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An Analysis of the Relationship between Study Styles and Demographics across Multiple Accounting Class Levels

Savannah B. Hooper
University of Southern Mississippi

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The University of Southern Mississippi

An Analysis of the Relationship between Study Styles and
Demographics across Multiple Accounting Class Levels

by

Savannah B. Hooper

A Thesis
Submitted to the Honors College of
The University of Southern Mississippi
in Partial Fulfillment
of the Requirement for the Degree of
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Approved by

Mary Anderson, Ph.D., Thesis Adviser
Associate Professor of Accounting

Gwen Pate, Ph.D., Director
School of Accountancy

Ellen Weinauer, Ph.D., Dean
Honors College

ABSTRACT

Approaches to learning are elemental to a student's learning outcomes. Prior research indicates that accounting students with a deep learning approach have a more successful student learning outcome than do accounting students with a surface learning approach. Accounting accreditation and regulatory agencies have recommended that coursework be directed towards more critical thinking and real-life preparation of students. These characteristics are indicative of the deep learning approach. After ascertaining the learning approach adopted by introductory, intermediate, and advance accounting students at a public university with a main and satellite campus, this paper reports on demographic characteristics that may impact a student's selection of learning approaches.

Key Terms: study methods, approaches to learning, deep, surface, study process questionnaire

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INTRODUCTION

The Accounting Education Change Commission (AECC) recognizes that accounting classes are vital for establishing accounting fundamentals for both accounting and other business majors. Considered the “language of business”, understanding basic accounting concepts is elemental to business success. Accordingly, accounting education research is valuable to the academic community as it provides information and evidence concerning strategies students can learn to be more successful in their accounting courses. This research is also beneficial to employers since successful students are likely to graduate as more knowledgeable and valuable employees. Since students often view accounting classes as the most difficult general business class requirement, many researchers focus on trying to identify presentation methods and study strategies that encourage student success. For accounting majors, the student’s understanding of introductory principles will influence success in subsequent classes; for non-accounting majors, the introductory classes likely represent the student’s only concentrated exposure to accounting. As such, a basic understanding of the accounting principles must be carried forward through one’s curriculum.

The purpose of this research is to determine if a certain demographic factor or set of factors is correlated with a student’s tendency to study using a deep or surface approach, as defined by educational researchers, in accounting classes (Biggs, 1987). The results of this study will attempt to generate a profile of a successful student by identifying traits or sets of traits that most often correspond with the desired method. In contrast to previous studies that consider a single class level, (Henry, 2004; Swanson, et al., 2005; Elias, 2005; Clark and Latshaw, 2012; Chen, Jones and Moreland, 2014) this study spans across three

different class levels: introductory, intermediate, and advanced accounting. The study will document an evolution of the methods a student uses depending upon class level, if such patterns emerge. This information is useful to accounting professors so that they can encourage students to use the more successful method to enhance student-learning outcomes.

LITERATURE REVIEW

Cognitive Style versus Learning Style

In researching learning styles, it is vital to differentiate between students' cognitive styles and their learning styles, which are often incorrectly used interchangeably. Cognitive styles are indicative of a student's "consistent preferences for particular ways of gathering, processing, and storing information and experiences". A student's natural cognitive style is believed to be shaped and formed in primary school years and is believed to be concrete and consistent by college years (Ak, 2008). Conversely, learning styles are indicative of a student's approach to the study of the material presented.

Learning Styles

In 1976, Swedish researchers Ference Marton and Roger Saljo began researching the qualitative differences of students' approaches to learning; their findings are now well established in higher education literature across all disciplines. Determining student-learning processes is extremely dependent on values, motives, and several other context factors (Marton and Saljo, 1976). These issues are ignored by psychological approaches that focus on measuring how information is processed (Weinstein, Schulte and Palmer, 1987; Moreno and DiVesta, 1991; Schmeck, Geisler-Brenstein and Cercy, 1991).

Subsequent education research of students' orientations to studying, based upon motivation (Biggs, 1976), approaches to learning tasks (Marton and Saljo, 1976), and learning styles (Pask, 1976), led to the development of the Approaches to Learning Inventory (ASI) (Entwistle and Ramsden, 1983). This tool has been widely used in early studies of students' learning in higher education to identify students' orientation to studying.

