

CLASS SELECTION PREFERENCES OF AFRICAN-AMERICAN MILLENNIAL BUSINESS SCHOOL STUDENTS: A STUDY OF STUDENT CHARACTERISTICS

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ABSTRACT

In this study, we replicate and extend the research of Milliron (2008) by first examining class selection preferences of accounting classes in a predominantly African-American Millennial and non-Millennial student sample. The focus of the research is to explore whether the Millennial student sample, as in Milliron (2008), attaches lower importance to skill-development in favor of other factors such as

achieving a high grade or having a low workload. Unlike the results reported by Milliron in a predominantly white sample, our findings suggest that while the predominantly African-American Millennial students are interested in attaining high grades, they are more concerned with developing important job-related skills than their non-Millennial counterparts. We also extend the previous study by considering preferences within subgroups of the Millennial sample based on gender, family educational background, study major, and employment status. Our results suggest that values are different when controlling for gender and study major.

Key words: Millennial students, diversity, African-American, gender

Data availability: Data are available upon request from the authors

INTRODUCTION

The Millennial generation, those born between 1982 and 2002 (Howe and Strauss 2000; Coomes and DeBard 2004), has been characterized as having unique characteristics which require new learning strategies and new educational theories and environments (Coomes and DeBard 2004). In the workplace, they are also considered to be different from older generations. For example, as Myers and Sadaghiani (2010) note: ‘They are likely to have different, often broader, perspectives about the world marketplace, supervisor–subordinate relationships, cultural diversity, performance of tasks, and ways that communication and information technologies can be used to enhance organizational performance and to maximize productivity.’

Previous research (e.g. Milliron 2008) has examined class selection preferences of Millennial students as a way to understand the values associated with student preferences, behavior, and characteristics. Milliron assessed the importance of 14 class characteristics in their choice of class sections and found some disconnect between Millennial values and attributes associated with success. Milliron found that Millennial students attached more importance to high grades and low class workload than essential skill development in the form of analytical, computational, and communication skills. Therefore, Milliron suggested that Millennial students may face ‘crushing realities’ unless they and their faculty find a better way to align their values with the demands of the workplace.

Milliron’s (2008) study focused on undergraduate students in accounting classes at a mid-sized state university with a predominantly white, middle-class student body. Since the Millennial generation is expected to be the largest, most racially and ethnically diverse generation ever, exploring the impact of values on key success attributes for different groups within this generation is important (Howe and Strauss 2000; Broido 2004; Partridge and Hallam 2006). Therefore, we begin by replicating the above study at an urban university with a predominantly African-American student body. Furthermore, prior research shows that Millennials’ expectations and values vary by gender, visible minority status, grade-point average, and year of study (Ng, Schweitzer and Lyons 2010). We consequently examine the Millennial generation further by dividing our sample by gender, previous family education, study major, and employment status to explore whether or not different values are exhibited by different subgroups of Millennial students.

We find that our sample of predominantly African-American Millennial students do prefer factors unrelated to skill-development, such as attaining a high grade. However, unlike the predominantly white sample, they attach more importance to skill-development factors than their non-Millennial counterparts. Furthermore, females and those students who have selected an accounting study major value certain skill-development factors more than males and those selecting other study majors. This shows that Millennial students' preferences do differ based on factors such as race, gender, and study major.

The remainder of this paper is organized as follows. A literature review about the Millennial generation and important dimensions including race, gender, family education background, study major, and employment status is presented in the next section. The following section presents the research methodology, after which we discuss our findings. The final section presents the conclusion.

BACKGROUND

The Impact of Race

The Millennial generation is more ethnically and racially diverse than previous generations (Strange 2004; Partridge and Hallam 2006). Per the 2000 census in the United States, 39 percent of people under 18 years of age are people of color (i.e., Asian, African-American, Hispanic, or Native American) in comparison to 28 percent of people over 18 years old (Broido 2004).

In terms of racial differences relevant to this study, there is research on academic performance as well as preference differences. Firstly, there is evidence that academic performance differs depending on race due to different expectations of students (e.g. Carpenter, Friar and Lipe 1993; Bonner 2010). Furthermore, there is evidence that preferences differ by race (e.g. Littrell and Nkomo 2005) and that African-Americans score lower than Caucasians on personal efficacy measures (Hughes and Demo 1989; James and Hill 2009). Furthermore, research on African-American and Caucasian business students finds that African-Americans score higher on values that indicate concerns regarding long-term career objectives and job structure (Brenner and Tomkiewicz 1982).

The Impact of Gender

Millennials are expected to be the most female dominated generation in U.S. history (Brownstein 2000). Over the last forty years women have gone from being a minority on college campuses to being the majority (from 42 percent to 56 percent of undergraduate college students) (Peter and Horn 2005; Holsendolph 2006). However, enrollment in college by gender is not the same across various demographic groups. African-American, older (forty years old or older), and single parent students are more skewed towards females (63 percent, 62 percent, and 70 percent, respectively) (Kleinfeld 1999).

