ARTICLE

Role Models, Ethnic Identity, and Health-Risk Behaviors in Urban Adolescents

Antronette K. Yancey, MD, MPH; Judith M. Siegel, PhD, MSHyg; Kimberly L. McDaniel, PhD

Background: The assumption that role models or mentors constructively influence adolescent psychological functioning has prompted societal investment in mentoring programs. However, there has been little empirical evaluation of the relationship between role model or mentor characteristics and health behaviors.

Objectives: To describe role model selection in urban adolescents and examine the relationships between role model characteristics, psychosocial functioning, and health-risk behaviors.

Design: Cross-sectional survey.

Participants: A population-based, multiethnic sample of Los Angeles County adolescents aged 12 to 17 years was generated from a 3-stage, area-probability sampling frame. Of 877 adolescents identified, 749 are included in this analysis.

Methods: In-person, in-home interviews were conducted.

Main Outcome Measures: Substance use, academic performance, and self-perception (measures of ethnic identify and self-esteem). Ethnic identity was measured by an adaptation of a scale developed by Phinney (*J Adolesc Res*. 1992;7:156-176) to assess commonalities across ethnic groups.

Results: Fifty-six percent of adolescents identified a role model. Higher levels of ethnic identity were associated with moving from identifying no role model to identifying a figure primarily available through the media to identifying a known individual, familial or nonfamilial ($P<.001$). Having a role model, particularly an individual known to the adolescent, was also associated with higher self-esteem ($P<.001$) and higher grades ($P<.05$). For white males without custodial fathers, having a role model was associated with decreased substance use ($P<.05$).

Conclusion: Role model selection is associated with protective psychosocial characteristics.

Arch Pediatr Adolesc Med. 2002;156:55-61

From the Division of Chronic Disease Prevention & Health Promotion, Los Angeles County Department of Health Services (Dr Yancey); Department of Community Health Sciences, School of Public Health (Drs Yancey and Siegel); Division of Cancer Prevention & Control Research, Jonsson Comprehensive Cancer Center and School of Public Health (Dr Yancey), University of California, Los Angeles; and the Department of Behavioral Health Care Services, Alameda County, Calif (Dr McDaniel).

THE GROWING cultural diversity of the United States,[1,2] particularly within younger population segments, has directed increasing attention to the effect of ethnicity on health and, more recently, to ethnic disparities in health outcomes.[2,3] Ethnicity distinguishes individuals according to their membership in groups that share common social, cultural, and historical heritage, as well as common phenotypic characteristics. There is considerable variation, however, within and among ethnic groups with regard to ethnic self-perception and the salience of ethnic group membership.[4-8] These dimensions refer to the construct of ethnic identity, defined as "one's sense of belonging to an ethnic group and the part of one's thinking, perceptions, feelings, and behavior that is due to ethnic group membership."[9] Ethnic identity, then, is ethnicity incorporated into self-perception.

Attitudes toward one's own ethnicity have particular implications for health and psychological functioning among subgroups that are misrepresented within or discriminated against by societal and cultural institutions.[1] Both intraethnic and interethnic differences in psychosocial functioning among youth may be examined from this vantage point.[5] For youth of color, self-protection and, presumably, healthier outcomes reside in the ability to resist internalizing the negative images of their groups that are portrayed by the dominant culture.[10]

As adolescents of color negotiate the transition to adulthood, the nature and outcome of their struggles to achieve a positive identity influence their life trajectories. It has been well documented that risk factors in adolescents tend to clus-

PARTICIPANTS AND METHODS

SAMPLE SELECTION

Participants were selected from a 3-stage, area-probability sampling frame of Los Angeles County. The stages were census tracts, blocks, and households. Sampling intervals were adjusted to produce an oversample of African Americans and Asian Americans. Of 1417 eligible participants, interviews were completed with 62% (877 adolescents). When adjusted for the end of enrollment, the response rate increases to 71%. Siegel et al[33] provide a more detailed description of the sample selection process. University of California, Los Angeles, institutional review board approval was obtained for this study.

INTERVIEWS

In-person interviews were conducted between October 1992 and April 1994 in either English or Spanish. Interviewer assignments were made to fit the ethnic composition of the neighborhood, but neither ethnicity nor sex were matched to the respondents' characteristics in advance. Two thirds of the respondents were interviewed by ethnically congruent interviewers, with African Americans (84%) being more likely than whites (67%) or Latinos (63%) to be matched on race-ethnicity with the interviewer ($\chi^2_2=17.26$; $P<.001$).

The interview was highly structured, with both fixed and open-ended response formats. The questions emphasized emotional distress and problematic behavior, exposure to social stressors, coping resources and behaviors, and the demographic characteristics of adolescents and their families. Only a portion of the interview content is reported here. Variables used in this analysis are described below.