Early theoretical educational researchers originally believed that a student's approach to learning was static. However, a student's approach to learning is less steady and can vary between classes, even between topics within the same class. By the 1980s, research revealed that students' approaches are influenced by a combination of the student's cognitive style, the student's inherent learning style, and the instructor's presentation of the material (Beattie, Collins, and McInnes, 1997; Hall, Ramsey and Raven, 2004; Ak, 2008). In order to demonstrate the interaction between these three variables it is helpful to utilize Curry's onion model, where the innermost core of the onion represents fundamental cognitive styles that are the most consistent and the outermost ring of the onion represents instructor's preferences, the least stable component of student's learning. (Curry, 1983; Ak, 2008).

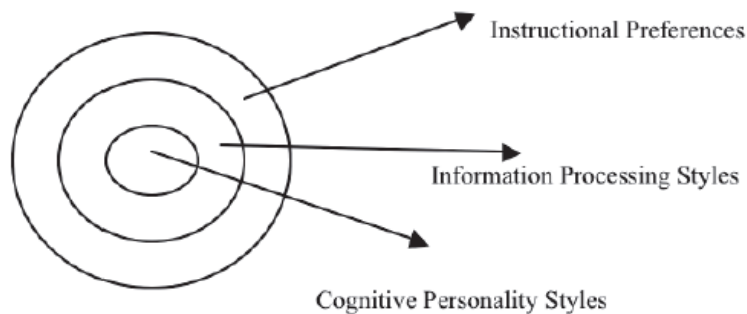


Figure 1. Curry's (1983) onion model (Price, 2004).

A student's learning approach adapts to the learning environment and is affected by internal cognitive factors, psychological factors, and external factors, such as how instructors present the information. In order to identify which learning approach a particular student utilizes, education researchers have worked to develop questionnaires. To give insight into the approach taken by individual students, Biggs developed the Study Process Questionnaire (SPQ) (Biggs, 1987). Through this questionnaire, the learning approach adopted by a student can be ascertained as either a *surface approach* or a *deep approach*. The original SPQ questionnaire was condensed to twenty items in 2001, ten statements that measure deep study method and ten statements that measure surface study method (Biggs, et al., 2001). This revised questionnaire (R-SPQ-2F) has been used in studies with similar objectives in other disciplines, such as nursing and dentistry and is a reliable way to gather data on learning methods (Khan, 2011; Mohamed Ali and El Sebai, 2010).

Deep and Surface Methods

The deep approach is defined as being associated with a commitment to and interest in seeking meaning of the subject; conversely, the surface approach is defined as being associated with acquiring enough knowledge to complete the task (i.e., pass the class). The deep approach relates to an in-depth understanding of material while the surface approach relates to memorization and short-term learning. Students employing a deep approach would be more likely to write out notes to study, as opposed to memorizing flashcards. While surface learners are content memorizing content without questioning its logic, deep learners approach content critically and are more concerned with achieving a true understanding of the principles behind the material (Beattie, et al., 1997).

Previous research studying these approaches in regard to accounting curriculum specifically demonstrates a positive correlation between the deep study method and success (Davidson, 2002; Elias, 2005; Ballantine, Duff and McCourt Larres, 2008). These findings are consistent with the findings of researchers in similar fields, such as engineering, where abstract, critical thinking skills are of high importance (Henry, 2004).

The findings of previous studies have shared the conclusion that the deep study method is most correlated with the highest cumulative GPA and course success (Elias, 2005; Clark and Latshaw, 2012). However, there are differences in findings of whether or not instructors should change or modify their teaching style and presentation of material based on the demographics of the class. Some studies (Beattie et al., 1977; Dallimore, Hertenstein, and Platt, 2010) give evidence that altering teaching styles or implementing new teaching techniques can improve student learning outcomes; other studies (Selto, et al., 1987; Ballantine, et al., 2008) find that such changes have no effect on the overall achievement of learning objectives.

Researchers generally agree that there is at least a minor correlation between student's perception of the presentation of the information and study approach. The connection between students' approach and learning instructional factors is illustrated in Curry's onion model. Overall, since student's learning approach is dependent and influenced by internal (cognitive) factors and external (learning environment) factors it is beneficial for instructors to investigate how they can encourage a deep approach (Hall et al., 2004; Ak, 2008). General education research and accounting specific research supports accounting educators "moving away from procedural tasks and the memorizing of professional standards to a more conceptual and analytical form of learning" in order to

encourage a deep approach (Beattie et al., 1997; Davidson, 2002; Hall et al., 2004). Methods of encouraging this approach include ensuring students are not prescribed an excessive workload and that assignments incorporate case studies, group projects, and critical thinking (Hall et al., 2004). Additional institutional factors that research indicates can increase students' likelihood of utilizing the deep approach are passionate instructors, high staff/student ratios, and student feedback (Sharma, 1997). The Accounting Education Change Commission's (AECC) most recent report through the Pathway's Commission encourages academics to move toward these deep study method approaches.

