

J Marriage Fam. Author manuscript; available in PMC 2011 June 17

Published in final edited form as:

J Marriage Fam. 2009 February; 71(1): 122-134. doi:10.1111/j.1741-3737.2008.00584.x.

Norms About Nonmarital Pregnancy and Willingness to Provide Resources to Unwed Parents

Stefanie Mollborn

University of Colorado at Boulder

Abstract

Contested social norms underlie public concern about adults' and teenagers' nonmarital pregnancy. The original, vignette-based National Pregnancy Norms Survey (N=812) measures these norms and related sanctions. Descriptive analyses report embarrassment at the prospect of a nonmarital pregnancy by age and gender of hypothetical prospective parents and age, race or ethnicity, and socioeconomic status of respondents. Multivariate analyses show that embarrassment about nonmarital pregnancy is frequently weak but much stronger when prospective parents are teenagers. Embarrassment predicts respondents' hypothetical sanctions of a new parent in their family by withholding several types of needed material resources. Because research has shown that such resources affect education and income, this study helps explain how violating norms might lead to negative outcomes among unmarried parents.

Keywords

adolescent pregnancy; life course theory; multi-generational relations; nonmarital parenting; survey research; transition to parenthood

American families have been undergoing major demographic changes in recent decades. One important trend is the increasingly prevalent decoupling of childbirth from marriage. The proportion of all births that are nonmarital has been climbing since the late 1990s, and nearly 4 in 10 babies were born to an unmarried mother in 2005 (Hamilton, Martin, & Ventura, 2006). Among teenage mothers, whose numbers had been decreasing until very recently (Hamilton, Martin, & Ventura, 2007), 8 in 10 births are out of wedlock (Sawhill, 2001). Despite the visibility of teenage childbearing as a social issue, most nonmarital births are to adult women, and births to adult mothers are driving the increase in non-marital childbearing.

Most of the research on pregnancy and child-bearing among teenagers and unmarried adults focuses on these demographic trends or on their causes and consequences. Instead of examining the behaviors themselves, this study focuses on the prescriptive, or normative, dimension of non-marital pregnancy. Social norms are regularly invoked to explain individuals' motivations for childbearing and other life events. Life course theorists once thought that a fairly rigid timetable of age expectations prescribes at what ages and in which

Institute of Behavioral Science and Department of Sociology, University of Colorado at Boulder, 483 UCB, Boulder, CO 80309-0483 (mollborn@colorado edu)

Data collected by Time-sharing Experiments for the Social Sciences, NSF Grant 0094964, Diana C. Mutz and Arthur Lupia, Principal Investigators. This material is based upon work supported under a National Science Foundation Graduate Research Fellowship. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author and do not necessarily reflect the views of the National Science Foundation. The author thanks Cecilia Ridgeway, Karen Cook, Nancy Tuma, Monica Kirkpatrick Johnson, and Judith Seltzer for their helpful comments.

order (e.g., before vs. after marriage) it is appropriate to experience a wide range of life transitions (Neugarten, Moore, & Lowe, 1965). Mounting evidence suggests that the life course is becoming individualized, with increasing variability in the ordering of transitions to adulthood, such as the ordering of marriage and child-bearing (Rindfuss, Swicegood, & Rosenfeld, 1987; Settersten, 2004; Shanahan, 2000). Does this mean that people are declining to follow an existing prescriptive timetable for life transitions, or is there no longer a normative timetable? Alternatively, do different subpopulations of Americans now have different normative timetables?

Social scientists addressing this question with regards to nonmarital childbearing have found differences across sociodemographic groups of Americans. Recent polling data (Taylor, Funk, & Clark, 2007) and ethnographic research (Edin & Kefalas, 2005) have suggested that attitudes and norms about nonmarital and teenage pregnancy may vary by age, socioeconomic status, race, ethnicity, and religious attendance. For example, most younger Americans find nonmarital childbearing to be morally acceptable, but most of those from older generations consider it wrong (Taylor et al., 2007). Edin and Kefalas found that social norms among their low-income interviewees have decoupled childbearing from marriage. Cherlin, Cross-Barnet, Burton, & Garrett-Peters (2007) supported this assertion using surveys of low-income mothers in three cities, finding that 82% of women disagreed that "having a child without being married is embarrassing for a woman."

Social norms about adults' nonmarital pregnancy thus appear to vary for different groups of Americans, but norms against *teenage* non-marital pregnancy may be stronger and more unified. Sixty-eight percent of adults in a 1999 poll felt that teenage pregnancy was "a major problem facing our country" (Race, Ethnicity and Medical Care Survey, 1999). Norms may proscribe teenage pregnancy even among groups in which the behavior is prevalent. Cherlin et al. (2007) found that, although half of the low-income women in their sample had been teenage mothers, just 3% thought that the best time to start having children was under age 20.

A growing literature is documenting norms and attitudes about nonmarital pregnancy in specific groups of Americans, but research that maps these norms in a nationally representative sample is needed. Are teenagers and adults who have children outside of marriage breaking societal rules about the age at which it is appropriate to get pregnant and about the ordering of pregnancy before marriage? Do these rules differ by the gender and age of the prospective parent and across racial, ethnic, and socioeconomic subgroups? The first goal of this study is to examine the strength of and sources of variation in norms against both adults' and teenagers' nonmarital pregnancy using a new, nationally representative survey of U.S. adults.