Ethnic self-identification was addressed by the question: "In Los Angeles, people come from many different cultural backgrounds . . . Latino, black, Asian, Native American, white or of some other ethnicity. With which one of these ethnic groups do you most closely identify?"

Role model presence/absence was assessed by a single item, with affirmative responses generating a 6-item follow-up sequence. The entry item was, "Now I'd like to ask you about people you admire or look up to. This could be someone you know personally, or someone you have read about or seen on TV or in the movies or know about some other way. Are there any people or individuals you really want to be like?" Affirmative responses led to 6 additional open-ended queries, 4 of which are reported here: "Who is the person you most want to be like?"; "How would you describe your relationship with this person?" (probe: "How do you know [about] this person?"); "What is/was her/his ethnicity?"; and "What is/was her/his gender?"

Substance use was assessed by asking adolescents about 10 different substances they might have used in the past week. A count was created by tallying whether they used cigarettes (9.3% of sample), alcohol (7.5%), or marijuana (5.2%) during the past week, with scores ranging from 0 (used none) to 3 (used all 3). The other 7 substances were used by too few respondents to be considered in this analysis.

Academic performance was assessed by adolescents' reports of their most recent grades in school, using a 12-response scale, with mostly A's scored as 12 and mostly F's scored as 1. The intervening categories were "mostly A's, some B's," "mostly B's, some A's," and so forth.

Ethnic identity was assessed with the 10-item Multi-Group Ethnic Identity Measure–Revised (MEIM-S).[4,5] The subject's own term for his orher ethnicity was inserted in the question stems in place of the standardized yet impersonal phrase "my ethnic group." Responses were assessed on a 4-point Likert scale and summed across the 10 items, with higher scores indicating a more positive ethnic identity. Reliability (Cronbach α) for the measure in this sample was $\alpha=.76$ and was uniformly high across the 3 racial or ethnic groups ($\alpha=.70$ to $\alpha=.77$).

Self-esteem was measured by the 10-item Rosenberg Self-esteem Scale.[34] Responses are assessed on a 4-point scale. After reverse-scoring negatively worded items, a total score is calculated by summing across the items. Higher scores indicate higher self-esteem. Reliability (Cronbach α) for the measure in this sample was $\alpha=.77$ and was uniformly high across the 3 racial ethnic groups ($\alpha=.73$ to $\alpha=.80$).

ter, such that a subset of youth engages in multiple risk behaviors, including unprotected sexual intercourse, substance use, violent behavior, and academic underachievement.[11,12] Ethnic identity is a key construct to include in examining the grouping of risk behaviors.[13-15]

Examining the relationship between ethnic identity and such indicators as academic aspirations and performance may be of particular value,[13] given that educational level is a robust determinant of health status in adulthood.[16] Indirect evidence of this linkage is readily available. In a study focused on ethnic socialization, Bowman and Howard[17] demonstrated that both a sense of personal efficacy and academic performance were enhanced by proactive orientations toward racial barriers transmitted by African American parents to their children. The themes of these communications included ethnic pride and commitment, self-development, awareness of and approach to racial barriers, and egalitarianism. More recent qualitative data drawn from African American and Latino high school and professional samples confirm the importance of this aspect of parental influence.[18,19]

Encompassing a complementary and supportive theme in the literature,[10,20-23] role model selection also reflects critical elements of psychosocial functioning and self-perception, particularly ethnic identity. Using qualitative methods, Taylor[24] found that identification of a role model distinguished high school from college samples of low-income African American males. College students primarily, though not exclusively, identified family members as role models, and extrafamilial role models tended to be ethnically similar to the young men. Enduring and substantive role models were less frequently identified in the younger sample. Still, even as objects of fleeting identification, African Americans—mainly entertainers and political or religious figures encountered through the media—were most often chosen. The educational persistence shown by graduates of historically African American colleges and universities also suggests the positive influence of ethnically relevant role models. While only 20% of African Ameri-

can undergraduate students are enrolled in these institutions, 33% of African American college graduates hail from these institutions, as do 55% of those earning doctorates and 70% of all African American professionals.[25]

