What Do They Want in Life?: The Life Goals of a Multi-Ethnic, Multi-Generational Sample of High School Seniors[1]

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This study investigated ethnic as well as gender and generational similarities and differences in the life goals among graduating high-school seniors. Adolescents came from six ethnic groups: White, African, Mexican, Other Latino, Filipino, and East/Southeast Asian Americans. Their self-articulated medium-range life goals were grouped into 8 major categories such as occupational, educational, familial, and material goals. Group differences in various aspects of future plans, such as priorities given to different life goals, time frame of attainment, and perceived controllability over their attainment, were also examined. Hypothesized group differences based on current social realities and small-scale qualitative studies on ethnic minorities were not found; there were very few ethnic, gender, and generational differences in adolescents' life goals. All groups reported a higher priority for, earlier expected attainment of, and more control over their medium-range educational and occupational goals than their family-related and material goals. Further, long-term educational and occupational aspirations were high across all groups. There were moderate ethnic differences in educational expectations and none for corresponding career expectations. Thus, current inequalities in educational and occupational attainments across ethnic groups were only partially reflected in the life goals of adolescents on the brink of graduating from high school.

KEY WORDS: life goals; ethnic differences; adolescence; educational aspirations; occupational aspirations.

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INTRODUCTION

The present study addresses adolescent life goals and their potential role in the emergence of educational and occupational disparities between different ethnic groups. A recent analysis of U.S. Census data by the Population Reference Bureau (2000) confirmed that significant educational and occupational disparities persist across ethnic groups. A higher proportion of Whites and Asians hold higher status jobs and college degrees compared to African American and Hispanic adults. In 1998, for example, 33% of Whites and 34% of Asian Americans held managerial and professional white-collar jobs compared to 20% of African Americans and 15% of Hispanics. In

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contrast, 20% of African Americans and 22% of Hispanics worked as semi- or unskilled workers compared to 12% of Whites and 11% of Asians. Similarly, 28% of Whites and 44% of Asian and Pacific Islanders hold a bachelor's degree, compared to only 17% of Blacks and 11% of Hispanics (U.S. Census Bureau, 2002).

Several studies have sought to identify the sources of these persistent inequalities. For example, the classic Coleman Report attributed educational inequality to family background (Coleman *et al*., 1966) as others have blamed a Euro-centric curriculum (e.g., Woodson, 1933), unequal school funding (e.g., Kozol, 1991), detrimental effects of stereotypes (e.g., Steele and Aronson, 1995), and differences in parenting styles (e.g., Steinberg *et al*., 1992). In terms of occupational disparity, researchers have pointed to educational inequality (e.g., Cummins, 1986), perceived discrimination (e.g., Howell *et al*., 1984), segmented labor market (e.g., Bluestone, 1970), and racial residential segregation (e.g., Myrdal, 1944) as possible causes. Of the various societal, familial, and individual factors that may contribute to racial inequality in education and occupation, many are well understood and have prompted major social intervention programs (e.g., Head Start and affirmative action). Other factors have not been well examined, and further research needs to address their roles in ethnic differences in education and occupation. Two such factors are adolescents' motivational resources and values, as reflected in their life goals.

Adolescent Life Goals

Research on adolescents' life goals investigates youths' future orientation, including occupational decision-making as well as educational and family-related developmental tasks. Life goals have been conceptualized as "organizers" of developmental regulation whereby individuals seek to influence their own development as they adapt to the constraints of a given context (Heckhausen, 1997). Much previous research on the content of adolescents' life goals has been based on Western European samples (e.g., Nurmi *et al*., 2002; Solantus, 1987) and measured goals in terms of their hopes and fears or future expectations. A comprehensive review of these past investigations by Nurmi (1991) revealed that adolescents typically set goals that reflect the major developmental tasks of late adolescence and young adulthood, such as finishing school, finding a job, and starting a family. Other frequently mentioned goals include leisure, obtaining property/material, and self-actualization.

In order to understand goal commitment, planning, and eventual attainment, research should address not only the content of adolescents' life goals, but also the prioriti-

zation among them, perceived control over attaining them, and thoughts about when these goals would be attained. Once a goal has been selected, according to the lifespan theory of control (Heckhausen and Schulz, 1995), a specific set of control strategies that comprises goal engagement is set in motion, such as the investment of time and effort, as well as enhanced perceptions of control (Heckhausen, 1999). High perceptions of personal control are regarded as necessary for future goal attainment because these perceptions increase the likelihood of goal commitment. Very little empirical work has examined perceptions of control over goals among adolescents in the U.S.. However, research has found that adolescents typically think ahead into the 3rd decade of life and that their planning levels increase with age (Nurmi, 1991). Adolescent life goals are thought to be accomplished in an orderly sequence characterized by education, leisure, occupation, and family goals in approximately that order (Nurmi, 1989). Although adolescents (12–15 years) seem to be aware of a certain degree of uncertainty that might interfere with their ideal sequence and timing of goal attainments, they often do not think these challenges will happen to them (Malmberg and Norrgård, 1999).

