

RUNNING HEAD: DOES IT TAKE A VILLAGE?

RESEV 552: Research Proposal Project

Does it take a Village?

How the Surrounding Campus Community May Impact Retention on Campus

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How the Surrounding Campus Community May Impact Retention on Campus

Iowa State University is continually challenged with how to recruit and retain students of color to the institution. Because the adjoining community plays an important role in how the campus succeeds with recruitment and retention, it is important to understand the community's demographics. When a person is mature racial identity they are learning to decipher the messages about racial groups (Jones and Carter, 1996). "Race and ethnicity are defined by society, not by science. A racial group is often defined according to such physical characteristics as hair type, facial features, and skin color" (Pollard & O'Hare, 1999). With these words defined one can determine the importance of teaching white students about multiculturalism because of the demographical change within the United States. Pollard and O'Hare (1999) explained,

Between 1950 and 1998, the minority population more than tripled in size as waves of immigration from non-European countries, higher birth rates among minorities, and a relatively young age structure accelerated the minority growth rates. The non-Hispanic white population grew slowly after 1970 as birth rates fell and immigration from Europe dwindled. Between 1980 and 1998, the minority population increased 63 percent, compared with an 8 percent growth of non-Hispanic white population. Minorities now comprise one-fourth of the U. S. population.

People of color attending colleges and universities have increased over the last twenty-four years. According to the National Center for Educational Statistics Higher Education General Information Survey (2002) the percentage of students of color attending higher education institutions have increased from 15.4% in 1976 to 28.2% in 2000; whereas white students have decreased from 82.6% in 1976 to 68% in 2000. Thus, the importance of understanding how

communities contribute to students of color retention is vital to the success of higher education's mission to educate students for the greater good.

Research Questions

In particular, are Iowa State University's students of color demographics proportionate to the people of color living within the Ames, Iowa community? How does Iowa State University's and Ames, Iowa compare to other State of Iowa Regent Universities? How does it compare to the Peer Eleven Institutions? In order to gain an understanding of these populations, statistical information was gathered from the 2000 National Center for Educational Statistics and compared proportionately to data from the 2000 United States Census Bureau.

The Purpose of the Study

Given the lack of empirical investigations on how the surrounding community may impact the retention of students of color, it is appropriate to develop a methodology for differentiating between the campus and community in regards to diversity. The purpose of this study is to provide a means for colleges to develop improved retention interventions based on a more accurate understanding of the differences between the community's population and the campus population. Along with emphasizing the need to understanding how Iowa State University's community may differentiate among students of color, other findings of the study may be generalized to peer institutions or State of Iowa Regent Universities. This research is based upon an institutional study at Iowa State University (26845 students) weighed the Peer Eleven Land Grant Institutions (Fact Book, 2003) and State of Iowa Regent Universities. It is possible to identify common patterns across institutions, even those with varied metropolitan or rural areas. Using 2000 data from the National Center for Education Statistics, there were a total of 14 public 4-year institutions responding to the federally required characteristics and

enrollment surveys. The community information was captured from the 2000 United State Census Bureau Data.

The literature review also identified a number of studies based upon student retention or diversity challenges, though inconsistently across studies and often not accounting for all groups (drop-outs, stop-outs, opt-outs, and transfer-outs). Thus, many other institutions will have the subpopulations identified in this study, and it would be informative for more institutions to profile these student groups.

Literature Review

The theoretical basis of this study rests with the underlying philosophy of how the collegiate environment impacts student retention. These models and the associated theories affirm that the college environment and the student's interaction with that surrounding can have a considerable impact on an array of college outcomes.

One of the theories is Nancy Schlossberg's theory of marginality and mattering (as cited in Evans, Forney, & Guido-DiBrito, 1998). This theory proposed that students' levels of marginality and mattering in college are directly related to their learning and development in college. As Evans et al. (1998) stated, "The range of optimal dissonance for any particular person varies, depending on the quality of the challenge and support that the environment provides as well as the characteristics of the individual" (p. 26). The impact of the quality of life within a college community for students of color increases when students feel respected, and supported. Therefore, environment plays an integral role in a student's retention and quality of life (Evans et al., 1998; Reason, 2003; Strange & Banning, 2001). Identifying the community based environmental initiatives students of color will help recruit and retain students (Strange & Banning, 2001). Location plays an integral role in how students will be involved within the

learning processes and that it can be utilized as an “educational advantage” (Strange & Banning, 2001, p. 142).

