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The Effect of High School Accounting on the Selection of College Major, Performance, Satisfaction and Retention

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ABSTRACT

The objective of this study is to examine the impact completion of a high school accounting course has on the selection of college major, academic performance in introductory accounting courses, satisfaction with one's major, and retention. These relations are examined using data from a survey given to 208 students of various majors enrolled in the Paul College of Business and Economics at the University of New Hampshire. Multiple linear regression analyses were used to analyze the data. The results provide evidence of a significant positive relation between high school accounting and two variables: selection of college major, and performance in introduction to managerial accounting. The results also provide evidence consistent with a moderately significant relation between high school accounting and retention. The results do not show any significant relation between high school accounting and performance in introduction to financial accounting or major satisfaction. Overall, the results of this study contribute to a better understanding of the effect high school accounting can have on the development of future accounting professionals.

I. Introduction

The influence that accounting education has on the development of accounting professionals is of interest to researchers and practicing professionals; two parties focused on ensuring accounting students are effectively prepared for their careers. While much of the focus is at the university level, it is important to realize that accounting education often starts earlier, at the high school level. Understanding how high school accounting affects the development of accounting students can help further the development of accounting education programs. The objective of this study is to contribute to a better understanding of this relation. The results should be of interest to universities looking to make more informed decisions about course design, with any resulting changes ultimately benefiting the accounting firms and practicing professionals who rely on university programs to educate accounting students.

Prior research has examined the effect that high school accounting has on performance, both overall and within accounting courses (Eskew and Faley 1988, Schroeder 1986). Researchers have also investigated the many factors (i.e., personality, intelligence, experience, gender, and age) that determine why students choose accounting as a major (Cohen & Hanno 1993), as well as factors that contribute to both a student's satisfaction and retention¹ within the accounting major (Adams et al. 1994). To my knowledge, however, no studies have examined these relations in the past 10 years, a

¹ In prior studies, the term student retention has been used to refer to retention within a major or retention within the school as a whole. For the purposes of this study, I define student retention based on declared major, with a retained student defined as one that continues to major in accounting after their initial declaration of accounting as a major.

period in which the accounting industry and undergraduate accounting programs have undergone substantial changes.

This study examines the effect completion of a high school accounting course has on student's at the Paul College of Business and Economics at the University of New Hampshire. The effect of a high school accounting course is captured using several variables, including: selection of college major, performance, satisfaction, and retention. The sample consists of sophomores, juniors, and seniors who have completed introductory accounting courses and are on track to completing a bachelor's degree in business. My study produces evidence of a relation between high school accounting and three of the variables of interest. I find evidence of a significant positive relation between high school accounting and selection of major, and between high school accounting and performance in an introductory accounting course. I also find limited evidence of a relation between high school accounting and retention with a major. Taken as a whole, my results suggest high school accounting experience has a significant effect on student outcomes.

This study is motivated by a number of factors. First, while prior research on the subject exists, to the best of my knowledge, all prior studies on this subject were either completed before significant AICPA recommendations were issued (Smith 1968, Schroeder 1986, Eskew and Faley 1988), or the research was done in a country outside of the United States (Byrne and Flood 2008, Al-Twaijry 2010, Kavanagh and Drennan 2008, Hancock et al. 2010). In addition, in the last 10 years many universities have altered their accounting programs to accommodate the changing needs of the profession (AAA 2015). Taken together, the changes in universities and the industry as a whole

suggest the need for up to date research using a sample of students in the United States. Finally, the American Accounting Association (AAA) has in recent years outlined several objectives related to improving high school accounting courses (AAA 2015). Results of this study provide evidence on whether the current structure of accounting courses is effective or if the AAA is correct in requesting changes be made to high school accounting courses.

II. Literature Review and Hypothesis Development

Choosing Accounting as a College Major

The variables that affect a student's choice of major are important because they allow educators and professionals to predict which students will be majoring in their field. This knowledge can be used to streamline admissions and improve outcomes, as the parties are able to influence students prior to their arrival at a university. Consistent with the importance of this topic, there are a large number of prior studies that have examined the variables that determine college major. Monmarquette et al. (2001) found that expected earnings, based off perceived probability of success, earnings after graduation, and earnings alternative of failure, are essential to selection of college major. Malgwi et al. (2005) found that genuine interest in the subject was the most important factor influencing incoming freshman on the decision of their major. Beggs et al. (2008) found similar results in that students tend to major in a subject in which they have a knowledge base about, noting important factors such as interest, major attributes and job characteristics. Other studies have focused on selection of college major for subsets of students, including: business majors (Kumar and Kumar 2013), math and science majors

(Stinebrickner and Stinebrickner 2011), information system majors (Zhang 2007), and engineering majors (Matusovich et al. 2011).