There is little direct empirical evidence for the linkage among ethnic identity, role model selection, and either psychological attributes or health behaviors in adolescence, according to electronic database searches of recent literature on these topics.[6,11,14,15,26-29] Role modeling and mentoring (a subset of the broader construct of role modeling that involves the deliberate support and guidance of a younger or less-experienced individual by an older or more-experienced one[20]) are variables of particular interest, because of their malleability and the recent proliferation of mentoring programs for high-risk youth.[30] A study of mentoring among adolescents receiving outpatient medical care[30] found that those who could identify "an adult in your life you can usually turn to for help and advice" were significantly less likely to have participated in several risk behaviors, including weapon carrying, illicit drug use, daily smoking, and high-risk sexual activity. While most (56%) identified a parent, both parental and nonparental mentors exerted similarly constructive or prosocial influences on these risk behaviors. This suggests that the contribution of mentoring to risk behaviors is independent of the well-documented influence of family cohesion.[31] Despite the recent societal investment in mentoring and the intuitive presumption that mentors have a constructive influence on adolescent psychological functioning, particularly among adolescents of color, there is a paucity of high-quality data delineating the packaging, content, delivery, and impact of interventions using role models and mentors.[20,30] Clearly, there is a need for more rigorous empirical evaluation of the relationship between role model characteristics and health-risk behaviors.

This study describes role model selection in a population-based, multiethnic sample of urban adolescents and examines the relationships among role model characteristics, psychosocial functioning, and health-risk behaviors. The specific questions addressed include the following: Who has a role model? Who is the role model? Does having a model make a difference? And does having a model help specific groups of adolescents more than others? We hypothesized that adolescents with role models will demonstrate better psychosocial functioning and that these effects will be magnified as the closeness to the role model increases. There were no a priori hypotheses regarding sexual or ethnic variations in the tendency to have a role model, but it was expected that adolescents who lack other resources (eg, financial or familial) would benefit most from having a role model. Particular attention is focused on sexual and ethnic variation, as well as family configuration. With regard to the latter, the greater prevalence of mother-only households for African American youth[32] raises the question of whether the presence of a custodial father would influence the likelihood of having a role model or the choice of a particular role model. Some have surmised that the absence of a male role model is particularly detrimental for boys and is possibly magnified in communities lacking other social resources.

The measures of psychosocial functioning and health-risk behaviors are substance use, academic performance, and 2 indicators of self-perception: ethnic identity and self-esteem. These measures were selected because they collectively capture critical domains of adolescent functioning. Grades, substance use, and self-esteem are frequently assessed in research on adolescents. This study also included ethnic identity as a variable, because of its potential relevance to role model choices.

RESULTS

SAMPLE

The average age was 14.5 years. Of 749 participants, 391 (52%) were males and 358 (48%) were females. A majority of the teens in this sample (66.8%) resided with 2 parents—biological, adoptive, or a parent and a stepparent. The remainder lived with 1 parent (29.0%) or with other relatives or guardians (3.8%).

The sample was socioeconomically diverse. Parental education ranged from less than elementary school to postgraduate, with median educational attainment of high school graduation. Median annual household income was $28 750 ($8452 per capita), and about a quarter of households (23.8%) lived below the federal poverty standard. Median incomes for African American and Latino households were similar, at about $21 500; median income for white households was $48 000, more than double the median income for households of color.

Latinos were the dominant ethnic subgroup (n=477) followed by whites (n=171) and approximately equal numbers of African Americans (n=101) and Asian Americans (n=98). Those of other backgrounds (n=30) were a small and heterogeneous group. A sample of 749 adolescents is used for this analysis. Both Asian Americans and those of other ethnic backgrounds were excluded from analysis because insufficient sample size was available to accommodate the heterogeneity of these groups (eg, immigrant vs native-born, nationality or culture of origin, acculturation level). The demographic characteristics of the sample are presented in **Table 1**.

WHO HAS A ROLE MODEL?

Fifty-six percent of respondents indicated that they had a role model. No differences were observed between boys (56%) and girls (56%), between younger teens (55%) and older teens (56%), or between those who had lived only in the United States (56%) vs those who had also lived somewhere else (57%).

Whites (64%) were somewhat more likely to have role models than either African Americans (53%) or Latinos (54%)($P=.07$). Whites were significantly more likely to have role models than teens of color, or African Americans and Latinos combined ($F_{1,747}=5.50$; $P<.05$). Higher income was associated with having a model: in the top income group, 65% answered affirmatively, compared with 50% in the middle third and 52% in the lower third. When income and ethnicity are included in same analysis, income is the predominant effect. Using analysis of covariance, income is significant when controlling for ethnicity ($F_{2,745}=4.66$; $P<.05$) but ethnicity is not related to having a role model, controlling for income ($P<.50$).

