Published in final edited form as:
J Clin Psychol. 2014 January ; 70(1): 95–106. doi:10.1002/jclp.21979.

"Love Hurts": Romantic Attachment and Depressive Symptoms in Pregnant Adolescent and Young Adult Couples

Alethea Desrosiers[1], **Heather Sipsma**[1], **Tamora Callands**[1], **Nathan Hansen**[1], **Anna Divney**[2], **Urania Magriples**[1], and **Trace Kershaw**[1]

[1]Yale University

[2]City University of New York

Abstract

Objective—The current study investigates the relationship between romantic attachment style and depressive symptoms between both members of pregnant adolescent and young adult couples.

Method—Participants were 296 pregnant young females (mean age = 18.7) and their male partners (mean age = 21.3; 592 total participants) who were recruited from obstetrics and gynecology clinics in Connecticut. The dimensions of avoidant and anxious romantic attachment were assessed using the Experiences in Close Relationships Inventory. Depressive symptoms were measured using the Center for Epidemiological Studies-Depression Scale.

Results—Results showed that avoidant attachment and anxious attachment were significantly positively related to depressive symptoms. Multilevel modeling for partner effects revealed that anxious attachment and depressive symptoms in partners were significantly positively associated with depressive symptoms

Conclusion—Findings underscore the importance of considering *couples-based approaches* to supporting the transition to parenthood and developing the necessary self and relationship skills to manage attachment needs and relationship challenges.

Keywords

romantic attachment; depression; adolescents; pregnancy; couples

Examining depressive symptoms in pregnant adolescents and young adults is particularly important, as they tend to exhibit heightened levels of depressive symptomatology (e.g., sadness, hopelessness, frequent crying) in comparison to adult mothers during both prenatal and postpartum periods (Lanzi, Bert, Jacobs, & the Centers for Prevention of Child Neglect, 2009; Quinlivan, Tan, Steele, & Black, 2004; Whitman, Borkowski, Keogh, & Weed, 2001). This may be accounted for in part by the increased level of stressors encountered by many pregnant adolescents and young adults, including lack of resources, lack of social support, and challenges in attaining educational goals, as well as the increased vulnerability to onset

Please address correspondence to: Alethea Desrosiers, Department of Psychiatry, Yale University, 389 Whitney Ave., New Haven, CT 06511. alethea.desrosiers@yale.edu.

of depressive disorders that occurs during adolescence (Eshbaugh, Lempers, & Luze, 2006; Nolen-Hoeksema, Larson, & Grayson, 1999). In addition, pregnancy and parenthood during adolescence and young adulthood may impede many normative developmental tasks, such as individuation and identity development as well as the development of healthy interpersonal relationships, generating increased psychological distress (Lanzi et al., 2009).

Though prenatal depressive symptomatology is more prevalent in women than men, symptoms of depression during the prenatal period are also be exhibited by male partners, with rates estimated at 7% (Escribe-Aguier, Gonzalez-Galarzo, Barona-Vilar, & Artazcoz, 2008). Prenatal depressive symptoms in men have been associated with depression in their female partners (Field et al., 2006; Rholes, Simpson, & Friedman, 2006), suggesting the possibility of a reciprocal influence of depressive symptomatology in pregnant couples. Distinguishing risk factors for depressive symptoms in expecting fathers is also important in light of emerging research on associations between postnatal depressive symptoms in fathers and disturbances in socioemotional development in infants (Ramchandani, P., Stein, A., Evans, J., O'Connor, T. G., & the ALSPAC study team, 2005). Of note, investigation of prenatal depressive symptomatology in *adolescent and young adult* fathers is virtually absent from the field. However, preliminary findings suggest that younger onset of fatherhood is significantly associated with depressive symptomatology (Quinlivan & Condon, 2005) and underscores the need for further research in this population.

Given the implications of maternal (and paternal) prenatal depressive symptomatology on healthy development in infancy and early childhood (Field, 2011), identifying factors that contribute to depressive symptoms in young parents is critical. Variables that have been consistently associated with depressive symptoms in pregnancy include poor attachment to early caregivers and a history of negative parent-child relationships (Conde, Figueiredo, & Bifulco, 2011; Milan et al., 2004, 2007). Despite this, research investigating the relationship of romantic attachment to psychopathology during pregnancy is quite limited. Considering the breadth of empirical evidence suggesting that parent-child attachment patterns continue to influence close relationships into adulthood (Bartholomew & Horowitz; 1991; Hazan & Shaver, 1987; Shaver, Collins, & Clark, 1996), understanding the relationship between adult romantic attachment and mental health during pregnancy is highly pertinent.

Romantic Attachment and Depressive Symptoms

Drawing from the sentinel work of Bowlby (1969, 1973, 1979), romantic attachment in adults has typically been assessed along two continuous dimensions: anxious attachment and avoidant attachment. Anxious attachment relates to fears of abandonment by others, while avoidant attachment refers to discomfort with closeness and/or dependency (Brennan, Clark, & Shaver, 1998). In studies focusing on romantic attachment and depressive symptoms, results in nonpregnant adults indicate that romantic attachment insecurity, specifically anxious attachment, operates as a unique predictor of depressive symptoms (Simpson & Rholes, 2004; Williams & Riskind, 2004). Similar findings have been reported among samples of young adults (aged 18–25 years), with insecure romantic attachment orientations relating to higher depressive symptomatology (Davila, Steinberg, Kachadourian, Cobb, & Fincham, 2004; Marchand-Reilly, 2009).

