

# Trends Among Honors College Students:

## An Analysis by Year in School

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This study sought to determine whether honors college students differed with regards to academic achievement, academic self-concept, general self-concept, educational aspirations, and career aspirations as a function of their class standing. Participants included 298 honors college students from a large, Midwestern university. A demographic questionnaire, the general academic subscale and the general-self subscale of the Self-Description Questionnaire III (Marsh & O'Neill, 1984), and the Leadership and Achievement Aspirations subscale of the Career Aspirations Scale (O'Brien, 1992) were used. Results indicate significant differences between juniors and seniors with regards to academic self-concept, educational aspirations, and career aspirations. Implications for honors faculty and administrators are discussed.

**S**ome research indicates honors college graduates are fairly homogeneous (Wittig, Schurr, & Ruble, 1986–1987), and other research indicates honors students cannot be typified (Laycock, 1984; Robinson, 1997). However, insufficient research exists to allow researchers to draw definitive conclusions regarding the characteristics of honors college students. Relative to the areas of college student development and gifted education, very little research has combined these areas and examined the gifted college student (Rinn & Plucker, 2004).

Several researchers have studied the differences between honors students and nonhonors students. For example, honors college students are likely more perfectionistic (Parker & Adkins, 1995; Neumeister, 2004), more likely to plan to attend graduate or professional school (Randall, Salzwedel, Cribbs, & Sedlack, 1990), differ with regard to personality type (Randall & Copeland, 1986–1987), and are more autonomous (Gottsdanker, 1968; Palmer & Wohl, 1972) than nonhonors students. In a comparison of honors students and nonhonors students of equal ability, Rinn (2004) found honors students had significantly

higher grade point averages, academic self-concepts, and career aspirations than nonhonors students.

Honors and nonhonors students may differ as a function of honors program membership, or they may differ as a function of precollege characteristics. In other words, in the aforementioned study, it is difficult to know if honors students' high academic achievement, high self-concepts, and high career aspirations existed prior to enrollment or were developed during membership in an honors program. Thus, honors students may have joined an honors program because they already had high self-concepts and high aspirations, and had high grade point averages in high school. Focused students may participate in selective programs to aid them in achieving the high aspirations they have already set for themselves. Indeed, Gerrity, Lawrence, and Sedlacek (1993) found 34% of 231 honors college students joined an honors college as preparation for graduate school and 18% believed honors college participation would help them to get a better job. We do not, however, know what happens to honors students as they move through higher education. If they all enter honors programs with similar goals, why is the attrition rate so high?

When studying gifted college students, most researchers focus on these students as a group (Rinn & Plucker, 2004). Little research has been conducted to examine the differences among honors students of varying class standing (freshman, sophomore, junior, or senior). The importance of studying average-ability college students across class standing (see Pascarella & Terenzini, 1991) and studying gifted students at the elementary and secondary level with regard to grade level (Clark, 2002) has been noted, however.

The relationship among academic achievement, self-concept, and aspirations has also been noted with populations of average-ability college students (see Pascarella & Terenzini, 1991) and gifted students at the elementary and secondary level (see Davis & Rimm, 2004). Again, little research has examined these constructs among gifted college students (Rinn, 2004), yet academic achievement, self-concept, and aspirations are strongly connected to issues of retention and attrition (Tinto, 1975). The following review of research is intended to provide the reader with an overview of the literature that pertains to the academic achievement, academic self-concept, general self-concept, educational aspirations, and career aspirations of college students and/or gifted students as a function of their year in school.

For the purposes of this research, a gifted college student can be defined as one who is a member of an honors program in a college or university setting. Because identification of giftedness at the postsecondary level is very difficult due to the lack of standardized assessments, membership in an honors program is often used as an indicator of giftedness at the postsecondary level (Rinn & Plucker, 2004).

## Review of Research

### Academic Achievement

Pflaum, Pascarella, and Duby (1985) found honors college participation was associated with high academic achievement during the first year of college, and Rinn (2004) and Shushok (2003) found gifted honors students had higher academic achievement than gifted nonhonors students. Very little research exists concerning the academic achievement of college students, separate from research that examines academic achievement in relation to some other construct, such as self-concept or aspirations (see Pascarella & Terenzini, 1991).

