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Ethnicity and Social Support During Pregnancy[1]

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Data from two multi-ethnic prospective studies of African American, Latina, and non-Hispanic White pregnant women were used to examine the influence of contextual factors on social support processes during pregnancy. Multiple types of support (perceived support, received support, support satisfaction, network support) and sources of support (baby's father, family, friends) were assessed. The role of ethnicity in social support was examined after controlling for the contribution of related contextual factors (SES, marital

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status, age, parity, employment) to these processes. The impact of ethnicity and related contextual factors differed across sources of social support. Ethnic differences in support from family and friends, but not from the baby's father, emerged. However, marital status was a consistent predictor of support from the baby's father, and SES was a consistent predictor of support from friends. Overall, the findings of two studies suggest that although ethnicity is associated with support from friends and family, other contextual factors, such as marital status and SES, influence support processes during pregnancy.

The impending birth of a child symbolizes a new life, often beginning within the context of a family and community. These contexts interact to form a unique environment in which a pregnant woman prepares for and delivers her child. More specifically, these contexts influence the degree to which psychosocial resources are available during pregnancy, such as the degree to which support is available from individuals in one's social network. Social support has been shown to have beneficial effects on the mental and physical health of pregnant women (see review in Dunkel-Schetter, Sagrestano, Feldman, & Killingsworth, 1996).

Several theorists have noted the importance of taking a more ecological approach to studying social support (Bronfenbrenner, 1986; Lamborn, Dornbusch, & Steinberg, 1996; Mitchell & Trickett, 1980; Revenson, 1990; Szapocznik & Kurtines, 1993; Vaux, 1988). Indeed, Mitchell & Trickett (1980) call for an understanding of how individual and environmental characteristics influence the transmission and availability of social support, noting that the size and quality of networks is related to the family psychosocial climate and social integration into the community. Of particular importance here is understanding the contribution of ethnicity to social support processes during pregnancy. However, we also examine the contribution of related contextual variables such as marital status and socioeconomic status (SES) to these processes. In addition, we examine various types of support (i.e., perceived, received, network integration), and sources of support (i.e., baby's father, family, friends).

ETHNIC DIFFERENCES IN SUPPORT DURING PREGNANCY

Previous research suggests that ethnic differences may exist in the perception and receipt of social support during pregnancy. Results from two studies, one with teens (Koniak-Griffin, Lominska, & Brecht, 1993) and an adult sample composed of three ethnic groups (Norbeck & Anderson, 1989), provide preliminary evidence that White women report receiving

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more support and having larger support networks than African American and Latina women. Latinas report more support from the baby's father and from their mothers than do Whites and African Americans (Norbeck & Anderson, 1989). African American women report more support from other relatives than do Whites and Latinas (Koniak-Griffin et al., 1993; Norbeck & Anderson, 1989). Social support for Latinas also differed with acculturation such that Mexican Americans report receiving more support from family during pregnancy than recent immigrants, whereas recent immigrants report receiving more spousal support, presumably because recent immigrants have less extended family nearby (Norbeck & Anderson, 1989).

SUPPORT FROM BABY'S FATHER

These findings suggest that it is important to examine ethnic variability patterns of support provided by different sources in the social network (i.e., baby's father, family, friends). Social support from one's marital partner may be of particular importance in pregnancy because women are likely to have more interactions with their marital partner than other family members, and therefore to seek and receive more support from their partner than from extended family members. However, during pregnancy, one's spouse and family members may contribute support of different types (Ramsey et al., 1986; Chen, Telleen, & Chen, 1995). For example, in the transition to parenthood, husbands are more likely to provide physical assistance, whereas friends and family are more likely to provide guidance (Rhoades, 1989). Research further suggests that the marital relationship differs from other types of supportive relationships, insomuch as support from others cannot take the place of marital support (Brown & Harris, 1978; Coyne & Delongis, 1986; Leatham & Duck, 1990; Lieberman, 1982). For example, support from one's husband reduces prenatal distress (Kalil, Gruber, Conley, & Sytniac, 1993), whereas support from others does not (Lieberman, 1982). Married women living with their husbands also have significantly higher birth weight babies than women living with extended family, which the authors attributed to increased stress for women who were too enmeshed with family and therefore lacked autonomy (Ramsey et al., 1986). There is some evidence for ethnic variability in support from the baby's father, although ethnic differences in marital status may explain ethnic differences in support. For example, Latinas are more likely to be married and living with the baby's father than women of other ethnic groups, and the baby's father and female relatives provide the most support for Latinas during pregnancy (Engle, Scrimshaw, Zambrana, & Dunkel-Schetter, 1990; Latican & Corona, 1992; Norbeck & Anderson, 1989;

...crimshaw, Engle, Arnold, & Haynes, 1987; Scrimshaw, Zambrana, & Dun-kel-Schetter, 1997; Zayas & Busch-Rossnagel, 1992). For African American women, the role of the baby's father is smaller in comparison to extended family (Chase-Lansdale, Brooks-Gunn, & Zamsky, 1994; Jarrett, 1994; McAdoo, 1986), however, greater support from the baby's father is associated with better birth outcomes (Norbeck & Anderson, 1989).

SUPPORT FROM FAMILY AND FRIENDS

Ethnic differences in patterns of family and friend support during pregnancy have not been widely examined and warrant further investigation. We view ethnicity as a proxy for culture. Cultural norms, especially surrounding the meaning of family and pregnancy, are likely to have a large impact on social support for women of different ethnic groups. For example, cultural influences on the definition and perception of social support could lead to ethnic disparities in the perception, reporting, and effects of similar forms or amounts of support (Jacobson, 1986; Vaux, 1985). An examination of the literature on cultural norms of different ethnic groups serves to facilitate the understanding of ethnic variability in support processes. Little research has been conducted to examine the cultural norms surrounding the meaning of family among White men and women. In the United States, Whites are a heterogenous group including heritages of many ethnic domains, a fact not often considered in research examining ethnic variability. As a result, we know very little about the role of cultural heritages in behavior among different sub-groups of Whites. The strong individualist orientation in White American culture suggests that White women derive support primarily from their spouses, as they tend to live in nuclear families removed from their extended family network (Keefe, Padilla, & Carlos, 1979). Isolation from the extended family may also result in White women relying more on friendship networks for support. Interestingly, for White women greater support from their mothers and other relatives is associated with poorer birth outcomes, especially among women reporting high stress (Norbeck & Anderson, 1989).