Despite the prevalence of research in other disciplines, few researchers have focused on the factors that affect a student's decision to study in accounting. Aryna et al. (1978) compared the stereotypical accountant to psychology students, finding that accounting students had a higher level of interest business and organization but lower level of interest in service, general culture, art, and entertainment. Cohen and Hanno (1993) found that success in introductory courses, skills and background in math, and workload in undergraduate accounting courses were factors that facilitate or hinder the choice to major in accounting. Owoso et al. (2014) found that students who participated in a computer based assisted learning program (CBAL) during their introductory accounting course were more likely to enroll in intermediate accounting and to major in accounting than those students who did not take the CBAL.

Consistent with coursework informing selection of college major, students exhibit a preference for college majors that align with the abilities developed through high school coursework (Tchunte 2016). This relation has been documented in a variety of disciplines: Math and Science (Trusty 2002; Federman 2007), and Computer Science (Cater 2006). A link between the two is unsurprising given a majority of students begin the selection process while in high school: 94% of high school seniors have already started thinking about their major, with 61% of those students having a major finalized (Granitz et al. 2014). While the extant literature has provided evidence of a relation between high school coursework and college major, to the best of my knowledge, no study has explicitly examined whether taking an accounting class in high school is

associated with choosing accounting as a major in college. I expect enrollment in a high school accounting course to be indicative of a student's interest in accounting, and the acquisition of skills relevant to accounting coursework. Consistent with prior studies that show student's select majors that fit their interests and skill set, I expect that students who take an accounting class in high school will be more likely to major in accounting in college than those who do not. Consequently, my first hypothesis stated in alternative form is:

H1: Students who completed an accounting course in high school are more likely to major in accounting.

Performance in Accounting Courses

Many studies have examined the relation between high school accounting experience and undergraduate accounting performance. However, the literature has provided mixed evidence. A majority of studies find no relation between high school accounting experience and performance, measured using exam scores (Baldwin and Howe 1982, Schroeder 1986, Rowbottom 2013), or GPA (Byrne and Flood 2008). Several studies, however, find a significant positive relation between high school accounting experience and performance in introductory courses (Smith 1968, Eskew and Faley 1988, Gul & Fung 1993). An outlier, Koh and Koh (1998) found a significant negative relation between high school accounting experience and performance in introductory courses.

In the last ten years there have been significant changes in the content of undergraduate accounting courses in response to the demands of employers. Employers now expect students to be “job ready” and are requesting more “non-technical” skills

from college graduates (Kavanagh and Dreenan 2008, Hancock et al. 2010). In response to these demands, accounting programs are increasingly focused on the development of “non-technical” skills in students. Young and Warren (2011) and McGuigan et al. (2012) document two separate implementations of programs within introductory accounting classes designed to develop the critical-thinking of students. Both instances found students to experience critical-thinking improvement through various aspects of introductory accounting. Sergeant and Cannon (2016) documented expanded integration of “non-technical” skills by implementing critical-thinking programs into an auditing course, finding that students achieved desired learning objectives and felt that their critical-thinking had been heightened.

While colleges have adapted their curriculum to meet the demands of public accounting firms, high schools have only just begun to make adjustments to their accounting programs. On September 28, 2016 the AICPA announced that they have partnered with state CPA societies to “increase the number of high school educators trained to teach higher order accounting courses across the country” by training educators throughout the summer of 2016. This initiative addressed the American Accounting Association (AAA) Pathway Commission’s suggestion that the profession “improve its ability to attract high-potential, diverse entrants into the position”. The AAA had previously requested that the College Board develop an accounting class eligible for advanced placement (AP) credits. However, the College Board denied the request until certain issues were resolved. As a response, the AICPA began their work with state CPA societies to hope to “move the AP initiative forward” (AAA 2015).