Most honors programs in the United States have minimum grade point average requirements (Digby, 1999).

That is, to remain a member of the honors program, students have to maintain a minimum grade point average (usually around a 3.3 on a 4.0 scale). It is therefore unlikely that gifted upperclassmen will have differing grade point averages from other honors underclassmen, as those with low grade point averages are not allowed to remain in an honors program.

### Academic Self-Concept

*Self-concept* can be defined as “a person’s perceptions of him- or herself . . . formed through experience with and interpretations of one’s environment” (Marsh & Shavelson, 1985, p. 107). Academic self-concept can thus be defined as the way one feels about his or her academic abilities.

Pascarella and Terenzini (1991) cited evidence to suggest college students’ academic self-concepts decline during the freshman year. From here, they argued students’ academic self-concepts increase, such that by the end of a student’s senior year, his or her academic self-concept is greater than it was at the beginning of the freshman year (see also Astin, 1977; Pascarella, Smart, Ethington, & Nettles, 1987). Reynolds (1988) has argued that the increase in academic self-concept seen from the first to the last year in college is due to both general maturation and a process of selective mortality, whereby students with poor grades and poor adjustment drop out of college, thus resulting only in students with positive perceptions of their abilities by the senior year. House (1993) found students’ academic self-concept to be a strong predictor of subsequent school withdrawal, indicating those with low academic self-concepts may indeed drop out of school. Academic self-concept may also increase as a function of age. Research indicates academic self-concept increases naturally during late adolescence and early adulthood (Marsh, 1989a), which corresponds with the college-age years.

Among the research on gifted students at the elementary and secondary level, the decrease in self-concept seen after joining a selective program is due to the Big-Fish-Little-Pond Effect (BFLPE; Marsh, 1987; Marsh & Parker, 1984). When a gifted student enters a gifted program after having been part of a mixed ability level program, he or she may find himself or herself surrounded by peers of equal ability. This may challenge his or her prior conceptions of ability and lower his or her academic self-concept. Moon, Feldhusen, and Dillon (1994) have suggested that this decrease in academic self-concept may only be temporary, and that the long-term effects of participating in a gifted program may actually be positive, which they found in their longitudinal study. This increase is in line with

Pascarella and Terenzini's (1991) suggestion of an increase in self-concept from the sophomore to the senior year.

In contrast to the BFLPE (Marsh, 1987; Marsh & Parker, 1984), gifted students may experience the reflected glory effect upon entrance to a selective program (Cialdini & Richardson, 1980). Gifted students who are enrolled in a selective program are "basking in the reflected glory of successful others by merely . . . joining highly valued social groups" (Marsh, Kong, & Hau, 2000, p. 338). Academic self-concept is therefore enhanced by virtue of being a member of a highly accomplished group. In other words, gifted students may realize their abilities because they were accepted as part of a highly able group, namely an honors program.

Although few researchers have directly studied the academic self-concepts of gifted college students (Rinn & Plucker, 2004), research has indicated that honors students have considerable confidence in their academic abilities (Mathiasen, 1985). Gifted students at the elementary and secondary level typically have higher academic self-concepts than their average-ability counterparts (Ablard, 1997; Colangelo, Kelly, & Schrepfer, 1987). Recent research has also found gifted college students to have higher academic self-concepts than their average-ability counterparts (Rinn, 2004).

### General Self-Concept

Some researchers disagree about the nature of the general self-concept (see Marsh & Shavelson, 1985), as the general self-concept could be comprised of a total score across a collection of self-report items; a higher order factor that is not directly measurable; or a separate, distinguishable, superordinate facet that is commonly referred to as self-esteem. Shavelson, Hubner, and Stanton (1976) argue self-concept is both multifaceted and hierarchical. Self-concept is multifaceted "in that people categorize the vast amount of information they have about themselves and relate these categories to one another." It is hierarchically arranged "with perceptions of behavior at the base moving to inferences about self in sub areas (e.g., academic—English, science, history, mathematics), then to inferences about the self in general" (Marsh & Shavelson, p. 107). Because the self-concept measure used in this study is based on the Shavelson model of self-concept, this study is based on the same assumptions of Shavelson, Hubner, and Stanton.

