in U.S. cities with populations of 200,000 or more between 1998 and 2000. The study includes over 3,700 unmarried couples. The data reported here came from the TLC3 Study, which conducted in-depth interviews with a subset of parents who participated in the larger study.

Figure 7. Cross-National Differences in Poverty Rates, by Family Status



Note: Poverty is defined as living in a household in which the family income is less than 50% of the median income.

Source: Rainwater and Smeeding (2003).

To explore this idea further, Tara Watson and I (Watson and McLanahan 2004) have developed and tested an identity model of marriage. This model, which was adapted from work by Akerlof and Kranton (2000), posits that marriage is associated with a set of norms about behaviors and living standards, and the psychological gains to marriage depend on how closely people are able to match these ideals. Using census data from 1970 to 2000, we showed that when individual income is held constant, the further men fall below the median income of other men in their communities, the less likely they are to marry.

I would also argue that we should be concerned about the high prevalence of single mothers, especially among mothers in the lower social strata. Whereas some single motherhood is probably a good sign for society insofar as it indicates that women have the freedom to opt out of bad relationships, high levels of father absence are likely to be a sign of social disorganization and isolation (Wilson 1987). Moreover, whereas the disparities in maternal age and employment are a matter of women in the top quartile *gaining* resources faster than women in the bottom quartile, the disparities in single mothers are a matter of women in the bottom quartile *losing* resources faster than women in the top quartile. And the children in the bottom quartile can ill afford these losses.¹⁷

Most important, across all Western industrialized countries, children in single-mother families have much higher poverty rates than children in two-parent families (see Figure 7). Although poverty rates vary widely across countries, single-mother families

17. Some research has indicated that single motherhood has no long-term consequences. Musick and Mare (2004), for example, reported that single motherhood in one generation is *not* associated with single motherhood in the next generation. However, their analysis controlled for income and did not take account of indirect effects of family structure via losses of economic resources.

Table 4. Risk Factors Among Less-Educated Families, by Parents' Relationship Status

Risk Factor	Relationship Status		
	Married	Cohabiting	Single
Mothers' Health			
Depression	10.2	15.0 ^a	14.9 ^a
Prenatal drug use	1.0	6.3 ^a	8.8 ^{a,b}
Prenatal smoking	10.4	25.5 ^a	25.9 ^a
Fathers' Health			
Substance abuse	4.3	4.1 ^a	7.6 ^{a,b}
Disability	5.8	7.5 ^a	6.6
Violence	2.0	3.5	6.1 ^{a,b}
Incarceration	12.2	31.6 ^a	39.2 ^{a,b}
Family structure			
Father has a child with other partner	19.0	33.5 ^a	44.1 ^{a,b}
Mother has a child with other partner	21.6	40.8 ^a	41.5 ^a
Father not working	7.8	19.5 ^a	39.2 ^{a,b}
Income/needs ratio	2.28	1.46 ^a	1.13 ^{a,b}
Disrupt by age 1	8.9	30.9 ^a	65.1 ^{a,b}
Disrupt by age 3	16.9	47.6 ^a	78.2 ^{a,b}
Quality of Mothering			
Child was breast-fed	62.4	47.5 ^a	38.9 ^{a,b}
Nonpunitive interaction	4.79	4.48 ^a	4.29 ^{a,b}
Language stimulation	9.29	9.06 ^a	9.03 ^a

Source: Author's calculations, using data from the Fragile Families and Child Wellbeing Study.

Note: The sample is limited to mothers with a high school degree or less.

^aDifferent from married at $p < .05$.

^bDifferent from cohabiting at $p < .05$.

always have higher rates than do married-couple families (Rainwater and Smeeding 2003). And this point holds even though many countries provide substantial income support to single mothers.

In addition to high poverty rates, single motherhood is a proxy for multiple risk factors that do not bode well for children. Data from the Fragile Families Study show that unmarried mothers with low education (a high school degree or less) are more likely to suffer from clinical depression and to have used drugs and tobacco during their pregnancies than married mothers with similar levels of education. The fathers of their children also have more problems, including higher rates of substance abuse, disability, domestic violence, and incarceration.¹⁸

As shown in Table 4, relationships are more complex and less stable in families that are formed by unmarried parents. These families are much more likely to include children

18. These differences in marital status exist for whites, blacks, and Hispanics as well.

from other partnerships,¹⁹ and parents' relationships are more fragile. Nearly half the cohabiting mothers (and nearly 80% of the noncohabiting unmarried mothers) have ended their relationships with their child's fathers by the time their children are 3 years old. Poverty rates and unemployment are also higher in unmarried-parent families. Finally, the quality of parenting is lower for children of unmarried parents. Breast-feeding and language stimulation are less common, whereas harsh parenting is more common.

