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The Influence of General Discrimination and Social Context on Young Urban Expecting Couples' Mental Health

Derrick M. Gordon, Christina Campbell, Keahnan Washington, Tashuna Albritton, Anna Divney, Urania Magriples, and Trace Kershaw

Yale University

Abstract

Young expecting parents face a great deal of challenges as they transition into parenthood. This paper sought to identify racial and gender differences in the relationship between general discrimination, neighborhood problems, neighborhood cohesion, and social support on the depressive and stress symptoms among young expecting couples. Results indicated perceived general discrimination and less social support was associated with increased stress and depression. More neighborhood problems were related to increased depression and more neighborhood cohesion was related to less stress. Moderator analyses showed that the influence of general discrimination and stress was stronger for women than men. In addition, neighborhood cohesion was protective on stress for Blacks and Whites but not for Hispanics. These results indicate the need to address the broader social context for young expectant couples.

Introduction

Pregnancy among adolescents and young adults, ages ranging from 13 to mid-20s, is often fraught with changes, adaptations and stress. These populations are particularly underprepared to cope with the stressors associated with parenting due to their own significant social, cognitive and behavioral developmental life changes (Hess, Papas, & Black, 2002; Markham et al., 2000). In addition, this experience is most pronounced in couples with fewer resources to balance effectively their own life development alongside the post-natal transition to parenthood (Caldwell, Antonakos, Tsuchiya, Assari, & De Loney, 2013). These factors may play a role in perpetuating the extant disparities in perinatal mortality and health (An et al., 2013; Creanga et al., 2012).

The stress of becoming a parent may also be heightened for specific groups depending on ethnic minority status and living location (Beers & Hollo, 2009; Klein & Adolescence, 2005), which gives rise to questions about factors that further impact the adolescent and young adult parents' ability to effectively assume a new role and support the healthy development of their child (Klein & Adolescence, 2005). Along with the stress experienced by this vulnerable population, adolescent and young adult parents often manifest symptoms of depression, which relates to poor parenting practices and capacities (Borre & Kliever, 2014; Raskin, 2012). Limited resources, ethnic minority status, and location can function as contributors of mental health disparities among young expecting parents (Muntaner, 2013). The identification of social and neighborhood factors that impact the mental health of young expecting parents is important to the design and development of community-based

prevention and intervention strategies that eliminate health disparities for these populations. We are interested in understanding for young, expecting minority couples how the social context of discrimination, neighborhood problems, neighborhood cohesion, and social support influence stress and depressive symptoms.

In ethnic minority communities, evidence shows that minority status relates to negative health and mental health outcomes, calling for an integrated exploration into the social and structural contexts that affect these groups. Social and structural contexts such as living conditions (i.e., low-income and unstable housing), lifestyle (i.e., delinquency, substance use), culture (i.e., high crime, social injustices, recognition of health and mental health symptoms), and health care systems (i.e., cumbersome referral and intake procedures, strict medical paradigm, inequitable) can be barriers to resources and care across ethnic minority groups (Scheppers, van Dongen, Dekker, Geertzen, & Dekker, 2006). Given the increased risks associated with being a young ethnic minority parent, especially parents in Black and Latino communities, attention must be paid to the positive and negative social experiences that either influence optimal outcomes or perpetuate disparate health (Beers & Hollo, 2009; Klein & Adolescence, 2005).

For example, evidence shows that perceived discrimination negatively impacts the mental health of minorities. Increases in reports of personal discrimination have been related to psychological distress (Borrell et al., 2009; Pieterse, Todd, Neville, & Carter, 2012). A review of empirical research on perceived discrimination and health shows that over forty-seven studies proposed a link between discrimination and mental health (Williams & Mohammed, 2009).

