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¿Quién está en línea? A Five Year Longitudinal Study of Online Hispanic American Student Demographics

Meredith, Ben [1] and Burgess, Stephen R. [2]

[1] Eastern Washington University, [2] Southwestern Oklahoma State University

Abstract

In a five-year longitudinal study of Hispanic-American students taking online courses at a U.S. South Central University, the researchers sought to describe the demographic makeup of the typical online Hispanic-American student and the demographic makeup of the successful online Hispanic-American student. Using archived data it was determined that the profile of the online Hispanic-American students closely mirrored the profile of white populations.

Introduction

While already a decade old, the Pew Internet study on Hispanics and the Internet (Spooner and Rainier, 2001) found that Hispanic-American Internet users behave much like other Internet users, and in many instances are more likely to use the Internet for entertainment or as a source of information than white Internet users. Additionally, the study found that Hispanic-American households, even those living in modest economic circumstances of less than $40,000 per household, were as likely to have a computer and Internet connections in the household as white households. In the areas of personal and

economic advancement, Hispanic-American Internet users use the Internet in roughly the same way that Caucasian-American Internet users do.

Now a decade past this report and already into the second decade of online education invading the halls of higher education, the questions of who is online, who is successful online, and what of the Hispanic-American student online must be asked. Several studies (Coldwell, Craig, Paterson and Mustard, 2008; Diaz, 2000, 2002; Guernsey, 1998; Hoskins and Hooff, 2005; MacGregor, 2000, 2002; Meredith, 2011; Moore & Kearsley, 2005; Smith-Jaggars & Xu, 2010; Thompson, 1998; Wojciechowski & Palmer, 2005) over the last two decades have begun to ask the first two questions, but very little research exists asking the final question. This study seeks to add to that body of literature.

Online Student Demographics

In Thompson's (1998) review of research literature to that point, the typical distance learner (all forms of distance education from correspondence courses to computer-mediated courses were considered) is older than the typical undergraduate, female, more likely to be employed full-time, and married. While Thompson (1998) found that the demographically typical distance education student (older than 23 years of age, female, and Caucasian) had difficulty attending college because of geographic remoteness, he also found this caricature is changing. Thompson indicated that more students are choosing distance education without consideration of their proximity to campus. This may lead to speculation that distance education modes are less for "distance" and that other factors may be involved in student selection of this modality.

In Meredith's (2011) study of personality as an indicator of online student success and retention, the typical online learner generally mirrored Thompson's (1998) literature review from twelve years earlier. Meredith (2011) found that the typical online student is female, 26 years or older, Caucasian, married or in a committed relationship, had one or more children of child care age in the home, and lived in households with an income of $52,000 per annum or less. These support findings from a number of studies between 1998 and the present (Diaz, 2000, 2002; MacGregor, 2000, 2002; Smith-Jaggars & Xu, 2010).

A study undertaken by Coldwell, Craig, Paterson and Mustard (2008) looked at student demographics and academic achievement in an Australian-based, online, information technology class. Coldwell, et al found that a relationship existed between gender and academic achievement with women outperforming men and between nationality and academic achievement with Asian students performing poorer than those of Western cultures in online courses, which the authors attributed to a difference in learning culture between Asian students and Western culture. Although some earlier literature suggests that older students do perform better than younger students (Hoskins and Hooff, 2005), the results of Coldwell, et al's study did not support those findings.

Age has been a factor in some studies of online student behavior and preferences (Diaz, 2000; Guernsey, 1998; Moore & Kearsley, 2005; Wojciechowski & Palmer, 2005).Guernsey (1998) compared student behavior of a class that was offered in both a traditional face-to-face format and an online format. Out of the ten students who opted to take the course in the online format, six were older than most of the students, had families, and full-time jobs. The remaining four students were younger and had difficulties in the

course, eventually moving back to the face-to-face format to complete the course. Moore & Kearsley (2005) found that most students enrolled in an online course were adults who had clear reasons for enrolling in the online format and that these students were adults between 25 and 50.

While not looking specifically at age but at drop rates within online courses, Diaz (2000) argued that the high drop rates found within online courses do not necessarily indicate academic nonsuccess. Rather, Diaz argues that high drop rates may indicate better strategic movements on the part of more advanced, older and more experienced online students that his research found to be the online student's demographic profile.

