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Consistent and Inconsistent Contraception Among Young Women: Insights from Qualitative Interviews

Qualitative interviews with young women attending community colleges were used to address why women who do not desire pregnancy vary in how consistently they use contraception. Based on our analysis of the women's sexual histories, we argue that five factors are key to promoting or discouraging consistent use of contraception: efficacy (women's ability to put an intention to contracept into practice), the actions and attitudes of male partners, being in a long-term relationship, whether women experience side effects, and misinformation or erroneous

reasoning about pregnancy risk. Variations in how these factors combine at different times in women's lives explain much about their patterns of contraceptive consistency.

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Unintended pregnancies account for almost one half of all U.S. pregnancies and more than 70% of pregnancies outside of marriage (National Campaign to Prevent Teen and Unplanned Pregnancy [NCPTUP], 2012, Table A-3). Unintended pregnancies are especially common among unmarried women between age 18 and 25 with low income who are not college graduates (Boonstra, Gold, Richards, & Finer, 2006; Finer & Henshaw, 2006; Finer & Zolna, 2011; NCPTUP, 2012). Women who have unintended pregnancies typically have their children early, sometimes interrupting schooling (Hoffman, Foster, & Furstenberg, 1993; Klepinger, Lundberg, & Plotnick, 1999). Children born of unintended pregnancies have worse educational, emotional, and health outcomes than those who were intended, even adjusting for their parents' disadvantage (Gipson, Koenig, & Hindin, 2008).

Past research shows that most American women having unintended pregnancies know a fair amount about contraception and use it,

but do so inconsistently (Edin, England, Shafer, & Reed, 2007; Finer & Henshaw, 2006). We do not fully understand why women who do not desire a pregnancy vary in how consistently they use contraception; this study uses data from qualitative interviews with 51 young women to shed light on this issue. The rich narrative data from women's life histories reveal much about contexts that encourage or discourage contraceptive consistency.

CONSISTENT AND INCONSISTENT USE OF CONTRACEPTION: PAST RESEARCH

Past research shows that more than 99% of women have used some contraceptive method (Mosher & Jones, 2010), and, of sexually active women not intending a pregnancy, only 8% used no contraception the previous year (Frost, Singh, & Finer, 2007). Some studies have focused on which women use more effective methods, gauging failure rates of methods by the percentage of women who, given typical use (which may be imperfect and inconsistent), get pregnant using the method for a year. Oral and injectable contraceptives have low failure rates at 7% and 9%, respectively, whereas condoms and withdrawal have higher rates of 17% and 18%, respectively (Jones, Fennell, Higgins, & Blanchard, 2009; Kost, Singh, Vaughan, Trussell, & Bankole, 2008, p. 18). A more basic issue than what method is used is whether women are consistent. Frost et al. (2007) surveyed sexually active women not wanting a pregnancy and found 8% using no method over the last year, and another 15% with a gap of nonuse lasting at least a month (the average gap was 5 months).

Because inconsistent contraception puts women at risk for unintended pregnancy, and our goal was to illuminate what promotes consistency, we reviewed studies about predictors of consistent use. Some research sheds light on this indirectly by ascertaining what factors predict pregnancy among women using a method at least some of the time. These factors may indicate which women are inconsistent in their use, although they could also reflect choosing a riskier method or incorrect use. Kost et al. (2008) found that Hispanic and Black women and women in poverty are more likely to get pregnant when they say they have been using a method at least sometimes. This was also true if they limited analysis to those using just condoms; but

among pill users, there were no differences in pregnancy rates by race or income. Approaching determinants of inconsistency more directly, Frost et al. (2007) found that, among women not intending a pregnancy and using some method, the lower women's education, the more likely they were to have a gap in their use during the previous year. When researchers interview women after a birth and ask whether their conceptions were intended or unintended, much higher proportions are found to be unintended for Blacks than Whites (with Hispanics intermediate), and for women with less education or lower income (Finer & Zolna, 2011; Musick, England, Edgington, & Kangas, 2009). Overall, past research shows that, compared to more advantaged women, disadvantaged women are more inconsistent with contraception, even when they do not want a pregnancy, and that they have more unintended pregnancies.

Research going beyond demographic predictors such as race and income to examine circumstances leading to consistent or inconsistent contraception has offered two groups of explanations: (1) motivations to have a baby or to avoid pregnancy and (2) internal and external barriers to contraception among women not wanting a pregnancy.

Regarding motivations, Moreau, Hall, Trussell, and Barber (2013) showed that prospective measures of how much a woman wants to get pregnant or avoid a pregnancy strongly predict consistency. Research about the link between relationship status and contraception is often interpreted in terms of motivation. Unmarried women contracept less consistently in relationships they report to be more serious (Manlove, Ryan, & Franzetta, 2003); this suggests diminished motivation to avoid pregnancy as a relationship develops more commitment. Frost et al. (2007) showed that cohabiting women are more likely to have a gap in their contraception than unmarried women not living with their sexual partner, which could be because cohabitators have a more committed relationship, leading to more desire for pregnancy. But other aspects of the study by Frost et al. (2007) cast doubt on the interpretation that it is the seriousness rather than the length of the relationship that predicts inconsistency: among women who claimed not to be trying to get pregnant, cohabitators reported more inconsistent use than married women after adjusting for age and number of children, but marriages are

generally more committed than cohabitations. One recent qualitative interview study found few working-class male or female cohabitators wishing for a pregnancy and that those cohabitators who believed they had a future together were more consistent in their contraceptive use, suggesting a desire to avoid starting a family while cohabiting (Sassler, Miller, & Favinger, 2009). Overall, the evidence does not strongly support the idea that differences in consistency by relationship type or length reflect differences in motivation to avoid or have a child. They may simply arise because it is more difficult to be consistent for a long than a short time.

Motivations to avoid pregnancy and have a child are also key to economists' emphasis on opportunity costs. In this view, a woman's motivation to avoid pregnancy depends on how much she would forgo in earnings or other opportunities by having a child (Hotz, Klerman, & Willis, 1997). The higher a woman's anticipated educational attainment and wage, the more she has to lose by having a child, given that having a child may require dropping out of school, quitting a job for a time, or reducing hours on a job. Research has shown that those with higher education have lower fertility, consistent with the theory, but among employed women, the evidence is mixed on whether high wages deter fertility as opportunity cost theory would predict (Heckman & Walker, 1990; Musick et al., 2009).