In sum, goal characteristics, such as the prioritization, perceived control, and time frame of attainment, are important dimensions of goal engagement. Beyond merely having goals, it is important to have goals that are coherent and aligned with each other (Schneider and Stevenson, 1999). The more coherent and complementary the goal characteristics are in a set of life goals, the more one is able to sustain effort and orchestrate a plan to realize them (Heckhausen, 1999; Schneider and Stevenson, 1999).

Minority Adolescents' Life Goals

There has been limited research on ethnicity and U.S. adolescents' life goals. Descriptive case studies with small samples of minority adolescents have highlighted how ethnic background can be a source of variation in aspiration levels and types of life goals. At the forefront of such work is the notion that educational aspiration levels depend in part on the type of relationship an ethnic minority has with the majority. For example, Fordham and Ogbu (1986) suggested that African American children are socialized to be skeptical about the utility of education as a means for social mobility due to their subordinate relationship to the White majority. These children consequently develop an oppositional framework of reference, such that educational success is associated with being White and actively avoided (Ogbu, 1994). It has also been proposed that the goals of ethnic minority

adolescents are influenced by stereotypes of their ethnic groups. An interview study of ethnically diverse high-school students from a midwest school revealed that the pattern of "possible selves," or future expectations, of minority students were influenced by ethnic stereotypes of their group (Kao, 2000). For example, the sample reported ethnic stereotypes that portrayed Hispanics as manual laborers and Asians as high academic achievers, which resulted in Hispanic youths' emphasizing their occupational aspirations (such as professional office-based careers) and Asians focusing on educational aspirations and meeting high parental expectations of them.

There also seem to be ethnic differences in the priorities attached to different life goals and the time frames for attaining them. For example, it has been suggested that Mexican American families might encourage youths to seek early employment due to economic hardship (see Rumbaut and Cornelius, 1995),which may give occupational goals priority over educational or other goals. A cultural emphasis among Mexicans on the extended family and the "here and now" may not complement educational plans beyond high school due to relatively early social pressures to form a family and have children (Suárez-Orozco and Suárez-Orozco, 1995). Furthermore, although educational and occupational life goals may be articulated among minority adolescents, their family obligations might lead them to report longer time frames for attaining them.

Ethnic Differences in Educational and Occupational Aspiration Levels

Results from the qualitative studies mentioned above appear to be confirmed by larger-scale quantitative studies. Survey studies have consistently found that Hispanic students report lower levels of educational aspirations (Mau and Bikos, 2000) and expectations (Csikszentmihalyi and Schneider, 2000) than their Asian, African American, and White counterparts. In fact, Rumbaut (1999) reported that Mexican American adolescents not only indicated relatively lower educational expectations, but also showed a decrease in expectations as high school graduation approached.

Studies of ethnic differences in *occupational* aspirations, however, have yielded inconsistent findings. Cook *et al*. (1996) demonstrated that 2nd-grade underprivileged African American boys had future expectations that already mirrored existing disparities in the job market. Correspondingly, in a study of children of foreign-born parents, Rumbaut (1999) reported that the occupational aspirations of adolescents (in the 8th and 9th grades) of Asian heritage were higher than those of Mexican ancestry

at baseline in 1992; and 3 years afterwards, the aspirations of Asians had increased whereas those of Mexicans had decreased. In an analysis of the National Educational Longitudinal Study: 1988–1994, Mau and Bikos (2000) found that, when controlling for school, familial, and individual variables (such as self-esteem and academic self-efficacy), Asian and African American students had higher occupational aspirations than their White counterparts. On the other hand, studies comprised of White, Hispanic, and African American participants have not found significant ethnic differences in occupational aspirations and expectations among high school samples (Csikszentmihalyi and Schneider, 2000; Phinney *et al*., 2001) and young college students (Arbona and Novy, 1991).

Inconsistent findings may be partially due to methodological limitations. Most of these studies were cross-sectional and used samples of individuals at developmental stages that do not require them to think realistically about their occupational futures. Another possible explanation is that the studies in which ethnic differences surfaced confounded the effects of ethnicity with SES (e.g., Cook *et al*., 1996), and that significant effects may be accounted for by SES rather than by ethnicity. This explanation may prove to be compelling since the effects of SES on occupational aspirations have been well established (e.g., Majoribanks, 1998).

Gender and Generational Status

Ethnic variations and similarities in life goals are better understood by also examining possible moderating effects of gender and generational status. The U.S. has experienced major shifts in the ethnic diversity of its immigrant population in the past century whereby the countries of origin have shifted from Europe in the early 1900s to Latin America and Asia today. Not only may traditional roles for males and female be emphasized differently across ethnic groups (Zhou and Bankston, 2002), but they may also be dependent on the recency of immigration to the U.S. (Rumbaut and Cornelius, 1995).