Research Setting

The researchers used archived data covering the five academic years (Fall 2007 – Summer 2012) at a Central Southwestern U.S. regional university. The university is located in a primarily rural area. The student body is comprised of approximately 5,000 students. The majority of students enrolled self-identify as Caucasian (71%) with 6% Hispanic-American, 5% African American , and 5% Native American. The local area is comprised of 72% Caucasian, 14.7% Hispanic-American, 3.3% African American , and 6.9% Native American (U.S. Census Bureau, 2012).

Though the university offered online course sections throughout the period, this was not considered the primary mode of distance delivery by the university administration. In the years prior to the examined period, the university had invested heavily, and almost exclusively, in Interactive Television (ITV) technology to meet the demands of distance

delivery, with which the university faculty were comfortable. As a result of this, the university serviced and connected with 84 off-campus ITV locations around the state to deliver undergraduate and graduate courses. Not all course offerings at the university were delivered through this distance modality, leaving the distance program less of a program and more of a smattering of course offerings. Between AY 2007-2008 and AY 2008-2009, the university witnessed a shift in distance delivery to a more online focus (see table 1). In Spring 2010 enrollment patterns in distance courses demonstrated this emphasis shift when enrollment in online courses exceeded all other modalities of distance education offered at the university. This shift in primary modality of choice among students has continued to place online education as the primary method of distance delivery since that time.

Table 1

Duplicated Headcount Growth of Distance Course by Modality and Total

Modality	AY 07-08	AY 08-09	AY 09-10	AY 10-11	AY 11-12
Telecourse	**377**	**403**	**386**	**520**	**193**
Interactive TV	**1749**	**1786**	**1824**	**1781**	**1534**
Online	**277**	**983**	**2263**	**3305**	**4298**
All Modalities	**2403**	**3172**	**4473**	**5606**	**6025**

Method

The data set used for analysis in this study included all online courses and sections from Fall 2007 to Summer 2012. This consisted of 544 total individual courses comprising 633 individual sections and including both graduate and undergraduate courses and sections. The course organization, navigation and design in the online format were left to the teaching faculty member. Thus the courses represented a wide variety of approaches to online education from high student-faculty interaction to low student-faculty interaction. The courses were taken in aggregate rather than examined individually, which should mitigate any differences in instructional design for this study.

The initial dataset consisted of all distance education students at or over the age of 18 years at the university in all distance education courses from Fall 2007 to Summer 2012. This constituted 11,126 duplicated enrollment lines for all students. The information extracted consisted of student demographics (i.e., age, race, gender), marital status, financial aid status, and grade in the distance education course. Numeric identifiers for each student were used in place of personal identifying information. The information obtained was recorded in this manner to ensure anonymity and confidentiality of the participants. Analyses were conducted with the student as the unit of analysis.

Data for the present study were extracted to include all Hispanic-American students over the age of 18 years who were enrolled in a distance course by the Consensus Date (the tenth day of each term). This extrication yielded 521 duplicated enrollment lines of data for Hispanic-American students alone. While the data points contained duplicated enrollment, no longitudinal tracking of individual students or their progress was conducted for this study.

Descriptive statistics were used to analyze the data for individuals within two groups per annual cohort: (a) all students and (b) those students receiving a C or better in the class (i.e., used in this study to denote "successful" students). Simple means and frequency distributions were employed.

Results

What is the demographic profile of the online Hispanic-American student over time?

In this section we describe the demographic profile of the Hispanic-American student enrolled in online courses for the AY 07-08 to AY 11-12. The variables described are: academic standing, gender, age, financial aid status, and marital status.

Academic Standing

Over the five-year period of the study data, graduate students constituted the largest group in academic standings at 65% compared to 35% for undergraduates (see table 2). This percentage breakdown remained fairly constant through four of the five years of the study, χ^2 (4, 521) = 5.71, $p > .05$. In the first year examined, AY 07-08, graduate students constituted 93% of the student standings, but this is accountable by the general lack of undergraduate courses during this period and the presence of a graduate level program online. In that year, 277 students across the entire campus participated in an online course, while only 15 of these students self-classified as Hispanic-American. In AY 11-12, of the 4298 students across the campus that participated in an online course, 195 were self-classified as Hispanic-American. Thus the number of students overall enrolled in online courses increased

dramatically over the 5 year period studied. Interestingly, the percentage of students taking online courses identified as Hispanic-American remained fairly consistent at 5%.