Table 1. Selected Sample Characteristics

Characteristic	No. (%) (n = 749)
Age, y	
12-14	364 (49)
15-17	385 (51)
Sex	
Male	391 (52)
Female	358 (48)
Ethnicity	
Latino	477 (64)
White	171 (23)
African American	101 (13)
Household income, $	
<16 000	268 (36)
16 000-34 999	232 (31)
>35 000	249 (33)
Father's education*	
<12 y	170 (43)
High school graduate	83 (21)
>12 y	141 (36)
Mother's education	
<12 y	306 (47)
High school graduate	150 (23)
>12 y	196 (30)
Family configuration	
2 parents	500 (67)
1 parent	217 (29)
Other relative or guardian	32 (4)
Country of origin	
United States	541 (72)
Other	208 (28)

*Fathers were interviewed less often than mothers, so data on education levels were sometimes missing.

Table 2. Role Model Choices as a Function of Sex and Ethnicity

	Percentage				
	Sex		Ethnicity		
	Male	Female	Latino	White	African American
Model					
None	47	46	48	40	49
Parent/relative	19	27	23	22	20
Nonfamilial, known	7	14	9	17	6
Figure	29	13	21	21	25
Model same ethnicity	65	80	64	79	96
Model same sex	91	80	84	89	90

WHO IS THE ROLE MODEL?

Responses were initially classified using 19 interviewer-generated categories. A parent was chosen most frequently (n=90; 22%), followed by a sports figure (n=73; 18%), and then sibling and singer (n=40 for each; 10% each). For the purposes of this analysis, responses were grouped into 3 categories (**Table 2**): parent/relative (n=167; 42%); nonfamilial known individual (n=76; 19%); and "figure," or individual available primarily through the media (n=157; 39%). The nonfamilial known individual category included friends (n=45, across categories of boyfriend/girlfriend, same-age friend, and adult friend) and professionals, such as doctors or lawyers (n=18), teachers (n=12), and a member of the clergy (n=1). In addition to sports figures and singers, the figure category includes actors (n=29), historical figures (n=9), political leaders (n=3), comic book characters (n=2), and a community leader (n=1). (It should be noted that the data in Table 2 are based only on the categories listed above. The few teens who chose role models from outside these 3 categories were excluded from this analysis. As a result, the percentages in Table 2 vary slightly from those reported earlier in the article for the presence or absence of a role model.)

According to χ^2 tests, females were more likely than males to choose known individuals, familial or nonfamilial, as role models, whereas boys were more likely than girls to choose figures ($\chi^2_2=37.72$, $P<.001$). African Americans were especially likely to choose figures rather than known individuals ($P=.06$). Comparing white subjects with those of color showed that the groups were similar in the likelihood of choosing their parents or relatives as a role models, but teens of color were more likely than whites to choose figures, while the reverse was true for nonfamilial known individuals ($\chi^2_2=37.72$; $P<.001$). Looking at race and sex simultaneously suggested a strong effect for sex, with males being much more likely than females to choose a figures as role models ($F_{1,394}=29.58$; $P<.001$), but there was no main effect for race or interaction between the 2 variables.

A marginal effect of immigrant status is reflected in the finding that those who spent some time living outside the United States were more likely to choose family members as role models than teens whose entire life had been spent in the United States ($P=.09$). High-income adolescents were least likely to choose figures ($\chi^2_2=7.11$; $P<.05$). A comparison of younger and older teens showed they did not differ in their choices of role models ($P>.30$). The presence or absence of a custodial father had no impact on the likelihood of having a role model or the type of role model chosen. Because the 3 ethnic groups were not equally likely to have a father in the home, the analyses involving presence of a custodial father were performed within each ethnic group.

Nearly 3 (72%) of 4 teens chose role models of like ethnicity, and 86% chose models of like sex. Regarding ethnic congruence of role model and respondent, 96% of African Americans selected a role model of the same ethnicity, compared with 79% of whites and 64% of Latinos ($\chi^2_2=26.86$; $P<.001$). African American teens selected an ethnically congruent model regardless of their sex, whereas both white and Latino females were more likely than males to choose ethnically similar models. With respect to sex congruence of role model and respondent, 91% of males and 80% of females chose a role model of the same sex ($\chi^2_1=10.49$; $P<.001$). Males had a greater propensity than females to choose sex-congruent figures (98% compared with 75%; $\chi^2_1=22.29$; $P<.001$), but the proportions of males and females choosing sex-congruent models were the same for parent/relative or nonfamilial role models. Again, similar proportions of African American males and females selected sex-congruent models, yet for both whites and Latinos, males were more likely than females to choose models of the

same sex. Table 2 presents data on role model choices as a function of sex and ethnicity.

DOES HAVING A ROLE MODEL MAKE A DIFFERENCE?

