Achievement Goal Orientations of Academically Talented College Students: Socioemotional Factors Contributing to Honors Program Participation

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Achievement Goal Orientations of Academically Talented College Students: Socioemotional Factors Contributing to Honors Program Participation

Jaclyn M. Chancey, Ph.D.
University of Connecticut, 2013

Over 1000 colleges and universities in the United States have established honors programs to attract and serve high-achieving students. These students must decide whether participation in an honors program is compatible with the goals they have for their college educations, and not all will choose to join. Very little research has investigated the factors influencing this choice. In this mixed-methods study, honors-eligible students from two public research universities completed an online survey with five parts: the Achievement Goal Questionnaire-Revised (AGQ-R), Hewitt and Flett’s (1991) Multidimensional Perfectionism Scale (MPS), prior educational and extracurricular experiences, self-reported motivating factors for joining or not joining honors, and demographic information. Multivariate analyses were used to conduct comparisons among the parts of the survey; among students who joined honors as incoming freshmen, those who joined later, and those who did not join; and between honors students at the two universities. Students’ open-ended responses to the question of why they decided to join or not join honors were also analyzed qualitatively.

Results of this study indicated that students joined honors based on some combination of expected benefits, anticipated opportunities, and social and emotional needs. Students’ reasons did reflect their achievement goal orientations; citing opportunities for challenge and growth was positively associated with mastery-approach goals. Students who did not join honors anticipated
honors classes to be more difficult, require more work, and jeopardize their GPAs. However, this was not reflected in overall differences in achievement goal orientation or perfectionism between those who joined honors and those who did not. There were preliminary indications that students’ prior academic and extracurricular activities were related to achievement goals, perfectionism, and when they joined honors. Finally, honors students at the two universities differed significantly in levels of perfectionism and in the interactions between prior experiences and either achievement goals or perfectionism. They also placed different weights on the relative importance of benefits versus opportunities. These findings highlighted the influence of context when researching college honors programs and the students who qualify to participate in them.
Achievement Goal Orientations of Academically Talented College Students: Socioemotional Factors Contributing to Honors Program Participation

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A Dissertation
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2013
Doctor of Philosophy Dissertation
Achievement Goal Orientations of Academically Talented College Students: Socioemotional Factors Contributing to Honors Program Participation

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CHAPTER 1: INTRODUCTION TO THE STUDY

Over 1000 colleges and universities in the United States have established honors programs to attract and serve high-achieving students (National Collegiate Honors Council [NCHC], n.d.-a). For many academically talented students finishing high school and continuing to college, honors programs serve to continue the gifted or advanced education they may be used to receiving. However, not all eligible students who attend colleges or universities with honors programs will choose to join them. Very little research has investigated the factors influencing talented students’ choices to participate—or not participate—in honors programs. This study approached this larger question through the lens of achievement goal orientation, or whether individuals tend to define goals based on learning, demonstrating competence, or avoiding failure. Other possible explanatory factors were also included, with a special focus on perfectionism as a construct linked to achievement goal orientation and to gifted education.

Background of the Problem

Promotional materials for honors programs generally claim that they can help academically talented students increase the quality of their undergraduate education (e.g., NCHC, n.d.-b). Students who are eligible for such programs must decide whether participating in honors is compatible with the goals they have for their college educations. Students’ achievement goals are those specifically related to how they approach learning opportunities, emphasizing either the development of new knowledge or skills or the demonstration of knowledge or skills in comparison to others (Elliot, 2007). Research has linked the types of achievement goals students set to differences in emotional affect, behavior, and academic outcomes (Elliot & McGregor, 2001; Elliot & Murayama, 2008; McGregor & Elliot, 2002; Midgley & Urdan, 2001; Pintrich, 2000; Verner-Filion & Gaudreau, 2010; Wolters, 2004). The
precise mechanism by which different achievement goal orientations result in different outcomes has not been determined, but the goal orientation literature has been connected to research concerning other academic constructs, such as perfectionism (Eum & Rice, 2011; Fletcher, Serena, & Wang, 2012; Hanchon, 2010; Verner-Filion & Gaudreau, 2010). Honors programs may offer opportunities to fulfill multiple types of achievement goals, but it is also possible that students with different achievement goal orientations may choose to enter honors programs at different rates.

**Gifted Students and College Honors Programs**

Gifted programs in elementary and secondary education are centered upon the idea that highly able students have different educational needs than the majority of their classmates (Renzulli, Gubbins, McMillen, Eckert, & Little, 2009). At any post-secondary institution, no matter how selective, there will be some students with significantly higher levels of academic talent than the institution’s average, and their educational needs may not be met through the standard curriculum (Robinson, 1997). There is a small but growing body of knowledge concerning how successful colleges have been at filling this gap, most of which considers the effects of special programs such as early entrance and honors (Rinn & Plucker, 2004; Robinson, 1997). One difficulty faced by researchers has been the nonequivalence of gifted and honors: Not every student previously identified as gifted will choose to participate in—or be eligible for—an honors program, and some honors students may not have been identified as gifted during their K-12 educational careers.

College and university honors programs are sometimes described as extensions of K-12 gifted education programs (Hébert & McBee, 2007; Huggett, 2003; Rinn, 2007; Rinn & Plucker, 2004; Robinson, 1997). Honors programs may be either general—focusing on core curriculum,
liberal arts, interdisciplinary studies, and/or skills that transfer to multiple majors—or based within a single department. Honors programs vary in their minimum qualifications and admission processes, but most specify minimum high school GPAs and standardized test scores (Long, 2002). This indicates that honors programs are designed to serve students who have already established patterns of academic achievement above and beyond the minimum necessary for college or university admission. Participation in honors programming may positively affect GPA (Cosgrove, 2004; Rinn, 2007; Shushok, 2006) and retention (Cosgrove, 2004; Shushok, 2006; Slavin, Coladarci, & Pratt, 2008), promote deeper learning experiences (Hébert & McBee, 2007; Huggett, 2003), and have socioemotional benefits (Hébert & McBee, 2007), but the body of research concerning these effects is overall quite small (Rinn & Plucker, 2004).

A major problem researchers face when attempting to evaluate the effects of honors programming is the question of a comparison group. Many researchers have controlled for some measure of ability (Cosgrove, 2004; Rinn, 2007; Shushok, 2006; Slavin et al., 2008), but not all have (e.g., Hartleroad, 2005). Some qualitative studies have not used comparison groups at all (Hébert & McBee, 2007; Huggett, 2003), emphasizing instead rich descriptions of the honors experience and perceived benefits. There has been little research evaluating the suitability of any given comparison group, but two older studies (Capretta, Jones, Siegel, & Siegel, 1963; Hickson & Driskill, 1970) found differences in multiple noncognitive measures, including intellectual flexibility and the need to achieve, between those who entered honors programs and those of equivalent ability who did not. While Capretta et al. found “that ‘decision’ rather than ‘success’ or ‘failure’ is more important in distinguishing among groups of students” (p. 275), there has been no replication of this research with any recent generation of college students. Determining
what influences a student’s participation in honors is important on its own, and the problem of self-selection affects the interpretation of every study on programmatic effectiveness.

**Achievement Goal Orientation**

An achievement goal specifically refers to the outcome an individual desires from a learning situation: either to increase his competence through learning or to demonstrate his competence through performance (Elliot, 2007; Elliot & Dweck, 2007). The individual may also hold other underlying motivations or goals related to the learning situation (e.g., good grades, personal pride, or avoiding ridicule), but these are not included in the achievement goal construct (Elliot, 2007). The term orientation indicates that individuals tend to set similar achievement goals across a given domain, such as academics or athletics (Elliot, 2007; Pintrich, Conley, & Kempler, 2003). Although there is a large body of research applying achievement goal orientation to academic contexts (e.g., Midgley et al., 1998; Pintrich, 2000; Wolters, 2004), and some studies have statistically controlled for external measures of competence (Elliot & McGregor, 2001; McGregor & Elliot, 2002) or for perceived competence (Grant & Dweck, 2003; McGregor & Elliot, 2002), there has been little attention paid to the question of whether populations of individuals with similar levels of academic competence who have demonstrated different achievement-related behaviors may be distinguished by their achievement goal orientations.

This study was based on the 2 x 2 achievement goal framework first proposed by Elliot and McGregor (2001). Under this framework, goal orientations may be defined based on the terms by which competence is measured—against the demands of a given task (mastery) or against the performance of others (performance)—and on whether individuals specify goals in terms of desired outcomes that they will approach or undesired outcomes that they will attempt
to avoid. The connections between the four achievement goal orientations and academically related constructs are numerous. For example, Elliot and McGregor (2001) found that a need for achievement is positively related to mastery-approach and performance-approach goals; a fear of failure is positively related to performance-approach and mastery-avoidance goals; an entity view of intelligence is positively related to performance-avoidance and mastery-avoidance goals; and an incremental view of intelligence is negatively related to mastery-avoidance goals.

Mastery-approach goals have also been found to predict fewer academic self-handicapping behaviors, including procrastination, than performance-avoidance goals (Midgley & Urdan, 2001). Also, a lack of mastery-approach goals in the presence of performance-approach goals is related to less academic risk-taking (Pintrich, 2000). The precise mechanism by which different achievement goal orientations result in different outcomes has not been determined, but the goal orientation literature has been connected to research concerning other academic constructs, such as perfectionism (Eum & Rice, 2011; Fletcher et al., 2012; Hanchon, 2010; Verner-Filion & Gaudreau, 2010).

**Perfectionism**

This study used the model of perfectionism measured by Hewitt and Flett (1991) with their Multidimensional Perfectionism Scale (MPS), which has three subscales based on where the perfectionism originates and where it is targeting. Self-oriented perfectionism (SOP) is both derived from and focused upon the self, other-oriented perfectionism (OOP) is internal to the self but directed toward others, and socially prescribed perfectionism (SPP) is focused upon the self but based upon the belief that others hold high expectations for the individual. In general, SOP has been associated with positive academic outcomes and SPP with negative ones. For example, SOP has been correlated with high academic standards, academic satisfaction, academic efficacy,
organization, positive affect, greater progress toward academic goals, challenge seeking, a strong work ethic, and fewer academic problems, while SPP has been linked to procrastination, test anxiety, other academic problems, self-criticism, self-blame, anger, depression, dysfunctional coping, and obsessive-compulsive behavior (Dixon, Lapsley, & Hanchon, 2004; Eum & Rice, 2011; Flett, Blankstein, Hewitt, & Koledin, 1992; Frost, Heimberg, Holt, Mattia, & Neubauer, 1993; Gaudreau & Thompson, 2010; Hanchon, 2010; Hewitt & Flett, 1991).

Researchers have begun to connect the constructs of perfectionism, particularly the SOP and SPP subscales, and achievement goal orientation. SOP has been conceptually and statistically related to mastery-approach and performance-approach goal orientations, and SPP has been connected to performance-approach and performance-avoidance orientations (Eum & Rice, 2011; Fletcher et al., 2012; Hanchon, 2010). One of the few studies to include the newest goal orientation also found a correlation between “maladaptive” perfectionism and mastery-avoidance goals (Eum & Rice, 2011). The direction of influence between perfectionism and goal orientation has not been established, but it appears that neither construct can be completely subsumed under the other. Verner-Filion and Gaudreau (2010) showed a complex interrelationship between perfectionism and achievement goals, resulting in separate and overlapping contributions to academic achievement.

**Goal Orientations, Perfectionism, and Gifted Students**

Because achievement goals are based on competence, there is some indication that gifted students—who have generally been recognized for academic competence—have greater motivation to seek challenges and perhaps adopt mastery goals in their areas of talent (Dai, Moon, & Feldhusen, 1998). Honors students at the college level may demonstrate higher needs
for achievement when compared to the average college student (Mathiasen, 1985) or to their equal-ability non-honors peers (Hickson & Driskill, 1970).

However, this does not hold for all gifted or honors students. A fear of failure may result in perfectionism (Conroy, Kaye, & Fifer, 2007), or it may lead to underachievement (Reis & McCoach, 2000). Gifted students appear to be no more perfectionistic than their age peers (Parker & Mills, 1996), but they may manifest different patterns of perfectionism (LoCicero & Ashby, 2000; Parker, Portesova, & Stumpf, 2001). There is some evidence that gifted children are more likely than their peers to demonstrate self-oriented perfectionism (Roberts & Lovett, 1994), and some gifted students also demonstrate socially prescribed perfectionism (Speirs Neumeister, 2004a; Speirs Neumeister, 2004b). Speirs Neumeister (2004b) found the same patterns in achievement goal orientations and outcomes for gifted self-oriented and socially prescribed perfectionists as those detailed in the previous section. Underachievement may be a bigger issue when the fear of failure and/or socially prescribed perfectionism is paired with a low self-view of academic competence (Dai et al., 1998). Gifted students may also have more negative reactions to failure than their age peers, which can lead to less academic risk-taking (Roberts & Lovett, 1994).

Statement of the Problem

The primary distinction between a gifted college student and an honors student is that the honors student chooses to participate in an honors program; it is this issue of self-selection that shaped this study. In the literature concerning the effects of honors programs, it is common to use a comparison group consisting of students at the same institution, some matched by ability (Cosgrove, 2004; Shushok, 2006; Slavin et al., 2008) and some not (Hartleroad, 2005). A problem shared by all of these studies is the issue of self-selection. The decision facing an
academically talented college student who has the option to participate in an honors program is not well understood.

Socioemotional differences between honors and non-honors college students have been documented (e.g., Gerrity, Lawrence, & Sedlacek, 1993; Mathiasen, 1985; Parker & Adkins, 1995; Rinn, 2007), but most of these did not control for academic ability. Capretta, Jones, Siegel, and Siegel (1963) found noncognitive differences between those who entered honors programs and those of equivalent ability who did not, differences that held even if a student did not complete the program. Similarly, a smaller study (Hickson & Driskill, 1970) found differences in the need to achieve between students who chose to enter an honors program and those who declined their invitations. These studies included factors that may have contributed to students’ decisions whether to join honors, but they have not been replicated using any recent generation of college student or newer psychological constructs.

If the decision whether or not to join an honors program is related to socioemotional factors, then non-honors students of similar academic abilities would not be a valid comparison group for honors program evaluations. Differences between the two groups would need to be explained by the interaction of these factors and the honors program experience. Furthermore, understanding what noncognitive characteristics influence the choice to join honors may assist honors programs in designing recruitment materials and admission procedures.

**Purpose of the Study**

Achievement goal orientation has a long history of research showing its influence on academic behaviors and outcomes. The primary purpose of this study was to apply those findings as well as related findings regarding perfectionism to a gifted student’s decision whether or not to join a college honors program. Students facing this choice have demonstrated academic
success during secondary school, but their academic behaviors likely differ. For example, for some students, joining honors may be considered a form of academic risk-taking, a behavior linked to both achievement goal orientation and perfectionism (Pintrich, 2000; Speirs Neumeister, 2004b).

This study also served the secondary purpose of exploring other potential influences on this decision. These include prior educational and extracurricular activities as well as students’ stated reasons for joining or not joining. While these influences may be partially explained by achievement goal orientation and/or perfectionism, the paucity of existing literature on this decision highlights the need for additional information that may not fit a predetermined framework.

**Research Questions and Hypotheses**

This research study was organized around five broad questions.

1. Are there differences in (a) achievement goal orientation, (b) perfectionism, and/or (c) prior experiences, after controlling for the effect of gender, among those students who entered a college honors program when they first enrolled (freshman admits, FA), those who were eligible to enter an honors program at that time and chose not to do so (yet still attended the same institution; freshman declines, FD), and those who applied for and entered an honors program after enrolling in college for at least one semester (late admits, LA)?

2. Are there differences in achievement goal orientation and/or perfectionism, after controlling for the effect of gender, between college honors students enrolled in two different universities?
3. (a) What relationships may be observed among college honors students’ achievement goal orientations, perfectionism, and prior experiences? (b) Are those relationships consistent between two different universities?

4. (a) What reasons do honors-eligible students give for their choice to participate or not to participate in an honors program? (b) Do those reasons differ between two universities?

5. How well do students’ stated reasons for participating or not participating in honors reflect their achievement goal orientations?

The relative lack of research into factors related to honors college participation, especially comparing socioemotional characteristics among honors and non-honors gifted students at two different institutions, limited the number of research questions for which formal hypotheses could be offered. Specifically, no hypotheses were proposed for research question 1(c), 2, 3(b), or 4(b) due specifically to gaps in this area of research. Similarly, there was no extant research investigating the differences between students who enter honors programs in the “traditional” manner as freshmen and those who apply and enter later in their college careers, so no hypotheses regarding differences between the FA and LA groups were offered for research question 1.

Regarding research questions 1(a) and 1(b), the FA and LA groups were expected to be higher in both mastery-approach and performance-approach goal orientations, higher in self-oriented perfectionism, and lower in socially prescribed perfectionism than the FD group, which was expected to be higher in performance-avoidance goal orientation. As very little research has included mastery-avoidance goals or other-oriented perfectionism, no hypotheses were made for those measures.
For research question 3(a), self-oriented perfectionism was expected to relate to mastery-approach and performance-approach goal orientations, and socially prescribed perfectionism was expected to relate to both performance-approach and performance-avoidance orientations. Mastery-approach goal orientations were expected to relate to experiences designed to provide additional challenge, such as honors classes and academic summer programs, and to those designed to foster academic interests, such as non-competitive academic organizations. Performance-approach goal orientations were hypothesized to relate to academic competitions as well as activities associated with higher grades, such as honors societies. Finally, performance-avoidance orientations were expected among students who reported fewer activities related to academic challenge and/or competition.

Research question 4(a) and 5 were exploratory in nature and intended largely to fuel future research in this area. Thus, there was no base from which to make predictions as to how students made these choices and how salient their achievement goal orientations were during this process.

**Definition of Terms**

**Achievement goal** - What an individual hopes to achieve as a result of a given learning situation (e.g., to learn material or to perform better on a test than others in the class), separate from the reason behind that desire (e.g., for personal pride or to avoid ridicule; Elliot, 2007).

**Achievement goal orientation** - The general types of achievement goals that an individual tends to set across a given domain, such as academics or athletics (Elliot, 2007; Pintrich et al., 2003). In this study, achievement goal orientations were specified using the 2 x 2 achievement goal framework first proposed by Elliot and McGregor (2001).
**Approach orientation** - Holding achievement goals that are specified in terms of accomplishing desired outcomes.

**Avoidance orientation** - Holding achievement goals that are specified in terms of avoiding undesired outcomes.

**College or university** - Any postsecondary institution. For the purposes of this study, the two terms may be considered synonymous; when a specific type of institution is referenced, more detail will be given (e.g., “public research university”).

**Gifted** - Describes a student who has demonstrated a significantly higher level of academic talent than his or her age peers at the same institution (Robinson, 1997). In the context of this study, gifted college students were defined to include all those who were eligible to join the honors programs at their respective universities.

**Honors program** - College or university program designed to provide some form of academic enrichment for high achieving students. They may be general, interdisciplinary, or based in a single department.

**Mastery goal** - Achievement goal in which the desired outcome is defined by comparing one’s own performance against the demands of a given learning task.

**Other-oriented perfectionism (OOP)** - Perfectionism that is internal to the self but directed toward others (Hewitt & Flett, 1991).

**Perfectionism** - A multidimensional construct characterized by the desire for perfection, intolerance for error, and exacting high standards (Hewitt & Flett, 1991). The target of the perfectionism (self or others) is one dimension, while another is the source of the high standards (self or others).
**Performance goal** - Achievement goal in which the desired outcome is defined by comparing one’s own performance against the performance of others.

**Self-oriented perfectionism (SOP)** - Perfectionism that is both derived from and focused upon the self (Hewitt & Flett, 1991).

**Socially prescribed perfectionism (SPP)** - Perfectionism that is focused upon the self but based upon the belief that others hold high expectations for the individual (Hewitt & Flett, 1991).
CHAPTER 2: REVIEW OF LITERATURE

This research study addresses the factors involved when a gifted student decides whether or not to join an honors program at a college or university. This chapter first reviews the literature concerning gifted college students, with special attention paid to the distinctions among high achieving students, students who were labeled gifted in elementary school, and students enrolled in honors programs. It then turns to those programs themselves, highlighting their benefits to students and emphasizing the need for evaluation and assessment of programmatic effectiveness. After both of these sections demonstrate the importance of determining whether there is a difference between students who enter honors programs and those who choose not to do so, the two psychological constructs included in this study—achievement goal orientation and perfectionism—are explored, both in general and as they have been applied in gifted education.

Gifted and Honors Students in College

The difficulty in defining giftedness and gifted students has been a constant theme in gifted education research (Sternberg & Davidson, 2005). The limited research on gifted students in college has inherited this complication, making it difficult to integrate findings across studies. In general, authors have adopted three types of definitions. The first, and least common, is to define a gifted college student as one who was identified as gifted earlier in his or her academic career, usually in elementary school (Hébert & McBee, 2007). This approach avoids creating a new label, but at the cost of potentially inconsistent definitions of giftedness within the same study. The second is to use evidence of demonstrated academic achievement, generally achievement test scores (Rinn, 2007; Robinson, 1997; Satterfield, 2006). The third is to equate gifted students with those participating in an honors program (Rinn & Plucker, 2004; Siegle, Rubenstein, Pollard, & Romey, 2010), admission into which is usually based upon academic
achievement (Driscoll, 2011). The second and third approaches are also used outside of gifted education to guide studies of high-achieving or honors college students (e.g., Carnicom & Clump, 2004; Gerrity et al., 1993; Kaczvinsky, 2007; Mathiasen, 1985).

How academic achievement should be demonstrated and to what level for a student to be considered gifted or honors varies by study and by institution. In some cases, the standard is made explicit, such as a 1300 on the SAT (Rinn, 2007) or 26 on the ACT (Hébert & McBee, 2007). In others, it is known what evidence was used, but not the specific levels (Kaczvinsky, 2007; Speirs Neumeister, 2004a). However, when acceptance into an honors program that uses a holistic admissions process is the basis for a student’s inclusion in a study (Capretta et al., 1963; Gerrity et al., 1993; Siegle et al., 2010), it may not be possible to detail specific academic requirements. A review of college honors programs (Driscoll, 2011) found that, while high school GPAs and achievement test scores were the most popular admissions criteria, many programs also relied on recommendation letters, essays, and other application materials.

From a gifted education perspective, a focus upon high school academic performance fits into a talent development paradigm such as that recently espoused by Subotnik, Olszewski-Kubilius, and Worrell (2012). In this framework, giftedness may be identified based on potential in young children, but the focus should shift to progressively higher achievement as individuals mature. A student’s high school academic record is both an achievement and an indicator of future college performance, making it an acceptable basis for identification. While there are certainly students who evidence high levels of academic potential at young ages but then underachieve during high school (Reis & McCoach, 2000), these students may not be given opportunities to join college honors programs (Speirs Neumeister, 2004a; Speirs Neumeister, 2004b) and are thus outside of the scope of this study.
Even when attending colleges that have honors program for which they are eligible, not all gifted students will join honors. Some may not know about the opportunity. Others may decide that the available programs do not fit with their intended majors, plans of study, or academic interests (Robinson, 1997). It would be inappropriate to conceptualize one of the latter cases as underachievement, as it could more accurately be described as “a personal decision reflecting a wise use of time” (Reis & McCoach, 2000, p. 156). However, if the decision not to join honors is made out of fear that the work will be too difficult (Robinson, 1997), for example, the label of underachievement may be accurate. Furthermore, that decision may be influenced by one or more of the psychosocial factors that Subotnik et al. (2012) noted are essential in the development of talent. These considerations emphasize the need to distinguish between gifted students in college and those in honors. However, it is not possible to establish a rigid definition due to variations in college contexts (Robinson, 1997). Therefore, any student who has met the criteria for joining an honors program at his or her institution will be labeled as gifted or academically talented for the purposes of this study. Only those who actually join the program will be labeled as honors, which may be viewed as a subset of gifted and talented.

Characterizing Honors and Gifted College Students

As noted in the previous section, it is difficult to compare findings across studies due to the variety of definitions used for gifted college students and those in honors. This section contains research on both of these overlapping populations, with the caveat that the terms gifted (or talented) and honors are used as defined in the previous section, regardless of how they are used in the cited study. Additional details regarding selection criteria are given when they are known and relevant. Although this section contains references to gifted and talented students as a cohesive group, it is important to remember that there is a wide variety of gifted students at any
given college or university (Kaczvinsky, 2007), and the range becomes greater when comparing students between institutions (Robinson, 1997). Furthermore, there are likely more similarities than differences between gifted college students and their average-ability peers (Gerrity et al., 1993). The only differences that are consistently found are connected to students’ academic abilities and performance, which is to be expected since that is the basis of the group definition. Findings regarding differences in personal and learning characteristics and expectations for college are based on group means and may have limited usefulness in describing any given gifted student.

**Personal and learning characteristics.** Some studies have been undertaken to describe gifted and honors college students, often in an attempt to help college administrators understand this population. However, most of these studies are either several generations old (e.g., Warren & Heist, 1960) or limited to a single small institution (e.g., Carnicom & Clump, 2004). Rinn and Plucker (2004) noted that literature in the area of personality characteristics was particularly outdated, and no newer studies have been identified. Thus, while academically talented students have been described as more conscientious, less authoritarian, and more socially mature (Warren & Heist, 1960), changes in the college-going population and the psychometric methods used call the relevance of these findings into question. This applies equally—if not more so—to Palmer and Wohl’s (1972) descriptions of gender differences in honors students.

Learning differences have also been a target of research, possibly in an attempt to explain the academic success of this population. When looking at the learning processes used by students at a comprehensive Catholic university, Carnicom and Clump (2004) were surprised to find no difference between honors and other students on measures of factual memorization, methodical study, or elaboration. These conclusions were contrary to those reported 20 years prior by
Mathiasen (1985), who found that honors students scored above college norms on work methods, study habits, and study orientation, although a later study also found little to no difference between the study habits of honors and non-honors students (Kaczvinsky, 2007). However, Carnicom and Clump did find that honors students showed significantly greater use of deep processing. This may be related to earlier research that found successful honors students to be more flexible in their thinking and more intellectually oriented toward their academics than gifted students who did not join honors or who joined honors and then left the program prior to graduation (Capretta et al., 1963). There is also evidence that honors students may have higher levels of emotional intelligence than other college students, especially in the areas of emotional reasoning and understanding emotion (Castro-Johnson & Wang, 2003).

Some research has also been conducted on honors students’ motivational and attitudinal profiles. When compared to non-honors students, honors students have demonstrated more academic confidence—which should be expected given their higher levels of academic achievement—a greater willingness to tackle new ideas, and more intellectual interests (Kaczvinsky, 2007). However, the same study also found that they were lower in sociability, which may not be generalizable given other findings regarding honors students’ interests in extracurricular activities, as detailed in the following section. Previously, honors students were found to be more likely than average students to persist in their work, enjoy working to achieve, enjoy convincing and influencing others, have anxiety that helps them to achieve, value good grades, want to compete against others, and desire to win the approval of others (Mathiasen, 1985). Mathiasen also found that honors students were less likely to be discouraged by difficult schoolwork and had lower than normal needs to defer to convention. This study built on an earlier study in which students who chose to do honors independent research during their junior
and senior years of college demonstrated higher needs for achievement than those who chose not to do so (Hickson & Driskill, 1970). Additional confirmation of these findings was provided by Guerrero and Riggs (1996), who asked a multi-site sample of honors faculty members to describe what made honors students successful. Even when prompted to focus on knowledge and skills, faculty emphasized traits like motivation, openness, and self-confidence.

Both groups of students in the Hickson and Driskill (1970) study had the same average GPA, offering preliminary evidence that differences in motivation, not ability, may play an important role in students’ decisions to join honors. Additional support for this possibility may be found in Rinn’s (2004, 2007) study of gifted college students’ academic self-concept. She found that honors students had higher academic self-concepts than equally gifted students who did not join the program, although the two groups did not differ in their educational aspirations. Rinn interpreted this difference to be due in large part to the honors program experience. However, given that data were collected at the beginning of the fall semester and almost half of the honors group consisted of freshmen, it is difficult to determine whether the difference was due to input characteristics or the program itself. On the other hand, differences between college honors students and those of average academic ability are much better documented, and several of these differences manifest in students’ expectations for their college careers.

**Expectations for college.** Overall, academically talented students are highly recruited by colleges and universities. This recruitment is one reason why gifted students tend to expect more attention and support once they enroll than other students do (Satterfield, 2006). Gerrity et al. (1993) found that honors students tended to have more educated parents, leading to additional expectations placed upon the college. In a study based on an entire cohort of ACT test-takers, gifted high school students evidenced such a strong demand for honors work and independent
study once in college that the authors declared a strong honors program to be necessary in recruiting this population (Kerr & Colangelo, 1988). Honors students appear to expect their courses to be interesting (Gerrity et al., 1993) and challenging (Satterfield, 2006). However, they also may be more motivated by grades than average students (Mathiasen, 1985), which may be partially an artifact of the stipulations of scholarship awards (Haas, 1992).

Gifted students also plan to be heavily involved with extracurricular activities of almost all kinds. Kerr and Colangelo (1988) found that interest in almost all categories of extracurricular activities increased with academic ability, with the exceptions of varsity athletics, radio and television, and fraternities and sororities. The positive trend was particularly notable for departmental organizations, instrumental music, and debate. Both departmental clubs and special interest organizations attracted the interest of over 70% of highly talented students, leading the authors to note that, “apparently, as academic talent increases, so does expectation of involvement in all that campus life has to offer” (p. 45). These extracurricular interests may not be purely recreational, as they also facilitate the student-faculty relationships that honors students need (Satterfield, 2006) and promote social skills development (Rinn & Plucker, 2004). In a later section, this review will discuss evidence that honors programs can help colleges meet these student expectations.

**Concerns and Risk Factors**

The majority of research on gifted and honors college students highlights their more favorable academic outcomes, or the socioemotional factors that may have contributed to their academic success. However, this population is also at risk for low levels of achievement or dropping out of college, albeit at a lower rate than average (Cosgrove, 2004; Kaczvinsky, 2007; Shushok, 2006; Slavin et al., 2008). Robinson (1997) noted that the transition from high school
to college may be difficult for gifted students who are used to succeeding with little effort. They may never have developed the study and time management skills necessary for real academic work, a concern that was corroborated by Kaczvinsky’s (2007) finding that there was a gap between honors students’ academic confidence and study habits: a gap that was notably wider among students who failed to maintain a sufficiently high GPA to remain in the honors program. Honors classes may also expect a level of reflective thought that some gifted students have not reached (Haas, 1992).

In addition to academic skills, Robinson (1997) also cited emotional readiness for having true intellectual peers and academic challenge as a risk factor for gifted college students. This is especially an issue if the relative ease of elementary and secondary schooling has led students to have entity theories of their own intelligence (Aronson & Juarez, 2012; Robinson, 2012), also known as fixed mindsets (Dweck, 2012). Students with fixed mindsets often view the need to work on an academic task as evidence that they are not smart after all (Dweck, 2012), a recognition that has implications for the students’ self-concepts (Robinson, 1997). The connections among achievement goal orientation, mindset, and giftedness are explored later in this review. However, Rinn (2007) did not find evidence that honors students, who presumably were exposed to more academic challenge and intellectual peers, had lower academic self-concepts overall than gifted students not in honors. As a group, gifted students are well prepared for academic success upon reaching college, but individual gifted students may not be, especially if they were not sufficiently challenged prior to that point.

**Conclusion**

The image of a gifted or honors college student that emerges from the existing literature is that of a confident, intellectual student who is involved in a variety of extracurricular activities
and has a high need for academic achievement. Honors students expect interesting and challenging courses, and gifted high school students expect to receive personal attention and support from their colleges and universities. However, this picture is not a clear one. Multiple authors (e.g., Rinn & Plucker, 2004; Robinson, 1997) have emphasized the need for additional research on gifted students at the college level. Furthermore, it is not possible, using existing research, to disentangle the findings about gifted college students from those about honors students. Research into why gifted students join or not join a college honors program is particularly needed (Rinn, 2007). Not only is there a theoretical need to clarify the two populations, but it may be important to consider whether honors and gifted non-honors students are differentially at risk for negative academic outcomes.

**College Honors Programs**

As previously mentioned, gifted students have high expectations for college life and classes (Gerrity et al., 1993; Kerr & Colangelo, 1988; Satterfield, 2006). Many colleges and universities have developed honors programs in response to these demands. This section will describe those programs and discuss how students benefit from participating in them. However, the evidence supporting those benefits is not as rigorous as it could be, so this section concludes by highlighting the need for assessment and evaluation of honors programs.

**Descriptions**

From an administrative perspective, honors programs are generally created to aid in recruiting students with high achievement test scores and/or high school GPAs (Driscoll, 2011; Kaczvinsky, 2007; Long, 2002), and there is evidence that such students do demand honors work (Kerr & Colangelo, 1988). The overall institution benefits from the presence of honors students, who tend to be highly participatory even in their non-honors classes (Clauss, 2011; Gerrity et al.,
1993), through increased average test scores and other credentials, and thus prestige. Providing further support for the idea that honors programs are primarily recruitment tools, most are found at public four-year institutions that are moderately competitive and located in areas where “brain drain” is a concern (Long, 2002). The less competitive the university, the more merit scholarship funding and other benefits honors students are likely to receive. Long noted that these schools can use their honors programs to compete as less expensive options to more prestigious private schools.

