

RESIDENCE HALL ROOMMATE SELECTION: THE IMPACT OF AN ONLINE SEARCH  
PROGRAM, RANDOM ASSIGNMENT, OR EXISTING RELATIONSHIP ON  
SATISFACTION, PERSISTENCE, AND ACADEMIC PERFORMANCE.

by

Jon Kyle Coleman

(Under the Direction of Diane L. Cooper)

ABSTRACT

This study looks at the impact that student involvement in the college roommate selection has on the student's satisfaction with their roommate relationship, the student's persistence with their roommate, and the student's academic performance. Students were able to use three methods of selecting a roommate: random selection by the housing office, using an online roommate searching program, and choosing someone with whom they had a previously existing relationship. In addition a model for the steps that students using the online roommate searching program go through to select their roommate was created from student comments about their experiences with the program.

INDEX WORDS: Housing, Roommate Matching, Roommates, Student Satisfaction, Attribution, Academic Success, Assignments, Technology, Online Roommate Searching

RESIDENCE HALL ROOMMATE SELECTION: THE IMPACT OF AN ONLINE SEARCH  
PROGRAM, RANDOM ASSIGNMENT, OR EXISTING RELATIONSHIP ON  
SATISFACTION, PERSISTENCE, AND ACADEMIC PERFORMANCE.

by

Jon Kyle Coleman

B.A., University of Florida, 1990

J.D., University of Florida, 1993

MS.Ed., Southern Illinois University at Carbondale, 1996

A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial  
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2006

© 2006

Jon Kyle Coleman

All Rights Reserved

RESIDENCE HALL ROOMMATE SELECTION: THE IMPACT OF AN ONLINE SEARCH  
PROGRAM, RANDOM ASSIGNMENT, OR EXISTING RELATIONSHIP ON  
SATISFACTION, PERSISTENCE, AND ACADEMIC PERFORMANCE.

by

Jon Kyle Coleman

Major Professor: Diane L. Cooper

Committee: James F. Day  
Rosemary E. Phelps

Electronic Version Approved:

Maureen Grasso  
Dean of the Graduate School  
The University of Georgia  
May 2006

## DEDICATION

This study is dedicated to my parents: Erma Juliette Coleman and Jon Suber Coleman, who have supported me throughout my education and pursuit of a career, and a life, in higher education. You gave me the tools, the confidence, and the inspiration to be able to make reaching this a reality. Thank you so much for all that you have done for me in my life and how you made it possible for me to pursue my goals and dreams.

## ACKNOWLEDGEMENTS

I would like to begin my acknowledgements by again thanking my family for all of their support and encouragement while I was pursuing my education. In addition to my parents, my sisters, Judy Hyde and Jill Coleman, have always been supportive and encouraging to me over the years, even if they did not always understand what exactly my job was. Thank you so much for all of your support, encouragement, and understanding.

When I made the decision to pursue a career in Student Affairs, it was not an easy decision to make as I was over halfway through law school and I felt that I should continue along that course, but luckily I had several people who helped encourage me to consider what it was I truly wanted and if student affairs was what I wanted, then I should pursue it. Arthur Sandeen, the Vice President of Student Affairs at the University of Florida, was very encouraging to my questions about changing my career path and he took time from his very active schedule to help me to process my goals and thoughts and find possibilities instead of obstacles. In addition to being a great teacher, he helped me see how what I was learning in law school could be very beneficial to a career in higher education.

Second, there was Norbert Dunkel my advisor at the University of Florida, you helped me to find my home for the two years by encouraging me to apply to Southern Illinois University in Carbondale for my graduate program. This decision had such a profound impact on my life by introducing me not only to the profession, but also it allowed me to make connections to many of my classmates with whom I had a wonderful time and still look forward to seeing at conferences, weddings, and other events that keep us connected.

James Wallace was my advisor during my time in graduate school and along with Paulette Curkin, my supervisor, both provided me with such insights and understanding about

what made a person a good student affairs professional. Dr. Wallace, you have such a passion for this field and what we were learning that you made my time at SIU great and helped me in planning the kind of professor I hope to someday be. Paulette, you get so much joy out of what we do, but you also demonstrate on a daily basis the need for a life outside of work that so many people in our field forget. You love what you do, but it is not your sole existence and that example helps remind me when I need to remember to separate work and life and that the two are not the same.