We first determined common variance among the outcome measures and found that the strongest correlations were between grades and both substance use (r_{744}=–0.21; P<.001) and self-esteem (r_{744}=0.22; P<.001). Ethnic identity was correlated with self-esteem (r_{749}=0.15; P<.001) and weakly associated with substance use (r_{749}=–0.08; P<.05). Given the relatively small core of common variance among the dependent measures, it is reasonable to examine the outcome variables independently.

Analysis of covariance was used to determine first, if having a role model has an impact on the outcome variables, and second, if the relationship with the model (eg, known vs figure) is influential. In these analyses, household income is included as a covariate, because of the robust association of income with the outcome variables and its demonstrated relationship with the role model variables. Teens who had role models earned higher grades ($F_{1,741}$=4.01; P<.05), had higher self-esteem ($F_{1,746}$=6.95; P<.01) and had stronger ethnic identity ($F_{1,746}$=16.08; P<.001) than teens without role models. Income was a significant covariate for all 3 outcome variables. There was no association of role model presence/absence with substance use.

To examine the influence of role model type, adolescents with no role model, a known role model (combining parent/relative and nonfamilial), and a figure role model were compared on these outcomes. Again, significant effects were demonstrated for grade ($F_{1,731}$=3.29; P<.05), self-esteem, ($\underline{F}_{1,736}$=–4.40; P<.05), and ethnic identity ($\underline{F}_{1,736}$=–10.18; P<.001) but not for substance use. Income was a significant covariate for grades, self-esteem, and ethnic identity. Post hoc Scheffé tests showed that for both grades and self-esteem, those who knew their role model fared better than those with no role model. Having a figure for a role model was intermediate and did not differ from either group. With respect to ethnic identity, however, adolescents with no role models had weaker ethnic identities than those with figures for role models, who, in turn, had weaker ethnic identities than those who knew their role models. The means for the 4 outcome variables, as a function of model choices, are presented in **Table 3**. Despite the significant differences among the means, as described above, it should be noted that the accountable variance was quite small (<5% in all cases).

Given the apparent salience of sports star role models to males, responses on the 4 outcome variables were compared for teens who chose sports figures for role models and teens selecting other models. It is worth noting that 72 of the 73 teens who identified sports figures as models were male. Among teens who had role models, 24% of African Americans, 20% of whites, and 15% of Latinos selected sports figures (P=.10). There were no differences between teens naming a sports figure for a role model and teens selecting someone else with regard to grades, self-esteem, or ethnic identity. However, teens whose role models were sports figures were less likely to have used substances in the past week than teens who had other role models (t_{415}=2.16; P<.05).

Table 3. Substance Use, Grades, and Self-perceptions as a Function of Role Model Choices

	Mean (SD)			
	Substance Use*	Grades†	Self-esteem‡	Ethnic Identity§
Have model				
Yes	0.2 (0.6)	8.4 (2.5)	30.4 (3.8)	30.0 (4.3)
No	0.2 (0.6)	8.0 (2.5)	29.5 (4.0)	28.8 (4.2)
Model type				
None	0.2 (0.7)	8.0 (2.5)	29.5 (3.8)	28.8 (4.2)
Known	0.2 (0.6)	8.6 (2.6)	30.7 (4.1)	30.2 (4.3)
Figure	0.2 (0.6)	8.1 (2.5)	30.0 (3.8)	29.9 (4.0)

*A count of use of cigarettes, alcohol, or marijuana during the past week. Scores range from 0 (used none) to 3 (used all 3).

†Most recent grades in school, using a 12-item response scale, with mostly A's scored as 12 and mostly F's scored as 1.

‡10-item Rosenberg Self-esteem Scale.[34] Responses are assessed on a 4-point scale, with higher scores indicating higher self-esteem. Scores range from 10 to 40.

§10-item Multi-Group Ethnic Identity Measure–Revised (MEIM-S).[5] Responses are assessed on a 4-point scale, with higher scores indicating stronger ethnic identity. Scores range from 10 to 40.

DOES HAVING A ROLE MODEL HELP ONE GROUP MORE THAN OTHERS?

Looking simultaneously at sex, ethnicity, and the presence of a role model did not yield any interactions for substance use, grades, ethnic identity, or self-esteem. This implies that the effect of having a role model on these outcome variables is similar for the ethnicity and sex subgroups included in this study.