Previous research demonstrates that different demographic groups are more likely to process information in certain manners. Elias' study found that accounting majors, women, and older students are more likely than their counterparts to utilize a deep study approach (Elias, 2005). Researcher Thomas Wooten (1998) analyzed the differences between which factors motivated nontraditional students (ages 25 and higher) versus traditional students. His results indicate that the success of traditional students is most impacted by grade history, aptitude, and motivation, while the success of nontraditional students was influenced most by the learning environment and self-expectations. In studies conducted by Richardson (1995) and Devlin (1996), both researchers conclude that nontraditional students are more inclined to utilize the deep study approach than traditional students.

Study Methods and Success in Accounting Courses

Several accounting education research projects focus on isolating single variables in order to determine its correlation to student success (Wooten, 1998; Dallimore, et al., 2010; Krom and Williams, 2011). Elias focused on the relationship of study approaches to

success by examining students' study approaches in introductory courses along demographic factors (Elias, 2005). The study found that accounting majors, women, and older students were more inclined to utilize the deep study approach. Elias also concluded that GPA and expected course grade correspond positively with the deep study method. In a similar study in an advanced accounting class, Lynn and Robinson-Backmon reached the same conclusions as the Elias study. In their study of advanced classes, the authors conclude that the deep study method correlates with a higher chance of course success (Lynn and Robinson-Backmon, 2005). Thus, prior research, though limited to one class level, demonstrates a positive relationship between the deep study method and course success. Education researchers agree that students who utilize a deep approach rather than a surface approach to studying are more likely to truly comprehend the material. Truly understanding material translates to the ability to apply the material to real-life problems and discover solutions (Marton and Saljo, 1976; Biggs, 1989; Davidson, 2002). Critical thinking skills required for mastering complex accounting concepts are aligned with use of the deep study method. Therefore, focusing on which study approach students use is important because educationally successful students are more likely to utilize the deep approach versus those who are less successful (Tiwari et al., 2006; Zeegers, 2001).

METHODOLOGY

By spanning across three different levels of accounting classes this study is more holistic and comprehensive than previous studies. This will accomplish two objectives: (1) to give evidence of a set of certain demographic factors associated with the deep study method and whether the factors vary by class level, and (2) exploring whether accounting majors change their approach over time. As a complex subject accounting curriculum

builds upon foundations presented in beginning accounting courses. Since cognitive personality styles are constant and difficult to alter, this research seeks to identify factors contributing to a student's choice of learning approaches, surface or deep.

Survey Instrument

The instrument of this study is the Revised Two Factor Study Process Questionnaire (R-SPQ-2F). This questionnaire measures a student's tendency to use the deep or surface study methods. The SPQ survey consists of twenty questions, ten that measure surface learning, and ten that measure deep learning. The SPQ survey measures deep and surface approaches on two levels: motives and strategies for learning. This is beneficial because it is not limited to only measuring how the student studies, but what the student is trying to achieve (Biggs, et al., 2001). If the student is trying to achieve a true understanding of the material then they would have deep motive strategies, but the student may apply surface methods. Permission to utilize the R-SPQ-2F for research purposes is granted by John Biggs and David Kember (Biggs, Kember and Leung, 2001). Seven standard demographic questions, developed by the researcher, follow the SPQ questionnaire. The full survey, including the demographic questionnaire, is attached in Appendix A.

Demographic Variables

Based upon prior findings of Elias (2005), Wooten (1998), Devlin (1996), and Richardson (1995), demographic data compiled for the study include gender, campus location, age, major, work experience, program level, and grade expectation.

Gender. Elias (2005) found that women are more likely to utilize the deep study approach. Accordingly, gender data is collected.

Campus location. Data collected is from a satellite campus and a main campus of the same university. The satellite campus is composed primarily of nontraditional students.

Age. Wooten (1998) broke the data according to traditional students, defined as age 24 and below, and nontraditional students, defined as over age 24. Accordingly, the study includes age as a variable.

