

AFRICAN AMERICAN ADOLESCENT MOTHERS' VOCATIONAL ASPIRATION-EXPECTATION GAP: INDIVIDUAL, SOCIAL AND ENVIRONMENTAL INFLUENCES

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This study investigated the vocational aspirations and expectations of 160 African American adolescent mothers living in urban poverty. Discriminant function analysis was used in an attempt to distinguish between participants with, and those without, a discrepancy between their vocational aspirations and expectations. The two groups were found to be distinct in several ways. Depressive and anxious symptoms along with childcare provided by relatives, were associated with a gap between aspirations and expectations. Higher grade point averages, living with biological parents, and having a career mentor were more often associated with a match between expectations and aspirations. A combination of factors, including psychological functioning, social support, achievement, and contextual factors specific to the tasks of teen parenting, should be considered in future attempts to understand and describe adolescent mothers' vocational development.

Pregnant and parenting teens might well be considered an archetypal "at risk" group in psychology. Negative outcomes associated with early parenthood include low educational attainment, unemployment, and welfare dependence (Hofferth, 1987; Hofferth & Moore, 1979; Hoffman, Foster, & Furstenburg, 1993; Klepinger, Lundberg, & Plotnick, 1995). As adolescents, these young women face the tasks of forging an identity and gaining independence, while simultaneously coping with the stress of the transition to parenthood. Even in the best of circumstances, these tasks would be difficult. Minority adolescents confront additional obstacles stemming from racial discrimination and those living in poverty face even greater adversity. However, some poor, minority adolescent mothers manage to overcome the risks and make their way out of poverty—somehow they

imagine and create better circumstances for themselves. What accounts for these differences?

One source of difference may be adolescent mothers' beliefs about their potential to reach their own vocational goals. Vocational aspirations and expectations "represent the incipient tasks in the process of vocational development" (Baly, 1989, p. 255) and are generally predictive of later vocational attainment (Hotchkiss & Borow, 1984). Vocational aspirations are defined as "the statement of a desired career goal given ideal conditions" (Baly, 1989, p. 255). Vocational expectations, on the other hand, "include an individual's consideration of reality factors which may affect attainment of aspirations" (Baly, 1989, p. 255). Early vocational research, such as Super's (1953) study of vocational development asserts that vocational choices (aspirations) are crystallized during late adolescence, after a period of time in which teenagers integrate information about themselves with their knowledge of available opportunities. The approach taken by Super (1953) and others represents career exploration as a process grounded largely in personal interests and capabilities, with little attention to external circumstances or cultural pressures: general interest leads to a specific vocational goal, which in turn leads to pursuit and attainment of that goal.

Status attainment theory approaches vocational choice from a sociological perspective, identifying socioeconomic status as an important context for later educational and vocational achievement, with specific attention to the influences of social relationships, academic achievement, and

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occupational and educational aspirations (Sewell & Hauser, 1975). However, status attainment models for African Americans and women, in spite of the inclusion of contextual factors, have never achieved the predictive success of the same models developed for White men (Burke & Hoelter, 1988). Only recently have vocational psychologists begun to explore the vocational development of historically oppressed groups including women (Fitzgerald & Betz, 1983; Smith, 1983) and African Americans (Mickelson, 1990; Ogbu, 1989). Augmenting early vocational theory, which was based largely on White, middle-class males, culture- and context-sensitive theories provide an understanding of the ways in which external forces (e.g., race and sex discrimination, high local unemployment) affect individuals' vocational choices (e.g., Cook, Church, Ajanaku, Shadish, Kim, & Cohen, 1996; Gottfredson, 1981; Hackett & Byars, 1996).

In spite of this progress, a large gap exists in the literature where pregnant and parenting teens are concerned. Context and circumstances are likely to be even more important influences on vocational development for this population than for their nonparenting counterparts. A teenage girl with little money, no diploma, and a baby on the way may not have the luxury of considering her own interests and abilities in making job choices; she may have to take the first job that comes along or the one that provides adequate childcare. This may be particularly true for young women of color, who are likely to face even more barriers to achieving their goals.

Research that includes African American participants shows that they tend to have lower aspirations and expectations than their European American counterparts (Bogie, 1976; Curry & Picou, 1971; Kelly & Wingrove, 1975). In addition, the gap between what people hope for and what they expect to achieve, in terms of careers, is usually larger for women and minorities than it is for White men (Cook et al., 1996; Dillard, 1980; Holloway & Berreman, 1959; Hotchkiss & Borow, 1984). Thus, African American teenage girls, "regardless of socioeconomic status, . . . tend to set lower occupational goals and predict as well as expect lower occupational success" (Brown, 1996, p. 91). A disparity between aspirations and expectations may be referred to as "anticipatory occupational goal deflection" (Kuvlesky & Bealer, 1966), or more simply the aspiration-expectation gap. Unfortunately, conceptualizations and measurement of aspirations and expectations differ considerably across studies, leading to inconsistencies in the meaning of reported disparities between the two. Some studies use prestige categories (e.g., professional, skilled, unskilled), others use prestige or socioeconomic status scales, and still others use job titles or broad interest categories with no indication of relative prestige. Of those studies whose measures assessed the prestige or socioeconomic status of occupations, the reported proportion of adolescent participants with an aspiration-expectation gap ranges from 15% to 40% (Bogie, 1976; Cosby & Picou, 1971;

Curry & Picou, 1971; Ortiz & Bassoff, 1987; Stephenson, 1957).

Tapping occupational aspirations provides information about an individual's interests and hopes, unfettered by reality; expectations tell us what that same individual sees in the future, given the current context. The discrepancy between hopes and expectations gives a sense of an individual's view of his or her circumstances, abilities, and future opportunities. Without seeing the potential to attain her highest goals, it is unlikely that a young mother would continue to expend energy and resources trying to do so. Instead, her energies might well be directed toward a more feasible future. Therefore, the aspiration-expectation gap could make a difference between a young mother striving to achieve her career goals and simply taking what she believes she can get.