A large body of research has documented how gender role socialization shapes different patterns of expectations, values, and goals regarding education and career (e.g., Eccles, 1994). In terms of life goals, studies in the 1970s and 1980s mainly found that adolescents report their life goals according to traditional stereotypes, such that males reported that they were more focused on educational and occupational goals and females were more focused on familial, societal, and religious goals (for a review, see Nurmi, 1991). Greater participation of women in the workforce in the U.S. may lead to different results today, but ethnic variations in gender role expectations

are important to consider when Latino and Asian groups are compared to African American and White groups. Girls from traditional families, particularly from Mexico and Asia, are expected to get married and bear children at younger ages than boys, even though girls' educational opportunities and achievements were supported throughout the school years (Suárez-Orozco and Suárez-Orozco, 1995; Zhou and Bankston, 2002). Thus, girls from certain immigrant groups may report stereotypically female goals, such as family and humanitarian goals, whereas girls from White and African American groups may not.

Life goals are also expected to change as ethnic minority families adapt to Western society. Such changes would emerge as generational status effects. A review of cross-national research has pointed out that adolescents across Western and Eastern countries agreed about the importance of future education and work, but youth from European countries expressed more interest in leisure and happiness and youth from India and Mexico showed more interest in familial goals (Nurmi, 1991). Given such East–West cultural differences, the relative importance of school, work, family, and leisure is therefore expected to change as generational status in the U.S. increases. Previous research on the relations between family background and academic adjustment has also highlighted the importance of examining generational status in relation to adolescent life goals, especially qualitative studies that detail how recent immigrant students describe family environments that are strongly supportive of academic achievement (e.g., Suárez-Orozco, 1989). Recency of immigration is believed to lead to emphasis on the role of education in the lives of adolescents. It is therefore hypothesized that adolescents of more recent generations will report more educational and family-oriented life goals, as well as report higher levels of long-term occupational and educational aspirations.

The Present Study

Most of the studies reviewed above focused specifically on educational and/or occupational aspirations. Very little research attention has been directed toward adolescents' broader life goals in a multi-ethnic sample in the U.S. Only two studies are known to take this broader perspective on life goals. Phinney *et al*. (2001), in a study of ethnically diverse younger adolescents, used the following open-ended question: "If you could do anything you wanted with your life, what would you most want to do and be?" Perhaps due to the implied career aspirations in the question, 58% of respondents generated an occupation-related response. Eskilson and Wiley (1999) asked college students (classified as Whites and

non-Whites) how important each goal, among a checklist of 31 items, would be to their sense of life satisfaction 10 years from the present. A principal components analysis extracted eight factors: family, economic success, friends, significant others, creative, social/political, spiritual, and feeling supported. Non-White students rated economic success, creative goals, and spiritual goals as significantly more important to their future life satisfaction than did Whites, whereas Whites rated friends as more important to their future life satisfaction than did non-Whites.

Adolescent life goals could play a key role in producing current educational and occupational inequality inasmuch as other goals (e.g., family and material goals) might either compete with or facilitate educational and occupational aspirations. The present study examines ethnic variations and similarities in the types of medium-range (i.e., within 10 years) life goals, as well as long-term aspiration and expectation levels (i.e., eventual adult attainment), of high school seniors. Generational status and gender were addressed as potential moderators of ethnic variations in life goals.

Main research questions of this study concern ethnic similarities and differences in the types of medium-range life goals that adolescents generate, the priorities and other characteristics of these goals, and the long-term aspiration levels of adolescents' educational and occupational goals.

It is expected that minority groups are more likely to prioritize familial goals (Fuligni *et al*., 1999) and report longer time-frames for attaining educational and occupational pursuits, as these groups (especially females from recent immigrant groups such as Mexican Americans) have had more disadvantages in attaining higher education. In terms of perceived control over educational and occupational goals, we expect Whites to indicate higher levels of personal control than ethnic minority groups (especially females of recent generations). Finally, we expect to replicate ethnic group differences in long-term aspiration levels, such that White and both Asian groups would report higher levels than African American and Hispanic groups.

METHOD

Procedure and Participants

This study was based on the 1st wave of data collected from a longitudinal study of personal and social resources and liabilities of high school seniors, who were all within a month from their graduation in the spring of 2002. They were recruited from 4 schools in Los Angeles, selected to capture an ethnically diverse

working- and middle-class sample, to complete a confidential questionnaire during a regular class period. A letter explaining the research study and parental consent forms were distributed by research staff members who visited their classrooms the week before data collection. On the days of data collection, 81% of students present agreed to participate by signing forms of assent. The remaining either declined participation or did not have parental consent. Participants were compensated by entering them into classroom drawings for two $20 gift certificates and 2 school-wide drawings for $100 gift certificates to a local record store. Research staff from diverse ethnic backgrounds administered all questionnaires.

A total of 1,183 originally participated. Seventy-three students were excluded because of missing data on the key variables in this study (i.e., open-ended responses to life goals in the next 10 years) and 178 were excluded because they did not fit into the 6 ethnic groups under study. The final sample consisted of 932 adolescents. Adolescents' mean age was 17.8 years (SD = 0.57), and ranged from 16 to 20 years. The sample had somewhat more female (54.5%) than male participants. Due to the number of statistical tests performed, significance levels were set at $p \leq 0.01$, and all posthoc comparisons were Scheffé tests.