Since there has been a significant amount of time since a study examined the effect of high school accounting experience on undergraduate accounting performance, and there have been major changes in high school and collegiate curriculum over this period, a re-examination of the relation is relevant. Given the alignment of high school and undergraduate accounting curriculums, I expect students who take accounting classes in high school will perform better in undergraduate accounting courses than students who do not. A majority of the studies mentioned above that investigated this hypothesis calculated academic performance based off of examination results. However, since the desire for critical thinking and communication skills from employers have become more relevant in introductory accounting classes, the inclusion of grades from group projects, presentations, and participation all become necessary for consideration. Consequently, I use final letter grades from intro to accounting classes, to proxy for performance because this measure captures the entire workload from the course. My second hypothesis stated in alternative form is:

H2: Students who completed an accounting course in high school will perform better in undergraduate accounting courses.

The extant literature suggests student satisfaction is a function of performance. Multiple studies have documented an association between GPA and overall satisfaction (Aitken 1982; Nauta 2007; Abdel-Azim 2006). Students are more satisfied with their major if they perform well in the courses required by the major. Since a student taking a high school accounting course is expected to perform better in undergraduate accounting, I expect students who take accounting in high school to have greater satisfaction within

their accounting major than those who do not. Thus, my third hypothesis stated in alternative form is:

H3: Students who take accounting courses in high school and choose to major in accounting will report greater satisfaction with their major than those students who did not take accounting courses in high school.

Retention Within the Accounting Major

Many studies have investigated variables that affect undergraduate retention. Adams et al. (1994) found that the accounting major generally attracts the high-aptitude students that it desires, yet loses more than it gains as the program progresses. This study also found that genuine interest in the field was more important for non-accounting students than it was for accounting students. Allen (2004) found that non-accounting students perceive they do not have adequate skills or background in math to succeed in accounting. Mauldin et al. (2000) found that the accounting principles professor plays an important role in student retention. Sargent et al. (2011) found that students who participated in short online tutorials during their introductory accounting course were significantly less likely to withdraw from the course and more likely to pass the course.

To the best of my knowledge, no studies have explored the relation between high school accounting classes and retention within the accounting major. Since many studies have linked experience with retention, I believe that the completion of a high school accounting class will lead to increased retention. A student taking a high school accounting course will gain experience in accounting, and prior research has documented a positive association between experience and retention. Further, students who choose to major in accounting after taking the subject in high school understand the requirements to

obtain an accounting degree, resulting in a more informed initial decision. Thus, my fourth hypothesis stated in alternative form is:

H4: Retention rates for students who took an accounting course in high school will be higher than retention rates for students who did not take a course.

III. RESEARCH METHOD

This study was conducted using sophomore, junior, and senior students enrolled in a bachelor degree program at the Peter T. Paul College of Business and Economics at the University of New Hampshire. A survey was distributed in various courses, which asked questions related to student's majors, performance in introductory accounting courses, satisfaction within current major, and retention. The twenty-one questions provided to students included: free response, true/false, and 5-point Likert-type scales. The survey also questioned various details on student's personal information such as gender and age. Details on the survey instrument are provided in Appendix A.

The survey was given to students in two introductory finance courses, two organizational behavior courses, one introductory financial accounting course, one intermediate financial accounting course, and one auditing course. 219 students were asked to complete the survey. Complete responses were collected from 208 students. Males represented 60% of the sample while females represented 40%. Ages of respondents were between 19 and 26, with 56% of the sample being in their sophomore year and 38% of the sample being in their junior year. Basic demographic information as well as number of students who took accounting in high school and majored in accounting are presented below in Table 1.

Table 1

	Demographic Statistics		
	Male	Female	Total
Average Age	20.25	20.09	
High School Accounting (HSA)	42	21	63
No HSA	82	63	145
Accounting Major	47	32	79
Non - Accounting Major	77	52	129
Sample Size	124	84	208

Regression Models

To test the effect of high school accounting on selection of college major, performance, satisfaction and retention, multiple regression models were used similar to models used in prior research (Cohen and Hanno 1993, Byrne and Flood 2008, Nauta 2007, Aitken 1982, Biggers et al. 2008). Selection of college major (MAJ) is calculated based on self-reported current major from survey participants.

The linear regression model for selection of college major is as follows;

$$MAJ = \beta_0 + \beta_1 HSA + \beta_2 GND + \beta_3 AGE + \beta_4 502GRADE + \beta_5 503GRADE + \beta_6 CGPA + \beta_7 SKILLS + \beta_8 INSTR + \beta_9 INTEREST + \beta_{10} COMP + \beta_{11} QUAL + \varepsilon$$

(1)

Performance in introductory courses (PERF502 (503)) was calculated based on the received or expected letter grade in both Introduction to Financial Accounting (ADMN 502) and Introduction to Managerial Accounting (ADMN 503). Two separate regression models were used to investigate the effect of high school accounting on both ADMN 502 and ADMN 503.

