There is a pressing need for prevention programs designed to reduce the interpersonal risks associated with young parenthood, including hostile coparenting relations, harsh parenting, and paternal disengagement. Each of these interpersonal risks has been linked to psychological and physical health risks among children. For example, Kaczynski et al. found that intense conflict between parents was associated with dysfunctional maternal and paternal behavior, which, in turn, predicted the social and emotional development of their children. Although most of the research on the links among couples’ conflict, parenting problems, and child development focuses on married couples, there is evidence that conflict between young parents is also associated with harsh parenting behavior and paternal disengagement. In a recent article, based on data drawn from the Fragile Families Study, Lee and Guterman found that young mothers who reported hostile relationships with their partners were more likely to engage in harsh parenting behavior, suggesting that the combination of developmental status and relationship problems contributed to the occurrence of dysfunctional parenting.

The rate of childbirth for unmarried couples has risen dramatically over the past several decades, and many young parents are coparenting outside the context of marriage, often struggling to coordinate parenting activities between households, without the security of a committed romantic relationship. Until recently, young fathers in these “fragile families” were considered irrelevant to maternal-child health because they were often peripherally involved in prenatal care and early child rearing. However, there is evidence that many young men want to remain positively involved as coparents, but lack the necessary skills or support. The prevalent failure of young fathers to stay engaged with their partners only underscores the importance of including them in public health efforts to support their children’s well-being. The role of the coparenting relationship as a predictor of parent functioning and child health suggests that supporting these fragile relationships could help improve the social context and health outcomes of children.

Developmental transitions, such as the pre-natal period and the initial transition to parenthood, provide prevention-oriented health care providers with windows of opportunity to help young families build their capacity for managing the challenges of parenthood. This article describes a study testing the Young Parenthood Program (YPP), which is an innovative intervention designed to support the interpersonal development of expectant adolescent mothers and fathers. Drawing from family systems theory, the primary premise of the YPP is that young parents need programs that will help them develop the skills to maintain a positive, supportive coparenting relationship with their partners, enabling them to work together to maintain a stable, nurturing environment for their children. Thus, we hypothesized that improvements in the relationship competence of young mothers and fathers within the context of their coparenting relationship would predict positive parenting, defined as nurturing behaviors and attitudes.

In recent years, several programs for economically disadvantaged fragile families have been developed to increase positive coparenting and parenting. Among a diverse array of approaches, those that provide group support to married or committed couples with young children have demonstrated the most positive effects in promoting relationship satisfaction and father involvement. Family researchers have been less successful in developing programs that support positive coparenting among unstable or uncommitted couples. However, the increased rate of children born to unmarried, economically disadvantaged women underscores the pressing need for programs that support relationship stability.
among those coparenting couples who are most at risk for interpersonal conflict, relationship dissolution, and paternal disengagement. The YPP addresses this need by recruiting young expectant coparents through prenatal clinics and tailoring the intervention to address their particular needs and circumstances.

METHODS

For this study, 105 pregnant adolescents and the biological fathers of their children were recruited through prenatal clinics and schools for pregnant adolescents in a medium-sized city in a Western state. Inclusion criteria for pregnant adolescents were that the mother had to be (1) primiparous, (2) at least 14 years old but not older than 18 years, (3) less than 26 weeks pregnant, and (4) have a coparenting partner (the biological father) who was also willing to participate in the study. The eligibility criterion for biological fathers was that he had to be at least 14 years old but not older than 24 years at the initial assessment. Participants were paid $40 for completing each assessment. After the initial interview, couples were randomly assigned either to the YPP group (n = 53) or a control group condition. Control group participants received standard prenatal and social services provided through clinics and schools, but did not receive coparenting counseling services. Couples were interviewed before childbirth (Time 1 [T1]), 12 weeks after childbirth (Time 2 [T2]), and 18 months after childbirth (Time 3 [T3]). Couples were recruited between June 2004 and December 2005 and followed through October 2007. Retention among control couples was 85% for mothers and 70% for fathers (see Table 1 for additional information). To the extent possible, interviewers were blinded to participants’ intervention status throughout data collection (infrequently, participants disclosed their status to the interviewers). Approval for this study was obtained from the University of Utah institutional review board.