There is no single model for a college honors program, but most consist of a series of honors courses, both in core curriculum areas and within the disciplines (Long, 2002; NCHC, n.d.-b). According to the National Collegiate Honors Council’s recommendations for honors programs (2010b), 15% to 25% of an honors student’s collegiate coursework should be in honors classes that emphasize experiential and/or independent learning. Honors classes tend to have smaller enrollments and consist of content that is accelerated, enriched, or both (Robinson, 1997). Undergraduate research and independent study are also common (Long, 2002), and it is possible to have an honors program consisting entirely of honors contracts, negotiated extra learning opportunities within regular classes (Hochel & Wilson, 1996). Many public four-year universities have established honors colleges with more benefits, including housing (Long, 2002). The main differences between honors colleges and honors programs are administrative (NCHC, 2010a), so the term honors program is used in this review to apply to both types unless otherwise specified, and an honors student may be enrolled in either.

While the primary stated purpose of honors programming is usually to enhance a student’s academic development, there is also recognition that honors can—and perhaps should—affect many different facets of his or her collegiate career. Recommendations for honors
program practices include facilitating close social relationships among honors students and faculty; supporting students as they develop interpersonal skills, independence, self-identity, and integrity; and ensuring that career and other counselors are familiar with the needs of honors students (NCHC, 2010b; Robinson, 1997; Satterfield, 2006). The extent to which evidence exists to support claims that honors can provide these benefits is explored in the next section.

**Benefits of Honors**

The academic outcomes of honors programs have received the most research attention. Measures of academic achievement include college GPA (Capretta et al., 1963; Cosgrove, 2004; Hartleroad, 2005; Pflaum, Pascarella, & Duby, 1985; Phillips, 2004; Rinn, 2004, 2007; Shushok, 2006); honors program retention or completion (Cosgrove, 2004; McKay, 2009; Shushok, 2006); and college retention or graduation rates (Cosgrove, 2004; Shushok, 2006; Slavin et al., 2008). Multiple studies agree that honors freshmen tend to have higher first-year GPAs than both non-honors gifted freshmen (Pflaum et al., 1985; Shushok, 2006) and the rest of the freshman cohort (Hartleroad, 2005; Pflaum et al., 1985). Findings regarding the stability of this GPA advantage are mixed. Rinn (2004, 2007) found that honors students had higher GPAs than gifted non-honors students regardless of their class standing. However, most honors programs require students to maintain a minimum GPA, which makes it difficult to construct valid comparisons (Rinn, 2005). Cosgrove (2004) found that students who completed honors programs had higher GPAs than equally talented graduates who either did not enter honors or entered honors and subsequently left. However, the reasons students had left honors were not included in this analysis. On the other hand, Shushok (2006) found no GPA benefits for honors beyond the first year in an analysis that did not differentiate between students who stayed in honors and those who left. Overall, there is insufficient evidence to conclude that honors participation will result
in higher GPAs, but research does support the National Collegiate Honors Council (n.d.-a) claim that honors participation is unlikely to lower a student’s GPA.

Research findings related to honors programs and college retention demonstrate similar patterns. Retention benefits have been demonstrated for first year students, but graduation rate differences have not (Shushok, 2006; Slavin et al., 2008). The study by Slavin et al. may highlight the importance of individual program characteristics, as the benefits of honors participation in terms of first year retention rates increased over successive cohorts within a new honors program.

However, a few studies have directly or indirectly questioned the use of GPA or retention rates as measures of academic achievement related to participation in an honors program. If the honors program has “a more complex view of success, one that includes degree of difficulty, dedication to active learning, participation in research, and service to the campus and wider communities” (Stoller, 2004, p. 82), it may not be appropriate to expect its students to have higher GPAs than other students at the same university. In an example of using a measure of academic success more closely related to the mission of an honors program, Phillips (2004) found that students who participated in honors programs at the community college level experienced less “transfer shock” after transferring to a four-year college. Thus, success was defined as maintaining a consistent GPA over the transfer, not in having a higher GPA than other students.

Very few studies have purported to measure non-academic benefits of honors participation. Rinn (2004, 2007) compared academic self-concepts and educational aspirations of honors students and gifted non-honors students, finding that honors students had higher academic self-concepts but there was no difference in educational aspirations. However, it is not
possible to determine whether these results were the result of honors or of input characteristics, especially given the large percentage of the honors group consisting of freshmen (47%) compared to the non-honors group (4.3%). Academic self-concept also may vary across years in college (Rinn, 2005). Yet there is some evidence that the nonacademic benefits of honors programs exist and are very important to some students. Shushok (2006) compared the experiences of honors students to gifted non-honors students and found that honors students were more likely to have met with a faculty member, discussed career plans with a faculty member, and discussed social or world issues with other students outside of class. In a qualitative case study, Hébert and McBee (2007) found that graduates of one intensive honors program credited the program with ending their social isolation, fostering intellectual and psychosocial growth, and helping them find meaning in their undergraduate careers. All participants felt that they had obtained a better education because of their participation in the program. A major challenge for honors programs is being able to document, in a systematic fashion, the range of benefits they provide for students.

**Need for Program Evaluation**

Program evaluation is a growing concern in the higher education community. Multiple authors have called on honors program administrators to adopt more regular assessment strategies to maintain relevance in an era of limited resources and demands for accountability (Achterberg, 2006; Driscoll, 2011; Lanier, 2008; Rinn & Plucker, 2004; Shushok, 2006). Evaluation based on a given program’s objectives and context can also be used to improve services (Achterberg, 2006; Shushok, 2006), and the presence of research faculty in most honors programs should be an asset for conducting assessments and using their results (Shushok, 2006). However, almost half of honors programs polled in a nationwide survey conducted no
assessment whatsoever, citing the newness of the program and/or administrators, a lack of time, or an opposition to the idea of assessment at all (Driscoll, 2011). There is a lack of consensus as to the most appropriate outcomes and measures to use; however, assessments usually look at surveys of student satisfaction and institutional data on retention (Driscoll, 2011).

Some of the confusion in this area may be due to the variety of stakeholders involved. As one honors program director noted,

Most honors programs have not been created and promoted (at least at the administrative level) to address high-achieving students’ special needs or characters but rather to convince heavily recruited students (and their parents) to attend a particular public institution as an inexpensive alternative to a private liberal arts college or university.

(Kaczvinsky, 2007, p. 88)

Thus, while some researchers (Hébert & McBee, 2007; Huggett, 2003) would define honors program success based upon whether students’ own goals were met, college and university administrators may require assessment based upon their own (possibly implicit) objectives for the program. Stoller (2004) and Lanier (2008) both suggested that program outcomes should be specified in terms of higher-order learning objectives, and Lanier further discussed the importance of defining appropriate measures for each one. This approach is lacking from much of the published research on honors programs.

Finally, to support administrators’ claims that honors programs have positive effects on student learning, these outcomes should be measured for both honors students and gifted non-honors students (Lanier, 2008). Driscoll (2011) found that only 5 of the 38 honors programs surveyed reported using any comparison group, and the 4 that gave further details indicated they used a non-honors sample that was not matched on ability measures. Without further research on
the differences between honors and non-honors students, including the reasons gifted students choose to enter or not enter honors programs (Rinn, 2007), it will not be possible to distinguish the effects of such programs from differences in student characteristics.

**Conclusion**

While honors programs are marketed as ways for academically talented students to enrich their college experiences (e.g., NCHC, n.d.-b), they primarily exist as a way for institutions to recruit those students who would otherwise attend more selective institutions (Driscoll, 2011; Kaczvinsky, 2007; Long, 2002). This creates a situation in which honors students demand services and benefits from honors programs (Kerr & Colangelo, 1988), but program evaluation and assessment efforts focus on the information desired by college and university administrators (Driscoll, 2011). This may be necessary to maintain the existence of honors programs (Achterberg, 2006; Driscoll, 2011; Lanier, 2008; Shushok, 2006), but it is of limited benefit for program improvement. Assessment that will aid honors program administrators in designing quality learning and development experiences will require a deeper understanding of the honors student population, particularly how they differ from gifted non-honors students. The remainder of this review will examine two potential areas of difference: achievement goal orientations and perfectionism.

**Achievement Goal Orientation**

In the psychological literature on goals and motivation, the term *achievement goal* is used to describe what an individual consciously wants to happen in a learning situation as a result of his or her effort. These are cognitive, as opposed to emotional, states (Pintrich et al., 2003), and they apply to specific tasks or situations as well as larger contexts (Elliot, 2007; Pintrich et al., 2003). The construct of achievement goals is closely related to the construct of competence, and
goals generally include both the reason for achievement (e.g., to demonstrate competence or to increase it) and the standards by which competence is measured (e.g., against the task or in comparison to others; Elliot, 2007; Grant & Dweck, 2003; Pintrich et al., 2003). Achievement goals are separate from achievement motives, which are based more in emotion, broad life goals, which are less connected to achievement situations, and specific task goals, which have little to no cross-task application (Pintrich et al., 2003).

To clarify the distinction between achievement goals and task goals, the term achievement goal orientation is often used (Pintrich et al., 2003). This term emphasizes that individuals tend to set similar achievement goals across a given domain, such as academics or athletics (Elliot, 2007; Pintrich et al., 2003), and that achievement goal orientations are “concerned with the meaning and purpose of achievement to the individual” (Midgley & Urdan, 2001, p. 62). An individual’s achievement goal orientation also includes the levels of all four achievement goal types, which may exist in any combination. Supporting the construct of achievement goal orientation, achievement goals have been found to be stable for periods from two weeks (Grant & Dweck, 2003) to an academic semester (Elliot & McGregor, 2001), and studies have produced similar results with instruments asking about a single class (Elliot & McGregor, 2001; Elliot & Murayama, 2008; Eum & Rice, 2011), an entire academic semester (Finney, Pieper, & Barron, 2004), and a general academic topic (Deemer, Martens, & Podchaski, 2007).

Researchers have used several different self-report instruments to measure students’ achievement goal orientations, including the trichotomous Achievement Goal Questionnaire (AGQ; Elliot & Thrash, 2002), the first 2x2 AGQ (Elliot & McGregor, 2001), the Achievement Goal Questionnaire-Revised (AGQ-R; Elliot & Murayama, 2008), and the Patterns of Adaptive
Learning Scales (PALS; Midgley et al., 1998). Furthermore, some research has been conducted in which particular achievement goals are induced through artificial task requirements or researcher instructions (Grant & Dweck, 2003), thus removing the need to measure achievement goal orientations. Although these induced goal states have similar effects and have been used to support causality, they “do not necessarily correspond to what is tapped by self-report measures of goal orientations” (Dai et al., 1998, p. 52). For this reason, this review will focus on assessments of goal orientations, and any studies based on induced goal states will be explicitly labeled.

2x2 framework

The current study was based on the 2 x 2 achievement goal framework first proposed by Elliot and McGregor (2001) and refined by Elliot and Murayama (2008). Under this framework, goal orientations may be defined based on two axes. The first axis specifies the terms by which competence is measured: against the demands of a given task or one’s own existing abilities (mastery) or against the performance of others (performance). The second axis is valence, or whether an individual has specified the goal in terms of a desired outcome that he will approach or an undesired outcome that he will attempt to avoid. This axis is closely related to stable personality factors, leading to the concept of approach and avoidance temperaments (Elliot & Thrash, 2002) and supporting the concept that achievement goals may be viewed as broad orientations. Achievement goals may then be characterized as mastery-approach, when an individual seeks to improve skills or gain knowledge; mastery-avoidance, when an individual seeks to avoid failing at a learning task or losing existing skills; performance-approach, when an individual wants to prove his competence relative to others; or performance-avoidance, when an individual wants to avoid demonstrating incompetence relative to others. An explicit part of this
framework is that individuals may hold multiple types of achievement goals at the same time (Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002), in any combination, although goals that share a dimension (such as mastery-approach and mastery-avoidance or mastery-approach and performance-approach) are more likely to occur together (Elliot & Murayama, 2008). The 2 x 2 framework is an extension of the previous trichotomous model in which the valence axis was only applied to performance goals (Elliot, 2007; Midgley et al., 1998). Research using the trichotomous model is still applicable to the 2 x 2 framework with mastery-avoidance goals omitted, as the instruments used measured mastery goals from an approach standpoint.

**Academic Effects of Achievement Goals**

All four achievement goal orientations have been linked to differential academic outcomes, attitudes, and behaviors, although the newest orientation, mastery-avoidance, has substantially less evidence. Overall, mastery goals tend to be superior to performance goals in relation to these outcomes, and approach goals are superior to avoidance goals on the same, but the specific relationships among the four goal types are complicated and dependent on context.

**Academic outcomes.** When academic outcomes are defined in terms of grades, the strongest and most consistent effect finding is a positive relationship with performance-approach goals (Elliot & McGregor, 2001; Elliot & Murayama, 2008; Verner-Filion & Gaudreau, 2010; Wolters, 2004). Mastery-approach goals have been linked to improved learning processes (Elliot & McGregor, 2001; Pintrich, 2000), but usually are found to have no relationship with grades (Elliot & McGregor, 2001; Elliot & Murayama, 2008; Pintrich, 2000; Verner-Filion & Gaudreau, 2010; Wolters, 2004). One exception is a study conducted by Finney, Pieper, and Barron (2004), who found that mastery-approach goal orientations were positively related to semester GPA (albeit with a relatively small effect) and performance-approach goals were not related.
One possible explanation for the discrepancy is how grades were determined in each context, since normative grading structures would be more conducive to performance goals than would grades based on comparison to a set standard (Elliot & Murayama, 2008). Both of the studies by Elliot and McGregor (2001) and Elliot and Murayama (2008) used course grades that were explicitly normative. The other studies referenced did not specify how grades were assigned. Another possible explanation is that the relationship between academic performance and achievement goals may not be consistent across ability and challenge levels. In induced goal states, mastery goals have been found to lead to higher achievement specifically in the presence of challenge (Grant & Dweck, 2003). In the same study, performance goals that were based on normative comparisons had no effect on achievement, and performance goals based on validating one’s ability led to higher achievement in the absence of challenge but lower achievement when challenge was present. Furthermore, students with higher self-perceived ability tend to set normative performance goals (Grant & Dweck, 2003). More information would be needed about the grading systems, perceived levels of challenge, and perceived levels of ability in the referenced studies to determine the source of the discrepancy.

In most studies, neither avoidance goal orientation was related to academic outcome (Elliot & McGregor, 2001; Elliot & Murayama, 2008; Pintrich, 2000; Wolters, 2004), despite being related to negative academic attitudes and behaviors, as detailed in the next two sections. However, Finney et al. (2004) found a significant negative relationship between performance-avoidance orientations and semester GPA, although it was once again small. Eum and Rice (2011) demonstrated that both avoidance orientations were linked to lower test performance through increased test anxiety. The negative effects of avoidance goals may be largely centered
on academic attitudes and behaviors, and whether those translate to lower academic outcomes is dependent on the specifics of the context.

**Academic attitudes.** While performance-approach goals show the most direct connections to favorable academic outcomes, mastery-approach goals have been linked most consistently with positive academic attitudes (Verner-Filion & Gaudreau, 2010). College students with mastery-approach orientations are more likely to approach an upcoming normatively graded exam as a positive growth experience, feel in control of their study processes, and feel calm due to preparation, and they are less likely to express a desire to escape from the exam (McGregor & Elliot, 2002). Junior high students with mastery-approach orientations toward mathematics demonstrated greater motivational engagement than those without such orientations, as measured by their willingness to take additional non-required math courses, the amount of effort they report expending on the math class, and their lack of desire to escape from taking the test (Wolters, 2004). Finally, counseling psychology graduate students high in mastery-approach goals showed greater interest in conducting research (Deemer et al., 2007).

Individuals holding performance-approach goals also tend to have positive academic affect, although not necessarily at the same levels as those associated with mastery-approach goals (Elliot, 2007; McGregor & Elliot, 2002). For example, performance-approach goals are also associated with challenge appraisals and challenge affects, feeling in control of the study process, and not feeling the desire to escape from an exam, with the additional benefit of higher grade aspirations for a normatively-graded exam (McGregor & Elliot, 2002). However, performance-approach goals did not result in greater motivational engagement in mathematics (Wolters, 2004) or greater interest in conducting research (Deemer et al., 2007). In general,
performance-approach goals correspond to more positive outcomes and mastery-approach goals to more positive attitudes (Verner-Filion & Gaudreau, 2010). This may be due to differences in motivational antecedents, which are explored in a later section.

In contrast, both kinds of avoidance goal orientations have been associated with negative affect. Both have been found to relate to test anxiety and worry (Elliot & McGregor, 2001; Eum & Rice, 2011). As noted previously, many studies used the older trichotomous model of achievement goal orientations, meaning that performance-avoidance orientations have been researched much more thoroughly than mastery-avoidance. These studies include evidence that students with performance-avoidance orientations demonstrated less motivational engagement with junior high mathematics, meaning that they were less likely to choose to take an optional math class, less persistent when faced with difficult problems, and more likely to procrastinate (Wolters, 2004). Such students were also more likely to view a normatively graded exam as a threat, experience test anxiety, have low grade aspirations, and want to escape from the testing situation, and they were less likely to feel calm as a result of preparation (McGregor & Elliot, 2002). Performance-avoidance goals were also related to less interest in research among counseling psychology graduate students (Deemer et al., 2007).

This section specifically focused on affective states and attitudes that could potentially result from different academic achievement goals. There are other socioemotional factors that are better conceptualized as motivational precursors to achievement goals, and those are examined in a later section.

**Academic behaviors.** The influence of achievement goals on academic behaviors has been studied at the level of individual test preparation and at the level of a single academic course. Patterns have been described for metacognitive strategies, including how students plan
and attend to their studies; for cognitive strategies, or how students approach their learning; and for overall strategies such as self-handicapping and risk taking.

In general, students with approach orientations approach their studies in a more planned manner. They study for more hours overall, but fewer hours at the last minute (McGregor & Elliot, 2002). When measuring metacognitive strategies as a single construct, researchers have found mastery-approach orientations to be associated with greater use, while performance-approach orientations have not shown significant relationships (Pintrich, 2000; Wolters, 2004). Students with either avoidance goal orientation demonstrate a lack of organization in their study habits (Elliot & McGregor, 2001), and performance-avoidance orientations have been linked to fewer hours spent studying and less concentration during study time (McGregor & Elliot, 2002).

When studying, students with mastery-approach orientations are more likely to use a variety of intentional cognitive strategies (Pintrich, 2000; Wolters, 2004). Pintrich (2000) found that the same was true of students with performance-approach orientations, but Wolters (2004) found no relationship between performance-approach goals and cognitive strategy use. Wolters reiterated that performance-approach goals appeared to have neither a positive nor a negative effect on student learning processes on their own. Elliot and McGregor (2001) reported that mastery-approach goals were related to deep processing while performance-approach goals predicted surface processing. This distinction may indicate that measuring cognitive strategies as a single construct may not discriminate sufficiently between two conceptually different approaches. The same study found that avoidance orientations may not reduce cognitive strategy use; although mastery-avoidance goals demonstrated no effect, performance-avoidance goals were related to less deep processing but increased surface processing.
Achievement goals may also be related to motivational strategies such as academic risk taking, which tends to be positively related to mastery-approach goals and negatively related to performance-approach goals in the absence of mastery-approach goals (Pintrich, 2000), and self-handicapping. Self-handicapping includes any withholding of effort intended to deflect attention away from possible ability deficits in the case of failure; procrastination is the most common example. When using a framework of goal orientations that included only high and low levels of approach goals, Pintrich did not find evidence of a consistent relationship between achievement goals and handicapping. When either the trichotomous model or the 2 x 2 model has been used, performance-avoidance goals have predicted handicapping behavior (McGregor & Elliot, 2002; Midgley & Urdan, 2001; Wolters, 2004), while mastery-approach goals have predicted less handicapping behavior (Wolters, 2004), although not necessarily in the presence of high performance-avoidance goals (Midgley & Urdan, 2001). Performance-approach goals were unrelated to handicapping in all of these studies.

When the effects of achievement goal orientations on academic outcomes, attitudes, and behaviors are viewed holistically, several things become apparent. First, mastery-approach goals are linked to the most positive attitudes and behaviors, including those associated with long-term learning, although this influence may not result in higher grades. Second, performance-avoidance goals are associated with the most negative attitudes, behaviors, and outcomes; the presence of a strong performance-avoidance orientation should be seen as an academic risk factor. Third, the influence of performance-approach goals is generally positive, although it depends on the presence or absence of mastery-approach goals as well as the academic context. Mastery-approach goals may be optimal for independent projects and other situations requiring strong intrinsic interest, while performance-approach goals tend to show benefits for tasks with a
necessarily competitive component or external rewards, like grades (Harackiewicz et al., 2002). The next section examines connections between achievement goal orientations and key motivational constructs, some of which may explain these differential academic effects.

**Other Motivational Constructs**

When Elliot and McGregor (2001) first conceptualized and measured the 2 x 2 framework, they highlighted several motivational antecedents that differentiated among the four orientations. Some of these relationships were further clarified by Elliot and Murayama (2008). In particular, how much a person is motivated by a need to achieve or by the fear of failure appears to be a major factor in achievement goal formation, with mastery-approach goals being influenced only by the need for achievement; performance-approach goals by the need for achievement and then the fear of failure; mastery-avoidance goals by the fear of failure and then the need for achievement; and performance-avoidance by the fear of failure only (Elliot & Murayama, 2008). This pattern of motivations, as well as the finding that both avoidance orientations are related to lower self-determination, supports the contention that approach goals are more adaptive than avoidance goals and mastery goals are more adaptive than performance goals (Elliot & McGregor, 2001). Fear of failure is particularly related to perfectionism, as is detailed in that section below.

Connections have also been made between achievement goals and mindsets, or implicit theories of intelligence. When students have a fixed mindset (or entity theory of intelligence), they believe that their basic levels of ability in an area are unchangeable. However, students with a growth mindset (or incremental theory of intelligence) believe that their abilities in an area can improve with practice (Dweck, 2012). In the initial testing of the 2 x 2 framework, Elliot and McGregor (2001) found that both avoidance goals were associated with more fixed mindsets and
that mastery-avoidance was also linked to a reduced chance of a growth mindset. They found no significant relationship between either of the approach goal orientations and mindset. However, Dweck (2012) reported that fixed mindsets can lead to both types of performance goals while growth mindsets lead to mastery-approach goals.

**Gifted Students’ Achievement Goals**

There is little research exploring whether gifted or academically talented students differ from average ability students in their goal orientations or how those orientations affect academic attitudes, behaviors or outcomes. It is clear that there is variation in goal orientations within this population. Ainley (1993) discovered two separate clusters of high ability students. The one she described as “committed” was high in both mastery-approach and performance-approach goals, while the other, which she described as “detached,” was low in both performance-approach and performance-avoidance goals and average in mastery-approach. Both clusters used more transformational learning strategies than the clusters of average or low ability students, with the committed students using them more frequently. This finding indicates that goal orientations are related to academic behaviors among high-achieving students, but that this relationship may become apparent only after the effect of ability is considered. This was also demonstrated in Speirs Neumeister’s (2004b) research on college honors students with perfectionism, which is described in further detail later in this review. The students in her sample who had strong performance-avoidance goal orientations tended to self-handicap and avoid challenge, but they had all joined honors because not doing so would have been perceived as failure.

Modern definitions of achievement goals emphasize the construct of competence and how it is measured, demonstrated, or developed (Elliot, 2007). Different levels of competence may affect both goal orientations and how those goals are expressed. For example, higher levels
of prior mathematics achievement have been associated with both mastery-approach and performance-approach goals (Wolters, 2004), and high levels of performance on a task have predicted higher rates of normative information seeking and higher levels of maintained interest (Butler, 1992). Grant and Dweck (2003) found higher levels of self-perceived competence to be positively correlated with performance-approach goals but not significantly correlated with mastery goals. The level of perceived competence is more important to the formation of academic motivations and goals than an objective measure of competence is, although achievement and test scores serve as cues that help guide the formation of that perception (Dai et al., 1998). Although gifted and talented students generally have higher perceptions of their competence (Dai et al., 1998), differences in perceived competence can be measured as early as elementary school, and gifted students with low perceptions of their own competence tend to withdraw from school and avoid academic work (Miserandino, 1996).

The literature on gifted students may also be connected to achievement goals through related motivational constructs. For example, honors students have been found to have greater needs for achievement than other college students (Hickson & Driskill, 1970; Mathiasen, 1985), which could indicate a greater tendency for approach goals. Dai et al. (1998) noted that many older measures of the need for achievement were defined by doing well compared to others, so these findings may apply only to performance-approach goals.

There is increasing interest in applying the research on mindsets—and therefore its connections to achievement goals—to gifted students. A negative correlation has been found between honors students’ fixed mindsets and their perceived abilities in a variety of talent areas (Siegle et al., 2010). In addition to its relationship to performance goals, a fixed mindset is thought to put a gifted student’s self-concept at risk when faced with academic challenge
(Robinson, 1997). The desire to avoid a fixed mindset and its associated effects has been used to support the need for appropriate educational challenges for gifted and talented students (e.g., Aronson & Juarez, 2012; Robinson, 2012). Given that honors students sometimes report not having been challenged intellectually during their K-12 education (Hébert & McBee, 2007), and the evidence that lack of challenge can result in students not developing necessary metacognitive academic skills (Kaczvinsky, 2007; Robinson, 1997), the role of academic challenge in the development of achievement goal orientations among this population should be considered further.

Dweck (2012) has expressed concerns that labeling students as gifted and focusing on their strengths increases the likelihood that they develop fixed mindsets. However, Worrell (2012) responded that existing evidence of gifted students’ academic attitudes, behaviors, and attributions for success and failure indicates that they generally demonstrate growth mindsets despite the effects of labeling. Aronson and Juarez (2012) showed that induced goal states may have differential effects based in part on students’ abilities on the task in question and highlighted the need for further research on gifted students’ mindsets.

**Conclusion**

The literature on achievement goal orientations established that different orientations are related to different academic attitudes, behaviors, and outcomes and that this may in part be due to the different motivational constructs leading to achievement goal formation. Because students’ decisions to join an honors program are directly connected to what they want to achieve during their college careers, differences in achievement goal orientation may result in different decisions. However, this is unlikely to be a simple relationship, as an honors program may include mastery-oriented tasks such as independent study or research as well as performance-
oriented components like normative grading. Students’ levels of perceived competence are also likely to interact with their achievement goal orientation, for example by affecting their judgment of the riskiness of joining honors. This relationship may also be mediated by other socioemotional constructs, including perfectionism, which is the focus of the remainder of this review.

**Perfectionism**

The construct of perfectionism has been explored in a variety of academic populations, including gifted students, college students, and gifted college students. Much of the existing research on perfectionism uses one of two models, each of which is measured through an instrument called the “Multidimensional Perfectionism Scale” (MPS). The MPS developed by Frost, Marten, Lahart, and Rosenblate (1990) consists of six subscales: concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization. Hewitt and Flett (1991) defined their MPS subscales based on where the perfectionism originates and where it is targeting. Self-oriented perfectionism (SOP) is both derived from and focused upon the self; other-oriented perfectionism (OOP) is internal to the self but directed toward others, and socially prescribed perfectionism (SPP) is focused upon the self but based upon the belief that others hold high expectations for the individual. The two instruments are conceptually related and show strong correlations (Frost et al., 1993). The Hewitt and Flett SOP subscale is most correlated with the Frost et al. personal standards, concern over mistakes, and parental expectations subscales, while SPP is correlated strongly with parental expectations, parental criticism, and concern over mistakes. Flett, Blankstein, Hewitt, and Koledin (1992) concluded that both MPS measures included “the important distinction between self-determined and imposed standards of perfection” (p. 86).
These subscale correlations and conceptual similarities allow the integration of research using the two measures. Some of this research takes the additional step of distinguishing between “healthy” (or “adaptive”) and “maladaptive” perfectionism (e.g., Dixon et al., 2004; Frost et al., 1993; Hanchon, 2010). Depending on the measure(s) used, healthy perfectionism is said to encompass personal standards, organization, and/or SOP, while maladaptive perfectionism includes concern over mistakes, parental criticism, parental expectations, doubts about actions, and/or SPP (Frost et al., 1993). The controversy surrounding the conceptualization of some perfectionism as healthy is examined in more detail below, after the consideration of how these different types of perfectionism manifest in academic contexts.

**Academic Effects of Perfectionism**

In general, SOP and the related subscales of personal standards and organization have been associated with positive academic and emotional factors. College students scoring highly on these scales tended to enjoy academics, reporting significantly higher levels of academic satisfaction, self-determination, and positive affect (Gaudreau & Thompson, 2010; Verner-Filion & Gaudreau, 2010). These “adaptive” subscales have also been connected to perceptions of academic competence and self-efficacy (Dixon et al., 2004; Hanchon, 2010) as well as progress toward academic goals (Gaudreau & Thompson, 2010) and higher levels of academic achievement (Cox, Enns, & Clara, 2002; Verner-Filion & Gaudreau, 2010). These observed differences have been large enough to cause at least one researcher to suggest that possessing some facets of healthy perfectionism may be more desirable than having no perfectionism at all (Dixon et al., 2004).

On the other hand, SPP, concern over mistakes, parental criticisms, and doubts about actions have been associated overwhelmingly with highly negative outcomes. College students
who scored highly on these “maladaptive” subscales reported experiencing academic problems (Hanchon, 2010), including procrastination (Flett et al., 1992; Speirs Neumeister, 2004b) and test anxiety (Eum & Rice, 2011). SPP and related subscales are associated with negative affect (Gaudreau & Thompson, 2010), anger (Hewitt & Flett, 1991), depression (Cox et al., 2002), and other mental health concerns (Dixon et al., 2004). These are all connected with decreased academic achievement (Verner-Filion & Gaudreau, 2010).

Some researchers have extended the conception of “healthy” and “maladaptive” perfectionism into models with four classifications: high in both types; high in healthy perfectionism only; high in maladaptive perfectionism only; and low in both types. Gaudreau and Thompson (2010) found that students high in healthy perfectionism only had the most favorable scores for academic self-determination, academic satisfaction, positive affect, and academic goal progress, that students high in unhealthy perfectionism only had the least favorable, and that students who were either high in both or low in both had scores between the two, with students who were low in both perfectionism types having more academic self-determination and less negative affect than those who were high in both. However, Dixon, Lapsley, and Hanchon (Dixon et al., 2004) found a different pattern, with students who were high in healthy perfectionism only having the highest scores on measures of adjustment and perceived competence but otherwise appearing similar to those who scored low in both in terms of mental health. Those high in maladaptive perfectionism demonstrated poor mental health, adjustment, and coping skills, regardless of their levels of adaptive perfectionism.

“Healthy” Perfectionism: A Misnomer

The practice of labeling some types of perfectionism as healthy is not universally accepted. Critics of healthy perfectionism cite three main concerns. First, the construct of
perfectionism has, at its core, the pursuit of perfection (Greenspon, 2000). However, definitions of healthy perfectionism often refer to high standards, not perfection. For example, Gaudreau and Thompson (2010) defined their version of an adaptive perfectionism as “the self-oriented tendency to set highly demanding standards and to conscientiously strive for their attainment” (p. 532). When healthy perfectionism is defined using the Frost et al. (1990) MPS, it does not include concern for mistakes, yet Frost et al. described this subscale as a core component of perfectionism. Greenspon (2000) averred that high scores on other subscales without concern for mistakes indicated simply striving for excellence. Flett and Hewitt (2006) have also recommended that only “those individuals who hold rigidly to their standards, even in situations that do not call for perfection” (p. 476), across multiple areas, should be considered perfectionists, and that so-called healthy perfectionism should be considered conscientiousness.

A second concern is that even so-called healthy perfectionism has been found to correlate with negative emotions and outcomes. The fact that these have been overlooked may be a result of over-relying on college student populations and focusing primarily on academic outcomes. Based on research with clinical populations, Flett and Hewitt (2006) cautioned that so-called healthy perfectionism may result in negative outcomes across the lifespan, in nonacademic contexts (e.g., personal relationships), and in response to failure. For example, SOP is associated with an increased risk of alcohol abuse (Flett & Hewitt, 2006; Hewitt & Flett, 1991). Even when using college student samples, high personal standards—generally considered to be part of healthy perfectionism—have been linked to lower performance satisfaction but higher ratings of actual performance, part of the reason self-oriented perfectionists are also at risk for very negative responses to failure (Flett & Hewitt, 2006). Greenspon (2000) concluded that, even in highly functioning individuals, there is no evidence that perfectionism itself can be healthy.
Finally, a few authors have highlighted the fact that the motivational antecedents of perfectionism are inherently negative. Greenspon (2000) emphasized that perfectionism results from conditional acceptance, either by the self or by others. Flett et al. (1992) found that all three perfectionism dimensions (SOP, SPP, and OOP) were associated with the fear of failure, even when that fear did not manifest in outwardly avoidant behaviors, although at least one other author (Conroy et al., 2007) has been able to replicate that result with SPP only. For the purposes of the rest of this review, the terminology of “healthy” or “maladaptive” perfectionism is used only when necessitated by the design of the original study. The Hewitt and Flett (1991) model and terminology (SOP, SPP, and OOP) are preferred, as all three dimensions encapsulate the search for perfection as opposed to excellence.

**Perfectionism and Achievement Goals**

Perfectionism has been conceptually and statistically related to different achievement goal orientations. As noted in the previous section, the fear of failure may be a root for all forms of perfectionism (Flett et al., 1992) or just SPP (Conroy et al., 2007). As described earlier in this review, the fear of failure is also a key motivational antecedent for mastery-avoidance goals and both forms of performance goals (Elliot & Murayama, 2008). Indeed, SPP and related “maladaptive” perfectionism types have been correlated with the adoption of both performance-approach and performance-avoidance goals (Eum & Rice, 2011; Fletcher et al., 2012; Hanchon, 2010). When the 2 x 2 framework of achievement goal orientations was proposed, mastery-avoidance goals were hypothesized to affect perfectionists (Elliot & McGregor, 2001; Pintrich et al., 2003), and one of the only studies to include this fourth orientation has confirmed its correlation with “maladaptive” perfectionism (Eum & Rice, 2011). Behaviorally, SPP is also
correlated with procrastination (Flett et al., 1992), one of the self-handicapping behaviors associated with avoidant goal orientations.