From this theoretical perspective stress is generated in the targeted populations through perceived discrimination experiences (Thoits, 2013). Previous studies conducted with racially and ethnically diverse adolescents and young adults have documented perceived discrimination in schools (i.e., teacher low expectation of academic performance and career trajectory), the workplace (i.e., aggravation, lack of advancement), and among peers (i.e., social and public dismissal and exclusion) that have been associated with psychological distress, including depressive symptoms and low self-esteem (Greene, Way, & Pahl, 2006; Rosenbloom & Way, 2004). Given the social experiences of young expecting parents in their current environments, it is hypothesized that increased reports of discrimination will result in increased endorsement of depressive and stress symptoms. The simultaneous tasks of preparing for parenthood and psychologically adjusting to discriminatory experiences create a situation wherein depressive and stress symptoms are subject to increase. While discrimination has been shown to impact health and mental health, other factors also play an important role for expecting parents, including the neighborhood in which they reside.

Neighborhood factors have been associated with health outcomes (Almedom, 2005) and disparities (Adler & Stewart, 2010; White & Borrell, 2011) and are important to consider for young expecting parents. Neighborhood problems such as reports of crime, unemployment, violence, environmental stressors like pollution, and physical signs of neighborhood decline (Latkin & Curry, 2003; Yen, Yelin, Katz, Eisner, & Blanc, 2006) all have been shown to increase the level of reported stress and depression. In addition, more neighborhood

problems result in higher rates of mental health problems including depression and stress (Fone et al., 2007; Gary et al., 2007). Given this body of evidence, we hypothesize that increases in neighborhood problems will result in increased report of depressive and stress symptoms. While there may be clear links between negative neighborhood experiences and mental health, other positive aspects of community life, such as cohesion, may positively impact mental health (Lewin, Mitchell, Rasmussen, Sanders-Phillips, & Joseph, 2011).

Neighborhood cohesion (Sampson, 2003) refers to the connectedness and solidarity existing within a given geographic area. For example, greater access to social and health services may be a product of living in a neighborhood where there is trust in established and even under established social relationships (Mulvaney-Day et al., 2007). The relationship between neighborhood cohesion, depression, and stress has been observed in some community samples (De Silva, McKenzie, Harpham, & Huttly, 2005; Riina, Martin, Gardner, & Brooks-Gunn, 2013). One study found that a positive association between ongoing experiences with discrimination and depression were reduced among young African American mothers residing in cohesive neighborhoods (Lewin et al., 2011). Understanding the particular contributions of neighborhood cohesion to depression and stress for young expecting parents may help to highlight structural and community approaches to alleviate mental health burden and disparities. We hypothesize that increased neighborhood cohesion will result in decreased reports of depression and stress for young expecting parents. Building a clear link between neighborhood cohesion and depression and stress among young expecting parents is important because it impacts their ability to fully assume their role when their child is born. It also begins to highlight their social context and how it impacts mental health, parenting abilities, and practices.

Social support has also been shown to impact health (Stockdale et al., 2007). Social support, a cognitive process whereby one is loved, esteemed, and a part of a network of spouses, friends and family members who provide psychological and material resources (Cohen & Wills, 1985) has been consistently linked to better mental health (Iwamoto et al., 2012). Existing literature (Hays, Turner, & Coates, 1992; Iwamoto et al., 2012) has documented that the experience of social support moderates the effects of HIV symptom expression and masculinity on depression and stress (Broadhead et al., 1983; House, Landis, & Umberson, 1988). There have been calls for research that examines how the contextual issues impacting individuals affect their use and experience of social support (Braveman, Egerter, & Williams, 2011; Thoits, 1995). We hypothesize that increased social support will result in fewer depressive and stress symptoms reported. For young expecting parents, the identification of social support and the resultant mental health functioning would be important as they transition into parenthood. Social support also draws attention to the effects of the relationships in which they are engaged on their mental health. Given their impending role as parents, questions are raised about the effects of the relationship between the expectant mother and father. A meta-analysis examining change in relationship satisfaction across transition to parenthood indicates small declines in relationship satisfaction for men and women from pregnancy until 11 months postpartum and moderate declines at 12 to 14 months. Thus, having social supports could buffer the relational stressors for young expecting couples.