Motivation to avoid childbearing may also be affected by class-specific cultural values. Some argue that disadvantaged women see it as less crucial to avoid childbearing when they are young and unmarried, not just because their opportunity costs are lower, but also because they see children as their main available sources of meaning (Edin & Kefalas, 2005), or because there is little stigma associated with nonmarital births in their communities (Carlson & England, 2011). Yet the claim that disadvantaged individuals are less motivated to avoid pregnancies, whether because of different opportunity costs or values, is inconsistent with some evidence that disadvantaged women are much more likely to characterize their pregnancies as unintended (Finer & Zolna, 2011). Granting that some women will call pregnancies unintended that were at least ambivalently desired, the evidence also suggests that poor women often contracept inconsistently when they do not want a baby (Edin et al., 2007). To get at why, we examined

the second group of explanations that feature barriers to contraception.

One barrier to contraception is internal: a woman may not want to get pregnant but may lack the efficacy necessary for consistent contraception. England, McClintock, and Shafer (2011) define *efficacy* as the ability to follow through on the necessary behaviors that will help realize one's goals, even when the behaviors are onerous. To keep contraception consistent, a woman needs to go to the doctor, renew her prescription before her supply of pills runs out, and remember to take pills daily. If she is relying on condoms or withdrawal, she may need to be assertive with a partner to keep contraception going. These somewhat burdensome behaviors are necessary for consistency. England et al. (2011) argue that efficacy requires a belief that one can control events through one's actions, and the self-regulation to follow through with the necessary actions even when they are taxing. Some writers speculate that efficacy is lower among disadvantaged individuals because they grow up in more difficult environments, with fewer supervised opportunities to practice routines that pay off in realized goals, and that lower efficacy leads to inconsistent contraception and unintended pregnancies (Edin et al., 2007; England et al., 2011; Musick et al., 2009).

Although efficacy is an internal characteristic, the other barriers to contraceptive consistency are external. An example is male partners who can hurt or help consistent contraception. Fennell's (2011) qualitative interviews with a sample of mostly college graduates revealed that men and women see men as responsible for providing condoms when a couple first starts having sex; they then see women as responsible for using hormonal contraception if the couple decides to stop using condoms, and joint decision making is common later. A qualitative-interview study of working-class cohabiting couples, none of whom was a college graduate, found that communication between partners about contraception was associated with more consistent use (Sassler et al., 2009), and a broad population survey showed that couples that discuss plans for contraception and childbearing are less likely to experience an unintended pregnancy (Kost et al., 2008). Men's attitudes and behaviors sometimes impede contraception when they do not want to use condoms (Anderson, 1999; Edin & Kefalas, 2005; Mosher & Jones, 2010) or when they want a child

(Anderson, 1999; Higgins, Popkin, & Santelli, 2012). Incentives matter too; Huang (2007) found that adolescent males living in states with more stringent child support laws contracepted more consistently with their partners.

The fact that unintended pregnancies are more likely among the poor (Finer & Henshaw, 2006) suggests that cost may be a barrier to contraceptive use. Yet research focusing on poor or near-poor populations has found cost to be a quite minor barrier to contraception (Edin et al., 2007; Silverman, Torres, & Forrest, 1987), but an important barrier to abortion (Morgan & Parnell, 2002).

Dissatisfaction with a contraceptive method is another reason for inconsistent use, and, among users of hormonal methods, this is often a result of perceived side effects. Among women who ever used the pill, 30% stopped due to dissatisfaction; among injectable users it was 43% (Mosher & Jones, 2010). Experiencing unpleasant side effects was the most common reason for stopping contraception because of dissatisfaction (Littlejohn, 2012). Among women who had ever used the pill and stopped, 64% stopped due to perceived side effects, and an additional 13% stopped because they were worried about them (Mosher & Jones, 2010). Stopping a method and starting another is associated with increased risk of pregnancy because often there is a period between methods when women are at risk of pregnancy (Frost et al., 2007).

A further obstacle to consistent use of contraception is misinformation about contraception or fertility or erroneous reasoning from one's information. One study found that 90% of young adults viewed themselves to have all the information they needed to protect themselves from pregnancies, but questions about specific methods revealed serious knowledge deficiencies (Kaye, Sullentrop, & Sloup, 2009). Polis and Zabin (2012) found that 19% of women age 19 to 29 thought they might be infertile, but individuals are often incorrect about their own infertility (Chandra, Martinez, Mosher, Abma, & Jones, 2005; Kaye et al., 2009).

THE CURRENT STUDY

Past research has identified a number of factors that encourage or discourage consistency in contraception among women not wanting to get pregnant. To further understand the contexts in

which women become more or less consistent in contraception, we drew on qualitative interview data from 51 unmarried women that included complete sexual histories with detailed narratives on contraceptive use with each of their sexual partners. Our data allowed us to examine patterns of more or less consistent use of contraception for individual women over time and across partners. We examined how factors identified by previous research combine to provide the context for processes leading to more or less consistent use of contraception.

METHOD

Our data came from the College and Personal Life Study. During 2009 and 2010, we conducted qualitative, in-depth interviews with 51 never-married women who were mostly in their early twenties (the range was 20–29). The women were full- or part-time students at two community colleges in the San Francisco Bay Area. We focused on community colleges for recruiting our sample because they are disproportionately populated by low-income and minority students (Provasnik & Planty, 2008), who, as mentioned above, are at high risk for inconsistent contraception. Few community college students are likely to get bachelor's degrees; more than 80% aspire to do so, but a major 5-year follow-up study found that only 6% had done so (U.S. Department of Education, 2011, Tables 1-A and 2-A). U.S. community colleges enrolled 12% of all 18- to 24-year-olds in 2008 (Taylor, Fry, Wang, Docterman, & Velasco, 2009), and community college students total more than 6 million, almost one half of all undergraduates (American Association of Community Colleges, 2013, figures for 2005), so they are an accessible and large population to potentially target for interventions to improve the consistency of contraception.