To further examine the interplay between custodial fathers and role models, the effects of the presence of a custodial father and having a role model were evaluated in the context of ethnicity and sex. Only substance use was affected, and the impact varied by ethnicity but not by sex. Specifically, a 3-way analysis of variance (ethnicity, role model, father in house) on substance use yielded main effects for ethnicity ($F_{1,737}$=4.75; P<.01) and for having a father in the house ($F_{1,737}$=4.72; P<.05), a 2-way interaction for having a role model and having a father in the house ($F_{1,737}$=5.72; P<.05), and a 3-way interaction for ethnicity, having a role model, and having a custodial father ($F_{2,\ 737}$=3.08; P<.05). Subsequent tests among the means showed that whites used more substances than either African Americans or Latinos, and teens of any ethnicity who did not have a father in the house used more substances than those with a custodial father. The combination of not having a role model and not having a father in the house was associated with the highest level of substance use (mean of 0.43 compared with ≤0.2 for the other 3 groups); this pattern was most pronounced for whites (mean of 0.77 for whites with no role model and no father in the house compared with ≤0.32 for the other 11 subgroups). Variance accounted for by each interaction term was less than 5%. In sum, whites without a father in the home and without a role model appear to be particularly vulnerable to substance use.

COMMENT

For teenagers, having a role model they know personally appears to exert a modest protective effect on risk behaviors. In a multiethnic sample of adolescents, controlling for income, those who identified a person whom they could "admire or look up to" earned higher grades, had higher self-esteem, and showed stronger ethnic identity; furthermore, all these effects were magnified when teens with a known role model were compared with teens who did not identify a role model. For ethnic identity alone, each increment in closeness with a role model (from no role model to a figure observed mainly or solely through the media to an individual personally known to the teen) was associated with a significant increase in mean score, suggesting that ethnic identity plays an important role in connectedness. Under certain circumstances, having a role model is also linked with a lower likelihood of health-risk behaviors. Whites without custodial fathers were less likely to use substances if they identified a role model than if they did not. The cross-sectional nature of these data does not allow a determination of whether teens who are functioning well are more likely to have role models or, instead, if teens who have role models perform better in other domains. However, these data do identify role model characteristics that are associated with varying levels of involvement in health-risk behaviors in teens and highlight possible avenues for intervention. Specific suggestions for intervention are offered below.

The likelihood of having a role model did not vary by sex, and the interethnic group differences for this dimension were explained largely by family income, with teens from families with lower incomes being less likely to have role models. These sociodemographic factors had a greater impact on the choice of who the role model was. Most notably, having a lower income and being male were associated with selecting role models available primarily through the media, as opposed to known individuals. Needless to say, the opportunity for a role model to have a positive influence is severely limited without direct personal contact. It is sobering to note that 31 teens (7%) named doctors, lawyers, teachers, or clergy members as role models, while 142 teens (34%) identified sports figures, singers, or actors. There may be some qualitative differences in influence for teens choosing political leaders or historical figures as role models rather than singers or sports figures. However, the small proportion (<2%) identifying this choice precludes substantive analysis. Aside from their families, teens are choosing media "products" to emulate rather than the responsible, professional adults to whom they are or should be exposed. The primary difference in role model quality to emerge among income groups is that the less affluent teens were more likely to identify figures, and less likely to identify known persons outside their families, as their role models. Lack of exposure to powerful and socially constructive adults outside the family likely governs the less optimal role model choices of lower-income teens.[20]

As would be predicted by social-learning theory,[35,36] most teens chose models of their own ethnicity and sex. African American teens almost exclusively chose African American role models (96%), whereas two thirds (64%) of Latinos chose ethnically congruent models. Overall, 75% of Latinos chose role models of color, with 11% choosing African Americans. Four in 5 whites identified a white role model. It is likely that more phenotypically distinct, "minority status" groups tend to suffer greater social distance and discrimination, increasing the salience and level of ethnic identity.[5] Hence, African Americans had the highest ethnic identity scores in the sample and made the highest proportion of ethnically congruent role model choices. Ethnic congruence of role models did not seem to affect the outcomes studied, but the lack of variability in the African American subgroup did not permit an adequate test of this hypothesis. A larger sample probably would not increase this variability, because adolescents for whom ethnicity is most salient strongly gravitate to role models of the same ethnicity.

Turning to sex, there was a greater tendency for males than females to chose a sexually congruent model. A closer look at these data shows that this difference is entirely due to the figure category of models. Females and males were equally likely to name role models of the same sex if the models were family members or others personally known to the teens, whereas virtually all males (98%) but only 3 in 4 females (75%) selected models of the same sex if the models were figures. This effect is likely due to the greater availability of powerful male figures in the popular media and in sports, in particular, and to the greater status that our society affords to men.

This research is consistent with the findings of a recent study of adolescents seeking health care. In that report, having a mentor, or "an adult in your life you can turn to for help or advice" was associated with lower risk-taking.[30] The data here suggest that even having a role model not personally known to the adolescent exerts a positive influence. Despite the highly publicized falls from grace of some athletes, sports-figure role models were as positively influential as other figures. A more detailed set of questions might have allowed us to determine if the role models actually embodied prosocial behavior.