What is evident from the literature is that the conceptualization of social (discrimination, social support) and structural (neighborhood problems, neighborhood cohesion) context on mental health is multidimensional (Harrell, 2000). Thus, as authors, we did not look to a single model to explain mental health outcomes (e.g., Stress-Buffering Model, Stress Appraisal Model; (Cohen, Benjamin, & Underwood, 2000; Thoits, 2013). We have chosen to select social and structural variables based on previous studies and examine their effect on stress and depression. The unique contribution of this paper rests in its use of dyadic analytic strategies to understand how the individuals in the romantic couple's social and structural contexts (i.e., experience of discrimination, neighborhood problems and cohesion, and social support) impacts the mental health outcomes for the couple individually and jointly. This attention underscores the ways that our significant relationships influence how we function directly and indirectly.

Individuals are influenced directly by their own social context and may be indirectly influenced by their partner's social context (Divney et al., 2012). Divney and colleagues found that among heterosexual couples, a woman's partner's stressful life events were associated with her increased depression and stress symptoms (Divney et al., 2012). No studies of health disparities have looked at how an individual's partner's experience of general discrimination, neighborhood problems, neighborhood cohesion, and social support influences their own mental health. Given the observations that men may be more vulnerable to the effects of discrimination, (Flores et al., 2008; Flores, Tschann, Dimas, Pasch, & de Groat, 2010) women experience more depressive symptoms than men, (Kessler, 2003) and that specific groups (e.g., Blacks and Latinos) have poorer health profiles than their majority counterparts we hypothesize that gender and race moderate such factors as general discrimination, neighborhood problems, neighborhood cohesion, and social support on mental health.

Social factors like general discrimination, neighborhood problems, neighborhood cohesion, and social support have been shown to impact mental health for groups identified as vulnerable. Although disparities exist in the mental health of vulnerable groups, the documentation of these experiences is not sufficient. Understanding the mechanisms of risks among vulnerable groups such as young expecting parents is important. The value of this knowledge also rests in the implications for developing strategies to reduce harm experienced by these populations. For example, there is evidence that poor mental health limits parenting capacity (Borre & Kliwer, 2014; Raskin, 2012) and that stress increases pre-term birth (Goldenberg, Culhane, Iams, & Romero, 2008; Hobel, 2004). Disparities in mental health care may then be linked to disparities in physical health.

In this paper, we hypothesize that among expecting adolescents and young adults: 1) general discrimination, neighborhood problems, neighborhood cohesion, and social support impact depression and stress symptoms (Echeverría, Diez-Roux, Shea, Borrell, & Jackson, 2008; Ertel et al., 2012; Franco, Pottick, & Huang, 2010; Mitnick, Heyman, & Slep, 2009); and 2) gender and race moderate the effects of reported experiences of perceived discrimination, neighborhood problems, neighborhood cohesion, and social support on depression and stress (Auerbach, Bigda-Peyton, Eberhart, Webb, & Ho, 2011; Seaton, Caldwell, Sellers, & Jackson, 2010; Siddiqi & Nguyen, 2010; Williams & Mohammed, 2009). This is a valuable

study, as we aim to identify the social experiences that shape the mental health of young expecting parents and seek to provide future direction for their improving mental health functioning and positive parenting practices and capacities. This is one of the first studies to explore the influence of a wide range of social experiences on mental health among expecting young couples. In addition, this study explores how these influences coalesce differentially across gender and race. We also discuss implications for mental health intervention at the structural level as potential mechanisms for addressing mental health disparities.

Methods

Participants

Data for this study come from a longitudinal study of pregnant adolescent females and their partners. Between July, 2007 and February, 2011, pregnant adolescents and their male partners were recruited from obstetrics and gynecology clinics and an ultrasound clinic in four university-affiliated hospitals in Connecticut. Of 413 eligible couples, 296 (72.2%) couples enrolled in the study (N=592). Those who agreed to participate were of greater gestational age ($p=.03$). Participation did not vary by any other pre-screened demographic characteristic (all $p>.05$). The majority of study participants were African-American (44.1%) or Hispanic (38.0%), with only 13.7% white and 4.2% some other race/ethnicity. Average age was 18.7 (SD=1.7) for women and 21.3 (SD=4.1) for men. Data reported are from the baseline assessments of all participants. Additional participant descriptors are found in the results sections and Table 1.