Most research consistently indicates an increase in college students' general self-concept throughout the college years (see Pascarella & Terenzini, 1991). To illustrate, Graham and Cockriel (1996), in their study of over

9,000 college students, found an increase in general self-confidence from the freshman to the senior year. Again, the increase in self-concept may have been a function of either general maturation or a process of selective mortality (Reynolds, 1988). Resembling the patterns of academic self-concept, students' general self-concept also probably increases with age. Indeed, Marsh (1989a) and O'Malley and Bachman (1983) found general self-concept to increase during late adolescence and early adulthood.

### Educational Aspirations

When researchers discuss educational aspirations, they are usually discussing one's desire to attain a post-baccalaureate degree (Kamen, 1979). Research regarding the educational aspirations of college students is mixed, particularly with regards to gifted college students. Based on his research, Quilter (1995) has speculated that first-year college students may aspire to high educational goals, regardless of their ability, as their aspirations are more idealistic than realistic. However, Noldon and Sedlacek (1998) stated "academically talented men and women generally enter college with aspirations that correspond to their academic ability" (p. 107), suggesting realistic expectations for success.

Students' educational aspirations may differ, though, as a result of their year in school. In their longitudinal study of approximately 400 Stanford students, Katchadourian and Boli (1985)<sup>1</sup> found freshmen and seniors differed in their plans for postbaccalaureate study. As freshmen, 21% intended to receive a bachelor's degree, 30% intended to earn a master's degree, and 49% intended to earn a doctoral degree. By the senior year, only 8% of students intended to stop their education at the bachelor's degree and only 45% intended to earn a doctoral degree. Those seniors expecting to earn a master's degree increased to 47%. These findings suggest as students progress through higher education, they are more likely to aspire to a graduate degree. As this study was conducted in a selective institution, the results may be somewhat applicable to the current study of honors students.

In a study of gifted freshmen and sophomores, the majority of students expected to receive a master's degree, rather than a bachelor's degree or a doctorate degree (Perrone & Dow, 1993). Gerrity et al. (1993) found the same results in their study of honors freshmen. This research suggests honors underclassmen are not likely to aspire to attain a doctorate degree. These findings contrast with the high percentage of freshman in Katchadourian and Boli's (1985) research who intended to pursue a doctoral degree.

## Career Aspirations

To operationalize aspirations only as students' intentions to pursue graduate training is seen as a flaw in research that examines aspirations (Kamen, 1979). Measuring only educational aspirations minimizes some career fields that do not require advanced training, such as education and business. Thus, researchers have emphasized the study of higher level career aspirations, or aspirations to a leadership position within one's chosen field, *in addition to* the study of educational aspirations, as a way to address the aspirations of those who do not wish to attend graduate or professional school (Nauta, Epperson, & Kahn, 1998). Although research is limited in the specific area of higher level career aspirations, some research exists that studies career aspirations as separate from educational aspirations.

Among average-ability college students, research suggests juniors and seniors are more advanced in their career planning than freshmen and sophomores (e.g., Healy, Mitchell, & Mourton, 1987; McCaffrey, Miller, & Winston, 1984), and are more certain about their chosen career than freshmen and sophomores (Van Haveren, 2000). This suggests upperclassmen may have higher career aspirations than underclassmen.

Schroer and Dorn (1986) argued gifted college students begin college with confusion and uncertainty regarding their future career plans, implying they might have lower career aspirations than upperclassmen. "Academically talented students must often consider a wide range of interests and abilities, cope with high expectations from others, and make decisions regarding investments of time and money in their future careers" (p. 567). Gifted students may experience multipotentiality, or the ability to develop skills at a high level in multiple different areas (Kerr, 1986), as Schroer and Dorn suggest, or they may experience early emergence, which is an extreme focus in one area that usually begins at an early age (Roper & Berry, 1986). The concept of early emergence is in line with research on college student development, which suggests selective institutions attract students with higher occupational goals who are more certain about their chosen career (e.g., Smart, 1986).