The current study draws on status attainment theory and includes variables specific to teen parenting, to understand the development of aspirations and expectations, and more specifically to determine the factors affecting the development (or lack thereof) of a disparity between hopes and expectations. We have drawn upon numerous studies that attempt to account for the variation in levels of occupational aspirations and for the size of the aspiration-expectation gap. As noted previously, race and sex are two of the most common influences on the size of this gap; however, studies of aspirations have identified numerous more specific influences. Among these are age, geographic region (rural or urban, economically depressed or thriving), and socioeconomic status (e.g., Cook et al., 1996; Furlong & Cartmel, 1995; Stephenson, 1957), all of which are nearly constant across the participants in our study. Rather than looking for differences between populations, we are attempting to gain insight into the particulars of the situation common to all our participants: being an urban, African American teenage girl, living with limited financial means, with a baby on the way or recently born.

In order to make the study meaningful within this population, we have attempted to analyze the influence of some factors specific to the girls with whom we worked. Perhaps young women with only one child, for instance, are more hopeful than those with two or three, given lower expenses and overall stress. Those mothers who can find free childcare, perhaps from family members, may more easily see themselves earning a diploma and going on to college than do their peers who cannot find affordable childcare during school hours. A young mother's family situation, whether with both biological parents, a single parent, or neither parent, may also influence hopes and expectations (Cook et al., 1996), through variations in available social support and buffering against external strain. Having a model to emulate, such as a career mentor (Klaw & Rhodes, 1995), could provide an adolescent with a better understanding of the requirements and possibilities of vocational success. Perceiving, more generally, that various types of support are available (Rhodes, Meyers, Davis, Ebert, & Gee, 1998)

might make momentary stresses more bearable and allow a broader range of long-term plans.

Academic achievement has been linked, in prior studies, to both aspirations and attainment (Bogie, 1976; O'Brien & Fassinger, 1993; Rojewski & Yang, 1997), so measures of school performance such as grade point average have been included as well. Participants' work histories and employment-related activities may provide some indication of their engagement and sense of agency in developing a vocation, which may in turn affect their beliefs in their own capacity to succeed in the long term. Depression can be a particular risk for adolescent mothers (DeBolt, Pasley, & Kreutzer, 1990) and is often comorbid with anxiety (Caron & Rutter, 1991). These syndromes can include worry (e.g., APA, 1994, p. 432) and hopelessness (APA, 1994, p. 320), which may affect young women's ability to see a positive outcome for themselves. A young mother also may perceive a number of concrete obstacles to attaining her goals. Her belief in her own ability to surpass those obstacles may affect her view of her future, given the current stressful circumstance of early childbearing.

In light of ongoing policy debates regarding "welfare mothers" and adolescent pregnancy, it is particularly important to move beyond the stereotyped portrayal of these young women as doomed to, and even satisfied with, welfare dependence. Indeed, this portrayal has "led to the inevitable conclusions that poor single mothers must be prodded by ultimatums and threats to get them to work" (Wijnberg & Weinger, 1998, p. 212). However, contrary to this "common knowledge," existing research suggests that teen mothers do hope to continue with secondary and postsecondary education (Farber, 1989). Furthermore, these young women frequently express a "strong motivation toward independence and empowerment" (Wijnberg & Weinger, 1998); in many cases, they identify specific career goals (Ortiz & Bassoff, 1987). On the other hand, Ortiz and Bassoff (1987) found that adolescent mothers were much less likely than their nonparenting counterparts to believe they could attain their career goals. An examination of the forces affecting this aspiration-expectation gap will contribute to a reasoned and realistic view of adolescent mothers' career development, perhaps offering much-needed information for service provision and policy development.

This exploratory study combines predictors of vocational outlook supported in existing literature with those specific to the circumstances of an urban, African American, adolescent mother. Previous studies with other populations have begun to identify individual factors relevant to vocational development, but these studies have seldom addressed the issue of correlated predictors. Family structure, for example, might appear to influence job choice directly, when in fact its importance lies in the availability of parental encouragement regarding education and employment. Whenever possible, we have selected multiple indicator variables within each domain of interest. These multiple lenses provide both breadth and depth and may help to elucidate

relationships between the factors affecting the vocational development of urban, African American, adolescent mothers. With this approach, we hope to identify factors that can reliably distinguish between those young mothers who see no possibility of achieving what they want and those whose vision of the future matches their highest hopes.

METHOD

Procedure

An alternative school for pregnant and parenting teenage girls, in a large Midwestern city, was the site of the study. The research team attempted to contact all students who were enrolled during the 1992–1993 academic year. The study was explained to students and their parents by a trained, African American, female research associate; the explanation included the study's procedures and emphasized the fact that participation was entirely voluntary. Of the 239 students contacted, 235 (98.3%) agreed to participate in the study. Parents and students gave informed consent, and a stipend of \$10 was offered for each interview completed annually by the student. Initial interviews took place at the school and lasted approximately two hours. The current study utilizes a subset of instruments and questions from the students' first interviews and represents a cross-sectional portion of a longitudinal study with the same participants.

Participants

Study participants were African American girls ($N = 160$) between 13 and 19 years of age ($M = 16.12$; $SD = 1.18$). Most were pregnant with or had just given birth to their first child (91%); a small group was pregnant with or had just given birth to their second child (8%); and very few had three children or two with one on the way (1%). A Bonferroni-corrected comparison of pregnant students (those with a baby on the way and no other children) and parenting students (those with one or more children) revealed no significant differences between the two groups on any of the measures used in this study. Therefore, we chose to consider them effectively equivalent and combined their data for the remainder of our analyses.

Because a number of participants did not provide answers to all the relevant questions, this study focuses on a subset of the 235 African American students who participated in the first year of the project. Comparisons on the 20 variables in the current study reveal no significant differences between those who were and were not included in our analyses.

Measures

Vocational aspiration-expectation gap. Students were asked one open-ended question about their dreams for the future, assuming they faced no obstacles whatsoever, and a

second question about their most probable future career. Both questions parallel those used in other studies of this nature (e.g., Bogie, 1976; Dawkins, 1981; McNair & Brown, 1983). The aspirations question asked, "If you were completely free to choose any job, what job would you like most as a lifetime job?" The expectations question asked, "When you think of your life, what job do you think you will be doing when you are 30 years old?" Job choices were coded based on the Socioeconomic Index (SEI; Stevens & Cho, 1985), a scale based on 1980 census data¹, which assigns scores to specific jobs based on a combination of prestige and income.