The linear regression models for performance are as follows;

$$\text{PERF502} = \beta_0 + \beta_1\text{HSA} + \beta_2\text{502TIME} + \beta_3\text{INTEREST} + \beta_4\text{HSGPA} + \beta_5\text{AGE} + \beta_6\text{GND} + \varepsilon \quad (2)$$

$$\text{PERF503} = \beta_0 + \beta_1\text{HSA} + \beta_2\text{503TIME} + \beta_3\text{INTEREST} + \beta_4\text{HSGPA} + \beta_5\text{AGE} + \beta_6\text{GND} + \varepsilon \quad (3)$$

Satisfaction (SATF) is calculated based on self-reported overall happiness with current college major.

The linear regression model for satisfaction is as follows;

$$\text{SATF} = \beta_0 + \beta_1\text{HSA} + \beta_2\text{502GRADE} + \beta_3\text{503GRADE} + \beta_4\text{EXP} + \beta_5\text{AGE} + \beta_6\text{GND} + \beta_7\text{CGPA} + \beta_8\text{INTEREST} + \beta_9\text{CSAT} + \varepsilon \quad (4)$$

Retention is calculated based on students who entered college as accounting majors and have remained within the major. Students who are reported as not being retained are those who have entered college as accounting majors and have left the major, and those students who have reported that they “agree” or “completely agree” that they are considering changing majors.

The linear regression model for retention is specified as follows;

$$\text{RET} = \beta_0 + \beta_1\text{HSA} + \beta_2\text{503GRADE} + \beta_3\text{SATF} + \beta_4\text{AGE} + \beta_5\text{GND} + \beta_6\text{502GRADE} + \beta_7\text{PRNTO} + \beta_8\text{COMP} + \varepsilon \quad (5)$$

The variable of interest, HSA, is the presence of high school accounting. The models presented above examine the effect of HSA on MAJ, PERF, SATF, and RET. The regression models presented also include variables consistent with other research (Cohen and Hanno 1993, DeMarie and Aloise-Young 2003, Malgwi et al. 2005, Allen 2004,

Kumar & Kumar 2013). A full explanation of the variables used is presented in Appendix B.

IV. DATA AND RESULTS

Hypothesis 1: Selection of College Major

Table 2
Regression Analysis

Association between High School Accounting and Selection of College Major			
Dependent Variable: MAJ			
Variable	Estimate		T-Stat
<i>Intercept</i>	-1.923	***	-2.825
<i>HSA</i>	0.186	**	2.564
<i>GND</i>	0.108		1.63
<i>AGE</i>	0.065	**	2.069
<i>502GRADE</i>	0.05	**	2.31
<i>503GRADE</i>	0.064	***	3.133
<i>CGPA</i>	-0.09		-1.542
<i>SKILLS</i>	-0.002		-0.036
<i>INSTR</i>	0.069	**	2.384
<i>INTEREST</i>	-0.06		-1.372
<i>COMP</i>	0.057	*	1.769
<i>QUAL</i>	0.012		0.315
Adjusted R ²	0.28		
n	177		
p-level	<.01		
*, **, *** Significant at P<.10, P<.05, P<.01 Respectively			

The results for the regression analysis on selection of college major based on Model 1 are shown above in Table 2. A sample of 177 students was used in the first regression model based off surveys completed fully. The adjusted R² is 0.28 and the p-value is < .01 indicating a good model fit. Based off the regression results, high school accounting (HSA), age, performance in ADMN 502 (502GRADE), performance in

ADMN 503 (503GRADE) and Instructor quality (INSTR) are all significant factors in student selection of college major.

Hypothesis 1 proposes that the presence of high school accounting courses is significantly associated with selection of college major. Table 2 reveals that high school accounting (HSA) is significantly positively associated with selection of college major ($P = .011$). Therefore, Hypothesis 1 is accepted. This finding is consistent with other studies (Beggs et al. 2008, Tchunte 2016).

