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African American Students' Satisfaction with Distance Education Courses

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#### Abstract

National data showed that the more distance education courses African American students took, the more likely they were to report greater satisfaction with distance education courses.

# Background

During the past two decades, distance education has increased in availability to college students (Rovai & Ponton, 2005; Waits & Lewis, 2003). What once was an anomaly at institutions of higher education is now a common instructional-delivery option for students at both public and private universities (Nania, 1999; Waits & Lewis). Today, students are more likely to enroll in courses that are offered through distance education (Rovai, Ponton, & Baker, 2008). According to Allen and Seaman (2007), nearly 3.2 million students took at least one online course during the fall of 2005. There are several explanations as to why colleges and universities are expanding their distance education programs on their campuses. For example, some postsecondary institutions are increasing their distance education course offerings to reduce the costs of instruction and increase student enrollment (Lewis, Snow, Farris, & Levin, 1999). Sherron and Boettcher (1997) also suggest that the changing student demographics of those who pursue a postsecondary education, combined with the need to reduce costs associated with postsecondary education has contributed to the distance education boom on college campuses.

Improving student access to higher education has also been cited as a major reason for offering more online courses and programs (Allen & Seaman, 2007). Further, increasing the rate of degree completion and the appeal of online instruction to non-traditional students are some of the other explanations given for the growth of online instruction. Additionally, many colleges and universities are offering more online courses and programs to remain competitive with other academic institutions and to ensure that their students have all of the skills needed to be successful in today's technological society. As a result, the trend to offer distance education courses is not only reflected at predominately White institutions but also predominately Black institutions, where African American students are the majority student population.

Beyond the skills of a basic education, Roach (2000) asserts that today's worker needs complex information fluency skills (e.g., critical thinking, information literacy, and technology literacy). With this in mind, it is likely that virtually all institutions will follow the lead of their peers and offer more online distance education courses. To prepare for projected increases, it is critical that researchers and social scientists continue to explore the advantages and disadvantages of online distance education versus traditional instruction as well as the relationship between student satisfaction and distance education (Sahin & Shelley, 2008). Because online distance education research is still in its early stages of development, this study is both timely and likely to shed light on this subject. Further, with the increase in online distance education, it is clear that more research is needed to determine the extent to which this method of instruction is an effective modality and whether or not students are more satisfied with traditional courses. This contention is supported by Miller and Husmann (1994) who asserted that educators and researchers need to learn more about the student-learner to determine the quality and success of distance education programming.

As a result of the increase in distance education courses on college campuses, the research literature on this topic is beginning to expand. However, a substantial segment of this literature base has focused primarily on colleges and universities and emphasized the perspectives of course designers, administrators, and instructors (Harbeck, 2001; Rovai et al., 2008). As a result, there is a dearth of research on the perspectives of students (Allen, Bourhis, Burrell, & Mabry, 2002; Miller & Husmann, 1994; Roblyer, 1999; Schlosser & Anderson, 1994; Stokes, 2001; Wang & Newlin, 2000). Moreover,

there are relatively few studies that have examined African American students' experiences and outcomes in distance education (Rovai & Ponton, 2005). Given that more African American students are entering higher education and an increasing number of these students are enrolled in distance education courses (Waits & Lewis, 2003), research that examines the impact of distance education on their satisfaction is important and relevant in light of the limited research on this topic and the concomitant goal of many universities to increase African American student enrollment and graduation rates. Accordingly, the purpose of this study is to examine African American students' satisfaction with distance education courses. More specifically, this study sought to determine if the number of distance education courses taken influenced African American students' satisfaction with distance education increases students' satisfaction with online learning (Arbaugh, 2004).

### Methods

## Data Source

Data for the present study were extracted from the National Postsecondary Student Aid Study 2003-2004 (NPSAS:2004), a nationally representative study sponsored by the National Center for Education Statistics of the U.S. Department of Education (Cominole, Siegel, Dudley, Roe, & Gilligan, 2006). The NPSAS:2004 is a nationally representative database designed to study how college students and their parents and guardians finance the costs of higher education. The NPSAS:2004 enables analysts to examine student background traits, institutional characteristics, and students' experiences in college. Based on estimates from the National Center for Education Statistics, the student sample represented more than 19 million undergraduate students attending the nation's postsecondary institutions (Horn & Nevill, 2006).

## **Participants**

The NPSAS:2004 variables employed in this study were accessed through the Internet via the Data Analysis System (DAS) sponsored by the National Center for Education Statistics of the U.S. Department of Education. The African American student sample constituted 14% of the total NPSAS:2004 student sample. Fifteen percent of the African American students in the NPSAS:2004 student sample took at least one distance education course for credit and 85% of the African American student sample did not take a distance education course. For comparison purposes, 16% of the White students in the NPSAS:2004 student sample took at least one distance education course for credit and 84% did not take a distance education course.