Two raters coded participants' job choices independently, with 98% agreement for aspirations and 95% agreement for expectations. All conflicts were resolved by a third rater. In some cases, students' choices (e.g., "nurse") did not precisely fit available job titles (e.g., "registered nurse," "licensed practical nurse," "nurse's aide")². If several categories could reasonably apply to the job listed by the student, the scores for all potentially applicable categories were averaged; this happened most frequently with "nurse" and "secretary." If the job listed by a student did not have an obvious match on the SEI list, the best possible substitute, based on the agreement of the three raters, was utilized.

The aspiration-expectation gap is the numerical difference between the codes for a student's aspiration and her expectation. In most cases (102 students, 64%), there was no difference between the job they hoped to get and the one they believed they would have; in other words, the aspiration-expectation gap was zero. Forty-seven students (29%) had a positive gap, indicating that their aspirations were higher than their expectations; another 11 (7%) had a negative gap, indicating that their expectations were higher than their aspirations. Given the low frequency of the negative gap in our sample, it was taken to represent random variation³. The largest negative gap was a difference in SEI scores of 29 points; if negative gaps in this range are understood as nonsignificant, positive gaps of similar magnitude must be treated the same way. Thus, any aspiration-expectation discrepancy of fewer than 29 points, whether positive or negative, was treated as though it represented random variation and was included as a "no gap" case. This method placed 26 cases in the "gap" group, and the remaining 134 in the "no gap" group.

Age. This variable indicates participants' age in years at the time of the initial interview.

Number of children. Participants were asked how many children they had and cared for. If they were currently pregnant, the number of children was increased by one, on the assumption that this pregnancy would affect participants' views of their own lives and circumstances even before the baby was born.

Childcare plans. Two variables ("relative-provided childcare" and "paid childcare") were created from items about participants' childcare plans. Respondents were asked, "Who does (or will) care for your baby while you're at school?" and presented with choices including self, mother, other relative, in-school, or other day care, "I don't know," and "Other," the latter specified in a subsequent open-ended question. For the second item, "Will you have to pay money for any of your regular childcare arrangements?" response choices were "no," "yes," "sometimes," and "I don't know." Participants who responded "I don't know" to either question were eliminated from further analyses because we could not adequately interpret the meaning of this response or its relationships to the dependent variables. Each item is scored dichotomously, with a score of zero representing nonrelative care for the first variable and unpaid childcare for the second. Eighty-four percent of respondents indicated that a relative would be providing childcare, and 83% had found unpaid childcare providers. Thus, the great majority of respondents (73%) were receiving free childcare from relatives.

Economic strain. Pearlin's Economic Strain Scale (Pearlin, Menaghan, Lieberman, & Mullan, 1981) consists of eight items that focus on chronic economic strain, as represented by trouble paying bills, affording rent, and paying for other goods and services. Study participants rated the frequency with which their household experienced these types of strain, on a 4-point scale ranging from *never* to *always*; higher scores indicate more economic difficulty. The average total score was 13.96 ($SD = 4.05$). The scale's reliability was moderate ($\alpha = .76$) in our sample.

Parents in home. As a proxy for family structure and support, this variable indicates the number of biological parents (0, 1, or 2) with whom the participant was living at the time of the interview. The majority of respondents (67%) lived with one parent, while 23% lived with neither parent, and 10% lived with both parents. Unfortunately, more specific data about household and family composition were not available.

Maternal educational aspirations. Participants responded to the statement, "It is very important to your mother (or mother figure) that you complete high school" on a 4-point Likert scale ranging from *strongly disagree* to *strongly agree*. It is important to note that this variable taps the participants' perceptions of their mother's viewpoint, rather than the mothers' own responses. A majority of participants (93%) chose "strongly agree" in response to the statement.

Total perceived support. The "total perceived support" score was derived from the Social Support Network Questionnaire (SSNQ; Rhodes et al., 1998), which assesses several types of social support such as emotional support,

tangible assistance, and childcare. Participants were asked to nominate individuals who were available to provide any type of support; the total perceived support score is simply the total number of individuals nominated by each participant. Rhodes et al. (1998) found the total perceived support subscale to have strong one-week test-retest reliability ($r = .83$). In our sample, the size of this social support network ranged from 2 to 17 nominated individuals, with an average of 6 ($SD = 2.71$).

Mentor status. Each student was given the definition of a mentor and stated whether she had a person in her life who fit the description (Klaw & Rhodes, 1995). The definition required that the person be an adult, older than the participant, who has taken a special interest in her, and to whom the student looks for support and guidance. The "mentor status" variable is dichotomous, with a score of 1 for students with mentors and a score of 0 for those without. Ninety-two students (58%) identified at least one person whom they considered to be a mentor.

Career mentor involvement. This measure, designed by Klaw & Rhodes (1995), asks those students who identified mentors to rate how much the mentor could be counted on, how much the mentor believes in and cares about the student, how much the student is inspired by the mentor to do her best, and how much knowing the mentor has affected the student's actions and choices. In addition, two items addressed the role of a mentor as a model for success in careers; these items stated "he or she is a model for the kind of person you want to be" and "he or she is a model for the kind of career successes you would like to have." Each of the six questions was answered on a 5-point Likert-type scale ranging from *not at all* to *a huge amount (extremely)*. The career mentor involvement (CMI) variable refers to the summed scores of the six items. For students who did have a mentor, CMI ranged from 13 to 30, with a mean of 22.96 ($SD = 4.15$); the scale's reliability was adequate ($\alpha = 0.72$) for this sample. For those students who did not identify a mentor, the career mentor involvement score was set at six, which would represent answers of "not at all" to each of the six mentor description questions.