Hypothesis 2: Performance

Table 3
Regression Analysis

Association between High School Accounting and 502 Performance		
Dependent Variable: 502GRADE		
Variable	Estimate	T-Stat
<i>Intercept</i>	4.437	1.407
<i>HSA</i>	-0.005	-0.017
<i>GND</i>	-0.334	-1.118
<i>HSGPA</i>	0.447 **	2.013
<i>502TIME</i>	-0.215 ***	-5.251
<i>INTEREST</i>	0.156	0.886
<i>AGE</i>	0.185	1.303
Adjusted R ²	0.17	
n	193	
p-level	<.01	

*, **, *** Significant at P<.10,P<.05,P<.01 Respectively

Table 4
Regression Analysis

Association between High School Accounting and 503 Performance		
Dependent Variable: 503GRADE		
Variable	Estimate	T-Stat
<i>Intercept</i>	0.92848	0.28758
<i>HSA</i>	0.803 **	2.49624
<i>GND</i>	-0.04236	-0.13692
<i>HSGPA</i>	0.40606 **	1.81323
<i>503TIME</i>	-0.1633 ***	-4.68968
<i>INTEREST</i>	-0.00335	-0.01798
<i>AGE</i>	0.33222 **	2.29135
Adjusted R ²	0.17	
n	174	
p-level	<.01	
*, **, *** Significant at P<.10,P<.05,P<.01 Respectively		

The results for the regression analysis on performance based on Models 2 & 3 are shown above in Table 3 and Table 4. A sample of 193 and 174 students are used in regression analysis two and three, respectively. The adjusted R² for both models is 0.17 and the p – level is <. 01, indicating a good model-fit. Based on the regression results, high school GPA (HSGPA) and time spent outside of the classroom (502TIME) were the only significant variables on performance in ADMN 502. High school accounting (HSA), high school GPA (HSGPA), time spent outside of the classroom (503TIME) and age were all significant variables on performance in ADMN 503.

Hypothesis 2 proposes that the presence of high school accounting courses is significantly associated with performance in introductory accounting courses. Table 3 reveals that high school accounting (HSA) is not significantly associated with performance in introduction to financial accounting (ADMN 502) (P = 0.986). Table 4

reveals that high school accounting (HSA) is significantly positively associated with performance in introduction to managerial accounting (ADMN 503) ($P = 0.013$). Thus, Hypothesis 2 is partially accepted. The mixed finding of hypothesis 2 is consistent with other studies (Eskew and Faley 1988, Gul and Fung 1993, Byrne and Flood 2008).

Hypothesis 3: Satisfaction

Table 5
Regression Analysis

Association between High School Accounting and Satisfaction		
Dependent Variable: HAP		
Variable	Estimate	T-Stat
<i>Intercept</i>	1.963	1.426
<i>HSA</i>	0.004	0.026
<i>502GRADE</i>	0.022	0.482
<i>503GRADE</i>	0.03	0.652
<i>EXP</i>	0.446 ***	3.079
<i>AGE</i>	-0.023	-0.41
<i>GND</i>	-0.187	-1.406
<i>CGPA</i>	0.142	1.131
<i>INTEREST</i>	0.256 ***	3.093
<i>RSAT</i>	0.149 **	2.28
Adjusted R ²	0.23	
n	72	
p-level	<.01	

*, **, *** Significant at P<.10, P<.05, P<.01 Respectively

The results for the regression analysis on satisfaction based on Model 4 are presented above in Table 5. A sample of 72 students was used to conduct this regression analysis as only accounting majors were considered. The adjusted R² is 0.23 and the p – level is < .01, indicating a good model fit. Based on the regression results, previous accounting work experience (EXP), genuine interest in accounting (INT), and self-

reported current satisfaction (CSAT) were all significant variables associated with overall major satisfaction.

Hypothesis 3 proposes that the presence of high school accounting courses is significantly associated with major satisfaction. Table 5 reveals that high school accounting (HSA) is not significantly associated with major satisfaction ($P = 0.979$). Thus, Hypothesis 3 is rejected.

Hypothesis 4: Retention

Table 6

Regression Analysis		
Association between High School Accounting and Retention		
Dependent Variable: RET		
Variable	Estimate	T-Stat
Intercept	-0.258	-0.227
HSA	0.242 *	1.96
503GRADE	0.056	1.278
HAP	0.074	0.857
AGE	-0.002	-0.043
GND	-0.063	-0.536
502GRADE	0.006	0.098
PRNTO	0.009	0.197
COMP	0.05	0.763
Adjusted R ²	0.03	
n	50	
p-level	0.34	

*, **, *** Significant at $P < .10, P < .05, P < .01$ Respectively

The results from the regression analysis on retention based on Model 5 are presented above in Table 6. A sample of 50 students was used to conduct this regression analysis. The adjusted R^2 is .03 and the p – level is 0.34 which indicated a less than ideal

model fit. Based on the regression results, high school accounting (HSA) is a moderately significant variable in determining retention.