In terms of academic performance, females tend to earn higher grades in school than males; this pattern holds across race/ethnicity, age, era, and subjects (Kleinfeld 1999). On standardized tests, males tend to do better than females in math and science, while females tend to outperform males in reading and writing (Kleinfeld 1999). Furthermore, values of females tend to differ from those of males, specifically in matters such as ambition, broad-mindedness and self-discipline (Giacomino and Akers 1998).

The Impact of Family Educational Background

First-generation college students, students who are the first in their family to go to college, represent about a third of high school graduates (Horn and Nunez 2000; Choy 2001; Chen 2005). These students, are more likely to be African-American or Hispanic, and to be from low income families; they are also significantly less likely to enroll in college immediately after finishing high school (Choy 2001; Chen 2005). Research indicates that first-generation college students tend to have lower academic expectations, be less prepared academically for college, are twice as likely to drop out during the first year, and are generally less likely to attain a degree (Choy 2001; Pascarella et al. 2004; Ishitani 2006; McCarron and Inkelas 2006; Clauss-Ehlers and Wibrowski 2007; Ramos-Sanchez and Nichols 2007).

The Impact of Study Major

A number of studies have investigated the beliefs and factors of students to major or not major in accounting (Cohen and Hanno 1993; Hermanson, Hermanson and Ivancevich 1995; Allen 2004; Tan and Laswad 2006). These studies find that students selecting different study majors have different beliefs and attitudes about the desirability of working in the accounting profession, studying accounting as an academic discipline, and the skills and competencies associated with being a successful accounting student and accounting practitioner. For example, Cohen and Hanno (1993, p. 230) found that “accounting majors viewed a career in a field that works with numbers... as significantly more favorable than did the non-accounting majors.” On the other hand, non-accounting majors held negative perceptions about the accounting profession based on the nature of accounting work and the work environment in accounting (Hermanson, Hermanson and Ivancevich 1995; Tan and Laswad 2006). Furthermore, non-accounting majors believed accounting courses were boring, too number-oriented and required too much work (Cohen and Hanno 1993; Allen 2004). Prior research also shows that accounting majors had a higher perception of the importance of the first accounting course studied, when compared to non-accounting majors (Malgwi, 2006). Furthermore, the study and practice of accounting require individuals to have some mathematical or quantitative skills (Cohen and Hanno 1993). As a result, those with better quantitative skills gravitate toward a major in accounting, while those with lesser quantitative skills major in fields other than accounting (Pritchard, Potter and Saccucci 2004).

The Impact of Employment Status

Almost 50 percent of full-time college students and about 80 percent of part-time college students work (Planty et al. 2008). The number of hours worked per week by college students is significant, with 22 percent of full-time students working twenty to thirty-four hours per week, and 46 percent of part-time students working thirty-five hours or more per week (Planty et al. 2008). Milliron (2008) and others (DeBard 2004; Wilson 2004) argue that Millennials may have unrealistic expectations about what it takes to succeed academically and professionally. Since they are working more off campus, their confidence and optimism may be shattered in a challenging academic environment (DeBard 2004). Prior literature finds a clear negative relationship between student work intensity and academic outcomes among high-school students (Holloway 2001; Warren 2002). However, research among college students finds either no association or a negative association between work and grades, degree completion, and overall satisfaction with college (Stern and Nakata 1991; Furr and Elling 2000; Watts and Pickering 2000; Curtis and Williams 2002; Hawkins et al. 2005; Humphrey 2006).

METHODOLOGY

Milliron's (2008) study was designed to assess the values that influence students' selection of course section offerings. Students in her study were asked to complete a questionnaire, which consisted of 14 criteria, rating each criterion on a seven point Likert-type importance scale. Specifically, the survey asked students to rate the importance of factors that affect their choosing a particular class section over another, when multiple sections are offered for the same course. The students were from a mid-sized state university (14,000 students) with a predominantly white (80 percent), middle class student body. It is considered a residential campus since 90 percent of the students live within a few miles of campus. The majority of the general population of the university consists of students aged 24 or younger (85 percent) and most of the remaining students are reported to be in the 25 to 29 age category (Milliron 2008).

This study replicates the study by Milliron (2008) in a different setting. The students surveyed in this study belong to a small-medium (around 7,000 students) urban, public, historically African-American university with a predominantly African-American student body (90 percent). The students at the university are 55 percent females and 45 percent males and most fall into the Millennial category (79 percent of students are 25 years of age or younger; 8 percent of the student population is aged 36 or over). In terms of the residency status of students, most reside within the state, but it is unclear if they live as close as students in the Milliron study. Specifically, 82 percent of students are residents of the state and 45 percent live on campus [data obtained from the University's fall 2008 demographics figures]. The student populations in both studies are similar in most respects, other than their background. Whereas the Milliron study sample is mostly white and middle-class, our study sample is mostly African-American from low to middle income families (94 percent of beginning students in 2010-11 were receiving financial aid of any kind – National Center for Education Statistics).