Marybelle Keim was my research methods professor and the chair of my Thesis committee and is probably one of the people most responsible for my decision to pursue my doctorate. In her class I found a love of research and the knowledge that it was not only something that I could do well, but that I enjoyed immensely. I have probably not told you this enough, but you inspire me with everything that you accomplish, your attitude towards life, and the impact you have on so many people that you have touched with your compassion and care. Whenever I think I am tired or have too much going on I just have to think about how much you accomplish in a single year compared and I find new perspective and motivation.

I especially want to thank Diane Cooper for all of her help and support as my advisor and committee chair. You have always been there to support my interests as well as helping to make me aware of, and even to provide, opportunities that would prepare me for my future goals and hopes of being a professor. You have been encouraging, challenging, and a regular reminder that I can succeed in this endeavor and your support has helped me immensely when I was stressed, concerned, and just plain freaked out. I could not have done this without you as you have made so much of what I wanted to gain from this experience possible. Thank you.

I would also like to thank my committee: Jim Day, Rosemary Phelps, and Merrily Dunn. Jim and Merrily, you have been along for the ride since the publishable paper and have worked hard to help me to refine my ideas and find an expression that is not only interesting to me, but hopefully useful to the field. A special thank you goes to Dr. Phelps who stepped in at the last minute to not only keep me on time, but also allowed everyone to focus on their priorities.

I want to say a very sincere and appreciative thank you to my supervisor, Shay Davis. Not only have you given me a job for three years that was a great place to work, learn, and enjoy my time at UGA, you have also made my dissertation possible. By supporting my research you have not only made the implementation of the online program happen here at UGA, but you have also helped me to communicate with my participants through the staff in our office. It was so great to be able to have someone who not only knew what I was going through in my classes, but also in what I wanted from my research and it made seeing it possible. In addition, you have become someone who I hope to continue working with on projects and plans and who I am proud to call one of my friends.

Doing research online means having professionals who know the technology and can help you make your research possible. Thank you to Michael Carey and Angela Callaway for all the work you did in sending out all of my emails. Over two years you probably sent out over 24,000 emails to students using the criteria I gave you and I don't know how I would have done it without you. Additionally, thank you to Jan Davis Barham and Michael Campbell for helping get my survey online and getting me my data so I could figure out what it all meant. And I also want to say thank you for the regular updates you provided on numbers who were participating, although I could not do anything with the data, just knowing it was coming in made a huge difference to me.



Finally, I want to thank the members of my cohort who over the last three years have made this process a great one; Jan Lloyd, Wanda Gibson, and Bobbie Woodard you have made this an amazing experience. It is hard to believe so much time has passed since we first sat down for our first class together, but you make me proud to be a part of our group. Bobbie – Go Gators. Last, but definitely not least, thank you Dianne Timm, another of our cohort and my future writing partner for all the long hours we spent studying for prelims, working on the projects in staffing, sharing our office, going to Ramsey, going to EVC, reading each others' papers and projects and on and on. But most importantly, thank you for being there to have someone to talk to.

## TABLE OF CONTENTS

|  | Page |
|--|------|
| ACKNOWLEDGEMENTS .....                             | v    |
| LIST OF TABLES .....                               | xi   |
| CHAPTER  |      |
| 1 Introduction .....                               | 1    |
| Statement of the Problem .....                     | 5    |
| Purpose of the Study.....                          | 6    |
| Significance of Study .....                        | 6    |
| Research Questions .....                           | 7    |
| Operational Definitions .....                      | 8    |
| Limitations of Study .....                         | 11   |
| 2 Literature Review .....                          | 13   |
| Positive Roommate Relationships .....              | 15   |
| Predicting Successful Roommate Relationships ..... | 17   |
| Technology and Roommate Relationships .....        | 19   |
| Students and Technology .....                      | 21   |
| Attribution Theory .....                           | 24   |
| Summary & Critique .....                           | 27   |
| 3 Methodology .....                                | 33   |
| Participants.....                                  | 33   |
| Online Roommate Searching .....                    | 34   |