I also ask if people face negative consequences for breaking social rules about the timing and ordering of pregnancy. Among researchers who maintain that a normative timetable of life transitions guides people's behavior, the importance of conformity to or violation of transition norms for understanding the subsequent life course has been widely assumed but rarely documented (Elder, 1975; Settersten, 2004). This omission has contributed to serious criticisms of the concept of age norms (Marini, 1984). This study tests one possible mechanism linking norm violations to compromised life outcomes: If family members perceive norms that strongly discourage a pregnancy, then they may provide fewer resources such as money, housing, and child care as a way of sanctioning the prospective parent. The resulting lack of resources may then worsen the life outcomes of teenage parents and their children. Extant research supports the latter part of this proposed process. A lack of several types of material resources partly explained teenage mothers' and fathers' lower educational attainment compared to their childless peers (Mollborn, 2007), and a lack of instrumental,

social, and financial resources was associated with higher levels of poverty among low-income adults (Henly, Danziger, & Offer, 2005). The second goal of this study is to evaluate the former part of the proposed process: the link between norms against nonmarital pregnancy and family members' sanctioning by withholding needed resources.

This research is theoretically interesting because it reports unique national data on perceived norms about nonmarital pregnancy and resulting sanctions and because it tests part of a mechanism by which violating transition norms may lead to negative life outcomes. Norms are rarely measured in surveys, and this survey's vignette-based approach to measuring norms represents a contribution to the literature. On a policy level, this study provides new information about two particularly vulnerable groups, teenage parents and unmarried parents. Results show in which sociodemographic groups these parents are likely to suffer the most sanctions, potentially worsening their own and their children's life chances. Identifying these vulnerable groups may allow targeted interventions to offset the potential effects of sanctions.

Measuring Norms about Nonmarital Pregnancy

Like other social norms, "transition norms" about the timing and ordering of life transitions are group-level evaluations of appropriate behaviors and not personally held attitudes (Marini, 1984). Transition norms are central to life course theory but have rarely been measured satisfactorily in the past (Elder, 1975; Marini, 1984; Settersten, 2004). Because of their collective nature, social norms are difficult to assess in surveys of individuals. Some past research has used statistical means or ideal ages to represent norms, thereby assuming that norms can be inferred from patterns of behavior (Settersten, 2004). This study does not make this assumption because other factors besides a desire to conform to norms may drive people's behaviors. Rather, I measure adult respondents' levels of *embarrassment* at the hypothetical prospect of a nonmarital pregnancy in their family. Embarrassment reflects people's expectations of a negative reaction from others if they violate a norm and does not necessarily mean that they have internalized the norm. Embarrassment has been used to indicate the presence of norms and stigma across the social sciences (e.g., Cherlin et al., 2007; Elster, 1989; Goffman, 1967; Keltner & Buswell, 1997). Although it is experienced internally, embarrassment is a social emotion requiring either real or imagined others (Miller, 1995, citing Edelmann, 1994). For this reason, it is useful for measuring group-level norms through an individual-level survey item.

Sources of Variation in Nonmarital Pregnancy Norms

This study examines variation in norms about nonmarital pregnancy by the socioeconomic status (SES; operationalized as education and household income), race or ethnicity, and age of the respondent, as well as the gender and age of the unwed prospective parent.

Nonmarital pregnancy is more common in racial or ethnic minority and low-SES groups, so these groups may have weaker norms against nonmarital pregnancy. Because teenage and single parents are perceived to have low-SES futures, respondents from high-SES families and communities may be particularly likely to discourage a pregnancy that might propel their children into a lower socioeconomic trajectory. Similarly, widespread socioeconomic disadvantage in some racial and ethnic minority groups may make high socioeconomic attainment seem an unlikely prospect for their young people, leading to weaker community discouragement of nonmarital or teenage pregnancy (Wilson, 1987). Perceived nonmarital pregnancy norms may also vary by age because older people grew up when out-of-wedlock births were rarer. In the words of one respondent, "The morals of our society have decreased to the point [that] a young girl getting pregnant nowadays without being married has become the norm. I was brought up at a time where there was still some embarrassment from a

situation such as this." Because of the above reasoning and because intrasocietal variation in norms about teenage pregnancy has been demonstrated among American adolescents (Mollborn, 2006), *I expect that pregnancy norms also vary across subpopulations of American adults*.

Norms about unmarried pregnancy may also vary by the characteristics of the prospective parent. For example, the parent's gender is likely to influence the content of norms about nonmarital pregnancy. Women are the more visible violators of a pregnancy norm, and traditional sexual norms prescribe virginity more strongly for adolescent girls and young women than for boys and men. In many groups, there may be expectations that families must help daughters more than sons if they bear a child out of wedlock (Kaplan, 1997), providing a stronger incentive to prevent a girl's unwed pregnancy. For these reasons, I hypothesize that norms proscribe nonmarital motherhood more strongly than nonmarital fatherhood (*Hypothesis 1*).

The age of the prospective parent is probably another important influence on norms about non-marital pregnancy. Unmarried teenagers who bear children likely violate two transition norms, an age norm against teenage pregnancy and a timing norm against pregnancy before marriage, whereas unmarried adults only violate the timing norm. The age norm against teenage pregnancy is expected to be the stronger of the two because of public perceptions (which research has called into question; see Hoffman, 1998, for a review) that having a child ruins an adolescent's life chances. Therefore, I hypothesize that the norms against nonmarital pregnancy in the United States are stronger for teenagers than for young adults (*Hypothesis 2*).

The Consequences of Pregnancy Norm Violation

According to the sociological definition of norms, sanctions must result when norms are violated. Marini (1984) criticized life course research for failing to demonstrate that people who violate transition norms are sanctioned and argued that, for researchers to convince others of the existence of transition norms, future research must document sanctions. This study can provide preliminary evidence by testing whether perceived norms against nonmarital pregnancy affect respondents' sanctioning behavior. Experimental research has shown that people's expectations of others' reactions influence their sanctioning actions (Horne, 2001). Teens and unmarried adults who bear children likely face greater sanctions than their parents do, but parents in communities with strong norms against nonmarital childbearing may also face sanctions for fully supporting their children.