Looking to pregnant and parenting adults, insecure attachment has also been linked with elevated depression symptoms. Specifically, avoidant attachment patterns have been associated with higher levels of depressive symptoms during pregnancy andwith higher reports of parenting stress postpartum (Rholes et al., 2006). Further, avoidant romantic attachment style has been linked with lower global maternal sensitivity and higher psychological distance (i.e., discomfort with contact, nonsynchronicity in interaction) in adult mothers (Edelstein et al., 2004; Selcuk et al., 2010), raising concern for implications of avoidant attachment on healthy socioemotional development in children as well as on maternal depressive symptomatology.

With the increased meaning and importance of peer and romantic relationships in adolescence and young adulthood, romantic attachment patterns in this age group may emerge as significant risk and/or protective factors for development of depressive symptoms. According to attachment theory (Bowlby, 1969), internal working models (or mental representations) of self and other developed during infancy and early childhood serve as templates for future relationships (i.e., romantic relationships) that persist throughout the lifespan. Empirical work also supports the stability of attachment patterns across development, with comparable attachment patterns evidenced by mother-infant dyads and in later adolescent and adult romantic relationships (Hazan & Shaver, 1987; Levy, Blatt, & Shaver, 1996). While theory and research suggest that similar patterns of associations between romantic attachment style, partner romantic attachment style, and depressive symptoms among pregnant adult couples should emerge in younger pregnant couples, few studies have examined this specifically.

Partner Romantic Attachment and Gender

Among adult couples, current literature also suggests that *partner* romantic attachment style often affects one's ownmental health. Viewed through the lens of attachment theory, attachment style is intricately associated with the experience and regulation of affect, such that attachment functions as a regulatory system in which secure partners may be more adept at reducing each other's distress (Pietromonaco, Greenwood, & Feldman Barrett, 2004). Consistent with this notion, partner support has been shown to predict lower postpartum depression (while controlling for prenatal depression) among adolescent mothers (Florsheim et al., 2003).

The effect of partners' attachment style on emotion regulation and mood also appears to differ according to gender. For example, women exhibiting high attachment insecurity have reported experiencing significantly less comfort and support from their partners and significantly more depressive symptoms in comparison to securely attached women (Rholes et al., 2006). More avoidantly attached men are less likely to provide support when their partners display distress (Simpson, Rholes, Orina, & Grich, 2002). Additionally, higher partner attachment insecurity has been found to predict higher stress reactivity inmen, but not women (Powers, Pietromonaco, Gunlicks, & Sayer, 2006). Comparable findings for partner effects of romantic attachment style and gender differences in these relationships may be expected in adolescent and young adult couples, but empirical research on these associations in this population is lacking.

Current Study

To address gaps in the literature on romantic attachment and depression in young expecting couples, the current study seeks to (a) investigate the impact of romantic attachment style on depressive symptoms in pregnant adolescent couples, (b) examine the influence of partner romantic attachment style on each individual's level of depressive symptoms, and (c) examine the impact of partner depressive symptoms on each individual's own level of depressive symptomatology. Secondary aims include investigating potential interaction effects between each partner's romantic attachment style (i.e., avoidant or anxious) and depressive symptoms and whether gender moderates these associations. Moderation by race/ethnicity was also examined.

Methods

Participants

Participants were 296 pregnant adolescent and young adult females and their male partners (592 total participants). For females, the average age was 18.7 (standard deviation [*SD*] = 1.6), and for males it was 21.3 (*SD* = 4.1). Participants were predominantly African American (44.1%) or Hispanic (38.0%), with 13.7% White and 4.2% some other race/ethnicity. Average duration of current relationship was 26.9 months (*SD* = 19.8). For males, 77 were both English- and Spanish-speaking, and seven were Spanish-speaking only; for females; 72 were both English- and Spanish-speaking and none were Spanish-speaking only. See Table 1 for additional demographic information.

Procedure

The current study utilizes baseline data from a longitudinal study of pregnant and postpartum young females and their partners. Participants were recruited from obstetrics and gynecology clinics and an ultrasound clinic in four university-affiliated hospitals in Connecticut between July 2007 and February 2011. Clinics were selected for this study based on proximity and population served. Research staff identified and screened 944 potential participants (couples). Of those approached, 413 couples were eligible, and 296 couples enrolled in the study (72.2% participation). Participants who enrolled were more likely to be two weeks further along in pregnancy at screening compared with those who refused ($p < .03$). Participation did not vary by any other prescreened demographic characteristic (all $p > .05$). For all eligible participants, research staff explained the study in detail and answered any questions. If the male partner was not present at the time of screening, research staff asked for permission to contact the male partner to explain the study. Research staff provided informational materials for the absent partner and asked the present partner to talk to them about the study. Two research assistants collected data and scheduled appointments with participants to complete the study interview on a laptop.