Job preparation activities. Participants were asked whether they were participating in any activities to help them procure their desired job or career; choices included taking vocational courses, taking college preparatory courses, currently working at a related job, doing volunteer work, and other activities specified by the participants. A slight majority (53%) of participants identified no current job-related activities; responses ranged from zero to three activities.

Work history. This dichotomous variable indicates whether students have ever had formal employment. Most participants (63%) answered in the affirmative.

Educational achievement. Students' cumulative high school grade point averages (GPA, based on a 5-point scale), at the time of entry to the alternative school, are used to indicate educational achievement. GPAs were collected from public school records and include data from a number of schools throughout the city where the study took place. Values ranged from zero to five grade points, with an average of 1.35 ($SD = 0.78$).

Educational aspirations and expectations. Respondents were asked two questions concerning their educational plans. The first item tapped educational aspirations, asking, "If nothing stood in your way, how much education would you want to complete?" The other question focused on expectations, asking, "When you think of your life, how much education do you expect to have completed by the time you are thirty?" Response choices for both ranged in discrete steps from "less than a high school diploma" to "graduate degree." Participants' responses for both items ranged from "high school diploma" (aspirations, 9%; expectations, 4%) to "graduate degree" (aspirations, 38%; expectations, 33%) with "four-year college degree" being the most common response for both aspirations and expectations (41% each).

Obstacles to education. The interviewer asked respondents, "What things, do you think, will make it difficult for you to get all the education you want?" and listed five response choices: "nothing," "caring for a child," "not having enough money to pay for further education," "parents expect me to work full time," and "other," with an open-ended response option to specify the other educational barriers. Response choices were derived from focus groups with the study participants (Klaw & Rhodes, 1995). The educational obstacles score refers to the total number of obstacles endorsed or named by each participant; these totals ranged from zero to three obstacles ($M = 1.14$, $SD = 0.69$).

Depressive symptoms. Participants responded to 13 items that form the depression subscale of the Symptom Checklist 90-R (SCL-90-R; Derogotis, 1983). Derogotis (1983) reported strong reliability ($\alpha = .90$) for this subscale; in our sample, internal consistency was also high ($\alpha = 0.88$). Each item asks whether the respondent has experienced a symptom (such as anhedonia or hopelessness) in the past two weeks, with answers ranging from *not at all* to *a huge amount (extremely)*. The average total score was 25.68 ($SD = 9.72$). Individual totals ranged from 13 to 61.

Anxious symptoms. The SCL-90-R (Derogotis, 1983) also contains an anxiety subscale that was utilized in this study. This scale consists of 10 items, each asking whether the respondent has experienced a symptom (such as restlessness or trouble concentrating) in the past two weeks. The answer choices are the same as those for the depression subscale. In our sample, the reliability was high ($\alpha = 0.86$).

Total scores ranged from 10 to 40, with an average of 16.08 ($SD = 6.41$).

Analyses

Discriminant function analysis. Because this study is exploratory, it is as important to determine the relative importance of all the variables in combination as it might be to select those with a statistically significant contribution. For this reason, we utilized a discriminant function analysis that forced inclusion of the entire set of independent variables. Prior probabilities of group membership were assumed to be equivalent to those in our data set, as the relative proportions of the "gap" and "no gap" groups were similar to those found in previous studies of various populations (Bogie, 1976; Cosby & Picou, 1971; Curry & Picou, 1971; Ortiz & Bassoff, 1987).

Post hoc analyses. We performed additional analyses of groups defined by aspiration and expectation levels, rather than by a discrepancy between the two. The goal was to better understand why two groups of young women with equally high aspirations might have markedly disparate expectations, or in the converse, why two groups with equally low expectations might have markedly disparate aspirations. We created three comparison groups, one with high aspirations and low expectations, a second with high aspirations

and expectations, and the third with low aspirations and expectations. ANOVA and post hoc pairwise (Tukey's HSD) comparisons were used to compare the three groups' means on all study variables.

RESULTS

Descriptive Summary

Aspirations and expectations. Figure 1 shows the frequency with which participants identified vocational aspiration and expectation choices in a variety of job categories. Notably, 72 students (about 45% of all respondents) aspired to some form of medical profession. Although 21 young mothers (13%) aspired to become physicians of some kind, only about 10 (6%) expected to do so; a similar trend can be observed for the "lawyer" category. At the low end of the prestige and income scale, no participant aspired to be unemployed, to work in food service, or to be a childcare provider, yet several expected to hold these positions at the age of 30.

Students' aspirations ranged from cosmetologist ($SEI = 19.10$) to lawyer ($SEI = 88.42$). The mean aspiration level was 55.53 ($SD = 23.17$). Job titles near this mean value include "underwriters" ($SEI = 54.09$) and "legislators" ($SEI = 57.09$). Participants' expectations ranged from an SEI of zero, which encompasses unemployment and

Fig. 1. Aspirations and expectations categorized by job type.

volunteer work, to an SEI of 88.42 (lawyer). The mean expectation score was 45.91 ($SD = 21.81$); occupations close to this score include “sales supervisors and proprietors” ($SEI = 48.10$) and “public transportation attendants” ($SEI = 45.7$). Overall, the students’ aspirations and expectations were moderately correlated ($r = .59, p < .01$).

Aspiration-expectation gap. Student’s t tests reveal that the respondents’ aspirations were significantly higher than their expectations ($t[159] = 5.96, p < .001$); as a group, these young mothers did experience a moderate aspiration-expectation gap. However, the majority ($n = 102$) of respondents showed no discrepancy between their aspirations and expectations. As noted previously, of those with a gap, most ($n = 47$) had a “positive” gap: their aspirations were higher than their expectations. Another 11 students had a “negative” gap. Thus, the result showing that students’ aspirations were, on average, higher than their expectations, is driven entirely by a group of 47 students, or approximately 29% of the sample.

Furthermore, in a comparison between students with and without an aspiration-expectation gap, the gap group shows significantly higher aspirations ($F[1, 158] = 39.880, p < .001$) and lower expectations ($F[1, 158] = 21.85, p < .001$) than their counterparts with no gap at all. In other words, those students with a gap are aiming higher than their nongap counterparts, and, at the same time, they are expecting less.