It is important for universities to take the surrounding campus environment when recruiting students, because the specific needs of students of color may vary according to the community. “Inclusion for one group often rests on the exclusion of other groups, ultimately challenging their sense of safety and security, physical or psychological” (Strange & Banning, 2001, p. 130). In addition predominantly white campuses may have difficulty retaining because of a significant feeling of exclusion within the community (e.g., Reason, 2003; Strange & Banning, 2001). It is challenging for administrators to meet the needs of students of color because of the complexity within the campus and community environments. This complexity may lead to a need for higher education to understand and evaluate all of the variables that may exist in retaining students of color at institutions (Reason, 2003). Thus, the surrounding community plays a role in the retention of students. In summary, how college affects students has been an area of inquiry that has been extensively studied. In many of those studies, however, researchers have seldom specifically examined how the undergraduate student experience influences progress in college for different types of students.

Design and Method

Information was collected from the 2000 National Center for Educational Statistics and Census Data. A two-way analysis of the proportions between students of color and people of color within a community was evaluated through a test statistic on independent samples. Hypothesis testing for independent samples was used to examine the proportion between students color within the higher education institution and a person of color within the community the institution is located. The hypothesis tested is that the institution will have a larger proportion

of people of color than that of the community. Thus, the institution may have a challenge to retain students of color on their campus because of the surrounding communities' lack of people of color.

These respondents utilized serve as peer institutions for Iowa State University, which I currently work at as the Assistant Director of Student Activities. The request for our institution to have a diverse student body is important to the culture of the University, but also a request from the State of Iowa Board of Regents. Because of this consistent request to diversify our student body, I believe it is important to understand how the campus students of color are proportionate to the surrounding community.

The limitation of this study happens to be how the National Center for Educational Statistics and United States Census Bureau determine race. Each of these methods is different and the races themselves may be considered different. In particular, each of the gathering measures may include international students within their statistical information. Although, one cannot determine this information, it may contribute to some of the information reported to those specific federal bureaus.

The criterion for rejecting the hypothesis is $H_0 = P_1 - P_2 = 0$. Therefore students of color and people of color are equal within this hypothesis. In order to determine this hypothesis a standard error of the difference between independent proportions needed to be established. The formula itself is $S_{P_1 - P_2} = \sqrt{pq (1/n_1 + 1/n_2)}$. Once the standard of error was established, it was utilized to compute the test statistic. A test statistic is a quantity calculated from our sample of data. Its value is used to decide whether or not the null hypothesis should be rejected in our hypothesis test. The 95 percent confidence level for the unknown parameter was then calculated for each of the samples for each of the sample populations. The width of the confidence interval

gives us some idea about how uncertain we are about the unknown parameter. A larger interval may show that more information should be composed prior to anything very explicit can be said in relation to the parameter. Confidence intervals are more informative than the simple results of hypothesis tests (where we decide "reject H_0 " or "don't reject H_0 ") since they present a range of reasonable values for the unknown parameter. The interpretation of the results then was considered to conclude the study.

Findings

Of the 13 respondents, all are statistically significant. Because the purpose of this study was to examine the campus and community environment only those institutions which are consistently compared to Iowa State University were analyzed. The results show significant differences between the campus students of color and communities people of color [See Table 1].

The null hypothesis and the 95 percent confidence interval developed for Iowa State University ($P_1=.2089$) and Ames ($P_2=.1269$) was rejected because the observed difference in the sample proportions ($z=22.9167$) would have occurred by chance if the null hypothesis were true is less than .05. Thus, Iowa State University can conclude that the campus's student of color population has a greater proportion than that of the Ames community's people of color population. This information is helpful for Iowa State University to understand that student of color retention may be impacted because the surrounding community does not necessarily represent the diversity found on its campus.