Table 2

Online Enrollment by Academic Standings

Academic Standing	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***N***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***N***
Graduate	65.1	339	93.3	14	60.9	28	63.9	69	65.0	102	64.6	126
Undergrad.	34.9	182	6.7	1	39.1	18	36.1	39	35.0	55	35.4	69
N	521		15		46		108		157		195	

Gender

Over the five year period of the study, females constituted 73% of the online Hispanic-American student population and males constituted 27% (see table 3). The population gender proportions did not remain constant throughout the period of the study, χ^2 (4, 521) = 12.76, $p < .05$. From AY07-08 to AY 09-10, the percentage of females among online Hispanic-American students dropped from 67% to 65%, while the percentage of males among online Hispanic-American students increased proportionally. However, beginning in AY 10-11, the percentage of female students rose dramatically. In AY 11-12, the percentage of female online Hispanic-American students rose to 82% while the percentage of males dropped to a mere 19% in spite of the overall increase in the number of Hispanic-American students online increasing throughout the period.

Table 3

Online Enrollment by Gender

Gender	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***N***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Female	73.3	382	66.7	10	65.2	30	64.8	70	72.0	113	81.5	159
Male	26.7	139	33.3	5	34.8	16	35.2	38	28.0	44	18.5	36

Age

The mean age of online Hispanic-American students was 27 years old over the five-year period of the study (see table 4). While in three of the five years of the study the mean age of the students was a constant 27 years old, this was a drop from the first year of the study (AY 07-08) when the mean age for the students was 32 years old. Additionally, over the length of the study the deviation from the mean age generally declined, $F(3, 521) = 2.34$, $p = .05$.

Table 4

Mean Age of Online Students by Year Group

Age	**Total**	**AY 07-08**	**AY 08-09**	**AY 09-10**	**AY 10-11**	**AY 11-12**
Mean	27	32	30	27	27	27
Std Dev	8.6	16.7	12.0	8.1	7.3	7.9
N	521	15	46	108	157	195

In overall enrollments, the 18-23 year old student, the traditional student, constituted only 41% of all online Hispanic-American students (see table 5). Over the length of the five

year study, this group began on par with the 24-33 year old student group in AY 07-08 and 08-09. In AY 09-10, this group spiked to 47% of all online Hispanic-American students, but dropped back to 39% the following academic year. Overall these changes in enrollment were not statistically significant, χ^2 (12, 521) = .22, p > .05. However these trends may have implications for how educators and administrators plan for enrollment patterns. The largest single group of students was the 24-33 year olds, the first bracketing of non-traditional students – those students older than 23 years of age. This group constituted 42% of all online students over the length of the study. In the first two academic years of the study this group would be on par with the 18-23 year old group. In AY 10-11, this group would spike to being 47% of all enrolled online Hispanic-American students, and would retain this lead position in the last year of the study. Among all years, however, the non-traditional student who is over 24 years old constituted the largest portion of enrolled Hispanic-American students.

Table 5

Online Enrollment by Age

Age	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
18-23	40.9	213	40.0	6	37.0	17	47.2	51	38.9	61	40.0	78
24-33	42.4	221	40.0	6	37.0	17	39.8	43	46.5	73	42.1	82
34-43	7.7	40	0.0	0	10.9	5	2.8	3	7.0	11	10.8	21
44 -above	9.0	47	20.0	3	15.2	7	10.2	11	7.6	12	7.2	14
n	521		15		46		108		157		195	

Financial Aid

Over the five year period of this study, online Hispanic-American students receiving financial aid constituted 84% of the total online Hispanic-American population (see table 6). In the first year of the study (AY 07-08) this percentage would constitute a staggering 93% of all online Hispanic-American students, but it would drop to a low of 77% in AY 09-10. These changes were not statistically significant but would potentially represent a practically significant change in the manner in which financial aid decisions and recruitment of potential students were considered.

Table 6

Online Enrollment by Financial Aid Status

Financial Aid	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Yes	83.7	436	93.3	14	84.8	39	76.9	83	86.0	135	84.6	165
No	16.3	85	6.7	1	15.2	7	23.1	25	14.0	22	15.4	30
N	521		15		46		108		157		195	

Marital Status

Students who did not declare a marital status constituted only 11% of all online Hispanic-American students in the study and as a result of this their numbers were not removed from the analysis (see table 7). The researchers determined that a clear demographic picture of the student marital makeup would be accurately portrayed by leaving their undeclared status in the analysis.