Inclusion criteria are as follows: (a) the pregnant partner is in the second or third trimester of pregnancy at time of baseline interview; (b) women were between 14 and 21 years of age and men were least 14 years of age, at time of the interview; (c) both members of the couple report being in a romantic relationship with each other; (d) both report being the biological

parents of the unborn baby; (e) both agree to participate in the study; and (f) both are able to speak English or Spanish. Because this was a longitudinal study, we used an initial run-in period as part of eligibility criteria in which participants were deemed ineligible if they could not be re-contacted after screening and before their estimated due date. For Spanish-speaking participants, the interview was translated by a Spanish-speaking research assistant, and then back-translated to English by another (native) Spanish-speaking research assistant, who also advised on revision of questions in Spanish to ensure their consistency with the English version.

Written informed consent was obtained by a research staff member at the baseline appointment. The couples separately completed structured interviews via audio computer-assisted self-interviews (ACASI). Participation was voluntary and confidential, and did not influence the provision of health care or social services. All procedures were approved by the Yale University Human Investigation Committee and by institutional review boards at study clinics. Participants were reimbursed $25 each for their effort.

Measures

Attachment was assessed using the 36-item Experiences in Close Relationships Inventory (ECRI; Brennan et al., 1998). Participants responded to statements about their relationship on a 7-point Likert scale, ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). The Avoidant Attachment subscale comprises 17 items and the Anxious Attachment subscale comprises 19 items. Higher scores on both subscales reflect more secure attachment orientations, while low scores indicate more attachment insecurity. Internal consistency was good for both the avoidant ($\alpha = 0.85$) and anxious subscales ($\alpha = 0.89$).

Depressive symptoms were measured using the Center for Epidemiological Studies-Depression Scale (CES-D; Radloff, 1977). For each symptom of depression, participants indicated how often they felt or behaved in the specified way over the past week, ranging from 0 (*less than 1 day a week*) to 3 (*most of the time, 5–7 days a week*). Given that the CES-D can inflate estimates of depression, because several items reflect somatic complaints that also occur with medical conditions and pregnancy, 5 of the original 20 items were excluded (Kalichman, Rompa, & Cage, 2000; Milan et al., 2007; Mundell et al., 2011; Orr, James, & Prince, 2002; Westdahl et al., 2007). These five items included “I did not feel like eating,” “I had trouble keeping my mind on what I was doing,” “I felt that everything I did was an effort,” “My sleep was restless,” and “I could not get ‘going.’” Scores were calculated by summing the responses to the remaining 15 items. Internal consistency for this measure was very good ($\alpha = 0.82$). Previous studies using this adapted version have utilized a cutoff of 15 or greater, representing significant levels of clinical depression (Kalichman et al., 2000).

Data Analysis

First, we generated descriptive statistics, including frequencies for categorical and means for continuous variables of interest. We determined whether these measures differed in gender by conducting McNemar tests and paired *t* tests, as appropriate. Correlation coefficients were also generated to determine the degree to which our variables of interest were related

to one another. Next, we used multilevel modeling to examine associations between attachment styles and depressive symptoms to control for the correlated nature of dyadic data.

The Actor-Partner Interdependence model incorporates responses from both members of the couple in a single analysis, while accounting for the correlated nature of the data from each partner, nested within couples (Kenny, Kashy, & Cook, 2006). Actor effects refer to whether a person's score on a predictor variable is associated with the person's own outcome (e.g., a woman's attachment style to her own depressive symptoms). Partner effects refer to whether a partner's score on the predictor variable is associated with the person's outcome (e.g., the male partner's attachment style relating to the woman's depressive symptoms). A series of multilevel models were used to examine the relationships between attachment styles and depressive symptoms, modeling both actor and partner effects. Interactions of actor and partner attachment styles were also tested.

Additionally, this series of models was used to explore the relationship between actor and partner depression by examining the intraclass correlation coefficient (ICC). The ICC measures the correlation between actor and partner depressive symptoms within couples that remains after explanatory variables have been taken into account; therefore, this measure was able to suggest the association between actor and partner depressive symptoms before and after controlling for attachment styles. All modeling controlled for selected sociodemographic characteristics including age, household income, current school status, race/ethnicity, parity, and gestational age. Interaction terms were used to determine if effects were moderated by gender and by race/ethnicity.

A complete case analysis was conducted because of the low frequency of missing data (<5.5%). The SPSS Predictive Analytics Software (PASW) version 18 statistics program (SPSS Inc., Chicago, IL, USA) was used for all analyses.

Results

Means and standard deviations are displayed in Table 1. Males scored significantly higher than females on avoidant attachment ($t = –2.13$, $p < .05$), and females scored significantly higher on anxious attachment ($t = 3.23$, $p < .005$) and depression symptomatology ($t = 3.15$, $p < .005$). No significant differences were found between racial/ethnic groups on study variables.