One half of our interviews were with students from Laney College in downtown Oakland, and the remainder with students from Foothill College in Los Altos, a Silicon Valley suburb. We posted flyers on each campus to recruit, promising \$50 for an interview. Using theoretical sampling to make it likely that a number of our respondents would have had unintended, nonmarital conceptions, about one half our sample at each school was recruited from a flyer stating that respondents must have been pregnant at least once, "whether or not

Table 1. *Quantitative Indicators for the Full Sample and Each of the Three Contraceptive Consistency Groups*

	(Percent, Mean, or Median)			
	Full sample	Always consistent	Mostly consistent	Sometimes consistent
Race/ethnicity				
White	43%	37%	42%	54%
Black	27%	5%	47%	31%
Latina	16%	32%	0%	15%
Asian	14%	26%	11%	0%
Age at interview (mean)	23	23	23	24
Full-time student at interview	68%	67%	63%	77%
Employment status at interview				
Not working	52%	50%	68%	31%
Works full-time	22%	22%	11%	38%
Works part-time	26%	28%	21%	31%
Plans 4-year college degree	63%	95%	53%	31%
Living arrangement at interview				
Parents	45%	53%	58%	15%
Romantic Partner	8%	0%	0%	31%
Other(s)	47%	47%	42%	54%
Age at first intercourse (median)	17	18	16	15
Number of sexual partners (median) ^a	5	2	6	5
% partners with whom she wanted a baby during the partnership (mean)	10%	12%	6%	12%
Ever had an abortion	51%	11%	79%	69%
Ever had a birth	35%	11%	42%	62%
High or medium efficacy	57%	74%	68%	15%
Number of partnerships at least 6 months long (mean)	2.0	1.3	2.3	2.5
Total months in sexual partnerships (mean)	58	32	63	88
Partners' helpfulness on contraception (mean %)				
Obstructive	17%	6%	15%	34%
Neutral	70%	77%	78%	48%
Helpful	14%	17%	7%	18%
Ever experienced side effects	57%	37%	68%	69%
Would conclude infertile after 6 months unprotected sex	40%	20%	40%	60%
% of full sample	100%	37%	37%	25%
<i>N</i>	51	19	19	13

^a Range of # of sexual partners is 1–19.

you had the baby.” The other one half did not require a prior pregnancy, only that the woman had had “sex with a man.” All flyers stated that respondents had to be full- or part-time students at the college, never married, and between ages 20 and 29. Respondents’ background characteristics are summarized in Table 1.

Procedure

Most of the interviews were done by three of the authors, all of whom are women. Most interviews took place on the respondent’s

campus, in a common area or quiet room, and lasted between 2 and 3 hours. All were audio-recorded and transcribed verbatim. We used open-ended questions and made interviews resemble conversations as much as possible. All interviews covered the same predetermined topics, but interviewers adjusted wording, question order, or probes to best capture each woman’s story. We began by asking the respondent to describe her daily routine, living situation, and aspirations for family, education, and career. The centerpiece of the interview was a detailed account of the woman’s sexual history, starting

with her first partner. For each of the woman's male sexual partners we asked about the history and character of the relationship, their practices and communication regarding contraception, any desire for pregnancy, and circumstances surrounding pregnancy if one occurred. The first time we asked about contraception, we explained that using contraception meant doing anything to prevent pregnancy, such as using the pill, a contraceptive injection, an IUD, condoms, other barrier methods, withdrawal, fertility awareness (having sex only certain days of the woman's cycle), or Plan B.

Coding and Data Analysis

Our initial stage of qualitative coding entailed pasting sections of the interview transcripts into NVivo (ver. 8) software under topical field titles. Three authors created a qualitative codebook while working together to code several interview transcripts thematically, determining topics and decision rules. The codebook was used by a small group of trained undergraduate and graduate students to code the transcripts into a database of topical fields.

Working from these topical fields, we engaged in the three types of qualitative coding discussed by Strauss and Corbin (1990): open, axial, and selective. First, we open coded the portions of transcripts centering on respondents' sexual encounters, noting themes related to women's motivation to avoid pregnancy with each partner, use or nonuse of contraception, and anything that seemed to help or impede contraception. The process of open coding resulted in five categories or "factors" that seemed important in whether respondents used contraception consistently when they had no desire for pregnancy with a given partner. Our next step was axial coding, where we looked for linkages between the five factors, and between each factor and contraceptive consistency with particular partners. Finally, we moved on to selective coding to develop a theory for answering our key question of why women who do not desire a pregnancy vary in how consistently they use contraception. At this stage, we also considered long-term patterns, using a case study approach to group respondents based on the consistency of their contraceptive use over their entire sexual history, so as to identify patterns linked to more or less consistent use.

To group individuals by their more or less consistent use of contraception, we defined *using contraception* as doing anything that is listed on Planned Parenthood's website as such. We used the information on the website to define and assess *consistent* use for a particular method. For example, if a woman described taking birth control pills but skipping several without using a backup method, we called this inconsistent use with the given partner. If she used a condom, withdrawal, or Plan B when skipping pills, we called this consistent.

We grouped women into three consistency categories based on these long-term patterns: those who used contraception every single time with 100% of their partners (*always*), those who used contraception all of the time with at least 67% but not all their partners (*mostly*), and those who used contraception all of the time with fewer than 67% of their partners (*sometimes*). In addition to showing statistics on background variables for the whole sample, Table 1 shows them separately for the always, mostly, and sometimes consistent groups. One statistic in Table 1 points to the appropriateness of our sample for studying whether women contracept consistently "when they don't want a pregnancy": the average percentage of women's partners with whom they ever wanted a pregnancy during the time seeing the partner is only 10%, and it is no higher for the least than the most consistent group. As part of our case study analysis, for each woman, we created simple quantitative codes for indicators of each of the five factors we identified and on a few other variables. Table 1 shows the percent, mean, or median on each indicator for each of the three contraceptive consistency groups, which allows us to compare the presence of each factor between the three groups.

RESULTS

Influences on Consistent Contraception

Our analysis revealed that five factors were key to whether contraception was used consistently when women did not desire a pregnancy: efficacy, male partners' attitudes and behaviors, how long the relationship was, side effects from hormonal methods, and erroneous reasoning or misinformation about fertility.

Efficacy. As discussed previously, we use the term *efficacy* to refer to an individual's ability

to undertake the sometimes onerous behaviors necessary for consistent contraception. We found two aspects of efficacy that were important influences in whether contraception was used consistently: whether the woman was assertive with her male partner, and whether she was organized and disciplined enough to carry out the routines necessary for obtaining and using contraceptives.