The Latino community in the United States is especially influenced by the concept of *familism,* which represents the collective orientation of cultures of Hispanic or Spanish origin, placing the extended family at the center of life, from which identity and social support are drawn (Knouse, 1991; Ramirez & Arce, 1981; Rothman, Gant, & Hnat, 1985; Zuniga, 1992). For example, Mexican American families tend to live in nuclear units, with extensive bonds to other family units (Chilman, 1993; Keefe, 1984; Vega, 1990; Zuniga, 1992). Within the Latino culture generally, the extended

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family network serves as the primary source of social support (Keefe *et al.*, 1979). Friendships tend to be formed within the immediate community, and close friends are often considered "virtually kin" (Chilman, 1993). It is surprising, then, that Latinas in the western United States have reported lower levels of support during pregnancy than other ethnic groups (Norbeck & Anderson, 1989), although this may be a function of the number of years spent in the United States.

Within the African American community, the family is a group of people who have close ties, regardless of whether they live together or are related to each other biologically (Billingsley, 1968; McAdoo, 1992; Stack, 1975; Willis, 1992). Billingsley (1968) has termed close friends who are considered part of the family "fictive kin." It is expected that close friends and extended family will be involved in family functioning and discipline, and extended family members, especially elders, are treated with respect (Willis, 1992). African Americans value the group's effort for the common interest as a strategy for survival; however, independence is also a strong value, with individuals expected to strive for self-reliance, but to help others whenever possible (Billingsley, 1968; McAdoo, 1992; Willis, 1992). Multi-generational, female-headed families are especially common in African American communities. This has important implications for social support during pregnancy, in that the role of grandmothers, aunts, and other family members is greater (Chase-Lansdale *et al.,* 1994; Jarrett, 1994; McAdoo, 1986). Indeed, for African American women, greater support from the pregnant woman's mother was associated with better birth outcomes (Norbeck & Anderson, 1989). Research has indicated that family is the most important source of support for African Americans (Cauce, Felner, & Primavera, 1982; Miller, 1992). However, reliance on the family for support may be seen as a sign of dependence or irresponsibility, therefore leading to lower self-esteem for those who seek family assistance (Ball, Warheit, Vandizer, & Holzer, 1979; 1980; Miller, 1992). As a result, African American women may be less likely to seek support than women of other groups (Miller, 1992). In light of these patterns, it is not surprising that research has shown that the focus of support within this community is more tangible or instrumental, with support provision better in response to acute negative life events than for the chronic stress associated with poor living conditions (McLoyd, 1990).

The current research utilizes data from two large prospective studies on pregnancy and birth outcomes to examine social support during pregnancy. First, we examine ethnic differences in social support. Second, we examine whether ethnic differences in social support remain when controlling for relevant demographic variables, including age, parity, work status, marital status, and SES. We examine these relationships across sources (i.e., baby's father, family, friends) and types (i.e., perceived, received, network integration) of support.

METHOD

Participants

Participants for the current research were drawn from two separate studies of behavior during pregnancy. To be eligible for these studies, women had to be English or Spanish speaking, less than 20 weeks gestation, and of single gestation. Participants were not restricted based on parity or medical risk. Reflecting the populations served by the medical centers for the two studies, the sample in Study 1 consisted of women of Hispanic and non-Hispanic White origin, whereas the sample in Study 2 also included African American women. The samples differed with respect to several demographic variables. Specifically, the Latinas in Study 1 were less acculturated than the Latinas in Study 2. The women in Study 2 were less likely to be married or living with the baby's father, more likely to be giving birth for the first time, and had less income and fewer years of education than women in Study 1 (see following).

Study 1

Participants in Study 1 were 246 pregnant women, ranging in age from 17 years to 40 years ($M = 25.74$, $SD = 5.53$), recruited in the perinatal clinic of a university-affiliated hospital in Orange County, California. The sample was 49.6% non-Hispanic White and 50.4% Latina. The majority of the women in the sample were married (61%), and 81.7% reported living with the baby's father. Seventy percent of the women had given birth at least one time previously. The annual family income ranged from less than $10,000 to more than $90,000, with a median range of $30,000 to $40,000. The mean education level was 12.11 years ($SD = 3.56$). All eligible patients were approached, and 77% agreed to participate. Reasons for declining to participate had to do with lack of time due to other responsibilities (e.g., work, child care, travel; 33%), lack of interest (15%), transportation problems (15%), or their partners did not want them to participate (7%). Attrition rates were 9% after initial recruitment and before the first assessment, and 3% after the second prenatal assessment but before delivery.

Study 2

Participants in Study 2 were 504 pregnant women from an original sample of 688 women recruited from the public perinatal clinic of a hospital

in West Los Angeles, a local HMO, and private physicians. Of the original 688 women, 136 were excluded because they were not members of the three ethnic groups targeted in these analyses, and 48 (52% African American, 34% Latina, 17% White) were excluded because they did not complete the necessary interviews ($N = 44$) or had substantial data missing ($N = 4$). The final sample was 45% African American, 34% Latina, and 21% White, and ranged in age from 16 years to 43 years ($M = 27.6$, $SD = 5.44$). Approximately half of the sample (51.4%) was married, and 71.5% reported living with the baby's father. The average number of people living in the respondents' households was 3.48 ($SD = 1.62$), ranging from 1 to 11. Thirty-eight percent of the women were giving birth for the first time, 33% had one child, 17% had two children, and 12% had more than two children ($M = 1.09$, $SD = 1.21$, Maximum = 7). The annual family income ranged from $2,500 to $100,000, with a median range of $20,000 to $30,000, and the mean education level was 13 years. Analyses of response rates indicated that of the women eligible, 80% consented to be in the study. Of those consenting, 4.1% dropped out before completing the prepartum interviews.

Procedure

Participants in Study 1 were assessed two times in closely spaced intervals during the third trimester, at 28 and 30 weeks gestation. Participants in Study 2 were assessed three times prenatally. The Time 1 prenatal assessment occurred at the beginning of the second trimester, between 16 and 21 weeks gestation ($M = 19$), the Time 2 prenatal assessment occurred at the end of the second trimester or the beginning of the third trimester, between 24 and 31 weeks gestation ($M = 28$), and the Time 3 prenatal assessment occurred at the end of the third trimester, between 33 and 38 weeks gestation ($M = 36$). Only data from Time 1 and Time 2 are included in the current analyses. Delivery takes place at approximately 40 weeks.