## The Current Study

Although a plethora of research has looked at the academic achievement, academic self-concepts, general self-concepts, educational aspirations, and careers aspirations of college students, very little research has examined how these variables differ across class standings of college students (Dunlop & Canale, 1988). Further, very little, if

any, research has been conducted to examine these differences among honors college students (Rinn & Plucker, 2004).

The purpose of the current study is to examine how the academic achievement, academic self-concepts, general self-concepts, educational aspirations, and career aspirations of honors college students vary as a function of class standing. Freshmen and sophomores will be compared, as will juniors and seniors.<sup>2</sup> This study is important for both theoretical and practical reasons.

Theoretically, this research is important because it will provide further information about constructs related to the BFLPE (Marsh, 1987; Marsh & Parker, 1984) and the reflected glory effect (Cialdini & Richardson, 1980; Marsh, Kong, & Hau, 2000) with a scarcely studied subpopulation. Further, because gifted college students as a subpopulation are not often studied, this research simultaneously contributes to the research literature on gifted college students, on honors colleges, and on college student development. This study also provides further empirical information regarding the use of the general academic subscale and the general-self subscale of the Self Description Questionnaire III (Marsh & O'Neill, 1984), as well as the Leadership and Achievement Aspirations subscale of the Career Aspirations Scale (O'Brien, 1992), with gifted college students.

Practically, this research is important because, while attrition from a selective program is largely unexpected (Hermanowicz, 2004), it nonetheless occurs. Retaining honors students is not only beneficial for an institution, but also for the students themselves. Honors students "offer positive peer effects for their classmates," "influence the school's appeal to faculty members," and "their successes in the labor market contribute to the outcomes one often uses to judge the effectiveness of an educational program" (Long, 2002, p. 4). Honors students make important contributions to their institutions; thus, institutions try to attract and retain these students.

Honors program benefits for students include an elite education at a fraction of the price of more selective universities, smaller class sizes, special academic advising, honors residence halls, and other perks (Digby, 1999). Upon graduation, honors students indicate higher satisfaction with their jobs than nonhonors students (Sturgess & Fleming, 1994), are more likely to complete graduate or professional school than nonhonors students (Jahnke, 1976), and experience gains in the liberal arts, science, and technology (Shushok, 2003).

Given the interest in attrition and retention of bright students among institutions of higher education (Rinn & Plucker, 2004), research that examines factors that may



affect attrition and retention of bright students should be of importance to researchers and educators in the fields of higher education and gifted education. As more than half of students who drop out of higher education leave before the start of their second year (Tinto, 1996), the findings concerning the similarities and/or differences between freshmen and sophomores may be of particular importance.

## Method

### Participants

Participants for this study included 298 college students, all of whom were enrolled in an honors program at a large, residential, Midwestern university. The honors program requires a minimum combined score of 1300 on the SAT for admission<sup>3</sup>, as well as a high school class rank in the top 10% of a student's class. The average SAT score of honors students at this university was 1343 for the academic year in which data was collected (Jill Baker, personal communication, October 22, 2003).

Participants' SAT scores in the current study ranged from 1000 to 1600. The mean SAT score was 1360 ( $SD = 94.35$ ). Among participants, 57% were male ( $n = 170$ ) and 43% were female ( $n = 128$ ). Concerning class standing, 42.6% of participants were freshmen ( $n = 127$ ), 40.6% were sophomores ( $n = 121$ ), 5.4% were juniors ( $n = 16$ ), and 11.4% were seniors ( $n = 34$ ). Overall, 65.1% of students were majoring in business ( $n = 194$ ), 14.1% were majoring in natural sciences or mathematics ( $n = 42$ ), 13.8% were majoring in humanities ( $n = 41$ ), 6.7% were majoring in social sciences ( $n = 20$ ), 5.7% were majoring in fine arts ( $n = 17$ ), 4% were majoring in education ( $n = 12$ ), and 4% were undecided in their majors ( $n = 12$ ). Students who indicated a double major were counted twice in this analysis.

### Materials

Participants completed a demographic questionnaire that assessed gender, age, year in school, major field of study, grade point average, SAT score, and educational aspirations. Participants also completed the academic and general subscales of the Self-Description Questionnaire III and the Career Aspiration Scale. Other data was gathered as part of a larger database, but was not used in this study.