The study includes a survey of 282 undergraduate college students enrolled in accounting courses in the spring of 2009 (88 percent Millennials, 12 percent non-Millennials). The classes surveyed were accounting classes offered at two or more different times. A total of 14 class sections were surveyed, including 10 sections offered in the daytime (between 8:00 a.m. and 5:00 p.m.) and 4 offered in the evening (between 5:00 and 8:50 p.m.). Furthermore, a total of 7 instructors were involved in the teaching of the classes. During the first week of classes, students were asked to complete a questionnaire (See Appendix), which incorporated the same 14 criteria, and used the same scale as the Milliron (2008) study. Students were asked for some other descriptive information as well (gender, family education status, study major selected, and work status). The survey was conducted during class time by graduate students and instructors; therefore, the surveys distributed (N=282) were all collected, resulting in a response rate of 100%. The final usable sample consists of 270 questionnaires as 12 of those collected were excluded due to incomplete information.

FINDINGS

Descriptive Statistics of Sample and Comparison to Milliron (2008)

We first examine the responses in our predominantly African-American sample and contrast them to those in the Milliron (2008) study on predominantly white students. Table 1 presents the mean and standard deviations of the responses to the 14 questions in the overall sample and by generation in the current study as well as in the Milliron study. We also present the p-values from tests of difference in mean responses in both studies.

TABLE 1

Descriptive Statistics: Comparison between Current Study and Milliron (2008) Study

Question Description	Groups per Tukey HSD	Overall Rank*	Milliron Rank**	Overall			Millennial			Non-Millennial		
				Current Study Mean (SD) n=270	Milliron Mean (SD)** n=275	p-value	Current Study Mean (SD) n=237	Milliron Mean (SD)** n=228	p-value	Current Study Mean (SD) n=33	Milliron Mean (SD)** n=47	p-value
Q 12 Accessible	A	1	5	6.5 (1.1)	5.9 (1.4)	0.01	6.6 (0.9)	5.9 (1.4)	0.01	5.9 (1.9)	5.9 (1.6)	0.99
Q 7 High Grade	A	2	7	6.4 (1.1)	5.7 (1.4)	0.01	6.6 (1.0)	5.7 (1.3)	0.01	5.7 (1.9)	5.6 (1.6)	0.80
Q 14 Relevance	A	3	2	6.3 (1.0)	6.0 (1.2)	0.01	6.4 (0.9)	5.9 (1.2)	0.01	6.0 (1.5)	6.1 (1.4)	0.77
Q 6 Convenience	A	4	3	6.3 (1.3)	5.9 (1.5)	0.01	6.3 (1.3)	5.9 (1.4)	0.01	6.5 (1.1)	5.8 (1.6)	0.03
Q 5 Constructive	A	5	4	6.3 (1.2)	5.9 (1.3)	0.01	6.4 (1.0)	5.8 (1.3)	0.01	5.5 (2.2)	6.1 (1.5)	0.18
Q 8 Expert	A	6	6	6.2 (1.3)	5.9 (1.4)	0.01	6.2 (1.2)	5.8 (1.3)	0.01	5.5 (2.0)	6.0 (1.6)	0.23
Q 4 Clearly Defined	B	7	1	6.1 (1.3)	6.3 (1.2)	0.06	6.2 (1.1)	6.2 (1.2)	0.99	5.3 (2.1)	6.6 (1.2)	0.01
Q 10 Prompt Feedback	B	8	8	6.0 (1.3)	5.6 (1.3)	0.01	6.1 (1.2)	5.6 (1.3)	0.01	5.1 (1.9)	5.8 (1.3)	0.07
Q 1 Active Learning	B	9	9	6.0 (1.3)	5.5 (1.4)	0.01	6.1 (1.1)	5.5 (1.4)	0.01	5.1 (2.0)	5.7 (1.5)	0.15
Q 9 Flexible	C	10	11	5.6 (1.5)	4.8 (1.6)	0.01	5.7 (1.4)	4.8 (1.5)	0.01	5.0 (1.8)	4.5 (1.9)	0.23
Q 2 Analytical	C	11	12	5.6 (1.4)	4.7 (1.5)	0.01	5.7 (1.3)	4.6 (1.6)	0.01	5.1 (1.8)	5.3 (1.6)	0.61
Q 3 Communication	C	12	13	5.5 (1.5)	4.7 (1.6)	0.01	5.6 (1.4)	4.6 (1.6)	0.01	4.9 (1.8)	4.8 (1.9)	0.81
Q 11 Group Work	D	13	14	5.2 (1.7)	4.4 (1.6)	0.01	5.2 (1.6)	4.4 (1.3)	0.01	4.5 (2.1)	4.2 (2.0)	0.52
Q 13 Low Workload	D	14	10	5.1 (1.7)	5.1 (1.6)	0.99	5.1 (1.6)	5.3 (1.6)	0.19	4.3 (2.0)	4.6 (1.7)	0.48

* The overall rank is based on the overall means in this study.

** The rank for the predominantly white sample as well as the mean and standard deviation of responses in the overall sample and Millennial and non-Millennial subsamples are obtained from Table 1 in Milliron (2008).

p-values are based on two-tailed tests of difference in means between the current study and Milliron (2008) study; p-values in bold are statistically significant at 10% or less.