The gap and no-gap groups showed significant differences on several of the measures in the study. The gap group reported more anxious symptoms than the no-gap group ($M[SD] = 18.73 (6.43)$ and $15.56 (6.30)$, respectively, ($F[1, 158] = 5.47, p < .01$). Similarly, those students with a gap reported more depressive symptoms ($M[SD] = 29.85 [11.14]$) than the no-gap group ($24.87 [9.25]$; $F[1, 158] = 5.88, p < .01$). Students with an aspiration-expectation gap had significantly lower GPAs than their counterparts with no gap ($M[SD] = 1.06 [0.69]$ and $1.40 [0.78]$, respectively, $F[1, 158] = 4.19, p < .05$). The two groups also reported differences in the availability and roles of adult mentors. Students with an aspiration-expectation gap were less likely to have a mentor ($M[SD] = 0.38 [0.50]$, gap; $0.61 [0.49]$, no-gap; $F[1, 158] = 4.36, p < .05$), and had lower scores on the Career Mentor Involvement scale ($M[SD] = 12.58 [8.80]$, gap; $16.37 [8.91]$, no-gap; $F[1, 158] = 3.95, p < .05$). In a nonsignificant trend, the gap group was somewhat more likely than the no-gap group to have primary childcare arrangements with relatives ($M[SD] = 0.96 [0.19]$, gap; $0.82 [0.38]$, no gap; $F[1, 158] = 3.29, p < .10$).

Discriminant Function Analysis

The discriminant function analysis included the entire set of independent variables, using the pooled within-groups correlation matrix, suggested by Klecka (1980) to be the best representation of the relationships among variables. The derived discriminant function is statistically significant ($\alpha = .818, \alpha^2[18] = 29.84, p < .05$), confirming that the

two groups are distinct. However, the eigenvalue for that function is 0.22, suggesting that it may have little discriminatory power; in addition, the canonical correlation between the groups and the discriminant function itself is .43, indicating only a moderate association⁴.

Function scores and classification. The no-gap and gap groups’ discriminant function score distributions overlap closely, with ranges from -2.81 to 3.59 and -2.87 to 0.23 , respectively. Thus the range of discriminant function scores for the gap group is contained almost entirely within the low end of the range for the no-gap group. The no-gap group’s centroid (mean function score) is at 0.21 and the gap group’s centroid is at -1.1 .

The overall classification accuracy of the discriminant function is 83%. The function’s specificity is 95%; it correctly classified 127 of the 134 cases with no aspiration-expectation gap. Its sensitivity, however, is only 23%; the majority of cases with a gap were misclassified. The proportional reduction in error, measured by tau, is 37%; thus, for every 100 errors made using random assignment (based on prior probabilities) to the two groups, we would make only 63 using the derived discriminant function.

Structure and standardized coefficients. The (pooled) within-groups correlations (structure coefficients) are not particularly large, ranging in absolute value from .03 to .41. However, ordering them by magnitude provides some sense of the relative strength of individual factors’ relationships to discriminant function scores overall. Depressive and anxious symptoms take the lead with structure coefficients of $-.41$ and $-.40$, respectively; GPA (.35), mentor status (.37) and involvement (.34), and relative-provided childcare ($-.31$) round out the list of factors most strongly correlated with function scores. These relationships closely reflect the pattern of significant group differences in the univariate analysis. The discriminant function analysis also provides information about relationships that could not be identified through analysis of variance. Specifically, we see a group of factors in the medium range of correlation values (from .12 to .23), including parents in the home, age, educational expectations, job preparation activities, maternal educational aspirations, paid childcare, and economic strain. The standardized coefficients showed relative magnitudes similar to those of the structure coefficients, with minor variations in direction of association accountable largely to the effect of variable intercorrelations, which do not influence structure coefficients.

Post Hoc Group Comparisons

The post hoc analyses explore the result, noted earlier, that the gap group had higher aspirations and lower expectations than the no-gap group. What distinguishes between these high-aspiring but pessimistic young women and their more optimistic counterparts who expect to obtain the career they hope for, regardless of its prestige and income? One possibility is that extremely high aspirations are in fact

a defense against the low expectations that may result from some adolescent mothers' perceptions of hopelessness in their daily struggle for survival. If this were the case, it might be true that extremely high aspirations are dependably paired with low expectations⁵. However, a comparison of students whose aspirations were extremely high (top 25%) to those with lower aspirations (all others) revealed no difference in the proportion of individuals with extremely low (bottom 25%) expectations ($\alpha^2[1] = 0.268, p > .35$). Thus, extremely high aspirations are not paired exclusively with extremely low expectations in our sample.

To explore what makes the difference between having a gap or having none for people in the extremely high and low ranges of aspirations and expectations, we created three groups for comparison. The first consisted of the entire "gap" group in our study, people with high aspirations and low expectations. The second group was selected to match the gap group's aspirations, by taking all no-gap participants whose aspiration SEI was within one standard deviation of the gap group's mean (range of 64.18 to 93.98). The third group was selected from the no-gap group by matching on the gap group's mean expectations (range of 16.09 to 41.33). Thus, the groups included one with high aspirations and low expectations ("high-low," $n = 26$), one with high aspirations and high expectations ("high-high," $n = 45$), and one with low aspirations and low expectations ("low-low," $n = 67$).

ANOVA and post hoc pairwise (Tukey's HSD, $\alpha = 0.05$) comparisons showed no significant differences between the low-low and high-low groups on the same set of predictor variables used in the discriminant function analysis. The high-high group had a greater likelihood than the other two groups of having a nonrelative childcare provider (HSD = 0.21; $M[SD] = 0.69 [0.47]$ for high-high, 0.90 [0.31] for low-low, and 0.96 [0.19] for the high-low group). The high-high and high-low groups also differed in terms of family structure; the mean number of parents in the home was lower for the high-low group than for the high-high group (HSD = 0.31; $M[SD] = 0.73 [0.60]$ and 1.04 [0.52], respectively). In all three groups, the majority of respondents (from 58 to 73%) lived with only one biological parent. However, a slightly higher proportion of the high-high group lived with two parents (15.6%, as opposed to 11.1% living with neither parent), while a higher proportion of the high-low group lived with neither parent (34.6%, leaving 7.7% living with both parents). Finally, the low-low group indicated greater economic strain than the high-high group (HSD = 1.80, $M[SD] = 15.52 [4.08]$ and 12.44 [3.56], respectively) and lower educational aspirations than the high-high group (HSD = 0.42, $M[SD] = 3.93 [0.86]$ for low-low, and 4.36 [0.86] for high-high).