Procedures

Potential participants were screened and, if eligible, research staff explained the study in detail and answered any questions. If their baby's father or mother was not present at the time of screening, research staff asked for permission to contact their partner to explain the study. If willing, research staff provided informational materials for their partner and asked them to talk to their partner about the study. Research staff called the women and their partner to answer any questions and, if interested, scheduled an appointment for their baseline interview.

Inclusion criteria included: (a) pregnant or partner is pregnant in the second or third trimester of pregnancy at time of baseline interview; (b) women: age 14–21 years; men: age at least 14 years, 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 where participants were deemed ineligible if they could not be re-contacted after screening and before their estimated due date.

Written informed consent was obtained by a research staff member at the baseline appointment. The couples separately completed a 90-minute structured interview 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 for their effort.

Measures

Independent Variables

General discrimination: Perceived general “everyday discrimination” was assessed with 19 questions adapted from the Daily Life Experiences Scale. For the purposes of this study, everyday discrimination refers to racial/ethnic discrimination. Participants responded on a 6-point scale ranging from “Never” to “Once a Week or More.” Sample items included: “In general, how often are you accused of something or treated suspiciously?” and “How often are you not taken seriously?” The reliability for this measure was very good ($\alpha = .93$).

Neighborhood problems: Neighborhood problems were assessed with a 16-item adapted version of the Perceived Neighborhood Problems Scale (Buckner, 1988; Ellaway, Macintyre, & Kearns, 2001). Participants indicated how much various neighborhood problems were an issue in their neighborhood, on a 3-point scale ranging from “not a problem” to “serious problem.” Sample items included: “In your neighborhood, how much of a problem is the reputation of neighborhood?” and “In your neighborhood, how much of a problem is feeling unsafe after dark.” This measure showed very good reliability ($\alpha = .95$).

Neighborhood cohesion: Neighborhood cohesion was assessed with a measure where participants responded to statements about their level of comfort and attachment in their neighborhood, and indicated their agreement on a 5-point scale ranging from “strongly disagree” to “strongly agree.” Sample items included: “I believe my neighbors would help in an emergency” and “I feel like I belong to my neighborhood.” Finally, participants indicated whether they thought they were better off, worse off, or equally well off in relation to the rest of their neighborhood in terms of their standard of living. This measure had good reliability ($\alpha = .88$).

Social support: Social support was measured using an 11-item scale adapted from the MOS Social Support Survey (Sherbourne & Stewart, 1991). Participants indicated how often, on a 5-point scale, others were available to them for companionship, assistance, and other forms of support; responses ranged from 0 = “None of the time” to 4 = “All of the time.” Sample items included: “How often is someone available to take you to the doctor if you needed it?” and “How often is someone available who shows you love and affection?” This measure had good reliability ($\alpha = .80$).

Dependent Variables

Depression: Depression was measured using 15 of the 20-items in the Center of Epidemiological Studies-Depression Scale (CES-D) (Radloff, 1977). Because half of our participants were pregnant, we did not include the 5 somatic depression items because they have been shown to relate to common symptoms of pregnancy. We have used and validated this abbreviated scale in pregnant populations (Milan et al., 2007; Westdahl et al., 2007). For each symptom of depression, participants indicated how often they felt or behaved in the

specified way, ranging from 0 = “Less than 1 day a week” to 3 = “Most of the time (5–7 days a week).” Sample items included: “I talked less than usual.” and “I felt that people disliked me.” The CES-D scale discriminates strongly between patient and general population groups, is sensitive to levels of severity of depressive symptomatology, and reflects improvements after psychiatric treatment. This measure had good reliability ($\alpha = .82$).