Given the limited availability of appropriate one-to-one known mentors for every teen at risk, attention should be directed to the development and systematic evaluation of innovative and cost-effective group endeavors to provide constructive, ethnically relevant role models, whether via the media or in person.[10,20,23] Although the process by which youth identify role models is not well understood, efforts to enhance ethnic identity by providing positive images and examples of individuals ethnically matched to the target population, in the context of service provision, would also seem to be indicated. For providers serving increasingly diverse and at-risk youth populations, ethnic identity may be more malleable and amenable to intervention than the structural inequalities that contribute to adverse outcomes. Some practical examples of such efforts, particularly in meeting the needs of African American and Latino youth, are offered.

- Identifying and engaging youth with appropriate non-family role models and mentors, such as counselors or therapists, physicians, coaches, teachers, clergy members, and lawyers.
- Establishing a resource guide of rites of passage or other culturally tailored programs available locally.

- Encouraging parents or guardians of color to empower youth by modeling behaviors that constructively challenge discrimination or opportunity deficits and communicate proactive orientations toward barriers (eg, voting; writing letters to elected officials; not patronizing businesses or commercial establishments in which they have experienced discriminatory practices and explaining that "dollar vote" to their youngsters; attending, with their youngsters, school and civic meetings that mobilize communities to increase racial equality and educational opportunity).
- In service delivery settings, countering the negative media barrage youth of color face in mainstream culture by including works by artists of color on walls; displaying books, magazines, and videos positively depicting people of color; playing ethnically varied music; and providing the staff with cultural proficiency training.
- Counseling parents and youth to avoid derogatory ethnic slurs and references, eg, devaluing phenotypic traits associated with certain groups, such as "bad" (kinky) hair.

In closing, many questions must still be addressed by future research. Key issues for exploration that may assist in the design, implementation, evaluation, and dissemination of the next generation of role modeling/mentoring interventions include the natural processes by which adolescents select role models outside the context of intervention research or service delivery; the nature and continuity of the contact (eg, mediated in person or otherwise, frequency, duration, content and style of any interaction) between role models and adolescents and how it influences behavior; and role model selection and training processes. Because role modeling provides critical, and potentially socially constructive, access to the self-images of socioeconomically marginalized, at-risk youth, progress in this arena is central to advancing the field of adolescent health promotion.

Accepted for publication August 17, 2001.

This study was supported by grant 2R01 MH40831 from the National Institute of Mental Health, Bethesda, Md (Carol Aneshensel, PhD, Principal Investigator). Dr Yancey was supported in part by grant 1R01 HD39103 from the National Institute of Child Health and Human Development, Bethesda.

We thank Martin Anderson, MD, MPH, Lauren and Sheneil Christian, Anne Driscoll, PhD, Neal Halfon, MD, MPH, Karen Markus, Danielle Osby, Akil Smith, Mark Weber, PhD, and Robyn Yancey for their assistance in the conceptual development of this analysis or preparation of the manuscript.

Corresponding author and reprints: Antronette K. Yancey, MD, MPH, UCLA Jonsson Comprehensive Cancer Center and School of Public Health, Department of Health Services, Box 956900, A2-125 CHS, Los Angeles, CA 90095-6900 (e-mail: ayancey@ucla.edu).