It seems plausible that one of many forms of such sanctioning could be withholding resources from an unmarried adult or teenage parent. As Furstenberg (1976) writes, "premature entry into parenthood may mean that the adolescent childbearer is formally or informally denied the resources and support normally provided to mature mothers" (p. 15). Evidence shows these "normally provided" resources are substantial, averaging \$38,000 and 3,900 hours of help across the transition to adulthood (Schoeni & Ross, 2005). Many factors affect the amount of help that is given. Financial assistance varies greatly by family income, but time help does not. For adults ages 18 - 34, both money and time are given less freely at older ages (Schoeni & Ross). Importantly for this study, past research shows that unmarried parents are indeed provided with fewer resources by their families. Compared to married couples, cohabiting couples with or without children received less support from their families (Eggebeen, 2005) and cohabiting mothers' social networks gave them less support than married mothers' (Harknett & Knab, 2007). Marks and McLanahan (1993) found that single mothers who had been married received slightly more kin support than those who had not. Norms against nonmarital childbearing may explain these differences.

Controlling for other factors that affect the degree of assistance provided such as age and income, I hypothesize that family members who perceive strong norms against a pregnancy will be more likely to withhold needed resources from the prospective parent (*Hypothesis 3*). This study operationalizes resources as the hypothetical provision of general help, housing, child care, and money in the event of a nonmarital birth. Resource withholding is an interesting sanction because of its direct implications for socioeconomic outcomes and because it may be generalizable to other too-early or out-of-order life transitions such as school dropout or early marriage.

The Current Study

This study has an experimental design, asking respondents to read a vignette about a hypothetical unmarried parent-to-be in their family, with the gender and age of the parent randomly assigned. Questions about the vignette measure respondents' level of embarrassment and the resources they think they would be willing to provide to the prospective parent. Descriptive analyses show the distribution of nonmarital pregnancy norms in various ways. Multivariate analyses use the age and gender of the prospective parent and characteristics of the respondent to predict respondents' level of embarrassment, testing the first two hypotheses. Further analyses test the relationship between respondents' embarrassment and their hypothetical willingness to provide resources to the parent-to-be, testing the third hypothesis.

Multivariate analyses include several control variables. Living with a teenager affects the degree to which respondents' answers are hypothetical because they are currently facing the real possibility of an adolescent pregnancy in the family. Norms about nonmarital pregnancy and resource provision to young family members may vary between urban and rural areas and regions of the country because of differences in nonmarital birth rates (U.S. Department of Agriculture, 1997). Finally, respondents who have chosen to marry may perceive different norms about nonmarital pregnancy than others, and women and men may provide different amounts of resources, such as child care to family members (Sarkisian & Gerstel, 2004), so these variables are also included.

Method

Data

Adult respondents' norms were measured in a new, nationally representative vignette-based survey, the National Pregnancy Norms Study (Mollborn, 2005). No known recent national survey includes information about pregnancy norms among adults. The data were collected through the National Science Foundation's TimeSharing Experiments for the Social Sciences program and administered by Knowledge Networks, which distributed Internetbased surveys to an online research panel that was nearly representative of the U.S. population. Respondents were recruited to the panel through phone calls (random digit dialing) and mailings and were given free hardware and Internet access in exchange for completing occasional surveys; those with their own Internet access were also included in the panel. The panel closely matches the U.S. population on race or ethnicity, age, region, employment status, and other demographic characteristics (Knowledge Networks, 2005). Research comparing this kind of sample with telephone-based samples that use random digit dialing has found that they are equally representative, and the Internet-based data may be more reliable than data collected by phone (see Huggins & Eyerman, 2001; Krosnick & Chang, 2001). Probability weights make the sample representative of the U.S. noninstitutionalized adult population; Table 1 shows weighted descriptive statistics.

As part of a survey-based experiment, in April and May of 2005, 812 respondents drawn from the Knowledge Networks research panel (with a 66.2% response rate) were randomly assigned to read one of four brief vignettes describing a young person who has found out that she or he is having a baby. Both the gender and age (16 or 26 years old) of the prospective parent were experimentally manipulated in the vignette for a total of four conditions (16-year-old girl, 16-year-old boy, 26-year-old woman, and 26-year-old man). Gender was indicated by using the names "Jessica" and "Michael," which were the most popular female and male names given to babies in the 1980s and 1990s according to the Social Security Administration. No single racial or ethnic group apparently drove this popularity: They were among the 10 most popular names given to newborns in New York City in 1995 among Whites, African-Americans, Latinos, and Asians. Respondents were then asked 10 questions about the vignette, including their embarrassment if the respondent intends to remain unmarried. A text box at the end of the survey allowed for respondents' open-ended remarks, and about one third chose to comment. Because respondents selfselected into this communication, their comments were not representative. Very few cases contain missing data: Between 5 and 10 cases, or 1%, were deleted listwise from each multivariate analysis.

Measures

Embarrassment at the prospect of a nonmarital pregnancy—In measuring pregnancy norms as embarrassment at the prospect of a pregnancy, this study follows a survey item from the National Longitudinal Study of Adolescent Health, which targeted teenagers. An important difference in the wording is that the measure of norms used here specifically addressed nonmarital pregnancy. This was necessary because this study included vignettes about both adult and adolescent prospective parents. Because pregnancy norms for adults seem especially likely to differ by the marital status of the prospective parent, it needed to be specified.