Table 7

Online Enrollment by Marital Status

Marital Status	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Single	58.9	307	80.0	12	73.9	34	57.4	62	58.6	92	54.9	107
Married	23.0	120	13.3	2	10.9	5	27.8	30	21.0	33	25.6	50
Separated	3.3	17	0.0	0	2.2	1	0.0	0	8.3	13	1.5	3
Wid./ Div.	3.5	18	0.0	0	0.0	0	0.0	0	1.3	2	8.2	16
Undeclared	11.3	59	6.7	1	13.0	6	14.8	16	10.8	17	9.7	19
n	521		15		46		108		157		195	

Over the five year period of the study, single students constituted the largest group of Hispanic-American students online at 59%. Over the length of the study, this group would remain the largest group by a significant number. In AY 07-08, the first year of the study data, this group would spike at 80% of those Hispanic-American students enrolled in online courses. Over the length of the study, this group would slowly significantly decline in its dominance to 55% of all online Hispanic-American students in AY 11-12, the last year of data in the study , χ^2 (4, 521) = 17.38, p < .05. .

The second largest group throughout the length of the study was online Hispanic-American students who declared their status as married. Over the length of the study this group constituted 23% of all online Hispanic-American students. In AY 09-10, this group would spike to 28% of the total online Hispanic-American student count. Prior to AY 10-11, the university did not have a classification for "Divorced/Widowed" that students could

self-declare as a status. As a result of this, there is no data for this category prior to this academic year.

What is the demographic profile of the successful online Hispanic-American student?

With data and a demographic profile of the online Hispanic-American student, the question arises as to the similarity or difference between the demographic profile of the online Hispanic-American student and the successful online Hispanic-American student. For this study, *successful* was defined as a student receiving a final course grade of 2.0 or above, or a letter grade of a "C", "B", or "A", or a credit grade of "S" or "P". Students with a final course grade below 2.0, a letter grade of "D" or "F" or a credit grade of "NS", "NP", "I" or "W" were considered to be *unsuccessful* and were excluded from the analysis. These definitions were in keeping with the university's and state's definitions of *successful* and *unsuccessful* students. With these exclusions, 70% of all Hispanic-American students were successful in their online courses. In this section we describe the demographic profile of the successful Hispanic-American student enrolled in online courses for the AY 07-08 to AY 11-12. The variables described are: academic standing, gender, age, financial aid status, and marital status.

Academic Standing

As noted previously, over the five year period of this study, graduate online Hispanic-American students constituted the largest group in academic standings. Graduate students also represented the larger portion of successful students at 66% over undergraduates 34%. After AY 09-10, these percentages remained fairly constant (see table 8), , χ^2 (3, 364) = 1.51,

$p > .05$. Prior to AY 09-10, with the general absence of undergraduate online courses at the university AY 07-08, the graduate online Hispanic-American population constituted almost 100% of the successful students.

Table 8

Successful Online Enrollment by Academic Standing

Academic Standing	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***N***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Graduate	65.7	239	100	8	56.3	18	66.2	49	67.5	77	64.0	87
Undergrad.	34.3	125	NA	NA	43.8	14	33.8	25	32.5	37	36.0	49
n	364		8		32		74		114		136	

Gender

Over the five year period of the study, females constituted 75% of the successful online Hispanic-American student population and males constituted 25% of the same population (see table 9). The population gender proportions did not remain constant throughout the period of the study but were not statistically significant, χ^2 (4, 364) = 6.37, $p > .05$. From AY 08-09 through AY 09-10, the population of females among the successful online Hispanic-American population dropped to 63% and 69% respectively. However, in AY 10-11 this percentage rose to 77% with a spike to 80% in AY 11-12 with successful online Hispanic-American males dropping to a mere 20% of the total population in that same year. That is the lowest percentage of successful online Hispanic-American males in the length of the study.

Table 9

Successful Online Enrollment by Gender

Gender	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Female	75.3	274	75.0	6	62.5	20	68.9	51	77.2	88	80.1	109
Male	24.7	90	25.0	2	37.5	12	31.1	23	22.8	26	19.9	27
N	364		8		32		74		114		136	

Age

The mean age of the successful online Hispanic-American student was 30 years old over the five year period of the study (see table 10). While the mean age was constant at 26 years old for AY 10-11 and AY 11-12, this was a drop from the first year of the study period when the mean age for the successful online Hispanic-American student was 39 years old, $F(4, 360) = 6.14$, $p < .05$. Over the length of the study the deviation from the mean age continued on a decline from 20.6 to 6.6 years. This trend is consistent with the increase in undergraduate enrollment in online courses during the period examined.