Measures

Adolescents reported on demographic information, such as their ethnic group membership ("What is your race or ethnic background?"), whether they and their parents were born in the U.S., parental educational attainment (1: *junior high school*; 5: *master's or professional degree*), and family living arrangement (both biological parents, mother and step-father, mother only, and other).

Ethnicity

Participants were grouped into 6 ethnic group categories: White, African, Mexican, Other Latino, Filipino, and East/SE Asian Americans. This grouping was done with 2 aims in mind: the need to allow for as many distinct groups as possible and the requirement of an adequate cell size for statistical analyses. In the end, we retained the traditional grouping of Whites and African Americans, but took advantage of the large sample size of traditionally defined Asian and Hispanic Americans and separated these into two subgroups each (Filipino and East/Southeast Asian; and Mexican and Other Latinos, the latter group included mostly Central and South Americans, but also Cubans ($n = 3$) as well as those who identified as "Hispanic" ($n = 8$)). The remaining

($n = 178$) could not be classified and were categorized as "Other." Since this ethnically heterogeneous group did not represent a meaningful sociological category, these participants were removed from further analysis.

Generational status was defined as follows: 1st generation adolescents and their parents were not born in the U.S., 2nd-generation adolescents were born in the U.S. but neither parent was born in the U.S., and 3rd and subsequent generation adolescents had at least 1 parent who was born in the U.S. In the few cases where adolescents were born overseas but at least 1 parent was born in the U.S. ($n = 11$), they were classified as 3rd generation and beyond.

Type of Medium-Range Life Goals

Adolescents responded to an open-ended question, "What are your most important goals and plans between now and 10 years from now?" and were allowed space to list 3. Although most of the participants (95.2%) generated 3 goals, 7% generated 2 and 2.7% generated only 1. All self-articulated life goals were coded into 8 general categories. The coding scheme, which was devised for this project, is detailed in Table I. This scheme was based on previous research on German adults and adolescents (Heckhausen, 1997; Heckhausen and Tomasik, 2002) and adjusted to accommodate this study based on a random sample of 50 participants' life goals. Three research assistants were trained and achieved excellent interrater agreement (94%) on a random sample of 284 life goals. Table II summarizes the frequency distribution of adolescents who generated at least 1 goal in a particular goal category.

Overall Priority

Participants were then asked to rank their medium-range life goals in order of importance, which was used to create a measure of priority for each of the 8 goal categories with scores ranging from 1 "most important" to 4 "not as important" (note that lower scores represent higher priority). If adolescents did not generate a particular life goal category, priority for that goal was assumed to be 4, or "not as important." If more than 1 response was in the same goal category, such as having 2 educational goals, the goal with the highest priority rating was used.

Perceived Control

Participants were asked to rate the amount of control they perceived they had in attaining their life goals, on a 5-point scale (1: *no control at all*; 5: *complete control*).

Table II. Percent of Self-Articulated Life Goals by Ethnicity

	White	African American	Mexican American	Other Latino American	Filipino American	E/SE Asian American	Total nominated N (%)	χ^2 (5, N = 924)
Occupation	78.8	75.0	79.1	78.7	85.6	76.5	731 (78.9)	4.53
Education	73.9	68.2	71.7	71.7	84.7	76.5	683 (73.8)	10.15
Family	39.8	31.1	29.1	29.1	37.8	32.7	310 (33.5)	8.44
Material	15.0	22.7	19.6	15.0	6.3	11.2	147 (15.9)	16.44*
Self-actualization	16.8	14.4	9.1	7.1	9.9	10.2	108 (11.7)	11.30
Leisure	8.4	4.5	5.2	7.1	2.7	10.2	59 (6.4)	7.83
Autonomy	3.5	3.0	4.8	5.5	8.1	6.1	45 (4.9)	4.79
Other goals[a]	7.5	2.3	3.0	4.7	0.9	3.1	37 (4.0)	12.04

[a]Other goals include prosocial, health, and peer-related goals.
*$p \leq 0.01$.

Mean ratings of perceived control were computed for each of the 8 goal categories.

Time Frame for Goal Attainment

Participants were also asked to indicate both the age by which they wanted to attain these goals and the latest acceptable age for attaining them. Extreme outlying values were identified if they were greater than 3 standard deviations from the mean (Kleinbaum *et al.*, 1998). Outliers were typical for adolescent reports of the latest acceptable ages for all goals except "other" goals, but were very few in number (ranging from 0.1% for school goals to 4.5% for self-actualization goals). For ideal ages of attainment, outlying values were present only for self-actualization (1% of respondents). Most outlying

Table I. Coding Scheme for Self-Articulated Life Goals

Category	Examples
1. Educational goals	Attend/graduate from 2-year or 4-year college, "Complete all my schooling," "Further my education"
2. Occupational goals	"Become a lawyer," "Be a dental assistant," "Have a good job," "Successful career"
3. Family-related goals	"Get married," "Have kids," "Start a family," "Find someone," "Help my parents buy a house"
4. Material goals	"Be rich," "Make money," "Have a nice car," "Live a high-class life," "Own a mansion"
5. Self-actualization goals	"Be happy," "Personal fulfillment," "Advance spiritually"
6. Travel and leisure goals	"Travel," "Have fun," "Play hockey," "Party"
7. Autonomy goals	"Get my own place," "Move out," "Become independent"
8. Other goals	"Help others," "Meet interesting people," "Be healthy," "Make a difference in the world"

values were typically in the late adulthood years, 90–101 years. Following the procedure for dealing with outliers recommended by Barnett and Lewis (1994), three-way ANOVA analyses with and without these outlying values were conducted. Since the results were not different, the results included outliers in this paper.