Because most of the respondents in this nationally representative sample of adults did not have a young parent in their family, the survey asked respondents to imagine that the hypothetical parent-to-be in the vignette they read is their own son or daughter. This may require a greater degree of imagination from younger respondents, but adults of all ages periodically make similar hypothetical statements such as "If I had a daughter, I wouldn't let her dress like that." The question read "Jessica/Mike is your [daughter/son]. If you found out that [she/his girlfriend] was pregnant and [she/he] was not going to marry [her boyfriend/his girlfriend], how embarrassed would you be when other people found out about the pregnancy?" Response options were not at all, not very, somewhat, very, and extremely. Higher levels of embarrassment reflect stronger perceived norms against pregnancy. Analyses compared those "very" and "extremely" embarrassed to those "not at all," "not very," and "somewhat" embarrassed. This cutoff was chosen because "somewhat" embarrassed respondents differed significantly from "very" and "extremely" but not from "not at all" and "not very" embarrassed in nearly all analyses. Sensitivity analyses were performed using two alternate measures, one including "somewhat" in the other category and another treating "somewhat" as its own category. As discussed below, main results are robust across coding schemes. Descriptive information for this and other variables is presented in Table 1.

Hypothetical resource provision—To test this study's main hypothesis, four questions measured the amount of material help that respondents were hypothetically willing to provide to the prospective parent. Respondents were again asked to imagine that the parent-to-be is their son or daughter. The first question asked *generally how much help* the respondent would hypothetically be willing to provide. Follow-up questions measured

respondents' expected willingness to provide housing ("letting [him/her] live with you"), child care ("babysitting or paying for child care" so that the prospective parent does not need "to quit school or work"), and financial support (giving money if he/she "has no money to support the baby") for the prospective parent and child. For the first three measures, there were five ordered response options ranging from no support to all to the support that is needed. Response options for the question on expected financial support could not fully account for the effect of respondents' available financial resources. Twentysix percent of respondents replied that they did not have any money to give, but if they had money they would give it to the prospective parent. This response could not be categorized among the other ordered response options (none, less than \$100 per month, \$100 - 200 per month, and \$200 per month or more), so these respondents were omitted from multivariate analyses, leaving 595 respondents for the analysis of expected financial support compared to more than 800 respondents for the other analyses. The omitted respondents were less embarrassed about a nonmarital pregnancy and had lower income and education than those who had money to give, and they were more likely to give general help and housing but no different in providing child care. Sensitivity analyses, using a dichotomous measure separating those who would give money or said they would if they had it from those who would not, suggested that the results are robust.

Other variables—Several control variables were selected for inclusion in the analyses on the basis of the expectation that they are related to pregnancy norms or resource provision. The data source was standard sociodemographic information previously collected by Knowledge Networks separately from the collection of the data on pregnancy norms. Analyses included respondents' gender (female = 1, male = 0) and age in years. Race or ethnicity may also affect pregnancy norms. Responses were coded as Latina/o (n = 74) and non-Latina/o White (n = 631; reference category), African American (n = 64), and other racial categories or multiracial (n = 38). Respondents' socioeconomic status was measured by highest education level completed (reference category of less than a high school degree, a high school degree, some college, and a bachelor's degree or higher) and by household income (recoded from a categorical scheme with a minimum of \$2,500 and a maximum of \$200,000; missing values were imputed by Knowledge Networks using census block-level data). Additional variables indicated whether respondents lived in a metropolitan statistical area and their region (Northeast, Midwest, South, or West). Analyses also controlled for whether there are any teenagers age 13 to 17 in the respondent's household and for the respondent's marital status (reference category of married or widowed compared to separated or divorced and never married). Finally, multivariate analyses included the two experimental manipulation variables, the *prospective parent's gender (female* = 1, *male* = 0) and age (16 or 26 years old).

Analysis Plan

Univariate and bivariate descriptive analyses examined reported embarrassment at the prospect of a nonmarital pregnancy for teenage and adult prospective parents and investigated sources of variation in these reports. A multivariate binary logistic regression model tested Hypotheses 1 and 2, which state that norms against nonmarital pregnancy are likely to be stronger for women and teenagers than for men and adults. Ordinal logistic regression models assessed Hypothesis 3, which expects perceived norms against a pregnancy to decrease the amount of resources family members are hypothetically willing to provide. All analyses were weighted.

Results

Describing Embarrassment at the Prospect of a Nonmarital Pregnancy

Figure 1 displays distributions of reported embarrassment at the prospect of a nonmarital pregnancy for teenage and adult prospective parents; means for the dichotomized embarrassment measure used in analyses are presented in Table 1. In Figure 1, it is immediately interesting that most people did not report much embarrassment at the prospect of a nonmarital pregnancy in their families. The average response for both a teenage and an adult prospective parent fell between "not very" and "somewhat" embarrassed. The distributions of embarrassment for both teenage and adult prospective parents were bimodal, with peaks at "somewhat" and "not at all" embarrassed. About a third of respondents reported that they would "not at all" be embarrassed by a non-marital pregnancy, which is close to the proportion of actual births that are nonmarital.

Sources of Variation in Embarrassment

Further descriptive analyses reported below explored possible sources of variation in nonmarital pregnancy norms in the U.S. population. Table 1 shows that there were no significant differences in reported embarrassment at the prospect of a teenage or adult nonmarital pregnancy by the *gender of the prospective parent*, which did not support Hypothesis 1. Supplemental analyses (not shown) revealed that distributions by gender were nearly identical, and embarrassment did not differ significantly by gender within any racial or ethnic category. Nonrepresentative open-ended responses supported the conjecture that even if the *strength* was similar, the *reasons* for being embarrassed differed by the prospective parent's gender: A norm against extramarital sexual activity (the violation of which is literally embodied in a pregnancy) may have been stronger for prospective mothers, and a "shotgun wedding" norm in which prospective fathers are deviant if they do not agree to marry and support the woman they impregnated may have been more important for men. An example for prospective mothers was "She will have to deal with being called a slut and easy." For prospective fathers, a respondent's comment was "Rather than expect help and money ... the father of the child should be doing his share to support them."