Interviewers for the psychosocial assessment portions of the studies consisted of trained interviewers, some of whom were bilingual. For each study, two obstetric research nurses, one of whom was bilingual, recruited patients on site, obtained medical histories, and abstracted labor, delivery, and neonatal information from patient medical records.

Measures

For both studies, each assessment consisted of an interview as well as completion of a set of questionnaires. A series of psychosocial

constructs were measured including several social support measures selected to reflect the different components of support emerging from systematic research (see Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993). Study 1 included measures to assess perceived support and social network resources. Study 2 included several additional measures of social support to further differentiate perceived and received support, as well as to examine satisfaction with support. These distinctions have been raised in the literature as important avenues for further research (Barrera, 1986; Dunkel-Schetter & Bennet, 1990; Dunkel-Schetter, Blasband, Feinstein, & Herbert, 1992). All instruments used to measure support had been previously used in pregnancy research and were further tailored to the specific characteristics of the samples with respect to education and ethnicity.

Interviews were conducted in either English or Spanish, and all measures were translated into Spanish. Validation procedures involved extensive pretesting, back translation, and examination of psychometric criteria in data analyses. Reliabilities of Spanish measures are reported for Study 1 only because the Latinas in Study 2 were more acculturated and as a result most chose to be interviewed in English. The breakdown of means and standard deviations of the demographic variables and social support measures by ethnic group are presented in Tables I and II, respectively. Sample sizes varied on the support measures due to missing data, and because women who did not interact with the baby's father did not complete questions related to interactions with the baby's father.

Demographic Questions

In the prescreening and Time 1 assessments for both studies, a series of demographic questions asked participants to indicate the racial or ethnic category with which they identified, their age, and their marital status. Total household income was assessed in Study 1 using a 10-category item with a scale ranging from 1 (under $10,000) to 10 (over $90,000), and in Study 2 using a 13-category item with a scale ranging from 1 (under $2,500) to 13 (over $100,000). Education was assessed by asking the number of years of school completed. Participants also indicated their current employment status. Parity, that is, number of prior births (total number of still births plus live births), was extracted from medical charts. Nulliparity (whether or not this was a first birth) was computed for use in analyses, coded as first birth (nulliparous, 1) versus not first birth (multiparous, −1). Income and education were highly correlated (Study 1, $r = .54$; Study 2, $r = .55$),

and therefore an SES score was computed by standardizing and summing income and years of education.

Acculturation

Three questions, including language preference, place of birth, and years in the United States, were examined for the Latino women as indicators of acculturation. For Study 1 Latinas, 96% reported speaking Spanish. Approximately half of the Latinas ($n = 61$) responded to the language preference items, and of those women, 31.1% preferred to speak mostly English, 54.1% spoke English and Spanish about the same, and 14.8% preferred to speak mostly Spanish. Most of the sample (82.5%) were born in Mexico or other Latin-American countries, and on average, they lived in the United States for 9.45 years. For Study 2 Latinas, 25.0% preferred to speak mostly English, 50.0% spoke English and Spanish about the same, and 25.0% preferred to speak mostly Spanish. Approximately half (57.8%) were born in Mexico or other Latin-American countries, and on average, they lived in the United States for 18.2 years. This suggests that the Latinas in Study 1 were less acculturated than the Latinas in Study 2, as the Latinas in Study 1 were more likely to be born outside of the United States and have lived in the US for shorter periods of time, on average, than the Latinas in Study 2.

Perceived Support from Baby's Father

An eight-item scale used in past research (Turner, Frankel, & Levin, 1983; Turner, Grindstaff, & Phillips, 1990) was utilized to assess perceived social support from the baby's father at Time 1 for Study 1 and Time 2 for Study 2. It should be noted that some of the items reflected support that was nonspecific with respect to whether it was perceived or received. Items assessed the extent to which the baby's father is affectionate, understands feelings, talks and spends time with his partner (the respondent), can be counted on for financial support and to be there when needed, and would help when the baby comes. The response scales ranged from 1 (strongly disagree) to 4 (strongly agree), and an index of perceived support from the baby's father was computed by averaging scores on the eight items. The mean score for the index was 3.42 ($SD = 0.56$) for Study 1 ($n = 233$), and 3.25 ($SD = 0.71$) for Study 2 ($n = 501$), and the scale had a high internal consistency (Study 1: English alpha = .89; Spanish alpha = .94; Study 2: English alpha = .94).

Received Social Support From Baby's Father and Satisfaction

Received social support from the baby's father was measured during the Time 1 interview of Study 2 only, using a 12-item modified version of a baby's father support measure described in Collins et al., (1993). Participants were asked how often the baby's father had provided them with material support, assistance with tasks, advice or information, and listening when they expressed feelings, using a 5-point Likert scale ranging from 1 (never) to 5 (always). An index of received support from the baby's father was computed by averaging the responses of these six items ($M = 3.78$, $SD = 0.92$, alpha = .89, $n = 504$). Participants also indicated how satisfied they were with the extent to which they received these six types of support, using a 5-point Likert scale ranging from 1 (not at all satisfied) to 5 (completely satisfied). An index of satisfaction with received support from baby's father was computed by averaging responses to these items ($M = 3.58$, $SD = 1.03$, alpha = .92, $n = 503$).

Perceived Support from Family

A seven-item scale was used to assess perceived available support from the family at Time 1 for Study 1 and Time 2 for Study 2. Six items (family there if needed, rely on family, think I'm a worthwhile person, have confidence in me, provide help with problems, will stand by me), were adapted from the Provisions of Social Relations Scale (PSR, Turner et al., 1983), and one item was added concerning financial assistance. Participants rated the items on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). The mean score for the index was 3.28 ($SD = 0.52$) for Study 1 ($n = 246$) and 3.24 ($SD = 0.59$) for Study 2 ($n = 504$), and the scale had a high internal consistency (Study 1: English alpha = .84; Spanish alpha = .81; Study 2: English alpha = .90).

Received Social Support From Family and Friends and Satisfaction

Received social support from family and friends was measured during the Time 1 interview for Study 2 only, using items parallel to those used in the received support from baby's father index. The index of received support from family and friends was computed by averaging responses on the six received support items (range = 1–5; $M = 3.18$, $SD = 0.83$, alpha = .80; $n = 452$), and the index of satisfaction with received support from family and friends was computed by averaging

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In addition, respondents were asked who provided each type of support. The number of times "friends" were mentioned as providers of the six types of support was counted (range 0–6; $M = 2.45$, $SD = 2.01$). The number of times three types of family members were mentioned (mother/father, sister/brother, other relative) was also counted (range of 0-6 for each type of family member, for a total range of 0–18; $M = 1.88$, $SD = 1.38$).