DISCUSSION

This study offers a glimpse of the vocational outlook of young, urban, African American women who face the com-

bined challenges of poverty and early childbearing and contributes to a deeper understanding of the factors that influence their career development. Our participants' predictions regarding their educational and vocational futures were more optimistic than might be expected, given the apparent disadvantages they face, the reality of limited attainment for many pregnant and parenting teens (e.g., Klepinger et al., 1995), and the group's generally low GPA. The great majority of young women in this study, across GPA levels, expected to graduate from a four-year college or from graduate school. Most respondents also believed they would reach their vocational goals at all levels of socioeconomic status and prestige. This educational and vocational optimism, which in some cases seems unrealistic, may be a positive illusion (Taylor & Brown, 1988), a cognitive coping method that arises in the face of adversity. Given the reality of childrearing in urban poverty, it makes sense that these young mothers might tell themselves things are better than they seem. Another possibility is that school grades are poor indicators of these students' true abilities and interests; if having a child has motivated them to educational success in a way that school alone could not do, their educational expectations may be more accurate than GPA-based predictions. Finally, it should be noted that many participants identified aspirations, such as "hospital orderly" or "secretary," in the middle to low ranges of education requirements and income. These young women may already have adjusted their aspirations in response to perceived limitations in the availability of educational and vocational opportunities, thus eliminating a disparity between aspirations and expectations.

Of particular interest in our results was the fact that those students with an aspiration-expectation gap had both higher aspirations and lower expectations than their peers with no gap at all. Among those young women with extremely high aspirations, living with both biological parents and utilizing childcare provided by nonrelatives was associated with having equally high expectations. Given the context of early childbearing in an economically troubled urban environment, the role modeling and social support of both parents may be necessary to shore up expectations that would otherwise be dragged down by perceptions of the local opportunity structure. Regarding the importance of nonrelative childcare to maintaining high expectations, our respondents may have the close kin networks often attributed to African American families and communities. In that case, those young women relying on kin network members for child support may foresee the "burnout" of these resources, presaging a barrier to continued educational and vocational advancement. In this sense, childcare providers outside the family network may be perceived by young mothers as a source of social support. Finding nonrelatives to provide childcare may also reflect independence from relatives in a generally assertive, confident approach to life's tasks, which could be associated with holding higher goals and believing in one's abilities to achieve them. The gap group's

extremely low expectations are more resistant to interpretation. Among students with very low expectations, no differences emerged between those with equally low aspirations and those with high aspirations. It may be that once high expectations are abandoned, aspirations are eventually adjusted downward, without any further influence from external factors. However, the cross-sectional nature of our data prevents a firm conclusion on this issue.

Moving beyond the descriptive results, our findings in the discriminant function analysis support our original hypothesis that the domains of school achievement, psychological functioning, adult availability and guidance, and situational factors specific to parenting would all be important in understanding African American adolescent mothers' vocational choices. Childcare plans, scholastic achievement, anxious and depressive symptoms, mentor status, career mentor involvement, and parents in the home proved important in distinguishing participants with and without an aspiration-expectation gap⁶.

The relevance of psychological functioning to vocational development and imagining future careers is borne out in our data. As would be expected, the more anxious or depressed a participant feels, the less likely it is that her vocational expectations will match her aspirations. Previous studies of vocational development have not assessed psychopathological symptoms, focusing instead on attitudes and personality traits such as self-esteem or locus of control (Rojewski & Yang, 1997; Wilson, Peterson, & Wilson, 1993). Our data suggest that for these economically disadvantaged African American mothers, views of the future are also driven by daily worry, anxiety, and depressive symptoms.

As expected, the presence and availability of parents or mentors, and the specific vocational support provided by career mentors, helped the young mothers in our study to believe they would reach the career goals they set for themselves, perhaps by helping them to make their aspirations realistic or to be hopeful about achieving their goals. This finding is consistent with previous research on adolescents' career development, which has underscored the crucial role of adult support and guidance (Darling, Hamilton, & Niego, 1994; Klaw & Rhodes, 1995; Klaw, Rhodes, & Fitzgerald, 2000). The association between family structure and vocational outlook was further illuminated in the post hoc analyses, which showed that for young women with high aspirations, having both parents in the home was associated with an optimistic outlook (equally high expectations), while having no parents in the home was more likely for those with a gap.

The importance of family structure is especially interesting when one considers its limitation as a representation of respondents' family lives; it does not account for the details of the parent-child relationship, nor for the presence of siblings or extended family members in the home. Without this information, it is difficult to interpret the meaning of the relationship between family structure and the exist-

tence of an aspiration-expectation gap. It may be based in the likelihood that respondents have additional emotional support available at home, or role models for parenting, employment, or committed relationships, which in turn allow them to feel more hope for their own futures. Although we selected this variable based on its use in prior studies, future studies should explore family relationships in more detail, to improve our understanding of the relationship between family structure and vocational development.

Childcare plans have previously been considered only in qualitative studies of adolescent parents' vocational development (e.g., Wijnberg & Weinger, 1998). For our study participants, having nonrelatives provide childcare decreased the likelihood of having a gap between vocational aspirations and expectations. As we noted earlier, utilizing childcare provided by nonrelatives was associated with respondents aiming higher and believing they could achieve those high goals. Furthermore, the provider's relative or nonrelative status was more important to the development of an aspiration-expectation gap than was the need to pay for childcare services. These results run counter to our initial assumptions that having access to relatives for childcare would ease adolescent mothers' economic and logistical burdens, and that having to pay for childcare would represent an economic obstacle to later success.