Table 2 (Models 1–3) displays results of multilevel modeling for actor effects of attachment style and depression symptoms. Higher scores on avoidant attachment (B=.15, $p<.01$; Model 1) and anxious attachment (B = .14, $p < .01$; Model 2) were significantly associated with higher scores on depression symptoms. These effects were slightly attenuated only when both attachment styles were entered into the model simultaneously (B = .10 for avoidant and B = .11 for anxious, both $p < 0.01$; Model 3). The interaction effect for gender and avoidant attachment was marginally significant (B = –.06, $p < .06$); there was a greater association between avoidant attachment style and depression symptoms for females (B = .18, $p < 0.01$) than for males (B = .12, $p < 0.01$). The association between anxious attachment and

depressive symptoms was not significantly moderated by gender. Results suggest that higher levels of both avoidant attachment and anxious attachment are associated with higher levels of depressive symptomatology in both males and females.

Race/ethnicity moderated the association between avoidant attachment and depressive symptoms after accounting for anxious attachment; African American participants had a significantly different association than Hispanic participants (B = –.08, $p < .05$). There was a statistically significant relationship between avoidant attachment and depressive symptoms for African American participants (B = .12, $p < .01$), but not for Hispanic participants (B = 0.04, $p = .10$). White participants and participants of another race/ethnicity, however, had associations between avoidant attachment and depressive symptoms (B = .13, $p < .01$ and B = .17, $p < .01$, respectively) that were not statistically different from African American participants (B = .01, $p > .05$ and B = .04, $p > .05$, respectively). Therefore, avoidant attachment was related to higher depressive symptoms for all racial groups except Hispanics. There were no differences by race/ethnicity in associations between anxious attachment and depressive symptoms.

Models describing the addition of partner effects are presented in Models 4–6 of Table 2. While controlling for actor attachment style, level of avoidant attachment in partners was not significantly associated with actor depression symptoms (Model 4). In contrast, higher levels of anxious attachment in partners were significantly associated with higher actor depression symptom scores after controlling for actor attachment (B = .03, $p < .05$; Model 5). However, neither partner attachment orientation was related to actor depression symptoms when modeled simultaneously (Model 6). Only one interaction effect was significant in these models; the association between actor anxious attachment and depressive symptomatology was moderated by avoidant attachment in partners (B = .002, $p < .05$), indicating that higher levels of anxious attachment in partners was related to increasing depressive symptoms when their partners had higher levels of avoidant attachment. Interaction effects were not moderated by gender.

Within these series of models, the ICC was used to assess the correlation between actor and partner depression symptoms. Adding actor and partner attachment to the model with only covariates substantially reduces the adjusted intraclass correlation (ICC = .22, $p < .01$ for model with only covariates; ICC=.11, p=.07 for model with attachment and covariates). Attachment, therefore, reduces the correlation between actor and partner depression symptoms, suggesting that romantic attachment style may mediate this relationship.

Discussion

The current study demonstrated that for expectant adolescent and young adult couples, both avoidant and anxious romantic attachment were associated with higher levels of depressive symptoms among both expectant mothers and fathers. These results support previous research underscoring the link between insecure romantic attachment styles (e.g., avoidant and anxious) and mental health (Hazan & Shaver, 1987; Mickelson, Kessler, & Shaver, 1997). Research has also posited that the strength of these relationships is partially contingent upon stress, which can heighten the degree of avoidance and anxiety within

romantic relationships (Simpson & Rholes, 2004). Particularly for adolescent and young adult couples expecting their first child, the transition to parenthood is often stressful, generating increased conflict, dissatisfaction, and relationship strain (Bost, Cox, Burchinal, & Payne, 2002; Dulude, Belanger, Wright, & Sabourin, 2002) and likely increasing vulnerability for development of depressive symptomatology.

Additionally, results showed that anxiously attached adolescents and young adults with avoidantly attached partners reported higher levels of depressive symptoms. From an attachment theory perspective, symptoms of depression may be exacerbated in anxiously attached adolescents with avoidant partners because they fear emotional distancing, neglect, and/or abandonment by their partner (Simpson & Rholes, 2004). Furthermore, both theory and research posit that stress activates the attachment system, thus triggering attachment seeking or distancing behavior in response to increased emotional distress (Feeney, 2004). Adolescents and young adults with anxious attachment styles experiencing heightened levels of pregnancy-related stress may intensify efforts to secure reassurance and emotional safety by engaging in controlling or clingy behaviors, which may then backfire by increasing distancing behavior from avoidantly attached partners. Consequently, this approach-avoidance cycle may lead to increased relationship strain and depressive symptoms, as the anxiously attached partner's needs for emotional support and comforting are continually unfulfilled.

Current findings also indicated that higher depressive symptoms in one member of a couple were related to higher depressive symptoms in the other, suggesting that within the context of romantic relationships, depressive symptoms in adolescents and young adults may be exacerbated by depression in their partners. Consistent with our findings, Coyne's (1976) interactional depression paradigm posited that adolescents with high levels of depressive symptoms may affiliate with one another, and these relationships may maintain or exacerbate the depressive symptoms of each individual within the dyad (Rosenblatt & Greenberg, 1991). Depressed individuals may also have a harder time meeting the relationship needs of partners, thus further contributing to conflict or relationship problems (Lewinsohn, 1974). Importantly, however, attachment style appears to mediate the relationship between partner and actor depressive symptomatology. Including anxious and avoidant attachment in multilevel models accounted for more of the variance in actor depressive symptoms, and partner depressive symptoms was no longer significantly associated with actor depression. This highlights the importance of interpersonal factors in depressive symptomatology among couples and the need to address attachment issues in expecting adolescents and young adults.