#### Variables

As stated earlier, the dependent and independent variables were drawn from the NPSAS:2004 (variable names for all dependent and independent variables from the NPSAS:2004 are shown in parentheses). The dependent variable in this study was students' satisfaction with distance education (DISTSATF). This variable was measured using the following question: "Compared to other courses you have taken, are you more satisfied or less satisfied with the quality of instruction you received in your distance education courses?" The response options were: (a) did not take distance education course, (b) more satisfied, (c) liked both the same, and (d) less satisfied. The independent variable in this study consisted of the number of distance education courses taken by students (DISTNUM). This variable was assessed with the following question: "During the 2003-2004 school year, how many distance education courses did you take?"

#### Data Analysis Procedures

This study employed nationally representative data to examine the impact of the number of distance education courses taken by African American students on their satisfaction with distance education courses. Stated differently, this study attempted to estimate the extent to which more exposure with distance education courses increased the likelihood that students would prefer distance education courses over traditional courses. The independent samples t-test procedure was used to determine if statistically significant differences in satisfaction resulted from the number of courses taken. More specifically, this study determined if there was a significant difference in the percentage distribution of students who were "more" or "less" satisfied with distance education courses by the number of distance education courses taken. All statistical results were reported significant at p < .05.

## Table 1

Percentage Distribution of African American Students' Satisfaction with Distance Education Courses

<b>Distance Education</b>	Frequency	More Satisfied	Like Both	Less Satisfied
Course Taken			the Same	
1	39.0	30.7	32.0	37.4
2	25.6	36.0	37.1	26.9
3	11.7	34.0	41.5	<b>24.5</b> <sup>NS</sup>
4	8.3	33.2	42.5	<b>24.4</b> <sup>NS</sup>
5	4.4	41.1	32.8	<b>26.1</b> <sup>NS</sup>
6	4.1	58.9	35.2	5.9
7 or more	7.0	54.1	43.7	2.3

by the Number of Distance Education Courses Taken

*Note*. Data were accessed from the U.S. Department of Education, National Center for Education Statistics, 2004 National Postsecondary Student Aid Study (Data Analysis System). The Frequency data refers to the percentage of African American students within each category of distance education courses taken, e.g. 39% of the students who took distance education courses took only one course. Percentages may not sum to 100 due to rounding. Within-group statistical analyses were conducted for each course taken category by satisfaction level. All differences between respondents who reported that they were "more" or "less" satisfied, unless otherwise indicated as not significant (NS), were significant at p < .05.

#### Results

The data analysis yielded three major findings. First, African American students who took 1 distance education course reported being less satisfied with distance education courses than traditional courses. Second, students who reported taking 2 distance education courses were more satisfied with distance education courses than with the traditional course format. The data also indicated that African American students who took 6 or more distance education courses were more satisfied with distance education courses than with traditional courses. Supplementary data analyses also revealed a similar finding for White students. Thus, consistent with the results for the African American student sample, the more distance education courses.

**Discussion and Implications** 

The higher education learning environment in which undergraduate students are expected to demonstrate mastery has changed considerably over the years. At many colleges and universities around the country, an increase in distance education courses (Lewis et al., 1999; Rovai & Ponton, 2005) has propelled this change. It has, in many ways, contributed to the investment of better university technological infrastructures and emerging technologies to improve faculty instruction and student learning. Thus, future research on this topic should continue to focus on student-centered investigations of distance education that illustrate the appropriate use of technology and pedagogy and how the two can be more advantageous and enhance student satisfaction (Hara & Kling, 2000). Toward this end, the major finding in this study was consistent with Arbaugh (2004) who found that students with more exposure to distance education settings were more likely to express greater satisfaction with the learning environment than with traditional courses.

Although there is an increase in the number of distance education courses offered at American colleges and universities, there are still some institutions of higher learning that struggle with the implementation and sustainability of distance education. Poor technology, lack of training, professional issues, and student demographics are some of the factors that have been cited as inhibitors (Jacobsen, 1997; Nania, 1999). To address some of these issues, an increasing body of research on distance education is attempting to identify effective practices related to the organization, administration, and implementation of distance education. This research indicates that the format of instruction and delivery of course content impacts student learning outcomes. For example, Souder (1993) found that learning outcomes tend to be higher for distance education students versus those who opt for traditional classroom settings. Other researchers (Rovai et al., 2008; Wang & Newlin, 2000) have shown that many different factors enhance student achievement in distance education courses such as institution-centered factors, student-centered factors, as well as factors related to the online learning environment. Unfortunately, there is a limitation to this body of knowledge. For example, much of the research has not focused on African American college students. In fact, very little is known about how African American students experience distance education environments (Rovai & Ponton, 2005). As a result, this topic deserves special attention in the research literature. In this regard, this research study found that African American students with more exposure to distance education courses are more likely to prefer distance education courses than traditional learning environments.

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