Young Parenthood Program Intervention

The YPP is a 10-week preventive intervention designed to support the development of the interpersonal skills needed for positive coparenting and parenting. The program is administered to individual couples (rather than groups of couples), and meetings occur at prenatal clinics, community settings, or participant’s homes, depending on preference and logistics. This flexible approach is intended to increase the rate of program completion. Based on an integration of family systems theory12,21 and adolescent developmental theory,22 the YPP is organized into 5 phases. The first phase focuses on the development of the therapeutic alliance and educating couples about the connection between coparenting and child development. The second phase is designed to set relationship goals and determine which specific interpersonal skills are needed to reach identified goals. The third phase includes specific activities designed to help couples develop communication and self-regulation skills related to positive coparenting. The YPP targets specific interpersonal skills hypothesized to promote positive communication and lower the risk for intimate partner violence, paternal disengagement, and harsh parenting. The fourth phase focuses on negotiating changing roles associated with the transition to parenthood, particularly within the context of extended families. The fifth phase focuses on future coparenting issues, including family planning to avoid “rapid repeat” pregnancies.

YPP counselors follow a clear protocol, but have some latitude to customize the intervention to the particular needs and circumstances of each couple.23 The YPP was administered by master’s level clinicians selected based on their clinical skills and experience working with adolescents and couples. Intervention sessions lasted an average of 75 minutes and were typically provided once per week. Training and primary supervision were provided by a licensed clinical psychologist with expertise in adolescent development and psychotherapy. An intervention manual was developed to assist in the YPP counselor training process and to help maintain intervention fidelity. Regular supervision meetings focused on therapeutic process and adherence to the intervention model.

Measures

Relationship competence at Time 1 and Time 2. A primary goal of the YPP was to facilitate relationship competence among pregnant adolescents and their partners, which, in turn, would support positive coparenting and parenting. Relationship competence was defined as the capacity to retain a positive perspective on the coparenting partnership and engage in positive coparenting behavior. The Capacity for Interpersonal Bonding (CIB) interview and coding scheme were developed to assess young mothers’ and fathers’ relationship skills within the context of their romantic or coparenting relations. For the purposes of this study, we focused on the coparenting partnership, assuming that the romantic relationship between some couples would wane.24,25 The CIB interview contains open-ended questions that focus on the coparenting or romantic partner. For example, participants were asked to provide 3 words that described their relationship, and then asked for an example or explanation of each selected word. This strategy was repeated to gather detailed information about the participant’s perception and experience of their partner and the relationship. The CIB interviews required 60 minutes to complete and were administered separately to each participant to ensure privacy. The CIB coding scheme was designed to measure the following components of relationship competence:

1. empathy for the partner,
2. fondness for partner,
3. acceptance of partner,
4. commitment to a stable relationship, and
5. feelings of togetherness and cohesion with respect to child rearing.

Each of these capacities was scored on a 5-point scale, ranging from 1 (low) to 5 (high), with the option of half-point scores. To assist the coding process, CIB coding forms included operational definitions (i.e., anchors) for each point on the scale. The CIB coding manual guides the coder through the subtleties and nuances of evaluating interpersonal bonding using interview data. Instructions help coders carefully consider (1) inconsistencies or contradictions, (2) specific examples or elaborations, or lack thereof, and (3) emotional tone associated with interview content.

Coding was completed by research assistants who received at least 30 hours of training and who were blinded to the intervention status of the couple. Intraclass correlation (ICC)
was used to assess inter-rater reliability (ICC > 0.70) using a 2-way mixed model in which raters were fixed and ratings were random. Once inter-rater reliability was established, 20% of the interviews were randomly selected and independently coded by both research assistants. The average ICC was 0.91 for T1 interviews and 0.84 for T2 interviews. Previous research with an independent sample of pregnant adolescents resulted in an adequate level of internal consistency (α = 0.86).