Stress: Anxiety was measured using the 10-item Perceived Stress Scale (Cohen & Williamson, 1988). Participants indicated how often in the past month they had experienced stressful feelings and thoughts, on a 5-point scale ranging from 0= “Never” to 4= “Very often.” Sample items included: “In the past month, how often have you felt unable to cope with all the things you had to do?” and “In the past month, how often have you felt nervous and stressed?” This measure had good reliability ($\alpha = .76$).

Data Analysis

Due to the dyadic nature of the data, we used multi-level modeling to assess the Actor-Partner Independence model (APIM). The APIM incorporates responses from both members of a dyad into a single analysis. Multilevel modeling (or hierarchical linear modeling) to estimate APIM treats the members of a dyad as nested scores within the same group (Kenny, 2006). The multilevel modeling approach is less computationally complex, more flexible, and better able to easily model and assess interactions than pooled regression and SEM approaches to assessing APIM. A detailed description on how to conduct APIM analyses using multilevel modeling programs has been previously outlined (Kenny, 2006), and served as the guide for our analysis plan. The heart of the APIM approach is to assess actor and partner effects. Actor effects refer to whether a person’s score on a predictor variable influences the person’s own outcome (e.g., man’s perceived discrimination relates to his own depression). Partner effects refer to whether a partner’s score on the predictor variable influences another person’s outcome (e.g., woman’s perceived discrimination influences man’s depression).

To assess whether any of the actor and partner relationships differed by gender, race, or social support, a set of interactions between gender and all predictor variables were entered one at a time in the final model (Kenny, 2006). Because interaction terms were modeled, all variables were centered using the mean from the combined data, which is the recommended approach when centering variables in the APIM model (Kenny, 2006). The actor and partner effects presented in the model are un-standardized regression coefficients (and their standard errors). All analyses controlled for gender, age, income, length of relationship, and race.

Results

Mean partnership duration was just over 2 years. Only 8.8% of couples were married, and mean gestational age was 29.1 weeks. Mean and standard deviations for the independent and dependent variables are displayed in Table 1 by gender. Women had greater symptoms of depression and stress than men. However, men experienced greater general discrimination and neighborhood problems than women. See Table 1 for a complete description of sample characteristics.

To assess hypothesis 1, multilevel modeling was conducted to predict factors related to endorsement of depressive symptoms and stress among young pregnant couples. Results are displayed in Table 2. Individuals who experienced more general discrimination ($B=1.525$, $p=.0001$) and neighborhood problems ($B=.084$, $p=.02$) and less social support ($B=-.25$, $p=.0001$) had higher depressive symptoms. There were no significant partner effects. In addition, women endorsed more depressive symptoms during pregnancy than men ($B=3.258$, $p=.0001$).

Individuals who experienced more general discrimination ($B=2.081$, $p=.0001$), less neighborhood cohesion ($B=-.129$, $p=.001$) and social support ($B=-.160$, $p=.0001$) endorsed more stress symptoms. There were no significant partner effects. In addition, women endorsed greater stress symptoms during pregnancy than men ($B=2.488$, $p=.0001$).

To assess hypothesis 2, the possible moderators of gender and race were tested. We tested for possible interactions one at a time with each of the moderators and our main predictors of general discrimination, neighborhood problems, neighborhood cohesion, and social support. Significant interactions were followed up with simple effects for interpretations.

Results showed two significant interactions with gender on depression. First there was a significant gender by general discrimination effect interaction ($t=2.95$, $p=.003$). Simple effects showed that general discrimination related to increased depression for men and women, however the effect was significantly stronger for women ($B=2.67$, $SE=.50$, $t=5.38$, $p<.0001$) than men ($B=1.03$, $SE=.34$, $t=3.01$, $p=.003$). Similarly, there was a significant gender by social support interaction ($t=-2.02$, $p=.04$). Simple effects showed that social support related to decreased depression for men and women, however the effect was significantly stronger for women ($B=-.35$, $SE=.05$, $t=-6.75$, $p<.0001$) than men ($B=-.20$, $SE=.04$, $t=-5.27$, $p<.0001$). Gender did not significantly moderate the effects of the predictors for stress.