Long-Term Aspirations and Expectations

In addition to questions about medium-range life goals and plans, adolescents were asked an open-ended question about their long-term occupational goals and a closed-ended question about their long-term educational goals. Occupational aspirations were coded according to Nakao and Treas (1994) prestige scores that ranged from 21 (working with animals in entertainment industry) to 86 (physician) in this sample. A 10-point difference is the equivalent difference between a journalist (60) and an engineer (70). Coders were 2 advanced graduate students who were selected because of their knowledge of adult work and occupations; interrater agreement was 88%. Adolescents also rated the likelihood of attaining their long-term occupational aspirations on a 5-point scale (1: *very unlikely*; 5: *very likely*). Long-term educational aspirations ("What is the highest level of education that you ideally would like to complete?") and expectations ("Realistically, what is the highest level of education you think you will finish?") were assessed on a 4-point scale (1: *high school*; 4: *graduate school (PhD, MD, etc)*.

RESULTS

Family Background

Table III displays the composition of gender and generational status within each ethnic group. Ethnic groups did not differ in gender composition, although generational status varied significantly according to ethnic group

Table III. Sample According to Ethnic Group Membership by Gender and Generational Status

	Gender		Generational Status			
	Male	Female	First	Second	Third	Total
White	115	107	27	8	190	226
African American	60	70	7	5	120	132
Mexican American	92	137	66	126	37	230
Other Latino	57	70	45	71	11	127
Filipino	51	60	58	47	6	111
East/Southeast Asian	45	53	53	38	7	98

membership ($\chi^2(10, N = 923) = 567.21, p < .001$). As expected, a majority of African Americans and Whites were of 3rd and subsequent generations. Over half of Filipinos and East/Southeast Asians were 1st-generation Americans, whereas over half of the Mexicans and Other Latinos were 2nd generation. Parental educational attainment differed significantly by ethnic group, $F(5, 901) = 64.44$, $p < .001$. Mexican and Other Latino groups reported significantly lower parental educational levels than all other groups, and African Americans reported significantly lower parental education levels than White adolescents.

The majority of participants (60.4%) lived with both of their biological parents; 22.1% lived with their mother only whereas 8.3% lived with their mother and stepfather. The remaining 9.2% indicated other living arrangements. Family structure varied significantly among ethnic groups ($\chi^2(15, N = 898) = 124.60, p < .001$). The majority of Filipinos, Mexicans, and E/SE Asians lived with both biological parents (69–74%), compared to approximately half of Whites and Other Latinos (56%) and not quite one-third of African American adolescents (30%).

Types of Medium-Range Life Goals

A large majority of the participants had goals related to their future occupation (78.9%) and education (73.9%). Table II summarizes the distribution of life goals among students from the 6 ethnic groups and corresponding χ^2 statistics. Contrary to our hypotheses, ethnic groups did not differ in the frequency of various goals with the exception of material goals. More African Americans (22.7%) than Filipinos (6.3%) articulated material goals. Overall gender differences existed in educational ($\chi^2(1, N = 924) = 21.64, p < 0.001$), family ($\chi^2(1, N = 924) = 7.94, p < 0.001$), and autonomy ($\chi^2(1, N = 924) = 7.48, p < 0.001$) goals. Females generated more goals in each of these domains. Gender dif-

ferences in other goals (i.e., self-actualization, occupation, material, and leisure) did not reach statistical significance, ($\chi^2(1, N = 924) = 4.38, \chi^2(1, N = 924) = 2.15, \chi^2(1, N = 924) = 3.83, \chi^2(1, N = 924) = 4.18$, respectively).

χ^2 analyses were also conducted simultaneously by ethnicity and gender to see whether gender differences might have varied by ethnicity. Fewer males articulated an educational goal than females among African Americans (55% for males; 84% for females), Mexicans (58% for males; 81% for females), and to a lesser extent among Other Latinos (63% for males; 79% for females). Interestingly, these percentages for females of the three groups were very similar to those of both males and females in the Filipino, E/SE Asian, and White groups (70–85%). In terms of familial goals, more males within E/SE Asian (38%) and Other Latino (33%) groups articulated familial goals than their female counterparts (28% for E/SE Asian females, 26% for Other Latino females).

Generational status differences were evident only in self-actualization goals ($\chi^2(2, N = 929) = 14.22$, $p < 0.001$), with 3rd and subsequent generation adolescents reporting a high number of these goals.