Consistent with the literature on romantic attachment and gender, particularly in pregnancy, adolescent and young adult females in the current study reported higher anxious attachment compared with males, whereas males reported higher avoidant attachment (Conde et al., 2011; Delguidice, 2011; Miga, Hare, Allen, & Manning, 2010). However, despite gender differences in amount of attachment anxiety and avoidance, no gender differences emerged in associations between romantic attachment style and symptoms of depression. Among expectant adolescent and young adult couples, the relationship between both avoidant and anxious attachment styles and depressive symptoms may be experienced similarly in males

and females. Research on pregnant adult couples also supports this finding, in that no gender effects have been found for associations between insecure attachment and depressive symtpoms (Conde et al., 2011). Taken together, findings suggest that addressing symptoms of depression and insecure attachment patterns may be important for both young expectant mothers *and* young fathers.

Finally, results indicated that the relationship between anxious attachment and depressive symptoms was consistent across racial/ethnic group, but associations between avoidant attachment and depressive symptoms differed. Significant positive associations between avoidant attachment and depressive symptoms were found for each racial/ethnic group except Hispanic adolescents and young adults. This finding parallels the finding reported by Wei, Russel, Mallinckrodt, and Zakalik (2004) and might be partially explained in light of the emphasis on interdependence and collectivism often found in Hispanic culture (Sue & Sue, 2003). Pregnant Hispanic couples may be more likely to engage in close relationships in which they seek assurance and support from others and depend on others to meet needs (Gloria & Segura, 2004; Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000).

Implications for Treatment

Treating symptoms of depression as well as insecure romantic attachment patterns in pregnant adolescent and young adult couples is essential given the effect of these factors on healthy child development (Field, 2011; Rholes et al., 2006). Based on current findings and existing literature, improving security of romantic attachment may reduce depressive symptoms during prenatal and postnatal periods. This may be particularly important for couples in which one member is anxiously attached and the other member is avoidantly attached. Focusing on improving romantic attachment in pregnant adolescent and young adult couples may also help prevent intergenerational transmission of insecure attachment patterns and foster healthy interpersonal functioning in future generations. Finally, strengthening security of attachment in expecting couples may improve overall relationship functioning, commitment, and longevity, which may in turn increase the capacity of both parents to remain actively and positively involved in child-rearing.

It is likely among adolescent and young adult couples transitioning into parenthood that there will not have been adequate time to develop skills for identifying and addressing relationship needs. In addition to individual-level interventions, expectant adolescent and young adult couples could benefit from couples-based approaches focused on supporting the transition to parenthood and developing the necessary self and relationship skills to manage attachment needs and relationship challenges. For young couples exhibiting both insecure attachment and depressive symptoms, couples based approaches may be especially relevant. As this study makes clear, insecure attachment orientations in either member of a couple is associated with depressive symptoms, and depressive symptoms in one member of a couple relate to depressive symptoms in the other. Couples-based mental health interventions, such as Emotionally Focused Couple Therapy (Johnson & Greenman, 2006), may be useful in addressing the interpersonal nature of depressive symptomatology and the attachment needs of each individual within a couple, especially for young couples cohabitating and/or electing to stay together through pregnancy.

Strengths and Limitations

While this study addresses several gaps in existing literature and offers a novel contribution to the field, findings should be considered in the context of several limitations. First, the cross-sectional nature of the data limits causal interpretations of findings. Longitudinal research is needed to identify temporal relationships between attachment and depressive symptoms within actors and between partners. Second, although assessments were administered using an ACASI system to reduce bias and encourage accurate reporting, all data were obtained through self-report measures; therefore, data might reflect self-presentation bias. Additionally, all participants were English-speaking and were recruited from low-income and urban and suburban settings in the Northeastern United States; thus, findings may not generalize to all expectant adolescent and young adult couples. Finally, as this study represents expectant adolescents and young adults in romantic relationships, findings may not generalize to expectant couples not in romantic relationships or to young couples who are not pregnant.

Despite the above-mentioned limitations, the current study also has several notable strengths. The sample was large and ethnically diverse. The study focused specifically on romantic relationships among expecting adolescents and young adults and included data from both male and female members of each partnership. Further, data analytic methods used the actor/partner model to explicitly account for the non independence inherent in data drawn from couples. While all data were self-report, ACASI administration of assessments improves reliability and validity of measurement. Finally, this study is one of few that included expecting adolescent fathers, and it is the only study we are aware of that considers the mental health and attachment styles of these young men.

Conclusion

Adolescence and young adulthood mark critical periods for romantic relationship development (Florsheim et al., 2003), during which learning to negotiate interpersonal relationships and establish healthy patterns of behavior are significant developmental tasks. For adolescents and young adults with anxious and/or avoidant attachment styles, coping with relationship challenges, including effectively communicating emotional needs and feeling that these needs are satisfied, may be particularly challenging. Faced with heightened stresses associated with pregnancy in adolescence and young adulthood, expectant young couples with insecure romantic attachment orientations may be particularly vulnerable to development of depressive symptoms. Improving relationship and communication skills as well as strengthening attachment bonds among pregnant young couples demonstrating depressive symptoms or insecure attachment styles may be important considerations for professional working with this population.