The results of the survey in the overall sample indicate that the respondents in the current study place a significantly higher weight on most factors, when compared to the Milliron (2008) study. Specifically, the mean response to all questions, other than Q4 (clearly defined assessment) and Q13 (low workload), is higher at the 1% level of significance. This shows that the sample of predominantly African-American students differ from the predominantly white students in how they rate preferences.

When examining the responses of Millennial students, the same pattern is found. The mean response to all questions, other than having clearly defined assessment and requirements (Q4) and low workload (Q13), is higher in the current study at the 1% level of significance.

However, most of the responses in the non-Millennial sample do not differ significantly in both studies. There are some significant differences, though; our sample shows non-Millennial students are more concerned with the convenience of the time and location of the class than non-Millennials in the predominantly white sample (mean response of Q6 in the current and the Milliron study is 6.5 and 5.8, respectively, significantly different at the 5% level); on the other hand, they are less concerned with having clearly defined assignments and requirements (mean response of Q4 is 5.3 and 6.6 in the current and the Milliron study, respectively, significantly different at the 1% level) and having prompt feedback (mean response of Q10 is 5.1 and 5.8 in the current and the Milliron study, respectively, significantly different at the 10% level).

In comparing the overall ranking in this study with that in the predominantly white sample from Milliron (2008), we find that both groups favor a slightly different set of criteria. Specifically, the predominantly white students favor six criteria for an effective learning environment; they want clearly defined assessments and a relevant curriculum taught by accessible, expert instructors and delivered in a convenient and constructive manner. The predominantly African-American student sample in the current study favors a similar set of criteria, except for valuing achieving a high grade. This criterion was ranked the second most important overall by the predominantly African-American student sample in our study, whereas it was ranked seventh in importance by the predominantly white student sample in the Milliron study.

Using a Tukey HSD analysis (test to compare group means in analysis of variance setting), Milliron (2008) showed that their top six criteria, which did not include a high grade, clustered together and differed significantly from the other factors. In contrast, the Tukey HSD analysis results in our study, in the first column of results in Table 1, indicate that the top six criteria in our study are clustered together and are significantly different from other factors. Therefore, our predominantly African-American sample differs from the Milliron sample in their preference towards achieving a high grade over having clearly defined assessment and class requirements.

The Tukey HSD grouping results also show that the mean scores for skill development criteria (Q2 and Q3) are ranked significantly lower than the mean score for factors that are unrelated to skill development such as achieving a high grade (Q7), which could indicate shortcomings in graduating students. This is similar to the findings in Milliron (2008). However, Milliron also found that low workload clustered with achieving a high grade (Q7 and Q13). In contrast, we find in the current study that low workload (Q13) ratings are significantly below the analytical and communication skill ratings (Q2 and Q3); this finding is in line with previous research on African-Americans considering long-term career objectives more than Caucasians (Brenner and Tomkiewicz 1982).

These results clearly indicate a different perspective in the current sample as compared to that of Milliron (2008). However, these differences could be due to factors linked to the student

TABLE 2**Differences by Generation for Predominantly African-American Sample**

Question Description	Overall	Millennial	Non-Millennial	Millennial		Non-Millennial		p-value	Milliron p-value**
	Rank*	Rank	Rank	Mean (SD)	n=237	Mean (SD)	n=275		
Q 12 Accessible	1	1	3	6.6	(0.9)	5.9	(1.9)	0.01	0.84
Q 7 High Grade	2	2	4	6.6	(1.0)	5.7	(1.9)	0.01	0.87
Q 14 Relevance	3	4	2	6.4	(0.9)	6.0	(1.5)	0.04	0.54
Q 6 Convenience	4	5	1	6.3	(1.3)	6.5	(1.1)	0.28	0.75
Q 5 Constructive	5	3	5	6.4	(1.0)	5.5	(2.3)	0.01	0.19
Q 8 Expert	6	6	6	6.2	(1.2)	5.5	(2.0)	0.01	0.50
Q 4 Clearly Defined	7	7	7	6.2	(1.2)	5.3	(2.1)	0.01	0.06
Q 10 Prompt Feedback	8	8	9	6.1	(1.1)	5.1	(1.9)	0.01	0.30
Q 1 Active Learning	9	9	8	6.1	(1.1)	5.1	(2.0)	0.01	0.36
Q 9 Flexible	10	10	11	5.7	(1.4)	5.0	(1.8)	0.02	0.32
Q 2 Analytical	11	11	10	5.7	(1.2)	5.1	(1.8)	0.02	0.01
Q 3 Communication	12	12	12	5.6	(1.4)	4.9	(1.8)	0.01	0.58
Q 11 Group Work	13	13	13	5.2	(1.6)	4.5	(2.0)	0.02	0.65
Q 13 Low Workload	14	14	14	5.1	(1.6)	4.3	(2.0)	0.01	0.01

* The overall rank is based on the overall means in this study.

** Milliron p-values are based on two-tailed tests of difference in mean responses between the Millennial and non-Millennial subsamples, which are obtained from Table 1 from the Milliron (2008) study.

p-values are based on two-tailed tests of difference in means; p-values in bold are statistically significant at 10% or less.

body (predominantly African-American vs. predominantly white), the time of the study (early 2009 vs. prior to 2008), or the location of the university.