Overall Priority of Medium-Range Life Goals

Of the 932 adolescents in the sample, 90.4% ranked the life goals that they generated. The overall mean priority scores are listed in Fig. 1, which shows that educational and occupational goals were highly prioritized overall, followed by familial, self-actualization, and material goals. Leisure, autonomy, and "other" goals had the lowest average priority. Three-way ANOVAs with ethnicity, gender, and generational status on each goal category's overall priority revealed no significant ethnic group differences or interactions. However, gender differences in the overall priority of educational goals were significant ($F(1796) = 14.04, p < 0.001$). Females prioritized their educational goals higher ($M = 1.8$) than males ($M = 2.5$).

Perceived Control Over Medium-Range Life Goals

Figure 1 shows the mean rating of perceived control by goal categories. As indicated earlier, ratings of perceived control over personal life goals were high, indicating a great deal of confidence among the majority of these adolescents in their future. Participants reported the highest amount of control over educational goals and the
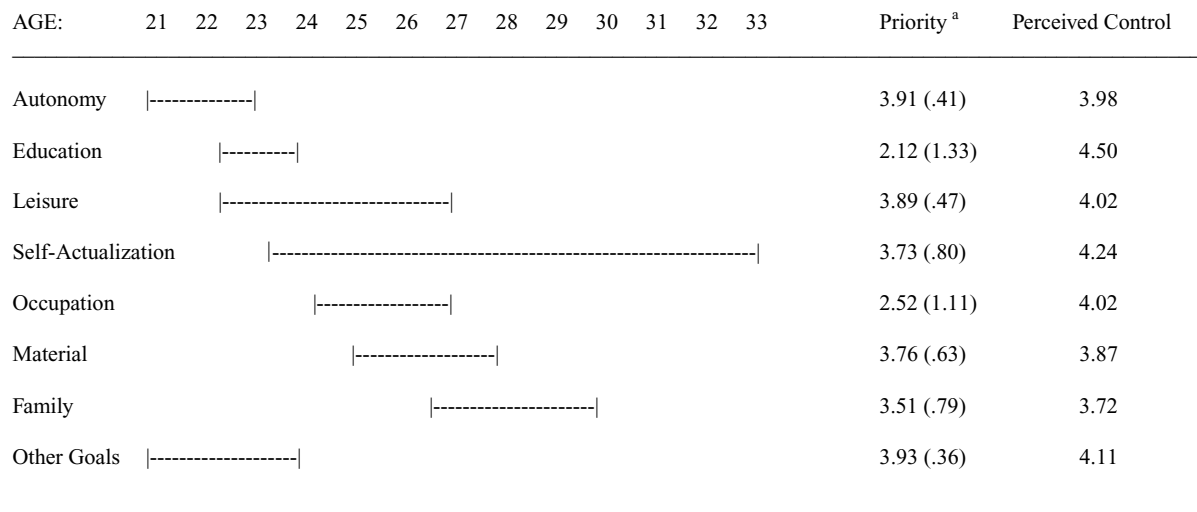
AGE:	21 22 23 24 25 26 27 28 29 30 31 32 33	Priority [a]	Perceived Control
Autonomy	|-------------|	3.91 (.41)	3.98
Education	|----------|	2.12 (1.33)	4.50
Leisure	|-----------------------------|	3.89 (.47)	4.02
Self-Actualization	|---|	3.73 (.80)	4.24
Occupation	|------------------|	2.52 (1.11)	4.02
Material	|-------------------|	3.76 (.63)	3.87
Family	|----------------------|	3.51 (.79)	3.72
Other Goals	|--------------------|	3.93 (.36)	4.11

Fig. 1. Time frame for medium-range goal attainment, overall priority, and perceived control.[a]Note that lower scores represent higher priority.

lowest amount of control over familial goals. Contrary to our hypotheses, 3-way ANOVAs did not reveal any significant group differences or interactions for perceived control of goals.

Time Frame for Life Goal Attainment

A display of the time frame for average ideal and latest acceptable goal attainment in each goal category is given in Fig. 1. The life goals are sequenced in a developmentally predictable way, beginning with autonomy and ending with family and self-actualization. Based on the time frames of all goals, 2 types of life goals emerged without any overlap, which conveniently map onto the developmental tasks associated with adolescence/young adulthood and adulthood (Erikson, 1968, 1980). Adolescent goals of autonomy (between ages 21.0 and 23.0) and education (between ages 22.3 and 24.1) were immediate and given relatively shorter time frames for attainment, such that both were ideally to be completed by age 24. Adult goals began with occupation (between ages 23.6 and 26.7) and the formation of family (between ages 25.8 and 29.6), with material goals squarely in the center of these 2 adult goals (24.6–28.0 years of age). The time frames for leisure (between ages 22.5 and 27.2) and self-actualization (between ages 23.4 and 32.5) goals cut across both adolescence/young adulthood and adulthood goal attainments. Self-actualization was the last goal that respondents expected to be fully attained, and was given the longest time frame for attainment (an average of 9.1 years between ideal and latest acceptable ages). Three-way ANOVAs for

ideal and latest ages, and the difference between the two, for all 8-goal categories revealed no ethnic, gender, and generational status main effects or interactions.