Descriptive analyses displayed in Table 1 supported Hypothesis 2. Twenty-four percent of respondents reported that they would be "very" or "extremely" embarrassed by an unmarried teenager getting pregnant, compared to just 12% for an adult (p < .001). Descriptive findings also provided support for the idea that norms against nonmarital pregnancy are stronger for Whites than African Americans. Non-Latino Whites reported significantly higher levels of embarrassment at the prospect of a non-marital adult pregnancy, but not a teenage pregnancy, than other groups in general (see Table 1). Supplemental analyses showed that compared to African Americans in particular, Whites reported significantly greater embarrassment about a nonmarital pregnancy at either age. African Americans' mean embarrassment at the prospect at both a teenage and an adult pregnancy was significantly lower than other groups'. Neither Latinos nor members of "other" racial groups reported significantly different embarrassment compared to others in general, or compared to Whites and to African Americans in particular. Figure 1 displays respondents' reported embarrassment by their racial or ethnic category and the prospective parent's age. Distributions were bimodal across all racial and ethnic categories with one exception: African Americans overwhelmingly reported little embarrassment at the prospect of a nonmarital adult pregnancy, which may not be surprising given that 71% of births to African American mothers in 2006 were nonmarital (Hamilton et al., 2007). Contrary to popular belief, then, with this single exception there was no "typical" norm about the acceptability of nonmarital pregnancy in any racial or ethnic group. Other potential sources of variation received little or inconsistent support. Embarrassment did not vary by age or

income for any comparison in Table 1, and higher levels of education were associated with greater embarrassment at the prospect of a nonmarital teenage, but not an adult, pregnancy.

Predicting Embarrassment at the Prospect of a Nonmarital Pregnancy

Hypothesis 1, which states that norms against nonmarital pregnancy will be stronger for women than for men, was supported by neither descriptive nor multivariate analyses. A weighted binary logistic regression model with controls (see Table 2, Model 2) revealed no association between the prospective parent's gender and the respondent's embarrassment at the prospect of a nonmarital pregnancy. Supplemental analyses (not shown) found no significant interaction between the prospective parent's age and gender.

Hypothesis 2 states that the age of the prospective parent (teenage vs. adult) is negatively related to the level of embarrassment at the prospect of a nonmarital pregnancy. Results from both models of Table 2 supported this hypothesis. Respondents' odds of being "very" or "extremely" embarrassed (hereafter referred to as reporting embarrassment) at the prospect of a nonmarital pregnancy were higher when the prospective parent was a teenager instead of an adult, regardless of the presence of controls. This finding was consistent for both alternate embarrassment measures as well. Table 2, Model 2 shows that respondents who read vignettes about a teenager's pregnancy were fully 127% more likely to report embarrassment than those who read about an adult. Just three control variables were significant: African Americans were less likely to report embarrassment than Whites, divorced or separated respondents were less likely to report embarrassment than married or widowed respondents, and respondents living with teens were more likely to report embarrassment than others.

Consequences of Embarrassment at the Prospect of a Nonmarital Pregnancy

Table 3 displays weighted ordinal logistic regression models testing Hypothesis 3, which states that respondents who report embarrassment at the prospect of a nonmarital pregnancy are less likely to be hypothetically willing to provide resources to the prospective parent. The hypothesis was supported for all four dependent variables in separate models, and these results were consistent for the alternate embarrassment measures. "Very" or "extremely" embarrassed respondents were less hypothetically willing to provide general help, let the prospective parent keep living at home, provide child care, and give money (using either the ordinal measure in the table or the dichotomized alternate measure). Some respondents linked disapproval against unmarried pregnancy and resource withholding in open-ended comments; for example, one wrote "My son would have to be responsible for his actions. He'd have to take care of his child in whatever way possible."

To illustrate the strength of the relationship between embarrassment and hypothetical resource provision, predicted probabilities for a hypothetical respondent who reported embarrassment at the prospect of a nonmarital pregnancy in the family were compared to those for a respondent who did not (not shown). Other variables were held constant at their means (if continuous), medians (if ordinal), or modes (for other categorical variables). Depending on the prospective parent's age and gender and the resource type analyzed, the change from no embarrassment to embarrassment was associated with a predicted decrease of between 9% and 16% in expected willingness to provide the highest level of resources, which represented the parent's and child's needs being fully met. Particularly because many teenage parents do not have substantial resources of their own, such modest differences in resource withholding could matter a great deal for their own and their children's outcomes.

Table 3 shows that respondents were more hypothetically willing to provide help across all four measures if the prospective parent was female rather than male, which is consistent

with ethnographic evidence that maternal grandparents provide substantial resources to the children of teenage mothers (Kaplan, 1997). After reported embarrassment was controlled, respondents were significantly more willing to provide housing and child care when the prospective parent was a teenager rather than an adult, but there was no significant difference for general help or financial support. The former results echo past findings (Schoeni & Ross, 2005) and implicitly support the idea that norms prescribing family support are likely to be stronger for a teenager than a young adult.

Although it is not a hypothesis, another potential consequence of respondents perceiving a norm against nonmarital pregnancy is that they may want to prevent the norm violation from becoming public knowledge. In this case, respondents might have recommended that the prospective parent get an abortion or give the baby up for adoption. Supplementary analyses using another question from the survey (not shown) revealed that this was indeed the case. For adult unwed pregnancies, just 33% of respondents who were "very" or "extremely" embarrassed at the prospect of a pregnancy thought that the prospective parent should definitely "keep the baby," compared to 50% of those who were less embarrassed (p < .05). The corresponding figures for teenage nonmarital pregnancies were 22% and 35% (p < .05).

Discussion

The past several decades have seen increased nonmarital childbearing and individualization of the ordering and timing of life transitions. In this context, social norms about nonmarital pregnancy may well be weakening and diversifying across subpopulations of Americans. These norms are rarely documented, and their consequences for people who violate them are largely unknown. Using embarrassment to measure norms, this study provided preliminary information to address these issues. Descriptive analyses found that most American adults would not be particularly embarrassed by a nonmarital pregnancy in their family, which supports the idea that the life course is becoming more individualized and less bound by strict age expectations (Settersten, 2004). Respondents with a high school degree or less reported lower levels of embarrassment at the prospect of a teenage non-marital pregnancy than those with more education. Whites reported higher mean levels of embarrassment at the prospect of a nonmarital pregnancy than African Americans.