Hypothesis 4 proposes that the presence of high school accounting courses is significantly associated with major retention. Table 6 reveals that high school accounting (HSA) is moderately significantly positively associated with major retention ($P = 0.057$). Thus, some evidence is provided to support Hypothesis 4. This finding is consistent with prior studies (Biggers et al. 2008).

V. CONCLUSION

The accounting education environment is continuously evolving with new laws and regulations, and changing demands. Since the passage of the Sarbanes-Oxley in 2002 accounting regulators have consistently emphasized the need to adapt education programs to ensure relevance. The necessity of producing accounting professionals with “higher-order cognitive skills” (AICPA 2015) has led accounting educators are altering their curriculums to accommodate more critical thinking, analytical and problem-solving skills (Young and Warren 2011, McGuigan et al. 2012, Sergeant and Cannon 2016). With these changes to the environment a re-examination of variables that affect undergraduate accounting education is relevant.

The results of this study show that students who take high school accounting are more likely to select accounting as a major, perform better in introductory managerial accounting courses, and are more likely to be retained within the major. This finding should be of interest to accounting professionals and professors. For these stakeholders, my results have several implications. First, if high school accounting plays a roll in the progression and development of students within college accounting programs, accounting

professionals can stress the importance of early experience with accounting and universities can look to enroll students with high school experience. Second, my results suggest that high schools should continue the development of accounting courses to fit the changing needs of the accounting profession. While this study does not investigate the kind of accounting programs taught in high school, it shows the potential these programs can have on the future accounting professional. Furthermore, as the AAA moves forward with their initiative to develop an advanced placement high school course, more high schools across the country can look to add accounting courses to their curriculum.

Overall, this study is meant to highlight the potential of high school accounting courses and their effect on students. Due to the fact that many majors require students to take introductory accounting courses, high school accounting can be beneficial to more than just accounting majors. With the development of more effective high school accounting programs courses, students can gain experience to help them throughout their higher education.

Limitations

There are numerous limitations accompanying this study. First, the outcomes of data from this study are limited as all responses to survey questions were collected from one university. In future research, replicating this study in other universities or multiple universities across the country could result in a more representative sample. Furthermore, the sample size was limited. Although there was a fair amount of respondents only 30% of respondents took an accounting course in high school and 38% of respondents were accounting majors. To improve the significance of results from the regression analyses a larger overall sample could be used to ensure a proper sample for each regression

analysis. Another limitation was the design of the survey instrument and distribution process. Many surveys seemed to have incorrect or blank responses and therefore could not be used to analyze data. A more simplified or concise survey could be used in further research. Finally, this study is limited as to the variables used in each regression analysis. These variables were consistent with previous research; however, further exploration into the effect high school accounting could take into account other variables that may have an increased effect on the dependent variables used in this study.

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Appendix A: Survey Instrument
Paul College Survey Questionnaire

Instructions: Please complete questions 1 through 21 below. This survey should take about five minutes to complete. If you have any questions, do not hesitate to ask. We appreciate your participation.

SECTION I.

- 1) Student ID Number: _____ - _____
- 2) a. Age: _____ b. Gender: _____
- 3) Indicate your current year in school:
 Freshman Sophomore Junior Senior Grad. Student
- 4) What year do you plan on graduating? _____

SECTION II.

- 5) Did you take an accounting course in high school? Yes No
- 6) If yes, what year were you when you took an accounting class in high school?
 Freshman Sophomore Junior Senior
- 7) Have you had any previous work or internship experience with accounting? Yes
No
- 8) What were your SAT scores in high school? _____
- 9) My high school GPA was between: 1.9-2.4 2.5-
2.9 3.0-3.4 above 3.4 Other _____
- 10) My college GPA is between:
 1.9-2.4 2.5-2.9 3.0-3.4 above 3.4 Other _____
- 11) Grades received in the following courses: (if applicable) (if currently enrolled, please report your current average and expected grade)
 Financial Accounting (502) _____ Managerial Accounting (503) _____
- 12) How many hours a week on average do you/did spend on the following courses:
 Financial Accounting (502) _____ Managerial Accounting (503) _____

SECTION III.