There are also some studies that have found associations between perfectionism and mastery-approach goal orientations. One “maladaptive” dimension, doubts about actions, correlates with fewer mastery-approach goals (Fletcher et al., 2012). However, several dimensions often considered part of healthy perfectionism may predict higher mastery-approach orientations, including SOP, organization, and personal standards (Fletcher et al., 2012; Verner-Filion & Gaudreau, 2010). Overall measures of “adaptive” perfectionism have also been found to correlate with approach and mastery goal orientations (Eum & Rice, 2011; Hanchon, 2010).

The direction of influence between perfectionism and goal orientation has not been established, but it appears that neither construct can be completely subsumed under the other. Hanchon (2010) suggested that the self-doubts and concerns associated with perfectionism modify the effects of achievement goal orientations, causing the presence of either type of performance goal to outweigh the presence of a mastery-approach orientation. Verner-Filion and Gaudreau (2010) showed a complex interrelationship between perfectionism and achievement goals, resulting in separate and overlapping contributions to academic achievement and necessitating the measurement of both constructs.

**Perfectionism in Gifted Students**

Among gifted and talented students, a fear of failure may contribute to perfectionism and, in turn, underachievement (Conroy et al., 2007; Reis & McCoach, 2000), especially when self-perceptions of ability are low (Dai et al., 1998). Even when a gifted student is not underachieving by standard measures, negative reactions to failure or potential failure may result in less academic risk-taking (Roberts & Lovett, 1994). However, it is important to consider a
student’s abilities when considering whether his goals are attainable or unrealistic (Parker & Mills, 1996). Simply striving for excellence is not evidence of perfectionism, even if the standard for excellence is higher than what most people could achieve (Greenspon, 2000).

Gifted students appear to be no more perfectionistic than their age peers (Parker & Mills, 1996; Speirs Neumeister, 2004a). However, it is unclear whether there is a difference in perfectionism types based on ability levels. Speirs Neumeister (2004a, 2004b) reported average SPP and SOP scores for college honors students that were similar to the instrument’s reported college norms. Parker and Mills (1996) also found no significant difference between gifted students in a talent search and their age peers on either overall Frost MPS scores or placement in a typology based on healthy versus maladaptive perfectionism. However, Parker and Adkins (1995) discovered that college honors students scored higher on personal standards, concern over mistakes, and parental expectations subscales; given the participants’ academic success, all of these were considered evidence of positive striving. LoCicero and Ashby (2000) also reported that gifted students showed more adaptive and less maladaptive perfectionism. However, this study used an instrument that measured only high standards and distress due to discrepancy with those standards, with gifted students scoring higher on the former and lower on the latter. These results could be due to higher levels of perceived and actual competence. In the only identified study that rated gifted students more highly than their age peers in both perfectionism (specifically SOP) and negative outcomes, gifted students experienced greater distress after induced academic failure (1994). This conclusion stood in stark contrast from studies in which the effects of perfectionism were measured only against academic achievement, which may not be decreased in gifted students. Greenspon (2000) cautioned against concluding that perfectionism, especially healthy perfectionism, was more common in gifted students: “Some
gifted people are perfectionistic and some are not. Many gifted people are capable of doing certain tasks perfectly; one cannot conclude from this, however, that they will necessarily try to do so” (p. 206).

When gifted students do demonstrate perfectionism, the effects upon their emotional states mirror those reported for average students (Dixon et al., 2004). The relationship between perfectionism and achievement goal orientations also appears to be largely unchanged from average students to honors students (Speirs Neumeister, 2004b; Speirs Neumeister & Finch, 2006). Students who were high in SPP were motivated to avoid failure, which led to the formation of both kinds of performance goals, which in turn led to procrastination. The approach-avoidance valence for these performance goals determined whether the student would seek or avoid academic challenges. On the other hand, honors students who were high in SOP were motivated to achieve, which led to performance-approach and mastery-approach goals, challenge-seeking, and a strong work ethic. However, honors students with SOP and SPP had similar college GPAs, which confirmed that gifted students with SPP may experience negative affect or use maladaptive strategies without affecting their academic achievement (Speirs Neumeister, 2004b). Furthermore, whether an action such as joining an honors program is considered an academic risk is dependent on the expectations of self or others; the honors students in the SPP group indicated that they joined honors in part to avoid the risk of being seen as inferior (Speirs Neumeister, 2004b). However, Speirs Neumeister noted that there would be some gifted students who either underachieved in high school or chose not to enter honors programs, and her findings may not extend to that population.
Conclusion

Perfectionism is defined by a striving for the unattainable ideal, or for the desire to avoid all mistakes. This quest for perfection is likely to have negative emotional effects, some of which will manifest in behavior. It appears that the effects of perfectionism are worse when the individual believes that significant others in his life demand perfection from him (SPP) than when he demands it from himself (SOP). SOP may result in mastery-approach and performance-approach achievement goals, leading to positive academic outcomes. SPP, on the other hand, is linked to performance-approach and performance-avoidance goals as well as avoidant behaviors and the negative academic consequences that accompany them. Even though gifted students are no more perfectionistic than average students, and they also may not differ in terms of perfectionism types, how that perfectionism manifests in academic behavior and outcomes may vary due to greater competence and perceived competence.

Summary

The problem of multiple definitions of giftedness that affects research focusing on K-12 gifted education also complicates research on gifted college students. The lack of standardized identification procedures causes researchers to define giftedness based on academic achievement and often includes participation in an honors program. These programs vary in terms of admissions criteria as well as what they offer to and require of their students, but they share the general goal of helping honors students maximize their collegiate academic careers. However, without a better understanding of the difference between a gifted student and an honors student, it is difficult to truly measure the effects of honors education separately from the effects of being an honors student. This issue is increasing in importance as honors programs face growing demands for program evaluation and accountability.
Possible areas of difference between honors students and gifted non-honors students include achievement goal orientations and perfectionism, both of which have been shown to influence academic behaviors. Honors may be viewed as a way to increase one’s learning, or as a way to demonstrate one’s academic superiority, or even as a risk to be avoided. Students may also join honors because others expect them to do so. More knowledge of the factors affecting this choice also has potential implications for admissions and recruitment procedures, either to attract students who might otherwise decline to participate or to focus admissions on students who are most likely to accept an offer.
CHAPTER 3: RESEARCH METHODS

This study used a retrospective survey to answer the five research questions:

1. Are there differences in (a) achievement goal orientation, (b) perfectionism, and/or (c) prior experiences, after controlling for the effect of gender, among those students who entered a college honors program when they first enrolled (FA), those who were eligible to enter an honors program at that time and chose not to do so (yet still attended the same institution, FD), and those who applied for and entered an honors program after enrolling in college for at least one semester (LA)?

2. Are there differences in achievement goal orientation and/or perfectionism, after controlling for the effect of gender, between college honors students enrolled in two different universities?

3. (a) What relationships may be observed among college honors students’ achievement goal orientations, perfectionism, and prior experiences? (b) Are those relationships consistent between two different universities?

4. (a) What reasons do honors-eligible students give for their choice to participate or not to participate in an honors program? (b) Do those reasons differ between two universities?

5. How well do students’ stated reasons for participating or not participating in honors reflect their achievement goal orientations?

Students in each of the three groups (i.e., FA, FD, LA) from two institutions responded to questionnaires containing standardized instruments and survey questions. Portions of the questionnaire, including the achievement goal orientation and perfectionism instruments, were analyzed quantitatively to answer the first three research questions. The fourth question was
answered through quantitative analysis of survey responses followed by qualitative coding and analysis of participants’ open-ended survey responses. The results of this analysis were quantitatively analyzed along with the participants’ responses to achievement goal orientation instrument to respond to the fifth and final question.

**Research Sites**

The sample for this study consisted of students from two public research universities. The first university (University A) is located in the southeastern United States and is classified as high research activity and selective by the Carnegie Foundation. Approximately 26,000 undergraduate students are enrolled at University A, with over 5,500 entering as freshmen in fall 2011. The honors college at University A consists of three honors programs; the honors program used for this study is based on a series of honors courses, some interdisciplinary and some within students’ majors of study. Incoming students must submit a separate application for the honors program, but admission into the program is automatic if the student has met the minimum requirements: 28 ACT or 1250 SAT and 3.3 high school GPA. (The GPA requirement was added for the fall 2012 entering class.) Current university students may also apply for admission to the honors program at any time, and admission is automatic if a student has achieved at least a 3.3 GPA. The honors program enrolls approximately 20% of students entering University A each year, and the majority of these students live in one of four honors residence halls, which include students from all three honors programs. To remain in the program, students must maintain a 3.3 overall GPA and complete honors classes at an appropriate pace to meet graduation requirements. Graduation from the program requires at least 18 hours of honors coursework, at least 6 of which must be within the honors college. The honors college offers courses that may
be used to satisfy four of the university’s core curriculum requirements, and many of the other requirements may be met through departmental honors classes.

The second university (University B) is located in the northeastern United States and is classified as very high research activity and more selective by the Carnegie Foundation. It enrolls almost 18,000 undergraduate students, with over 3,000 entering as freshmen in fall 2011. University B has a university-wide honors program consisting of two phases; the first two years are primarily focused on general honors coursework and community events, while the second two years are based in the student’s major and include a thesis. Admission to the honors program as an incoming freshman is by invitation. The applications for all individuals admitted to the university are reviewed, and invitations are issued based on academic history, achievement test scores, demonstrated leadership, and other factors. More than 400 students join the honors program each year, and the large majority of these students live in a single freshman honors residence hall. Current students at University B may also apply to the honors program at the end of their first or second year as long as they have at least a 3.4 GPA, and admission decisions will be made based on their academic records and whether space is available. Once admitted to the honors program, students must maintain a 3.4 overall GPA and take at least one honors course per year to remain in good standing. Students may pursue two major honors goals that are largely independent from each other. The first, awarded at the end of the sophomore year, requires students to complete at least 16 honors credit hours and attend several events. The second, graduating as an honors scholar, requires an additional 12 hours of honors credit within a student’s major or related area and the completion of a thesis. Changes have been made to the honors requirements for students entering in fall 2012. Such students must earn at least six honors credits per year to remain in the program, and graduating as an honors scholar will
require them to earn at least 15 honors credit hours (or 12 beyond sophomore honors for those who earn both awards). Furthermore, credit hours must be earned in at least two subject areas.

Participants

At each university, three groups of students were defined. The first group (freshman admits, FA) consisted of those students who entered the honors program as first-time freshmen between fall 2010 and fall 2012. The second group (freshman declines, FD) consisted of those students who were eligible to enter the honors program as first-time freshmen between fall 2010 and fall 2012 but did not, while still enrolling at the university. At University A, these were students who met the requirements for admission to the honors program but did not apply. At University B, these were students who were issued an invitation for the honors program and declined it. The final group (late admits, LA) consisted of students who enrolled in the university as first-time, non-honors freshmen between fall 2010 and spring 2012 and then applied, were admitted, and entered the honors program based on their college academic performance.

Students were sent email invitations in fall 2012 to complete the online surveys; two identical reminder emails followed the initial invitation. The text of these invitations is included in Appendix A. Response rates varied from a low of 1.3% (University A, LA) to a high of 11.6% (University B, FD). A few blank surveys were received (6 from University A, FA and 1 from University A, FD), and those were discarded. Table 3.1 includes the number of invitations issued, usable responses received, and response rate for each of the six groups.
Table 3.1
Response Rates by Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Invitations</th>
<th>Responses (N)</th>
<th>Response Rate</th>
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<tr>
<td>University A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>4413</td>
<td>180</td>
<td>4.1%</td>
</tr>
<tr>
<td>FD</td>
<td>403</td>
<td>12</td>
<td>3.0%</td>
</tr>
<tr>
<td>LA</td>
<td>593</td>
<td>8</td>
<td>1.3%</td>
</tr>
<tr>
<td>Totals</td>
<td>5409</td>
<td>200</td>
<td>3.7%</td>
</tr>
<tr>
<td>University B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FA</td>
<td>1249</td>
<td>84</td>
<td>6.7%</td>
</tr>
<tr>
<td>FD</td>
<td>43</td>
<td>5</td>
<td>11.6%</td>
</tr>
<tr>
<td>LA</td>
<td>168</td>
<td>7</td>
<td>4.2%</td>
</tr>
<tr>
<td>Totals</td>
<td>1460</td>
<td>96</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

The gender and ethnicity distributions for the six groups can be found in Table 3.2. As a whole, the sample was predominantly female, with one group having no male respondents and three other groups having fewer than five male respondents. This was not true of the underlying populations, as both universities reported approximately equal gender distributions overall, as does the honors program at University B. The sample was also predominantly (85%) White, with the remaining 15% split between Black, Hispanic/Latino(a), Asian or Pacific Islander, other, and not specified. This was fairly close to the underlying population at University A, which reported 79% of its undergraduates and 89% of its honors students to be White, although Black students (12% of undergraduates and 4% of honors students) were under-sampled. On the other hand, University B reported that 27% of its honors program and of the undergraduate student body as a whole were underrepresented minorities, indicating that White students were over-sampled.
Table 3.2  
Ethnicity and Gender by Group and University

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>FA</th>
<th>FD</th>
<th>LA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>N/S</td>
<td></td>
</tr>
<tr>
<td><strong>University A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>51</td>
<td>108</td>
<td>0</td>
<td>175 (87.5%)</td>
</tr>
<tr>
<td>Black</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>4 (2.0%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>7 (3.5%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>4 (2.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>4 (2.0%)</td>
</tr>
<tr>
<td>Not specified</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>6 (3.0%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>54</td>
<td>123</td>
<td>3</td>
<td>200 (29.0%)</td>
</tr>
<tr>
<td><strong>University B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>24</td>
<td>43</td>
<td>1</td>
<td>77 (80.2%)</td>
</tr>
<tr>
<td>Black</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2 (2.1%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2 (2.1%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>7 (7.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3 (3.1%)</td>
</tr>
<tr>
<td>Not specified</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5 (5.2%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>28</td>
<td>53</td>
<td>3</td>
<td>96 (31.3%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>FA</th>
<th>FD</th>
<th>LA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>N/S</td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4 (2.0%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2 (2.1%)</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>7 (7.3%)</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>3 (3.1%)</td>
</tr>
<tr>
<td>Not specified</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5 (5.2%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>24</td>
<td>43</td>
<td>1</td>
<td>77 (80.2%)</td>
</tr>
</tbody>
</table>
The class standings and number of semesters of college attended for students at each university are shown in Table 3.3. At each university, the sample largely consisted of freshmen, sophomores, and juniors, with a smaller proportion of seniors. However, these numbers did not correspond exactly to the number of semesters the students had attended college. Thirty-three percent of the sample at University A and 43% of the sample at University B reported being classified at a higher class standing than would be expected based on their attendance. All students in this sample would be considered traditional students based on age; the minimum age was 18 and the maximum age was 21 at both universities, and there was no significant difference between the ages at University A \( (n = 199, M = 18.99, SD = 0.904) \) and University B \( [n = 94, M = 18.98, SD = 0.855; t(291) = 0.93, p = .928] \).

Table 3.3

<table>
<thead>
<tr>
<th>Class Standing</th>
<th>1-2</th>
<th>3-4</th>
<th>5-6</th>
<th>7+</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>59</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td>Sophomore</td>
<td>19</td>
<td>42</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>61</td>
</tr>
<tr>
<td>Junior</td>
<td>5</td>
<td>24</td>
<td>29</td>
<td>1</td>
<td>0</td>
<td>59</td>
</tr>
<tr>
<td>Senior</td>
<td>0</td>
<td>3</td>
<td>14</td>
<td>1</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>84</td>
<td>69</td>
<td>44</td>
<td>2</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td><strong>University B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Sophomore</td>
<td>10</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Junior</td>
<td>4</td>
<td>13</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>33</td>
</tr>
<tr>
<td>Senior</td>
<td>0</td>
<td>1</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>34</td>
<td>33</td>
<td>29</td>
<td>0</td>
<td>0</td>
<td>96</td>
</tr>
</tbody>
</table>
Measures

Participants completed a single online survey with five parts. There were six versions of the survey: one for each group at each university. Students in groups FA and LA received surveys that were identical; separate surveys were used to preserve data integrity. The surveys sent to students in the FD groups did not include questions about the number of honors credits earned or their plans to graduate in honors, and they were asked about their reasons for not joining honors instead of their reasons for joining. These surveys, with modifications made to mask the identities of the research sites and to abide by the copyright of one instrument, may be found in Appendices B (University A, groups FA and LA), C (University A, group FD), D (University B, groups FA and LA), and E (University B, group FD).

Achievement Goal Orientation

The 12-item Achievement Goal Questionnaire-Revised (AGQ-R; Elliot & Murayama, 2008) produces subscale scores for the 2 x 2 achievement goal framework. There are 12 questions, each asking respondents to rate statements about their academic goals on a Likert scale ranging from 1 (“Not at all true of me”) to 5 (“Very true of me”). In initial development and testing, Elliot and Murayama found high levels of internal consistency, with Cronbach’s alphas ranging from 0.84 for mastery-approach to 0.94 for performance-avoidance. For this study, 3 of the 12 items were reworded to shift the goal focus from a particular course to the student’s entire college career. (The remaining nine items make no reference to a class or course.) This alteration remains compatible with the caution that achievement goal orientation is a mid-range construct, between general life goals and specific task goals (Pintrich et al., 2003). Research using previous versions of the AGQ (Elliot & McGregor, 2001) also reworded items to
shift to a more general academic context and did not sacrifice internal consistency or factorial structure (Deemer et al., 2007; Finney et al., 2004).

To ensure that the overall 2 x 2 framework was a suitable fit for this sample and was not disrupted by the reworded items, a confirmatory factor analysis was conducted using IBM SPSS Amos version 20. Listwise deletion was used for missing variables, resulting in a sample size of 289. Errors were assumed to be uncorrelated and the four latent variables (achievement goal orientations) were allowed to intercorrelate freely. As reported in Table 3.4, the maximum-likelihood estimation procedure offered guarded support for the use of the 2 x 2 framework with these data. Both the comparative fit index (CFI) and the Tucker-Lewis index (TLI) were slightly below the stringent acceptance standard of 0.95 but above 0.90 (Lance, Butts, & Miche, 2006). The root mean square error of approximation (RMSEA) was marginally acceptable, being below 0.1 (Browne & Cudeck, 1992). The chi-square statistic was significant ($p < .001$), although that was due in part to the sample size. The Hoelter index indicated that the chi-square would not have been significant if the sample size had been 117 or less. Cronbach’s alphas were computed for all four subscales of this modified AGQ-R using IBM SPSS Statistics version 21 with listwise deletion used for missing values. All subscales displayed acceptable reliability, with Cronbach’s alphas ranging between 0.76 (mastery-approach) and 0.91 (performance-avoidance), as shown in Table 3.5.

Table 3.4
Confirmatory Factor Analyses

<table>
<thead>
<tr>
<th>Instrument</th>
<th>$N$</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>$\chi^2 (df)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGQ-R</td>
<td>289</td>
<td>0.94</td>
<td>0.92</td>
<td>0.09</td>
<td>160.80 (48)</td>
</tr>
<tr>
<td>MPS</td>
<td>270</td>
<td>0.68</td>
<td>0.66</td>
<td>0.08</td>
<td>2731.73 (942)</td>
</tr>
<tr>
<td>MPS-brief</td>
<td>279</td>
<td>0.88</td>
<td>0.86</td>
<td>0.08</td>
<td>253.19 (87)</td>
</tr>
</tbody>
</table>
Scores for each of the four subscales were computed by averaging across the three corresponding item scores. If one of the three items was missing a response, that subscale was scored by averaging the other two items; if two or more items for a subscale were missing, that subscale scale was also determined to be missing. Whole-group subscale means and standard deviations are reported in Table 3.6 and compared to the college student norms reported by Elliot and Murayama (2008). The scores for this sample were similar to those found by Elliot and Murayama for mastery-approach \([t(522) = 1.91, p = .056]\), mastery-avoidance \([t(519) = 1.41, p = .158]\), and performance-avoidance \([t(521) = 1.59, p = .113]\) goal orientations. However, this sample scored significantly higher than reported norms for performance-approach goals \([t(522) = 3.21, p = .001]\). Correlations among the four subscales, shown in Table 3.5, were also similar to those found by Elliot and Murayama, with the exception that performance-approach in this sample was more strongly correlated with both mastery orientations and less strongly correlated with performance-avoidance.
Table 3.6
AGQ-R Summary

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Present study</th>
<th>Murayama &amp; Elliot (2008)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Mastery-approach</td>
<td>295</td>
<td>4.34 (0.64)</td>
</tr>
<tr>
<td>Mastery-avoidance</td>
<td>292</td>
<td>3.73 (0.97)</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>295</td>
<td>4.30 (0.84)</td>
</tr>
<tr>
<td>Performance-avoidance</td>
<td>294</td>
<td>3.98 (1.08)</td>
</tr>
</tbody>
</table>

** Difference between present study and Murayama and Elliot (2008) significant, \( p < .01 \).

Perfectionism

Hewitt and Flett’s (1991) Multidimensional Perfectionism Scale (MPS) consists of 45 questions on a 7-point Likert scale. Respondents are asked to specify how much they agree or disagree with each statement on a scale from 1 (“strongly disagree”) to 7 (“strongly agree”). In initial development with college student samples, the authors found Cronbach’s alphas between 0.86 and 0.89 for self-oriented perfectionism (SOP), between 0.79 and 0.82 for other-oriented perfectionism (OOP), and between 0.86 and 0.87 for socially prescribed perfectionism (SPP). This instrument was used under license from Multi-Health Systems Inc. and initially scored according to the instrument’s manual (Hewitt & Flett, 2004).

Examination of the initial MPS results raised concerns about the factorial structure of the instrument when used with this sample. Internal consistency was good, with Cronbach’s alphas of 0.92 (SOP), 0.82 (OOP), and 0.85 (SPP). However, some interitem correlations within the factors were very low (< 0.15; SOP, OOP, SPP) or negative (OOP, SPP), while others were very high (> 0.70; SOP, SPP). Each of the factors also included one item with a low item-total correlation (< 0.4). A confirmatory factor analysis conducted using IBM SPSS Amos version 20 also showed potential problems (Table 3.4). The chi-square statistic was significant (\( p < .001 \)), although the Hoelter index (100) indicated that, like the AGQ-R, this was due in part to sample
size. The RMSEA was also in the acceptable range (Browne & Cudeck, 1992). However, both the CFI and the TLI were well below acceptable values (Lance et al., 2006).

These results were inconsistent with Hewitt and Flett’s previous work with the MPS (Hewitt & Flett, 1991; Hewitt & Flett, 2004), but similar to the analysis reported by Cox, Enns, and Clara (2002), who recommended a short form of the MPS (MPS-brief) that displayed stronger statistical properties. This scoring method uses 5 items per factor rather than the original 15. However, Cronbach’s alphas computed with the sample for this study remained acceptably high, ranging from 0.76 (OOP) to 0.83 (SOP; see Table 3.7). The confirmatory factor analysis on MPS-brief (Table 3.4) showed improved performance, although not to the levels reported by Cox et al. The CFI and the TLI approached 0.9 (Lance et al., 2006), and the RMSEA remained in the acceptable range (Browne & Cudeck, 1992). The chi-square statistic was still significant \( p < .001 \), but the Hoelter index increased slightly to 117. The MPS-brief also had acceptable inter-item and item-total correlations within each of the three subscales.

Table 3.7  
*MPS-brief Subscale Reliability and Intercorrelations*

<table>
<thead>
<tr>
<th></th>
<th>SOP</th>
<th>SPP</th>
<th>OOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOP</td>
<td>(0.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPP</td>
<td>0.40***</td>
<td>(0.79)</td>
<td></td>
</tr>
<tr>
<td>OOP</td>
<td>0.30***</td>
<td>0.12*</td>
<td>(0.76)</td>
</tr>
</tbody>
</table>

* \( p < .05; \) *** \( p < .001 \).

Based upon these findings, scores for each of the three subscales were computed based on the factor structure of the MPS-brief. Scores were computed by averaging across the five corresponding item scores and then multiplying by 15 to place them on the same scale as the original MPS scores. If one of the five items was missing a response, that subscale was scored by averaging the other four items; if two or more items for a subscale were missing, that subscale
scale was also determined to be missing. A summary of these scores may be found in Table 3.8. There have been no norms published for the brief form of the MPS, and it also was not possible to directly compare among the three subscale scores or between the MPS-brief and the MPS.

Table 3.8

<table>
<thead>
<tr>
<th>Subscale</th>
<th>N</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-oriented</td>
<td>288</td>
<td>78.4 (18.75)</td>
</tr>
<tr>
<td>Other-oriented</td>
<td>288</td>
<td>70.6 (15.79)</td>
</tr>
<tr>
<td>Socially-prescribed</td>
<td>288</td>
<td>56.1 (19.64)</td>
</tr>
</tbody>
</table>

**Educational and Extracurricular Experiences**

Participants were asked general questions regarding their previous educational and extracurricular experiences. The first question focused on educational practices and academic opportunities intended to increase challenge (e.g., Advanced Placement) or intrinsic motivation (e.g., enrichment-based gifted programs; see Figure 3.1). Almost all of the 296 respondents to this question had taken AP classes (90.5%) and/or honors classes (90.5%) in high school and had joined at least one honors society (87%). Other experiences reported by a majority of respondents included being identified gifted and talented in elementary school (77.3%), joining a non-competitive academic organization (66.4%), participating in a gifted and talented program in elementary school (64.4%), and participating in an academic competition (59.7%). Relatively few respondents reported being in an International Baccalaureate program in high school (3.1%), having been assigned a mentor through a school or community program (5.8%), or attending a nonresidential (7.8%) or residential (9.2%) academic summer program.
The second question asked whether respondents participated in a variety of nonacademic extracurricular activities. (See Figure 3.2). A large majority (86.2%) reported having conducted community service or volunteer work, while smaller majorities had summer jobs (63.8%), performed in band, chorus, or other musical activities (59.7%), or participated in varsity or junior varsity athletics (58.3%). Few had been involved in military (1.0%) or pre-professional (6.9%) organizations.

Figure 3.1. K-12 academic experiences

Figure 3.2. K-12 nonacademic extracurricular experiences
Participants were then asked to self-identify their college grades on a scale from “mostly D’s and F’s” to “All A’s.” This academic self-report scale has been used successfully in research with students in high school (McCoach & Siegle, 2003) and middle school (Mitchell, 2011). Of the 295 participants who responded to this question, 84 indicated that this was their first semester in college, leaving 211 who reported college grades. As shown in Figure 3.3, almost all students reported receiving all A’s (31.3%) or mostly A’s (52.6%) and no students reported earning anything lower than more B’s than C’s. A significant relationship was found between self-reported grades and standing in college ($r_c = 0.17, p < .001$) and between grades and gender ($\gamma = -0.28, p = .020$), but no relationship was found between grades and the number of semesters enrolled in college ($r_c = 0.04, p = .373$) or ethnicity (Fisher’s exact test = 17.65, $p = .35$).

![Figure 3.3. Self-reported college grades](image)

Participants were also asked to self-report how long they had been enrolled at their university, how many academic credits they had earned, and how many honors credits they had earned (FA and LA groups only). The data regarding time at the university and academic credits
earned were summarized in a previous section and in Table 3.3. Of the 279 participants in FA or LA groups, 275 indicated the number of honors credits they had already earned. Sixty participants had not yet earned any honors credits, 55 had earned 6 or fewer honors credit hours, 72 had earned 7-12 honors credit hours, 57 had earned 13-18 honors credit hours, and 30 reported earning 18 or more honors credit hours.

**Self-reported Motivating Factors**

One multiple-choice question and one open-ended question probed for participants’ reasons for joining or not joining the honors program. Of the 279 participants in FA or LA groups, 278 responded to the multiple-choice question and 227 responded to the open-ended question. All 17 participants in the FD groups responded to the multiple-choice question regarding why they chose not to join honors, and 13 also responded to the open-ended question. Participants in the FA and LA groups were also asked whether they intended to complete the requirements to graduate with their university’s honors designation. Almost all indicated that they did intend to do so (80.7%) or that they would probably do so (9.5%).

**Demographics**

Both gender (Elliot & McGregor, 2001; McGregor & Elliot, 2002) and ethnicity (Lepper, Corpus, & Iyengar, 2005) have been shown to relate to academic achievement goal orientations, so participants were asked to self-report both of these demographic items. To facilitate possible group comparisons, participants were also asked to self-report their age, their class standing, and the number of semesters they had attended their university. Responses for all demographic questions were summarized in the earlier section describing the study participants and in Table 3.2. As all samples were predominantly White, ethnicity was not included in further analysis.
Analysis

Research Question 1: Differences Among Groups

Research question 1 asked if there were differences in (a) achievement goal orientation, (b) perfectionism, and/or (c) prior experiences, after controlling for the effect of gender, among students in the three groups (FA, FD, and LA). Due to the intercorrelations among the subscales of each instrument, two MANCOVAs were used to answer parts (a) and (b). Each had the subscales of a single test—either the (a) AGQ-R or (b) MPS—as dependent variables, group as a fixed factor, and gender as a covariate.

The data for part (c) were the responses to a series of binary questions. Because of the large number of variables and small sample size in some of the groups, initial analysis was done through visual examination of percentage differences. Post-hoc chi-square tests were conducted on any group differences greater than 15 percentage points. The binary variables were then collapsed into seven categories as shown in Table 3.9, and each participant was assigned two scores per category: a sum of all responses selected in that category and a dichotomous (1/0) score of whether any responses in the category were selected. The dichotomous scores were analyzed through a series of seven chi-square tests, and the summed scores were analyzed using a series of ANOVAs.

Research Question 2: Differences Between Universities

Research question 2 was concerned with differences in achievement goal orientation and/or perfectionism between honors students at the two universities. For this analysis, students in groups FA and LA were combined into a single “honors” group at each university ($N_A = 188$, $N_B = 91$), and students in the FD groups were omitted. Analysis then proceeded in a similar
fashion to research question 1, parts (a) and (b), as detailed above, replacing the group fixed factor with university.

Table 3.9  
*Categories of Prior Experiences*

<table>
<thead>
<tr>
<th>Category</th>
<th>Included responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum responses</td>
<td>GT program in elementary</td>
</tr>
<tr>
<td></td>
<td>AP in high school</td>
</tr>
<tr>
<td></td>
<td>IB in high school</td>
</tr>
<tr>
<td></td>
<td>Honors classes in high school</td>
</tr>
<tr>
<td></td>
<td>Public residential high school</td>
</tr>
<tr>
<td>Academic recognition</td>
<td>Identified GT in elementary</td>
</tr>
<tr>
<td></td>
<td>National Merit/Achievement</td>
</tr>
<tr>
<td></td>
<td>Honors society</td>
</tr>
<tr>
<td>Vocational or mentorship</td>
<td>Job shadow/career</td>
</tr>
<tr>
<td></td>
<td>Internship</td>
</tr>
<tr>
<td></td>
<td>Mentorship</td>
</tr>
<tr>
<td></td>
<td>Pre-professional org</td>
</tr>
<tr>
<td></td>
<td>Military org.</td>
</tr>
<tr>
<td></td>
<td>Summer job</td>
</tr>
<tr>
<td></td>
<td>School-year job</td>
</tr>
<tr>
<td>Academic interest</td>
<td>Academic competition</td>
</tr>
<tr>
<td></td>
<td>Non-competitive academic org</td>
</tr>
<tr>
<td></td>
<td>Residential acad. summer</td>
</tr>
<tr>
<td></td>
<td>Nonresidential acad. summer</td>
</tr>
<tr>
<td>Arts</td>
<td>Music</td>
</tr>
<tr>
<td></td>
<td>Performing arts, non-music</td>
</tr>
<tr>
<td></td>
<td>Visual arts</td>
</tr>
<tr>
<td>Athletics</td>
<td>Athletics (Varsity/JV)</td>
</tr>
<tr>
<td></td>
<td>Athletics (intramural)</td>
</tr>
<tr>
<td></td>
<td>Athletics (non-school)</td>
</tr>
<tr>
<td>Other interest</td>
<td>Student government</td>
</tr>
<tr>
<td></td>
<td>Community service</td>
</tr>
<tr>
<td></td>
<td>Political org.</td>
</tr>
<tr>
<td></td>
<td>Student media</td>
</tr>
</tbody>
</table>

**Research Question 3: Achievement Goal Orientation, Perfectionism, and Prior Experiences**

Research question 3(a) was concerned with the relationship among honors students’ achievement goal orientations, perfectionism, and prior experiences. The analyses for this
Research Question 4: Self-Reported Motivating Factors

Research question 4 was concerned with the reasons that honors-eligible students gave for their choice to participate or not participate in an honors program and whether those reasons were consistent between the two universities. Relevant data included responses to a series of binary questions as well as an open-ended response. For the quantitative portion of this question, the percentage of participants who selected each reason was reported. Between-university differences were investigated through post-hoc chi-square tests.

The open-ended responses of honors students were analyzed qualitatively. An initial examination of the data was conducted to generate in vivo codes using students’ words. An iterative process was then used to combine and condense the initial in vivo codes into the 53
codes described in Appendix F. These codes were based upon student-generated phrases whenever possible. Further analysis of the patterns of student responses led to the identification of four major overarching themes and one minor theme; these themes and 10 sub-themes are also listed in Appendix F. When possible, codes and interpretations were triangulated against the quantitative data and analysis described above. There were very few responses from students who did not join honors, so these responses were considered against the codes and themes generated from the honors student responses. Although no attempt was made to code these responses directly, they were analyzed holistically, with particular attention paid to areas of difference and statements that did not fit existing codes.