Because reported embarrassment was similarly strong on average for female and male prospective parents, multivariate findings did not support Hypothesis 1, which expected norms against nonmarital pregnancy to be stronger for women. Hypothesis 2, which expected norms against nonmarital pregnancy to be stronger for teenagers than for adults, was strongly supported. Embarrassment, in turn, influenced the amount of material resources that family members reported hypothetically being willing to provide to a prospective parent, supporting Hypothesis 3. As suggested in life course theory, when nonmarital pregnancy was viewed as a deviant act, a negative sanction typically occurred: Respondents expected to make fewer needed resources available to the parent and child. This sanction has been shown to have lasting effects on teenage parents' lives. Previous research has linked a lack of these particular material resources (housing, child care, and financial support) to teenage mothers' and fathers' lower educational attainment (Mollborn, 2007), and a lack of instrumental, social, and financial resources has been associated with higher levels of poverty among low-income adults (Henly et al., 2005).

This study has several limitations. First, a more multifaceted conception of norms created from several measures instead of a single item and a comparison of marital and nonmarital pregnancy norms are needed. Until other measures besides embarrassment are used, subcultural and individual differences in definitions of and sensitivity to embarrassment will influence results. Variables capturing other types of sanctions besides resource provision

would be particularly useful because multiple sanctions almost certainly occur in these situations. Second, the causal direction between respondents' norms and hypothetical resource provision was not firmly established here. Third, the sample was limited to a panel of adult respondents selected from households with telephones and did not include institutionalized adults. Fourth, because there was no information about which respondents have actually been in the situation of deciding whether to support an unmarried parent, the link between pregnancy norms and the provision of material resources was only hypothetical. As one respondent wrote, "Actually being in that situation is much different than being on the sidelines." There may be a stronger link from norms to hypothetical behaviors than there is to real-life behaviors. Finally, many respondents were quite passionate and articulate in their optional comments, especially those who had a teenage or nonmarital pregnancy in their families. Their responses left the impression that much could be learned from open-ended interviews on this topic with teenage and unmarried parents' family members.

Assuming that norms about nonmarital pregnancy influence people's actual resource provision, the findings have implications for social policy. Even though most unwed parents do not appear to face strong negative norms, descriptive analyses suggest that unmarried adult or teenage parents in certain advantaged subpopulations, such as Whites and the more highly educated, are violating stronger norms against nonmarital pregnancy. Although their advantaged status could provide a buffer at a material level, the risk of losing their family's support because of violating these norms, and thereby losing much of this protection, may be high. Results also suggest that families are more embarrassed at the prospect of a teenager becoming an unmarried parent than an adult. This embarrassment is at least hypothetically associated with concrete negative sanctions in the form of resource withholding. Therefore, making sure that young parents and their children have access to an adequate level of material resources is one way to buffer them against potential negative consequences of norm violation. In the absence of such a safety net, strengthening norms against teenage pregnancy as a policy measure is a double-edged sword. Although stronger norms are associated with lower rates of adolescent pregnancy (Mollborn, n.d.), these same norms have negative effects on the people who violate them. For this reason, normatively neutral solutions to curbing rates of teenage or nonmarital pregnancy that have less potential to harm teenagers who are already parenting are appealing.

Using new data from a nationally representative survey of U.S. adults, these results provide important information about the distribution of norms against nonmarital pregnancy across subgroups of American society. Instead of inferring norms from behaviors, this analysis contributes empirical evidence about these transition norms and one related type of sanction. It also speaks to the importance of not inferring transition norms from prevalent patterns of behavior because substantial intergroup differences in rates of teenage and nonmarital childbearing, or both, on the basis of individuals' gender, race, and ethnicity were often not reflected in the content of the corresponding norms. This reinforces the idea that other factors besides norms influence individuals' behavior, and therefore transition norms and subpopulation behavior patterns cannot be assumed to be identical.

References

Cherlin, A.; Cross-Barnet, C.; Burton, LM.; Garrett-Peters, R. Promises they can keep:Low-income women's attitudes toward motherhood and marriage (Welfare, Children, & Families: A Three City Study Working Paper 07-02). 2007. Retrieved June 4, 2008, from http://web.jhu.edu/threecitystudy/Publications/index_old.html

Edelmann, RJ. Embarrassment and blushing: Factors influencing face-saving strategies. In: Ting-Toomey, S., editor. The challenge of facework. Albany: State University of New York Press.; 1994. p. 231-267.