Major. Prior research indicates that accounting majors generally use deep learning approaches to their studies (Elias, 2005). College major data is collected.

Work experience. Accounting experience through work activities may provide exposure to the real-life complexities of the subject matter. As such, data on accounting work experience is collected.

Program level. To research evolution of learning strategies, from surface to deep, data three from three levels of accounting courses is collected. *Principles of Accounting* is a required sophomore level accounting course that all business majors are required to take. *Intermediate Accounting* and *Advanced Accounting* are courses required of accounting majors exclusively. Intermediate Accounting courses are prerequisites for Advanced Accounting.

Grade expectation. Students who report higher expected course grades are more likely to use the deep study method. Grade expectation is used as a proxy for motivation; therefore, it is included in the study.

Sample

The sample for this study consists of introductory, intermediate, and advanced accounting students at one accredited public university, across the school's two campuses. The main campus serves traditional students while the satellite campus serves primarily

non-traditional students. Two sections of each class, one from the main campus and one from the satellite campus, will comprise the sample. Each class ranges between approximately 30 and 40 students. After eliminating incomplete surveys, the final sample size is 146 students.

Analytical Method

Pearson's chi-squared analysis is used to analyze the relationship between study method, as determined by the survey, and demographic variables collected with the survey. Chi-squared analysis is very useful and common with enumerative count data. The chi-square statistic measures the difference between *expected* counts and *observed* counts. In order to compute the chi-square statistic, the formula $\chi^2 = \sum(\text{Observed} - \text{Expected})^2 / \text{Expected}$, is used. Then, results are compared with critical points of the chi-square distribution to demonstrate significant differences or lack thereof. Critical point for the study is 0.05.

Study methods variable can have one of two properties, deep or surface. As deep is the preferred study method since critical thinking is necessary, the study seeks to provide evidence as to the demographic characteristics of students who employ deep study methods. Also of value is at what level of academics this transition, if there is such, occurs. The variables of gender, campus, and work experience have binomial distributions; the variables of age, expected grade, and major have multinomial distributions. These multinomial variables can, and will be, converted to a binomial distribution for initial analysis. Additional analyses will be made on their multinomial distributions.

Hypotheses

The hypothesis statement being stated in the null form is elemental to chi-square analysis. Accordingly, each characteristic variable will be tested using the null

hypothesis: H_0 : The *Demographic Variables* are equally proficient in using the deep study method.

RESULTS

Table 1 illustrates the counts regarding study method relative to gender and yields the hypothesis: H_0 : Females and males are equally proficient in using the deep study method.

TABLE 1: Study Method by Gender

Variable	Deep Study Method	Surface Study Method
Female	57	28
Male	37	24

The chi-square statistic is 0.635. The p-value is 0.42554. The result is **not significant** at $p < 0.05$.

Table 2 illustrates the counts regarding study method relative to campus location and yields the hypothesis: H_0 : Students at the main and satellite campuses are equally proficient in using the deep study method.

TABLE 2: Study Method by Campus Location

Variable	Deep Study Method	Surface Study Method
Main campus	57	41
Satellite campus	37	11

The chi-square statistic is 5.0296. The p-value is 0.024918. This result is **significant** at $p < 0.05$.

Table 3 illustrates the counts regarding study method relative to age and yields the hypothesis: H_0 : Students under 24 years of age and students over 24 years of age are equally proficient in using the deep study method.

TABLE 3: Study Method by Age

Variable	Deep Study Method	Surface Study Method
Under 24 years old	59	44
24 years and over	35	8

The chi-square statistic is 7.6923. The p-value is 0.005546. The result is **significant** at $p < 0.05$.

Elias (2005) found significant differences between accounting majors and majors of other disciplines. Accordingly, in this study, students indicated their respective major from the following three categories: Accounting majors, Other Business majors, and Other Non-Business Majors. Based on responses, analysis was performed between Accounting versus Other Business majors, and between Business majors versus Non-Business majors.

Table 4 illustrates the counts regarding study method in regarding accounting majors versus all other business majors and yields the hypothesis: H_0 : Accounting majors and all other business majors are equally proficient in using the deep study method.

TABLE 4: Study Method by Major - Accounting v. Other Business

Variable	Deep Study Method	Surface Study Method
Accounting Major	74	35
Other Business Majors	10	11

The chi-square statistic is 3.1644. The p-value is 0.075258. The result is **not significant** at $p < 0.05$.