Race significantly moderated the effect of neighborhood cohesion on stress, showing an overall interaction effect ($\text{Chi-sq. (df = 2)} = 7.25$, $p<.01$). Simple effect analyses showed that there were differences on the effect of neighborhood cohesion and stress between Blacks and Hispanics ($t=3.39$, $p=.001$) and between Whites and Hispanics ($t=2.52$, $p=.016$). Neighborhood cohesion related to reduced stress in Blacks ($B=-.25$, $SE=.06$, $t=-4.24$, $p<.0001$) and Whites ($B=-.26$, $SE=.10$, $t=-2.52$, $p=.01$), but did not relate for Hispanics ($B=.02$, $SE=.06$, $t=0.38$, $p=.70$). Race did not significantly moderate the effects of the predictors on depression.

Discussion

This research examined the role of general discrimination, neighborhood problems, neighborhood cohesion, and social support on the depressive and stress symptoms endorsed by a diverse group of young expecting minority parents. Our results suggest that social context can have a significant impact on the mental functioning of young pregnant couples as they transition into their role as a parent (Hess et al., 2002; Ketterlinus, Lamb, & Nitz,

1991). Further, this diverse group of young expecting parents are particularly at risk for these social threats (Beers & Hollo, 2009; Klein & Adolescence, 2005).

Observations from this study supported our hypothesis that for a diverse sample of young expecting couples, general discrimination was related to depression and stress. General discrimination's link to depression and stress is important. Strategies are needed to counter these experiences and teach young parents how to negotiate symptoms of depression and stress that may result from perceived discrimination experiences. This supposition also rests in the developmental and contextual situations in which young expecting parents exist. Recognizing that as young expecting parents negotiate the developmental milestones required, their ability to assess and evaluate their social experience as discriminatory may help to undermine their ability to bond effectively with the larger society in the creation of a welcoming environment for their unborn child (Caldwell et al., 2013; Ertel et al., 2012).

Neighborhood problems were related to increased depressive symptoms, but were not related to stress symptoms. If young expecting parents are residing in communities that they perceive as having fewer resources and more problems, they then may feel more encumbered in their roles. It appears that this may manifest more in a depressive response rather than a stress related one, which corroborates with existing literature examining the comparatively low stress response (Franco et al., 2010) but high depression response (Lewin et al., 2011) of minority parents in a context of high neighborhood disorder. These responses may be related to perceiving their lived environment as threatening and unable to assist them as they transition into their new role. This also points to potential areas of intervention and raises a question: if you increase young expecting parents' social resources and decrease the challenges described, how might that empower them in their new roles?

For individuals, less neighborhood cohesion was related to more stress but not more depression. This observation raises questions about how connections to others in the community may help to lessen the stress experienced but not impact depression. This finding underscores the challenges observed in the literature on neighborhood cohesion where some studies observe a link to measures of mental health while others do not (De Silva et al., 2005; Riina et al., 2013). There are also questions about the unique representation of this construct for communities of color where strong emotional ties have helped to sustain them in the face of adversity and, in this context, color the relationship (Lewin et al., 2011). There are sound methodological, conceptual, and theoretical issues that must be addressed to further enhance our understanding of this construct and operation at the community level.

This study also observed that for young expecting parents, fewer social supports increased the level of stress reported. This observation is consistent with the literature (Brown, Harris, Woods, Buman, & Cox, 2012; Cox et al., 2008) and important, given that often the experience of parenting only focuses on the role after the child is born. Again, clearly delineating the mechanisms that operate as young expecting parents activate their social resources to assist them in their transition to parenthood would be valuable. Given that young expecting parents need greater social support than their adult counterparts (Auerbach

et al., 2011), developing strategies whereby these mechanisms are purposefully transmitted to new parents may result in lower stress and increased parenting capacity.