- Edin, K.; Kefalas, M. Promises I can keep: Why poor women put motherhood before marriage. Berkeley: University of California Press.; 2005.
- Eggebeen DJ. Cohabitation and exchanges of support. Social Forces. 2005; 83:1097 1110.
- Elder GH Jr. Age differentiation and the life course. Annual Review of Sociology. 1975; 1:165 190.
- Elster J. Social norms and economic theory. Journal of Economic Perspectives. 1989; 3:99 117.
- Furstenberg, FF, Jr. Unplanned parenthood: The social consequences of teenage child-bearing. New York: Free Press.; 1976.
- Goffman, E. Interaction ritual: Essays on face-to-face behavior. New York: Doubleday & Co.; 1967. Embarrassment and social organization; p. 97-112.
- Hamilton, BE.; Martin, JA.; Ventura, SJ. National Vital Statistics Reports. Vol. 55. Hyattsville, MD: National Center for Health Statistics.; 2006. Births: Preliminary data for 2005.
- Hamilton, BE.; Martin, JA.; Ventura, SJ. National Vital Statistics Reports. Vol. 56. Hyattsville, MD: National Center for Health Statistics.; 2007. Births: Preliminary data for 2006.
- Harknett K, Knab J. More kin, less support: Multipartnered fertility and perceived support among mothers. Journal of Marriage and Family. 2007; 69:237 253.
- Henly JR, Danziger SK, Offer S. The contribution of social support to the material well-being of low-income families. Journal of Marriage and Family. 2005; 67:122 140.
- Hoffman SD. Teenage childbearing is not so bad after all. .. or is it? A review of the new literature. Family Planning Perspectives. 1998; 30:236–239. 243. [PubMed: 9782047]
- Horne C. The enforcement of norms: Group cohesion and meta-norms. Social Psychology Quarterly. 2001; 64:253 266.
- Huggins, V.; Eyerman, J. Probability based Internet surveys: A synopsis of early methods and survey research results. Paper presented at the research conference of the Federal Committee on Statistical Methodology; 2001 November. Retrieved May 15, 2006, from http://www.fcsm.gov/01papers/Huggins.pdf
- Kaplan, EB. Not our kind of girl: Unraveling the myths of Black teenage motherhood. Berkeley: University of California Press.; 1997.
- Keltner D, Buswell BN. Embarrassment: Its distinct form and appearement functions. Psychological Bulletin. 1997; 122:250 270. [PubMed: 9354148]
- Knowledge Networks. Knowledge Networks panel demographic characteristics January 2005. 2005.
- Krosnick, JA.; Chang, L. A comparison of the random digit dialing telephone survey methodology with Internet survey methodology as implemented by Knowledge Networks and Harris Interactive. Paper presented at the meeting of the American Association for Public Opinion Research; 2001 May. Retrieved May 15, 2006, from http://www.knowledgenetworks.com/ganp/docs/OSUpaper.pdf
- Marini MM. Age and sequencing norms in the transition to adulthood. Social Forces. 1984; 63:229 244.
- Marks NF, McLanahan SS. Gender, family structure, and social support among parents. Journal of Marriage and the Family. 1993; 55:481 493.
- Miller RS. On the nature of embarrassability: Shyness, social evaluation, and social skill. Journal of Personality. 1995; 63:315 339. [PubMed: 7782995]
- Mollborn, S. National Pregnancy Norms Study, 2005. [Data file]. Conducted by TimeSharing Experiments for the Social Sciences. Administered by Knowledge Networks. 2005. http://www.experimentcentral.org/data/data.php?pid=390
- Mollborn, SB. Doctoral dissertation. Stanford University; 2006. Understanding teenage pregnancy norms and their influence on teenage mothers' and fathers' life outcomes.
- Mollborn S. Making the best of a bad situation: Material resources and teenage parenthood. Journal of Marriage and Family. 2007; 69:92 104.
- Mollborn S. Who says it's so bad? Predictors and consequences of adolescents' norms about teenage pregnancy. (n.d.). Unpublished manuscript.

Neugarten BL, Moore JW, Lowe JC. Age norms, age constraints, and adult socialization. American Journal of Sociology. 1965; 70:710 – 717.

- Race, Ethnicity and Medical Care Survey. 1999 Survey by Henry J. Kaiser Family Foundation. July 7-September. 1999 Retrieved February 27, 2005, from the iPOLL Databank, The Roper Center for Public Opinion Research, University of Connecticut, http://www.ropercenter.uconn.edu/ipoll.html
- Rindfuss RR, Swicegood CG, Rosenfeld RA. Disorder in the life course: How common and does it matter? American Sociological Review. 1987; 52:785 801.
- Sarkisian N, Gerstel N. Kin support among Blacks and Whites: Race and family organization. American Sociological Review. 2004; 69:812-837.
- Sawhill, IV. What can be done to reduce teen pregnancy and out-of-wedlock births? Brookings Institution WR&B Brief #8. 2001. Accessed December 30, 2006, from http://www.brook.edu/es/research/projects/wrb/publications/pb/pb08.htm
- Schoeni, RF.; Ross, KE. Material assistance from families during the transition to adulthood. In: Settersten, RA., Jr; Furstenberg, FF., Jr; Rumbaut, RG., editors. On the frontier of adulthood: Theory, research, and public policy. Chicago: University of Chicago Press.; 2005. p. 396-416.
- Settersten, RA, Jr. Age structuring and the rhythm of the life course. In: Mortimer, JT.; Shanahan, MJ., editors. Handbook of the life course. New York: Springer Press.; 2004. p. 81-98.
- Shanahan MJ. Pathways to adulthood in changing societies: Variability and mechanisms in life course perspective. Annual Review of Sociology. 2000; 26:667 692.
- Taylor, P.; Funk, C.; Clark, A. Generation gap in values, behaviors: As marriage and parenthood drift apart, public is concerned about social impact. Pew Research Center; 2007. Accessed May 14, 2008, http://pewresearch.org/pubs/526/marriage-parenthood
- U.S. Department of Agriculture. Births to unmarried mothers are rising faster in rural areas. Rural Conditions and Trends. 1997; 8:66-69.
- Wilson, WJ. The truly disadvantaged: The inner city, the underclass and public policy. Chicago: University of Chicago Press.; 1987.

Figure 1.

Embarrassment at the Prospect of a Nonmarital Pregnancy, by Age of Prospective Parent and Race or Ethnicity (n = 807).

Note: Source—National Pregnancy Norms Study (2005).