Acknowledgments

The current study was supported by a National Institutes of Mental Health grant (1R01MH75685) (Kershaw: PI) and a National Institute on Drug Abuse (T32 DA019426) grant.

References

Bartholomew K, Horowitz LM. Attachment styles among young adults: A test of a four-category model. Journal of Personality and Social Psychology. 1991; 61:226–244. [PubMed: 1920064]

Bost KK, Cox MJ, Burchinal MR, Payne C. Structural and supportive changes in couples' family and friendship networks across the transition to parenthood. Journal of Marriage & the Family. 2002; 64(2):517–531.

Bowlby, J. Attachment and loss: Vol. 1. Attachment. New York, NY: Basic Books; 1969.

Bowlby, J. Attachment and loss: Vol. 2. Separation. New York, NY: Basic Books; 1973.

Bowlby, J. The making and breaking of affectional bonds. London, UK: Tavistock; 1979.

Brennan, KA.; Clark, CL.; Shaver, PR. Self-reported measurement of adult romantic attachment: An integrative overview. In: Simpson, JA., editor. Attachment Theory and Close Relationships. New York, NY: Guilford Press; 1998. p. 46-76.

Conde A, Figueiredo B, Bifulco A. Attachment style and psychological adjustment in couples. Attachment & Human Development. 2011; 13:271–291. [PubMed: 21506031]

Coyne JC. Toward an interactional description of depression. Psychiatry. 1976; 39:14–27.

Davila J, Steinberg SJ, Kachadourian L, Cobb R, Fincham F. Romantic involvement and depressive symptoms in early and late adolescence: The role of a preoccupied relational style. Personal Relationships. 2004; 11:161–178.

Del Guiduice M. Sex differences in romantic attachment: A meta-analysis. Personality and Social Psychology Bulletin. 2011; 37:193–214. [PubMed: 21239594]

Dulude D, Belanger C, Wright J, Sabourin S. High-risk pregnancies, psychological distress, and dyadic adjustment. Journal of Reproductive & Infant Psychology. 2002; 20:101–124.

Edelstein RS, Alexander KW, Shaver PR, Schaaf JM, Quas JA, Lovas GS, Goodman GS. Adult attachment style and parental responsiveness during a stressful event. Attachment and Human Development. 2004; 6:31–52. [PubMed: 14982678]

Escribe-Aguir V, Gonzalez-Golarzo MC, Barona-Vilar C, Artazcoz L. Factors related to depression during pregnancy: Are these gender differences? Developmental Psychobiology. 2008; 50:579–587. [PubMed: 18683180]

Eshbaugh EM, Lempers J, Luze GJ. Objective and self-perceived resources a predictors of depression among urban and non-urban adolescent mothers. Journal of Youth and Adolescence. 2006; 35:839–847.

Feeney, JA. Adult attachment and relationship functioning under stressful conditions: Understanding partners' responses to conflicts and challenges. In: Rholes, WS.; Simpson, JA., editors. Adult Attachment: Theory, Research, and Clinical Implications. New York, NY: The Guilford Press; 2004. p. 339-364.

Field T. Prenatal depression effects on early development: A review. Infant Behavior and Development. 2011; 34:1–14. [PubMed: 20970195]

Field T, Diego M, Hernandez-Reif M, Figueiredo B, Deeds O, Contogeorgos J, Ascencio A. Prenatal paternal depression. Infant Behavior & Development. 2006; 29:579–583. [PubMed: 17138311]

Florsheim P, Sumida E, McCann C, Winstanley M, Fukui R, Seefeldt T, Moore D. The transition to parenthood among young African American and Latino couples: Relational predictors of risk for parental dysfunction. Journal of Family Psychology. 2003; 17:65–79. [PubMed: 12666464]

Gloria, AM.; Segura-Herrera, TA. Somo! Latinas and Latinos in the United States. In: Atkinson, DR., editor. Counseling American minority. 6th ed. Boston, MA: McGraw-Hill; 2004. p. 279-299.

Hazan C, Shaver PR. Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology. 1987; 52:511–524. [PubMed: 3572722]

Johnson SM, Greenman PS. The path to a secure bond: Emotionally focused couple therapy. Journal of Clinical Psychology. 2006; 62:597–609. [PubMed: 16523499]

Kalichman SC, Rompa D, Cage M. Distinguishing between overlapping somatic symptoms of depression and HIV disease in people living with HIV-AIDS. Journal of Nervous and Mental Disease. 2000; 188:662–670. [PubMed: 11048815]

Kenny, DA.; Kashy, DA.; Cook, WL. Dyadic data analysis. New York, NY: Guilford Press; 2006.

Lanzi RG, Bert SC, Jacobs BK. the Centers for Prevention of Child Neglect. Depression among a sample of first-time adolescent and adult mothers. Journal of Child and Adolescent Psychiatric Nursing. 2009; 22:19–202.

Lewinsohn, PM. A behavioral approach to depression. In: Friedman, RJ.; Katz, M., editors. The psychology of depression: Contemporary theory and research. Washington, DC: Winston-Wiley; 1974. p. 112-139.