REFERENCES

1. Wallman K, Evinger S, Schechter S. Measuring our nation's diversity: developing a common language for data on race/ethnicity. *Am J Public Health*. 2000; 90:1704-1708.
2. Wilson D, Rodrigue J, Taylor W. *Health Promoting and Health-Compromising Behaviors Among Minority Adolescents*. Washington, DC: American Psychological Association; 1997:xix.
3. US Department of Health and Human Services. *Use of Race and Ethnicity in Public Health Surveillance*. Washington, DC: Dept of Health and Human Services; 1993;42:1-17.
4. Phinney J. The multigroup ethnic identity measure. *J Adolesc Res*. 1992;7:156-176.
5. Yancey A, Aneshensel C, Driscoll A. The assessment of ethnic identity in a diverse urban youth population. *J Black Psychol*. 2001;27:190-208.
6. Smith E, Walker K, Fields L. Ethnic identity and its relationship to self-esteem, perceived efficacy and prosocial attitudes in early adolescence. *J Adolesc*. 1999; 22:867-880.
7. Rotheram-Borus M. Adolescents' reference-group choices, self-esteem, and adjustment. *J Pers Soc Psychol*. 1990;59:1075-1081.
8. McGuire W, McGuire C, Child P, Fujioka T. Salience of ethnicity in the spontaneous self-concept as a function of one's ethnic distinctiveness in the social environment. *J Pers Soc Psychol*. 1978;5:511-520.
9. Rotheram M, Phinney J. Introduction: definitions and perspectives in the study of children's ethnic socialization. In: Phinney J, Rotheram M, eds. *Children's Ethnic Socialization: Pluralism and Development*. Newbury Park, Calif: Sage Publications; 1987:10-28.
10. Brookins C. Promoting ethnic identity development in African-American youth: the role of rites of passage. *J Black Psychol*. 1996;22:388-417.
11. Gordon-Rouse K, Ingersoll G, Orr D. Longitudinal health endangering behavior risk among resilient and nonresilient early adolescents. *J Adolesc Health*. 1998; 23:297-302.
12. Irwin C. The theoretical concept of at-risk adolescents. *Adolesc Med*. 1990;1: 1-15.
13. Miller D. Racial socialization and racial identity: can they promote resiliency for African American adolescents? *Adolescence*. 1999;34:493-501.
14. Brook J, Whiteman M, Gurson M. Drug use among Puerto Ricans: ethnic identity as a protective factor. *Hispanic J Behav Sci*. 1998;20:241-254.
15. Brook J, Balka E, Brook D, Win P, Gurson M. Drug use among African Americans: ethnic identity as a protective factor. *Psychol Rep*. 1998;83:1427-1446.
16. Winkleby M, Fortmann S, Rockhill B. Trends in cardiovascular disease risk factors by educational level: the Stanford Five City Project. *Prev Med*. 1992;21:592-601.
17. Bowman P, Howard C. Race-related socialization, motivation, and academic achievement: a study of black youth in three-generation families. *J Am Acad Child Adolesc Psychiatry*. 1985;24:134-141.
18. O'Connor C. Dispositions toward (collective) struggle and educational resilience in the inner city: a case analysis of six African-American high school students. *Am Edu Res J*. 1997;34:593-629.
19. Gandara P. *Over the Ivy Walls: The Educational Mobility of Low-Income Chicanos*. Albany, NY: SUNY Press; 1995.
20. Yancey A. Self-image building in adolescents in foster care: the use of group process interactions with role models. *Adolescence*. 1998;33:253-267.
21. Levine A, Nidiffer J. *Beating the Odds: How the Poor Get to College*. San Francisco, Calif: Jossey-Bass Publishers; 1996.
22. Yancey A. Identity formation and social maladaptation in foster adolescents. *Adolescence*. 1992;27:818-831.
23. Malgady R, Roger L, Costantino G. Hero/heroine modeling for Puerto Rican adolescents: a preventive mental health intervention. *J Consult Clin Psychol*. 1990; 58:469-474.
24. Taylor R. Black youth, role models and the social construction of identity. In: Jones R, ed. *Black Adolescents*. Berkeley, Calif: Cobb and Henry; 1989:155-174.
25. Barnes E. The black community as the source of positive self-concept for black children: a theoretical perspective. In: Jones R, ed. *Black Psychology*. New York, NY: Harper and Row; 1980:106-130.
26. Dumont M, Provost M. Resilience in adolescents: protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. *J Youth Adolesc*. 1999;28:343-363.
27. Costa F, Jessor R, Turbin M. Transition into adolescent problem drinking: the role of psychosocial risk and protective factors. *J Stud Alcohol*. 1999;60:480-490.
28. Romero A, Roberts R. Perception of discrimination and ethnocultural variables in a diverse group of adolescents. *J Adolesc*. 1998;21:641-656.
29. Bates S, Beauvais F, Trimble J. American Indian adolescent alcohol involvement and ethnic identification. *Subst Use Misuse*. 1997;32:2013-2031.
30. Beier S, Rosenfeld W, Spitalny K, Zansky S, Bontempo A. The potential role of an adult mentor in influencing high-risk behaviors in adolescents. *Arch Pediatr Adolesc Med*. 2000;154:327-331.
31. Resnick M, Bearman P, Blum R, et al. Protecting adolescents from harm. Findings from the National Longitudinal Study on Adolescent Health. *JAMA*. 1997; 278:823-832.
32. McLoyd VC. The impact of economic hardship on black families and children: psychological distress, parenting, and socioemotional development. *Child Dev*. 1990;61:311-346.
33. Siegel J, Yancey A, Aneshensel C, Schuler R. Body image, perceived pubertal timing, and adolescent mental health. *J Adolesc Health*. 1999;25:155-165.
34. Rosenberg M. *Society and the Adolescent Self-image*. Princeton, NJ: Princeton University Press; 1965.
35. Bandura A. Ontological and epistemological terrains revisited. *J Behav Ther Exp Psychiatry*. 1996;27:323-345.
36. Bandura A. *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall; 1986.