Appendix A (Continued)

- 13) What was your major when you came into college as a freshman? (Mark all that apply)
- Undeclared General
 Undeclared Business ADMN
 Accounting
 Economics
Management
 Finance
 Entrepreneurial Studies
 Information Systems
 (MIS)
 International Business and Economics
 Student Designed Option
 Other
- _____

- 14) How many times have you changed your major (including from undeclared)?
- Never (**Skip to question #17**)
 One Time
 Two Times
 Three Times

- 15) What is your current major? (Mark all that apply)
- Undeclared General
 Undeclared Business ADMN
 Accounting
 Economics
Management
 Finance
 Entrepreneurial Studies
 Information Systems
 (MIS)
 International Business and Economics
 Student Designed Option
 Other
- _____

- 16) What was the reason for changing your major?
- _____
- _____
- _____
- _____

- 17) What year were you when you declared your current major? _____

SECTION IV:

- 18) How satisfied are you with your current major?
- Very Unsatisfied
 Unsatisfied
 Indifferent
 Satisfied
 Very Satisfied

- 19) To what extent do you agree with the following factors? Please evaluate each factor on its level of influence to your current major. Use a scale of 1 to 5, where: 1 = *Completely Disagree* and 5 = *Completely Agree*. Circle Your Answer.

	Completel y Disagree	Disagree	Indifferent	Agree	Completely Agree
I often wish I had changed my major	1	2	3	4	5
I am considering changing majors	1	2	3	4	5

Overall I am happy with my choice of major	1	2	3	4	5
It is important that I am satisfied with my major	1	2	3	4	5

20) **Positive Influences:** In selecting your **current major** to what extent were you **positively** influenced by the following factors? Please evaluate each factor on its level of influence leading you to choose your current major. Use a scale of 1 to 5, where: 1 = *no influence* and 5 = *major influence*. Circle Your Answer.

	No influence	Minor Influence	Somewhat Minor Influence	Somewhat Major Influence	Major Influence
Interest In the Subject	1	2	3	4	5
College Advisor	1	2	3	4	5
Introductory Courses	1	2	3	4	5
Career Opportunities	1	2	3	4	5
Parent/Guardian opinion	1	2	3	4	5
Level of Compensation	1	2	3	4	5
Instructors	1	2	3	4	5
Self - belief in having the skills to succeed	1	2	3	4	5
Quality of Curriculum	1	2	3	4	5

21) What are some of the factors you associate with the success in your major?

Appendix B: Variable Definitions (Alphabetical)

<i>502GRADE</i>	Letter grade received in ADMN 502 - Introduction to Financial Accounting
<i>503GRADE</i>	Letter grade received in ADMN 503 - Introduction to Managerial Accounting
<i>502TIME</i>	Average time spent outside of the classroom on ADMN 502
<i>503TIME</i>	Average time spent outside of the classroom on ADMN 503
<i>AGE</i>	Current age of survey participant
<i>CGPA</i>	Current college grade point average
<i>COMP</i>	Ranked 1-5 Importance of future compensation on selection of current college major
<i>CSAT</i>	Ranked 1-5 current satisfaction with major
<i>EXP</i>	Any previous work experience with accounting outside of the classroom. Variable coded 1 if yes and 0 if no
<i>GND</i>	Gender of survey participant
<i>HSA</i>	Presence of high school accounting course. Coded 1 if survey participant took accounting in high school, 0 otherwise
<i>HSGPA</i>	High school grade point average
<i>INSTR</i>	Ranked 1-5 influence that previous/current Instructors had on selection of college major
<i>INTEREST</i>	Ranked 1-5 interest in current major
<i>MAJ</i>	Current college major. Variable coded 1 if accounting, 0 otherwise
<i>PRNTO</i>	Ranked 1-5 Influence of parent/guardian approval on selection of college major
<i>RET</i>	Retention rate of students within the accounting major. Ranked 1 if student was retained, 0 otherwise
<i>SATF</i>	Ranked 1-5 overall satisfaction based on overall happiness of selection of college major
<i>SKILLS</i>	Ranked 1-5 belief in having the skills to succeed in current major
<i>QUAL</i>	Ranked 1-5 belief in the quality of current major curriculum