**Paternal engagement at Time 3.** Because father disengagement from parenting was an important outcome, all mothers were asked: “Has the child’s father been involved in parenting during the past 3 months?” at T3. This response was scored as “0” (uninvolved) if the mother reported that the father had been completely disengaged from parenting and “1” (involved) if the father was at least minimally engaged. We relied on maternal report to be consistent across all couples. Of the total number of fathers, 69% were reported to be actively engaged in child rearing at T3, defined broadly as helping with childcare.

**Child abuse potential at Time 3.** The Child Abuse Potential Inventory (CAPI) is a self-report questionnaire used to assess parenting attitudes associated with child abuse. The CAPI Abuse Scale includes 77 items designed to measure 6 components of risk associated with abusive parenting behavior: distress, rigidity, unhappiness, problems with child and self, problems with family, and problems with others. Respondents are asked to respond “agree” or “disagree” to items such as, “A child should never talk back.” The CAPI was found to have adequate psychometric properties with diverse populations, including adolescent parents. Reliability analysis with this group of adolescents resulted in an adequate level of internal consistency (α = 0.79).

**Nurturing behavior at Time 3.** Nine items from the Parenting Behavior Checklist (PBC) were used to assess for the occurrence or frequency of nurturing behavior, defined as reading, playing, cuddling, and so forth. The PBC asks parents to indicate how often they engage in specific behavior on a 4-point scale, from never (scored as 1) to often (scored as 4). Sample items include, “I read to my child at bedtime.” For the purposes of this study, we included only those items developmentally appropriate for parenting an 18-month-old child. Previous research on the original subscales, with older toddlers and children, indicated that the PBC has good internal consistency, test-retest reliability, and predictive validity. Reliability analyses indicated that the modified nurturing subscale created for this study demonstrated an adequate level of internal consistency (α = 0.70).

**Relationship with coparenting partner at Time 3.** Participants’ relationships with their coparenting partner at T3 were assessed using the Quality of Relationship Inventory (QRI). The QRI is a 25-item self-report measure designed to assess level of support, conflict, and depth in a dyadic relationship. The QRI includes questions such as, “How upset does this person make you feel?” and “To what extent can you turn to this person for help with a problem?” with responses given on a 4-point scale, ranging from “not at all” to “a lot.” Lower scores indicate a lower quality relationship.

**RESULTS**

This study required several stages of analyses.

**Preliminary Analyses**

Fifty-four percent of eligible pregnant adolescents and their partners were recruited into the study (n = 105 couples). The primary reasons given for not participating were (1) partner not interested, (2) partner already disengaged, or (3) not enough time. Demographic information describing the sample is presented in Table 1. As indicated, the mean age for pregnant adolescents was 16.5 years, and
18.5 years. The sample was primarily Latino or White. Most couples (94%) were romantically involved at T1, and more than half (53%) remained romantically involved at T3. Forty percent of couples reported living together at T1, often with 1 or the other’s parent. For example, 56% of the pregnant adolescents lived with their parents, and 21% lived with their partners’ parents. Others lived apart from their families, sometimes with their partner. Twenty-eight percent of the pregnant adolescents and 39% of their partners dropped out of high school. Among the couples recruited into the study, 5 miscarried or gave up the child for adoption, 6 declined to complete the program (i.e., received less than 5 sessions), and 11 couples could not be located for follow-up. Eight YPP fathers and 12 control group fathers were no longer involved in coparenting or parenting at T3. Couples who were randomized into YPP attended on average 8.8 sessions (range = 0–13), including those who had declined or dropped out of the intervention. Figure 1 documents the flow of participants through the study.

Preliminary analyses examined initial differences between couples who completed the YPP (n = 40), couples in the control group (n = 44), and couples who declined or dropped out of treatment (n = 7). Results indicated that there were no significant differences among participants in these 3 groups with respect to any demographic variables assessed. Repeated measures analyses of variance were used to examine treatment group differences and gender differences for all relationship variables assessed, including CIB at T1 and T2, and the CAPI, the PBC, and the QRI at T3. In these analyses, gender was the within-group factor, and treatment group assignment was the between-group variable. Results in Table 1 indicate that mothers had significantly higher CIB scores at T1 and T2 compared with fathers in the control group.