For women using condoms or withdrawal, an important element of efficacy is the extent to which they are assertive with male partners, because these methods require men's cooperation. Male partners varied in whether they were proactive, passive, or resistant to condoms or withdrawal; if a male partner was passive or resistant to condoms or withdrawal, she needed to be assertive to negotiate use. For example, Bella, a 21-year-old white woman who wants to get a BA but is unsure of her career plans, has always been assertive with her partners regarding contraception. She told her first partner, "Put it on. I've never been very timid, even in those situations. It's kind of like, what do I have to lose? Okay, I'll sleep by myself tonight." Yuko, who is Asian, age 27, with goals of applying to veterinary school, told her boyfriend, "Hey, let's use condoms. If I get pregnant, I'm in trouble, you're in trouble" and threatened to break up with him when he once tried to have unprotected sex. Both women show high levels of efficacy in being assertive with partners.

Another important aspect of efficacy is maintaining routines needed for contraception. For hormonal users, this involves remembering to take the pill at the same time every day, refill prescriptions on time, and go to the clinic to get new prescriptions. Katie, a White 22-year-old studying to get a 2-year degree in dental hygiene, takes steps to ensure she maintains contraceptive routines. She says, "I set my alarm every day to take the pill ... I was like 'OK, I really don't want a baby, ...' So I was on top of it, like I forced myself." This dimension of efficacy appeared to interact with women's external support; those who had more material and social support for contraception, such as a parent, friend, or partner to provide transportation to a clinic, needed less efficacy to maintain contraception than women with fewer such resources. Katie's efficacy at taking the pill, for example, was likely helped along by the fact that her mother initially organized her medical appointment to obtain the pill years prior.

Over time, efficacy generally increased with age and the independence of adulthood. Girls who were sexually active in high school and did not want their parents to know often found it difficult to secretly get to the clinic. These young women needed especially high levels of efficacy to obtain pills. For example, Shanice, a 27-year-old Black woman enrolled in a cosmetology program, showed high levels of efficacy when she described going to a clinic on her own to get on the pill when she was age 14 before she and her partner had sex the first time. In addition to the pill, they also used condoms, because her partner wanted to, and "just in case something happened with my pills."

In contrast, Heather is a 20-year-old White woman with one child who wants to be a nurse. She described a period of low efficacy with one partner. They began using condoms, but once she went on the pill, their condom use lapsed and she forgot to take the pills. She says, "to me the pill was a huge hassle ... like remembering it every day, it was way too much work." Looking back on that relationship, she says, "It was like very inconsistent ... like we kind of just did whatever."

Efficacy can be reduced by drug and alcohol use. Women reported that inebriation or drug use rendered them less able to focus on contraception. For example, Sonya's contraception varied depending on whether she was using drugs. She is a White 24-year-old who aspires to get a BA and run a bed and breakfast. She used condoms consistently with her first partner before using drugs. She says, "I think I brought it up because it's important ... it was my first time and I didn't want to get pregnant or get anything." But after she started using drugs, she used condoms only some of the time and took the pill inconsistently with her second partner. Reflecting back, she says, "I was really bad about it because I was doing a lot of drugs then." Caroline, White, age 21, with vague career and educational goals, was drunk or high during "all" of her sexual encounters. Regarding one partner, she says, "I really don't think we used [a condom]; we were not careful at all ... that was the time when my addiction was really, really bad.... I was just like, 'whatever'." Women who attributed inconsistency to alcohol and drug use were generally heavy users who characterized their substance use as a problem.

Male partners. The behaviors and attitudes of male partners toward contraception can have positive and negative influences on consistency. Men sometimes have a positive influence on the contraceptive consistency of women who, left to their own devices, were lax about contraception. Male partners' resistance to using contraceptives, when it occurs, is mostly limited to condoms and is about insistence on pleasure and convenience. Few men resisted contraception because they wanted a pregnancy.

Male partners are a positive influence on consistency in several ways when they have a strong desire to prevent pregnancy or sexually transmitted infections (STIs) and have high efficacy themselves. In casual encounters, such men carry condoms and use them without having to be asked. In relationships, some encourage their partners to use a specific method, usually hormonal methods like the pill, patch, or shot, that they think will work best given their sense of their partner's efficacy limits. Some provide information, transportation to the clinic, funds, or reminders. They may insist on using condoms or withdrawal in addition to a partner's hormonal method, because of concern about their partners' consistency in taking the pill. Respondents were usually pleased when their partners offered to share the burden of contraception, seeing it as evidence of care.

Grace, a 22-year-old Asian woman, is taking classes to explore her options. She had a partner who was a positive influence on her consistency with contraception and compensated for her own low efficacy. She "thinks" she was on the pill when she started seeing him, but is not sure, as she was "spending more time smoking pot and drinking." At this point, having had an abortion, she said condom use was a "no brainer . . . especially with somebody that I'm not really in a formal relationship with." But, she says,

I remember at one point I said something like, "you should take the condom off," something stupid like that. And he was like, "well I don't want any babies." And I was like "I guess you're right," but to me I just didn't like the feeling of it.

Clearly, it was his motivation and efficacy, more than hers, which ensured condom use for them.

Jacinda is a Black 23-year-old hoping to become a social worker. She needed reminders to consistently use hormonal contraception and was not consistent with partners who left contraception up to her. Her second partner is

a good example of how men can help ensure consistent contraception. He used condoms initially and then did research on her hormonal options.

He was like, "well there's the pill and you gotta take that every day and . . . you're probably gonna forget" . . . so he told me what my options were and I went with the shot because it was the one that required the least work.

She says,

he was like insistent about it . . . I didn't really think much about it either way at first. But then when I started taking the shot I just felt like it was the regular thing to do . . . It was his idea but I was in agreeance.

With the help of his reminders, she consistently used the shot for 3 years, but her use lapsed during her next relationship, leading to a pregnancy that was "so unplanned."

Jessica, a 20-year-old White woman who wants to get a BA and work in social services, was consistent with her first three partners, who took responsibility for condom use, but then had a hard time with a partner resistant to condom use. She says the first three partners "just whipped it [the condom] out," without her having to do anything. Her fourth partner, however, "says he doesn't like them." The combination of his dislike of condoms and her difficulty being assertive led to a long period of inconsistency. However, after two unplanned pregnancies and abortions with him, she became more insistent. She says, "Well now I make him use condoms. But then it means we have sex a lot less because he hates it. . . . Like with the other guys, they always had it [condoms], and with him, he didn't so it just happened."