Marchand-Reilly J. Depressive symptoms in young adults: The role of attachment orientation and romantic relationship conflict. Journal of Adult Development. 2009; 16:31–38.

Mickelson KD, Kessler RC, Shaver PR. Adult attachment in a nationally representative sample. Journal of Personality and Social Psychology. 1997; 73:1092–1106. [PubMed: 9364763]

Miga EM, Hare A, Allen JP, Manning N. The relation of insecure attachment states of mind and romantic attachment styles to adolescent aggression in romantic relationships. Attachment & Human Development. 2010; 12:463–481. [PubMed: 20730640]

Milan S, Ickovics JR, Kershaw T, Lewis J, Meade C, Ethier K. Prevalence, course, and predictors of emotional distress in pregnant and parenting adolescents. Journal of Consulting and Clinical Psychology. 2004; 72:328–340. [PubMed: 15065965]

Milan S, Kershaw TS, Lewis J, Westdahl C, Rising SS, Patrikios M, Ickovics JR. Caregiving history and prenatal depressive symptoms in low-income adolescent and young adult women: Moderating and mediating effects. Psychology of Women Quarterly. 2007; 31:241–251.

Mundell JP, Visser MJ, Makin JD, Kershaw TS, Forsyth BWC, Jeffery B, Sikkema KJ. The impact of structured support groups for pregnant South African women recently diagnosed HIV positive. Women & Health. 2011; 51:546–565. [PubMed: 21973110]

Nolen-Hoeksema S, Larson J, Grayson C. Explaining the gender difference in depressive symptoms. Journal of Personality and Social Psychology. 1999; 77:1061–1072. [PubMed: 10573880]

Orr ST, James SA, Prince CB. Maternal prenatal depressive symptoms and spontaneous preterm births among African-American women in Baltimore, Maryland. American Journal of Epidemiology. 2002; 156:797–892. [PubMed: 12396996]

Pietromonaco, PR.; Greenwood, D.; Feldman Barrett, L. Conflict in adult close relationships: An attachment perspective. In: Rholes, WS.; Simpson, JA., editors. Adult attachment: New directions and emerging issues. New York, NY: Guilford Press; 2004. p. 267-299.

Powers SI, Pietromonaco PR, Gunlicks M, Sayer A. Dating couples' attachment styles and patterns of cortisol reactivity and recovery in response to a relationship conflict. Journal of Personality and Social Psychology. 2006; 90:613–628. [PubMed: 16649858]

Quinlivan JA, Condon J. Anxiety and depression in fathers in teenage pregnancy. Australian and New Zealand Journal of Psychiatry. 2005; 39:915–920. [PubMed: 16168019]

Quinlivan JA, Tan LH, Steele A, Black K. Impact of demographic factors, early family relationships and depressive symptomatology in teenage pregnancy. Australian and New Zealand Journal of Psychiatry. 2004; 38:197–203. [PubMed: 15038797]

Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measurement. 1977; 1:385–401.

Ramchandani P, Stein A, Evans J, O'Connor TG. the ALSPAC study team. Paternal depression in the postnatal period and child development: A prospective study. The Lancet. 2005; 365:2201–2205.

Rholes WS, Simpson JA. Ambivalent attachment and depressive symptoms: The role of romantic and parent-child relationships. Journal of Cognitive Psychotherapy: An International Quarterly. 2004; 18:67–78.

Rholes WS, Simpson JA, Friedman M. .Avoidant attachment and the experience of parenting. Personality and Social Psychology Bulletin. 2006; 32:275–285. [PubMed: 16455856]

Rosenblatt A, Greenberg J. Examining the world of the depressed: Do depressed people prefer others who are depressed? Journal of Personality and Social Psychology. 1991; 60:620–629. [PubMed: 2037970]

Rothbaum F, Weisz J, Pott M, Miyake K, Morelli G. Attachment and culture security in the United States and Japan. American Psychologist. 2000; 55:1093–1104. [PubMed: 11080829]

Selcuk E, Gunaydin G, Sumer N, Harma M, Salman S, Hazan C, Ozturk A. Self-reported romantic attachment style predicts everyday maternal caregiving behavior at home. Journal of Research in Personality. 2010; 44:544–549.

Shaver, PR.; Collins, NJ.; Clark, CL. .Attachment styles and internal working models of self and relationship partners. In: Fletcher, GJO.; Fitness, J., editors. Knowledge structures in close relationships: A social psychological approach. Mahwah, NJ: Erlbaum; 1996.

Simpson, JA.; Rholes, WS. Anxious attachment and depressive symptoms: An interpersonal perspective. In: Rholes, WS.; Simpson, JA., editors. Adult attachment: theory, research, and clinical implications. New York, NY: The Guilford Press; 2004. p. 408-467.

Simpson JA, Rholes WS, Orina MM, Grich J. Internal working models of attachment in a support seeking situation. Personality and Social Psychology Bulletin. 2002; 28:598–608.

Sue, DW.; Sue, D. Counseling the culturally diverse: Theory and practice. 4th ed.. New York, NY: Wiley; 2003.

