

TRADITIONAL AND E-TEXTBOOK PURCHASING BEHAVIOR AMONG AFRICAN-AMERICAN COLLEGE STUDENTS

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INTRODUCTION

In the higher education classroom, the textbook is one of the many tools used for learning. Textbooks play a very important role in the student learning experiences. However, the nature of textbook is changing in this digital age. With the increased adoption of mobile devices and use by college students, many publishers are offering an increased number of textbooks in digital format. These digital texts, also called e-textbooks, can be accessed via the Internet and downloaded on tablets, e-readers, smart phones, and laptops. Yet, e-textbook sales have yet to take-off at the college level. Whether a student uses a printed textbook or e-textbook, the higher cost of college textbooks has created an enormous challenge for college students, regardless their economic status. According to the Government Accountability Office of United States, college textbook prices have increased by 82 percent from 2002 to 2014, outpacing inflation by a factor of three; the average college student spends as much as \$1200.00 each year on textbooks and supplies. Subsequently, 70 percent college students chose not to buy a textbook due to its cost as reported by the US Public Interest Research Group (Bidwell, A., 2014). Furthermore, the majority of college students prefer buying used textbooks over renting textbooks, new textbooks and e-textbooks according to a survey by Textbook.Com. One suspected cause of increased cost of the textbook is that the publishing industry is operating under oligopoly structure where only three major competitors are controlling 80 percent of college textbook market. Currently, there are only three major publishers such as Irwin-McGraw-Hill, Pearson/Prentice-Hall and Cengage Learning compete in the college textbook industry.

A growing number of studies have examined student perceptions, attitudes, and habits of textbook buying behavior. However, perceptions and attitudes of traditional print versus e-textbooks among African-American college students, who are disproportionately have a financial disadvantage when it comes to higher education, have not been explored.

PURPOSE OF THE STUDY

The purpose of this exploratory study was to determine African-American college students' perceptions toward traditional print textbooks versus e-textbooks as well as assess the differences in perceptions by age, gender, and purchasing behavior. Specific objectives of this study are to identify and analyze:

1. African-American college students' perceptions regarding the traditional/ printed textbooks,
2. African-American college students' perceptions toward digital or e-textbooks, and
3. African-American college students' purchasing behavior or method of actual textbook acquisition process.

METHODOLOGY

A questionnaire was developed from the existing literature that examined attitudes, perceptions, purchasing behavior of American college students toward acquiring college textbooks. The survey questionnaire contained 14 attitudinal/perceptual statements/questions. Ten statements/questions were related to cost-benefit of traditional print textbooks and four statements/questions dealt with digital/e-books. Respondent were asked whether they strongly disagree or strongly agree to individual statements based on the Liker-type scales. Also, included in the questionnaire were book buying behavior questions such as whether the student buys all new edition or an older edition textbook, whether the student buys from campus bookstore or from online vendors, and whether the student buys e-textbooks or digital textbooks. Finally, demographic information were also included, e.g., respondent's age, gender, student classification, enrollment status, major field of study and who pays for the purchase of textbooks.

Primary data were collected from 194 African-American college students attending a medium-sized, historically Black university (HBCU) located in the southeastern United States. Response rate was 36%.

Statistics

Basic descriptive statistics were obtained for demographic characteristics and perceptions of textbook usage. Analysis of Variance (ANOVA) evaluated the difference in perceptions of traditional versus e-textbook usage by gender, age, and textbook buying behavior. The acceptance level for statistical significance was 0.05.

STUDY RESULTS

The majority of the participants (63.9%) were females, junior/senior (68.6%), non-business majors (60.3%), enrolled full-time (82.5%), and lived in off campus housing or rented apartments (53.1%). The modal age of participants was ≥ 25 years; 33% were between 20-22 years of age. While the majority of students (63.9%) used financial aid to buy their textbooks, and 12% of students pay for textbooks on their own or have their parents pay for it respectively.

The majority of students preferred hardcover textbooks (new or old: 59.8%) than paperback textbooks (new or old: 40.2%). Furthermore, the majority bought their new textbooks from the university book store (40.1%) as compared to online (19.2%), used copy from a friend or classmate (11%), rented the (18%) or bought or downloaded an e-textbook (6.1%).

The majority of the students were favorable (agreed or strongly agreed) towards their perception of textbooks as a valuable resource and that traditional printed textbooks were better than digital or e-textbooks. However, African American students' perceived price is a major concern for acquiring college textbooks (88% agreed or strongly agreed) and the cost of college textbooks are increasing at a faster rate than inflation (86% agreed or strongly agreed). The high cost of textbooks has resulted in students buying used textbooks (93% agreed or strongly agreed) or buy lower priced paperback international editions (78% agreed or strongly agreed). Students perceived

Perceptions of e-textbooks was judiciously favorable among the participants. The majority of students perceived e-textbooks to be cheaper than the traditional printed textbooks (43%), will increase in demand in the future (57%), and were likely to use if it is selected by instructors (40%), and prefer them due to their impressive features such as search functions, interactive tutorials and colorful graphics (50%).