Relationship context. Respondents had sex in a variety of contexts, from one-time encounters to casual liaisons that lasted a few months to long-term relationships. Although some respondents only had intercourse in relationships, most women report a mix of relationships and casual encounters. Respondents used contraception more consistently during one-time and relatively short casual encounters than during longer term relationships. The most common setting for one-time or casual encounters was at or after a party where alcohol and/or drugs were available, similar to the "hookup" culture that has been

described for 4-year college women (England, Shafer, & Fogarty, 2008). Respondents report a norm of condom use during one-time or casual encounters, and an expectation that men should have condoms with them. Thus, whether partners had condoms with them was important for consistency in one-time and short encounters. Reporting at least mild use of alcohol and/or drugs preceding casual encounters was common. Although we discussed earlier that we found heavy substance use to impede contraceptive consistency, we did not find moderate alcohol or drug use to do so.

The central way we found relationships to be important in contraceptive consistency was in the way they linked to method type and thus to risk of experiencing side effects. We found that couples often switched away from condoms to hormonal methods once a relationship was going for a few months. Although hormonal methods are generally more effective, inconsistency resulted if a woman had low efficacy using the method or experienced side effects.

Side effects. We found that many women experience what they view as intolerable side effects from hormonal methods and stop using them as a result. We cannot say whether the symptoms they described were actually due to hormonal contraception, but it is clear their attribution of the symptoms to contraception often led them to discontinue use. This led to lapses in contraceptive use as women searched for a different, more agreeable hormonal method without consistently using condoms or withdrawal in the interim, or shifted to a strategy of condoms or withdrawal that their partners were not willing to be consistent with. Respondents reported the most side effects from pills and “the shot” (the Depo Provera injection). The most common side effects reported for pills were headaches, nausea, weight gain, and moodiness, and for the shot persistent menstrual-like bleeding, weight gain, moodiness, and hair loss.

Evie, a 23-year-old White woman hoping to become a physician’s assistant, experienced side effects from multiple methods of contraception, leading her on a quest to find an agreeable method. She switched from pills to the shot, because she thought it would be “easier.” Once she was on the shot, “they realized I was allergic to all the hormones in birth control so I had to stop taking it . . . later I had intercourse with

a condom and I broke out in hives, so I was allergic to latex . . . so I got an IUD.” She later removed the IUD because “I was having really bad cramping and a lot of blood.” Six months later, she got another IUD that has not produced side effects.

Side effects contributed to Laila’s lapses in using the shot, which resulted in two pregnancies and abortions with her first partner. She is a Black 22-year-old, pursuing her AA degree. She and her first partner began their relationship with inconsistent condom use, and she went on the shot after she had an abortion, choosing the shot because “I knew I couldn’t remember to take pills everyday.” She says that she “hated” the shot because she gained “a lot of weight” and therefore let more than the recommended 3 months pass between appointments. Although Laila did not want a pregnancy, she did not insist on using condoms. During these periods, her boyfriend agreed to use withdrawal but did not.

Misinformation and erroneous reasoning. A number of respondents estimate their risk of pregnancy based on faulty inferences or incorrect information. The most common example is when a respondent starts having unprotected sex, does not get pregnant after a few months, and then interprets the lack of pregnancy as evidence that a future pregnancy is unlikely to occur. This is a faulty inference because a fertile woman will often take longer than this to get pregnant (Mayo Clinic, 2012). In a few cases, messages in sex education intended to encourage regular contraception backfired; women had heard that pregnancy is very likely if you have unprotected sex regularly for even a short period, so when no pregnancy occurred they figured one of the partners was infertile.

For example, Rachel, a 26-year-old White woman with vague career goals, says that after having a child, she was inconsistent with contraception with her next partner, and used nothing with the partner after that. Over a period of several months, she said “I just figured I couldn’t get pregnant because it’s already been so long and I haven’t become pregnant again.” Maleyna, a 28-year-old Black woman, says she wants to be a doctor, but seems misinformed about what that would take. She used condoms inconsistently with her second partner and never got pregnant. She and her next partner started using condoms but soon stopped. She says,

Like when we first started using them, I was like, “oh what if I get pregnant.” . . . You think like the first time you had sex without a condom, whatever, you were going to get pregnant . . . then you don’t get pregnant for so long, you stop thinking about it. . . . I started thinking like maybe I’m one of those people that don’t get pregnant.

In other cases, misinterpretation of information about the duration of effects of particular methods was the problem. One respondent read that if she wanted to get pregnant after being on the shot it could take up to 18 months, and she incorrectly inferred that she was safe for this amount of time without using anything.

How the Factors Combined Within a Partnership

Some of the factors, such as the length of the relationship, whether the partner hurt or helped consistent contraception, and whether side effects were experienced, varied from partner to partner. These factors sometimes combined in given partnerships in ways that seemed key to which partners women were consistent with. For example, we found that the way relationship context combined with side effects was important for whether the side effects had any consequence for contraceptive consistency. We noted earlier that respondents tended to use condoms during one-time or short-term partnerships, and hormonal methods when they were together longer in a relationship. Because hormonal methods are the methods responsible for most side effects, this means that women were usually in relationships when they experienced side effects: in that case quitting a method due to side effects meant stopping it just when they were having more regular sex. Women who used hormonal methods when not in relationships also stopped using them due to side effects, but they had periods of sexual inactivity, and if they had a casual liaison, the norm of condom use during one-time and short-term encounters made it likely that their casual partners would bring and use condoms; thus, their stopping often did not result in unprotected sex. We also found that relationships magnified the importance of any erroneous reasoning or misinformation about pregnancy risk because any such errors led to extended risk taking over a longer period of regular sex. Women in relationships who falsely reasoned they could not become pregnant were at much greater risk

for unintended pregnancy than those having intercourse less frequently in occasional casual liaisons.

Side effects from hormonal methods also combined with efficacy and the attitudes and actions of the male partner. The fact that the couple was using a hormonal method in the first place was often because one of them—usually but not always the man—disliked condoms. The decision to stop using one hormonal method and the subsequent need to organize the start of a new one increased the level of efficacy one or both partners needed to ensure consistent contraception. Could she comply with the necessary routines for starting a new method? The male partner’s efficacy could be very important in this scenario—did he follow through on a stated intent to “pull out” or use condoms until she got the new method in place for long enough to be effective? Did she need to be assertive to get him to do so? In sum, this particular combination of factors (experiencing side effects while being in a relationship with a partner who dislikes condoms) was linked to inconsistency, but it could be overridden by a cooperative and efficacious partner or a woman’s own efficacy.