Generational Differences

Table 2 presents the difference between the responses in the Millennial and non-Millennial subsamples in our study and the significance of these differences. The number of non-Millennial students in our study is small (12 percent), but not much lower than the percentage in the Milliron study (17 percent). The results of the survey in Table 2 show that Millennial students place a significantly higher weight than non-Millennials on all factors, other than the convenience of time and location of the class (Q6). These differences are statistically significant at the 5 percent level or below. In contrast, Milliron (2008) found that predominantly white Millennial students placed significantly higher emphasis only on low out-of-class workload, while placing a significantly lower emphasis on clearly defined assessment and having assignments which emphasize analytical skills.

In addition to comparing ratings of Millennial and non-Millennial students, we also investigate whether Millennial students attach more importance to factors of little value to skill-development such as achieving a high grade and a low workload compared to skills needed in the workplace such as analytical and communication skills. We find that Millennial students attach more importance to a high grade (mean score of Q7 is 6.6 and 5.7 in Millennial and non-Millennial students, respectively, significantly different at the 1% level) and to a low out-of-class workload (mean score of Q13 is 5.1 and 4.3 in Millennial and non-Millennial students, respectively, significantly different at the 1% level). Furthermore, we find that the new generation of predominantly African-American students is interested in skill development that will improve their chances of success in their careers. Specifically, Millennial students attach greater importance to analytical and computational skills, (mean score of Q2 is 5.7 and 5.1 in Millennial and non-Millennial students, respectively, significantly different at the 5% level), as well as communication skills (mean score of Q3 is 5.6 and 4.9 in Millennial and non-Millennial students, respectively, significantly different at the 1% level) than non-Millennial students.

When examining the ranking of preferences, we find these to be different in some cases between Millennial and non-Millennial students. Specifically, having a convenient time and location of class was ranked the highest in importance by the non-Millennial students in the current study but fifth in the Millennial sample.

Overall, we find that our sample of predominantly African-American Millennial students value skill development more than Non-Millennial students, which indicates that the new generation of predominantly African-American students may fare better than the older generation in terms of possessing necessary skills for the workplace. However, they also value factors that are not important for skill-development such as achieving a high grade.

Gender Differences

In this section, we begin examining preference differences within the Millennial student sample. We first examine any differences that may be due to gender. There are 127 females (54 percent) and 110 males (46 percent) in the Millennial student sample. The first set of results in Table 3 summarizes the mean differences between our predominantly African-American male and female responses. The results show that, in general, females give higher consideration to most factors in selecting a class section. The mean for all questions is significantly higher (at 10 percent or less) for females than for males, except for analytical skill-learning (Q2), having an expert instructor (Q8),

TABLE 3

Differences by Gender, Family Educational Background, and Study Major for Millennial Predominantly African-American Sample

Question Description	Millennial Rank*	Female		Male		p-value	First Generation		Non-First Generation		p-value	Accounting Major		Non-Accounting Major		p-value
		Mean (SD)	(n=127)	Mean (SD)	(n=110)		Mean (SD)	(n=102)	Mean (SD)	(n=134)		Mean (SD)	(n=68)	Mean (SD)	(n=168)	
Q 12 Accessible	1	6.7	(0.7)	6.5	(1.1)	0.03	6.7	(0.8)	6.5	(0.9)	0.14	6.5	(1.3)	6.7	(0.6)	0.08
Q 7 High Grade	2	6.7	(0.7)	6.4	(1.2)	0.01	6.6	(0.9)	6.5	(0.9)	0.58	6.4	(1.3)	6.6	(0.7)	0.22
Q 5 Constructive	3	6.5	(0.8)	6.3	(1.1)	0.03	6.5	(0.8)	6.3	(1.1)	0.06	6.3	(1.0)	6.5	(0.9)	0.28
Q 14 Relevance	4	6.5	(0.8)	6.2	(1.0)	0.02	6.3	(1.0)	6.5	(0.8)	0.27	6.4	(1.1)	6.4	(0.8)	0.74
Q 6 Convenience	5	6.4	(1.1)	6.1	(1.4)	0.05	6.2	(1.3)	6.4	(1.2)	0.42	6.0	(1.6)	6.4	(1.1)	0.05
Q 8 Expert	6	6.4	(1.1)	6.1	(1.3)	0.11	6.4	(0.9)	6.1	(1.4)	0.03	6.3	(1.3)	6.2	(1.1)	0.66
Q 4 Clearly Defined	7	6.3	(1.0)	6.0	(1.3)	0.02	6.1	(1.2)	6.2	(1.1)	0.32	6.3	(1.0)	6.2	(1.2)	0.59
Q 10 Prompt Feedback	8	6.4	(1.0)	5.9	(1.2)	0.01	6.2	(1.0)	6.1	(1.2)	0.76	6.2	(1.1)	6.1	(1.1)	0.42
Q 1 Active Learning	9	6.3	(1.1)	6.0	(1.1)	0.10	6.1	(1.1)	6.1	(1.0)	0.93	6.2	(1.0)	6.1	(1.1)	0.63
Q 9 Flexible	10	6.0	(1.3)	5.4	(1.5)	0.01	5.7	(1.5)	5.7	(1.4)	0.70	5.5	(1.6)	5.7	(1.4)	0.66
Q 2 Analytical	11	5.8	(1.2)	5.6	(1.3)	0.25	5.6	(1.3)	5.7	(1.2)	0.48	5.9	(1.1)	5.6	(1.3)	0.05
Q 3 Communication	12	5.8	(1.2)	5.3	(1.5)	0.01	5.5	(1.6)	5.7	(1.2)	0.17	5.5	(1.5)	5.6	(1.3)	0.54
Q 11 Group Work	13	5.1	(1.6)	5.3	(1.7)	0.32	5.3	(1.6)	5.2	(1.6)	0.66	5.2	(1.8)	5.3	(1.6)	0.63
Q 13 Low Workload	14	5.2	(1.6)	5.1	(1.7)	0.73	5.1	(1.7)	5.2	(1.5)	0.48	4.9	(1.6)	5.3	(1.6)	0.07