Research Question 5: Salience of Achievement Goal Orientations

The final research question was concerned with both the applicability and the salience of students’ achievement goal orientations to their decision of whether to join honors. Correspondence between students’ goal orientations and their stated reasons would provide evidence that participation in honors was an achievement-linked behavior and that students were aware of their achievement goals. The analyses for this question consisted of four canonical correlation models, each comparing the four subscales of the AGQ-R with some measure of self-reported motivations. The first model was limited to honors students and used 10 of the multiple choice responses for why students joined honors: increased challenge, more interesting classes, prestige, improved graduate or professional school applications, improved chances of getting a job, undergraduate research, study abroad, service learning opportunities, leadership opportunities, and fear of regret. These were the only choices that were conceptually linked to achievement goal orientations. The second model, which was limited to students who did not join honors, included only those multiple-choice reasons for declining honors membership that
were linked to achievement goals (difficult honors classes, time away from other activities, jeopardizing one’s GPA, and lack of interest in research).

The third and fourth models were both limited to honors students who had responded to the open-ended question of why they joined honors. Two of the themes that had been identified as part of the qualitative analysis of research question 4 were conceptually linked to achievement goal orientations. The seven total sub-themes for those two themes were converted to quantitative indicator variables that were then used in canonical correlation analyses. One model used the three sub-themes associated with the benefits theme and the other model used the four sub-themes of opportunities.

**Delimitations and Limitations**

This study used a retrospective methodology in that it was concerned with factors that influenced a decision occurring up to 3 years prior to the administration of the surveys. This was most likely to affect research questions 4 and 5, as students were asked to reflect upon their reasons for joining or not joining the honors program when that decision may have been very remote. This was less likely to have major effects on parts of research questions 1, 2, and 3, as achievement goal orientations have been shown to be largely stable (Elliot & McGregor, 2001). However, less is known about the stability of perfectionism scores over time, which could affect the interpretation of these questions. Also, like the majority of research in achievement goal orientation, perfectionism, and honors programs, this study was limited in its external generalizability. Replicating this research from University A at University B, which is in a different region of the United States, helped to moderate this concern, but it is not possible to directly extend findings from this study to other contexts, such as smaller colleges, more elite universities, community colleges, or honors programs with different service models.
CHAPTER 4: FINDINGS

Research Question 1: Differences Among Groups

Are there differences in (a) achievement goal orientation, (b) perfectionism, and/or (c) prior experiences, after controlling for the effect of gender, among those students who entered a college honors program when they first enrolled (FA), those who were eligible to enter an honors program at that time and chose not to do so (yet still attended the same institution, FD), and those who applied for and entered an honors program after enrolling in college for at least one semester (LA)?

Table 4.1 summarizes the measures of achievement goal orientation and perfectionism by group, and Table 4.2 does the same for students’ past academic and nonacademic extracurricular experiences. The following sections include the results of the analyses for parts (a), (b), and (c), respectively.

Achievement Goal Orientation

A one-factor, between-subjects multivariate analysis of covariance (MANCOVA) was conducted using the MANOVA syntax in IBM SPSS Statistics version 21. The four subscales of the AGQ-R were entered as dependent variables, group as the independent factor with three levels (FA, FD, and LA), and gender as a covariate. Results of the MANCOVA were not statistically significant for group [Wilks’ $\Lambda = 0.99$, $F(8, 556) = 0.36$, $p = .941$]. The univariate models also were not significant, ranging from $F(3, 281) = 1.27$, $p = .286$ (mastery-avoidance) to $F(3, 281) = 0.49$, $p = .687$ (mastery-approach). The gender covariate was also not significant, but removing it did not affect the significance of any models.
Table 4.1
Achievement Goal Orientations and Perfectionism by Group

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery-approach</td>
<td>FA</td>
<td>264</td>
<td>4.35</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>16</td>
<td>4.42</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>4.22</td>
<td>0.66</td>
</tr>
<tr>
<td>Mastery-avoidance</td>
<td>FA</td>
<td>261</td>
<td>3.74</td>
<td>0.99</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>16</td>
<td>3.79</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>3.57</td>
<td>0.85</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>FA</td>
<td>264</td>
<td>4.30</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>16</td>
<td>4.44</td>
<td>0.55</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>4.18</td>
<td>0.92</td>
</tr>
<tr>
<td>Performance-avoidance</td>
<td>FA</td>
<td>263</td>
<td>3.99</td>
<td>1.11</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>16</td>
<td>4.13</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>3.76</td>
<td>0.96</td>
</tr>
<tr>
<td>SOP</td>
<td>FA</td>
<td>260</td>
<td>78.34</td>
<td>18.93</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>13</td>
<td>78.00</td>
<td>15.27</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>80.45</td>
<td>15.48</td>
</tr>
<tr>
<td>SPP</td>
<td>FA</td>
<td>260</td>
<td>55.84</td>
<td>19.84</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>13</td>
<td>63.92</td>
<td>19.71</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>53.00</td>
<td>19.03</td>
</tr>
<tr>
<td>OOP</td>
<td>FA</td>
<td>260</td>
<td>70.73</td>
<td>15.62</td>
</tr>
<tr>
<td></td>
<td>FD</td>
<td>13</td>
<td>69.35</td>
<td>19.83</td>
</tr>
<tr>
<td></td>
<td>LA</td>
<td>15</td>
<td>69.80</td>
<td>16.21</td>
</tr>
</tbody>
</table>
Table 4.2
*Academic and Nonacademic Extracurricular Experiences as Percentage of Group*

<table>
<thead>
<tr>
<th>Experience</th>
<th>FA</th>
<th>FD</th>
<th>LA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified GT in elementary</td>
<td>77.3%</td>
<td>82.4%</td>
<td>66.7%</td>
</tr>
<tr>
<td>GT program in elementary</td>
<td>65.5%</td>
<td>64.7%</td>
<td>40.0%</td>
</tr>
<tr>
<td>AP in high school</td>
<td>91.7%</td>
<td>88.2%</td>
<td>66.7%</td>
</tr>
<tr>
<td>IB in high school</td>
<td>3.4%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Honors classes in high school</td>
<td>91.7%</td>
<td>82.4%</td>
<td>73.3%</td>
</tr>
<tr>
<td>Public residential high school</td>
<td>16.7%</td>
<td>17.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>National Merit/Achievement</td>
<td>28.8%</td>
<td>17.6%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Job shadow or career experience</td>
<td>34.5%</td>
<td>35.3%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Internship</td>
<td>17.0%</td>
<td>11.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Mentorship</td>
<td>6.4%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Academic competition</td>
<td>61.4%</td>
<td>52.9%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Non-competitive academic org.</td>
<td>66.7%</td>
<td>58.8%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Honors society</td>
<td>88.3%</td>
<td>76.5%</td>
<td>73.3%</td>
</tr>
<tr>
<td>Residential academic summer program</td>
<td>9.8%</td>
<td>5.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Nonresidential academic summer program</td>
<td>8.7%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Music</td>
<td>59.8%</td>
<td>41.2%</td>
<td>53.3%</td>
</tr>
<tr>
<td>Performing arts, non-music</td>
<td>23.9%</td>
<td>23.5%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Visual arts</td>
<td>12.5%</td>
<td>5.9%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Athletics, Varsity/JV</td>
<td>58.3%</td>
<td>52.9%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Athletics, intramural</td>
<td>13.3%</td>
<td>5.9%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Athletics, non-school</td>
<td>43.9%</td>
<td>41.2%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Student government</td>
<td>27.7%</td>
<td>29.4%</td>
<td>40.0%</td>
</tr>
<tr>
<td>Community service</td>
<td>84.1%</td>
<td>88.2%</td>
<td>86.7%</td>
</tr>
<tr>
<td>Pre-professional org.</td>
<td>6.8%</td>
<td>5.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Political org.</td>
<td>11.0%</td>
<td>5.9%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Student media</td>
<td>23.9%</td>
<td>29.4%</td>
<td>13.3%</td>
</tr>
<tr>
<td>Military org.</td>
<td>1.1%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Summer job</td>
<td>61.7%</td>
<td>70.6%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Job during school year</td>
<td>41.3%</td>
<td>58.8%</td>
<td>46.7%</td>
</tr>
</tbody>
</table>
**Perfectionism**

A similar MANCOVA was conducted using the three perfectionism subscales (SOP, SPP, and OOP) as dependent variables, group as the independent factor, and gender as a covariate. The multivariate model was not statistically significant for group (Wilks’ $\Lambda = 0.99$, $F(6, 550) = 0.613, p = .720$), and the univariate models also were not significant, with values from $F(3, 281) = .93, p = .428$ (SPP) to $F(3, 281) = 0.34, p = .798$ (SOP). The gender covariate was also not significant, but removing it did not affect the significance of any models.

**Prior experiences**

The percentage of participants in each group reporting each of 29 academic or non-academic extracurricular experiences is summarized in Table 4.2. Of the 87 possible pairwise combinations, 18 differed by 15 or more percentage points and were selected for post-hoc chi-square analysis. These pairs and the results of this analysis are reported in Table 4.3. The largest pairwise difference was in the percentages of students in the FA and LA groups who had taken AP classes in high school. The other significant differences were also between the FA and LA groups: enrollment in honors classes in high school; participation in an academic competition; and participation in a gifted and talented program in elementary school. The required $p$-value to achieve a Bonferroni-adjusted group alpha of .05 was less than .001, so these results should be interpreted with care due to an inflated risk of Type I error.
The 29 experience variables were then collapsed into seven categories as shown in Table 3.9. For each category, two summary variables were computed: a summed score of all category experiences reported and a dichotomous indicator of whether at least one category experience was reported. The summed scores were analyzed through a series of one-way between-subjects ANOVAs with group as a three-level factor, while chi-square tests of proportions were used to analyze the dichotomous indicators. Both set of tests are summarized in Table 4.4. The only category demonstrating significant differences among groups was curriculum responses. Post hoc comparisons using the Tukey HSD test indicated that the mean summed score of curriculum

<table>
<thead>
<tr>
<th>Comparison</th>
<th>N</th>
<th>$\chi^2 (df=1)$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identified GT in elementary (FD - LA)</td>
<td>32</td>
<td>1.05</td>
<td>.306</td>
</tr>
<tr>
<td>GT program in elementary (FA - LA)</td>
<td>279</td>
<td>4.02</td>
<td>.045*</td>
</tr>
<tr>
<td>GT program in elementary (FD - LA)</td>
<td>32</td>
<td>1.95</td>
<td>.162</td>
</tr>
<tr>
<td>AP in high school (FA-LA)</td>
<td>279</td>
<td>10.15</td>
<td>.001**</td>
</tr>
<tr>
<td>AP in high school (FD-LA)</td>
<td>32</td>
<td>2.17</td>
<td>.141</td>
</tr>
<tr>
<td>Honors classes in high school (FA-LA)</td>
<td>279</td>
<td>5.65</td>
<td>.018*</td>
</tr>
<tr>
<td>Public residential high school (FA-LA)</td>
<td>279</td>
<td>2.97</td>
<td>.085</td>
</tr>
<tr>
<td>Public residential high school (FD-LA)</td>
<td>32</td>
<td>2.92</td>
<td>.087</td>
</tr>
<tr>
<td>National Merit/Achievement (FA-LA)</td>
<td>279</td>
<td>1.68</td>
<td>.195</td>
</tr>
<tr>
<td>Job shadow or career experience (FD-LA)</td>
<td>32</td>
<td>0.92</td>
<td>.337</td>
</tr>
<tr>
<td>Academic competition (FA-LA)</td>
<td>279</td>
<td>4.64</td>
<td>.031*</td>
</tr>
<tr>
<td>Academic competition (FD-LA)</td>
<td>32</td>
<td>1.25</td>
<td>.265</td>
</tr>
<tr>
<td>Honors Society (FA-LA)</td>
<td>279</td>
<td>2.88</td>
<td>.090</td>
</tr>
<tr>
<td>Music (FA-FD)</td>
<td>281</td>
<td>2.30</td>
<td>.130</td>
</tr>
<tr>
<td>Athletics, Varsity/JV (FA-LA)</td>
<td>279</td>
<td>1.95</td>
<td>.163</td>
</tr>
<tr>
<td>Athletics, non-school (FA-LA)</td>
<td>279</td>
<td>1.73</td>
<td>.189</td>
</tr>
<tr>
<td>Student media (FD-LA)</td>
<td>32</td>
<td>1.21</td>
<td>.272</td>
</tr>
<tr>
<td>Job during school year (FD-FA)</td>
<td>281</td>
<td>2.01</td>
<td>.156</td>
</tr>
</tbody>
</table>

* $p < .05$; ** $p < .01$. 

Table 4.3
Post-hoc Tests of Group Differences in Academic and Nonacademic Extracurricular Experiences
responses for the LA group \((M = 1.80, SD = 1.01)\) was significantly lower than the mean for the FD group \((M = 2.53, SD = 0.87, p = .036)\) and the FA group \((M = 2.69, SD = 0.81, p < .001)\).

The mean scores for FA and FD did not differ significantly. A series of three post hoc 2x2 chi-square tests were also conducted for the curriculum response indicator variable. The only significant difference was between the FA and LA groups \([\chi^2(1, N = 279) = 12.00, p = .001]\).

Table 4.4
Summary of Tests of Differences Among Groups (FA, FD, LA) in Categories of Prior Experiences

<table>
<thead>
<tr>
<th>Category</th>
<th>Dichotomous indicator (\chi^2(2, N = 296))</th>
<th>(p)</th>
<th>Summed scores (F(2, 293))</th>
<th>(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum Responses</td>
<td>13.03</td>
<td>.001†</td>
<td>8.32</td>
<td>.000†</td>
</tr>
<tr>
<td>Academic Recognition</td>
<td>3.33</td>
<td>.189</td>
<td>2.30</td>
<td>.102</td>
</tr>
<tr>
<td>Vocational or Mentorship</td>
<td>0.05</td>
<td>.975</td>
<td>0.12</td>
<td>.887</td>
</tr>
<tr>
<td>Academic Interest</td>
<td>0.41</td>
<td>.814</td>
<td>2.58</td>
<td>.077</td>
</tr>
<tr>
<td>Arts</td>
<td>0.16</td>
<td>.923</td>
<td>0.91</td>
<td>.402</td>
</tr>
<tr>
<td>Athletics</td>
<td>2.49</td>
<td>.288</td>
<td>1.16</td>
<td>.314</td>
</tr>
<tr>
<td>Other Interests</td>
<td>0.27</td>
<td>.875</td>
<td>0.09</td>
<td>.912</td>
</tr>
</tbody>
</table>

† \(p < .007\) (Bonferroni-adjusted group \(\alpha = .05\)).

Summary

No differences were found in achievement goal orientation or perfectionism, with or without controlling for the effect of gender, among students in the three groups. Some preliminary differences were found between the prior experiences of students in the LA group and students in the FA group. Students in the LA group were less likely than students in the FA group to have been exposed to curriculum responses like AP or honors classes in high school or gifted and talented programs in elementary school. There was also limited evidence that students in the LA group were less likely to have experienced curriculum responses than were students in the FD group, but there were no differences between the FA and FD groups.
Research Question 2: Differences Between Universities

Are there differences in achievement goal orientation and/or perfectionism, after controlling for the effect of gender, between college honors students enrolled in two different universities?

For this question, the FA and LA groups were combined into a single “honors” sample. Table 4.5 summarizes the measures of achievement goal orientation and perfectionism for honors students at each university. The following sections include the results of the analyses for achievement goal orientation and perfectionism, respectively.

Table 4.5
Honors Students’ Achievement Goal Orientations and Perfectionism by University

<table>
<thead>
<tr>
<th>Subscale</th>
<th>University</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mastery-approach</td>
<td>A</td>
<td>188</td>
<td>4.34</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>91</td>
<td>4.34</td>
<td>0.69</td>
</tr>
<tr>
<td>Mastery-avoidance</td>
<td>A</td>
<td>187</td>
<td>3.72</td>
<td>0.98</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>89</td>
<td>3.74</td>
<td>0.99</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>A</td>
<td>188</td>
<td>4.34</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>91</td>
<td>4.19</td>
<td>0.88</td>
</tr>
<tr>
<td>Performance-avoidance</td>
<td>A</td>
<td>188</td>
<td>4.02</td>
<td>1.11</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>90</td>
<td>3.89</td>
<td>1.09</td>
</tr>
<tr>
<td>SOP</td>
<td>A</td>
<td>187</td>
<td>80.46</td>
<td>17.36</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>88</td>
<td>74.20</td>
<td>20.87</td>
</tr>
<tr>
<td>SPP</td>
<td>A</td>
<td>187</td>
<td>57.45</td>
<td>19.27</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>88</td>
<td>51.92</td>
<td>20.40</td>
</tr>
<tr>
<td>OOP</td>
<td>A</td>
<td>187</td>
<td>73.14</td>
<td>14.37</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>88</td>
<td>65.46</td>
<td>16.92</td>
</tr>
</tbody>
</table>

Achievement Goal Orientation

As in the analysis for research question 1(a), a one-factor, between-subjects MANCOVA was conducted with the four subscales of the AGQ-R as dependent variables and gender as a
covariate. In this model, university was entered as the independent factor with two levels (A and B). The multivariate test for university was not statistically significant \([\text{Wilks’ } \Lambda = 0.99, F(4, 263) = 0.70, p = .595]\), nor were any of the univariate models, with values ranging from \(F(2, 266) = 2.05, p = .131\) (performance-approach) to \(F(2, 266) = 0.01, p = .990\) (mastery-approach). The gender covariate was also not significant for the multivariate test or any univariate test, but removing it did not affect the significance of any of the models.

**Perfectionism**

A similar MANCOVA to that used in the analysis for research question 1(b) was conducted to examine the effect of university on the three MPS subscales, with gender as a covariate. The multivariate test for university was highly significant \([\text{Wilks’ } \Lambda = 0.94, F(3, 263) = 5.44, p = .001]\), but the multivariate test for gender was not \([\text{Wilks’ } \Lambda = 0.99, F(3, 263) = 0.68, p = .565]\), so gender was removed from the model to facilitate further interpretation.

The effect of university on the multivariate model with gender removed remained highly significant \([\text{Wilks’ } \Lambda = 0.93, F(3, 271) = 6.47, p < .001]\). The unstandardized coefficients of the sole discriminant function for SOP, SPP, and OOP were 0.013, 0.016, and 0.052, respectively. Honors students at the two universities differed in response to a function of elevated scores on all three subscales. Following the recommendations of Grice and Iwasaki (2007), this discriminant function was simplified to a composite “Overall Perfectionism” score equal to the sum of SOP, SPP, and OOP. A follow up \(t\) test of independent sample means indicated that the mean overall perfectionism score was significantly higher \([t(273) = 3.95, p < .001]\) for honors students at University A \((n = 187, M = 211.05, SD = 36.87)\) than for honors students at University B \((n = 88, M = 191.57, SD = 40.76)\).
Summary

No differences were found in achievement goal orientation, with or without controlling for the effect of gender, between honors students at the two universities. Significant differences were found in honors students’ level of perfectionism, with honors students at University A demonstrating higher overall levels of perfectionism than those at University B.

Research Question 3: Achievement Goal Orientation, Perfectionism, and Prior Experiences

(a) What relationships may be observed among college honors students’ achievement goal orientations, perfectionism, and prior experiences? (b) Are those relationships consistent between two different universities?

Analyses for this question used the “honors” subsample defined for question 2, above, and the summed scores for prior experience categories defined as part of research question 1. As shown in Table 4.6, there were strong correlations between the subscales of the AGQ-R and the subscales of the MPS. Specifically, SOP was positively correlated with all four achievement goal orientations; SPP was positively correlated with mastery-avoidance, performance-approach, and performance-avoidance; and OOP was positively correlated with mastery-approach and performance-approach, albeit less strongly than SOP and SPP. The strong intercorrelations displayed by the subscales within each of these two measures were previously described. There also were several significant positive correlations among the categories of prior experience, with academic recognition related to curriculum response, academic interest, arts, and other interests; academic interest related to vocational/mentorship, arts, and other interests; and vocational/mentorship related to athletics and other interests. There were fewer relationships between experiences and either achievement goals or perfectionism. Mastery-approach demonstrated a weak positive relationship with academic interest, SOP a weak positive
relationship with academic recognition, and OOP a weak positive relationship with athletics and a strong positive relationship with other interests. The following sections include further exploration of each pairwise relationship (achievement goals and perfectionism; achievement goals and experiences; and perfectionism and experiences), followed by the inclusion of a university factor.
Table 4.6  
Correlations Among Honors Students’ Achievement Goal Orientations, Perfectionism, and Categories of Prior Experiences

<table>
<thead>
<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>12.</th>
<th>13.</th>
<th>14.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mastery-approach</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Mastery-avoidance</td>
<td>0.50**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. Performance-approach</td>
<td>0.20**</td>
<td>0.24**</td>
<td>1</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Performance-avoidance</td>
<td>0.07</td>
<td>0.45**</td>
<td>0.55**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. SOP</td>
<td>0.34**</td>
<td>0.22**</td>
<td>0.40**</td>
<td>0.22**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>6. SPP</td>
<td>0.07</td>
<td>0.19**</td>
<td>0.22**</td>
<td>0.30**</td>
<td>0.40**</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7. OOP</td>
<td>0.12*</td>
<td>0.12</td>
<td>0.13*</td>
<td>0.04</td>
<td>0.30**</td>
<td>0.12*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Curriculum Response</td>
<td>0.04</td>
<td>−0.01</td>
<td>0.06</td>
<td>−0.00</td>
<td>0.03</td>
<td>0.04</td>
<td>−0.02</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Academic Recognition</td>
<td>0.11</td>
<td>0.04</td>
<td>−0.04</td>
<td>−0.06</td>
<td>0.12*</td>
<td>0.07</td>
<td>0.06</td>
<td>0.39**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Vocational/Mentorship</td>
<td>0.03</td>
<td>−0.04</td>
<td>0.07</td>
<td>−0.06</td>
<td>0.06</td>
<td>0.09</td>
<td>0.03</td>
<td>0.04</td>
<td>0.03</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Academic Interest</td>
<td>0.13*</td>
<td>0.06</td>
<td>0.06</td>
<td>0.05</td>
<td>−0.04</td>
<td>0.02</td>
<td>0.09</td>
<td>0.11</td>
<td>0.16**</td>
<td>0.14*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Arts</td>
<td>−0.01</td>
<td>0.03</td>
<td>0.05</td>
<td>−0.01</td>
<td>0.04</td>
<td>0.06</td>
<td>0.05</td>
<td>0.01</td>
<td>0.19**</td>
<td>0.06</td>
<td>0.18**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Athletics</td>
<td>−0.02</td>
<td>−0.10</td>
<td>0.09</td>
<td>−0.03</td>
<td>0.07</td>
<td>−0.01</td>
<td>0.13*</td>
<td>0.05</td>
<td>−0.01</td>
<td>0.25**</td>
<td>−0.03</td>
<td>−0.08</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>14. Other Interest</td>
<td>0.09</td>
<td>−0.01</td>
<td>0.08</td>
<td>−0.05</td>
<td>0.06</td>
<td>0.06</td>
<td>0.17**</td>
<td>0.06</td>
<td>0.18**</td>
<td>0.25**</td>
<td>0.21**</td>
<td>0.10</td>
<td>0.10</td>
<td>1</td>
</tr>
</tbody>
</table>

* $p < 0.05$; ** $p < 0.01$.  

82
Achievement Goal Orientations and Perfectionism

A canonical correlation analysis was performed to determine the linear relationships among the subscales of the AGQ-R and MPS. Three canonical variates were computed, and the standardized canonical coefficients and correlations of each subscale with each variate are shown in Table 4.7. The entire model was significant \[ \text{Wilks' } \Lambda = 0.71, F(12, 70) = 7.97, p < .001 \], as were the first two canonical variates. The first canonical variate was associated positively with both mastery-approach and performance approach goals and with SOP, and it explained a total of 50% of the shared variance in AGQ-R scores and 52% of the shared variance in MPS scores. The coefficients were simplified in a manner similar to that used for question 2(b), and the sum of the approach orientations was found to be significantly positively correlated with SOP \[ r(273) = 0.48, p < .001 \]. The second canonical variate was associated positively with mastery-approach and performance-approach goals and with SOP, and it was associated negatively with mastery-avoidance and performance-avoidance goals and SPP. It explained a total of 32% of the shared variance in AGQ-R and 29% in MPS. Using the simplified coefficients resulted in a significant positive correlation between a variable representing the difference between the sum of the approach orientations and the sum of the avoidance orientations and a variable consisting of the difference between SOP and SPP \[ r(271) = 0.23, p < .001 \]. The third canonical variate was eliminated from further analysis due to its lack of statistical significance and very low canonical correlation.

Achievement Goal Orientations and Prior Experiences

The relationship between achievement goal orientation and prior experiences was first explored through a multivariate general linear model (GLM). The dependent variables were the four subscales of the AGQ-R, and the 29 individual experiences (see Table 4.2) were entered as
covariates. There were no fixed factors, and the model was constrained to main effects only. With all 29 covariates included in the model, no multivariate effects were significant, and only six univariate effects reached a .05 level of significance: attending a public residential high school was associated with mastery-approach \( [F(1, 262) = 3.97, p < .05] \); being a National Merit or National Achievement semifinalist or finalist was associated with performance-approach \( [F(1, 262) = 4.74, p = .030] \); varsity or junior varsity athletics were associated with performance-approach \( [F(1, 262) = 5.75, p = .017] \); holding a job during the summer was associated with both performance-approach \( [F(1, 262) = 6.70, p = .010] \) and performance-avoidance \( [F(1, 262) = 5.36, p = .021] \); and having a job during the school year was associated with performance-approach \( [F(1, 262) = 5.06, p = .025] \).

Table 4.7

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Canonical variates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>AGQ-R Mastery-approach</td>
<td>0.56</td>
</tr>
<tr>
<td>Mastery-avoidance</td>
<td>−0.00</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>0.72</td>
</tr>
<tr>
<td>Performance-avoidance</td>
<td>0.02</td>
</tr>
<tr>
<td>Explained variance</td>
<td>40.0%</td>
</tr>
<tr>
<td>Redundancy</td>
<td>10.0%</td>
</tr>
<tr>
<td>MPS SOP</td>
<td>0.98</td>
</tr>
<tr>
<td>SPP</td>
<td>0.02</td>
</tr>
<tr>
<td>OOP Explained variance</td>
<td>0.03</td>
</tr>
<tr>
<td>Redundancy</td>
<td>42.9%</td>
</tr>
<tr>
<td>Canonical correlation</td>
<td>9.4%</td>
</tr>
</tbody>
</table>

**Note.** Coefficients are standardized.
A simplified multivariate GLM consisting of only those five covariates resulted in the varsity or junior varsity athletics covariate demonstrating a significant multivariate effect [Wilks’ \( \Lambda = 0.96, F(4, 283) = 2.62, p = .036 \)]. The univariate effect previously found for attending a public residential high school was no longer significant, but the five other univariate effects remained. Follow up analyses were then conducted to isolate the significant multivariate and univariate effects for further interpretation.

The first of these analyses was another multivariate GLM of achievement goal orientation with varsity or junior varsity athletics as the sole covariate. Once again, this covariate achieved multivariate significance [Wilks’ \( \Lambda = 0.97, F(4, 287) = 2.50, p = .043 \)]. The discriminant function coefficients for mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance were 1.32, \(-0.15, 0.42, \) and 0.26, respectively. This function was simplified to a sum of both performance orientations with mastery-approach, minus mastery-avoidance; this new variable was significantly correlated with the varsity or junior varsity athletics variable \( r(290) = 0.14, p = .017 \).

The remaining follow-up analyses consisted of bivariate correlations corresponding to the univariate effects previously identified. Holding a summer job was not significantly correlated with either performance-avoidance \( r(292) = -0.10, p = .083 \) or performance-approach \( r(293) = -0.06, p = .295 \) goals. Holding a job during the school year was also not significantly correlated with performance-approach goals \( r(293) = 0.09, p = .130 \), but being a National Merit or National Achievement semifinalist or finalist was \( r(293) = -0.12, p = .037 \).

**Perfectionism and Prior Experiences**

Another series of multivariate GLMs was used to explore the relationship between perfectionism and prior experiences. As in the analysis of achievement goal orientation and
experiences, the first multivariate GLM included the main effects of all 29 individual experiences as covariates and no fixed factors. The three subscales of the MPS were the dependent variables. With all 29 covariates included in the model, two covariates demonstrated significant multivariate effects: taking AP classes in high school [Wilks’ \( \Lambda = 0.96, F(3, 256) = 3.67, p = .013 \)] and athletics not sponsored by a school [Wilks’ \( \Lambda = 0.96, F(3, 256) = 3.51, p = .016 \)]. The same two covariates also had the only significant univariate effects, both with OOP [\( F(1, 258) = 10.92, p = .001; F(1, 258) = 9.42, p = .002 \)].

Two separate multivariate GLMs were conducted, each of which facilitated the interpretation of the relationship between perfectionism and one of the two significant prior experiences. When the variable indicating whether a student had taken AP classes was the only covariate, its multivariate effect remained significant [Wilks’ \( \Lambda = 0.97, F(3, 284) = 2.87, p = .037 \)]. The standardized discriminant function coefficients for SOP, SPP, and OOP were 0.25, \(-0.17\), and \(-1.03\), respectively, which simplified to the equation \( \text{SOP} - \text{SPP} - \text{OOP} \). The variable corresponding to that simplified function (which may be considered a measure of elevated SOP and lower SPP and OOP) was significantly positively correlated with the variable representing AP classes [\( r(286) = 0.12, p = .045 \)].

In the follow-up GLM associated with athletics not supported by a school, the multivariate tests for this covariate were no longer significant [Wilks’ \( \Lambda = 0.98, F(3, 284) = 2.36, p = .072 \)]. However, the univariate effect for non-school athletics and OOP was significant [\( F(1, 286) = 8.20 , p = .004 \)], and the two were also significantly correlated [\( r(286) = 0.15, p = .011 \)].
University Differences in Achievement Goal Orientations and Perfectionism

To assess the extent to which the university honors students attended affected the relationship between achievement goal orientation and perfectionism, the canonical correlation between the subscales of the AGQ-R and the MPS was repeated, with a variable representing university added to the MPS. The university variable was included with MPS due to the relationship between the two and the lack of relationship between university and achievement goals, both of which were discovered during the analysis for research question 2. The addition of university caused four canonical variates to be computed, the standardized canonical coefficients and correlations of which are shown in Table 4.8. The entire model was significant [Wilks’ $\Lambda = 0.71$, $F(16, 81) = 6.01, p < .001$], as were the first two canonical variates. The first two canonical variates were also very similar to those found in the previous canonical correlation. The first was associated with both approach goal orientations and with SOP, and it explained a total of 48% of the shared variance in AGQ-R scores and 42% of the shared variance in MPS scores and university. The second variate was associated positively with both approach orientations and with SOP and was associated negatively with both avoidance orientations and SPP. This variate explained a total of 28% of the shared variance in AGQ-R and 32% of the shared variance in MPS and university. The simplified coefficients of the first two variates were identical to those found in the initial canonical correlation between achievement goal orientation and perfectionism, and there was very little change in the standardized coefficients, both of which indicated that this relationship had not been changed significantly by the inclusion of university. Because the third and fourth canonical variates were not significant and had very low canonical correlations, they were not considered further.
Table 4.8
 Canonical Correlations Between the Subscales of the AGQ-R and the MPS, with University

<table>
<thead>
<tr>
<th></th>
<th>AGQ-R</th>
<th>MPS + university</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Canonical variates</td>
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</tr>
<tr>
<td></td>
<td>1</td>
<td>r</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGQ-R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastery-approach</td>
<td>0.56</td>
<td>0.70</td>
</tr>
<tr>
<td>Mastery-avoidance</td>
<td>-0.00</td>
<td>0.46</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>0.71</td>
<td>0.83</td>
</tr>
<tr>
<td>Performance-avoidance</td>
<td>0.02</td>
<td>0.45</td>
</tr>
<tr>
<td>Explained variance</td>
<td>40.1%</td>
<td>27.0%</td>
</tr>
<tr>
<td>Redundancy</td>
<td>7.6%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

*Note.* Coefficients are standardized.

**University Differences in Achievement Goal Orientation and Prior Experiences**

To investigate the question of whether the relationship between achievement goal orientation and prior experience differed between universities, the researcher repeated the previously computed multivariate general linear model of individual experiences on the subscales of the AGQ-R with the addition of university as a fixed factor. The university variable was coded such that University A was the baseline value. Two-way interactions between university and each experience were also included in the model. With the fixed factor, 29 covariates, and 29 interaction terms included in the model, four multivariate effects were significant: university [Wilks’ $\Lambda = 0.88$, $F(4, 230) = 7.59$, $p < .001$], taking AP classes in high
school [Wilks’ Λ = 0.93, F(4, 230) = 4.10, p = .003], the interaction between university and AP classes [Wilks’ Λ = .93, F(4, 230) = 4.11, p = .003], and the interaction between university and participating in an academic competition [Wilks’ Λ = .96, F(4, 230) = 2.72, p = .030]. In addition to the terms demonstrating multivariate significance, eight terms exhibited significant univariate relationships with at least one AGQ-R subscale; all significant univariate relationships are shown in Table 4.9.