Although we cannot say whether these marital-status differences are due to marriage per se or to something about the parents who marry, there are theoretical reasons for believing that father absence and high levels of union instability are harmful to children. Child development theory, for example, tells us that nonresident fathers are less likely to bond with their children (Lamb and Tamis-LeMonda 2004), sociological theory tells us that father absence reduces children's access to social capital (Coleman 1988; Seltzer 1991), and some economists have argued that low contact between fathers and children reduces altruism (Folbre 2004; Mulligan 1997). Moreover, the fact that *married* fathers have been increasing the amount of time they spend with their children suggests that father absence may become even more important in the future.

WHAT CAN BE DONE?

Just as their governments designed old age pensions to address the increases in longevity that resulted from the first demographic transition, most countries are now creating institutions to deal with the changes brought about by the second transition. In thinking about these policies, it may be useful to revisit the causes I discussed earlier. The basic question is this: what policies may encourage mothers and fathers in the lowest quartile to adopt the behaviors of parents in the top quartile? Specifically, how can we get women from disadvantaged backgrounds to delay childbearing, invest in education and training, and form stable partnerships? Similarly, how can we get men from disadvantaged backgrounds to remain committed to their children?

With respect to labor market conditions, I argued that growing wage inequality has favored women in the top strata but has made both men and women in the bottom strata less "marriageable." To counter this trend, which is driven, in large part, by changes in the demand for low-skilled workers, we need policies that increase the returns to work and make it possible for men and women in the bottom strata to achieve the living standard they associate with marriage. The Earned Income Tax Credit is one such policy. Subsidized child care and preschools also make work more rewarding, and good-quality child care and preschools have the additional advantage of directly increasing children's resources (Magnuson and Waldfogel forthcoming). Many European countries have such policies, and they are widely supported. Despite its pioneering role in the provision of elementary, secondary, and mass tertiary education, the United States lags behind most of the European countries in developing these institutions.

With respect to the new birth control technology, I argued that the pill and legalized abortion have undermined men's willingness to take responsibility for their children. Clearly, we do not want to go back to the days of the shotgun marriage. We can, however, institute policies that hold men responsible for the children they sire. Child support enforcement does exactly this, and there is evidence that stronger enforcement reduces non-marital fertility (Aizer and McLanahan 2003; Case 1998; Garfinkel et al. 2003). The United States has made substantial strides in child support enforcement during the past 20 years (Case et al. 2003; Garfinkel 2001; Garfinkel et al. 2003).

With respect to income-support policies, I argued that low income is a serious deterrent to marriage and that income-tested programs discourage work and marriage. One way

19. See Carlson and Furstenberg (2003) and Mincy (2002) on complexity and Wu and Martinson (1993) on instability.

to eliminate the marriage penalty that is implicit in income testing is to provide benefits that are based on individual, rather than family, eligibility. If the couple decides to live together or marry, they reap the benefits of economies of scale. Although such programs are more expensive (because more couples qualify for benefits), the long-term gains in terms of family formation may well offset the costs.

Finally, feminism has some useful lessons for policy makers who are concerned with the decline in marriage among low-income couples. The Bush administration recently launched an initiative to spend \$1.5 billion over the next five years on programs to increase marriage among low-income parents (Garfinkel and McLanahan 2003). As now designed, these programs aim to improve communication skills within couples and to improve mutual understanding and trust. Although many observers doubt that these programs will be helpful to low-income couples, and some believe they may even do harm, it is worth noting that the goal of "building mutual understanding and trust" is consistent with the new marital standards envisioned by feminism. On the basis of the qualitative interviews conducted with unmarried parents in the Fragile Families Study, disputes over sexual infidelity and gender mistrust are serious issues for many low-income couples (Edin, England, and Linnenberg 2003). Cherlin (forthcoming) reported similar findings from the Three City Welfare Study. Insofar as the marriage-promotion programs address these concerns, they may increase union stability among some low-income parents (McLanahan forthcoming).

Let me end by restating my major arguments. First, I have argued that the trends associated with the second demographic transition are following two trajectories and leading to greater disparities in children's resources. Second, I have noted that mothers with the most economic independence are leading the way, not in single motherhood, but in establishing stable unions that are based on a more equal sharing of parental responsibilities. Third, and last, I have argued that the government has an important role to play in ensuring that children have adequate resources in the new world that is being created by the demographic changes in family behavior. We did so for the elderly after the first transition, and children deserve no less.

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