Social Network Resources

A series of 14 items were developed based on published work on this topic (Collins *et al.*, 1993) to assess three components of social network resources (number, frequency of contact, and quality) for friends and for family during the Time 2 interview of both studies. To assess number of friends in the network, respondents were asked how many friends they had (Study 1: $M = 3.64$, $SD = 2.68$; Study 2: $M = 2.96$, $SD = 2.20$) and how many of them live within a 1-hr travel time (Study 1: $M = 3.18$, $SD = 2.42$; Study 2: $M = 2.74$, $SD = 2.45$). To assess number of close family members in the network, respondents were asked how many close family members they had (Study 1: $M = 4.62$, $SD = 3.13$; Study 2: $M = 4.31$, $SD = 3.06$), how many of them live within a 1-hr travel time (Study 1: $M = 3.44$, $SD = 2.88$; Study 2: $M = 3.30$, $SD = 3.61$), and whether each of their parents were alive (Study 1: mother, 94%; father, 85%; Study 2: mother, 93%; father, 81%). To assess frequency of contact with friends, respondents were asked how often they see close friends; likewise, frequency of contact with family was measured by asking how often they see family members. To assess quality of friendship networks, respondents were asked about their satisfaction with the number of friends they have, their satisfaction with how often they see friends, and their overall satisfaction with their relationships with their friends. The same questions were asked regarding their family members to assess quality of family networks. Six indices were formed by *a priori* rational decisions and then by averaging standardized scores for each of the sets of items.

RESULTS

Overview

A series of five demographic variables (age, marital status, nulliparity, SES, and employment status) were used in the following analyses. For

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Study 1, the intercorrelations among these variables ranged from −.03 (marital status with nulliparity) to .55 (age with SES), with a mean absolute value correlation of .25, and for Study 2, the intercorrelations among these variables ranged from −.31 (nulliparity with SES) to .42 (age with SES), and the mean absolute value correlation was .17, indicating that these variables were sufficiently independent to conduct multivariate analyses.

Univariate analyses were conducted to examine ethnic differences in the demographic and support variables (see Tables I and II). Associations between the demographic variables and the support variables were also tested (see Table III). Multivariate analyses were then conducted to examine associations between ethnicity and social support variables, controlling for demographic variables (see Tables IV–VI).

Ethnic Differences in Demographic Variables

One-way analyses of variance (ANOVA) were used to assess ethnic differences in age and SES (see Table I). Results for Study 1 indicated that the White women in this sample were significantly older and were of higher SES than the Latina women. Results for Study 2 indicated that the White women in this sample were significantly older than the Latina and African American women, and White women reported higher SES than African Americans, followed by Latinas. Chi-square tests were used to assess ethnic differences in marital status, nulliparity, and employment status (see Table I). For Study 1, White women were significantly more likely to be married

Table I. Ethnic Differences in Demographic and Background Variables

	Whites	Latinas	African Americans
Study 1			
Age*	28.0(5.5)	23.5(4.5)	n/a
Percent Married*	72.13%	50.0%	n/a
Nulliparity—Percent first birth	42.6%	45.2%	n/a
SES*	1.07(1.46)	−1.05(1.34)	n/a
Percent employed full time*	27.9%	11.3%	n/a
Study 2			
Age*[a,b]	30.2(4.7)	26.7(5.3)	26.9(5.4)
Percent Married*[a-c]	81.1%	55.0%	33.9%
Nulliparity—Percent first birth*[a,b]	58.6%	34.3%	30.9%
SES[a,b,d]	1.68(1.69)	−0.78(1.54)	−0.24(1.37)
Percent employed full time	32.3%	41.9%	42.9%

Note. *p < .05; [a]Whites > African Americans; [b]Whites > Latinas; [c]Latinas > African Americans; [d]African Americans > Latinas. SES was calculated by adding standardized scores for income and education.

and to be employed full-time than Latinas. There were no ethnic differences in nulliparity. For Study 2, White women were more likely to be having their first child than Latinas and African Americans. Furthermore, White women were significantly more likely to be employed full-time and to be married, followed by Latinas and then African Americans.

Ethnic Differences in Social Support Variables

A series of one-way analyses of variance were used to assess ethnic differences in social support and social network resources (see Table II). For Study 1, White women reported more perceived support from the baby's father than did Latinas, and there were no ethnic differences in

Table II. Ethnic Differences in Social Support and Social Network Measures

	Whites	Latinas	African Americans
Study 1			
Baby's Father Index			
Perceived support*	3.54(0.49)	3.30(0.60)	n/a
Family and Friend Indices			
Perceived support	3.33(0.54)	3.22(0.49)	n/a
Number family*	5.42(3.05)	3.81(3.00)	n/a
Number friends*	4.59(2.67)	2.74(2.37)	n/a
Frequency family*	2.63(1.45)	2.02(1.45)	n/a
Frequency friends	2.50(1.21)	2.43(1.34)	n/a
Quality family*	3.78(0.65)	4.02(0.85)	n/a
Quality friends	3.84(0.64)	3.94(0.84)	n/a
Study 2			
Baby's Father Indices			
Perceived Support*[a,b]	3.52(0.46)	3.24(0.72)	3.13(0.77)
Received Support*[a]	3.92(0.68)	3.83(0.95)	3.67(1.00)
Satisfaction*[a-c]	3.94(0.69)	3.64(1.04)	3.36(1.11)
Family and Friend Indices			
Perceived support	3.24(0.62)	3.25(0.51)	3.23(0.64)
Received support*[d,e]	2.94(0.66)	3.11(0.92)	3.35(0.81)
Family*[e]	1.64(1.11)	1.81(1.46)	2.06(1.42)
Friends*[b,d]	2.95(1.77)	1.81(2.00)	2.67(2.02)
Satisfaction	3.97(0.70)	3.93(0.78)	3.92(0.76)
Number family	2.08(1.12)	2.30(1.44)	2.41(1.69)
Number friends*[a,b,d]	3.59(2.30)	2.19(1.67)	2.78(2.41)
Frequency family*[c,e,f]	2.73(1.58)	4.24(1.16)	3.85(1.32)
Frequency friends	4.02(1.12)	4.07(1.12)	3.92(1.12)
Quality family*[c,f]	2.70(0.49)	2.90(0.44)	2.80(0.44)
Quality friends*[e]	2.42(0.51)	2.54(0.43)	2.57(0.43)

Note. $*p < .05$; [a]Whites > African Americans; [b]Whites > Latinas; [c]Latinas > African Americans; [d]African Americans > Latinas; [e]African Americans > Whites; [f]Latinas > Whites.

perceived support from the family. White women reported a greater number of both friends and relatives in their support networks. They also reported seeing relatives more often, but having lower quality relationships with relatives. There were no ethnic differences in how often they saw friends or in the quality of friendship networks.