Table 10

Mean Age of Successful Online Students by Year Group

Age	**Total**	**AY 07-08**	**AY 08-09**	**AY 09-10**	**AY 10-11**	**AY 11-12**
Mean	30	39	31	27	26	26
Std Dev	11.3	20.6	13.7	8.8	6.9	6.6
N	364	8	32	74	114	136

In overall enrollments, the traditional 18-23 year old student population constituted only 40% of all successful online Hispanic-American students (see table 11). The single

largest age demographic group was the 24-33 year olds at 46%. In aggregate, those successful online Hispanic-American students over the age of 23 constituted 60% of the total successful population. In AY 07-08, 38% of all successful online Hispanic-American students were 44 years old or older. This proportion saw a rapid decline from AY 08-09 to AY 11-12, χ^2 (4, 364) = 12.0, $p < .05$. At the same time, the proportion of students in the 24-33 year old demographic group realized a rise in overall proportional representation for all years, spiking to 51% of the successful online Hispanic-American students in AY 10-11.

Table 11

Successful Online Enrollment by Age Group

Age	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
18-23	40.1	146	37.5	3	31.3	10	47.3	35	39.5	45	39.0	53
24-33	45.9	169	25.0	2	43.8	14	37.8	28	50.9	58	47.8	65
34-43	5.2	19	0.0	0	3.1	1	2.7	2	2.0	3	9.6	13
44 -above	8.8	32	37.5	3	21.9	7	12.2	9	7.0	8	3.7	5
n	364		8		32		74		114		136	

Financial Aid

Over the five year period of the study, 81% of all successful online Hispanic-American students received financial aid (see table 12). In first year of the study (AY 07-08) this percentage would spike at 100% and would drop to a low of 75% in the third year of the study (AY 09-10). These differences were not statistically significant, χ^2 (4, 364) = 4.79, $p > .05$.

Table 12

Successful Online Enrollment by Financial Aid

Financial Aid	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Yes	81.0	295	100.0	8	81.3	26	74.5	55	84.2	96	80.9	110
No	19.0	69	0.0	0	18.8	6	25.7	19	15.8	18	19.1	26
n	364		8		32		74		114		136	

Marital Status

Students who did not declare a marital status over the length of the study constituted 14% of all successful online Hispanic-American students (see table 13). These students were not removed from the overall analysis. The researchers determined that a clear demographic picture of the student marital makeup would be accurately portrayed by leaving their undeclared status in the analysis.

Table 13

Successful Online Enrollment by Marital Status

Marital Status	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***N***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Single	57.1	208	100.0	8	75.0	24	54.1	40	55.3	63	53.7	73
Married	23.4	85	0.0	0	12.5	4	25.7	19	20.2	23	28.7	39
Separated	3.6	13	0.0	0	0.0	0	0.0	0	11.4	13	0.0	0
Wid./ Div.	2.2	8	0.0	0	0.0	0	0.0	0	1.8	2	4.4	6
Undeclared	13.7	50	0.0	0	12.5	4	20.3	15	11.4	13	13.2	18
n	364		8		32		74		114		136	

Over the five year period of the study, single students constituted the largest group of successful online Hispanic-American students at 57%. Over the length of this study, this group would remain the majority group by a significant number. The overall pattern of marital status did not change significantly over time, χ^2 (4, 364) = 8.56, p > .05. In AY 07-08, the first year of this study, the single group would spike to 100% of successful online Hispanic-American students. Over the length of this study, this group would decline to 54% of successful online Hispanic-American students in AY 09-10 and AY 11-12.

The second largest group throughout the study was successful online Hispanic-American students who declared their status as married. Over the length of this study this group constituted 23% of the total number of successful online Hispanic-American students. In AY 11-12, this group would spike to 29% of the total. Prior to AY 10-11, the university did not have a classification for "Divorced/Widowed" that students could self-declare as a status. As a result of this, there is no data for this category prior to this academic year.

Discussion

In taking up the issue of copyright and the digital learning age, the US Senate reported out in 2001 that the average online learning student is 34 years old, employed part-time, has previous college credit, and is a woman (U.S. Senate, 2001). In the last half century as universities have opened their doors to women, this demographic group has risen from an anomaly to a position of there being slightly more women enrolled in higher education than men. This same phenomenon can be seen in the university in this study. Between AY 07-08 and AY 11-12, females constituted the majority gender at the university in this study (see

table 14). Many women in or returning to college in this study face significant barriers not experienced or not experienced to the same degree as men. Balancing job and family responsibilities against academic work, women grapple with the inflexibility of class schedules, academic policies, inadequate child care, and transportation issues. As a result, online programs provide some relief from these difficulties (Kramarae, 2001).