**Academic achievement.** Academic achievement was measured by students' self-reported, cumulative grade point average, which could range from 0.00 to 4.00.

**Educational aspirations.** Educational aspirations were measured by asking students to indicate the highest post-baccalaureate degree they wished to obtain, if any.

**Self-Description Questionnaire III.** The Self-Description Questionnaire III (SDQ-III; Marsh & O'Neill, 1984) was designed to measure 13 facets of the self-concepts of late adolescents and young adults (math, verbal, general academic, problem solving, physical ability, physical appearance, relations with same sex, relations with opposite sex, relations with parents, religion/spirituality, honesty, emotional stability, and general-self). The SDQ-III is based on the Shavelson model of self-concept, as previously mentioned, which describes self-concept as a multifaceted, hierarchical construct (Shavelson et al., 1976).

For the purposes of this study, only the general academic subscale and the general-self subscale were used. The meanings of these subscales, as defined by Marsh (1989b, p. 12), are as follows: General Academic—I am a good student in most school subjects; General-Self—I have self-respect, self-confidence, self-acceptance, positive self-feelings, and a good self-concept.

Reliability scores for the academic subscale of the SDQ-III range from 0.86 to 0.92 (Marsh & Byrne, 1993). Validity evidence provided by factor analysis indicates factor loadings ranging from 0.47 to 0.81 on the academic subscale (Marsh, 1989b). Reliability scores for the general-self subscale range from 0.93 to 0.94, and factor loadings range from 0.57 to 0.71 on the general-self subscale (Marsh, 1989b).

Using the current sample, the internal-consistency reliability of the general academic subscale, as measured by Cronbach's alpha, was  $\alpha = 0.85$ . Internal-consistency reliability of the general-self subscale was  $\alpha = 0.95$ .

**Career Aspiration Scale.** The Career Aspiration Scale (CAS; O'Brien, 1992) was developed in order to assess the degree to which women aspire to leadership positions within their chosen careers. The CAS is based on the theoretical rationale that self-efficacy beliefs are positively related to career aspirations, and that just because a woman may not desire to attend graduate school does not mean she is without aspirations.

The CAS is comprised of two subscales: The Leadership and Achievement Aspirations subscale (five items) assesses one's intentions to obtain promotions, manage and train others, and become a leader in one's field. Sample items include "I hope to become a leader in my career field" and "When I am established in my career, I would like to manage other employees." The Educational Aspirations subscale (two items) assesses one's plans to continue one's education and pursue graduate training, but will

not be used in this paper (O'Brien, Gray, Tourajdi, & Eigenbrode, 1996).

Convergent validity for the entire CAS has been demonstrated through relationships with multiple role self-efficacy ( $r = 0.26$ ), attitudes towards women's roles ( $r = 0.37$ ), career decision-making self-efficacy ( $r = 0.50$ ), and career salience ( $r = 0.34$ ). Discriminant validity evidence has been demonstrated through the absence of a relationship between the CAS and social desirability, and a negative relationship between the CAS and a measure of the relative importance of career versus family ( $r = -0.26$ ; O'Brien et al., 1996).

The Leadership and Achievement Aspirations subscale was used to measure career aspirations in the current study. Using the current sample, the internal-consistency reliability of the six-item Leadership and Achievement Aspirations factor, as measured by Cronbach's alpha, was  $\alpha = 0.50$ . Item analysis indicated deleting the third question ("I would be satisfied just doing my job in a career I am interested in.") would increase the alpha. Thus, the reliability of the five-item Leadership and Achievement Aspirations factor, which will be used for analysis in this study, was  $\alpha = 0.78$  for the entire sample. Because the CAS was designed for use with women, a reliability analysis of the five-item Leadership and Achievement Aspirations factor using only men was conducted, revealing  $\alpha = 0.76$ . Reliability of the factor for women was  $\alpha = 0.82$ , suggesting the Leadership and Achievement Aspirations subscale is reliable for use with both men and women.