Primary Analysis

Structural equation modeling (SEM) was used to test a path analysis model examining the relationships among condition assignment (YPP or control), relational competence, and 18-month parenting or coparenting outcomes while simultaneously accounting for behavioral and psychological interdependencies between partners. We used SEM because we were interested in testing a model that involved mediation, with change in relational competence as the mediator. Specifically, we hypothesized that improvement in both mothers’ and fathers’ CIB scores would mediate program effects on several indexes of parental functioning. A mediator was an intervening variable.
(representing a “mechanism of change”) through which an independent variable (treatment or control) transmitted its effect to a dependent variable.32

Full information maximum likelihood was used to estimate missing data for those couples who had participated in follow-up data collection but were missing either partner’s report of specific items or subscales. The small subsample of participants who became ineligible because of miscarriage or abortion (n = 6) and those lost to attrition (n = 11) were not included in these analyses. A modified intent-to-treat approach was used, including the 4 couples who did not complete the YPP but participated in follow-up assessments. Statistical support was obtained for the full model ($\chi^2 = 33.84$, degree of freedom = 30; Confirmatory Fit Index = 0.904; Root Mean Square Error of Approximation = 0.039).33,34

As indicated in Figure 2, the direct path from random assignment to paternal engagement at T3 ($a \rightarrow c_1$) indicated that, compared with fathers in the control group, fathers in the YPP condition were significantly more likely to be actively engaged with their children at 18 months after birth ($b = 0.25; P = .018$). In addition, YPP participation significantly predicted fathers’ QRI scores at the 18-month follow-up ($a \rightarrow c_2; b = 0.25; P = .032$), such that fathers in YPP reported more positive relations with their coparenting partner than fathers in the control group.

The model also indicated that compared with controls, young mothers who participated in the YPP had higher CIB scores at T2 after controlling for CIB scores at T1 ($a \rightarrow b_2; b = 0.29; P = .006$), indicating improvements in relationship competence. Although the SEM results did not indicate a direct treatment effect on change in fathers’ CIB scores, repeated measures analysis of variance results reported in Table 1 suggested that fathers in the YPP demonstrated higher rates of change in CIB scores than fathers in the control group.

Moreover, positive change in fathers’ CIB scores predicted higher paternal nurturance scores, lower paternal CAPI scores, and higher rates of paternal engagement, as indicated in Figure 2.

Post hoc analyses were conducted to test the significance of the indirect effects (mediators). That is, we sought to identify specific mechanisms of change underlying the full model.

**FIGURE 2—Structural equation model for the Young Parenthood Program study: Supporting Positive Paternal Engagement Through Coparenting Counseling, 2004–2007.**
depicted in Figure 2. Results indicated the effect of treatment on the fathers’ change in CIB scores was fully mediated through the mothers’ change in CIB scores (a→b2→b1; Sobel’s z = 2.05; P = .006 using PRODCLIN).33 In other words, positive change in young fathers’ relationship competence was driven by their partners’ change in relationship competence.

Second, we tested the hypothesis that the path from mothers’ CIB scores (b2) to fathers’ parenting scores (c1→c4) was mediated through father’s CIB scores (b1). All of the indirect paths to fathers’ parenting scores through father’s CIB scores (b1) were significant. Specifically, mothers’ CIB scores (b2) indirectly predicted father’s presence (b2→b1→c1; Sobel’s z = 1.63; P = .037 using PRODCLIN),34 nurturing behavior (b2→b1→c3; Sobel’s z = 1.85; P = .017 [PRODCLIN]), and child abuse potential (b2→b1→c4; Sobel’s z = −1.75; P = .028 [PRODCLIN]). These findings indicate that the positive effect of YPP on young fathers’ parental functioning was mediated through both mothers’ and fathers’ change in CIB scores, underscoring the value of targeting coparenting couples in efforts to promote healthy parenting.