Table 14
Total University Enrollment by Gender

Gender	**Total**		**AY 07-08**		**AY 08-09**		**AY 09-10**		**AY 10-11**		**AY 11-12**	
	%	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***	**%**	***n***
Female	56.6	13211	58	2662	57	2526	56	2575	56	2715	56	2733
Male	43.4	10124	42	1916	43	1920	44	2014	44	2130	44	2144
n	23335		4578		4446		4589		4845		4877	

While females represented the majority of the students at the university in this study, they represented a "super majority" in the online arena at 73% among the general population of online Hispanic-American students and 75% among successful online Hispanic-American students over the five year period of the study. Females were more strongly represented among both the general online Hispanic-American student population and successful online Hispanic-American student population in all years except AY 08-09, when they were slightly better represented overall than they were among successful online Hispanic-American students. This mirrors the findings of Kramarae (2001) who argued that distance education reduces significant barriers for women's advancement in the face of family, work and community obligations. These findings also support Coldwell, et al's (2008) findings that a relationship existed between gender and academic advancement with women outperforming

men. Consistently, the female dominance in online education has been re-established in studies (Coldwell, Craig, Paterson and Mustard, 2008; Diaz, 2000, 2002; Guernsey, 1998; Hoskins and Hooff, 2005; MacGregor, 2000, 2002; Meredith, 2011; Moore & Kearsley, 2005; Smith-Jaggars & Xu, 2010; Thompson, 1998; Wojciechowski & Palmer, 2005), thus painting a clear picture that the role of females in online education is one of dominance. And while coming from a dominantly patriarchal society, Hispanic-American women are demonstrating a controlling position in higher education online courses and programs that is out of character to the Hispanic-American cultural position of women. This empowerment of the Hispanic-American female holds the potential for changes in the social structure in the Hispanic community as women are potentially in a better position to improve their social standing through the benefits and opportunities presented by increased educational attainment.

Mean age was also noticeably different between successful online Hispanic-American students and the general population of students overall. The mean age of successful students was three years older than the mean age of all online Hispanic-American students. The mean age of both successful and general online Hispanic-American students was older than the traditional ages student overall. Among successful online Hispanic-American students, traditional students were the dominant group in only two of the five years of the study. Likewise, traditional students were always a minority to non-traditional students in percentage of overall population. There are several possible reasons for this.

First, online education requires more discipline to remain on track and to place academic work above other temptations or responsibilities. A stronger self-discipline is

generally present in older, family age adults. Discipline among older students, a character trait needed in a student for online education, may account for the larger number of non-traditional students.

Second, among older students, especially those with family and job responsibilities, investment in personal and professional advancement may account for the larger number of non-traditional students in the online courses. With jobs, family, and community commitments, non-traditional students do not have the luxury of time to attend standard university courses in the middle of the day, several days a week. The open aspect of online course attendance allows adults with children and with employment to continue to attend the university while still attending to their responsibilities. Coming with this investment of time and energy is a commitment to excellence and good academic achievement.

Financial aid plays a dominant role among all online Hispanic-American students, which is aligned with other ethnic populations the authors found as a part of this research. Whether successful or part of the general population, online Hispanic-American students on financial aid consistently remained at 77% of the population or above. However, among successful online Hispanic-American students, those not on financial aid were slightly higher than the general population. The investment in one's education and the rising costs of that education may explain why among students not on financial aid there is a stronger representation as successful students.

Finally, in both the general population and the successful student population single students were dominant. This counters arguments poised by Kramarae (2001) that familial issues are an important factor in the selection of online delivery by students – especially

females. However, over the length of the study married students continued to be more strongly represented among successful students. Still this population never constituted more than 29% of the total population.

Conclusion

As online education quickly approaches its second decade in education and the university, understanding who is online and who is successful online becomes a paramount issue. In supporting online Hispanic-American students, knowing which segments of this demographic group are gravitating to an online format and how successful they are in this format will go a long way to tailoring that support to the population needs. With females taking advantage of online education at a greater rate than males their educational opportunities are increasing which will potentially place them in a better position to take advantage of the employment and other opportunities higher educational attainment affords.

The results of this study also suggest that online courses as currently structured may best be targeted towards older learners. Attempts to expand the online course offerings that might appeal to younger learners may need to be accompanied by a greater attempt to facilitate a sense of community and involvement for the learner as well as additional pedagogical features such as those that assist the learner in time management.

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