Table 5 illustrates the counts regarding study method in relation to all business majors (Other business majors + accounting) and non-business majors and yields the hypothesis: H_0 : All business majors and all majors outside of the college of business are equally proficient in using the deep study method.

TABLE 5: Study Method Major by Major - Business v. Non-business

Variable	Deep Study Method	Surface Study Method
Business Majors	84	46
Non-business Majors	10	6

The chi-square statistic is 0.0278. The p-value is 0.867577. The result is **not significant** at $p < 0.05$.

Table 6 illustrates the counts regarding study method in relation to accounting related work experience and yields the hypothesis: H_0 : Students with work experience and those without work experience are equally proficient in using the deep study method.

TABLE 6: Study Method by Work Experience

Variable	Deep Study Method	Surface Study Method
Work Experience	34	16
No Work Experience	60	34

The chi-square statistic is 0.4337. The p-value is 0.51018. The result is **not significant** at $p < 0.05$.

Table 7 illustrates the counts regarding study method in relation to class level and yields the hypothesis: H_0 : Students at all class levels are equally proficient in using the deep study method.

TABLE 7: Study Method by Class Levels

Variable	Deep Study Method	Surface Study Method
Introductory Level	26	19
Intermediate Level	40	18
Advanced Level	28	15

The chi-square statistic is 1.3974. The p-value is 0.497232. The result is **not significant** at $p < 0.05$.

To explore an evolution of learning strategies at increasingly complex materials, Table 8 illustrates the counts regarding study method in relation to introductory class level and classes above introductory level and yields the hypothesis: H_0 : Students in introductory level classes and higher-level students are equally proficient in using the deep study method.

TABLE 8: Study Method by Class Level

Variable	Deep Study Method	Surface Study Method
Introductory Level	26	19
Intermediate/Advanced Level	68	33

The chi-square statistic is 1.2378. The p -value is 0.265886. The result is **not significant** at $p < 0.05$.

TABLE 9: Study Method by Grade Expectation

Variable	Deep Study Method	Surface Study Method
A or B	77	39
C	15	12
D or below	1	1

The chi-square statistic is 1.2918. The p -value is .524194. The result is **not significant** at $p < .05$.

DISCUSSION AND FUTURE RESEARCH

Results suggest a significant relationship for study method chosen relative to age and campus location. As in prior research, nontraditional age students are more likely to adopt a deep study approach than their younger classmates (Richardson, 1995; Devlin, 1996; Elias, 2005). The results also indicate that students at the satellite campus are more likely to adopt a deep learning approach. Since 74% of the nontraditional students surveyed

attended the satellite campus this evidence supports prior studies' findings. Class level, work experience, gender and grade expectation were not found to have a statistical correlation with student's choice of study method. These results signal that there is not a specific group of demographic traits that inherently increase a student's approach to studying. However, in contrast to previous accounting research, the results indicate that the majority of accounting majors (68%) utilize the deep approach. With the regulatory bodies having directed academics to hone students' critical thinking skills by introducing more real-life curriculum into the classroom, this study indicates that these measures may be showing effects (Behn, 2012). Future research in the various business disciplines may confirm these results. Conversely, other disciplines may require or indicate surface learning approaches for the students. Given the findings in this study, future research should explore methods to encourage students using surface learning approaches to develop deep learning approaches, where appropriate. Teaching interventions and motivational techniques could be designed for testing effects. Longitudinal studies of the after graduation success in placement and advancement of students using deep learning approaches would also be appropriate. While research indicates that the accounting curriculum necessitates deep study approaches evidence of placement and advancement in careers would bolster these findings.

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APPENDICES
APPENDIX A

Revised Study Process Questionnaire (R-SPQ-2F)

This questionnaire has a number of questions about your attitudes towards your studies and your usual way of studying.

There is no *right* way of studying. It depends on what suits your own style and the course you are studying. It is accordingly important that you answer each question as honestly as you can. If you think your answer to a question would depend on the subject being studied, give the answer that would apply to the subjects(s) most important to you.

Please choose the one most appropriate response to each question. Fill the oval on the Answer Sheet that best fits your immediate reaction. Do not spend a long time on each item: your first reaction is probably the best one. Please answer each item.

Do not worry about projecting a good image. Your answers are CONFIDENTIAL.

Thank you for your cooperation.