ANOVA analysis showed significant differences in perceptions by gender, age, and textbook buying behaviors. African-American males perceived textbooks were valuable investments for college students than their female counterparts ($P=.013$). Females were also more likely to not buy required textbooks for their courses due to the higher cost ($P=.051$). Senior college students were the most favorable to buy textbooks as compared to the freshman/junior students, while freshman and sophomores were less likely to agree that high cost of textbooks is forcing student to buy the paperback international editions ($P=.042$). Junior and senior students were more likely to agree that the cost of college textbooks are increasing at a faster rate than the overall inflation as compared to freshman and sophomores ($P=.050$). Interestingly freshman and sophomores had the most favorable perception of using e-text books if it was selected by their instructors and due to its impressive features and interactive tutorials ($P=.002$ and $.007$ respectively) than the junior or senior students.

Predictors of Textbook Buying behavior

Results from multivariate logistic regression analyses are discussed here. The results show the association of textbook buying behavior (payment by parents = 0, self/financial aid = 1) and the format of the textbook (hardcover, paperback, or e-textbook), and perceptions toward traditional and e-textbooks by payment methods, controlling for demographic variables in the regression model. As shown in the table, adjusting for covariates in the model, freshmen and sophomore students were six times less likely (95% CI: 0.91, 47.76) to pay for their own textbooks as compared to junior or senior students. Younger students, i.e., 1-25 years of old were significantly less likely to pay for their own textbooks as compared to older students ($P<.001$). Full-time students were significantly more likely (3.3 times) to pay for their textbooks than part-time students, and male students were less likely (0.44 times) to pay as compared to their female counterparts.

Similarly, the adjusted odds of African-American students paying for textbooks themselves was lower among those who perceived that high costs of textbooks cause the not to buy the required textbook, cost of textbooks are escalating, and e-textbook demands will increase in future (OR = 0.014, 0.012, and 0.016 respectively). However, African-American students' textbook buying behavior was positively associated with perceptions of price and cost of textbook, e-textbooks are cheaper than traditional textbooks, and government should regulate textbook prices. Students who paid for textbooks themselves or with their financial aid funds were 6.4 times more likely to perceive that price is a major concern when they buy textbooks (95% CI: 1.26, 29.29), and approximately twice as likely to perceive that government should regulate the cost of textbooks (95% CI: 1.08, 5.01). However, perception of lower cost e-textbooks did not translate to its usage; there was no statistically significant association between those who

reported buying or downloading e-textbooks to payment behavior; students six times more likely to buy hardcover textbooks (OR = 6.19; 95% CI: 1.04, 36.68).

DISCUSSION

This study found that African-American college students' perception of traditional and e-textbook usage varied by gender, class status as well as their textbook buying behavior. This has implications for curricula designers, instructors, and textbook publishers as the benefits offered by the electronic version are not significant enough to influence minority students, especially those at HBCU campuses. The results also have implications for policy makers attempting to close the education disparities gap regarding minorities and African-American college enrollment rates.

The concern expressed by African-American college students in this study over increasing cost of higher education, including the cost of textbooks, will play a major role in the technological transformation of education at HBCUs. Cost of textbooks has been rising even faster than healthcare costs, and has become a cause of outcry in the past decade (Kingkade, 2013). Hence, it is not surprising that the concern of the majority of African-American students with the higher cost of textbooks touched all students – males, females, freshman and seniors, and students who buy textbooks on their own versus parents paying for it. This concern also translated into not buying textbooks for their courses as well as opting for paperback international versions or used versions for lowering their financial burden of college education. It is not surprising to note that the rate of growth in e-book sales has slowed down in 2012 (Hoffelder, 2013).

While caution should be exercised in generalizing results of this study to all HBCU institutions, in general, African American students were not favorable towards the use of e-textbooks and preferred printed textbooks, especially used and paperback versions. The unfavorable attitudes of students toward e-textbooks and e-books concurs with prior studies (Lie et al., 2011; Minnich et al., 2015; Woody, Daniel & Baker, 2010). Limitations also exist in the use of e-textbooks: difficulty to annotate, map out ideas, eye strain, and need to have supporting technology, internet and electronic gadgets (Philip and Moon, 2013). Although the literature suggest that learning rates are similar from paper to e-text, some studies have demonstrated that recall and retrieval is poorer when reading from an e-text as compared with a print text (Berg et al., 2010). Hence, future research should explore student learning outcomes among African American students who use e-textbooks and compare them to traditional print book users as well as assess the difference in e-textbook usage based on prior familiarity and background in using e-books and e-readers.

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