The childcare payment factor had limited variability in our sample, which may partially explain its relative unimportance in discriminating between groups. However, the relative childcare variable, which was a more powerful distinguishing factor, also had limited variability. Another possibility is that these African American adolescent mothers' economic strain and poverty are so pervasive that they are simply "facts of life;" perceptions of the future may then be conditioned more on the availability of internal and external resources such as psychological resiliency, mentoring, and school achievement. The use of relative or nonrelative childcare providers was more strongly associated with vocational outlook than family structure, economic strain, or perceived obstacles to education, all of which are standard measures in studies of vocational development. More than any other, this variable provides a view of the direct effect of childbearing on a teenager's vocational outlook, further supporting our assertion that teen parents' vocational development needs to be considered separately from that of their nonparenting peers. At the same time, the association between good grades in school and a hopeful vocational outlook shows that in some ways, the African American adolescent mothers in our sample are very similar to teens who are not raising children of their own.

Economic strain and educational aspirations, neither of which helped to distinguish students with an aspiration-expectation gap from those without, proved useful in distinguishing between extreme groups of students with no discrepancy between aspirations and expectations. Those with very high vocational aspirations and expectations had higher educational aspirations and lower economic strain

than those with extremely low vocational goals and expectations. The connection between educational and vocational aspirations is consistent with prior research (Cook et al., 1996; Dawkins, 1989) and makes sense if we assume that young women who aim high recognize that they will need more education to achieve their goals. The association between economic strain and overall levels of aspirations and expectations is also reasonable. In a household that often lacks enough money for rent, furniture, or family outings, a teenage mother could find it difficult to maintain an image of her earning advanced degrees and a prestigious career. In this situation, she might adjust not only her expectations, but her aspirations as well, in a compromise process like that in Gottfredson's (1981) theory of vocational development.

Dawkins (1989) found a strong positive correlation between perceived maternal aspirations and individual vocational or educational expectations for nonparenting, African American youth. However, in our data, maternal educational aspirations and vocational outlook were only weakly related. Furthermore, stronger maternal support for high school graduation appeared to increase slightly the likelihood that students would have an aspiration-expectation gap, perhaps because parental aspirations are driving an increase in teens' occupational aspirations. Because the current study uses more than twice as many variables as Dawkins' (1989) work, it is possible that the strength and direction of any one variable's effects might be altered by the complex interrelationships among factors. Differences in measures and participants may also account for this particular disparity.

Our data were modestly effective in distinguishing students with an aspiration-expectation gap from those without. Several factors may have contributed to this result. The first is the relatively small size of the gap group, which likely limited the statistical model's power to predict membership in this group. At a conceptual level, current models of vocational development may not be applicable to a group of young women who are becoming parents as they grow into young adulthood. Those models generally assume that job preferences and expectations move toward increasingly realistic plans over the years of adolescence and that vocational choice is "crystallized" by the end of that period (Super, 1953; Gottfredson, 1981). In other words, young people are expected, by their middle teen years, to have identified a career choice that is close enough to their interests and abilities that it will remain fairly stable through young adulthood at the very least. However, our data suggest that age had little bearing on levels of aspirations and expectations or on the development of a gap between them; the demands of motherhood may move adolescent girls onto a different trajectory for vocational development.

Fitzgerald and Betz (1983) assert that the vocational development of women may differ from that of men specifically because of the conflicting demands of family responsibilities and work life. Identity development and exploration

of job-relevant interests and skills may be postponed for young women who are facing the formidable task of becoming parents. If this were the case, the job choices identified in the middle teen years by adolescent mothers might not be as closely related to their identities, or their actual perceptions of the future, as they would be for a teenager without a baby to care for.

The constructs and measures we used may not have adequately reflected the issues or values most salient to the study's respondents. Merrick (1995) has suggested that adolescent pregnancy can be a career choice in itself, rather than a delay or detour on the path of vocational development. From this perspective, adolescent childbearing is an "alternative, normative life path within African American culture" (p. 288), representing the same expression of identity and future orientation as any other identification of career goals. To the extent that maternal and career identities are mutually exclusive, questions concerning job choices would be less relevant to adolescent mothers, and their answers could be considered less valid.

Many studies of vocational choice provide lists of job titles to participants, sorting job choices by the type of activity they entail, or by broad prestige categories, such as "professional" or "service" (e.g., Dawkins, 1989; Rojewski & Yang, 1997). In contrast, our measures focus on the relative prestige and income of job choices. Leadbeater (1996) found that despite a strong commitment to obtaining employment, many African American and Puerto Rican adolescent mothers "aspired to occupations for which they did not know educational requirements, duties, or average income" (p. 643). It is possible that the poor adolescent mothers participating in our study have relatively little contact with people employed in a variety of jobs, leaving them unaware of the job qualities indicated by SEI scores. However, given our finding that participants' aspirations were higher overall than their expectations, it seems unlikely that the vocational choices they identified were completely unrelated to considerations of prestige and income. Even if socioeconomic factors were not its source, the mismatch between some participants' aspirations and expectations suggests that they see a distinct difference between what they want and what they can get. Further exploration of this discrepancy could broaden our conception of what a "good job" is and shows how that definition may differ across populations.

In a context where many adults work at subsistence level or move in and out of welfare dependency, questions about careers and the ranking of respondents' job choices by prestige and income may represent the misapplication of a theoretical model, or an entire value system, to this population. For the young mothers in our study, the value of a job may not be defined by prestige and socioeconomic status; more important, perhaps, would be a young woman's knowledge of her personal connections to places of employment, her childcare options, or her ability to get to a school or training site via public transportation. None of these issues are reflected in the SEI, yet they may have a powerful

influence on the young mothers' perceptions of their future employment desires and possibilities. Our assumption that having more than one child would decrease young women's hopes of reaching their goals may have been similarly misguided; the number of children had very little relationship to the existence or absence of a discrepancy between vocational hopes and expectations. In terms of the vocational outlook of poor, urban, African American adolescents, the difference between having one child or two, or even three, may seem fairly small, in comparison to the barriers presented by social structures, economic disadvantage, or lack of educational opportunities.