The next stage of analysis consisted of a reduced multivariate GLM on achievement goal orientation. In addition to a university factor, the model included all nine covariates that showed significant multivariate or univariate main effects or interactions with university. Two-way interactions between university and each of the covariates were also included. In this reduced model, the multivariate effects of university [Wilks’ Λ = 0.89, F(4, 269) = 814, p < .001], taking AP classes in high school [Wilks’ Λ = 0.90, F(4, 269) = 7.58, p < .001], the interaction between university and AP classes [Wilks’ Λ = 0.88, F(4, 269) = 8.89, p < .001], and the interaction between university and participating in an academic competition [Wilks’ Λ = 0.95, F(4, 269) = 3.90, p = .004] remained significant, and the interaction of university and participating in student media gained multivariate significance [Wilks’ Λ = 0.96, F(4, 269) = 2.56, p = .039]. Most of the significant univariate effects from the full model remained significant, and four additional univariate effects became significant (see Table 4.9). Holding a summer job was the only covariate that was eliminated at this stage of the analysis.
Table 4.9
*Significant Univariate Effects From Multivariate General Linear Model of University and Prior Experiences on Achievement Goal Orientations*

<table>
<thead>
<tr>
<th>Independent Effect</th>
<th>Dependent Variable</th>
<th>$F(1, 233)$</th>
<th>$p$</th>
<th>$F(1, 272)$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>Mastery-approach</td>
<td>26.89</td>
<td>.000</td>
<td>31.04</td>
<td>.000</td>
</tr>
<tr>
<td>University</td>
<td>Mastery-avoidance</td>
<td>6.86</td>
<td>.009</td>
<td>8.36</td>
<td>.004</td>
</tr>
<tr>
<td>University</td>
<td>Performance-approach</td>
<td>4.40</td>
<td>.037</td>
<td>4.05</td>
<td>.045</td>
</tr>
<tr>
<td>University</td>
<td>Performance-avoidance</td>
<td>4.26</td>
<td>.040</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AP classes</td>
<td>Mastery-approach</td>
<td>14.32</td>
<td>.000</td>
<td>28.12</td>
<td>.000</td>
</tr>
<tr>
<td>AP classes</td>
<td>Mastery-avoidance</td>
<td>6.94</td>
<td>.009</td>
<td>8.83</td>
<td>.003</td>
</tr>
<tr>
<td>AP classes</td>
<td>Performance-approach</td>
<td>-</td>
<td>-</td>
<td>5.58</td>
<td>.019</td>
</tr>
<tr>
<td>National Merit</td>
<td>Performance-approach</td>
<td>4.89</td>
<td>.028</td>
<td>6.48</td>
<td>.011</td>
</tr>
<tr>
<td>Student media</td>
<td>Mastery-avoidance</td>
<td>5.73</td>
<td>.018</td>
<td>5.00</td>
<td>.026</td>
</tr>
<tr>
<td>Student media</td>
<td>Performance-avoidance</td>
<td>4.65</td>
<td>.032</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Summer job</td>
<td>Performance-approach</td>
<td>4.07</td>
<td>.045</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Summer job</td>
<td>Performance-avoidance</td>
<td>4.23</td>
<td>.041</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Univ. * AP classes</td>
<td>Mastery-approach</td>
<td>14.37</td>
<td>.000</td>
<td>32.36</td>
<td>.000</td>
</tr>
<tr>
<td>Univ. * AP classes</td>
<td>Mastery-avoidance</td>
<td>7.27</td>
<td>.008</td>
<td>13.23</td>
<td>.000</td>
</tr>
<tr>
<td>Univ. * AP classes</td>
<td>Performance-approach</td>
<td>-</td>
<td>-</td>
<td>6.02</td>
<td>.015</td>
</tr>
<tr>
<td>Univ. * Career</td>
<td>Mastery-avoidance</td>
<td>5.75</td>
<td>.017</td>
<td>5.82</td>
<td>.016</td>
</tr>
<tr>
<td>Univ. * Mentorship</td>
<td>Mastery-approach</td>
<td>7.19</td>
<td>.008</td>
<td>7.57</td>
<td>.006</td>
</tr>
<tr>
<td>Univ. * Acad. comp.</td>
<td>Performance-avoidance</td>
<td>-</td>
<td>-</td>
<td>6.16</td>
<td>.014</td>
</tr>
<tr>
<td>Univ. * Varsity/JV athletics</td>
<td>Mastery-avoidance</td>
<td>6.03</td>
<td>.015</td>
<td>4.32</td>
<td>.039</td>
</tr>
<tr>
<td>Univ. * Student gov.</td>
<td>Performance-avoidance</td>
<td>4.25</td>
<td>.040</td>
<td>5.19</td>
<td>.024</td>
</tr>
<tr>
<td>Univ. * Student media</td>
<td>Performance-approach</td>
<td>-</td>
<td>-</td>
<td>5.15</td>
<td>.024</td>
</tr>
<tr>
<td>Univ. * Student media</td>
<td>Performance-avoidance</td>
<td>7.06</td>
<td>.008</td>
<td>9.44</td>
<td>.002</td>
</tr>
</tbody>
</table>

To aid in interpretation, the researcher isolated the effects of the remaining eight covariates when combined with university in follow up analyses. Individual multivariate GLMs were computed for AP classes, academic competitions, and student media. Each multivariate
GLM also included university and an interaction term. Of the three models, only the one for AP classes was significant [Wilks’ $\Lambda = 0.87$, $F(12, 754.3) = 3.28, p < .001$], and it had a single significant discriminant function. The coefficients for mastery-approach, mastery-avoidance, performance-approach, and performance-avoidance (1.55, −0.07, 0.12, and 0.11) reduced to a single term for mastery-approach. Reducing the coefficients for university, AP classes, and the interaction (−12.28, −0.59, and 12.62) indicated that being an honors student at University B who had not taken AP classes was associated with lower scores for mastery-approach goal orientations.

The multivariate GLM on achievement goal orientation with university, participating in an academic competition, and their interaction was not significant [Wilks’ $\Lambda = 0.93$, $F(12, 754.3) = 1.69, p = .064$]. Their univariate effect on mastery-avoidance was significant [$F(2.5, 0.9) = 2.73, p = .044$], so a univariate linear regression model was computed on that goal orientation. All regression models reported in this section were designed to answer the question of whether university and the specific experience were related to a specific achievement goal orientation, not whether the level of that orientation could be predicted accurately using the resulting equation. For that reason, reporting and interpretation will focus on the significance of coefficients rather than the overall model. For this model, the coefficients for university ($\beta = 0.42, t(288) = 2.26, p = .025$), academic competition ($\beta = 0.32, t(288) = 2.29, p = .02$), and the interaction term ($\beta = -0.67, t(288) = -2.71, p = .007$) indicate that participating in academic competitions was associated with higher levels of mastery-avoidance goals at University A and lower levels at University B.

The multivariate GLM with university, participating in student media, and their interaction also was not significant [Wilks’ $\Lambda = 0.95$, $F(12, 754.3) = 1.24, p = .250$]. However,
the univariate effect on performance-avoidance goals was significant \[ F(1.8, 0.7) = 2.53, p = .057 \], so a linear regression model was computed. In that model, the coefficients for the main effects of university \[ \beta = 0.10, t(290) = 0.68, p = .497 \] and student media \[ \beta = 0.19, t(290) = 1.07, p = .288 \] were not significant, but the coefficient for the interaction term was \[ \beta = -1.06, t(290) = -3.20, p = .002 \]. Being a student at University B who had participated in student media was associated with lower performance-avoidance scores.

The univariate relationships identified for the remaining six covariates were also evaluated through linear regression models. In the model regressing job shadowing or other career experiences, university, and their interaction against mastery-avoidance goals, the coefficient of university was not significant \[ \beta = -0.17, t(288) = -1.10, p = .274 \], but the coefficients of job shadowing \[ \beta = -0.31, t(288) = -2.15, p = .033 \] and their interaction \[ \beta = 0.57, t(288) = 2.25, p = .025 \] were. At University A, career experiences were associated with lower levels of mastery-avoidance goals, while similar experiences at University B were associated with higher levels.

The main effect of university also had an insignificant coefficient \[ \beta = 0.06, t(291) = 0.70, p = .487 \] in the model regressing university and whether a student had an assigned mentor on mastery-approach goals. However, the coefficients for mentorship \[ \beta = 0.30, t(291) = 1.70, p = .090 \] and the interaction term \[ \beta = -1.01, t(291) = -2.46, p = .015 \] were significant. At University A, having a mentor was associated with higher mastery-approach goals, but it was associated with lower mastery-approach goals at University B.

There were three additional univariate effects that had been significant in the reduced GLM: National Merit/Achievement semifinalist or finalist on performance-approach goals; varsity or junior varsity athletics on mastery-avoidance goals; and student government on
performance-avoidance goals. Each of these univariate effects was tested in an individual linear regression model that also included university and an interaction term, and in each case all three coefficients were insignificant.

**University Differences in Perfectionism and Prior Experiences**

A similar process was used to explore the effect of university on the relationship between perfectionism and prior experience. The initial multivariate GLM had the three subscales of the MPS as independent variables, university as a fixed factor, all 29 experiences as covariates, and all two-way interactions that consisted of university and an experience. Seven terms demonstrated multivariate significance: university [Wilks’ $\Lambda = 0.96$, $F(3, 227) = 2.93$, $p = .035$]; AP classes in high school [Wilks’ $\Lambda = .91$, $F(3, 227) = 7.34$, $p < .001$]; visual arts [Wilks’ $\Lambda = .97$, $F(3, 227) = 2.76$, $p = .043$]; the interaction between university and participating in a gifted program in elementary school [Wilks’ $\Lambda = .95$, $F(3, 227) = 3.87$, $p = .010$]; the interaction between university and AP classes [Wilks’ $\Lambda = .94$, $F(3, 227) = 4.50$, $p = .004$]; the interaction between university and academic competition [Wilks’ $\Lambda = .96$, $F(3, 227) = 3.52$, $p = .016$]; and the interaction between university and pre-professional organization [Wilks’ $\Lambda = .96$, $F(3, 227) = 3.20$, $p = .024$]. There were also 12 significant univariate effects (Table 4.10).

The terms that were involved in significant multivariate or univariate effects were retained for the reduced model on MPS. This model included the university factor, 10 experiences as covariates, and 10 two-way interaction terms, each consisting of university and an experience. Six of the significant multivariate effects from the full model remained significant: university [Wilks’ $\Lambda = 0.95$, $F(3, 264) = 4.37$, $p = .005$]; AP classes in high school [Wilks’ $\Lambda = .93$, $F(3, 264) = 6.90$, $p < .001$]; the interaction between university and participating in a gifted program in elementary school [Wilks’ $\Lambda = .96$, $F(3, 264) = 4.10$, $p = .007$]; the interaction
between university and AP classes [Wilks’ $\Lambda = .95, F(3, 264) = 4.41, p = .005$]; the interaction between university and academic competition [Wilks’ $\Lambda = .96, F(3, 264) = 3.99, p = .008$]; and the interaction between university and pre-professional organization [Wilks’ $\Lambda = .97, F(3, 264) = 2.80, p = .041$]. The multivariate main effect of having an internship also became significant [Wilks’ $\Lambda = .97, F(3, 264) = 3.13, p = .026$]. Table 4.10 details the 11 significant univariate effects for this model. As a result of this model, three more variables were removed from further analysis: taking International Baccalaureate classes in high school, attending a residential academic summer program, and the visual arts.

Table 4.10
Significant Univariate Effects From Multivariate General Linear Model of University and Prior Experiences on Perfectionism

<table>
<thead>
<tr>
<th>Independent effect</th>
<th>Dependent var.</th>
<th>GLM 1: 29 covariates</th>
<th>GLM 2: 10 covariates</th>
</tr>
</thead>
<tbody>
<tr>
<td>University</td>
<td>OOP</td>
<td>-</td>
<td>6.23</td>
</tr>
<tr>
<td>AP classes</td>
<td>OOP</td>
<td>18.94</td>
<td>14.44</td>
</tr>
<tr>
<td>IB classes</td>
<td>SOP</td>
<td>3.89</td>
<td>-</td>
</tr>
<tr>
<td>Internship</td>
<td>SOP</td>
<td>-</td>
<td>4.09</td>
</tr>
<tr>
<td>Internship</td>
<td>SPP</td>
<td>-</td>
<td>4.13</td>
</tr>
<tr>
<td>Internship</td>
<td>OOP</td>
<td>3.89</td>
<td>5.60</td>
</tr>
<tr>
<td>Acad. competition</td>
<td>SOP</td>
<td>6.14</td>
<td>-</td>
</tr>
<tr>
<td>Acad. summer program, residential</td>
<td>OOP</td>
<td>4.75</td>
<td>-</td>
</tr>
<tr>
<td>Athletics, non-school</td>
<td>OOP</td>
<td>5.08</td>
<td>6.12</td>
</tr>
<tr>
<td>Univ. * GT program</td>
<td>SPP</td>
<td>5.65</td>
<td>5.56</td>
</tr>
<tr>
<td>Univ. * AP classes</td>
<td>OOP</td>
<td>10.14</td>
<td>6.43</td>
</tr>
<tr>
<td>Univ. * Public residential HS</td>
<td>SPP</td>
<td>5.12</td>
<td>5.73</td>
</tr>
<tr>
<td>Univ. * Acad. competition</td>
<td>SOP</td>
<td>6.47</td>
<td>-</td>
</tr>
<tr>
<td>Univ. * Acad. competition</td>
<td>OOP</td>
<td>7.06</td>
<td>10.77</td>
</tr>
<tr>
<td>Univ. * Pre-professional org.</td>
<td>OOP</td>
<td>9.46</td>
<td>8.34</td>
</tr>
</tbody>
</table>
The specific effects of the remaining seven covariates were investigated through a series of analyses. When an experience had been included in a term (either main effect or interaction) with a significant multivariate effect, the follow up analysis began with a multivariate GLM with only that experience, university, and an interaction term as independent variables. When the experience had only been involved in a significant univariate effect, the follow up analysis consisted of a linear regression model of experience, university, and their interaction on the perfectionism subscales.

The first follow up multivariate model concerned AP classes in high school. The overall model was significant [Wilks’ $\Lambda = 0.90, F(9, 686.5) = 3.54, p < .001$]. The first discriminant function consisted of coefficients $-0.000, 0.012,$ and $0.062$ for SOP, SPP, and OOP and coefficients $3.253, -1.311,$ and $-4.890$ for university, AP classes, and the interaction term. It had a canonical correlation of $0.272$, and it explained a total of $41\%$ of the common variance of the MPS and $60\%$ of the common variance of the independent variables. Simplifying this function results in the following statement: $OOP = (1)\text{university} + (-1)\text{AP classes} + (-1)\text{interaction}$. Taking AP classes was associated with lower OOP, and students at University B who did not take AP classes had higher OOP scores. The second function, which had a canonical correlation of $.181$, explained $41\%$ of the common variance of MPS and $17\%$ of the common variation of the dependent variables. The coefficients for SOP, SPP, and OOP ($-0.042, -0.022,$ and $0.022$) simplified to a function consisting of OOP minus both SOP and SPP, and the coefficients for university, AP classes, and their interaction ($11.046, -0.020, -10.078$) simplify to university minus the interaction term. Students at University B who had not experienced AP classes tended to have higher OOP scores and lower SPP and SOP scores.
The multivariate GLM of university, whether a student had completed an internship, and their interaction on MPS scores was significant [Wilks’ \( \Lambda = 0.91, F(9, 686.5) = 2.87, p = .002 \)]. The only significant discriminant function had SOP, SPP, and OOP coefficients of 0.018, 0.023, and 0.038, which simplified to an overall perfectionism score, and university, internship, and interaction coefficients of 1.699, 1.703, and 0.601. The model explained 53\% of the common variance in MPS subscales and 36\% of the common variance in the independent variables.

Simplifying the second half of the model led to a function represented as internship minus both university and the interaction effect. Students at University B demonstrated lower overall perfectionism scores, and students at University A who had completed internships were likely to have higher overall perfectionism.

The next multivariate GLM included participation in a gifted program in elementary school, university, and their interaction. The overall model was significant [Wilks’ \( \Lambda = 0.91, F(9, 686.5) = 3.09, p = .001 \)], as were two discriminant functions. The first function’s coefficients for the dependent variables (0.015, 0.015, and 0.047) simplified to the same overall perfectionism score as was found in the previous analysis. The coefficients for university (−2.215), gifted program (0.449) and the interaction (0.498) led to a simplified structure that consisted of gifted programming minus university plus the interaction term. This indicated that overall perfectionism was elevated when the student had been in a gifted program. Also, students who had not been in a gifted program and were enrolled at University B tended to have lower levels of overall perfectionism. The first discriminant function explained 51\% of the shared variance in MPS scores and 46\% of the shared variance in the independent variables. The second function explained 22\% of the shared variance in MPS and 17\% in the independent variables. The coefficients for MPS (−0.041, 0.051, −0.002) simplified to a factor that consisted of the
difference between SPP and SOP. Simplifying the independent variable coefficients (2.281, 1.539, −4.399) resulted in a factor defined by the sum of university and whether the student was in a gifted program minus their interaction. Students at University A who were not in a gifted program had lower SPP, higher SOP, or both.

The multivariate GLM of university, participation in an academic competition, and their interaction on MPS scores was significant [Wilks’ Λ = 0.92, F(9, 686.5) = 2.77, p = .003]. The only significant discriminant function had SOP, SPP, and OOP coefficients of 0.007, 0.017, and 0.053, respectively, which simplified to an overall perfectionism score. The second half of the model consisted of university, academic competition, and their interaction, with coefficients of −0.524, 1.061, and −2.220, respectively. Simplifying this portion of the model led to a function represented as academic competition minus both university and the interaction effect. Students at university B demonstrated lower overall perfectionism scores, and students at University A who had participated in academic competitions were likely to have higher overall perfectionism. The model explained 49% of the common variance in MPS subscales and 51% of the common variance in the independent variables.

The final follow up multivariate model explored the effect of pre-professional organizations. The overall model was significant [Wilks’ Λ = 0.92, F(9, 686.5) = 2.55, p = .007]. The first discriminant function consisted of coefficients 0.008, 0.024, and 0.046 for SOP, SPP, and OOP and coefficients −1.725, 2.013, and −2.934 for university, pre-professional organizations, and the interaction term. It explained a total of 50% of the common variance of the MPS and 37% of the common variance of the independent variables. Simplifying this function results in the following statement: overall perfectionism = (−1)university + (1)pre-professional organization + (−1)interaction. University B had lower overall perfectionism scores
than University A, and students at University A who had participated in pre-professional organizations tended to have higher overall perfectionism scores.

The univariate relationships identified for the remaining two covariates were evaluated through linear regression models. In the model regressing athletics not sponsored by a school, university, and their interaction against OOP, the coefficient of interaction was not significant \( \beta = 0.561, t(284) = 0.141, p = .888 \). However, the coefficients of university \( \beta = -6.915, t(284) = -2.71, p = .007 \) and non-school athletics \( \beta = 4.446, t(284) = 2.01, p = .045 \) were. University A had higher levels of OOP than University B, and students who participated in non-school athletics had higher levels of OOP than students who did not.

The final univariate model was for the effect of public residential high school, university, and their interaction on SPP. Neither the main effect for public residential high school \( \beta = -3.591, t(284) = -0.905, p = .366 \) nor its interaction with university \( \beta = 11.133, t(284) = 1.72, p = .087 \) had significant coefficients in the model regressing university and public residential high school on SPP. The coefficient for university \( \beta = -7.716, t(284) = -2.82, p = .005 \) was significant, but this does not give any additional information on the relationship between residential high schools and SPP.

**Summary**

Significant relationships were found between honors students’ achievement goal orientations and perfectionism. Specifically, approach goal orientations were positively related to SOP, and the combination of high approach orientations with low avoidance orientations was positively related to high levels of SOP and low levels of SPP. These relationships were consistent between the two universities.
Several prior experiences showed significant relationships with achievement goal orientations. Varsity and junior varsity athletes were more likely than other students to have higher levels of both performance goals and of mastery-approach goals and lower levels of mastery-avoidance goals. On the other hand, being a National Merit or National Achievement semifinalist or finalist was associated with a lower level of performance-approach goals. The relationships between achievement goal orientations and prior experiences were not consistent between universities. Mastery-approach goals were positively related to having a mentor at University A but negatively related both to having a mentor and to not taking AP classes at University B. Honors students who had participated in academic competitions had higher levels of mastery-avoidance goals at University A but lower levels at University B. Similarly, job shadowing or similar career experiences were related to higher levels of mastery-avoidance at University B and lower levels at University A. Finally, honors students at University B who had participated in student media had lower levels of performance-avoidance goals than other honors students.

Perfectionism was also significantly related to prior experiences. Honors students who had participated in athletics outside of school had higher levels of OOP than those who had not, and this was consistent between universities. Honors students who had taken AP classes in high school had higher levels of SOP and lower levels of SPP and OOP than students who had not. However, students at University B who had not taken AP classes had higher OOP and lower SPP and SOP than other students, an interaction that changed the direction of the effect of SPP. The univariate relationship between AP classes and lower OOP was particularly strong across both universities. As found in the analysis for the previous question, honors students at University A demonstrated significantly higher total perfectionism than honors students at University B. This
effect was particularly pronounced in those honors students at University A who had completed internships, participated in academic competitions, or joined pre-professional organizations. Finally, there was an interaction between university and participation in a gifted program in elementary school upon perfectionism. Overall, participation in a gifted program was associated with higher levels of perfectionism, and students at University B who were not in gifted programs demonstrated lower levels of perfectionism. However, students at University A who were not in gifted programs demonstrated higher levels of SOP and lower levels of SPP.

Research Question 4: Self-Reported Motivating Factors

(a) What reasons do honors-eligible students give for their choice to participate or not to participate in an honors program? (b) Do those reasons differ between two universities?

Each part of this research question was investigated both quantitatively and qualitatively. The quantitative analyses were based upon participants’ responses to a multiple-choice question asking for all of the reasons that they joined (FA and LA groups) or did not join (FD groups) college honors. These responses are summarized in Tables 4.11 and 4.12. Overall, honors students reported being most influenced by priority registration, smaller classes, prestige, honors housing, scholarship opportunities, more interesting classes, improved chances of getting a job, and increased academic challenge. They were least influenced by friends joining, service learning, undergraduate research, and study abroad. Based on chi-square comparisons, only six reasons showed significant differences between universities: parental expectations $[\chi^2(1, N = 279) = 3.88, p = .049]$; smaller classes $[\chi^2(1, N = 279) = 4.47, p = .035]$; having a small community within a large university $[\chi^2(1, N = 279) = 5.31, p = .021]$; study abroad $[\chi^2(1, N = 279) = 6.87, p = .009]$; priority registration $[\chi^2(1, N = 279) = 10.28, p = .001]$; and more interesting classes $[\chi^2(1, N = 279) = 39.09, p < .001]$. Of those, only the final two were
significant at a Bonferroni-corrected level of .0025. Non-honors students reported being influenced by concerns that honors classes would be more difficult, that honors would take time away from other activities, and that they did not want to jeopardize their GPAs. They were least influenced by parents telling them not to join and by incompatibilities with their majors. Based on chi-square comparisons, only the desire to not live in honors housing showed a significant difference between universities $[\chi^2(1, N = 17) = 7.97, p = .009]$, but it fell short of the Bonferroni-corrected significance level of .0045.

The qualitative analysis was based upon participants’ responses to a single open-ended question that asked why they had joined (FA and LA groups) or had not joined (FD groups) college honors. These questions were answered by 227 honors students (150 from University A and 77 from University B) and 13 non-honors students (10 from University A and 3 from University B). All responses were in vivo coded as described in Chapter 3, and those codes were iteratively recoded and analyzed for recurring themes. Where appropriate, the results of the qualitative analysis were compared with participants’ responses to the multiple-choice questions reported above. The codebook, including code definitions, representative quotes, and overarching themes, is included in Appendix F. Four major themes emerged from students’ responses: unexamined decisions, benefits of honors, opportunities presented by honors, and social/emotional components. Each of these themes, with the exception of unexamined benefits, contained three to four subthemes. The influence of others emerged as a minor theme that interacted with the four major themes. The following sections examine each theme in turn, including differences between honors students and non-honors gifted students and differences between students at the two universities.
### Table 4.11

*Reasons for Joining Honors by University*

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total</th>
<th>Univ. A</th>
<th>Univ. B</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(N = 279)</td>
<td>(n = 188)</td>
<td>(n = 91)</td>
<td></td>
</tr>
<tr>
<td>Increased academic challenge</td>
<td>70.6%</td>
<td>72.3%</td>
<td>67.0%</td>
<td>.362</td>
</tr>
<tr>
<td>Smaller classes</td>
<td>84.6%</td>
<td>87.8%</td>
<td>78.0%</td>
<td>.035*</td>
</tr>
<tr>
<td>More interesting classes</td>
<td>72.4%</td>
<td>84.0%</td>
<td>48.4%</td>
<td>.000†</td>
</tr>
<tr>
<td>Honors housing</td>
<td>73.5%</td>
<td>75.5%</td>
<td>69.2%</td>
<td>.264</td>
</tr>
<tr>
<td>Priority registration</td>
<td>88.9%</td>
<td>93.1%</td>
<td>80.2%</td>
<td>.001†</td>
</tr>
<tr>
<td>Prestige</td>
<td>82.1%</td>
<td>82.4%</td>
<td>81.3%</td>
<td>.818</td>
</tr>
<tr>
<td>Small community</td>
<td>59.5%</td>
<td>54.8%</td>
<td>69.2%</td>
<td>.021*</td>
</tr>
<tr>
<td>Improve graduate / professional school app.</td>
<td>57.3%</td>
<td>57.4%</td>
<td>57.1%</td>
<td>.962</td>
</tr>
<tr>
<td>Improve chances of job</td>
<td>71.7%</td>
<td>71.8%</td>
<td>71.4%</td>
<td>.947</td>
</tr>
<tr>
<td>Friends joining</td>
<td>16.5%</td>
<td>18.1%</td>
<td>13.2%</td>
<td>.301</td>
</tr>
<tr>
<td>Parents encouraged</td>
<td>52.0%</td>
<td>51.1%</td>
<td>53.8%</td>
<td>.663</td>
</tr>
<tr>
<td>Parents expected</td>
<td>48.0%</td>
<td>52.1%</td>
<td>39.6%</td>
<td>.049*</td>
</tr>
<tr>
<td>Wanted to be around similar students</td>
<td>67.4%</td>
<td>69.7%</td>
<td>62.6%</td>
<td>.239</td>
</tr>
<tr>
<td>Undergraduate research</td>
<td>34.4%</td>
<td>33.0%</td>
<td>37.4%</td>
<td>.470</td>
</tr>
<tr>
<td>Study abroad</td>
<td>37.3%</td>
<td>42.6%</td>
<td>26.4%</td>
<td>.009**</td>
</tr>
<tr>
<td>Leadership opportunities</td>
<td>40.1%</td>
<td>41.5%</td>
<td>37.4%</td>
<td>.510</td>
</tr>
<tr>
<td>Service learning opportunities</td>
<td>27.6%</td>
<td>30.3%</td>
<td>22.0%</td>
<td>.144</td>
</tr>
<tr>
<td>Scholarship opportunities</td>
<td>72.8%</td>
<td>76.1%</td>
<td>65.9%</td>
<td>.075</td>
</tr>
<tr>
<td>Afraid would regret not joining</td>
<td>42.7%</td>
<td>39.4%</td>
<td>49.5%</td>
<td>.110</td>
</tr>
<tr>
<td>Continuation of high school advanced classes</td>
<td>57.3%</td>
<td>60.6%</td>
<td>50.5%</td>
<td>.110</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01; † p < .0025 (Bonferroni-adjusted group α = .05).
Table 4.12
 Reasons for Not Joining Honors by University

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total (N = 17)</th>
<th>Univ A (n = 12)</th>
<th>Univ. B (n = 5)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honors classes would be more difficult</td>
<td>76.5%</td>
<td>66.7%</td>
<td>100.0%</td>
<td>.261</td>
</tr>
<tr>
<td>Did not want Honors housing</td>
<td>47.1%</td>
<td>25.0%</td>
<td>100.0%</td>
<td>.009**</td>
</tr>
<tr>
<td>Would take time away from other activities</td>
<td>76.5%</td>
<td>75.0%</td>
<td>80.0%</td>
<td>1.000</td>
</tr>
<tr>
<td>Did not want to jeopardize GPA</td>
<td>76.5%</td>
<td>83.3%</td>
<td>60.0%</td>
<td>.538</td>
</tr>
<tr>
<td>Friends not joining</td>
<td>11.8%</td>
<td>16.7%</td>
<td>0.0%</td>
<td>1.000</td>
</tr>
<tr>
<td>Parents said not to</td>
<td>5.9%</td>
<td>8.3%</td>
<td>0.0%</td>
<td>1.000</td>
</tr>
<tr>
<td>Did not like Honors students</td>
<td>11.8%</td>
<td>8.3%</td>
<td>20.0%</td>
<td>.515</td>
</tr>
<tr>
<td>Not interested in research</td>
<td>23.5%</td>
<td>16.7%</td>
<td>40.0%</td>
<td>.538</td>
</tr>
<tr>
<td>Not compatible with major</td>
<td>5.9%</td>
<td>8.3%</td>
<td>0.0%</td>
<td>1.000</td>
</tr>
<tr>
<td>Rather graduate early</td>
<td>23.5%</td>
<td>33.3%</td>
<td>0.0%</td>
<td>.261</td>
</tr>
<tr>
<td>Did not know about it</td>
<td>17.6%</td>
<td>25.0%</td>
<td>0.0%</td>
<td>.515</td>
</tr>
</tbody>
</table>

** p < .01.

Theme 1: Unexamined Choices

The theme of unexamined choices encompassed student responses that described their choice as a type of default behavior. Some of these responses also included aspects of the other themes, but they all indicated that the opposite course of action was never a real consideration. This took three basic forms and was largely dependent on the characteristics of the honors question at hand. Most obviously, two students at University A explained that they had not known that they could have joined honors:

I was not aware that Honors College even existed until after I had already signed up for classes for the first freshman semester. (White female junior, 20 years old)

Didn’t even know I qualified. (Female freshman, 18 years old)
This was not an issue at University B, as all students who were accepted into the honors program were contacted directly, and the three non-honors students who responded to this question gave detailed rationales for their decisions.

At University B, the default behavior was defined by automatically accepting the invitation into honors. Over one-quarter of honors respondents at University B indicated that they had joined because they were accepted.

I was offered so I figured why not. (Male junior, 20 years old)

Because I was accepted into it. (White female freshman, 18 years old)

I didn’t really have a reason. It said I was accepted to the honors program so I said sure. (White female sophomore, 19 years old)

At University A, default behavior was exhibited by honors students who applied for and entered the honors program primarily because they met the requirements or were automatically accepted. They may also have stated that there was no reason not to join.

On a base level, I joined the Honors Program because I met the qualifications for applying. (Female freshman, 19 years old)

I was automatically admitted because I was accepted to the University as a National Merit Finalist. (White female freshman, 18 years old)

If I am able to get into an honors program, I see no reason to turn it down. (White female junior, 19 years old)

It seemed silly not to join Honors. (White female junior, 20 years old)

Some honors students at University A (and one at University B) also indicated that their choices were based on being admitted and on a recognition of their ability to succeed in honors. These responses did not imply that students had completed thorough analyses of program
requirements or their own abilities, nor did these students consider not joining honors. Thus, 
acknowledgement of one’s ability to succeed in honors was included within the theme of 
unexamined choices as an extension of joining because one met the standards for admission. 

It seemed possible to maintain standards set by honors college. (White female freshman, 
18 years old, University A) 
Honors requirements are fairly easy to fulfill. (White male sophomore, 19 years old, 
University A) 

Finally, a few students at University A indicated that they had joined the honors program to 
fulfill the requirements of another program or scholarship. 
My scholarship required that I maintain membership in the Honors College. (White male 
in third year of college, 21 years old) 
I decided to join honors because I was accepted into [another program]. . . . You are 
required to be an honors student to get in. (White female sophomore, 19 years old) 

The theme of unexamined choices was not identified among any students in the LA group 
at University B, and only one student in the LA group at University A cited meeting the basic 
requirements as a reason to join honors late: 

I had the GPA for it my sophomore year. (White female junior, 20 years old) 

Overall, slightly more than one-fifth of responding honors students indicated that they 
had never considered not joining their honors programs. Most of these students also included 
reasons that fit into one of the following themes, but they likely were not weighed against 
potential reasons not to join.
Theme 2: Benefits Provided to Honors Students

The second theme emphasized the benefits that participants perceived as being available to honors students by virtue of joining the program. This was a broad theme, with benefits including tangible “perks,” the prestige of honors, and economic considerations.

I decided to join honors mainly due to the fact that there are quite a few benefits. The big ones for me were scholarships and it will hopefully look great on a resume when I apply for a job after graduation. (White male sophomore, 18 years old, University A)

I heard that it was a prestigious program that would provide me with benefits, both monetary and priority based. (White female junior, 20 years old, University B)

And let’s admit, scholarship money, Honors housing and priority registration doesn’t hurt either. (White male freshman, 18 years old, University A)

In addition to being listed as benefits by respondents, the unifying feature of all codes in this theme is that they were discussed as if they were given to students by the honors program. Although some of the codes within this theme (e.g., an honors degree) would require that the student fulfill obligations or meet certain standards, that was not reflected in student responses.

This theme was the most popular of the four major themes among honors students at University A, with slightly fewer than three-fourths of respondents citing benefits to joining, and second most popular at University B, where just over half of the honors students cited benefits. The following sections consider the subthemes of perks, prestige, and economics, followed by a discussion of how the benefits of honors were viewed by students in the FD groups.