DISCUSSION

The YPP is a new approach to supporting pregnant and parenting adolescents that targets the coparenting relationship. This initial test of the YPP supported the hypothesis that facilitating the development of relationship skills would help reduce paternal disengagement, improve the quality of coparenting relations, and support positive parent functioning. Results were promising; young fathers who participated in the YPP were more likely to remain engaged in child rearing and reported a more positive relationship with their coparenting partners. Several of the program’s positive effects on fathers were mediated through positive changes in the young mothers’ relational competence. That is, positive changes in the young mothers’ CIB scores predicted positive changes in the fathers’ CIB scores, which, in turn, predicted positive parenting and coparenting, including higher rates of paternal nurturance and lower child abuse potential scores. Practically, this finding underscored the potential benefits of a couples-focused approach, wherein program effects on one partner could facilitate positive change in the other.

The finding that YPP was more effective for fathers than for mothers was consistent with previous research that indicated that the young father’s relationship with his partner might be more critical to his functioning as a parent than the young mother’s relationship with her partner.10,37 Young mothers receive support from a variety of sources, including families, schools, clinics, peers, and partners. Men tend to receive less social support or tangible support in their role as fathers. Results indicated that a relatively modest level of support could have a significant impact on paternal functioning, suggesting that young fathers might make good use of the support offered during the transition to parenthood. Although more research is needed to establish the efficacy of YPP, it appeared that integrating coparenting support into prenatal care for pregnant adolescents could help young fathers provide a more stable and secure environment for their children.12,38

The lack of a significant impact on the parental functioning of young mothers suggested that we should modify the program to better address the particular needs of mothers. Our experience with YPP taught us that relationship “drama” could be extraordinarily stressful for pregnant adolescents. Focusing directly on stress reduction might be helpful for young mothers, especially within the context of the coparenting relationship. It was also possible that a different measurement strategy, such as observational assessments of mother-child interactions, would have captured program effects on maternal functioning. The present study relied solely on self-report methods, which might be less effective than observational measures in measuring subtle interpersonal processes, such as listening, affirming, and nurturing. It might be necessary to employ a multimethod, multidimensional approach to the assessment of interpersonal skills, including both observational and self- or other reports of coparenting and parenting. Such an approach might help identify program effects on maternal behavior.

The sample in the present study was small, restricting our ability to consider how contextual factors or risk status might have affected response to the YPP. The small sample pushed the limits of the statistical methods used, given the number of parameters relative to the number of participants. Despite our promising results, it is important to remember that this study was a pilot of a new program; further testing is needed with a larger sample of young parents. A replication with a large and diverse sample could help provide important information about how we might adapt the program for different subgroups.

Public health prevention efforts are not typically oriented toward improving relationships, but we believe that public health practitioners could make better use of the psychological research on relationship quality and health outcomes, particularly with respect to populations that experience social isolation and stress. Research on marriage and health has produced strong, consistent evidence that warm, supportive communications between spouses predict healthy immune system function and lower rates of cardiovascular risk; marital distress has the opposite effect.39 Although many of the primary risks associated with adolescent child-birth are macrosystemic (such as poverty) or intraindividual (such as impulsivity), a public health approach to ameliorating these risks must address the role of relationships on health, particularly the relationship between the adolescent parent and coparenting partner.2,5,40 Adolescent mothers and fathers are at high risk for engaging in hostile interpersonal behaviors that compromise their own health and the health of their children.2,5 In this respect, the public health risks associated with adolescent pregnancy and childhood are often perpetuated through interpersonal exchanges that occur across the generations. The present study, which focused on supporting the interpersonal development of adolescent parents and healthy coparenting, addressed an important public health concern from a distinc-tively relational perspective.

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Contributors

P. Florsheim developed the Young Parenthood Program, led the study described in the article, and was the primary author of this article. J. J. Burrow-Sánchez and T. Minami conducted the data analysis and assisted in writing the article. L. McArthur, S. Heavin, and C. Hudak played key roles in the implementation of the research and assisted in writing the article.

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Human Participant Protection

This study was approved by the University of Utah institutional review board.

References