* Millennial rank is based on ranking of mean values in Table 2 for Millennial subsample.

p-values are from two-tailed tests of difference in means; p-values in bold are statistically significant at 10% or less.

group work considerations (Q11) and low out-of-class workload (Q13). We find that in our sample female college students attach significantly more importance to achieving a high grade than do male college students (mean score of Q7 is 6.7 and 6.4 for females and males, respectively, significantly different at the 1% level). However, they prefer communication skill development (mean score of Q3 is 5.8 and 5.3 for female and males respectively, significantly different at the 1% level). The ranking of preferences does not differ significantly between females and males. The top six criteria are common between both segments of the population. As in the overall Millennial population, both males and females prefer high grades to learning the skills needed in the workplace but place a lower value on having a low out-of-class workload.

Family Educational Background Differences

Next, we examine preferences within subgroups of the Millennial sample with different family educational backgrounds. There are 102 Millennial students who are first-generation college students and 134 who are not.¹ The second set of results in Table 3 reports the differences between them. The results show that first-generation predominantly African-American college students value an expert instructor significantly more than non first-generation students do (mean score of Q8 is 6.4 and 6.1 in first-generation students and others, respectively, significantly different at the 5% level). Furthermore, they value constructive feedback from the instructor (mean score of Q5 is 6.5 and 6.3 for first-generation students and others, respectively, significantly different at the 10% level). There are no other significant differences between the two groups.

Study Major Differences

We divide the study majors into accounting majors and others (which include finance, business management, hospitality management, information systems as well as other less common majors). There are 68 (29 percent) Millennial students who have selected an accounting major and 168 (71 percent) who have selected another major.² The third set of results in Table 3 reports the differences between these two groups. We find that students who have an accounting major place a significantly higher value on analytical assignments than students in the other majors (mean score of Q2 is 5.9 and 5.6 in accounting and other major students, respectively, significantly different at the 5% level). Accounting major students are also less concerned with the convenience of the class section and low out-of-class workload (mean score of Q6 is 6.0 and 6.4 in accounting and other major students, respectively, significantly different at the 5% level, and mean score of Q13 is 4.9 and 5.3 in accounting and other major students, respectively, significantly different at the 10% level). They are also less concerned with the accessibility of the instructor (mean score of Q12 is 6.5 and 6.7 in accounting and other major students, respectively, significantly different at the 10% level). There are no other significant differences.

Employment Status Differences

In the Millennial student sample, the majority of students study while being employed. There are 146 (62 percent) students that work and 91 (38 percent) that do not work. We explore the differences between these subgroups in Table 4. We find that the only significant preference

¹ There is 1 questionnaire that is excluded from this analysis as the student did not fill in the necessary information.

² As in the above analysis, 1 questionnaire is excluded as the student did not fill in the necessary information.

TABLE 4

Differences by Employment Status for Millennial Predominantly African-American Sample