For Study 2, White women reported significantly more perceived support from the baby's father, followed by Latina and African American women. White women reported significantly more received support from the baby's father than did African American women. In addition, White women reported the most satisfaction with the support they received, followed by Latinas and then African American women.

With respect to support from family and friends measures, there were no ethnic differences on the perceived support from family index. African Americans reported a significantly higher frequency of receiving support from family and friends than did White and Latina women, although there were no ethnic differences in satisfaction with received support. With respect to reports of who, in particular, provided support, African Americans reported receiving significantly more support from family members than did White women, and White and African American women reported receiving significantly more support from friends than did Latinas.

With respect to social network resources, White women reported more friends than did African Americans, followed by Latinas, but no ethnic differences emerged in the number of family members in the network. Latinas reported more frequent interaction with family members than did African Americans, followed by White women, and no differences emerged with respect to frequency of interacting with friends. Latinas reported higher quality relationships with family than did White and African American women, and African Americans reported higher quality relationships with friends than did White women.

Associations Between Demographic Variables and Social Support Indices

Associations between the demographic variables and the social support indices and the social network resource indices were each tested using Pearson Correlation Coefficients (see Table III). Results for both studies indicate strong associations between many of the demographic variables and social support variables. For Study 1, age and SES were strongly associated with many of the network variables, whereas marital status and nulliparity were not, whereas for Study 2 there was considerable variability in the pattern of correlations. There were few consistent relationships across

Table III. Correlations Between Social Support and Social Network Indices and Demographic Variables

Support Measure	Age	Marital	Nulliparity	SES	Work
Study 1					
Baby's Father Index					
Perceived support	.07	.29*	.16*	.31*	.14*
Family and Friend Indices					
Perceived support	.05	.11	.18*	.26*	.14*
Number family	.05	.12	.12	.13*	.14
Number friends	.23*	.11	.11	.35*	.22*
Frequency family	.26*	.09	.05	.33*	.11
Frequency friends	.11	−.02	.05	.20*	−.01
Quality family	−.04	.02	−.06	−.16*	.04
Quality friends	.02	.09	.12	−.02	.05
Study 2					
Baby's Father Indices					
Perceived support	.05	.31*	.10*	.25*	−.02
Received support	−.01	.31*	.06	.14*	−.03
Satisfaction	.01	.30*	.11*	.20*	−.02
Family and Friend Indices					
Perceived support	−.04	.05	.17*	.12*	.02
Received support	−.18*	−.19*	.25*	−.01	.01
Family	−.15*	−.13*	.14*	.01	.06
Friends	.15*	.02	.12*	.19*	.07
Satisfaction	.01	.06	.21*	.12*	.02
Number family	−.12*	−.08	.04	.02	.01
Number friends	.19*	.05	.08	.31*	−.12*
Frequency family	−.26*	−.24*	−.14*	−.26*	.03
Frequency friends	−.11*	−.03	.01	−.05	−.08
Quality family	.02	−.03	−.07	−.11*	−.01
Quality friends	−.05	−.09	.02	−.07	.02

Note. *$p < .05$.

the two studies except being married was associated with higher perceived support from baby's father (and greater received support from friends and family in Study 2), and higher SES was associated with greater perceived support from baby's father and friends/family, as well as number of friends. Interestingly, higher SES was also associated with less satisfaction with family network in both studies.

Multiple Regression Analyses

Based on the univariate analyses presented above, multivariate analyses were conducted to examine ethnic differences in support when controlling for other demographic variables. For each support index for which there were ethnic differences, a hierarchal multiple linear regression analysis was performed. For each regression model, age, nulliparity, employment status,

SES, and marital status were simultaneously entered in the first step. Ethnicity was entered in the second step. For Study 1, ethnicity was coded using dummy variables such that Latina women were coded as −1 and White women were coded as 1. For Study 2, ethnicity was coded such that Ethnicity 1 reflected a comparison of White women (1) to minority group members (−1; African Americans and Latinas), and the variable Ethnicity 2 reflected a comparison of Latinas (1) to African Americans (−1; Whites = 0).

Support From Baby's Father Variables

Regressions were conducted for three indices of support from the baby's father (see Table IV). The models for perceived support from baby's father index were significant for both Study 1 and Study 2. For Study 1, higher SES and being married were significant predictors of perceived support, however, ethnicity did not add significantly to the variance explained by the model. Similar results were obtained for Study 2, although age was also a significant predictor of perceived support from the baby's father. These results suggest that the greater perceived support from the baby's father reported by Whites could be due to the fact that they are more likely to be married and have higher SES.

For the received support from baby's father index (Study 2 only), age and marital status were significant predictors, such that younger women and married women reported receiving more support from the baby's father than did older women and unmarried women. For satisfaction with received support (Study 2 only), age and marital status were again the only significant predictors. In both studies, ethnicity did not add significantly to the variance explained by the model; therefore, the greater received support and satisfaction with support provided by the baby's father reported by Whites may be explained by higher SES.