Links Between the Factors and Long-Term Patterns of Contraceptive Consistency

Our analysis revealed the important factors for consistent contraception with a given partner, but we also observed that some women were more consistent than others in their use of contraception over their entire sexual history. To investigate these longer term patterns, we grouped respondents into three categories based on how consistently they used contraception over their entire sexual history, as explained previously. As Table 1 shows, respondents in the “always” group, who used contraception every time they had sex, were 37% of the sample ($n = 19$); the “mostly” group, who were consistent with at least 67% but not all of their partners, make up another 37% ($n = 19$) of the sample; and 25% of the sample was in the least consistent “sometimes” group ($n = 13$), consistent with less than 67% of their partners.

Associations between quantitative indicators for factors and consistency. At the bottom of Table 1 are indicators we quantified relevant to each of the five factors that our previously discussed narrative analysis showed to be

relevant. The group differences provide further evidence of links between the factors and contraceptive consistency. We coded each woman as having either high, medium, or low efficacy. These codings were based on the women's own characterizations of whether they had problems being organized, disciplined, or assertive about contraception (e.g., if they forgot to take pills or make appointments, or wanted partners to use condoms but were not assertive about forcing the issue when they did not volunteer), and also our assessment of their efficacy on other issues; for example, whether they called themselves procrastinators regarding school work. Of those in the always consistent group, we coded 74% as having high or medium efficacy, compared to 68% in the mostly, and 15% in the sometimes consistent group.

We coded each male partner as obstructive, neutral (he just went along with whatever she wanted), or helpful (if he provided transportation, information, or funds for procuring contraception, was diligent about providing and using condoms or withdrawing, or provided reminders to help her remember to take pills or make appointments to get contraceptives). Women who were always consistent only averaged 6% of their partners being obstructive, compared to 15% in the mostly consistent group, and 34% in the sometimes consistent group. However, the women who were always consistent did not have a higher percent of helpful partners (17%) than did women in the sometimes consistent group (18%); but they had fewer obstructive and more neutral partners.

We discussed previously that couples were more inconsistent in longer term relationships than in short, casual liaisons. We asked women how long they were seeing each of their partners and recorded this in months (or fractions thereof). For each woman, we then added up the total number of months she had been in sexual partnerships, including all partners to date. Table 1 shows that the average total time in partnerships was 32 months for those who were always consistent, 63 for those who were mostly consistent, and 88 for those who were sometimes consistent. Table 1 also shows that the average number of partnerships of at least 6 months women had been in was 1.3 for the always consistent group, 2.3 for the mostly consistent group, and 2.5 for the sometimes consistent group. This shows that those who spend more time in relationships of some duration are less consistent.

We created an indicator for each woman for whether she ever experienced side effects. About two thirds of each of the two lower consistency groups experienced side effects, compared to only 37% of those in the most consistent group; this suggests a role for side effects in prompting gaps in contraception. Regarding incorrect information or inferences, our narrative analysis suggested that some women erroneously inferred that they could not get pregnant after they had been unprotected for a time but not gotten pregnant; this then encouraged them to continue being at risk. In our interviews we asked each woman whether, if someone had had unprotected sex for 6 months and had not gotten pregnant, she would think they were infertile. Such a belief is incorrect, as it takes many women longer than that to get pregnant. Only 20% of women who were always consistent believed this, compared with 40% of those who were mostly and 60% of those who were sometimes consistent.

How factors combine to create long-term patterns of consistency. Laura's story illustrates how multiple factors combine to encourage consistent contraception. A 26-year-old Latina who wants to pursue a BA, she has used either condoms or the pill consistently with each of her six sexual partners. Laura's consistency is due to a combination of favorable circumstances, including male partners who want to use contraception, a lack of side effects, and her own efficacy. She began using condoms with her first partner. She says, "I think if I hadn't brought it up, I don't think he would have used a condom . . . then afterwards, he was the one who mentioned, 'Oh, yeah, get on the pill.'" By her telling, Laura's efficacy was important for her initial condom use, but she also had a compliant partner who was willing to use condoms and also encouraged her to get on the pill. Like many, she switched to a hormonal method when it became a relationship. She did not experience side effects. She stopped using hormonal contraception when this relationship ended and used condoms with her next three partners, all casual short-term encounters. With her fifth partner, a relationship, she started out using condoms consistently, and then switched to oral contraceptives at his request, discontinuing pill use after they broke up. She has recently started a new relationship and had an appointment to get back on oral contraceptives at the time of our interview.

Meanwhile, they used condoms and occasional withdrawal.

In contrast, Shanice, mentioned earlier, has experienced more obstacles to consistent contraception over her sexual history. She is a 27-year-old Black woman studying cosmetology who showed a high level of efficacy when she got on the pill at 14 with her first partner. She later went off because she was getting headaches, which she attributed to the pills. Three months later, she went on the patch. In between, they used condoms. Shanice and her second partner used the patch and condoms at first but then stopped being consistent. She got pregnant about 3 months into this relationship, which was serious and lasted a few years. She attributes their inconsistency to a mix of side effects, the negative attitude of her partner toward condoms, and her own lack of efficacy in maintaining contraception. She says,

[the patch] left a burn mark so I remember taking it off and I was supposed to be starting a different method . . . I was going to go with the depo shot . . . but I was like ‘I’m kind of scared to get that’ and he just didn’t want to wear a condom.

She says that her partner gave her a hassle about using condoms every time she brought it up. She said that he was “‘lazy, and that he really didn’t want to get up to get it [condom]. It was like the bed is here, but his dresser is on the other side of the room, so he has to get up and go grab it.’” Sometimes, she said, “‘I just didn’t want to go through the argument.’” After her abortion, still with the same partner, she began using the shot consistently and has continued to do so with subsequent partners.

DISCUSSION

Rates of unintended pregnancy are high for young women in the United States, and a proximate cause is often inconsistent contraception. We have attempted to explain why some women are more consistent with contraception than others when they do not desire a pregnancy. Based on our analysis of qualitative interview data, we found that whether contraception is used consistently is affected by individual efficacy, the attitudes and actions of male partners toward contraception, how long the relationship is, the presence or absence of side effects, and whether the individual reasons correctly from accurate

information about pregnancy risk. The factors are important individually and in combination. Many of those who managed consistent contraception had several factors aligned; they had good efficacy, their partners were not obstructive to contraception, they had little trouble with side effects, and they did not harbor incorrect beliefs about when they were at risk of pregnancy. In contrast, other combinations of factors were detrimental to consistent contraception. Low efficacy combined with a male partner who disliked condoms was a particularly bad combination; experiencing side effects while in a relationship often led to inconsistency as well. Yet a helpful male partner could counter his partner’s low efficacy or misinformation.