“Perks.” Several honors students at both universities used the term “perks” to refer to the tangible benefits of an honors program.
I enjoy the “perks” of being in the honors college—priority registration for classes, extra seminars, smaller classes, and priority housing on campus. (White female freshman, 18 years old, University A)

Priority registration is a significant perk. (White male sophomore, 19 years old, University A)

Mostly for the perks—smaller classes, better pick times for classes and housing, etc. (Asian female freshman, 18 years old, University B)

As demonstrated in the above statements, two of the most popular perks were *priority or early registration* for classes (called pick times at University B) and *honors housing*, both of which also ranked highly in the quantitative analysis for this research question. As was found in that analysis, priority registration was named more often by honors students at University A; just over 30% of honors students at University A cited registration time as a reason they joined honors, compared to 6% of honors students at University B. As one of the few students who elaborated upon the importance of priority registration said, “Even though I am only a freshman, I have already registered before the vast majority of the upperclassmen. This helped to assure that I got into all the classes I wanted” (First semester student, University A).

Honors housing was also named by more honors students at University A (21%) than at University B (16%), but as was found in the quantitative analysis for this question, the difference was fairly small. Again, most students citing housing as a reason to join honors did not elaborate. When they did elaborate, students at each university referenced the fact that they got “priority registration” (or “better pick times”) for housing and referred to “better housing” and “nicer dorms.” A few discussed the atmosphere within honors housing as “more relaxed” or “quieter.”
There is some overlap between honors housing and the social/emotional components of the honors decision, which is discussed further in the section devoted to that theme.

Honors students, particularly those at University A, described access to honors classes as a benefit. Some students did not elaborate upon why honors classes were desirable, but others included additional details:

Instead of having to sit through massive lectures that might as well be held [in the football stadium] I was told that I’d be able to register for smaller honors classes with quality faculty. (White male sophomore, 19 years old, University A)

Not only does Honors College allow you to take specialized (and considerably more interesting) classes, it also offers lower student: teacher ratio. (Black female junior, 19 years old, University A)

Mostly because of the small class sizes, and the fact that I can take graduate courses as an undergrad. (White male freshman, 18 years old, University B)

It offers a different learning environment that would be geared toward discussion and active participation in my learning, as well as smaller classes. (White female junior, 19 years old, University A)

The most common characterization of honors classes at both universities was that they were smaller. As was the case in the quantitative analysis, smaller classes were named by a slightly larger proportion of honors students at University A (18%) than at University B (14%). Several honors students at University A also described honors courses as being interesting, a characterization that was not found among the responses from honors students at University B. Again, the quantitative analysis for this question found a large between-university difference in students who cited more interesting classes as a reason they joined honors. As demonstrated in
the statements above, other aspects of honors classes that students favored included different (i.e., non-lecture) *class formats* and the *high quality of faculty*.

Finally, some students highlighted their access to *additional resources*, including *individual attention* from faculty inside and outside of class.

Smaller classes with more individualized attention. (White female sophomore, 19 years old, University A)

A strong assistance program in helping me succeed here at the University. (Hispanic female junior, 20 years old, University A)

[Honors] advisors seemed more helpful and caring. (Asian female junior, 19 years old, University B)

It’s far easier to deal with the systems in place when you have people who actually know you and are willing to help. It’s easier to go to [the Honors offices] and ask somebody for help than try to get anything done another way. (White female sophomore, 19 years old, University A)

Honors students considered priority registration, honors housing, honors classes, and additional resources to be “perks” of joining the honors program. All of these were tangible, unlike the benefits associated with the prestige of being in honors.

**Prestige.** Honors students from both universities discussed the *prestige* of the honors program as a benefit that was conferred upon those who joined it.

It gave me many benefits, such as housing, class registration priority, and a prestigious organization to be a part of. (White male freshman, 18 years old, University A)

I decided to join the honors program because I heard how esteemed it was. It would be a big deal if I were in it. (White female freshman, 18 years old, University A)
It distinguishes someone to be in Honors. (White male senior, 21 years old, University B)

While the quantitative analysis showed no difference in the proportion of students at each university who joined honors based in part on prestige, more students at University A (33%) than at University B (16%) volunteered statements related to this theme. In the statements above, prestige was defined in absolute terms (“a prestigious organization”). Other students indicated their desires to stand out from other students at their universities:

I wanted something on my diploma and resume that helped me stand out. (White male junior, 19, University A)

I wanted something to set me at least somewhat apart from other attendees of [University A] upon graduation. (White male senior, 19 years old, University A)

I wanted to be considered an above average student. (White female senior, 20 years old, University A)

Other students highlighted the distinction of graduating with Honors without defining it explicitly as a way to separate themselves from their peers:

There is, of course, the bonus of graduating with Honors, which cannot be done without being in Honors College. (Female freshman, 19 years old, University A)

I also wanted to be recognized as graduating with honors. (Hispanic female senior, 20 years old, University A)

I decided to join Honors because of the distinction upon graduation. (Hispanic male junior, 20 years old, University B)

For a few students, the prestige of the honors program was necessary to compensate for the university’s lack of prestige.
To make my degree from [University A] seem more respectable. (White female junior, 20 years old, University A)

I attend a public university that is not ranked in the top 50; thus, being part of the honors program is a resume booster in terms of my education. (White female junior, 20 years old, University A)

I had the option of going to a highly respected private college, but I chose to attend a state school instead. Graduating with an Honors Degree looks much better. (White female junior, 19 years old, University A)

Because I didn’t think a [University B] degree would be impressive on its own. (White female junior, 19 years old, University B)

Among those who referenced the benefit of prestige, the idea that honors “looks good” on transcripts, diplomas, or applications was very popular. This was included as a benefit of honors when the conferred prestige was viewed as a consequence or logical outcome of joining honors, not as a result of additional effort or the completion of honors requirements.

It looks good on graduate school applications. (White female freshman, 18 years old, University B)

I also think it will be a strong addition to my resume. (White female sophomore, 18 years old, University A)

I decided to join the Honors College because it will look good on my transcripts and diploma. (White male sophomore, 19 years old, University A)

I decided to join Honors because it looks good on medical school applications. (White female junior, 19 years old, University B)
Being in the Honors program is a prestigious honor; it will look very good on a resume.

(White female freshman, 18 years old, University B)

I figured that Vet school would more readily accept someone who graduated with honors.

(White male junior, 20 years old, University B)

Even though any advantages related to prestige were often theoretical or in the future, many honors students listed it alongside the more tangible “perks” as a benefit of joining honors programs. The final subtheme, economic benefits, has both an immediately tangible aspect (scholarships) and a more intangible one (cost and value of education).

**Economic benefits.** There were two distinct types of economic benefits that students referenced as influencing their decision to join honors. At both universities, some students indicated that they had received scholarships as part of joining honors, while others noted that scholarships were available for honors students.

Money, money, money...money (Senior, 20 years old, University B)

There are also many benefits that come along with being in the Honors Program such as priority parking and registration as well as scholarship money. (White female sophomore, 20, University A)

I joined Honors because of a variety of reasons including scholarship money. (White female junior, 19, University A)

There are many scholarships available to honors students. (White female sophomore, 19 years old, University A)

Gave me a large scholarship. (White male junior, 20 years old, University B)

The accompanying scholarship was quite persuasive. (Sophomore, 18 years old, University B)
Scholarships were often listed along with other tangible benefits and “perks” of honors programs. Some honors students at University B also cited a separate economic benefit that was more closely related to the relative prestige of the program and the university. These students discussed the relative *educational value and cost* of honors at University B.

I was given a $3000 scholarship and was an instate student. Coming to [University B] as an honors student was really an amazing economic deal. (White female senior, 20 years old, University B)

It seemed like the best education for the price it was offered at. (White male senior, 20 years old, University B)

I could get a richer academic experience than the usual state college student, but wouldn’t be paying the tuition of a private college. (Female junior, 20 years old, University B)

These were similar to the statements of honors students at University A who were compensating for the university’s lack of prestige. However, those students focused on the level of respect that would be given to a degree from University A, and they did not refer to monetary cost. The students from University B highlighted the level of education they would receive in honors to make comparisons with more expensive institutions.

The overall theme of the benefits of honors and the three subthemes, “perks,” prestige, and economic benefits, were all defined based upon the words and perceptions of honors students at the two universities. The final section of this theme describes how these benefits were perceived by those respondents who had not joined honors.

**As viewed by non-honors gifted students.** As noted earlier, 13 students from the two FD groups (10 from University A and 3 from University B) responded to the open-ended question of why they had chosen not to join honors. Of those, two from University A indicated
that they had not known that they could have joined, leaving 11 students who described their reasons.

Simply put, I did not feel that any rewards would be worth the effort. (White male freshman, 19 years old, University A)

I did not feel the special classes and benefits were worth the extra work that it would take from me. (White male freshmen, 18 years old, University A)

I did not feel that the benefits outweighed the “paperwork” so to speak. (White female junior, 20 years old, University A)

Whereas honors students described everything in this section as benefits of being in honors, students who chose not to enter honors described some as benefits and some as drawbacks. For example, priority registration was seen as useful but not necessary:

The only benefit I would have needed would be the early registration, but with engineering classes, they don’t fill up too quickly. (White male freshman, 19 years old, University A)

I didn’t understand what housing/class selection times were, and how important it is to have an early one. (White female junior, 20 years old, University B)

One student at University A indicated that he lived off-campus and so he “did not need Honors housing.” In contrast, all three responding students from University B included the perceived requirement that they live in the honors community as a reason that they chose not to join:

I also wanted to live in the pre-pharmacy learning community as compared to the Honors housing. (White female sophomore, 18 years old, University B)
I wanted to live in the Pre-Pharmacy learning community, and I did not want to live in the honors dorm. (White female sophomore, 19 years old, University B)

My perception of the program was that it was a bunch of “nerds” living together in the crappiest building on campus . . . eating at the crappiest dining hall all the time. I really wanted to live in the pre-pharmacy learning community as well, so just the fact that I thought it was MANDATORY that you live in [honors housing] put me off from the get go. (White female junior, 20 years old, University B)

This was also reflected in the quantitative analysis, which indicated that every FD respondent from University B reported not wanting to live in honors housing, compared to 25% of the FD respondents at University A.

Finally, some students who did not join honors considered honors classes to be a hassle and the honors degree to be unnecessary. In some cases they were seen as distractions from success within the student’s chosen major.

Being in [communications], there were few Honors classes that were offered . . . I did not see the point in taking Honors English or Honors electives just to have “Honors College” on my diploma. . . . I haven’t had the headache of having to fit random Honors classes into my schedule. (White female junior, 20 years old, University A)

I decided not to join Honors because I do not have the time to schedule myself for Honors course. (White male junior, 19 years old, University A)

While it was a privilege to be invited to join the program . . . my number one priority now is to be accepted to the School of Pharmacy, and honors classes and an honors thesis didn’t seem to be in the picture for me. (White female sophomore, 18 years old, University B)
Thus, while honors students were often motivated by a variety of factors that they perceived as benefits for joining their honors programs, other students viewed the same factors as less important or even negative. This difference was equally stark for the next theme, which highlighted the opportunities honors students perceived as being available because of their participation.

**Theme 3: Opportunities Offered by Honors**

The third theme represented the *opportunities* that honors students perceived college honors as offering to them.

The Honors Program offered so many different opportunities for me to grow both academically and personally. I knew I wanted to be challenged during my undergraduate career but also wanted to participate in many different activities, so Honors was the perfect combination of the two. *(White male junior, 20 years old, University A)*

Unlike the benefits of the second theme, opportunities would only provide advantages if honors students chose to pursue them. Just under 60% of honors students at each university made statements that fit this theme, making it the most common theme at University B and the second most common theme at University A.

I wanted to have more of [a] challenge because high school was often boring and monotonous for me. I wanted more opportunities for leadership that were closed to me during high school. I wanted to make sure I was on track for my chosen professional career and took as many opportunities as possible to prepare for this. . . . I have a deep, abiding love of learning. *(Freshman, 18 years old, University A)*

At the core of the theme of opportunities was the desire for challenging academic work. Challenging academics were related to increased opportunities for learning as well as personal
and academic growth. Many honors students expressed the need to maximize their college experiences both in and out of the classroom, rejecting external limits on their growth and achievement. In turn, these experiences would “open doors” to other opportunities, including post-secondary education and career advancement.

I felt that the more challenging classes would allow me to gain the most from my college education experience and better prepare me for further educational opportunities. (White female sophomore, 19 years old, University A)

Students in the gifted non-honors group did not view honors as providing them these opportunities. Instead of characterizing classes as “challenging,” students in the FD group described them as “difficult” or “harder.” Honors classes were described as requiring more work with little or no benefit. Some non-honors students had also found other ways of accessing opportunities that they did value, such as undergraduate research.

**Challenge.** The desire for additional academic challenge was by far the largest subtheme within the opportunities theme.

I wanted to be challenged. I wanted college to be an intellectually stimulating experience. (White female sophomore, 18 years old, University A)

This was mirrored in the quantitative analysis, which found that a large majority of honors students at both universities joined honors in part for increased challenge. In the open-ended responses, over one-quarter of honors students at each university volunteered challenge as part of their reason for joining honors. In some cases, the source and type of challenge was vague:

I wanted the challenge. (Black female sophomore, 20 years old, University A)

I wanted to be challenged. (White female senior, 20 years old, University A)

Other responses clarified that the challenge should be academic in nature:
I thought honors would be a more academically challenging college experience. (Female junior, 19 years old, University B)

I enjoyed the idea of an extra challenge in my academic pursuits. (Male senior, 20 years old, University B)

And still others located the challenge within honors classes or curricula:

I also wanted to be able to take interesting and challenging classes. (White female freshman, 19 years old, University A)

I decided to join the Honors College because I wanted a challenge in my college curriculum. (Hispanic female senior, 20 years old, University A)

I also wanted more challenging coursework. (Asian female freshman, 18 years old, University B)

A few people did mention the related construct of academic rigor. Rigor was categorized as a type of academic challenge, regardless of whether the respondent described the courses as providing a challenge.

I was looking for more academic rigor in a school that is notoriously sports oriented. (White female sophomore, 18 years old, University A)

I wanted a rigorous undergraduate career that would be both fulfilling and challenging. More intense classes sounded like fun. (White female junior, 19 years old, University B)

I wanted a way to have the academic rigor that I was looking for while still attending a large school that has a nutrition major. (White female junior, 18 years old, University B)

Finally, some students connected their desire for increased challenge with the goal to fulfill their potential.
I also do not believe that all open-level classes challenge me to reach my potential. I wanted some stimulation from honors courses. (White female sophomore, 19 years old, University A)

I wanted to be truly challenged in college and fulfill my potential as best I could. (White male senior, 21 years old, University A)

This perception that honors could provide opportunities for personal growth is discussed in further detail in the next section.

**Growth and development.** Some honors students, especially at University A, described increased academic challenge as a vehicle for growth and development.

I felt that in the long run it would benefit me more to be a part of something that requires me to hold myself to a high standard along with giving me a chance to challenge myself. (White female freshman, 18 years old, University A)

Responses varied in the amount of detail given. Several responses referred to opportunities for personal development, including general personal improvement goals as well as work habits.

I try not to pass up opportunities to better myself. (White male junior, 20 years old, University A)

I felt that the increased challenge of obtaining an honors degree could only benefit me. (White male freshman, 19 years old, University A)

I wanted to add something to my experience here to make me perform better. (White male freshman, 18 years old, University A)

I hope it will push me to work harder. (White female freshman, 18 years old, University A)
I need to be challenged in order to do my best. It gives me a goal to aim for. (White female freshman, 18 years old, University B)

Other responses were more specifically oriented toward students’ *academic development*.

It presented the best opportunities for my academic development. (White male junior, 20 years old, University A)

I decided to join Honors because I knew I would get more out of the classes than I would regular college classes. (White female sophomore, 19 years old, University A)

The [University B] Honors program was enticing in very large part due to the senior Thesis and honors research opportunities. Being a science student, conducting research is entertaining and academically invigorating. (White male sophomore, 18 years old, University B)

I think conducting my own study will be a worthwhile and rewarding (though probably exhausting) experience. (White female junior, 20 years old, University B)

Many students described honors programs as offering more opportunities for *learning*. This included learning “more” or at a “higher level” as well as learning broadly, across academic disciplines. The specific inclusion of learning was much more common at University A than at University B, where only one student used the term.

I joined Honors because it would challenge me and help me learn material at a higher level. (Female freshman, 18 years old, University A)

I always take classes fairly seriously, and I want the opportunity to learn well and fully. Honors courses are more likely to teach me better. (White male sophomore, 18 years old, University A)

Broader learning opportunities. (Black freshman, 18 years old, University A)
Opportunities for learning interesting ideas outside my major. (White male junior, 20 years old, University A)

I saw the ability to take Honors classes, to get a much better understanding of the material, and I was all in. (White male senior, 21 years old, University A)

I decided to join Honors for the opportunities it made available to me, the scholarship and the higher level of learning. (White female freshman, 18 years old, University B)

Some responses that referenced honors contributing to students’ growth and development indicated that such development would help students maximize their college education or experience:

I see college as a personal investment rather than an economic one, and therefore I’m trying to take every enrichment opportunity made available to me. Honors seemed like a natural program to let that goal manifest, but also an integral part of following through on that goal. (Male senior, 20 years old, University B)

This concept of maximization is explored further in the next section.

**Maximization.** The desire “to get the most out of” college appeared in several statements related to the maximization of students’ college careers. This concept arose primarily from statements that included maximizing language:

I wanted to get the absolute most out of my college experience. (White male sophomore, 19 years old, University A)

I decided to join Honors because it allows me to take full advantage of my time here. (Hispanic male junior, 18 years old, University B)
I expected that I would have special opportunities to work with professors to create the strongest possible body of work that I can in my four years. (White male sophomore, 19 years old, University B)

The Honors College also provides me with the best education possible. (White female sophomore, 19 years old, University A)

I wanted to get the most out of my education. (White male junior, 20 years old, University B)

Other statements did not explicitly include maximizing language, but emphasized the entire college experience as opposed to simply academics. As part of the college experience, students expected additional opportunities to learn and to be involved outside of the classroom.

You get privileges/opportunities that other non-honors students don’t get, like . . . programs designed to enrich your college experience. (White female junior, 19 years old, University B)

I strive to enjoy my enriching experience at college. Being successful extends beyond the classroom and I feel the Honors program here at [University B] understands that. (Hispanic male junior, 19 years old, University B)

The Honors College also provides many opportunities to get involved and benefit from your college experience more. (White female junior, 19 years old, University A)

I was hoping to branch out with college and be open to new experiences. (White female junior, 21 years old, University A)

I decided to join Honors because it is an opportunity to excel even further in college both academically and socially. (White female freshman, 18 years old, University A)
Statements in this subtheme that did focus on academics discussed the *quality of education*, separate from the effects of that education on the students’ own growth or development. Some students particularly appreciated opportunities to *conduct undergraduate research* or *study abroad*.

**Higher quality of education.** (White female freshman, 18 years old, University A)

There are also more options in research and study abroad. (White female sophomore, 19 years old, University A)

Provides a more in-depth education through extra assignments, more challenging courses, and honors discussions. (White female freshman, 18 years old, University B)

Opportunities for internships, study abroad, and scholarships that normal students are not offered, giving me experiences that they might not have upon graduation. (White female freshman, 18 years old, University B)

**“Opening doors.”** The final subtheme incorporated several types of opportunities that honors students perceived themselves as having as a direct result of their honors participation. They considered honors as *opening doors* that otherwise would have been closed to them.

I joined Honors because I felt it would open more doors for me. (White male freshman, 18 years old, University A)

The opportunities that the Honors College will open for me will be abundant. (White male junior, 19 years old, University A)

In some cases, those opportunities were not described beyond being exclusive to honors students.

I felt that there were more opportunities that came along with being in the honors college. (White female freshman, 19 years old, University A)
The Honors Program offers opportunities that other students don’t always have easy access to. (White female senior, 18 years old, University A)

I knew that it would give me the connections and provide me with the opportunities that I wanted to have during my college experience. (White female sophomore, 19 years old, University A)

I decided to join honors because I believed that it would provide me with more opportunities than the average [University B] student gets. (Black female sophomore, 19 years old, University B)

Other anticipated opportunities directly connected students’ expectations for honors with their future careers, including graduate or professional school. These statements were distinguishable from those that said honors would “look good” in the future. Most importantly, they did not reference prestige or how an honors degree would be perceived by others. Some also gave additional details about how honors would be beneficial.

Because I thought it would further my career goals. (White female senior, 20 years old, University A)

I felt graduating with Honors would better prepare me for a career and give me opportunities to gain work experience before graduating. (White female sophomore, 19 years old, University A)

I am planning on attending law school, and the relationship between the Honors College and the law school was appealing to me. (White male sophomore, 20 years old, University A)

What drew me most to it by far was the opportunity to do research and publish an undergraduate thesis; I plan on attending graduate school, and research and field
experience is a huge component in my career path. (Female junior, 20 years old, University B)

As illustrated in the following statement, some of these expectations included an emotional component such as confidence.

I want to practice writing a thesis paper as an undergraduate so that I have a better understanding of the process and expectations in graduate school. The research experience and thesis advisor relationship with a current faculty member in my field is an invaluable experience. Also, the requirement to take a graduate level class further prepares me for the demands of graduate level work. I will feel like a more competent candidate and student in graduate courses having a background in Honors from my undergraduate studies. (Junior, 20 years old, University B)

The social and emotional components of the honors decision were included within final major theme arising from student responses, discussed in a future section.

As viewed by non-honors. While students who chose to join honors often expected their programs to provide them with opportunities to challenge themselves, grow, learn, and enhance their college experiences, other students did not. Most importantly, students in the FD groups described honors classes as being “more difficult,” requiring “more work,” and potentially “jeopardizing” their GPAs.

There is a lot more work involved. (White male freshman, 19 years old, University A)

I assumed it would involve taking more difficult courses than most people, and I wasn’t sure how I would do in regular college courses, much less Honors courses. (White female sophomore, 19 years old, University A)
I also thought that all of your classes were honors, thus they were going to be impossible. (White female junior, 20 years old, University B)

My biggest concern was the difficulty of the classes. . . . I did not want to have to worry about jeopardizing my math/science GPA and creating a difficult workload for myself, especially for my freshman year. (White female sophomore, 18 years old, University B)

I knew that my classes would be very difficult as is, and I did not want to make my difficult classes even more difficult. . . . In order to be a competitive applicant for Pharmacy school, I would need to have a high GPA to be considered, and I felt as though Honors classes would make having a competitive GPA more difficult. (White female sophomore, 19 years old, University B)

This was also reflected in the quantitative analysis, which found that a large majority of FD respondents at both universities were concerned that honors classes would be more difficult and jeopardize their GPAs. As the previous student response indicated, students also did not view honors as providing additional opportunities for career advancement or educational enrichment.

I don’t see the point of getting an Honors degree for [aerospace engineering]. Besides I already have several undergraduate research offers. (White male junior, 19 years old, University A)

Some students who declined to enroll in honors were concerned that it would take time away from other activities, a concern that had also been reflected in the quantitative analysis.

I promised myself that I would let myself have fun in college and try not to be so stressed out all the time. (White female sophomore, 19 years old, University A)
I chose not to join Honors in favor of joining [another program on campus]. (White female freshman, 18 years old, University A) [Editorial note: it is possible to enroll in both programs.]

I wanted to enjoy college, not spend all my time . . . studying. (White female junior, 20 years old, University B)

The analysis of the previous theme revealed that non-honors students did not perceive honors programs as providing the same benefits as honors students did. The same was true for opportunities. Honors was seen as potentially blocking some opportunities and as unimportant to others, and students believed that they could maximize their own experiences and development by not joining.

I knew that, no matter whether I was in the program or not, I would still push myself to be successful and to do the best that I possibly can in my classes. (White female sophomore, 18 years old, University B)

Theme 4: Social and Emotional Components of Honors

A large minority (about 40%) of honors students at each university cited the social and emotional components of college honors as reasons why they had joined the programs.

I entertained the dream of a community of scholars, who derive their pleasure from sharing collective knowledge, rather than four forgettable years of pre-professional preparation spent buried in redundant assignments and transient weekend thrills. I believed, and have been happy to find, that Honors not only encourages our academic passions, it cultivates them with all the resources at its disposal, and then brags about you. That respect, tantamount to vindication after the “nerd” labels of small-town society, is all the peace of mind I can ask for. A community of peers who esteem worthy your
pursuits, your goals, and your hobbies, is truly a home. (White male sophomore, 19 years old, University A)

Like the student quoted above, many emphasized the importance of a community of their peers that recognized and validated their abilities and achievements. Many defined their academic careers or identities based on their past and future participation in honors, and a few demonstrated disdain toward non-honors students. Students who had chosen not to join honors programs, on the other hand, rejected the honors community and the idea that honors would be beneficial to their emotional well-being.

**Community.** For many students, the other people involved in honors provided motivation for joining the honors program.

I decided to join Honors because I wanted to be part of a small community despite the university’s large size. I wanted to work with students who had similar aspirations and were equally as dedicated to their education as me. (White female freshman, 18 years old, University B)

The concept of an active or involved _community_ was central in these responses, indicating that students planned to participate and engage in the social aspect of honors.

I also wanted . . . a close-knit community. (White female junior, 19 years old, University A)

I wanted the small more involved community. (White female freshman, 18 years old, University A)

The size of the community was crucial. Honors students expected to have a _smaller community within the larger university_. This corresponded with the results of the quantitative analysis, in which a majority of students at each university indicated that the smaller community
had been influential in their choice to join honors. The open-ended responses demonstrated that honors students were very aware that University A and University B are large institutions. In some cases, this size was a positive in that it meant the universities could provide a variety of resources. However, every student who referred to university size did so while highlighting the importance of the smaller honors community.

I really wanted to come to a big school to experience everything a big school offers, but at the same time I did not want to lose myself in the flood of 30,000 people. So for me, the honors college was a great chance to have a smaller community inside of the bigger community of [University A] that I could plug into. (White female junior, 20 years old, University A)

I also like the idea of having a smaller community of people on campus with whom I interact. (Hispanic female senior, 20 years old, University A)

More opportunities with a smaller society. (Asian female sophomore, 19 years old, University B)

I was also drawn to the [University B] Honors Program because the program creates a smaller community within the larger university; it felt like we would have all the benefits of attending a large school while also receiving the personal attention one would receive at a smaller liberal arts college. (White female junior, 20 years old, University B)

Students’ responses also included further details as to what types of students they expected to find within the honors community: people like themselves. In the quantitative analysis, this desire to be around similar students had been rated highly by honors students at both universities.
You meet a lot more students like yourself. (White male sophomore, 19 years old, University A)

The incentive to learn more along [sic] people I identified closely with. (White male junior, 20 years old, University A)

The chance to meet people who have some of the same academic goals as me. (White female senior, 20 years old, University A)

I also hoped that by living in Honors housing I could connect with people similar to me. (White female freshman, 18 years old, University B)

I thought the program would . . . provide a strong community of students similar to myself. (White female freshman, 18 years old, University B)

It would provide me with a community within the university and allow me to live and take classes with like-minded and academically motivated students. (White female junior, 19 years old, University B)

Some students embedded information in their descriptions about the qualities those peers should have. In some cases, students were looking for peers who were *academically oriented*.

I wanted to be around like-minded students focused on academics. (Freshman, 18 years old, University A)

I thought honors would . . . place me with other students who were looking for a challenge. (Female junior, 19 years old, University B)

In other cases, students were looking for peers who were *intelligent or intellectual*.

I knew that I would be surrounded by like-minded, intelligent people that I would one day call my colleagues. (White female sophomore, 19 years old, University A)
I enjoy being around other smart, motivated people. (White male sophomore, 18 years old, University A)

I’m surrounded by peers who can keep up and challenge me intellectually. (White female junior, 20 years old, University A)

I have to admit part of the reason was that I would meet fellow students who were intelligent, ones I could have a decent conversation with. (White male senior, 21 years old, University A)

I was attracted to the idea of surrounding myself with other intelligent people. (White male freshman, 18 years old, University A)

Finally, a few indicated that they wanted peers who would also be attempting to maximize their college experiences.

I wanted to live in a community with people who were similar to me in my desire to always be learning more and gaining new insights and experiences from my classwork and social interactions on campus. (White female junior, 20 years old, University B)

I wanted to be around people like me who like to work hard, but school is not their whole life. (White female sophomore, 19 years old, University B)

I also wanted to be in a community of people that can balance having fun and getting good grades. (White female junior, 18 years old, University B)

When students described their ideal peers, they often included clues about how they defined themselves, such as referring to “other intelligent students.” The idea that students’ views of themselves and their identity within honors were important to their decision to join honors is examined in the next section.
**Student self-image.** Some students entered college with strong *self-identities as honors students.*

I have been in gifted and talented programs since elementary school, and continued on that same “gifted track” up until I graduated from high school. Even though I attended a public high school, I have never been in classes with average or below average students. In college—especially at such a large public university—I wanted to continue to be with people of a similar intellectual level. (Asian female junior, 20 years old, University A)

In some cases, this identity was proffered as sufficient reason to join honors at the college level.

I have always been an honors student (White female sophomore, 18 years old, University A)

I had been an honors student in high school and wasn’t about to stop once I was in college. (White female junior, 19 years old, University A)

I was invited into the program and had always been an honors student, so didn’t see why I shouldn’t join. (White female senior, 20 years old, University B)

Other students did not identify as honors students but highlighted their *past histories of honors* and advanced classwork. Their responses indicated that they considered being in honors to be an essential part of their academic careers, and they included their past experiences in their decision-making process. The quantitative analysis for this question found that a majority of honors students did consider college honors to be a continuation of the advanced classes they took in high school.

I’d been in honors classes during high school, and the continuation was not something I ever questioned. (White female junior, 19 years old, University A)
I also did a full honors program in high school. (White female freshman, 18 years old, University A)

I wanted to continue my honors-level work that I started in high school. (White female junior, 21 years old, University A)

I was invited and have always been on the honors track. (White female senior, 20 years old, University B)

I had always taken honors courses throughout high school. (White female freshman, 18 years old, University B)

I decided to accept the invitation to join the Honors Program because I expected that it would provide academic challenges similar to those I had been presented with in my high school honors and AP programs. (White female junior, 20 years old, University B)

Some students’ academic experiences included the realization that they needed honors to be part of their education.

I only took one non honors class in High school and could not handle the dumbed down version of the material. (White female senior, 20 years old, University A)

Because I needed more than what was offered in the regular course of studies. (White male freshman, 18 years old, University A)

As illustrated as part of the previous section on the qualities students expected in their peer groups, some honors students held self-identities as smart or intelligent or otherwise deserving of honors. It was more common for this to be reflected in the discussion of peers, but some students did address this concern directly.

I feel that I’m a smart person and I hold myself to certain academic standards so why not do honors college? (White male sophomore, 19 years old, University A)
I knew I was smart enough and a good enough student to be in Honors. (White male junior, 20 years old, University A)

I decided to join Honors because I made a high enough score on my ACT I believed I deserved to reap the benefits of the Honor’s College. (White female freshman, 19 years old, University A)

Finally, a few honors students at each university demonstrated strong negative feelings or disdain toward non-honors students. By highlighting non-honors students’ weaknesses, they defined themselves as the opposite.

I wanted to be around like-minded students focused on academics instead of high school students who could care less about education. (Freshman, 18 years old, University A)

I like the extra challenge and being around smart people. I don’t like to be around others who don’t try. By being in the honors college, I hope to have less of a chance of being in a group with others who don’t care about their grades or class and should not be here. (White male freshman, 18 years old, University A)

I wouldn’t go to [University B] if I didn’t do the Honors program because most other people aren’t that smart. (White male senior, 20 years old, University B)

For some students, their intelligence, academic abilities, and honors identity were important components of their decision to join the honors program. They also appreciated the opportunity to have those aspects of their self recognized and validated, as explored in the next section.

**Emotional needs.** The student quoted at the beginning of this theme of social and emotional components highlighted two important emotional needs. First, he was looking for “respect” for himself, his interests, and his activities. Second, he appreciated that the honors
program would “brag” about its students’ achievements. Each of these needs was present in a few other students’ responses as well. Some students joined honors in part to receive personal validation and care:

It made me feel better about myself as well. (White male freshman, 19 years old, University A)

I wanted to be a part of a smaller community within [University A]. It’s such a large school and I didn’t want to become a mere statistic and I felt like people at the Honors college truly appreciated my presence on campus. (White female sophomore, 18 years old, University A)

It felt like a community in which I belonged and a way to be known and cared for on a large campus. (White female sophomore, 19 years old, University A)

Other students highlighted the gratification of having their past accomplishments recognized through admission into the honors program:

Because I like the idea of being in a program that validates my hard work in high school. (White female sophomore, 18 years old, University A)

I felt like it was an achievement to recognize my success in high school. (White female sophomore, 19 years old, University A)

I was accepted and figured that as titled, it was an honor. I graciously accepted and was proud that I was invited to join the honors program. (Female Asian sophomore, University B)

I was flattered to have been recognized for my strong academic and extracurricular performance in high school (White female junior, 19 years old, University B)
As a consequence, students also expected that future accomplishments and academic achievement would be recognized as well.