Support From Friends and Family Variables

Regressions were conducted for the three indices of support from family and friends for which there were significant ethnic differences (all for Study 2 only), and all three models were significant (see Table V). With respect to frequency of received support from family and friends, age, nulliparity, and marital status were significant predictors, but the addition of ethnicity in the second step added significantly to the variance explained by the model. Specifically, younger women, unmarried women, and women

Table IV. Regression Models Predicting Results Predicting Support from Baby's Father Variables in Studies 1 and 2

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Table IV. Regression Models Predicting Results Predicting Support from Baby's Father Variables in Studies 1 and 2

Step and Variable	Study 1					Study 2				
	Beta	R	R² Change	F Change	df	Beta	R	R² Change	F Change	df
Perceived support from baby's father										
1. Age	−.13	.36	.13	7.65*	5,213	−.13*	.37	.13	13.33*	5,432
Nulliparity	−.10					.01				
Employment	.02					−.02				
SES	.27*					.19*				
Marital Status	.23*					.29*				
2. Ethnicity 1	.09	.36	.00	−1.08	6,212	.05	.37	.00	0.77	7,430
Ethnicity 2	n/a					.03				
Received support from baby's father										
1. Age	n/a					−.12*	.34	.11	11.15*	5,432
Nulliparity	n/a					.02				
Employment	n/a					−.04				
SES	n/a					.03				
Marital Status	n/a					.34*				
2. Ethnicity 1	n/a					−.03	.34	.00	0.33	7,430
Ethnicity 2	n/a					−.03				
Satisfaction with received support from baby's father										
1. Age	n/a					−.11*	.33	.11	10.67*	5,432
Nulliparity	n/a					.04				
Employment	n/a					−.04				
SES	n/a					.10				
Marital Status	n/a					.29*				
2. Ethnicity 1	n/a					.07	.34	.01	1.28	7,430
Ethnicity 2	n/a					.04				

Note. *$p < .05$. All statistics for a given independent variable were computed at the step that the variable entered the equation; Ethnicity 1 = Whites (1) vs. Minorities (−1); Ethnicity 2 = Latinas (1) vs. African Americans (−1).

Table V. Regression Models Predicting Support from Friends and Family Variables in Study 2

Step and Variable	Beta	R	R^2 Change	F Change	df
Received support from family and friends					
1. Age	-.17*	.35	.12	12.22*	5,432
Nulliparity	.24*				
Employment	-.01				
SES	.05				
Marital Status	-.17*				
2. Ethnicity 1	-.17*	.40	.03	8.47*	7,430
Ethnicity 2	-.10*				
Received support from family					
1. Age	-.16*	.25	.06	5.65*	5,432
Nulliparity	.12*				
Employment	.05				
SES	.10				
Marital Status	-.11*				
2. Ethnicity 1	-.11*	.28	.02	3.66*	7,430
Ethnicity 2	-.08				
Received support from friends					
1. Age	.10	.25	.06	5.61*	5,432
Nulliparity	.11*				
Employment	.02				
SES	.16*				
Marital Status	-.08				
2. Ethnicity 1	.05	.31	.04	8.53*	7,430
Ethnicity 2	-.20*				

Note. $*p < .05$. All statistics for a given independent variable were computed at the step that the variable entered the equation; Ethnicity 1 = Whites (1) vs. Minorities (-1); Ethnicity 2 = Latinas (1) vs. African Americans (-1).

having their first child reported receiving more support from family and friends; however, even after controlling for demographic variables, African American women reported receiving more support from family and friends than did Latinas, and White women reported the least amount.

Regression models for who in particular provided support (family and/or friends) were also significant. For received support from family, age, nulliparity, and marital status were again significant predictors, but the addition of ethnicity in the second step added significantly to the variance explained by the model. Thus, African American and Latina women reported more support from family members than did White women regardless of differences in age, parity, or marital status. Nulliparity and SES were each significant predictors of support from friends, but again, the addition of ethnicity in the second step added significantly to the variance explained by the model. Specifically, women having their first child and women of higher SES reported receiving more support from friends. Fur-

thermore, after controlling for demographic variables, African American women reported receiving more support from friends than did Latina women.[3]

Social Network Indices

Regressions were conducted for the five indices of social network support for which there were significant ethnic differences, and all five models were significant (see Table VI). A regression was performed for number of family members in the network for Study 1 but not Study 2. Ethnicity was the only significant predictor variable when holding all other predictor variables constant, such that White women reported more family members in their networks than did Latinas.

The models for number of friends in the network were significant for both Study 1 and Study 2. For Study 1, SES was the only significant demographic predictor, such that women of higher SES reported more friends in their network than did women of lower SES. Ethnicity did not add significantly to the explained variance. For Study 2, employment, higher SES, and being married were each significant predictors of number of friends, and ethnicity did not add significantly to the explained variance. Thus, the fewer friends reported by Latinas and African Americans could be due to the lower likelihood of being married, employed full time, or having less education/income.

The models for frequency of interactions with family members were significant for both Study 1 and Study 2. For Study 1, younger age, nulliparity, and higher SES were significant predictors, and ethnicity did not add significantly to the explained variance. In other words, the more frequent interactions with family members among Latinas could be explained by their youth, inexperience with pregnancy, and lower SES. For Study 2, younger age and not being married were significant predictors, but ethnicity added significantly to the variance explained by the model. Thus, even after controlling for demographic differences, Latina women reported the most frequent interactions with their family members, followed by African Americans and then White women.

The models for quality of interactions with family members were significant for both Study 1 and Study 2. For Study 1, SES was the only significant demographic predictor variable. Thus, the greater satisfaction

[3]When multivariate analyses of support from family were run controlling for number of family members in the network, significant predictors did not change. Similarly, when multivariate analyses of support from friends were run controlling for number of friends in the network, significant predictors did not change.

Table VI. Regression Models Predicting Social Network Variables in Studies 1 and 2

Step and Variable	Study 1					Study 2				
	Beta	R	R² Change	F Change	df	Beta	R	R² Change	F Change	df
Number of family members in network										
1. Age	−.03	.11	.01	1.51	5,206	n/a				
Nulliparity	−.05					n/a				
Employment	.09					n/a				
SES	.07					n/a				
Marital Status	.10					n/a				
2. Ethnicity 1	.23*	.20	.03	0.95*	6,205	n/a				
Number of friends										
1. Age	.06	.35	.12	6.84*	5,205	.09	.35	.12	10.53*	5,385
Nulliparity	−.10					.01				
Employment	.07					−.10*				
SES	.29*					.31*				
Marital Status	−.01					.11*				
2. Ethnicity 1	.15	.36	.01	−0.46	6,204	.06	.36	.01	2.25	7,383
Ethnicity 2	n/a					−.10				
Frequency of interactions with family										
1. Age	.17*	.35	.12	6.71*	5,200	−.17*	.31	.10	8.55*	5,385
Nulliparity	−.13*					.07				
Employment	−.03					.02				
SES	.26*					−.11				
Marital Status	−.04					−.11*				
2. Ethnicity 1	−.01	.34	−.01	−1.15	6,199	−.34*	.44	.09	21.57*	7,383
Ethnicity 2	n/a					.14*				