Although each of the five factors that we identified as important to consistent contraception have been identified in prior research, our findings add to our understanding of how the factors operate. Our finding that women’s efficacy is associated with consistent contraception affirms what had been largely a speculation by Musick et al. (2009) and England et al. (2011; with indirect evidence provided by Edin et al., 2007).

Like past authors, we found that male partners were sometimes important. In the extremely disadvantaged populations studied by Anderson (1999) and Edin and Kefalas (2005), some men discouraged contraception because they wanted a pregnancy; that was rare in our sample, where men’s obstruction was generally based on their feeling that using condoms or withdrawal was inconvenient or interfered with their sexual pleasure. Men’s unwillingness to use condoms or withdrawal was especially strong after the couple had been seeing each other for a while. Like Fennell (2011), we found that in one-time encounters or short liaisons the assumption that it is “‘men’s job” to bring a condom, and this sense of responsibility by men, when present, aided consistency, making women’s efficacy less crucial. Past studies have found that couples are more consistent about contraception if they communicate about it (Kost et al., 2008; Sassler et al., 2009), and we too found that some of our consistent contraceptors had such discussions. However, we found that what made the biggest difference was men’s active help with contraception—providing information, reminders, or transportation, and that this was especially important for women whose own efficacy was low.

Our findings reaffirm conclusions of prior research (Manlove et al., 2003) that link longer relationships to contraceptive inconsistency. We also found respondents to be more consistent with contraception during short-term encounters than in longer relationships; however, this may simply be because it is harder to be consistent for a longer time. We also confirm prior findings that many women discontinue use of the relatively more effective hormonal contraceptives due to unpleasant side effects (Frost et al., 2007; Littlejohn, 2012; Mosher & Jones, 2010), as well as findings that misinformation about one's own risk of pregnancy and fertility is common and can lead to nonuse due to an incorrect belief that one cannot get pregnant (Chandra et al., 2005; Kaye et al., 2009; Polis & Zabin, 2012).

Although we included questions about cost as a barrier to use, virtually every one of our respondents who did not have health insurance told us they had ready access to low-cost contraception, despite the fact that neither community college provided free or inexpensive contraception. This echoes previous findings that cost is currently a relatively minor barrier to access (Edin et al., 2007; Silverman et al., 1987). Many of our respondents used Planned Parenthood, and we note that if recent political threats to Planned Parenthood or to coverage of contraception by the new national health insurance were to be successful, many women's access to low-cost contraception would be seriously compromised. We found that complaints about access to clinics providing low-cost contraceptives were largely limited to reports of women's inability to find transportation during high school, sometimes exacerbated by fear of telling their parents they were having sex.

This study has several limitations. Our conclusions are based on interviews with a relatively small, nonrepresentative sample of 51 community college students in their twenties drawn from one fairly liberal metropolitan area of the United States. We might have found poor women to have more problems getting contraceptives in areas without a nearby Planned Parenthood clinic. The interviews entailed retrospective reporting, which is subject to recall bias, and questions about behavior that may lead to social desirability bias in answers. Nonetheless, most respondents seemed to remember their histories in substantial detail and to be quite candid. At a minimum, our findings are richly suggestive.

Our results have implications for practitioners wanting to reduce unintended pregnancies, and for researchers seeking a better understanding of them. We found that a woman's efficacy influences whether she contracept consistently, and sometimes her partner's efficacy is important as well. Yet it is not clear what creates these high levels of organization, discipline, and assertiveness. Whether and how these characteristics are rooted in experiences largely determined by social class is an important topic for future research. In the meantime, a more practical strategy is to try to reduce the influence of efficacy on consistent contraception. For those whose problem is low efficacy in remembering to schedule appointments on time, provision of prescriptions for more months of oral contraceptives so as to minimize needed follow-up clinic visits would help. Encouraging methods like the IUD, which takes no efficacy to maintain once it is in place, would render problems remembering to take the pill irrelevant.

Male partners may be the low-hanging fruit in thinking about ways to increase contraceptive consistency, and another way to potentially make some women's individual efficacy less consequential. Encouraging men to be more proactive about contraception, either through positive ("share the burden") and/or negative (STIs, child support) messages, if effective, would make consistency less dependent on women's efficacy.

We found that side effects from hormonal contraceptives are an important reason for inconsistent contraception. Whether they are real or not, the perception of side effects causes many to discontinue use. This suggests that practitioners should stress the importance of getting another method with fewer side effects in place before quitting the old one. This is especially important for women in relationships who are having regular sex. To the extent that the side effects are genuinely results of hormonal contraception, there is a need to develop better methods with fewer side effects. It is also important for sex educators and health care professionals to impart the message that one cannot infer that either partner is infertile from just a few months of unprotected sex without a pregnancy.

Finally, practitioners should recognize that consistent contraception depends on an array of circumstances and factors that are subject to change over time. One partner may cooperate

with condom use, whereas another may not; one partner may help a woman with low efficacy to remember to take her pills, while in another partnership, she may be on her own; or she may start experiencing side effects. Practitioners should realize that many of the issues that impede consistency are social as much as strictly medical, and seek as much information about the woman's situation as possible to recommend methods and strategies that help women contracept consistently.

