Purpose of the Study

The purpose of this research is to examine the relationship, if any that exists between students living in on-campus housing and graduation rates at rural public community colleges. Based on a current literature review, the topic of how student housing impacts graduation has not been researched thoroughly. The study will involve a national research base of rural community colleges with on-campus housing. A similar study by Yaun (2013) researched the relationship between retention and if students lived on or off campus at community colleges. With the close connection between retention and graduation, Yaun’s (2013) research on this topic, specifically in the community college environment, provides valuable information. The study will build on this relatively small body of research related to community colleges and specifically how campus housing impacts student success.
At 4-year institutions, research has shown that students living in college residence halls feel more engaged and express an overall better experience than those students living off-campus (Blimling, 1993). Based on the integration model developed by Tinto (1993), students who are integrated into the college environment will have better success at the institution. The proposed research will test the Tinto (1993) integration model and past research at 4-year institutions that show similar positive benefits of campus housing. With the increased pressure on higher education institutions to retain and graduate students, this research will provide valuable data for administrators at community colleges. The results of this research will provide insight into the potential relationship existing between living on-campus and graduation rates.

**Research Questions**

The purpose of this research is to examine the relationship, if any that exists between students living in on-campus housing and graduation rates at non-urban community colleges. The participants and units of analysis in the study are community colleges, some of which have student housing on campus, and some of which do not. The research is guided by the following research questions:

RQ1. What factors play a role in student housing decisions at non-urban community colleges?

RQ2. What factors of campus housing have a positive and negative impact on graduation rates at non-urban community colleges?

RQ3. Is there a significant difference between the graduation rates at non-urban community colleges with and without on-campus housing?
RQ4. Is there a significant difference between the graduation rates of students who live in on-campus housing and students who do not live in campus housing at non-urban community colleges during their entire academic career?

The following hypotheses will be used for the study:

RQ3. Null Hypothesis: There will be no significant difference between the mean graduation rate at non-urban community colleges with and without on-campus housing.

Alternative Hypothesis: There will be a significant difference between the mean graduation rates at non-urban community colleges with and without on-campus housing.

RQ4. Null Hypothesis: There will be no significant difference between the mean graduation rates of students living in campus housing and students not living in campus housing during at non-urban community colleges during their entire academic career.

Alternative Hypothesis: There will be a significant difference between the mean graduation rates of students living in campus housing and students not living in campus housing during at non-urban community colleges during their entire academic career.

**Methodology**

The research questions will be addressed through the collection and statistical analysis of quantitative data derived from two sources. The first source is secondary data obtained from the Department of Education through the IPEDS at the National Center for Education Statistics. The IPEDS database records the graduation rates (identified as students who obtained a
degree/certificate within 150% of the normal time) at 712 2-year institutions with and without on-campus housing (coded as 1 = Yes, 2 = No) for 3 years, between 2011 and 2013. The second source is empirical data collected through a cross-sectional questionnaire survey distributed to 101 ACUHO-I member institutions (see Appendix B).

**Data Collection / Instrumentation**

The IPEDS database contains publically available records from 712 rural community colleges about half of which provide campus housing to their students. The ACUHO-I survey will be distributed to all 101 community college members of the association, to discover the factors that play a role in student housing decisions and what factors of campus housing have a positive or negative impact on graduation rates (See Appendix B). Part I of the survey requests information about graduation rates. Each of the 18 items in Section II is followed by a list of items for the responding institution to answer using a 5-point Likert scale, using the following scores: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*; 4 = *agree*; 5 = *strongly agree*.

**Data Analysis**

The data will be analyzed with IBM SPSS using the protocols described by Field (2011). The variables used to address RQ1 and RQ2 consist of a list of factors, each of which is rated using a 5-point agreement scale (see Appendix B). The expected maximum sample size is 101 ACUHO-I rural community college member institutions. Sufficient data will be collected to conduct an exploratory factor analysis, to discover the underlying structure of the responses to the survey, and to determine the internal consistency reliability of the factors. Exploratory factor analysis is a data reduction method that does not test hypotheses. The analysis will reduce the large number of item scores collected in the survey into a smaller number of underlying dimensions, called principal components. Each principal component consists of a cluster of
highly correlated item scores. The solution of the exploratory factor analysis will help the researcher to summarize the survey data, and to explain what factors play a role in student housing decisions across the ACUHO-I institutions, and what factors of campus housing have a positive and negative impact on graduation rates. The hypotheses and variables used in the data analysis to address RQ3 and RQ4 are defined in Table 2 and 3.