Marital Status	−.04	.34	−.01	−1.15	6,199	−.11*	.44	.09	21.57*	7,383
2. Ethnicity 1	−.01					.34*				
Ethnicity 2	n/a					.14*				

Quality of interactions with family

1. Age	.03	.17	.03	2.27*	5,204	.09	.13	.02	1.35	5,385
Nulliparity	.03					.04				
Employment	.01					−.05				
SES	−.27*					−.10				
Marital Status	.10					−.01				
2. Etnicity 1	−.06	.17	.03	−0.29	6,203	−.16*	.20	.02	4.35*	7,383
Ethnicity 2	n/a					.07				

Quality of interactions with friends

1. Age	n/a					−.06	.13	.02	1.33*	5,383
Nulliparity	n/a					.02				
Employment	n/a					−.03				
SES	n/a					−.05				
Marital Status	n/a					−.04				
2. Ethnicity 1	n/a					−.20*	.21	.03	5.58*	7,383
Ethnicity 2	n/a					−.01				

Note. * p < .05. All statistics for a given independent variable were computed at the step that the variable entered the equation; Ethnicity 1 = Whites (1) vs. Minorities (−1); Ethnicity 2 = Latinas (1) vs. African Americans (−1).

with familial relationships reported by Latinas may be attributed to the fact that women of lower SES report more satisfaction. However, for Study 2, ethnicity was the only significant predictor variable, such that even after controlling for differences in SES and other demographic factors, the Latinas still reported more satisfaction with familial relationships compared to White women.

Because there were no ethnic differences in satisfaction with friendships for Study 1, a regression model was tested only for Study 2. Ethnicity was the only significant predictor variable, such that African American and Latina women reported more satisfaction with the quality of their friendships than did White women.

DISCUSSION

The current research utilized data from two large prospective studies on pregnancy and birth outcomes to examine social support during pregnancy. First, we examined ethnic differences in social support. Second, we examined whether these differences remained after controlling for relevant demographic variables, including age, parity, work status, marital status, and SES. We examine these relationships across sources (i.e., baby's father, family, friends) and types (i.e., perceived, received, network integration) of support.

Several important findings warrant discussion. When demographic variables were not controlled, ethnic differences emerged for most social support and social network variables. When controlling for demographic differences among ethnic groups, such as marital status and SES, ethnic differences in social support were either less robust or no longer significant. However, the role of ethnicity and several contextual factors differed depending on the source of support. Specifically, the most important variables in predicting support from the baby's father were age and marital status. Ethnicity did not predict support from the baby's father when controlling for demographic variables. With respect to support from family, ethnicity emerged as a consistent predictor, as did age and marital status, and with respect to support from friends, ethnicity and SES emerged as the most important predictor variables. The results of these studies suggest that ethnic differences in support, when controlling for demographic variables, are not as robust as had been suggested by previous research, especially with respect to support from baby's father. Related contextual and demographic factors also play an important role in understanding social support during pregnancy, although there is variation across sources of support. Specific

notable univariate and multivariate findings will be discussed below, organized by source of support.

Support from the Baby's Father

Marital status was the most important predictor of support from the baby's father when controlling for demographic variables. Ethnic differences in support from the baby's father emerged in univariate analyses in both studies, indicating that non-Hispanic White women perceived and received more support from the baby's father than did Latinas, followed by African Americans. Generally, these findings suggest that African American women experience the least support from the baby's father. When controlling for demographic variables, however, these ethnic differences were no longer significant, suggesting that demographic factors other than ethnic group figure prominently in establishing the support context for these pregnant women. Indeed, marital status emerged as the strongest predictor of support from the baby's father, with married women reporting more support than unmarried women. In addition, younger women reported more support from the baby's father than older women, although this does not fully explain ethnic differences. Furthermore, women of higher SES perceived that more support was available from the baby's father than women of lower SES. Given these findings, it is important to note that African American women were least likely to be married, followed by Latinas and then White women, suggesting that ethnic differences in marital status were driving the apparent ethnic differences in support from the baby's father. Norbeck & Anderson (1989) reported that Latinas received the most support from the baby's father, followed by Whites, and then African American women; however, the study did not include controls for marital status or report on ethnic differences in marital status. The current findings suggest that such ethnic differences may have been explained by ethnic differences in marital status.

That marital status is the most important predictor of support from the baby's father is not surprising, given that the baby's father is more likely to be present and committed to the relationship and to the baby if the couple is married. This finding has important implications, however, insomuch as previous research indicates that the spouse is a unique, irreplaceable provider of support (Brown & Harris, 1978; Coyne & Delongis, 1986; Lieberman, 1982), and his involvement is associated with healthy pregnancy outcomes including reduced prenatal distress and higher birthweight babies (Kalil *et al.*, 1993; Lieberman, 1982; Ramsey *et al.*, 1986). The fact that ethnic differences in support from the baby's father disap-

peared when marital status was controlled also suggests that the primacy of the marital relationship as a source of support holds up across these three culturally diverse groups of women who have differing attitudes toward pregnancy (Zambrana, Scrimshaw, Collins, & Dunkel-Schetter, 1997). This finding is valuable to family and marital researchers and has important implications for prenatal intervention.

An issue of concern may be the use of the marital status variable rather than an indicator of cohabitation. Arguably cohabitation might be as beneficial as marriage if it implies commitment and relationship stability. We examined this issue in analyses of Study 2 data by testing the association between living with the baby's father and marital status, and found the two variables to be highly correlated ($r = .62$) although not overlapping entirely. Further analyses indicated that unmarried women living with the baby's father ($N = 82$) received levels of support lower than married women living with the baby's father ($N = 230$), but greater than women who were unmarried and not living with the baby's father ($N = 130$). Thus, although cohabitation may be an important reason for why support from the baby's father is higher in married women (e.g., availability, opportunity), it is not the only explanation. There must be something else associated with the institution of marriage, such as the level of commitment, that leads to more support from the baby's father in pregnancy. Further examination of marital status within analyses of ethnic differences in social support seems essential in future research, but consideration of cohabitation patterns warrants attention as well.