The null hypothesis was rejected for 12 of the other respondents. Specifically, the difference in the proportions between the students of color and people of color for Michigan State University and East Lansing, Michigan; North Carolina State University and Raleigh,

North Carolina; University of California-Davis and Davis, California; and University of Northern Iowa and Cedar Falls, Iowa.

The one respondent in which the hypothesis was accepted was Ohio State University and Columbus, Ohio. The null hypothesis and the 95 percent confidence interval developed for Ohio State University ($P_1=.247$) and Ames ($P_2=.3207$) was accepted because the observed difference in the sample proportions ($z= -.1585$) occurred because the null hypothesis is true and is less than .05. Thus, Ohio State University can conclude that the campus's student of color population is similar in proportion to the Columbus community's people of color population. This information is helpful for Ohio State University to understand that students of color at their institution may be have a higher retention level because the surrounding community does represent the diversity found on its campus.

Although the null hypothesis was rejected for University of Minnesota – Twin Cities, it is important to note that there is almost a balance between the campus and the people of color population in the community of Minneapolis. The null hypothesis and the 95 percent confidence interval developed for University of Minnesota – Twin Cities ($P_1= .279$) and Minneapolis ($P_2=.3487$) was rejected because the observed difference in the sample proportions ($z= - .29042$) occurred because the null hypothesis is true and is less than .05. Thus, University of Minnesota – Twin Cities can conclude that the campus's student of color population has an equal proportion to that that of the Minneapolis community's people of color population. This information is helpful for University of Minnesota – Twin Cities to understand that students of color at their institution may be have a higher retention level because the surrounding community is almost proportionate to the diversity found on its campus.

Future Research

In terms of further research, one of the more promising areas to consider is whether or not the students of color retention is impacted by the community on each of these institutions. The National Center for Education Statistics does include a question about retention, but not necessarily for certain populations on campus. It would also be of interest to do a qualitative study on those campuses that may have a balanced population of people of color within their community to see whether or not the community does impact their environment. It would be important to explore this issue at different types of institutions, but particularly at predominately white institutions. Although this study was undertaken at comparing Iowa State University to its peer institutions, further research could focus on whether these results are constant across different institutions, and if so, what implications they suggest.

Conclusion

The information gathered from the institutions does show how the surrounding community may impact the campus climate. It is imperative for campuses to work with the surrounding communities to have a supportive network for students of color both on and off campus. The community and campus should not only be supportive from a developmental perspective, but stores and services that meet the needs of the entire population and not just those of the dominant majority on the campus. The collective community can contribute to the aggregate experience for students of color, thus creating a holistic and inclusive experience for students. In conclusion, I would like to share a portion of the Hillary Clinton's *It Takes a Village*:

It does take a village, to work with the family, to raise a child and weather the storms of life. If we want that kind of support, the place to begin is with ourselves. Community, like charity, begins at home. You start building a good neighborhood when you yourself decide that you will be a good neighbor.

TABLE 1

REGENT UNIVERSITIES	LOCATION	TEST STATISTIC	CONFIDENCE INTERVAL 95%
Iowa State University	Ames, IA	22.9167	0.0754 to .0896
University of Iowa	Iowa City, IA	28.7586	0.0777 to .0891
University of Northern Iowa	Cedar Falls, IA	44.545	0.0234 to .0256
PEER 11 LAND GRANT	LOCATION	TEST STATISTIC	CONFIDENCE INTERVAL 95%
University of Arizona	Tucson, AZ	22.4	0.051 to .061
University of California	Davis, CA	83.637	0.294 to .3082
University of Illinois	Urbana, IL	11.7143	0.0341 to .0479
Iowa State University	Ames, IA	22.9167	0.0754 to .0896
Michigan State University	East Lansing, MI	-62.1852	-.17321 to -.1621
University of Minnesota	Minneapolis/St. Paul, MN	-29.042	-.065 to -.0744
North Carolina State University	Raleigh, NC	-39.583	-.1496 to -.1354
Ohio State University	Columbus, OH	-0.1585	-.9849 to .8375
Purdue University	West Lafayette, IN	12.83	0.0326 to .0444
Texas A&M University	College Station, TX	15.56	0.034 to .0438
University of Wisconsin	Madison, WI	10.3	0.0167 to .0245

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