Greater social supports were protective against depression and stress. Both mental health challenges have been linked to prenatal development (Goldenberg et al., 2008; Hobel, 2004) and parenting (Hoffman, Crnic, & Baker, 2006; Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Given the developmental and social experiences of young adulthood, the experience of few social supports can undermine their successful negotiation of the tasks they are charged developmentally and help to under-prepare them for their new role. Understanding what they perceive as the most important attributes of social supports and developing strategies to either increase their access to healthy models or abilities to facilitate the negotiation into relationships with these models would be beneficial.

The positive impact of social support and the negative impact of general discrimination on depression were stronger for women than men. This may be partially explained by the higher levels of depression experienced by women. Consistent with the current literature, women reported more depressive symptoms than their male partners (Kessler, 2003). The observation that for young women, more general discrimination was associated with higher levels of depressive symptoms is important and adds to the literature on potential mechanisms for gender disparities of mental health. This observation also provides some insight into how general discrimination may undermine the parenting capacities of young expecting mothers; however, for young expecting mothers, social support had a greater association on her depressive symptoms than for men. It may be important to explore and understand how women use these resources during life transitions. For young men, helping them develop communication skills that are consistent with their masculine scripts and allow for the sharing of social knowledge around issues of discrimination and its impact on their mental health could prove to be beneficial. Sharing through trusted relationships rather than feeling like they have to manage singularly would be important to potentially increasing the effect of social supports on depressive symptoms (Caldwell et al., 2013).

Neighborhood cohesion had a more positive influence on depression for black and white young expectant parents than for Hispanics. This raises questions about the meaning of neighborhood cohesion for this group and brings to the fore issues related to acculturation and community bonding. Closer examination of these factors is warranted. It should be noted that negative experiences of social context (discrimination and neighborhood problems) negatively influenced depression and stress across race. This finding suggests that the reach of discrimination and neighborhood problems extends to all who are impacted by them and can lead to deficits in their mental health (Riina et al., 2013).

In this study, partner effects were not observed. This finding raises questions about the unique mechanisms that may be present for young expecting parents as they transition to parenthood. Within this analysis are issues related to the role of extended family networks attached to these young expecting parents in buffering the effects of the mental health challenges of their partners. This may have been demonstrated through the effects of social support (i.e., close friends and family) resulting in decreased depression for women and men. An alternative hypothesis is that individuals are more impacted by their own social

experiences and are not indirectly influenced by their partner's social experiences (Divney et al., 2012). Such a relationship between the individual's own social experience and those of their partner makes it essential that we address both members of a couple, given that improving one's social context will not automatically improve their partner's social context.

Limitations and strengths

This study is subject to several limitations. First, we used self-reported behavior and perceptions. Although the gold standard, self-reports could have been subject to socially desirable responding. However, ACASI has been shown to elicit higher reports of sensitive behaviors compared to other interview modalities and procedures were in place to assure confidentiality (Turner et al., 1998). Second, since the study purposefully recruited couples who remained in a romantic relationship at least through the second trimester of pregnancy, the findings may not be generalizable to all pregnant adolescents and their partners. There are questions about how these social factors operate differently in those couples who choose not to remain together. Further, given the developmental and geographic representation, there are questions about how development and geography impacts the endorsement of the mental health symptom in addition to the social factors identified in this study. Finally, this study is cross-sectional and unable to establish the causality of associations found.

Despite its importance to many behavioral theories, there is little evidence about the development of perceived mental health risks. This study makes a unique contribution to the literature by identifying factors associated with mental health risks for a diverse group of young expecting parents in an urban setting. Relatively few studies have examined the depressive and stress risks among young expecting parents. Despite its limitations, this study extends the literature on mental health challenges experienced by young expecting parents and the social factors that contribute to those risks. This study's ability to use information from both members of the couple makes it particularly unique and important.