REFERENCES

- American Association of Community Colleges. (2013). *Students at community colleges*. Retrieved from <http://www.aacc.nche.edu/AboutCC/Trends/Pages/studentsatcommunitycolleges.aspx>
- Anderson, E. (1999). *Code of the street: Decency, violence and the moral life of the inner city*. New York: W.W. Norton.
- Boonstra, H. D., Gold, R. B., Richards, C. L., & Finer, L. B. (2006). *Abortion in women's lives*. New York: Guttmacher Institute.
- Carlson, M., & England, P. (2011). Social class and family patterns in the United States. In M. Carlson & P. England (Eds.), *Social class and changing families in an unequal America* (pp. 1–20). Stanford, CA: Stanford University Press.
- Chandra, A., Martinez, G. M., Mosher, W. D., Abma, J. C., & Jones, J. (2005). *Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 national survey of family growth*. Retrieved from http://www.cdc.gov/nchs/data/series/sr_23/sr23_025.pdf
- Edin, K., England, P., Shafer, E. F., & Reed, J. (2007). Forming fragile families: Was the baby planned, unplanned, or in between. In K. Edin & P. England (Eds.), *Unmarried couples with children* (pp. 25–54). New York: Russell Sage Foundation.
- Edin, K., & Kefalas, M. (2005). *Promises I can keep: Why poor women put motherhood before marriage*. Berkeley: University of California Press.
- England, P., McClintock, E. A., & Shafer, E. F. (2011). Birth control use and early, unintended births: Evidence for a class gradient. In M. Carlson & P. England (Eds.), *Social class and changing families in an unequal America* (pp. 21–49). Stanford, CA: Stanford University Press.
- England, P., Shafer, E. F., & Fogarty, A. (2008). Hooking up and forming romantic relationships on today's college campuses. In M. Kimmel & A. Aronson (Eds.), *The gendered society reader* (pp. 531–547). New York: Oxford University Press.
- Fennell, J. L. (2011). Men bring condoms, women take pills: Men's and women's roles in contraceptive decision making. *Gender & Society, 25*, 469–521.
- Finer, L. B., & Henshaw, S. K. (2006). Disparities in rates of unintended pregnancy in the United States, 1994–2001. *Perspectives on Sexual and Reproductive Health, 39*, 48–55.
- Finer, L. B., & Zolna, M. (2011). Unintended pregnancy in the United States: Incidence and disparities, 2006. *Contraception, 84*, 478–485.
- Frost, J. J., Singh, S., & Finer, L. B. (2007). Factors associated with contraceptive use and nonuse, United States, 2004. *Perspectives on Sexual and Reproductive Health, 39*(2), 90–99.
- Gipson, J. D., Koehnig, M. A., & Hindin, M. J. (2008). The effects of unintended pregnancy on infant, child, and parental health: A review of the literature. *Studies in Family Planning, 39*, 18–38.
- Heckman, J. J., & Walker, J. R. (1990). The relationship between wages and income and the timing and spacing of births: Evidence from Swedish longitudinal data. *Econometrica, 58*, 1411–1441.
- Higgins, J. A., Popkin, R. A., & Santelli, J. S. (2012). Pregnancy ambivalence and contraceptive use among young adults in the United States. *Perspectives on Sexual and Reproductive Health, 44*, 236–243.
- Hoffman, S., Foster, E. M., & Furstenberg, F. (1993). Reevaluating the costs of teenage childbearing. *Demography, 30*, 1–14.
- Hotz, J. V., Klerman, J. A., & Willis, R. J. (1997). The economics of fertility in developed countries. In M. R. Rosenzweig & O. Stark (Eds.), *Handbook of population and family economics* (pp. 275–342). Amsterdam, The Netherlands: North-Holland Elsevier Press.
- Huang, C. (2007). Child support enforcement and sexual activity of male adolescents. *Journal of Marriage and Family, 69*(3), 763–777.
- Jones, R. K., Fennell, J., Higgins, J. A., & Blanchard, K. (2009) Better than nothing or savvy risk-reduction practice? The importance of withdrawal. *Contraception, 79*, 407–410.
- Kaye, K., Suellentrop, K., & Sloup, C. (2009). *The fog zone: How misperceptions, magical thinking, and ambivalence put young adults at risk for unplanned pregnancy*. Washington, DC: National Campaign to Prevent Teen and Unplanned Pregnancy.
- Klepinger, D., Lundberg, S., & Plotnick, R. (1999). How does adolescent fertility affect the human capital and wages of young women? *Journal of Human Resources, 34*, 421–448.
- Kost, K., Singh, S., Vaughan, B., Trussell, J., & Bankole, A. (2008). Estimates of contraceptive failure from the 2002 NSFG. *Contraception, 77*, 10–21.
- Littlejohn, K. (2012). Hormonal contraceptive use and discontinuation because of dissatisfaction: Differences by race and education. *Demography, 49*, 1433–1452.

- Manlove, J., Ryan, S., & Franzetta, K. (2003). Patterns of contraceptive use within teenagers' first sexual relationships. *Perspectives on Sexual and Reproductive Health, 35*, 246–255.
- Mayo Clinic. (2012). *Infertility*. Retrieved from <http://www.mayoclinic.com/health/infertility/DS00310>.
- Moreau, C., Hall, K., Trussell, J., & Barber, J. (2013). Effect of prospectively measured pregnancy intentions on the consistency of contraceptive use among young women in Michigan. *Human Reproduction, 28*, 642–650.
- Morgan, S. P., & Parnell, A. (2002). Effects on pregnancy outcomes of changes in the North Carolina state abortion fund. *Population Research and Policy Review, 21*, 319–338.
- Mosher, W. D., & Jones, J. (2010). *Use of contraception in the United States: 1982–2008*. Retrieved from http://www.cdc.gov/nchs/data/series/sr_23/sr23_029.pdf
- Musick, K., England, P., Edgington, S., & Kangas, N. (2009). Education differences in intended and unintended fertility. *Social Forces, 88*, 543–572.
- National Campaign to Prevent Teen and Unplanned Pregnancy. (2012). *DCR report*. Retrieved from http://www.thenationalcampaign.org/resources/dcr/Sectionb/DCR_Sectionb.pdf
- Polis, C. B., & Zabin, L. S. (2012). Missed conceptions or misconceptions: Perceived infertility among unmarried young adults in the United States. *Perspectives on Sexual and Reproductive Health, 44*, 30–38.
- Provasnik, S., & Planty, M. (2008). *Community colleges: Special supplement to the condition of education 2008*. National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubsearch/pubs2008/2008033.pdf>.
- Sassler, S., Miller, A., & Favinger, S. M. (2009). Planned parenthood: Fertility intentions and experiences among cohabiting couples. *Journal of Family Issues, 30*, 206–232.
- Silverman, J., Torres, A., & Forrest, J. D. (1987). Barriers to contraceptive services. *Family Planning Perspectives, 19*, 94–97.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research*. Thousand Oaks, CA: Sage.
- Taylor, P., Fry, R., Wang, W., Docterman, D., & Velasco, G. (2009). *College enrollment hits all-time high, fueled by community college surge* [Social and Demographic Trends Report]. Washington, DC: Pew Research Center. Retrieved from <http://www.pewsocialtrends.org/files/2010/10/college-enrollment.pdf>
- U.S. Department of Education. (2011). *Community college student outcomes: 1994–2009. Web Tables*. Retrieved from <http://nces.edu.gov/pubsearch/pubsinfo.asp?pubid=2012253>.