Over half of our participants identified professions in medicine or law for their aspirations, expectations, or both. It seems unlikely that this many students would be inherently interested in, or suited to, these professions. However, Cook et al. (1996) found that highly visible careers are chosen by young people at early stages of vocational development. Medical work may stand out for these young women because of frequent prenatal care visits, or because of the income and stability associated with medical professions. Similarly, lawyers are highly visible in our culture and being a lawyer is often thought to be synonymous with being wealthy. Previous research has also indicated that the economic situation of a community, and the specific job types available in that community, have a powerful influence on the aspirations and expectations of the young people living there (Cook et al., 1996; Furlong & Cartmel, 1995; Hall, Kelly, & Van Buren, 1995). The young mothers in our study may have a unique combination of delayed vocational development and minimal exposure to employment types. This would lead to the identification of job choices based not on interest, nor on a cognitive link between one's own abilities and the requirements of the job, but simply on vague possibilities one has observed in the environment.

This study contributes a broad, multivariate approach to the exploration of aspirations and expectations, revealing the complex influences on a group of African American adolescent mothers' idealistic and realistic views of the future. We have simultaneously investigated numerous levels of influence, including psychological functioning, family context, social support, academic and vocational behavior, and practical aspects of child rearing. This approach necessarily limits the ability of a single factor to distinguish between participants with and without an aspiration-expectation gap. In other words, when multiple influences actually exist, the predictive power of any one variable cannot be particularly large.

These results provide a new lens through which to view previous studies, in which predictors of aspirations and expectations, such as socioeconomic status and academic achievement, have been studied in relative isolation. It may be that their comparatively powerful influence on outcome variables has been in part due to a failure to measure and account for other relevant aspects of young people's social contexts. In the current study, academic achievement was the

only factor of several typically associated with status attainment models that showed a strong relationship to vocational outlook. Status attainment theory, grounded in sociology, is meant to model outcomes for groups of people, rather than for individuals; the weakness of the model in predicting achievement of women or African Americans reminds us that individual and contextual factors are more salient to achievement for groups other than White males. In an historically White- and male-dominated society, White men are "built into" educational and vocational pathways; their vocational destination will be largely dependent on where they started out—their parents' education, their own socioeconomic status, and abilities. However, for members of groups still overcoming racism and sexism, personal qualities and environmental supports can make the difference between perseverance and acquiescence, success and failure. As our results suggest, then, status attainment models for women and people of color may benefit from the addition of psychological and social context factors to more traditional factors such as socioeconomic status.

The results of this study make it abundantly clear that the vocational development of pregnant and parenting teens requires further exploration. A broad research agenda might incorporate baseline measures on existing instruments such as the Career Maturity Inventory (Crites & Savickas, 1996) and the Career Salience Inventory (Super & Nevill, 1985), assessment of interactions among contextual and individual factors such as social support and maternal identity, and qualitative inquiry regarding vocational knowledge and values. Knowing what drives vocational choice and motivation may allow us to develop early interventions which would improve the workforce participation of young mothers, in turn reducing many of the risks associated with early child-bearing.

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NOTES

1. SEI scores are quite stable over time (Stevens & Featherman, 1981). Nakao and Treas (1992) developed an updated SEI using 1989 prestige scores and 1980 census data; the SEI (Stevens & Cho, 1985) used for our analyses has a correlation of .96 with this later measure (Nakao & Treas, 1992, p. 12).
2. One specific difficulty in applying current vocational research techniques to this population was identified in the process of coding respondents' job choices. In many cases, respondents identified an area of interest, such as "office work," but did not give a specific job title; this may indicate relative ignorance of the many jobs available in a particular setting. It should be noted that the research interviewer did ask students to "be more specific," but she could not offer job titles without biasing the results; these students did not or could not offer a more specific title. In addition, some students expected to become "housewives," an occupation obviously excluded from the

SEI, which is based on job titles from the United States census (Stevens & Cho, 1985); ideally, one could include these responses by attaching some value to the choice of "housewife." However, the only possibility, while using the SEI, was to assign a value of zero to the response. While this assignment of no income and no prestige to this occupation may be accurate in terms of the SEI, it may not reflect the value placed on the job by the respondents. These data were necessarily eliminated from consideration.

3. The "negative gap" is not unheard of (see, for example, Bogie, 1976; Curry & Picou, 1971; Kuvlesky & Bealer, 1966), but it is difficult to interpret. Indeed, Bogie (1976) chose to eliminate such cases from his analyses, thus focusing only on instances in which aspirations were higher than expectations. The maximum size of the negative gap in our data, combined with the actual job titles listed by many students in the negative gap category, suggests that there may be a negligible perceived difference, for these adolescent mothers, between the two careers they listed. For example, the student with the largest negative gap aspired to be a beautician, but expected to "own [a] beauty salon." Although the SEI rating for proprietorship of a beauty salon is higher than that for beautician, it may be that this student considered owning a salon to be one way of being a beautician, or a career with similar prestige and educational requirements. Other representative aspiration/expectation pairs (with SEI discrepancy in parentheses) for students in the negative gap category include stenographer/teacher (-23.05) and nurse/teacher (-17.18). The SEI scores for these choices differ, but it is not difficult to imagine a high school student viewing them as quite similar in terms of the effort required to attain them, or their associated income and prestige.
4. Because our discriminant function approach might limit power to uncover significant findings, we also explored a data analytic strategy in which expectation scores were regressed onto aspirations and the other variables. The results of this analysis were consistent with the findings from the discriminant function, identifying depression and relative-provided childcare as significant predictors.
5. We would like to acknowledge the contribution of an anonymous reviewer, whose suggestions on this topic inspired the post hoc analyses presented here.
6. Because our data are cross-sectional, we cannot fully assess the direction of causality among them. While we acknowledge that the presence or absence of a vocational aspiration-expectation gap may influence individuals' intrapersonal and social functioning, our discussion understands vocational planning as a relatively late function in individual development, and assumes that family functioning, psychological well-being, educational achievement, and mentoring relationships are relatively stable factors that precede and inform individual's predictions about their future vocational path.

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