Long-Term Aspirations and Expectations

The majority of participants (79.2%) reported a long-term occupational goal. Less than 1% had goals that were not part of the Nakao and Treas coding scheme (mostly, military careers). A 3-way ANOVA by ethnicity, gender, and generational status that was conducted on occupational prestige scores revealed no main effects or interactions. A 3-way ANOVA on ratings of likelihood of long-term career attainment also did not reveal any significant differences.

In terms of educational aspirations, a 3-way ANOVA revealed a main effect only for ethnic group. Posthoc contrasts revealed that Mexican Americans had lower aspirations than E/SE Asians ($p < 0.001$). However, it is noteworthy that adolescents of all groups, on average, aspired to attend a 4-year college. An analysis of covariance (ANCOVA) was conducted to examine whether parental educational attainment could explain these ethnic group differences. The amount of variance that ethnicity accounted for was reduced, η_p^2 from .026 to $\eta_p^2 = 0.017$, but remained significant, $F(5,878) = 2.99$, $p = 0.01$.

A 3-way ANOVA by ethnicity, gender, and generational status on educational *expectations* revealed 2 significant main effects: ethnic group (refer to Table IV) and gender ($F(1, 912) = 18.35$, $p < 0.001$). Posthoc contrasts indicated that Mexicans and Other Latinos both had lower

Table IV. Means (Standard Deviations) of Long-Term Aspiration and Expectation Levels

	White	African American	Mexican American	Other Latino American	Filipino American	E/SE Asian American	Total
Educational							
Aspirations	3.43 (0.64)	3.44 (0.71)	3.18 (0.88)	3.38 (0.75)	3.47 (0.65)	3.63 (0.68)	3.39 (0.75)
Expectations	3.27 (0.63)	3.25 (0.70)	2.88 (0.80)	3.08 (0.71)	3.16 (0.63)	3.46 (0.64)	3.15 (0.72)
Occupational							
Prestige level	60.45 (12.1)	63.00 (13.3)	61.50 (12.2)	62.97 (10.7)	65.67 (10.6)	66.15 (10.1)	62.69 (11.9)
Expectations	4.24 (0.87)	4.24 (0.96)	3.98 (1.06)	4.23 (0.88)	3.99 (0.90)	3.99 (0.97)	4.12 (0.95)

expectations than East/SE Asians ($p < 0.01$); Mexicans also had lower expectations than African Americans and Whites ($p < 0.001$). An ANCOVA on educational expectations using parental educational attainment as a covariate indicated that the effect of ethnicity was reduced ($\eta_p^2 = 0.056$ to $\eta_p^2 = 0.035$), although it remained significant ($F(5, 897) = 6.2$, $p < 0.001$). On the other hand, the amount of variance accounted for by gender was not affected by parental education and thus remained significant ($F(1, 897) = 19.40$, $p < 0.001$, from $\eta_p^2 = 0.021$ to $\eta_p^2 = 0.022$).

DISCUSSION

This study set out to examine whether ethnic variations in the medium- and long-range life goals of older adolescents reflect inequalities in educational and occupational attainment found among adults. The present study is well-suited to investigate these questions because high school seniors are at a developmental stage where these issues are relatively more salient than during periods of moratorium, such as in early adolescence and college. Further, the analyses considered gender and generational status, a potential moderator of ethnicity's influence on life goals.

The contributions of this study pertain to broadening the scope of life goals investigated beyond the commonly examined educational and occupational goals of adolescents. Moreover, we involved an ethnically-diverse sample, which included 2 Latino (Mexican and Other Latin Americans) and 2 Asian (Filipino and E/SE Asian Americans) groups, African Americans, and Whites from the same school district. Our examination was comprehensive, including different aspects of medium-range plans that are indicative of goal commitment as well as long-term educational and occupational aspirations. The findings extend knowledge gained from previous research by detailing the time frames during which adolescents want to attain each of 8 goals and by examining adolescent perceptions of control. The latter have not previously been studied in a U.S. sample of adolescents.

The life goals of this multi-ethnic and multi-generational sample were representative of normative developmental tasks of late adolescence and young adulthood, such as pursuing higher education and moving on to a good career. This study replicates past studies that have found educational and occupational goals to be adolescents' biggest concern, as these goals were given the highest priority on average across ethnic groups. Additional goals were to establish autonomy, begin a family, secure material goods, and become self-actualized. Adolescents were generally found to be very optimistic and confident about the future across ethnic groups. Not only were perceptions of control typically high, but also the time frames adolescents set for the latest acceptable age of goal attainment were commonly before age 33. Contrary to our hypotheses, there were very few ethnic, gender, and generational status variations in the content of medium-range life goals adolescents reported. These findings are not consistent with some previous studies on minority adolescents' aspirations and do not support the expectation that life goals begin to vary more by ethnicity as students approach high school graduation (Phinney *et al.*, 2001).