## Procedure

The researcher contacted all of the professors at the Midwestern university who teach honors classes ( $n = 31$ ) and professors who were colleagues of the researcher ( $n = 8$ ) for permission to administer the questionnaires at the beginning or end of their class sessions. Thirty-nine professors were contacted, 35 responded, and the researcher collected data from 22 different classes (from 19 professors).

Each participant was associated with a numerical identifier; the participants' names were not collected. Participant bias was minimized because students were not required to participate in this study, even though data was collected during class sessions. Students were assured confidentiality and told their participation or lack thereof would have no effect on their grades in the course.

The final group of participants for the current study consisted of 298 students, although data were initially collected from 644 students. Participants' data were excluded from this study for several reasons: (1) nonhonors students were excluded because the focus of this study was solely on honors students ( $n = 251$ ); (2) non-traditional-

aged students were excluded ( $n = 12$ ) because theories and trends related to traditional college students are not always applicable to nontraditional college students (Pascarella & Terenzini, 1991); and (3) participants with incomplete data were excluded ( $n = 73$ ). Although freshmen did not yet have grade point averages at the time of data collection (first month of the fall semester), they were included in analyses when applicable. Approximately 46% of the collected questionnaires were used in this study.

## Results

Because a convenience sample was used in the current study, group size could not be controlled. Therefore, the group sizes were markedly different (freshmen,  $n = 127$ ; sophomores,  $n = 121$ ; juniors,  $n = 16$ ; seniors,  $n = 34$ ), such that a four-group comparison would not yield sound results. Freshmen and sophomores could be compared, and juniors and seniors could be compared, because of similarity in group size. To examine differences between freshmen and sophomores, and juniors and seniors, on variables used in this study, a series of independent sample  $t$ -tests were used. The means and standard deviations of the following variables can be found in Table 1: academic achievement, academic self-concept, general self-concept, and career aspirations. The frequencies of participants' educational aspirations can be found in Table 2.

Regarding academic self-concept, results of the  $t$ -test between freshmen ( $M = 6.35$ ,  $SD = 0.79$ ) and sophomores ( $M = 6.40$ ,  $SD = 0.68$ ) revealed no significant differences,  $t(246) = -0.50$ ,  $p = 0.62$ . Regarding general self-concept, results between freshmen ( $M = 6.55$ ,  $SD = 1.16$ ) and sophomores ( $M = 6.44$ ,  $SD = 1.11$ ) revealed no significant differences,  $t(246) = 0.78$ ,  $p = 0.44$ . Regarding educational aspirations, results between freshmen ( $M = 2.40$ ,  $SD = 0.63$ ) and sophomores ( $M = 2.26$ ,  $SD = 0.73$ ) revealed no significant differences,  $t(246) = 1.59$ ,  $p = 0.11$ . Finally, regarding career aspirations, results between freshmen ( $M = 3.45$ ,  $SD = 0.69$ ) and sophomores ( $M = 3.50$ ,  $SD = 0.68$ ) revealed no significant differences,  $t(245) = -0.63$ ,  $p = 0.53$ . Academic achievement was not compared between freshmen and sophomores, because, as previously mentioned, freshmen did not have grade point averages at the time of data collection.

Regarding academic self-concept, results of the  $t$ -test indicated juniors ( $M = 6.99$ ,  $SD = 0.62$ ) had significantly higher academic self-concepts than seniors ( $M = 6.58$ ,  $SD = 0.61$ ),  $t(48) = 2.24$ ,  $p < 0.05$ . Juniors also had significantly higher educational aspirations ( $M = 2.81$ ,  $SD = 0.40$ ) than seniors ( $M = 2.38$ ,  $SD = 0.70$ ),  $t(48) = 2.29$ ,  $p < 0.05$ . Finally, juniors had lower career aspirations ( $M$

Table 1

**Means and Standard Deviations of Included Variables by Year**

Year in School	Academic Achievement	Academic Self-Concept	General Self-Concept	Career Aspirations
Freshman				
Mean	--	6.35	6.55	3.45
N	--	127	127	127
Std. Deviation	--	0.79	1.16	0.69
Sophomore				
Mean	3.73	6.40	6.44	3.50
N	121	121	121	121
Std. Deviation	0.26	0.68	1.11	0.68
Junior				
Mean	3.74	6.99	6.77	3.03
N	16	16	16	16
Std. Deviation	0.21	0.62	1.42	0.77
Senior				
Mean	3.71	6.58	6.67	3.54
N	34	34	34	34
Std. Deviation	0.21	0.61	1.15	0.78
Total				
Mean	3.73	6.43	6.53	3.46
N	171	298	298	298
Std. Deviation	0.25	0.73	1.15	0.71