I wanted to be challenged like I had been for my whole high school career and be a respected student at this university. (White female sophomore, 19 years old, University B)

I wanted to have the opportunity to do more than is necessary during my time at college and then be recognized for that effort. (White female senior, 20 years old, University A)

Thus, while this subtheme was not particularly common, there was evidence that at least some students joined honors programs to meet their emotional needs. Some may also have joined honors to avoid experiencing at least one negative emotion. In the quantitative analysis, a sizable minority (over 40%) of honors students had indicated that the fear that they would regret not joining honors influenced their decisions. However, only two students highlighted this concern in their open-ended responses:

I felt that my college years would not be complete if I was not in the Honors College. (White female sophomore, 19 years old, University A)

Ultimately, I always would have wondered “what if” and maybe even doubted my abilities as a student (which I’ll admit because it seems important to this survey. I try not to sound like a jerk with statements like that.) On a personal level, I wouldn’t be satisfied if I wasn’t an Honors student, which is odd since I really don’t hold others to the same high standard—I’ve acknowledged the fact that it’s absolutely nonsensical to think that Honors students are better. In a way, we’re kind of the remedial learning community for chronic overachievers and the socially struggling. (Male senior, 20 years old, University B)
The latter response also included a clue as to why other students may not have volunteered this concern: the perception that admitting these concerns was not socially desirable. Within the context of this study, there is no way to determine the extent to which social desirability affected responses nor whether unspoken concerns like the fear of regret were actually widespread.

**As viewed by non-honors students.** As in the previous two themes, non-honors students differed from honors students in how they perceived the social and emotional components of honors. For example, only one student mentioned the honors community, which she rejected:

> My perception of the program was that it was a bunch of “nerds” living together in the crappiest building on campus. . . . I wanted to enjoy college, not spend all my time in this nerdy community studying.” (White female junior, 20 years old, University B)

The quantitative analysis indicated that this was not a common view, with a relatively small minority of students in the FD groups indicating that a dislike of honors students contributed to their decision. For other students, it appeared that the establishment of a community or peer group was irrelevant to their rejection of the honors program.

Students’ views of themselves and their affiliation with advanced academic programming appeared to be more salient. For example, one freshman at University A described herself as having been “part of an honors system” for her “entire life” but that the honors program was “not right for her” as she began the “completely new experience” of college. Another student indicated that her past participation in advanced programming may not have been entirely her decision and she rejected it for college:

> All through elementary, middle, and high school I was pushed to participate in accelerated and additional academic and extra-curricular programs. I believe that I did benefit from those activities. . . . I did not see the point in taking Honors English or
Honors electives just to have “Honors College” on my diploma. I had already done all those things in high school. (White female junior, 20 years old, University A)

Negative past experiences with academic stress and peer relationships resulted in another student’s rejection of an identity based on her intelligence and achievement:

I came from a small southern town and a small school system, and I went to school with the same people from 1st-12th grade. I was always very shy and in 5th grade, I was the top student in my class and everyone labeled me as the “quiet smart girl.” From 5th grade to 12th grade I was pressured to always be the best and to be the top student in my grade every year. In high school, I was always expected to be the valedictorian one day so I felt like everything I did had to be perfect. I would beat myself up over 98’s which is ridiculous, but I felt so pressured by everyone else that I couldn’t stand not being perfect. I did achieve my goal of being valedictorian of my senior class, but by senior year I was so tired of trying to be perfect, I promised myself that I would let myself have fun in college and try not to be so stressed out all the time, so when I got an invitation to join the honors college, I declined for that reason. I love college, and though I definitely still care deeply about my grades and school work, it is wonderful to not constantly feel the need to be perfect. (White female sophomore, 19 years old, University A)

On the other hand, another non-honors student illustrated how not joining an honors program could serve to maintain an unstable personal identity based on her intelligence:

I was intimidated. . . . I wasn’t sure how I would do in regular college courses, much less Honors courses. I figured I would be one of the smarter individuals in many of the regular courses and I could do well, but that probably wouldn’t have been the case in Honors courses. (White female sophomore, 19 years old, University A)
While students who joined honors perceived the programs as supporting their social and emotional needs, there is some evidence that students who rejected honors did so at least in part because the programs were either irrelevant or threatening to those needs.

**Minor theme: Influence of others**

Most students did not discuss how the expectations they had for their honors experience had been formed. However, several students from University A and one from University B did mention being influenced by other people. For example, two students indicated external expectations, one from parents and the other not specified, that they join honors:

- Though they didn’t expect perfection, my parents expected that I challenge myself. (White female freshman, 18 years old, University A)
- It was expected. (White female freshman, 18 years old, University A)

The quantitative analysis did find that approximately half of the responding honors students were influenced by parental encouragement, and half of the honors students from University A reported that their parents expected them to join.

Although the results of the quantitative analysis suggested that relatively few honors students joined honors because their friends were also joining, a few students reported being influenced by their friends.

- I was also influenced by my friend who graduated a couple years before me: she told me how much she enjoyed the programs. (White female sophomore, 19 years old, University A)
- A lot of my friends were in it. (White female junior, 20 years old, University A)
- All my friends from high school were in it. (White male junior, 21 years old, University B)
Others mentioned getting information or encouragement from other students or unnamed sources.

I was encouraged to do so. (White female junior, 19 years old, University A)

I heard from other [University A] students that the Honors college would give me a better experience at the university than being non-honors. (White male freshman, 18 years old, University A)

Finally, the active recruitment conducted by honors at University A influenced the decision-making process of at least four responding students. One sophomore detailed the visit he and his father had made to the university and honors program in which they received personal attention from the Honors Dean, concluding, “First impressions are a big deal.” Others described the honors program as being welcoming as well:

I joined Honors because on my very first visit to campus the Honors College went above and beyond anything I expected to make me feel welcome at [University A]. I was automatically accepted to the Honors College, but because I had such a great experience with the program when I was still in high school, I made sure to stay active within the program. (White female senior, 20 years old, University A)

I liked the welcoming experience I got when I visited the Honors College. (White female junior, 19 years old, University A)

Students who declined honors also did not emphasize how their expectations were formed. Of the 11 students who described their conscious choices to not join honors, only two indicated that other people were influential in those decisions. One freshman at University A was assisted in her decision by her parents, who agreed that honors was not the right choice for her at
the time. A junior at University B decided not to join honors and then spoke to an administrator in the program:

   After declining the invitation, I had to speak with an administrator in order to complete the process. Whoever this administrator was didn’t really probe me much into what my concerns were, and from what I remember it came across as she was kind of scolding me for my decision. That just further confirmed to me that I made the right decision. (White female junior, 20 years old, University B)

The few students who discussed the influence of others upon their honors decision provided evidence that people within and outside of honors may affect their perceptions of program benefits, opportunities, and social and emotional effects.

Summary

   At both universities, students who made conscious decisions to join honors programs based their choices on different combinations of expected benefits, anticipated opportunities, and social and emotional needs. There was individual variation in which of these three themes were emphasized. Overall, honors students at University A focused more on benefits like priority registration and interesting honors classes, while honors students at University B were equally likely to consider benefits and opportunities. Social and emotional needs were relatively less important at each university. Furthermore, although most honors students did not describe how their expectations were formed, there was some indication that other people or events could exert influence in all three areas.

   Students who consciously decided not to join honors programs did not share the same expectations. Factors that were viewed by honors students as benefits were viewed by non-honors students as either unimportant or as additional hassles. What honors students described as
opportunities for growth were described by non-honors students as risks or as obstacles for other opportunities. These differences in perceptions supported students’ decisions to forgo honors.

**Research Question 5: Salience of Achievement Goal Orientations**

*How well do students’ stated reasons for participating or not participating in honors reflect their achievement goal orientations?*

I strive to always be the best and when I do something I want to achieve it with the highest level possible. Graduation with honors would be one of the greatest and highest achievements as an undergraduate student and I wanted to be a part of a program that best represented myself, my hard work, and what I strive to be, Honored, above others, standing out, and with up-most respect. I want to stand out, to accomplish the most, and do something to the best of my ability. (White female sophomore, 19 years old, University A)

Each of the four analyses conducted to answer this question used the four subscales of the AGQ-R as one factor in a canonical correlation model. In two of the models, responses to the multiple-choice questions about why students joined or did not join honors constituted the other factor. The other two models used the subthemes of the benefits and opportunities themes identified as part of the qualitative analysis of the previous research question. The following four sections describe how each model was constructed and the results of the canonical correlations.

**Multiple Choice: Reasons to Join Honors**

Students in the FA and LA groups were asked to select all of the reasons that they joined honors from a list of 20 possibilities (see Table 4.11). Among those choices, 10 were conceptually related to achievement goals. The desires for increased academic challenge, more interesting classes, undergraduate research, study abroad, and service learning opportunities were
all ways to enrich students’ learning and thus potential signs of a mastery-approach orientation. On the other hand, prestige, improved graduate or professional school application, improved chances of getting a job, and leadership opportunities all encompassed competition or comparison with others, linking them to performance-approach orientations. Finally, the fear of regret was the only reason linked to an avoidance orientation.

A canonical correlation analysis was performed to determine the linear relationships among the AGQ-R subscales and those 10 reasons. Four canonical variates were computed, and the standardized canonical coefficients and correlations of each subscale with each variate are shown in Table 4.13. The entire model was significant [Wilks’ $\Lambda = 0.67$, $F(40, 995) = 2.78$, $p < .001$], as were the first two canonical variates. The third and fourth canonical variates were eliminated from further analysis due to their lack of statistical significance.

The first canonical variate was associated positively with mastery-approach goals and with a desire for academic challenge, and it explained a total of 43% of the shared variance in AGQ-R scores and 23% of the shared variance in reasons. This reduced to a simple bivariate correlation of $r(277) = 0.36$, $p < .001$.

The second canonical variate was associated positively with performance-approach and performance-avoidance goals and with reasons of prestige, improved chances of getting a job, fear of regret, and leadership opportunities, and it was associated negatively with mastery-approach goals and desires for increased challenge, undergraduate research, and more interesting classes. This variate explained a total of 38% of the shared variance in AGQ-R and 17% of the shared variance in reasons. Using the simplified coefficients resulted in one variable representing the sum of performance goals minus mastery-approach goals, which may be considered a representation of uncompensated performance goals, and another variable consisting of the sum
of prestige, improved job chances, and leadership opportunities (all of which were expected to related to performance-approach goals), plus the fear of regret (an avoidance motivation), minus the desires for increased academic challenge, interesting classes, and undergraduate research (all of which were expected to relate to mastery-approach goals). The bivariate correlation between these simplified variables was highly significant \[ r(276) = 0.37, p < .001 \].

Table 4.13  
*Canonical Correlations Between the Scales of the AGQ-R and 10 Reasons for Joining Honors*  

<table>
<thead>
<tr>
<th>Canonical variates</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGQ-R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mastery-approach</td>
<td>0.83</td>
<td>0.96</td>
<td>−0.41</td>
<td>−0.24</td>
<td>−0.25</td>
<td>0.06</td>
</tr>
<tr>
<td>Mastery-avoidance</td>
<td>0.22</td>
<td>0.70</td>
<td>0.06</td>
<td>0.24</td>
<td>0.33</td>
<td>−0.05</td>
</tr>
<tr>
<td>Performance-approach</td>
<td>0.04</td>
<td>0.33</td>
<td>0.52</td>
<td>0.77</td>
<td>1.12</td>
<td>0.50</td>
</tr>
<tr>
<td>Performance-avoidance</td>
<td>0.13</td>
<td>0.31</td>
<td>0.57</td>
<td>0.86</td>
<td>−1.17</td>
<td>−0.40</td>
</tr>
<tr>
<td>Explained variance</td>
<td>40.2%</td>
<td>36.3%</td>
<td>10.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redundancy</td>
<td>2.8%</td>
<td>1.7%</td>
<td>0.5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasons for joining</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acad. challenge</td>
<td>0.73</td>
<td>0.84</td>
<td>−0.28</td>
<td>−0.30</td>
<td>−0.15</td>
<td>−0.10</td>
</tr>
<tr>
<td>Interesting classes</td>
<td>0.12</td>
<td>0.33</td>
<td>−0.20</td>
<td>−0.24</td>
<td>0.15</td>
<td>0.23</td>
</tr>
<tr>
<td>Prestige</td>
<td>0.19</td>
<td>0.33</td>
<td>0.46</td>
<td>0.57</td>
<td>0.51</td>
<td>0.50</td>
</tr>
<tr>
<td>Grad/prof school</td>
<td>0.04</td>
<td>0.29</td>
<td>0.10</td>
<td>0.20</td>
<td>0.17</td>
<td>0.30</td>
</tr>
<tr>
<td>Job chances</td>
<td>0.03</td>
<td>0.19</td>
<td>0.43</td>
<td>0.51</td>
<td>−0.13</td>
<td>0.08</td>
</tr>
<tr>
<td>Undergrad research</td>
<td>0.23</td>
<td>0.48</td>
<td>−0.36</td>
<td>−0.26</td>
<td>−0.12</td>
<td>0.17</td>
</tr>
<tr>
<td>Study abroad</td>
<td>−0.18</td>
<td>0.00</td>
<td>−0.07</td>
<td>−0.13</td>
<td>0.29</td>
<td>0.43</td>
</tr>
<tr>
<td>Leadership</td>
<td>0.11</td>
<td>0.41</td>
<td>0.27</td>
<td>0.22</td>
<td>−0.29</td>
<td>0.09</td>
</tr>
<tr>
<td>Service learning</td>
<td>0.16</td>
<td>0.33</td>
<td>0.01</td>
<td>0.09</td>
<td>0.55</td>
<td>0.54</td>
</tr>
<tr>
<td>Fear of regret</td>
<td>0.22</td>
<td>0.24</td>
<td>0.41</td>
<td>0.49</td>
<td>−0.51</td>
<td>−0.54</td>
</tr>
<tr>
<td>Explained variance</td>
<td>16.2%</td>
<td>11.6%</td>
<td>12.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redundancy</td>
<td>6.9%</td>
<td>5.3%</td>
<td>0.4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canonical correlation</td>
<td>0.41</td>
<td>0.38</td>
<td>0.21</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. Coefficients are standardized.*
**Multiple Choice: Reasons to Not Join Honors**

Students in FD groups were asked to select all of the reasons that they had not joined honors from a list of 11 possibilities (see Table 4.12). Among those choices, four were conceptually related to achievement goals. Concerns about difficult honors classes and jeopardizing one’s GPA could be due to performance-avoidance goals; perceiving classes as difficult could also be conceptualized as the inverse of seeking challenge and be linked to low levels of mastery-approach goals. A lack of interest in research and a desire to spend more time on other (non-honors) activities could also be due to low mastery-approach goals. A canonical correlation analysis was performed between the AGQ-R subscales and these four reasons. The overall model was not statistically significant [Wilks’ Λ = 0.20, $F(16, 25) = 1.09, p = .941$], nor were any of the univariate effects, which ranged from $F(4, 11) = 0.75, p = .577$ (mastery-approach) to $F(4, 11) = 0.27, p = .889$ (performance-approach).

**Open Response: Benefits Theme**

Students in the FA and LA groups were also asked to respond to an open-ended question asking why they had joined the honors program. As reported above (research question 4), qualitative analysis identified four major themes in student responses. The overall theme of benefits included the tangible “perks” of honors, the prestige of honors, and economic considerations. Because the subtheme of prestige included a competitive aspect, this theme was identified as potentially related to students’ achievement goal orientations. Three indicator variables were computed, one for each of the three subthemes. If any of the codes belonging to a given subtheme (see Appendix F) were associated with a students’ response, the respective indicator variable was set equal to one. A canonical correlation analysis was performed between the AGQ-R subscales and the benefits subthemes, using only those students who responded to
the open-ended question. The overall model was not statistically significant \[\text{Wilks' } \Lambda = 0.98, \quad F(12, 560) = 0.45, \quad p = .941\], nor were any of the univariate effects, which ranged from \(F(3, 222) = 1.01, \quad p = .390\) (mastery-avoidance) to \(F(3, 222) = 0.10, \quad p = .961\) (mastery-approach).

**Open Response: Opportunities Theme**

The qualitative analysis from research question 4 also identified a major theme of *opportunities* with four subthemes. The subthemes of challenge, growth and development, and maximization all centered upon some aspect of learning and were therefore identified as potentially related to mastery-approach goals. The subtheme of “opening doors” included some competitive aspects, indicating that it could have been related to performance-approach goals. Indicator variables were computed for these subthemes in a similar fashion as for the benefits subthemes, above, and a canonical correlation analysis was performed between the AGQ-R subscales and the opportunities subthemes, using only those honors students who responded to the open-ended question. Four canonical variates were computed, and the full model \[\text{Wilks' } \Lambda = 0.86, \quad F(16, 667) = 2.11, \quad p = .007\] and first variate were significant. The standardized canonical coefficients and correlations of each subscale with each variate are shown in Table 4.14.

The only significant covariate was associated positively with mastery-approach goals and with stated desires for challenge, opportunities for growth and development, and maximizing the college experience, and it was associated negatively with opening doors. This covariate explained about 29% of the shared variance in AGQ-R scores and 28% of the shared variance in opportunities sub-themes. The bivariate correlation between mastery-approach goals and a variable consisting of the sum of challenge, growth, and maximization minus opening doors was highly significant \(r(225) = 0.31, \quad p < .001\).
Summary

The question asked whether students’ stated reasons for participating or not participating in honors reflected their achievement goal orientations. The limited information related to why students chose not to participate in honors did not provide evidence that their achievement goal orientations were salient to this decision. However, there was evidence suggesting that honors students’ mastery-approach goals were reflected in their reasons for joining, and that these goals were most evident in students’ desires for additional academic challenge and opportunities for growth and learning, both inside and outside the classroom. When prompted with a list of possible reasons to join honors, honors students with high performance (both approach and
avoidance) and low mastery-approach goal orientations were more likely to cite the program’s prestige and anticipated benefits in finding a job, but this was not seen in students’ open-ended responses.
CHAPTER 5: DISCUSSION AND IMPLICATIONS

Summary of Findings

This mixed-method study was designed to respond to the following five broad questions:

1. Are there differences in (a) achievement goal orientation, (b) perfectionism, and/or (c) prior experiences, after controlling for the effect of gender, among those students who entered a college honors program when they first enrolled, those who were eligible to enter an honors program at that time and chose not to do so (yet still attended the same institution), and those who applied for and entered an honors program after enrolling in college for at least one semester?

2. Are there differences in achievement goal orientation and/or perfectionism, after controlling for the effect of gender, between college honors students enrolled in two different universities?

3. (a) What relationships may be observed among college honors students’ achievement goal orientations, perfectionism, and prior experiences? (b) Are those relationships consistent between two different universities?

4. (a) What reasons do honors-eligible students give for their choice to participate or not to participate in an honors program? (b) Do those reasons differ between two universities?

5. How well do students’ stated reasons for participating or not participating in honors reflect their achievement goal orientations?

In a series of quantitative analyses, achievement goal orientation was not found to vary based on gender, group membership, or university. Perfectionism also did not vary by gender or group, but there was a significant difference in overall perfectionism levels between the two
universities. The relationships among honors students’ achievement goal orientations and perfectionism scores were similar to those found in other studies. Higher levels of self-oriented perfectionism (SOP) was associated with higher levels of approach goals, and high SOP with low socially prescribed perfectionism (SPP) was associated with high approach goals and low avoidance goals. Even though perfectionism levels varied by university, the basic relationship between perfectionism and achievement goal orientation did not.

There were preliminary indications that students’ prior academic and extracurricular activities were related to group membership, achievement goals, and perfectionism, and that the latter two relationships might not be consistent across the two universities. Students who joined honors when they entered college were found to be more likely than students who applied for and joined honors afterward to have taken AP or honors classes, participated in academic competitions, and been in gifted and talented programs in elementary school. Students who declined honors membership did not differ significantly from either of the other two groups in their rate of participation in any activity. Furthermore, a few activities, including athletics, taking AP classes, participating in academic competitions, and receiving gifted and talented services in elementary school, may have been related to achievement goal orientations or to perfectionism, albeit differently at the two universities.

For the most part, students joined honors based on some combination of expected benefits, anticipated opportunities, and social and emotional needs. Honors students with high levels of mastery-approach goals tended to focus on the opportunities for challenge, learning, and growth in addition to the immediate and tangible benefits of being in honors. Although these overall themes were consistent across the two universities, the relative weight given to particular benefits was not. In particular, students at one of the two universities were more likely to cite the
availability of honors housing, priority registration, and smaller, more interesting classes as reasons for joining their honors program. Students who did not join honors were less likely to view the challenge of honors classes as a positive benefit; they generally cited difficult classes that would jeopardize their GPAs as reasons why they declined membership.

**Discussion and Implications**

**Achievement Goals and Perfectionism**

Achievement goal orientations have been connected to a wide variety of academic constructs, including the need for achievement (Elliot & Murayama, 2008), test anxiety (Elliot & McGregor, 2001; Eum & Rice, 2011), cognitive strategy use (Pintrich, 2000; Wolters, 2004), self-handicapping (Midgley & Urdan, 2001), and study habits (McGregor & Elliot, 2002). The sample for this study was distinguished from average college students by a history of strong academic performance, and they scored very close to reported college norms on three of the four AGQ-R subscales. In the one significant difference, students in this sample reported higher levels of performance-approach goals. Previous short-term studies have found performance-approach goals, and not mastery-approach goals, to be positively related to test scores, class grades, and other academic outcomes (Elliot & McGregor, 2001; Elliot & Murayama, 2008; Pintrich, 2000; Verner-Filion & Gaudreau, 2010; Wolters, 2004). The AGQ-R scores for this sample supported those conclusions as well as the conception of a broad academic achievement goal orientation that would affect performance in multiple academic contexts.

This study found no evidence that differences in students' achievement goal orientations helped determine why some students entered honors programs when they enrolled in college and some did not. However, differences in levels of mastery-approach goals did manifest in honors students’ stated motivations for joining honors. Students with higher mastery-approach goals
were more likely to join honors with the intention to seek out additional challenge in their academic careers. This may have implications for what type of recruitment strategies would be effective for different students. Follow-up studies examining whether honors students’ levels of mastery-approach goals are related to their participation in various honors offerings or to non-GPA outcomes (e.g., research or publication) could also be useful in shaping honors admissions practices.

This study also found no direct evidence that perfectionism was related to students’ decision of whether to join college honors. However, between-group comparisons were hampered by small sample sizes in the non-honors and late admission groups. In particular, the average socially-prescribed perfectionism (SPP) score for students who did not join honors was noticeably larger (about 0.5 standard deviation units) than the average for either of the other two groups. This was by far the largest between-group difference, and it was in the hypothesized direction. Furthermore, this difference would have been significant at the $\alpha = 0.05$ level if the FD group had 26 respondents rather than 13. Given the existing research connecting SPP to avoidant behaviors (Flett et al., 1992; Speirs Neumeister, 2004b), future studies should investigate this difference further with larger sample sizes.

The relationships among perfectionism subtypes and achievement goal orientations demonstrated by this sample were similar to those previously identified (Fletcher et al., 2012; Verner-Filion & Gaudreau, 2010). Students with high self-oriented perfectionism (SOP) scores tended to have higher levels of approach goals, and those with high SPP scores without also having high SOP scores tended to have higher avoidance goals and lower approach goals. At least in the context of academic achievement goals, SOP had positive effects and SPP in the absence of SOP had negative effects. However, the Hewitt and Flett (1991) Multidimensional...
Perfectionism Scale performed very poorly with this sample, to the point that the three-factor scoring model did not fit the data. The brief scoring version proposed and validated by Cox, Enns, and Clara (2002) was useful in this study, but further research is needed on how perfectionism may be measured effectively among high achieving students.

**Pre-College Activities**

Questions about gifted college students’ prior academic and extracurricular experiences were included in this study to begin exploring the topic of antecedents to honors program participation. Little to no difference in past experiences was found between students who entered honors as college freshman and those who did not join honors. However, those students who entered college honors later, based on college performance rather than on high school, were less likely than those who entered as freshmen to have taken AP classes, enrolled in high school honors classes, participated in academic competitions, or been part of a gifted and talented program in elementary school. Further research would be necessary to determine if these results hold with larger samples at different universities as well as determine why these patterns exist. Specifically, it was not possible to determine whether students who entered honors later had fewer opportunities for involvement or advanced academics prior to college or whether they had simply not been interested in them at that time.

The analysis of relationships among different academic and extracurricular experiences, achievement goal orientations, and perfectionism also uncovered a few areas for further inspection. Some of the relationships were easily explained, such as the fact that students who had participated in athletics at the varsity or junior varsity level demonstrated higher levels of performance goals (which relate to competition) and mastery-approach goals (which relate to skill development) and lower levels of mastery-avoidance goals. Students who had taken AP
classes had higher levels of SOP and lower levels of SPP, which was consistent with the previously established effects of SOP and SPP on academic performance. However, they also had lower levels of other-oriented perfectionism (OOP), which has a much smaller research base from which to make inferences. On the other hand, students who had participated in athletics outside of school had elevated levels of OOP. While this might be a result of holding teammates to high standards, the effect did not hold for varsity athletes. Finally, being a National Merit and National Achievement semifinalist was found to relate to lower performance-approach goal orientations, which was the opposite of what might have been predicted.

As with any exploratory analysis, there was a risk of inflating the Type I error rate through multiple comparisons. On the other hand, the analyses were also very conservative, removing variables from models if they were not significant and not re-adding them in later iterations. These results should be interpreted with caution, preferably as the basis for further research on the relationships among honors students’ specific types of extracurricular involvement and their goals and motivations.

**Between-University Differences**

The two-site design of this study allowed the analysis of between-university differences. This is an important contribution, given that the majority of research about college honors programs and their students has consisted of single-site designs that have not been replicated to other institutions (Rinn & Plucker, 2004). The two study sites were both large public research universities, but they served different geographical regions, and University B was more selective than University A. The two honors programs were also very different in terms of relative size, administrative structure, admissions process, and expectations placed on students. Those effects that were similar at the two universities may be fairly robust. For example, there was no
between-university difference in achievement goal orientations, which strengthened the finding that honors-eligible students had higher than norm levels of performance-approach goals. In contrast, there were significant differences between perfectionism scores at the two universities, with University A scoring higher than University B. Without additional information, it is not possible to determine the cause of this discrepancy or to describe what perfectionism scores are “normal” for honors students.

Between-university differences were also identified within the relationships between prior experiences and either achievement goals or perfectionism. In some cases, the interaction with university changed the direction of the effect. Participating in an academic competition was associated with increased levels of mastery-avoidance at University A but with decreased levels at University B. In others, significant relationships only existed at one of the two universities; for example, not taking AP classes was associated with lower levels of mastery-approach goals only at University B. Of particular interest to the field of gifted education, participation in a gifted and talented program in elementary school was generally related to higher overall perfectionism scores. At University B, not participating in a gifted program was associated with lower overall perfectionism scores, but at University A it corresponded with a greater difference between SOP and SPP scores.

Clearly the term “honors student” is relative to the context in which the honors program operates. The existence of these between-university differences should serve as a caution when trying to apply the findings of this or any other research about college honors to a new institution, particularly one that is very dissimilar from the original study sites. Future research should also prioritize multi-site and replication studies.
Why Students Join Honors

Honors students at both universities highlighted the same basic ideas when discussing their decision to join the honors program. First, a small number did not examine their choices; like facing their own personal Everests, they joined honors “because it was there.” Among those who did examine their choices, most students were motivated at least in part by the immediate benefits they expected to gain by joining honors. These included both tangible benefits—more interesting classes, lower student-teacher ratios, priority registration, and housing being the most popular—and the more intangible benefit of prestige. A majority also looked forward to one or more opportunities that honors would make available to them, including the opportunity to learn and experience more while in college. For a minority of respondents, honors also held the promise of a community of peers: an emotionally supportive environment in which they would thrive.

The specific content within each of these themes varied between the two schools, as did the relative frequency in which they were mentioned. In the largest difference between the two, University A honors students were much more likely to name tangible “perks” of being in honors than were students at University B. While both programs offered priority registration and honors housing, students at University A mentioned them more frequently. Students at University A were also more likely to volunteer information about their experiences while being recruited. It is possible that the honors administration at University A recruited and/or highlighted those benefits more frequently than the honors administration at University B.

For the most part, students who chose not to enter honors programs did not perceive the benefits of honors to be worth the additional work it would require. In particular, access to honors classes was a benefit for those students who chose to enter the program, but students who
did not join honors characterized honors classes as a hassle to schedule, more difficult, and a threat to their GPAs. Many honors students had cited increased academic challenge as a positive aspect of an honors education; none of the students who refused honors appeared to share this opinion. This last finding contradicted earlier quantitative analyses that found no differences in achievement goal orientations between those who entered honors and those who did not. That lack of finding may have been due to low FD sample sizes; the differences in qualitative responses between the two groups were stark.

Among honors students, higher levels of mastery-approach goal orientation were associated with greater emphasis on learning, challenge, and other opportunities. Performance goals, however, did not appear to affect students’ stated reasons for joining honors. This may indicate that prospective students’ mastery-approach goals should be considered when planning recruitment activities in order to ensure that students receive the information that is most important to them.

**Final Thoughts**

This study was designed to investigate an under-explored area in college honors education: What influences students’ decisions whether or not to join the program? Future research is clearly needed, with special attention paid to increasing the sample size of students who rejected honors. Students’ open-ended responses indicated that there may be motivational differences, particularly in how the two groups approach academic challenge. This would have important consequences for program evaluation practices and other research into the effects of honors programming. More immediately, understanding why students join honors, including their expectations for program benefits, could be used to adjust recruitment and admissions procedures. Finally, it is critical that future honors program research be replicated in a variety of
locations. The definition of honors student varies widely depending on the institution, and there is little reason to expect that even the strongest findings from one university would apply to another.
References


doi:10.1177/001698620004400302


doi:10.1177/0016986209355975


APPENDIX A: INVITATION EMAIL

University A: FA, LA

Subject: Honors program choices – survey request

Achievement Goal Orientations of Academically Talented College Students:
Socioemotional Factors Contributing to Honors Program Participation

As an Honors College student at [University A], you are personally invited to participate in an online survey exploring the reasons why you joined Honors. This survey will involve answering questions about how you generally respond to situations, your goals for your college career, past academic and extracurricular experiences, and basic demographic information.

This survey should take no more than 20-30 minutes to complete. You will remain anonymous and all answers are confidential. Participation in this survey is voluntary and does not affect your participation in the Honors College in any way. You may skip questions or stop taking the survey at any time with no consequence.

This survey is part of a dissertation project. Results of this study may help us understand how students decide whether to join honors programs, leading to changes in recruitment or program evaluation practices.

If you are 18 years of age or older and would like to participate in this survey, please go to the following website:

[REDACTED]

If you have any questions, please contact [REDACTED].

Thank you!

[REDACTED IRB INFORMATION]
University A: FD

Subject: Honors program choices – survey request

Achievement Goal Orientations of Academically Talented College Students:

Socioemotional Factors Contributing to Honors Program Participation

As a [University A] student who did not join the Honors Program, you are personally invited to participate in an online survey exploring the reasons why you chose not to join. This survey will involve answering questions about how you generally respond to situations, your goals for your college career, past academic and extracurricular experiences, and basic demographic information.

This survey should take no more than 20-30 minutes to complete. You will remain anonymous and all answers are confidential. Participation in this survey is voluntary. You may skip questions or stop taking the survey at any time with no consequence.

This survey is part of a dissertation project. Results of this study may help us understand how students decide whether to join honors programs, leading to changes in recruitment or program evaluation practices.

If you are 18 years of age or older and would like to participate in this survey, please go to the following website:

[REDACTED]

If you have any questions, please contact [REDACTED]

Thank you!

[REDACTED IRB INFORMATION]

University B: FA, LA

Subject: Honors program choices – survey request
Achievement Goal Orientations of Academically Talented College Students:
Socioemotional Factors Contributing to Honors Program Participation

As an Honors Program student at [University B], you are personally invited to participate in an online survey exploring the reasons why you joined Honors. This survey will involve answering questions about how you generally respond to situations, your goals for your college career, past academic and extracurricular experiences, and basic demographic information.

This survey should take no more than 20-30 minutes to complete. You will remain anonymous and all answers are confidential. Participation in this survey is voluntary and does not affect your participation in the Honors Program in any way. You may skip questions or stop taking the survey at any time with no consequence.

This survey is part of a dissertation project. Results of this study may help us understand how students decide whether to join honors programs, leading to changes in recruitment or program evaluation practices.

If you are 18 years of age or older and would like to participate in this survey, please go to the following website:

[REDACTED]

If you have any questions, please contact [REDACTED]

Thank you!

[REDACTED IRB INFORMATION]

University B: FD

Subject: Honors program choices – survey request

Achievement Goal Orientations of Academically Talented College Students:
Socioemotional Factors Contributing to Honors Program Participation
As a [University B] student who declined membership in the Honors Program, you are personally invited to participate in an online survey exploring the reasons why you chose not to join. This survey will involve answering questions about how you generally respond to situations, your goals for your college career, past academic and extracurricular experiences, and basic demographic information.

This survey should take no more than 20-30 minutes to complete. You will remain anonymous and all answers are confidential. Participation in this survey is voluntary. You may skip questions or stop taking the survey at any time with no consequence.

This survey is part of a dissertation project. Results of this study may help us understand how students decide whether to join honors programs, leading to changes in recruitment or program evaluation practices.

If you are 18 years of age or older and would like to participate in this survey, please go to the following website:

[REDACTED]

If you have any questions, please contact [REDACTED].

Thank you!

[REDACTED IRB INFORMATION]
APPENDIX B: UNIVERSITY A, FA AND LA SURVEY

Portions of this survey have been redacted to protect the anonymity of the research sites and to respect the licensing of one of the instruments.

Factors Influencing Honors Program Participation

You are being asked to participate in a research study to investigate academically talented students’ decisions whether or not to participate in college honors programs. You are being asked to participate because you joined the [University A] Honors Program. We are interested in finding out whether there are differences between students who join honors programs and equally talented students who do not, and what those differences are.

[REDACTED]

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will complete an online survey. Survey questions will ask about how you generally respond to situations, your goals for your college career, why you joined the honors program, past academic and extracurricular experiences, and basic demographic information. Your participation is completely anonymous and you will not be contacted again.