Support from Family

Ethnic differences in support from family emerged in both studies when controlling for demographic variables, including SES. Specifically, univariate analyses of ethnic differences revealed that African American women reported receiving the most support from family, followed by Latinas and White women (Study 2). White women, however, reported more family members in their networks than did Latinas (Study 1; nonsignificant in Study 2), although this is likely an artifact of the number of years the Latinas have been in the U.S. In addition, Latinas reported higher quality interactions with family (Studies 1 and 2). Most of these ethnic differences were still significant in multivariate analyses controlling for demographic variables. Generally, these findings seem to suggest that African American and Latina women perceive their quality of interaction with family to be higher than White women.

From a cultural perspective, these differences may reflect variations

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in family orientation. For example, the finding that African Americans reported receiving more support than Latinas and White women may reflect the strong involvement of multi-generational extended family members in family functioning observed in African American culture (Chase-Lansdale *et al.,* 1994; Jarrett, 1994; Willis, 1992). Similarly, that Latinas reported higher quality interactions may reflect a familistic orientation within their culture (Vega, 1995). When comparing results across the two studies, Latinas in the less acculturated sample (Study 1) reported fewer family members in their networks and less frequency of interaction with family than Latinas in the more acculturated sample (Study 2). These differences may reflect immigration effects, as the women in Study 1 were more likely to be born outside the United States and to have lived in the United States for shorter periods of time, and therefore have fewer family members in the United States, on average, than the women in Study 2. Indeed, acculturation was significantly correlated with the number of family members in the network for the Latinas in Study 1 (born in United States, $r = .22$, $p < .05$; language preference, $r = .25$, $p < .05$), but not in Study 2 (born in United States, $r = .06$, *ns;* language p... ference, $r = .01$, *ns*). Acculturation and frequency of interaction were significantly correlated for both the Latinas in Study 1 (born in United States, $r = .23$, $p < .05$; language preference, $r = .19$, $p < .05$) and Study 2 (born in United States $r = -.11$, $p < .05$; language preference, $r = -.11$, $p < .05$), however, for Study 1, the more acculturated women had more frequent interactions, whereas in Study 2 the more acculturated women had less frequent interactions. Because the women in Study 2 are more acculturated overall, the lower levels of interaction with higher acculturation may reflect a shift toward more mainstream American values, including less emphasis on family than is the case in Latino culture. Similarly, higher SES women were more likely to have been in the United States longer (Study 1, $r = .54$, $p < .05$; Study 2, $r = .30$, $p < .05$), perhaps even for generations, allowing for the relocation of family members for those who were recent immigrants, or the development of close ties between family members.

Demographic variables (e.g., age, marital status, parity) were also important predictors of support from family. Younger women, unmarried women, and women having their first child reported more support received from family than did older women, married women, and women with more children. Specifically, family members showed greater support when the baby's father was absent, suggesting that family members may have been compensating for lack of support from the baby's father. First-time mothers and younger mothers reported receiving more support during pregnancy, which may indicate greater need for informational and emotional support in a first pregnancy and birth experience. However, the findings with respect

to frequency of interaction with family members were inconsistent. In Study 1, younger women and first time mothers reported *less* frequency of interaction with family than their older and more experienced counterparts. In contrast, in Study 2, younger women and unmarried women reported *more* frequent interactions than older, married women. The differences between studies may be an artifact of acculturation, as the Latinas in Study 1 were younger and more likely to be first time mothers, and they had fewer family members living close by, thus resulting in less frequent interactions with family members.

Support from Friends

Ethnic differences in social and network support from friends emerged in both studies after controlling for demographic variables. SES also predicted friendship networks. Specifically, univariate analyses revealed that White women reported more friends in their networks and more received support from friends than did African Americans, followed by Latinas. African American and Latina women reported higher quality interactions with friends, however, than did White women. These differences may reflect cultural differences between White women and African American and Latina women. Specifically, there is some evidence that White women are more removed from family networks (Keefe *et al.,* 1979), and therefore they may rely more on their friendship networks for support. When controlling for other demographic variables, women of higher SES reported more received support from friends and a greater number of friends in their network. These findings are consistent with other research which suggests that SES is associated with having more friends (Thoits, 1982; Golding & Baezconde-Garbanati, 1990). Furthermore, married women and women not working full time reported more friends in their networks, perhaps due to increased opportunities to spend time developing friendships both through broader opportunities to meet people through spouses, and increased time to develop friendships that unmarried women and women working full time do not have as readily available to them.

Limitations

One important limitation of this research was our inability to test the impact of culture on ethnic differences in social support. A measure of individualism and collectivism (attitudes measure, Triandis, 1994) was included for a subsample of women in Study 2. Unfortunately, although the

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measure was reliable among the White and African American samples, it was not reliable for Latinas, suggesting that the measure did not show cross-ethnic group equivalence. Although translations were provided by the author of the measure, the measure and translation were originally validated using college students, who may differ in meaningful ways from pregnant Latinas. Thus analyses were not reported for this measure. As interracial marriages increase in the United States, and the distinctions between racial and ethnic groups become increasingly blurred, the importance of focusing on value orientations (Schwartz & Bilsky, 1987; Triandis, 1989; 1994) rather than race and ethnicity to understand culture will become increasingly important. As such, the development of cross-culturally reliable measures of value orientations is needed.

CONCLUSION

The current studies examined ethnic variation in social support. Univariate results suggested that ethnic differences were pervasive. Generally, white women reported more support, although in some cases African and Latina women reported more support from family and friends. When controlling for demographic variables, ethnicity did not predict support from the baby's father. However, ethnicity continued to predict support from friends and family, suggesting that ethnicity is an important component to understanding support processes fully. The universality of the support processes in close relationships with partners and the effects of marriage bear further consideration. We also examined how patterns of support differed across sources of support (i.e., baby's father, family, friends). The findings suggest that marital status is the most important predictor of support from the baby's father, whereas support from friends and family is more complex, and is associated with ethnicity, SES, age, parity, and marital status.

An understanding of ethnic variability in the patterns of various types and sources of support may have implications for understanding ethnic differences in birth outcomes, which are large and long standing (Kleinman & Kessel, 1987; National Center for Health Statistics, 1997; Shiono, Klebanoff, Graubard, Berendes, & Rhodes, 1986). As such, future research examining the contribution of psychosocial factors to ethnic variability in birth outcomes would benefit from the inclusion of both contextually relevant demographic variables, and measures of social support that differentiate between types and sources of support. Furthermore, social support interventions during pregnancy have much potential and are frequently done, but are often not targeted to the ethnic or demographic

characteristics of the populations in which they are implemented (Blondel, 1998).

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