Wei M, Russel DW, Mallinckrodt B, Zakalik RA. Cultural equivalence of adult attachment across four ethnic groups: Factor structure, structured means, and associations with negative mood. Journal of Counseling Psychology. 2004; 51:408–417.

Westdahl C, Milan S, Magriples U, Kershaw TS, Rising SS, Ickovics JR. Social support and social conflict as predictors of prenatal depression. Obstetrics & Gynecology. 2007; 110:134–140. [PubMed: 17601908]

Williams NL, Riskind JH. Adult romantic attachment and cognitive vulnerabilities to anxiety and depression: Examining the interpersonal basis of vulnerability models. Journal of Cognitive Psychotherapy: An International Quarterly. 2004; 18:7–24.

Table 1

Participant Characteristics Overall and by Gender

	Overall (N = 592)	Female (N = 296)	Male (N = 296)	P-value[a]
Age (years)	20.0 ± 3.36	18.7 ± 1.63	21.3 ± 4.06	<0.001
Gender				
Male	296 (50.0%)			—
Female	296 (50.0%)	—	—	
Household income	$15,471 ± $18,870	$13,497 ± 15,530	$17,439 ± $21,541	0.005
Currently in school	196 (33.2%)	117 (39.5%)	79 (26.9%)	<0.001
Race/ethnicity				
Non-Hispanic Black	261 (44.1%)	117 (39.5%)	144 (48.6%)	
Hispanic	225 (38.0%)	117 (39.5%)	108 (36.5%)	0.001
Non-Hispanic White	81 (13.7%)	50 (16.9%)	31 (10.5%)	
Other	25 (4.2%)	12 (4.1%)	13 (4.4%)	
Parity				
First baby	454 (77.3%)	233 (79.0%)	221 (75.7%)	0.308
Not first baby	133 (22.7%)	62 (21.0%)	71 (24.3%)	
Avoidant attachment	47.7 ± 16.17	46.4 ± 15.74	48.9 ± 16.51	0.034
Anxious attachment	58.4 ± 20.35	61.1 ± 21.57	55.8 ± 18.71	0.001
Depressive symptoms	9.7 ± 7.06	10.6 ± 7.39	8.9 ± 6.62	0.002

Note.

[a] p-values derived from paired *t* tests for continuous variables and McNemar's tests for categorical variables to determine differences between gender.

J Clin Psychol. Author manuscript; available in PMC 2015 January 01.

Table 2

Multilevel Models Examining Associations between Avoidant and Anxious Attachment and Depressive Symptoms

	B (*SE*)					
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Avoidant attachment (actor)	0.15 (0.02)**	—	0.10 (0.02)**	0.10 (0.02)**	0.10 (0.02)**	0.10 (0.02)**
Anxious attachment (actor)	—	0.14 (0.01)**	0.11 (0.01)**	0.10 (0.01)**	0.11 (0.01)**	0.11 (0.01)**
Avoidant attachment (partner)				0.02 (0.02)	—	0.01 (0.02)
Anxious attachment (partner)				—	0.03 (0.01)*	0.02 (0.01)
Age (years)	0.07 (0.09)	0.11 (0.09)	0.07 (0.09)	0.07 (0.09)	0.07 (0.09)	0.07 (0.09)
Gender	−2.24 (0.55)**	1.37 (0.54)*	−1.62 (0.53)**	−1.53 (0.53)**	−1.71 (0.53)**	−1.66 (0.54)**
Household income	−0.03 (0.01)*	−0.02 (0.01)	−0.02 (0.01)	−0.02 (0.01)	−0.02 (0.01)	−0.02 (0.01)
Currently in school	0.34 (0.61)	0.26 (0.60)	0.39 (0.58)	0.42 (0.58)	0.42 (0.58)	0.42 (0.58)
Race/ethnicity						
Non-Hispanic Black	REF	REF	REF	REF	REF	REF
Hispanic	−0.06 (0.60)	−0.26 (0.59)	−0.36 (0.57)	−0.28 (0.57)	−0.31 (0.57)	−0.28 (0.57)
Non-Hispanic White	−0.37 (0.88)	−1.34 (0.86)	−0.94 (0.83)	−0.82 (0.83)	−1.01 (0.83)	−0.95 (0.83)
Other	1.46 (1.33)	0.88 (1.30)	0.77 (1.26)	0.84 (1.26)	0.74 (1.26)	0.77 (1.26)
First baby	−0.53 (0.66)	−0.31 (0.64)	−0.34 (0.62)	−0.36 (0.62)	−0.37 (0.62)	−0.37 (0.62)
Gestational age	−0.04 (0.05)	−0.00 (0.05)	−0.02 (0.05)	−0.03 (0.05)	−0.02 (0.05)	−0.02 (0.05)

Note. SE=standard error; Model 4 examines associations of actor avoidant and anxious attachment and partner avoidant attachment with depressive symptoms; Model 5 examines associations of actor avoidant and anxious attachment and partner anxious attachment with depressive symptoms; Model 6 examines associations of actor avoidant and anxious attachment and partner avoidant and anxious attachment with depressive symptoms, modeled simultaneously. All models control for age, gender, household income, etc., as shown in the table.

* $p \leq 0.05$.

** $p \leq 0.01$.