Portions of the survey are protected under copyright. You should not copy, save, store, or print this survey, and you may only use it to participate in this study.

How many people will be in the study?

We hope that approximately 700 other people will be in the study.

How much time will I spend being in this study?

Completing the survey should take about 20-30 minutes. If you cannot complete the survey in one sitting, you may save your progress and return to it later.

Will being in this study cost me anything?

The only cost to you from this survey is the time it takes to complete the survey.

Will I be compensated for being in this study?

You will not be compensated for your participation in this study.

What are the risks to me if I am in this study?

We believe there is little or no risk associated with this research study.

What are the benefits that may happen if I am in this study?
You are not expected to directly benefit from this research. However, we hope that your participation in the study may help improve honors program recruitment activities and evaluation projects.

**How will my privacy be protected?**

You may choose to take this survey using any Internet-connected computer and in any location in which you feel comfortable. You also have the option to leave any question blank.

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Survey results will be kept in password-protected electronic files. Only the members of the research team will have access to the passwords. At the conclusion of this study, we may publish our findings. Information will be presented in summary format, and any open-ended responses may be edited to protect your identity. You will not be identified in any publications or presentations.

You should also know that [REDACTED] and the respective offices of research compliance may inspect study records as part of their auditing programs, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

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**Whom do I contact if I have questions about the study?**

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If you have questions about your rights as a person in a research study, call [REDACTED]. You may also ask questions, make suggestions, or file complaints and concerns [REDACTED].

☐ I am 18 or older and agree to participate in this study.
If you do not wish to participate in this study, please close your browser window and delete the invitation e-mail.

Page 2

On a scale from 1 (Not at all true of me) to 5 (Very true of me), please indicate the extent to which the following statements are true of you and your goals for your college academic experiences.

1. My aim is to completely master the material presented in my college classes.
2. I am striving to do well compared to other students.
3. My goal is to learn as much as possible.
4. My aim is to perform well relative to other students.
5. My aim is to avoid learning less than I possibly could.
6. My goal is to avoid performing poorly compared to others.
7. I am striving to understand the content of my college courses as thoroughly as possible.
8. My goal is to perform better than the other students.
9. My goal is to avoid learning less than it is possible to learn.
10. I am striving to avoid performing worse than others.
11. I am striving to avoid an incomplete understanding of the course material.
12. My aim is to avoid doing worse than other students.

Page 3

Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. If you strongly agree, select 7. If you strongly disagree, select 1. If you feel somewhere in between, select one of the numbers between 1 and 7. If you feel neutral or undecided, the midpoint is 4.

[NOTE: THE FOLLOWING TABLE CONTAINS A SAMPLE OF QUESTIONS FROM THE MPS, WHICH WAS USED UNDER LICENSE FROM MULTI-HEALTH SYSTEMS, INC.]

6. One of my goals is to be perfect in everything I do.

10. It doesn’t matter when someone close to me does not do their absolute best.

13. Anything I do that is less than excellent will be seen as poor work by those around me.

14. I strive to be as perfect as I can be.

19. I do not have very high standards for those around me.

24. I do not expect a lot from my friends.
28. I am perfectionistic in setting my goals. □ □ □ □ □ □ □
31. I feel that people are too demanding of me. □ □ □ □ □ □ □
33. Although they may not show it, other people get very upset with me when I slip up.

Page 4
Which of the following academic experiences did you have prior to coming to college?

☐ Was identified as gifted or talented in elementary school
☐ Participated in a gifted and talented program in elementary school
☐ AP classes in high school
☐ International Baccalaureate program in high school
☐ Honors classes in high school
☐ Public residential high school (for example, a public school for math and science)
☐ National Merit or National Achievement semifinalist or finalist
☐ Job-shadowing or other career experience
☐ Full or part-time internship
☐ Assigned a mentor through a school or community program
☐ Participated in an academic competition, such as math team, quiz bowl, or mock trial
☐ Joined a non-competitive academic organization, such as a foreign language club
☐ Inducted into an honors society
☐ Residential academic summer program or governor’s school
☐ Non-residential academic summer program or governor’s school

In which of the following non-academic extracurricular activities did you participate prior to coming to college?

☐ Band, orchestra, chorus, or other music
☐ Performing arts, non-music
☐ Visual arts
☐ Varsity or junior varsity athletics
☐ Intramural athletics
☐ Athletics, not school-sponsored
☐ Student government
☐ Community service or volunteer work
☐ Pre-professional organizations
☐ Political organizations
☐ Student media (for example, yearbook or student radio)
☐ Junior ROTC or other military organization
☐ Paid employment during the summer
☐ Paid employment during the school year
Why did you decide to join Honors? [Open response]

Which of the following influenced your decision?
- Increased academic challenge
- Smaller classes
- More interesting classes
- Honors housing
- Priority registration
- Prestige of being in Honors
- Small community within a large university
- To improve my applications to medical school, law school, graduate school, etc.
- To improve my chances of getting a job
- My friends were joining Honors
- My parents encouraged me to join
- My parents expected me to join
- Wanted to be around other students like me
- Undergraduate research opportunities
- Study abroad
- Leadership opportunities
- Service learning opportunities
- Scholarship opportunities
- Afraid I would regret not participating
- Continuation of advanced classes in high school
- Other (please specify)

Are you planning to complete the requirements to graduate with the Honors designation?
- Yes
- I’m not sure, but probably
- I’m not sure, but probably not
- No
- I don’t know

Gender:  

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<th>Gender</th>
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<tr>
<td>Male</td>
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<tr>
<td>Female</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Prefer not to respond</td>
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</tbody>
</table>

179
Ethnicity:
- Asian/Pacific Islander
- American Indian/Alaskan Native
- African American
- Hispanic or Latino/Latina
- White, Non-Hispanic
- Prefer not to respond
- Other

Age:
- 18
- 19
- 20
- 21
- Over 21

Class standing (by credit hours):
- Freshman (0-30 credit hours)
- Sophomore (31-60 credit hours)
- Junior (61-90 credit hours)
- Senior (91+ credit hours)

Completed honors credits:
- 0
- 6 or fewer
- 7 – 12
- 13 – 18
- 18 or more

Including this one, how many semesters have you been enrolled as a full-time student at [University A]?
- 1 – 2
- 3 – 4
- 5 – 6
- 7+

What grades do you generally get in your college classes?
- □ I am in my first semester of college
- □ All A’s
- □ Mostly A’s
- □ More B’s than A’s
- □ Mostly B’s, some A’s and C’s
- □ More B’s than C’s
- □ More C’s than B’s
- □ More C’s than D’s
- □ More D’s than C’s
- □ Mostly D’s and F’s

Thank you for participating in this study. When you click the Submit button below, your responses will be submitted to the research team and your participation is completed.
APPENDIX C: UNIVERSITY A, FD SURVEY

Portions of this survey have been redacted to protect the anonymity of the research sites and to respect the licensing of one of the instruments.

Factors Influencing Honors Program Participation

You are being asked to participate in a research study to investigate academically talented students’ decisions whether or not to participate in college honors programs. You are being asked to participate because you did not join the [University A] Honors Program. We are interested in finding out whether there are differences between students who join honors programs and equally talented students who do not, and what those differences are.

[REDACTED]

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will complete an online survey. Survey questions will ask about how you generally respond to situations, your goals for your college career, why you joined the honors program, past academic and extracurricular experiences, and basic demographic information. Your participation is completely anonymous and you will not be contacted again.

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Completing the survey should take about 20-30 minutes. If you cannot complete the survey in one sitting, you may save your progress and return to it later.

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*Whom do I contact if I have questions about the study?*

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If you have questions about your rights as a person in a research study, call [REDACTED]. You may also ask questions, make suggestions, or file complaints and concerns [REDACTED].

☐ I am 18 or older and agree to participate in this study.
If you do not wish to participate in this study, please close your browser window and delete the invitation e-mail.

Page 2

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1. My aim is to completely master the material presented in my college classes.
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Page 3

Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. If you strongly agree, select 7. If you strongly disagree, select 1. If you feel somewhere in between, select one of the numbers between 1 and 7. If you feel neutral or undecided, the midpoint is 4.

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28. I am perfectionistic in setting my goals.

31. I feel that people are too demanding of me.

33. Although they may not show it, other people get very upset with me when I slip up.

Page 4

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- AP classes in high school
- International Baccalaureate program in high school
- Honors classes in high school
- Public residential high school (for example, a public school for math and science)
- National Merit or National Achievement semifinalist or finalist
- Job-shadowing or other career experience
- Full or part-time internship
- Assigned a mentor through a school or community program
- Participated in an academic competition, such as math team, quiz bowl, or mock trial
- Joined a non-competitive academic organization, such as a foreign language club
- Inducted into an honors society
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In which of the following non-academic extracurricular activities did you participate prior to coming to college?

- Band, orchestra, chorus, or other music
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- Varsity or junior varsity athletics
- Intramural athletics
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- Student government
- Community service or volunteer work
- Pre-professional organizations
- Political organizations
- Student media (for example, yearbook or student radio)
- Junior ROTC or other military organization
- Paid employment during the summer
- Paid employment during the school year
Why did you decide not to join Honors? [Open response]

Which of the following influenced your decision?

☐ Honors classes would be more difficult
☐ Did not want to live in honors housing
☐ Honors would take away time from other activities
☐ Did not want to jeopardize my GPA
☐ My friends were not joining Honors
☐ My parents told me not to
☐ Did not like the other students in Honors
☐ Not interested in undergraduate research
☐ It wasn’t compatible with my major
☐ Would rather focus on graduating early than finishing honors requirements
☐ Did not know about it
☐ Other (please specify)

Gender:  
- Male
- Female
- Other
- Prefer not to respond

Ethnicity:  
- Asian/Pacific Islander
- American Indian/Alaskan Native
- African American
- Hispanic or Latino/Latina
- White, Non-Hispanic
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- Other

Age:  
- 18
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- 20
- 21
- Over 21

Class standing (by credit hours):  
- Freshman (0-30 credit hours)
- Sophomore (31-60 credit hours)
- Junior (61-90 credit hours)
- Senior (91+ credit hours)

Including this one, how many semesters have you been enrolled as a full-time student at [University A]?
What grades do you generally get in your college classes?

☐ I am in my first semester of college
☐ All A’s
☐ Mostly A’s
☐ More B’s than A’s
☐ Mostly B’s, some A’s and C’s
☐ More B’s than C’s
☐ More C’s than B’s
☐ More C’s than D’s
☐ More D’s than C’s
☐ Mostly D’s and F’s

Page 7

Thank you for participating in this study. When you click the Submit button below, your responses will be submitted to the research team and your participation is completed.
APPENDIX D: UNIVERSITY B, FA AND LA SURVEY

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Factors Influencing Honors Program Participation

You are invited to participate in a research study to investigate academically talented students' decisions whether or not to participate in college honors programs. You are being asked to participate because you joined the [University B] Honors Program. I am a graduate student, and I am conducting this survey as part of my doctoral dissertation. I am interested in finding out whether there are differences between students who join honors programs and equally talented students who do not, and what those differences are.

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will complete an online survey. Survey questions will ask about how you generally respond to situations, your goals for your college career, why you joined the honors program, past academic and extracurricular experiences, and basic demographic information. This should take approximately 20-30 minutes of your time. If you cannot complete the survey in one sitting, you may save your progress and return to it later. Your participation is completely anonymous and you will not be contacted again.

Portions of the survey are protected under copyright. You should not copy, save, store, or print this survey, and you may only use it to participate in this study.

What are the risks or inconveniences of the study?

We believe there are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the study.

What are the benefits of the study?

You are not expected to directly benefit from this research. However, we hope that your participation in the study may inform future efforts in honors program recruitment and evaluation.

Will I receive payment for participation? Are there costs to participate?

There are no costs and you will not be paid to participate in this study.

How will my personal information be protected?

Your personally identifiable information has not been, and will not be, connected to your survey responses. This survey is protected by SSL encryption. Your responses will remain anonymous and your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

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may be edited to protect your identity. You will not be identified in any publications or presentations.

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*Whom do I contact if I have questions about the study?*

Take as long as you like before you make a decision. We will be happy to answer any question you have about this study. If you have further questions about this study or if you have a research-related problem, you may contact the principal investigator, [REDACTED]. If you have any questions concerning your rights as a research participant, you may contact [REDACTED].

**Page 2**

On a scale from 1 (Not at all true of me) to 5 (Very true of me), please indicate the extent to which the following statements are true of you and your goals for your college academic experiences.

| 1. My aim is to completely master the material presented in my college classes. | □ □ □ □ □ |
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| 3. My goal is to learn as much as possible. | □ □ □ □ □ |
| 4. My aim is to perform well relative to other students. | □ □ □ □ □ |
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| 9. My goal is to avoid learning less than it is possible to learn. | □ □ □ □ □ |
| 10. I am striving to avoid performing worse than others. | □ □ □ □ □ |
| 11. I am striving to avoid an incomplete understanding of the course material. | □ □ □ □ □ |
| 12. My aim is to avoid doing worse than other students. | □ □ □ □ □ |
Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. **If you strongly agree, select 7. If you strongly disagree, select 1.** If you feel somewhere in between, select one of the numbers between 1 and 7. If you feel neutral or undecided, the midpoint is 4.

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<td>4</td>
<td>5</td>
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<td>7</td>
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</tbody>
</table>

6. One of my goals is to be perfect in everything I do.  
10. It doesn’t matter when someone close to me does not do their absolute best.  
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24. I do not expect a lot from my friends.  
28. I am perfectionistic in setting my goals.  
31. I feel that people are too demanding of me.  
33. Although they may not show it, other people get very upset with me when I slip up.

Which of the following academic experiences did you have prior to coming to college?

- [ ] Was identified as gifted or talented in elementary school
- [ ] Participated in a gifted and talented program in elementary school
- [ ] AP classes in high school
- [ ] International Baccalaureate program in high school
- [ ] Honors classes in high school
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- [ ] National Merit or National Achievement semifinalist or finalist
- [ ] Job-shadowing or other career experience
- [ ] Full or part-time internship
- [ ] Assigned a mentor through a school or community program
- [ ] Participated in an academic competition, such as math team, quiz bowl, or mock trial
- [ ] Joined a non-competitive academic organization, such as a foreign language club
- [ ] Inducted into an honors society
- [ ] Residential academic summer program or governor’s school
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- Band, orchestra, chorus, or other music
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Why did you decide to join Honors? [Open response]

Which of the following influenced your decision?

- Increased academic challenge
- Smaller classes
- More interesting classes
- Honors housing
- Priority registration
- Prestige of being in Honors
- Small community within a large university
- To improve my applications to medical school, law school, graduate school, etc.
- To improve my chances of getting a job
- My friends were joining Honors
- My parents encouraged me to join
- My parents expected me to join
- Wanted to be around other students like me
- Undergraduate research opportunities
- Study abroad
- Leadership opportunities
- Service learning opportunities
- Scholarship opportunities
- Afraid I would regret not participating
- Continuation of advanced classes in high school
Are you planning to complete the requirements to graduate as an Honors Scholar?

- [ ] Yes
- [ ] I’m not sure, but probably
- [ ] I’m not sure, but probably not
- [ ] No
- [ ] I don’t know

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<th>Male</th>
<th>Female</th>
<th>Other</th>
<th>Prefer not to respond</th>
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<td>Class standing (by credit hours):</td>
<td>Freshman (0-23 credits)</td>
<td>Sophomore (24-53 credits)</td>
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<td>1 – 2</td>
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</tr>
<tr>
<td>What grades do you generally get in your college classes?</td>
<td>I am in my first semester of college</td>
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<td></td>
</tr>
</tbody>
</table>
☐ Mostly A’s
☐ More B’s than A’s
☐ Mostly B’s, some A’s and C’s
☐ More B’s than C’s
☐ More C’s than B’s
☐ More C’s than D’s
☐ More D’s than C’s
☐ Mostly D’s and F’s

Page 7

Thank you for participating in this study. When you click the Submit button below, your responses will be submitted to the research team and your participation is completed.
APPENDIX E: UNIVERSITY B, FD SURVEY

Portions of this survey have been redacted to protect the anonymity of the research sites and to respect the licensing of one of the instruments.

Factors Influencing Honors Program Participation

You are invited to participate in a research study to investigate academically talented students' decisions whether or not to participate in college honors programs. You are being asked to participate because you chose not to join the [University B] Honors Program. I am a graduate student, and I am conducting this survey as part of my doctoral dissertation. I am interested in finding out whether there are differences between students who join honors programs and equally talented students who do not, and what those differences are.

What are the study procedures? What will I be asked to do?

If you agree to take part in this study, you will complete an online survey. Survey questions will ask about how you generally respond to situations, your goals for your college career, why you joined the honors program, past academic and extracurricular experiences, and basic demographic information. This should take approximately 20-30 minutes of your time. If you cannot complete the survey in one sitting, you may save your progress and return to it later. Your participation is completely anonymous and you will not be contacted again.

Portions of the survey are protected under copyright. You should not copy, save, store, or print this survey, and you may only use it to participate in this study.

What are the risks or inconveniences of the study?

We believe there are no known risks associated with this research study; however, a possible inconvenience may be the time it takes to complete the study.

What are the benefits of the study?

You are not expected to directly benefit from this research. However, we hope that your participation in the study may inform future efforts in honors program recruitment and evaluation.

Will I receive payment for participation? Are there costs to participate?

There are no costs and you will not be paid to participate in this study.

How will my personal information be protected?

Your personally identifiable information has not been, and will not be, connected to your survey responses. This survey is protected by SSL encryption. Your responses will remain anonymous and your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

Survey results will be kept in password-protected electronic files. Only the members of the research team will have access to the passwords. At the conclusion of this study, we may publish our findings. Information will be presented in summary format, and any open-ended responses
may be edited to protect your identity. You will not be identified in any publications or presentations.

You should also know that the [University B] Institutional Review Board (IRB) and the Office of Research Compliance may inspect study records as part of its auditing program, but these reviews will only focus on the researchers and not on your responses or involvement. The IRB is a group of people who review research studies to protect the rights and welfare of research participants.

Can I stop being in the study and what are my rights?

You do not have to be in this study if you do not want to. If you agree to be in the study, but later change your mind, you may drop out at any time by leaving the survey. You may also remain in the study but choose not to answer any question that you do not wish to answer. There are no penalties or consequences of any kind if you decide that you do not want to participate.

Whom do I contact if I have questions about the study?

Take as long as you like before you make a decision. We will be happy to answer any question you have about this study. If you have further questions about this study or if you have a research-related problem, you may contact the principal investigator, [REDACTED]. If you have any questions concerning your rights as a research participant, you may contact [REDACTED].

Page 2

On a scale from 1 (Not at all true of me) to 5 (Very true of me), please indicate the extent to which the following statements are true of you and your goals for your college academic experiences.

1. My aim is to completely master the material presented in my college classes.
2. I am striving to do well compared to other students.
3. My goal is to learn as much as possible.
4. My aim is to perform well relative to other students.
5. My aim is to avoid learning less than I possibly could.
6. My goal is to avoid performing poorly compared to others.
7. I am striving to understand the content of my college courses as thoroughly as possible.
8. My goal is to perform better than the other students.
9. My goal is to avoid learning less than it is possible to learn.
10. I am striving to avoid performing worse than others.
11. I am striving to avoid an incomplete understanding of the course material.
12. My aim is to avoid doing worse than other students.
Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent. **If you strongly agree, select 7. If you strongly disagree, select 1.** If you feel somewhere in between, select one of the numbers between 1 and 7. If you feel neutral or undecided, the midpoint is 4.

[NOTE: THE FOLLOWING TABLE CONTAINS A SAMPLE OF QUESTIONS FROM THE MPS, WHICH WAS USED UNDER LICENSE FROM MULTI-HEALTH SYSTEMS, INC.]

<table>
<thead>
<tr>
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<th>1</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tr>
<td>6. One of my goals is to be perfect in everything I do.</td>
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<td>10. It doesn’t matter when someone close to me does not do their absolute best.</td>
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<td>13. Anything I do that is less than excellent will be seen as poor work by those around me.</td>
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<td>14. I strive to be as perfect as I can be.</td>
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<td>19. I do not have very high standards for those around me.</td>
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<td>24. I do not expect a lot from my friends.</td>
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<td>28. I am perfectionistic in setting my goals.</td>
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<td>31. I feel that people are too demanding of me.</td>
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<td>33. Although they may not show it, other people get very upset with me when I slip up.</td>
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</table>

**Page 4**

Which of the following academic experiences did you have prior to coming to college?

☐ Was identified as gifted or talented in elementary school
☐ Participated in a gifted and talented program in elementary school
☐ AP classes in high school
☐ International Baccalaureate program in high school
☐ Honors classes in high school
☐ Public residential high school (for example, a public school for math and science)
☐ National Merit or National Achievement semifinalist or finalist
☐ Job-shadowing or other career experience
☐ Full or part-time internship
☐ Assigned a mentor through a school or community program
☐ Participated in an academic competition, such as math team, quiz bowl, or mock trial
☐ Joined a non-competitive academic organization, such as a foreign language club
☐ Inducted into an honors society
☐ Residential academic summer program or governor’s school
☐ Non-residential academic summer program or governor’s school
In which of the following non-academic extracurricular activities did you participate prior to coming to college?

- Band, orchestra, chorus, or other music
- Performing arts, non-music
- Visual arts
- Varsity or junior varsity athletics
- Intramural athletics
- Athletics, not school-sponsored
- Student government
- Community service or volunteer work
- Pre-professional organizations
- Political organizations
- Student media (for example, yearbook or student radio)
- Junior ROTC or other military organization
- Paid employment during the summer
- Paid employment during the school year

Why did you decide not to join Honors? [Open response]

Which of the following influenced your decision?

- Honors classes would be more difficult
- Did not want to live in honors housing
- Honors would take away time from other activities
- Did not want to jeopardize my GPA
- My friends were not joining Honors
- My parents told me not to
- Did not like the other students in Honors
- Not interested in undergraduate research
- It wasn’t compatible with my major
- Would rather focus on graduating early than finishing honors requirements
- Did not know about it
- Other (please specify)

Gender: 
- Male
- Female
- Other
- Prefer not to respond
Ethnicity: 
- Asian/Pacific Islander
- American Indian/Alaskan Native
- African American
- Hispanic or Latino/Latina
- White, Non-Hispanic
- Prefer not to respond
- Other

Age: 
- 18
- 19
- 20
- 21
- Over 21

Class standing (by credit hours): 
- Freshman (0-23 credits)
- Sophomore (24-53 credits)
- Junior (54-85 credits)
- Senior (86+ credits)

Including this one, how many semesters have you been enrolled as a full-time student at [University B]?
- 1 – 2
- 3 – 4
- 5 – 6
- 7+

What grades do you generally get in your college classes?
- ☐ I am in my first semester of college
- ☐ All A’s
- ☐ Mostly A’s
- ☐ More B’s than A’s
- ☐ Mostly B’s, some A’s and C’s
- ☐ More B’s than C’s
- ☐ More C’s than B’s
- ☐ More C’s than D’s
- ☐ More D’s than C’s
- ☐ Mostly D’s and F’s

Page 7

Thank you for participating in this study. When you click the Submit button below, your responses will be submitted to the research team and your participation is completed.
### APPENDIX F: CODEBOOK FOR QUALITATIVE ANALYSIS

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subtheme</th>
<th>Code</th>
<th>Definition</th>
<th>Representative quote(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unexamined Choices</td>
<td>Unexamined Choices</td>
<td>BecauseICan</td>
<td>Recognition of ability and/or opportunity</td>
<td>“I’m fully capable of meeting the requirements”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Default</td>
<td>No reason not to join</td>
<td>“It seemed silly not to join Honors”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Requirement</td>
<td>Honors required by another program or scholarship</td>
<td>“Because I was accepted into it”</td>
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<td></td>
<td>“my scholarship required that I maintain membership in the Honors College.”</td>
</tr>
<tr>
<td>Benefits</td>
<td>“Perks”</td>
<td>PriorityReg</td>
<td>Ability to register for classes earlier than other students of same academic standing</td>
<td>“priority registration”</td>
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<td></td>
<td>“early registration”</td>
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<td></td>
<td></td>
<td>“better pick times”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Housing</td>
<td>On-campus housing with other honors students, or priority choice of housing</td>
<td>“Honors housing”</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>“better dorms”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SmallClasses</td>
<td>Recognition that honors classes have fewer students</td>
<td>“smaller, more intimate class settings”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>InterestingClasses</td>
<td>Description of honors classes as interesting, or academics based on student’s interest</td>
<td>“take specialized (and considerably more interesting) classes”</td>
</tr>
<tr>
<td></td>
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<td>ClassFormat</td>
<td>Reference to seminar, discussion, active learning, or other non-lecture class format</td>
<td>“a different learning environment that would be geared toward discussion and active participation in my learning”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>QualityFaculty</td>
<td>Description of honors faculty as being high-quality or as being better teachers</td>
<td>“I was told that I’d be able to register for smaller honors classes with quality faculty.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HonorsClasses</td>
<td>General reference to honors classes that does not fit in other category</td>
<td>“The Honors Program offers me more advanced courses”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IndividualAttn</td>
<td>Students’ ability to get personal attention from honors faculty or staff</td>
<td>“more attention from professors,”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resources</td>
<td>Extra resources (including people) available to honors students</td>
<td>“access to additional resources for things like advising, internships, or career placement.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perks</td>
<td>General reference to “perks” or “benefits” that does not fit in other category</td>
<td>“Honors-specific privileges”</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td>“I enjoy the ‘perks’ of being in the honors college”</td>
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<td></td>
<td></td>
<td>Prestige</td>
<td>Statement indicating that overall university is not prestigious without honors membership</td>
<td>“I attend a public university that is not ranked in the top 50”</td>
</tr>
<tr>
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<td>UnivNotPrestige</td>
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<tr>
<td></td>
<td></td>
<td>StandOut</td>
<td>Honors distinguishes self from non-honors students</td>
<td>“I wanted something . . . that helped me stand out”</td>
</tr>
<tr>
<td>Theme</td>
<td>Subtheme</td>
<td>Code</td>
<td>Definition</td>
<td>Representative quote(s)</td>
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<tr>
<td>HonorsDegree</td>
<td></td>
<td>HonorsDeg</td>
<td>Desire to have honors designation on diploma</td>
<td>“Graduating with an Honors Degree looks much better”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prestige</td>
<td>General reference to prestige of program or desire to be known as honors student</td>
<td>“I heard how esteemed [the honors program] was”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LooksGood</td>
<td>Honors “looks good” on resume or application</td>
<td>“Looks good on degree and resumes for grad school and jobs”</td>
</tr>
<tr>
<td>Economic Benefits</td>
<td></td>
<td>EconChoice</td>
<td>Comparing honors to more expensive educational options</td>
<td>“It seemed like the best education for the price it was offered at.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scholarships</td>
<td>Reference to scholarships received or available to honors students</td>
<td>“The accompanying scholarship was quite persuasive.”</td>
</tr>
<tr>
<td>Money</td>
<td></td>
<td>General reference to economic concerns</td>
<td></td>
<td>“Money, money, money...money”</td>
</tr>
<tr>
<td>Opportunities</td>
<td>Challenge</td>
<td>Challenge</td>
<td>Difficult or academically challenging course work; academic rigor</td>
<td>“I wanted a challenge in my course work”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FulfillPotential</td>
<td>Desire to fulfill own potential, which may not be specified</td>
<td>“I wanted to . . . fulfill my potential as best I could”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Growth and Development</td>
<td>Growth as a student or attention to academic career</td>
<td>“Honors not only encourages our academic passions, it cultivates them with all the resources at its disposal”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AcademicDev</td>
<td>Non-academic or non-specific growth</td>
<td>“I try not to pass up opportunities to better myself”</td>
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<tr>
<td></td>
<td></td>
<td>PersonalDev</td>
<td>Quality of learning or understanding desired</td>
<td>“get a much better understanding of the material,” “incentive to learn more”</td>
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<td>Learning</td>
<td></td>
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<td></td>
<td></td>
<td>Maximization</td>
<td>Expressed desire to maximize college experience</td>
<td>“I wanted to get the absolute most out of my college experience.”</td>
</tr>
<tr>
<td></td>
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<td>BetterEducation</td>
<td>Indication that honors would improve college education, but may not specify how</td>
<td>“I believed that Honors would get me a better education”</td>
</tr>
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<td>Research</td>
<td>Access to undergraduate research</td>
<td>“I was also interested in participating in research”</td>
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<td>StudyAbroad</td>
<td>Access to study abroad program</td>
<td>“There are also more options in . . . study abroad.”</td>
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<td>Connections</td>
<td>Access to people or programs that would be important in the future</td>
<td>“it would give me the connections . . . that I wanted to have during my college experience”</td>
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<tr>
<td>Theme</td>
<td>Subtheme</td>
<td>Code</td>
<td>Definition</td>
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<tr>
<td>GradSchool</td>
<td></td>
<td>PrepGrad</td>
<td>Preparing for graduate or professional school, beyond “looks good”</td>
<td>“I figured that Vet school would more readily accept someone who graduated with honors”</td>
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<td>PrepProf</td>
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<td>“I plan on attending graduate school, and research and field experience is a huge</td>
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<td></td>
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<td>PrepProf</td>
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<td>component in my career path.”</td>
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<td>Career</td>
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<td>ImprovProf</td>
<td>Improving resume or future career prospects, beyond “looks good”</td>
<td>“it would further my career goals”</td>
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<tr>
<td>OpeningDoors</td>
<td></td>
<td>GenStmts</td>
<td>General statements about honors “opening doors” or future opportunities</td>
<td>“I felt that there were more opportunities that came along with being in the honors</td>
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<td>Social/</td>
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<td>college”</td>
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<td>Community</td>
<td>Community</td>
<td>GenCommunity</td>
<td>General community, or specific comments about finding one’s place or “home”</td>
<td>“an engaged community”</td>
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<td>SmallCommunity</td>
<td>Comments</td>
<td>Comments</td>
<td>Comments about the size of the honors program compared to the large</td>
<td>“I liked that it was a smaller community within the big university”</td>
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<td>FacultyRelation</td>
<td>Ability</td>
<td>Ability</td>
<td>Ability to interact with faculty members beyond what is perceived to be the</td>
<td>“closer interactions with faculty”</td>
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<td>non-honors norm</td>
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<td>norm</td>
<td>Ability</td>
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<td>Peers</td>
<td>Desire</td>
<td>Desire</td>
<td>Desire to affiliate with people similar to self</td>
<td>“You meet a lot more students like yourself.”</td>
</tr>
<tr>
<td>AcadOriented</td>
<td>Describing</td>
<td>Describing</td>
<td>Describing self or others as focused on academics, motivated, and/or</td>
<td>“I hold myself to certain academic standards”</td>
</tr>
<tr>
<td></td>
<td>self or others</td>
<td>self or others</td>
<td>caring about their grades</td>
<td>“students focused on academics”</td>
</tr>
<tr>
<td>Smart</td>
<td>Describing</td>
<td>Describing</td>
<td>Describing self or others as smart or intelligent; also includes phrase</td>
<td>“I knew that I would be surrounded by . . . intelligent people”</td>
</tr>
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<td>self or</td>
<td>self or others</td>
<td>“intellectual peer”</td>
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<td>smart or</td>
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<td>smart or</td>
<td>phrase “</td>
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<td>others as</td>
<td>“intellectual”</td>
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<td>smart or</td>
<td>peer”</td>
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<tr>
<td>Self-Image</td>
<td>Honors</td>
<td>Honors</td>
<td>Self-identifying as an honors student (as opposed to someone in an honors</td>
<td>“I’ve always been an honors student”</td>
</tr>
<tr>
<td>HonorsHistory</td>
<td>History</td>
<td>History</td>
<td>student)</td>
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<tr>
<td>NeedForHonors</td>
<td>Description</td>
<td>Description</td>
<td>Description of honors as a needed, as opposed to wanted</td>
<td>“Because I needed more than what was offered in the regular course of studies”</td>
</tr>
<tr>
<td>Theme</td>
<td>Subtheme</td>
<td>Code</td>
<td>Definition</td>
<td>Representative quote(s)</td>
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<td>Disdain</td>
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<td>Negative statements regarding rest of university and/or non-honors students</td>
<td>“I wouldn’t go to [University B] if I didn’t do the Honors program because most other people aren’t that smart.”</td>
</tr>
<tr>
<td>Emotional</td>
<td>Recognition</td>
<td></td>
<td>Having past or future accomplishments recognized</td>
<td>“I wanted to have the opportunity to do more than is necessary during my time at college and then be recognized for that effort.”</td>
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<td>Validation</td>
<td></td>
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<td>Feeling that others appreciate one’s accomplishments, abilities, or interests</td>
<td>“I like the idea of being in a program that validates my hard work in high school”</td>
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<tr>
<td>Regret</td>
<td></td>
<td></td>
<td>Student would regret not joining honors</td>
<td>“I felt that my college years would not be complete if I was not in the Honors College”</td>
</tr>
<tr>
<td>SelfWorth</td>
<td></td>
<td></td>
<td>General comments about attitude toward self</td>
<td>“[Honors] made me feel better about myself”</td>
</tr>
<tr>
<td>Influence</td>
<td>Influence</td>
<td></td>
<td>Someone else, possibly unspecified, encouraged or influenced decision</td>
<td>“I was also influenced by my friend who graduated a couple years before me”</td>
</tr>
<tr>
<td></td>
<td>Recruitment</td>
<td></td>
<td>Specific recruitment activity conducted by honors program</td>
<td>“I joined Honors because on my very first visit to campus the Honors College went above and beyond anything I expected to make me feel welcome”</td>
</tr>
</tbody>
</table>