Implications

This study provides evidence of the influence of social context on depression and stress symptoms in a diverse group of young expecting parents from an urban setting. Clear links between depression and stress exist for general discrimination and social support. Skills development in the management of depressive and stress related symptoms in response to discrimination are needed. Our results suggest building social support networks and neighborhood cohesion may increase resilience to stressful life transitions. With this understanding, structural interventions that improve cohesion with neighborhoods and the healthy access of these parents to supports are needed. Further, neighborhood problems and discrimination may exacerbate mental health problems, perpetuating health disparities in already vulnerable communities. Structural interventions aimed to reduce common neighborhood problems and lessen the impact of discrimination may help to reduce mental health disparities in urban expecting parents.

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Table 1

Mean and Standard Deviation of Socio-demographic, Mental Health and Social Factors among Young Expecting Parents

Couple Characteristics			
Variable			
Partnership duration (years) *, mean (SD)	2.2 (1.6)		
Gestation (weeks), mean (SD)	29.1 (5.3)		
Married, n (%)	26 (8.8)		
Individual Socio-demographic Characteristics			
Variable	mean (SD)	mean (SD)	p-value
	Women	Men	
Age (years)	18.7 (1.7)	21.3 (4.1)	0.001 ***
Household income (\$)	13,399 (15,466)	17,271 (21,518)	0.013 **
Race/ ethnicity	n (%)	n (%)	0.054
Black	116 (39.5)	142 (48.3)	
Latino	117 (40.0)	108 (36.7)	
White	50 (17.0)	31 (10.5)	
Other	12 (4.1)	13 (4.4)	
18 years, currently in school	73 (24.8)	39 (13.3)	0.001 ***
18 years, not in currently in school	49 (16.6)	35 (12.0)	
>18 years, obtained at least a high school diploma	138 (46.8)	152 (51.9)	
>18 years, did not obtain at least a high school diploma	35 (11.9)	67 (22.9)	
Partner is main source of financial support	54 (18.3)	40 (13.7)	0.128
Mental Health and Social Factors			
Variable	mean (SD)	mean (SD)	p-value
	Women	Men	
Depression	10.55 (7.39)	8.88 (6.62)	.004 **
Stress	16.73 (6.24)	15.45 (6.31)	.014 *
General Discrimination	.84 (.81)	1.02 (1.01)	.018 *
Neighborhood Problems	22.38 (7.58)	24.39 (8.35)	.002 **
Neighborhood Cohesion	21.42 (5.58)	22.25 (6.47)	.096

Social Support	28.20 (7.56)	24.67 (9.38)	<.0001 ***
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*
p< .05,
**
p< .01,

p< .0001

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Table 2

The Association of General Discrimination, Neighborhood Problems, Neighborhood Cohesion and Social Support on Depression and Stress

	Depression		Stress	
Variable	<i>B</i> (<i>SE</i>)	<i>t</i>	<i>B</i> (<i>SE</i>)	<i>t</i>
Actor Effects				
General Discrimination	1.525(.294)	5.19***	2.080 (.272)	7.66***
Neighborhood Problems	.084 (.035)	2.42*	.038 (.032)	1.19
Neighborhood Cohesion	-.042(.044)	-0.96	-.129 (.040)	-3.20**
Social Support	-.250(.032)	-7.92***	-.160 (.029)	-5.53***
Partner Effects				
General Discrimination	-.004(.305)	-0.15	.394 (.271)	1.46
Neighborhood Problems	.001 (.035)	0.02	.016 (.032)	.50
Neighborhood Cohesion	.065(.045)	1.44	.033 (.04)	.81
Social Support	-.031(.032)	-0.97	-.027 (.028)	-.95
Covariates				
Gender				
Male	Referent		Referent	
Female	3.258(.545)	5.98***	2.488 (.485)	5.13***
Age	.094 (.085)	1.12	.151 (.081)	1.87
Income	-1.440 (1.382)	-1.04	-1.22 (1.273)	-.96
Length of relationship	-.010 (.015)	-.656	.000 (.014)	.02
Race				
White	Referent		Referent	
Black	.416 (.786)	.528	.636 (.709)	.90
Hispanic	.415 (.797)	.521	.246 (.714)	.34

* $p < .05$,

** $p < .01$,

*** $p < .0001$