Table 2

**Frequencies of Educational Aspirations by Year**

Year in School	No Postbaccalaureate Degree	Masters Degree	Doctorate Degree
Freshman (n=127)	10 (7.9%)	56 (44.1%)	61 (48%)
Sophomore (n=121)	20 (16.5%)	49 (40.5%)	52 (43%)
Junior (n=16)	0 (0%)	3 (18.8%)	13 (81.3%)
Senior (n=34)	4 (11.8%)	13 (38.2%)	17 (50%)
Total (n=298)	34 (11.4%)	121 (40.6%)	143 (48%)

= 3.03,  $SD = 0.77$ ) than seniors ( $M = 3.54$ ,  $SD = 0.78$ ),  $t(48) = -2.13$ ,  $p < 0.05$ . Juniors and seniors did not differ significantly with regards to academic achievement ( $M = 3.74$ ,  $SD = 0.21$  and  $M = 3.71$ ,  $SD = 0.21$ , respectively),  $t(48) = 0.37$ ,  $p = 0.71$ . Also, juniors and seniors did not differ significantly with regards to general self-concept ( $M = 6.77$ ,  $SD = 1.42$  and  $M = 6.67$ ,  $SD = 1.15$ , respectively),  $t(48) = 0.26$ ,  $p = 0.79$ .

## Discussion

The purpose of this study was to examine differences among honors college students as a function of their class standing. Specifically, freshmen and sophomores were compared and juniors and seniors were compared. No significant differences were found between freshmen and sophomores. Significant differences were found between juniors and seniors with regards to academic self-concept, educational aspirations, and career aspirations. Significant findings will be discussed.

### Academic Self-Concept

Results from this study reveal a significant difference between the academic self-concepts of juniors and seniors. These findings are not consistent with previous findings in this area. Prior research suggests students experience an increase in academic self-concept throughout college, such that after an initial decline during the freshman year, students' academic self-concepts increase, and by the end of a student's senior year, his or her academic self-concept is greater than it was at the beginning of the freshman year (Astin, 1977; Pascarella et al., 1987; Pascarella & Terenzini, 1991).

While senior honors students had higher academic self-concepts than freshman honors students and sophomore honors students ( $M = 6.58$ ,  $M = 6.35$ , and  $M = 6.40$ , respectively), junior honors students had the highest academic self-concepts ( $M = 6.99$ ). The decline in academic self-concept seen from the junior year to the senior year was statistically significant.

The peak in academic self-concept during the junior year may have occurred for at least two reasons. First, perhaps the small sample of juniors who participated in this study were not representative of the population of juniors. Or, perhaps the peak corresponds to a switch from general education courses to courses in one's major. Juniors may have been enrolled for the first time in courses they enjoyed, and therefore were likely to do well in, thus increasing their academic self-concept temporarily.

### Educational Aspirations

Within this study, the majority of honors students in each class aspired to earn a doctorate degree (freshman = 48%, sophomore = 43%, junior = 81.3%, and senior = 50%), followed by a master's degree (freshman = 44.1%, sophomore = 40.5%, junior = 18.8%, and senior = 38.2%). The minority of honors students in each class did not aspire to earn a postbaccalaureate degree. These

findings are consistent with Katchadourian and Boli's (1985) suggestion that many freshmen aspire to receive a doctorate degree, rather than a master's degree as Perrone & Dow (1993) and Gerrity et al. (1993) also suggested.

A significant difference between juniors and seniors was found with regard to educational aspirations. Results of this study suggest educational aspirations appear to peak during the junior year, with 81.3% of juniors aspiring to the doctorate degree, and then decrease during the senior year, with 50% of seniors aspiring to the doctorate degree.