Question Description	Millennial Rank*	Work		No Work		p-value	Full-Time Work		Part-Time Work		p-value
		Mean (SD)	n=146	Mean (SD)	n=91		Mean (SD)	n=42	Mean (SD)	n=17	
Q 12 Accessible	1	6.6	(0.8)	6.6	(1.0)	0.48	6.6	(0.7)	6.6	(0.9)	0.98
Q 7 High Grade	2	6.5	(0.9)	6.6	(1.0)	0.81	6.4	(0.9)	6.8	(0.9)	0.11
Q 5 Constructive	3	6.5	(0.9)	6.3	(1.1)	0.26	6.2	(1.1)	6.8	(1.1)	0.06
Q 14 Relevance	4	6.4	(0.8)	6.4	(1.0)	0.63	6.5	(0.9)	6.2	(0.8)	0.15
Q 6 Convenience	5	6.4	(1.1)	6.1	(1.4)	0.03	6.7	(0.5)	6.8	(1.2)	0.66
Q 8 Expert	6	6.2	(1.2)	6.3	(1.2)	0.33	6.1	(1.1)	6.2	(1.4)	0.79
Q 4 Clearly Defined	7	6.2	(1.1)	6.2	(1.2)	0.81	6.0	(1.1)	6.4	(1.1)	0.39
Q 10 Prompt Feedback	8	6.2	(1.2)	6.1	(1.1)	0.70	6.3	(0.8)	6.2	(1.2)	0.67
Q 1 Active Learning	9	6.1	(1.2)	6.2	(1.0)	0.27	5.9	(1.4)	6.4	(1.0)	0.14
Q 9 Flexible	10	5.8	(1.5)	5.6	(1.3)	0.23	6.2	(1.0)	6.2	(1.4)	0.82
Q 2 Analytical	11	5.7	(1.2)	5.6	(1.2)	0.28	6.1	(1.0)	5.9	(1.2)	0.59
Q 3 Communication	12	5.6	(1.4)	5.5	(1.3)	0.62	5.5	(1.5)	6.0	(0.9)	0.22
Q 11 Group Work	13	5.2	(1.7)	5.3	(1.6)	0.83	5.0	(1.5)	5.5	(1.1)	0.27
Q 13 Low Workload	14	5.1	(1.7)	5.2	(1.6)	0.90	5.2	(1.6)	5.3	(1.4)	0.82

* Millennial rank is based on ranking of mean values in Table 2 for Millennial subsample.
p-values are from two-tailed tests of difference in means; p-values in bold are statistically significant at 10% or less.
Full-time work is defined as working 40 hours or more per week.
Part-time work is defined as working 15 hours or less per week.

difference is the convenience of time and location of the class section (mean score of Q6 is 6.4 and 6.1 in working students and non-working students, respectively, significantly different at the 5% level). This result is expected, since full-time working students have less flexibility and are under pressure to find class sections that fit with their work schedules.

A comparison of students who work full time (40 hours or more per week; N=42) to those who work part-time (15 hours or less per week; N=17), indicate that part-time workers value constructive feedback from the instructor significantly more than students who work full-time (mean score of Q5 is 6.8 and 6.2 in part-time and full-time working students, respectively, significantly different at the 5% level). There are no other significant differences.

Further Analysis

The above univariate analyses in the subgroups of the Millennial sample do not provide a full picture of the class preferences within the examined subgroups. To address interaction among the student characteristics, we also perform a multivariate analysis through a regression of the form:

$$Q = a + b_1 \text{ Gender} + b_2 \text{ Accounting Major} + b_3 \text{ First-generation} + b_4 \text{ Work} + \varepsilon$$

Where Q = Ratings of a particular question in the survey,

Gender = 1 if the student is a male, and 0 otherwise,

Accounting major = 1 if the student is an accounting major, and 0 otherwise,

First-generation = 1 if the student is a first-generation student, and 0 otherwise,

Work = 1 if the student is employed, and 0 otherwise,

and ε = error term.

We examine the questions related to skill development (Q2 and Q3) as well as those related to the factors that do not relate to skill development (Q7 and Q13) to determine which student characteristics are related to class preference differences.

The findings, in Table 5, indicate that gender and the study major of the student are the two characteristics that are related to skill development. Specifically, communication skills are valued by females more than males (Coefficient = -0.454, significant at the 5% level), whereas analytical skills are preferred by accounting majors (Coefficient = 0.329, significant at the 10% level). But at the same time, females prefer factors unrelated to skill development such as achieving a high grade (Coefficient = -0.358, significant at the 1% level), whereas accounting majors are less concerned with a low workload (Coefficient = -0.426, significant at the 10% level) or achieving a high grade (Coefficient = -0.221, significant at the 10% level).

Overall, we find that gender and study major contribute to differences in preferences in the Millennial sample. In the multivariate setting, neither the employment status of the student nor their family educational background, affects their preferences in terms of these particular four questions.

CONCLUSION

In this study, we first explore the values of primarily African-American Millennial versus non-Millennial students on the same criteria examined in the Milliron (2008) study and compare their preferences to the predominantly white student population in her study. We find that the predominantly African-American student sample favor a slightly different set of criteria than the

TABLE 5
Results of Regressions on Characteristics of Students in the Millennial Sample
 (n=235)

<u>Variable</u>	<u>Q2: Analytical</u>			<u>Q3: Communication</u>		
	<u>Coeff.</u>	<u>p-value</u>		<u>Coeff.</u>	<u>p-value</u>	
Intercept	5.609	0.000	***	5.888	0.000	***
Gender	-0.147	0.364		-0.454	0.013	**
Accounting Major	0.329	0.063	*	-0.164	0.408	
First-generation	-0.114	0.484		-0.202	0.268	
Work	0.160	0.330		0.094	0.608	

<u>Variable</u>	<u>Q7: High Grade</u>			<u>Q13: Low Workload</u>		
	<u>Coeff.</u>	<u>p-value</u>		<u>Coeff.</u>	<u>p-value</u>	
Intercept	6.784	0.000	***	5.377	0.000	***
Gender	-0.358	0.004	***	-0.068	0.753	
Accounting Major	-0.221	0.098	*	-0.426	0.070	*
First-generation	0.112	0.360		-0.146	0.496	
Work	-0.060	0.630		-0.008	0.969	