Across all ethnic groups in the current study, the average long-term educational aspiration was to go to a 4-year college. These results converge with Schneider and Stevenson's (1999) findings in *The Ambitious American Generation*, which describe adolescents in the Sloan Study of Youth and Social Development as having very high educational and occupational aspirations. For example, they reported that 90% of high school seniors expected to go to college and 70% expected to work in professional jobs. These relatively high aspirations may be influenced by macro-level changes in the U.S. economy that are creating more jobs that require higher education. Longitudinal follow-ups of the participants in the current study will uncover how individual and social resources prior to and after high school support or depress young adults' life goals and aspirations. Future questions remain regarding whether this particular cohort will replicate previous patterns of ethnic and gender inequalities in occupational attainment. If these patterns of inequality persist, it will

be important to examine and understand the individual and social antecedents, as well as the social contexts, that promote systematic disengagement by minority groups. Such information will be necessary in order to design suitable intervention programs and inform educational policies.

There were noteworthy findings regarding ethnicity, gender, and educational goals. Not only did females, on average, rate their educational goals of higher priority than males but minority females generated educational goals at the same rate as females from other groups. Contrary to our hypotheses, females from East/Southeast Asian and Other Latino groups that are traditionally assumed to be more family-oriented nominated fewer family-related goals than male counterparts, who nominated these goals more than other groups. One possible explanation is that East and Southeast Asian family ancestral lineages are traditionally carried by sons, which may free girls to pursue their extrafamilial interests in this country but may strengthen sons' obligations to their families as newcomers to the U.S.

However, there were significant ethnic differences in adolescents' *expectations* to actually finish college. In line with previous research (e.g., Mau and Bikos, 2000), Latino students in this study reported relatively lower long-term educational expectations. Additional analyses indicated that socioeconomic status had a more detrimental effect on Latino adolescents' educational goals. It is possible that economic constraints (e.g., the cost of tuition) may be an influential factor in shaping their future expectations. Cultural interpretations that centralize the importance of the family and the "here and now," which have typically been used to explain the lower educational expectations of Latinos, are not consistent with our study results. In fact, studies of family obligations among immigrant adolescents have shown that the family is an important motivating factor in educational achievement, although it is also a potential burden in the contexts of economic hardship (e.g., Fuligni, 1997).

It could be argued that the high aspirations across all groups are illusory for many adolescents, especially for those with poor grades and those whose college plans are not aligned with their future occupational aspirations (Schneider and Stevenson, 1999). However, it could be argued that illusory goals may be helpful in adapting to the demands of the future. Particularly in the context of the U.S., earning a college degree does not necessarily require one to have had good grades in high school. Weekend colleges, internet courses and colleges, and 2-year colleges do not require a minimum high school grade point average for program admittance and offer many detours to a college

degree. Although there may be an association between educational and occupational attainment in adulthood, youths with high motivational resources may eventually achieve higher educational status as adults. However, the wide range of possibilities in achieving higher educational attainment has both costs and benefits for older adolescents. On the one hand, those who are highly resourceful may ultimately achieve higher educational status; but on the other hand, illusory goals (such as aspiring to attend medical school despite poor grades) can keep those who are less capable from disengaging appropriately to obtain more feasible goals.

Several methodological issues and study limitations are worth noting. Since we did not ask adolescents why they chose the life goals they generated, some educational and material goals could be argued to be family-related. For example, given research on family obligations (Fuligni, 1997), educational goals could also be argued to be a family goal, if family/parental expectations are the driving force behind them. Asking the question why adolescents have certain goals, possibly through interview or written narrative format would be a meaningful step in clarifying whether ethnic differences exist in adolescent life goals. The use of open-ended questions with diverse samples is believed to reduce cultural bias because it allows respondents to generate their own responses rather than imposes preconceived categories (Phinney *et al.*, 2001). However, this format may also have costs. Our use of an open-ended question for reporting life goals may not tap into implicit goals that are so embedded in a person's values that "it goes without saying." This may be a reason why there were an unexpectedly low number of familial goals among Mexican Americans and Other Latinos.

The results of this study are also limited to graduating high school seniors. Thus, this study may overestimate the aspiration levels and types of life goals (such as the large number of educational and occupational plans) of adolescents in general. It is likely that school-leavers have fewer and narrower life goals. The sampling of high school seniors may be argued to be a selective sampling strategy for investigating ethnic variations in life goals. It is worth noting that an analysis of U.S. Census data from 2000 indicated that Whites (92%) and Asians (95%) were more likely to graduate from high school compared to Hispanic (64%) and African American (84%) students (NCES, 2001).

Nevertheless, our results suggest that a multi-ethnic, multi-generational sample of graduating high school seniors differ very little from each other in their future plans. In fact, all minority adolescents were found to have higher educational and occupational aspirations than their White

peers. Intervention programs would do well to help minority youths translate their high educational aspirations into concrete actions. Interventions aimed at the individual, however, will almost certainly not be sufficient in the absence of programs that provide increased funding for higher education for these (and other) minority groups.

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