Table 2

*Alternative Hypothesis and Variables Used to Address RQ3*

<table>
<thead>
<tr>
<th>Alternative Hypothesis</th>
<th>Variable</th>
<th>Functional definition</th>
<th>Operational definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>There will be a significant difference between the mean graduation rates at institutions with and without on-campus housing</td>
<td>Graduation rate</td>
<td>Dependent variable</td>
<td>Students who graduated (obtained a degree/certificate within 150% of the normal time)</td>
</tr>
<tr>
<td></td>
<td>Campus housing</td>
<td>Independent variable</td>
<td>1 = Institution has campus housing 1 = Institution does not have campus housing</td>
</tr>
</tbody>
</table>

Table 3

*Alternative Hypothesis and Variables Used to Address RQ4*

<table>
<thead>
<tr>
<th>Alternative Hypothesis</th>
<th>Variable</th>
<th>Functional definition</th>
<th>Operational definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>There will be a significant difference between the mean graduation rates of students living in campus housing and students not living in campus housing</td>
<td>Graduation rate</td>
<td>Dependent variable</td>
<td>Students who graduated (obtained a degree/certificate within 150% of the normal time)</td>
</tr>
<tr>
<td></td>
<td>Campus housing</td>
<td>Independent variable</td>
<td>1 = Student lives in campus housing 2 = Student does not live in campus housing</td>
</tr>
</tbody>
</table>
The appropriate method of statistical analysis to test the hypotheses for RQ3 and RQ4 is the independent samples t-test. When conducting multiple t-tests on one set of data, it is necessary to take into account the elevation in the Type I error rate, or the probability that a significant difference will be falsely declared between the mean values, when, in fact, the means are not significantly different (Field, 2011). To avoid elevation of the Type I error rate, the Bonferroni correction will be applied (Abdi, 2007). The significance level to determine if the mean graduate rates are different will be reduced from the conventional .05 level to .05/n where n = the number of tests. If the p-value for the t-test is < .05/n then, the mean graduation rates will be declared to be significantly different.

REFERENCES


SURVEY OF ACUHO-I MEMBERS

Part I

1. Please state how many students who had campus housing graduated from the member institution within 150% of the normal time, each year between 2011 and 2013:

2011...............................  
2012...............................  
2013...............................  

2. Please state how many students who did not have campus housing graduated from the member institution within 150% of the normal time, each year between 2011 and 2013:

2011...............................  
2012...............................  
2013...............................  
Part II

Please rate each of the following items by choosing ONE option from the agreement scale, ranging from Strongly Disagree to Strongly Agree:

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The ability for students to live on campus and be integrated in the campus community generates positive effects on successful graduation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Student engagement through living on campus is the most important factor for retaining students at an institution</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. Room size is an important factor that first-year students consider when making housing decisions.</td>
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<td></td>
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</tr>
<tr>
<td>4. Types of room offered is an important factor that first-year students consider when making housing decisions.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>5. The age of the residence hall is an important factor that first-year students consider when making housing decisions.</td>
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<td></td>
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</tr>
<tr>
<td>6. The amenities offered in the facility is an important factor that first-year students consider when making housing decisions.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>7. The student housing experience plays a key role in the success that students have in college.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The sense of community that is created by campus housing plays a key role in the success that students have in college.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Students are requesting campus housing facilities that are more modern including updated conveniences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
10. The demands of students have become increasingly critical in the decision making process for housing.

11. Students are accustomed to high quality, private rooms, and amenities like technology capabilities, exercise centers, and laundry.

12. Students living on-campus complete more credit hours per semester and have higher grades than those students not living on campus.

13. The location of campus housing is highly important to students.

14. The proximity to desirable locations for student housing has a strong connection for predicting student satisfaction and retention.

15. Students must be satisfied with the physical environment of campus housing to achieve successful graduation.

16. It is important for prospective students to visit campus housing facilities during a campus tour.

17. Institutions can meet the ever increasing demands and requests for campus housing

18. The social relationships that students develop in a positive housing environment lead to improved overall satisfaction with the institution.