Table 1

Sample Characteristics, and Weighted Mean Embarrassment at the Prospect of a Nonmarital Pregnancy Among Selected Subpopulations (N = 812)

Mollborn

	Sample Characteristics	teristics	Overall En	Overall Embarrassment	Embarrassed by Teenage pregnancy	age pregnancy	Embarrassed by Adult Pregnancy	ult Pregnancy
Subpopulation	M	SE	M	SE	M	SE	M	SE
All respondents			.18	.00	.24a	.03	.12 a	.02
Parent-to-be's gender								
Female	.52	.02	.17	.00	.22	.04	.12	.03
Male	.48	.02	.19	.00	.26	.04	.13	.03
Respondent's race/ethnicity								
White	.70	.02	.20*	.00	.26	.03	.15*	.02
African American	.11	.02	.07**	.03	.12*	.05	.03**	.03
Latino	.13	.02	.17	90.	.23	90.	60.	90.
Other/multiracial	90.	.01	.18	.07	.26	.11	.07	.05
Respondent's age (years)	45.93	.73						
18 – 29 years			.20	.04	.27	.05	.12	.05
30 – 44 years			.16	.03	.24	.05	80.	.03
45 – 59 years			.14	.03	.17	.04	.12	.03
≥ 60 years			.24	.04	.29	90.	.19	.05
Respondent's education								
≤ HS graduate	.48	.02	.15	.02	*81.	.03	.13	.03
Some college or more	.52	.02	.21	.02	.30*	.04	.12	.00
Household income (\$1000)	47.66	1.59						
<\$45,000/year			.18	.00	.22	.03	.15	.03
≥ \$45,000/year			.18	.02	.26	.04	.10	.02

Notes: Source—National Pregnancy Norms Study (2005). 1 = very or extremely embarrassed.

aEmbarrassment differs between adult and teenage parents, p < .001

p < .05

^{**} p < .01 embarrassment compared to all other categories of the row variable.

Mollborn

Summary of Binary Logistic Regression Analyses Predicting Embarrassment at the Prospect of a Nonmarital Pregnancy (N = 807)

Table 2

Model 2
Model 1

Predictor B					l
	SEB	е _в	В	SEB	$e^{\mathbf{B}}$
Teen hypothetical parent = 1 (adult = 0)					
08.		2.23	.82	.22	2.27
Female hypothetical parent = 1 (male = 0)	<u> </u>				
			08	.22	.92
Female a			90.	.22	1.06
Age (years)			.01	.01	1.01
Education level b					
High school degree			11.	.38	1.12
Some college			4.	.39	1.56
At least bachelor's degree			.70	.39	2.01
Race/ethnicity ^c					
African American			-1.34 **	4.	.26
Latino			05	.37	.95
Other, multiracial			23	.45	<i>52.</i>
Household income (\$1000s)			00.	00.	1.00
Lives in a metro area ^{a}			03	.29	.97
$Region^d$					
Northeast			.33	.32	1.39
South			72.	.28	1.31
West			15	.33	98.
Teen age $13 - 17$ in household ^a					2.38
			** 28.	.30	
Marital status ^e					
Single			.30	.28	1.34
Divorced/separated			85	.40	.43

Mollborn

	M	Model 1		V	Model 2	
Predictor	В	SE B	ев	В	SE B	$e^{\mathbf{B}}$
Constant	-1.96 ***	.17		-3.01 ***	.65	
Wald χ^2		13.77***			48.35 ***	
Df		1			18	
Incremental \mathcal{X}^2					36.44**	
df					17	

Note: Source—National Pregnancy Norms Study (2005). Analyses are weighted to be representative of the U.S. population. e^{B} = exponentiated B. Incremental χ^2 compares Model 2 to Model 1. 18% of respondents reported embarrassment at the prospect of a pregnancy.

 $a_1 = yes$, 0 = no. Reference categories:

 $\frac{b}{\text{Less than a high school degree}}$

 $^{C}{\rm Non-Latino~White}$

 d Midwest

 e Married/widowed.

p < .01. * *p* < .05.

*** p < .001 (two-tailed tests)

Table 3

Summary of Ordinal Logistic Regression Analyses Predicting Embarrassment and Hypothetical Resource Provision

Mollborn

	General Help $(N = 804)$	Ielp (<i>N</i> =	: 804)	Living at Home $(N = 802)$	Home (N	= 802)	Babysitting $(N = 804)$	ng (N =	804)	Giving Money ^a $(N = 595)$	oneya (N	= 595)
Predictor	В	SE B	$e^{\mathbf{B}}$	В	SE B	$e^{\mathbf{B}}$	В	SE B	$e^{\mathbf{B}}$	В	SE B	$e^{\mathbf{B}}$
Embarrassed by pregnancy b	53	.20	.59	* 05	.20	.61	82 ***	.21	4.	** 59	.24	.52
Teen hypothetical parent = 1 (adult = 0)	.16	.17	1.17	***89.	.17	1.98	*38	.16	1.46	04	.20	76.
Female hypothetical parent = 1 (male = 0)	.51**	.16	1.67	1.26***	.17	3.54	**84.	.17	1.61	.83***	.19	2.29
Cut point 1	-5.72	99.		-3.95	.49		-4.64	.56		-2.11	.56	
Cut point 2	-4.28	.58		-2.29	.45		-3.40	.49		96	.55	
Cut point 3	-1.00	.50		68	.45		61	.47		.94	.55	
Cut point 4	.32	.50		.52	.45		.85	.48				
Wald χ^2	48.53 ***	*		109.89	* * *		48.01	* *		57.23 ***	* * *	
df.	19			19			19			19		

Note: Source—National Pregnancy Norms Study (2005). Analyses are weighted to be representative of the U.S. population. Higher levels of dependent variables indicate greater willingness to provide resources. Range: 1 – 5 for all resource variables except giving money, which is 1 – 4. e^B = exponentiated B. Control variables included in models are identical to those in Table 2.

 $^{\it a}$ Omitted respondents who answered that they do not have money to give, but would give if possible

 $b_1 = yes$, 0 = no. Reference categories:

^CLess than a high school degree

 $^{d} {\hbox{Non-Latino White}}$

 e Midwest

 f Married/widowed.

p < .05.

p < .01.

** p < .001 (two-tailed tests).