***, **, and * refers to 1%, 5%, and 10% significance, respectively

The variables are defined as follows:

Gender = 1 if male, 0 otherwise;

Accounting major = 1 if student is an accounting major, 0 otherwise;

First-generation = 1 if first-generation student, 0 otherwise;

Work = 1 if student works, 0 otherwise.

predominantly white students in the Milliron (2008) study; the difference comes from the sample in this study's preference towards achieving a high grade over having clearly defined assessment and requirements. Furthermore, as in the previous study, Millennial students value high grades more than their non-Millennial counterparts and more than skill development in the form of analytical and communication skills. However, in contrast to the previous study, African-American Millennial students value skill development more than their non-Millennial counterparts and more than having a low out-of-class workload.

The findings in this study indicate that overall, as in Milliron (2008), the Millennial students' values are not completely aligned with global market reality. There is some evidence that the predominantly African-American sample is more concerned with skill development than their non-Millennial counterparts. However, given that African-American students place more importance on class outcomes than skill development criteria, it is possible that they are not putting forward their best effort in the skill development area. As such, their course grade may not be fully reflective of

their skills and potential. Upon graduation, this may negatively affect how they are perceived as being ready for workforce requirements and career success. Therefore, academicians, both teachers and curriculum setters, should highlight the benefits of analytical and communication skills in the workplace to their students. This can be achieved through inviting guest speakers from the profession or alumni of the university to discuss the skills needed for entry-level employees and those needed for future career development. Furthermore, attention should be paid to consistency in assessment and assignments across all offered sections of the same course.

But all African-American Millennial students do not share the same preferences; therefore, some may fare better than others when entering the workforce. Specifically, females value communication skills more than males. Furthermore, students who select an accounting study major prefer to learn analytical and computational skills but not communication skills more than non-accounting study majors. This last result is in line with research that demonstrates that accounting students do not perceive oral communication skills as important in the accounting profession (Ameen et al., 2010). Results in other subsections of the sample also provide different insights. The results of family educational background suggest that first-generation students may be unfamiliar with the college experience and seek help and guidance from expert instructors.

Therefore, caution should be taken in labeling all non-Millennial students as facing ‘crushing realities’ when entering the workplace (Milliron, 2008). Furthermore, academicians should be aware of the differences in preferences between subgroups of the Millennial population. For example, they should emphasize skill development to students who do not major in quantitative subjects, such as accounting.

As with all research, this study has limitations. First, similar to Milliron’s sample, the percentage of non-Millennial students in our study is small (12 percent). This suggests caution in accepting the results comparing Millennial and non-Millennial students. Furthermore, the study was conducted in early 2009, following the financial crash of 2008, which might hinder the generalizability of the results. However, we do not believe this to be a significant factor as students enrolled in the spring of 2009 would have been seeking admission into the university in early 2008.

Another limitation is the comparability between our study and the Milliron study. Our sample is from a predominantly African-American, urban mid-sized university; whereas the sample in the Milliron study is from a state university populated by mostly white, middle-class students. Therefore, differences between results in this study and that of Milliron (2008) could be due to not only race but socio-economic or other factors. A further limitation is the type of university in which both Milliron’s and our study were conducted. Both universities are small to mid-sized, public universities. In order to reach out to students who may have different values, research needs to be extended to other types of universities. A final limitation is that the values of primarily American Millennial students are assessed. Perhaps future studies should separate the student sample by national origin. This would allow a determination to be made of the similarity or differences in values between American and foreign Millennial and non-Millennial students.

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APPENDIX

The questionnaire is adapted from Valerie C. Milliron's (2008) study "Exploring millennial student values and societal trends: Accounting course selection preferences"

QUESTIONNAIRE FOR STUDY ON CLASS SELECTION OF BUSINESS SCHOOL STUDENTS

On a scale of 1 to 7 (with 1 as "not at all important" and 7 as "extremely important"), please rate the importance of each of the following in terms of your decision to select this specific class section of the current class:

- Q1: Active learning environment with lively and engaging class sessions
- Q2: Assignments which emphasize development of analytical and computational skills
- Q3: Assignments which emphasize development of communication skills
- Q4: Clearly defined assignment and testing requirements
- Q5: Constructive feedback by instructor
- Q6: Convenience of the class time or location
- Q7: Expectation of achieving a high grade
- Q8: Expert instructor
- Q9: Flexible course design allowing choice in course components
- Q10: Frequent and prompt feedback
- Q11: Group work and opportunity to network with other students
- Q12: Instructor who is accessible and helpful
- Q13: Low out-of-class workload
- Q14: Relevance of course curriculum to life skills and/or career goals

Please check one of the following choices or fill in the information:

- (1) Were you born before 1982? Yes _____ No _____
- (2) What is your gender? Male _____ Female _____
- (3) What is your major? _____
- (4) Are you a first-generation college student? Yes _____ No _____
- (5) Do you work? Yes _____ No _____
How many hours of work per week? _____