The peak in educational aspirations during the junior year is consistent with the junior year peak seen in academic self-concept. Again, this peak could have occurred for the same reasons. Sampling error could be to blame, or perhaps juniors were overly ambitious upon entrance to courses in their major due to a heightened sense of self-concept.

### Career Aspirations

Results show a significant difference between juniors and seniors with regard to career aspirations. Seniors had much higher career aspirations than juniors ( $M = 3.54$  and  $M = 3.03$ , respectively). This was inconsistent with the peaks seen during the junior year in academic self-concept and educational aspirations. As seniors experienced declines in academic self-concept and educational aspirations, they experienced an increase in career aspirations.

This increase could have occurred for multiple reasons. Research shows seniors are more advanced in their career planning than freshmen and sophomores (e.g., Healy et al., 1987; McCaffrey et al., 1984), which likely occurs after a senior has taken many courses in his or her major and may have a better grasp on how he or she could contribute to a particular career field. Many seniors may hold internships in their chosen field, which might also lead to a better understanding of the expectations related to a particular career.

## Implications

That freshmen and sophomores were not found to differ with regards to academic self-concept, general self-concept, educational aspirations, or career aspirations is a noteworthy finding. This may suggest honors students have different attrition and retention patterns than average-ability students, as average-ability students usually leave school after the freshman year (Tinto, 1996). However, these findings could also have been a result of a process of selective mortality. Students with a low self-concept or low aspirations, among other reasons, may leave an honors program prior to their second year. As nonhonors students



were not included in this study, one must interpret the findings with caution.

That juniors and seniors were found to differ with regards to academic self-concept, educational aspirations, and career aspirations is also a noteworthy finding, particularly because career aspirations appeared to increase while educational aspirations appeared to decrease from the junior to the senior year. These findings suggest educational aspirations and career aspirations may indeed be separate constructs, suggesting researchers should include measures of both in their study of aspirations.

Implications of these findings for university honors program faculty and administrators are great. Having a stronger understanding of retention and attrition patterns, and factors that contribute to both, will help honors program faculty and administrators in providing for the needs of honors students. Knowing seniors may experience a slight decrease in academic self-concept, for example, might cause faculty and administrators to provide extra attention to the academic needs of honors seniors, such that their honors experiences will not be diminished in their final year of school.

### Limitations and Directions for Future Research

Because the sample used in this study was drawn from a single institution, replication of this study across varying types of honors programs is necessary before one can generalize from this research. In addition, replication with equal group sizes would allow researchers to compare honors students across the trajectory of higher education, rather than in two-year increments. In particular, the sample size of the juniors and seniors was rather small because of the convenience sampling method, so findings related to juniors and seniors should be replicated with much larger samples.

Future research should follow students who have left honors programs in order to account for the process of selective mortality that may affect the variables in this study. Students with low academic self-concept, for example, may leave an honors program early in college because of the lack of confidence in their ability to do honors work. Honors juniors and seniors are likely those students who have high achievement, high self-concept, and high aspirations, resulting in little variation among honors underclassmen and honors upperclassmen.

The junior year of college for honors students in this study is nonetheless noteworthy. Students in their junior year experienced a statistically significant peak in academic self-concept and educational aspirations and a decrease in

career aspirations. Future research should expand on the junior year. For example, the junior year is often associated with a switch from general education classes to classes in one's chosen major. Perhaps exposure to courses in one's major could account for the increase in academic self-concept and the high desire to receive a doctorate degree. However, this would not explain the decrease in career aspirations.

More research is needed in the area of gifted college student development. The experiences of this population are largely unknown. An examination of gifted college students, the programming available for gifted college students, and the effects of honors programming on gifted college student development would aid researchers and educators in the pursuit of providing a quality educational experience for academically talented students.

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## End Notes

<sup>1</sup> Although some research cited in this study may appear outdated, it has been included for two reasons: (1) the lack of more current research, and (2) the relation to honors and/or gifted college students.

<sup>2</sup> For statistical reasons, as will be discussed in a later portion of the paper.

<sup>3</sup> Students with SAT scores lower than 1300 can petition to join the honors college.

## Author Note

Data for this study were gathered as part of a larger database, part of which was also used for the author's dissertation. This study and the author's dissertation do not overlap.