1- <i>never</i> or <i>rarely</i> true of me	2- <i>sometimes</i> true of me	3- true of me about <i>half the</i> <i>time</i>	4- <i>frequently</i> true of me	5- <i>always</i> or <i>almost always</i> true of me
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1. I find that at times studying gives me a feeling of deep personal satisfaction.	
2. I find that I have to do enough work on a topic so that I can form my own conclusions before I am satisfied.	
3. My aim is to pass the course while doing as little work as possible.	
4. I only study seriously what's given out in class or in the course outlines.	
5. I feel that virtually any topic can be highly interesting once I get into it.	
6. I find most new topics interesting and often spend extra time trying to obtain more information about them.	
7. I do not find my course very interesting so I keep my work to the minimum.	
8. I learn some things by rote, going over and over them until I know them by heart even if I do not understand them.	
9. I find that studying academic topics can be as exciting as a good novel or movie.	
10. I test myself on important topics until I understand them completely.	
11. I find I can get by in most assessments by memorizing key sections rather than trying to understand them.	
12. I generally restrict my study to what is specifically set as I think it is unnecessary to do anything extra.	
13. I work hard at my studies because I find the material interesting.	

14. I spend a lot of my free time finding out more about interesting topics which have been discussed in different classes.	
15. I find it is not helpful to study topics in depth. It confuses and wastes time, when all you need is a passing acquaintance with topics.	
16. I believe that lecturers shouldn't expect students to spend significant amounts of time studying material everyone knows won't be examined.	
17. I come to most classes with questions in mind that I want answering.	
18. I make a point of looking at most of the suggested readings that go with the lectures.	
19. I see no point in learning material which is not likely to be in the examination.	
20. I find the best way to pass examinations is to try to remember answers to likely questions.	

Demographic Information

Please indicate which answer choice applies to you by circling it.

1. Which accounting class are you currently enrolled in?
A. Accounting 200 B. Accounting 325/327 C. Accounting 401
2. What is your gender?
A. Female B. Male
3. Do you have any work-related accounting experience?
A. Yes B. No
4. What is your age?
A. Under 18 B. 18-24 C. Over 24
5. Which campus do you attend for your accounting course?
A. Hattiesburg B. Gulf Coast
6. What is your major?
A. Accounting
B. Any Business Major Besides Accounting
C. My major is outside of the College of Business.
7. What grade do you expect in this course?
A. A or B
B. C
C. D or below

Thank you for completing this survey! By turning in this survey you are giving the researcher permission to use your results in a research project. Your answers are confidential.

APPENDIX B

Participant Consent

INSTITUTIONAL REVIEW BOARD
SHORT FORM CONSENT

SHORT FORM CONSENT PROCEDURES	
<p>This document must be completed and signed by each potential research participant before consent is obtained.</p> <ul style="list-style-type: none">• All potential research participants must be presented with the information detailed in the Oral Procedures before signing the short form consent.• The Project Information section should be completed by the Principal Investigator before submitting this form for IRB approval.• Copies of the signed short form consent should be provided to all participants.• The witness to consent must be someone other than the Principal Investigator or anyone else on the research team.	
Edited July 22 nd , 2014	Last

Today's date:		
PROJECT INFORMATION		
Project Title: "An Analysis of the Relationship between Study Styles and Demographics across Multiple Accounting Class Levels"		
Principal Investigator: Savannah Hooper	Phone: 251-327-2127	Email: savannah.hooper@eagles.usm.edu
College: Business	Department: Accounting	
CONSENT TO PARTICIPATE IN RESEARCH		

Participant's Name: _____

Consent is hereby given to participate in this research project. All procedures and/or investigations to be followed and their purpose, including any experimental procedures, were explained. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed to the Principal Investigator using the contact information provided above. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-5997.

Research Participant

Witness to Consent

Date

Date

APPENDIX C

Institutional Review Board Approval



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001

Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional.review.board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 15031705

PROJECT TITLE: An Analysis of the Relationship between Study Styles and Success across Multiple Accounting Class Levels

PROJECT TYPE: New Project

RESEARCHER(S): Savannah Hooper

COLLEGE/DIVISION: College of Business

DEPARTMENT: Accounting

FUNDING AGENCY/SPONSOR: N/A

IRB COMMITTEE ACTION: Expedited Review Approval

PERIOD OF APPROVAL: 04/10/2015 to 04/09/2016

Lawrence A. Hosman, Ph.D.

Institutional Review Board