|   |  |    |
|---|--|----|
|   | Instrumentation .....                      | 36 |
|   | Data Collection .....                      | 38 |
|   | Data Analysis .....                        | 39 |
|   | Analyzing the Research Question Data ..... | 40 |
| 4 | Results .....                              | 44 |
|   | Findings.....                              | 45 |
| 5 | Conclusion.....                            | 60 |
|   | Roommate Matching and Technology.....      | 60 |
|   | Additional Limitations of this Study.....  | 62 |
|   | Summary of Research Study .....            | 63 |
|   | Research Question One .....                | 64 |
|   | Research Question Two .....                | 66 |
|   | Research Question Three .....              | 68 |
|   | Research Question Four .....               | 68 |
|   | Research Question Five .....               | 69 |
|   | Research Question Six .....                | 71 |
|   | Research Question Seven .....              | 72 |
|   | Research Question Eight.....               | 74 |
|   | Research Question Nine .....               | 76 |
|   | Recommendations for Future Research .....  | 90 |
|   | Summary .....                              | 92 |
|   | REFERENCES .....                           | 94 |
|   | APPENDICES .....                           | 98 |

## LIST OF TABLES

|  | Page |
|--|------|
| Table 4.1: Method of Roommate Selection .....  | 46   |
| Table 4.2: Still Living with Original Roommate .....   | 46   |
| Table 4.3: Satisfaction Scores as measured by the Roommate Relationship Inventory (RRI) .... | 47   |
| Table 4.4: Student Satisfaction on the Roommate Relationship Inventory .....                 | 48   |
| Table 4.5: Student's Self-Reported Fall Semester GPA .....                                   | 49   |
| Table 4.6: Student Persistence with their Roommate .....                                     | 52   |
| Table 4.7: Students' Attribution of Responsibility – To Themselves .....                     | 55   |
| Table 4.7: Students' Attribution of Responsibility – To Their Roommate .....                 | 56   |
| Table 4.7: Students' Attribution of Responsibility – To the Method Used .....                | 58   |

## Chapter 1

### *Introduction*

The question of how to improve the college experience for students is a critical one for student affairs professionals in higher education. Housing professionals have also looked for ways that the housing and residence life program can improve students' experiences in college through the programs and services that they offer. Over the last several decades there have been many studies (Nudd, 1965; Pace, 1970; Perkins, 1977; Garb, 1978; Jones, McCaa, & Martecchini, 1980; Stanley, Werring, & Carey, 1988; Fuller & Hall, 1996) that have reviewed the benefits and value of providing a roommate matching service to students and how college and university housing operations can organize that process in order to obtain the greatest possible benefit to their students.

Unfortunately, the research generated results that discouraged offering this kind of service to students as being a waste of time and resources (Lapidus, Green & Baruh, 1985). The studies looked at a number of different factors that were identified as existing in positive roommate relationships but those factors, when used to attempt to predict successful relationships, showed results no better than when the housing office randomly assigned students together (Lapidus, et al). With technology advances offering institutions new tools to use in how they offer roommate matching, housing offices need evidence of the effectiveness of these new technologies on measures such as student satisfaction, student persistence with their roommate, and any potential effects on academic performance that can be associated with using these tools. This study looks at how using the World Wide Web (WWW) to promote communication

between potential roommates affects their satisfaction, persistence, and academic performance when compared to students who chose their roommates either based upon a previously existing relationship or who were randomly assigned a roommate by the housing office.

There are many factors that can influence the success of college and university students at an institution. One important factor is the quality of the relationship with one's residence hall roommate and the role that relationship plays in the student's adjustment to the college environment and his or her academic success (Carey, Hamilton, & Shankline, 1986). Students who develop greater trust and communication with their roommate are "significantly more satisfied with their relationship, are better adjusted to their living situation, and are better adjusted emotionally" (Waldo & Fuhrman, p. 34, 1981). Technology has become more accessible and familiar to both housing professionals and students and this has the potential to allow incoming students to communicate with each other prior to the housing room assignment process which can allow them to select roommates based upon these communications (Emerson, 2003).

As a housing professional with over 10 years of experience, I believed that students who chose to live with friends that they knew prior to coming to college often experienced less successful relationships than did the students who were matched randomly by the housing office. This belief was based on the researcher's interactions with students, especially those students experiencing problems with their roommate. Upon further research, there was no supporting information found to support this belief and one study that found that students who selected their own roommates were more likely to remain together than students who were randomly assigned (Carey, Hamilton, & Shankline, 1986). Despite this lack of studies supporting this belief, personal discussions with colleagues and other housing professionals by the researcher found

that this belief was commonly held by many student affairs professionals working in housing and residence life programs. Formal research studies looked for factors a housing office could use to improve roommate matching but were not able to identify any factor that existed in satisfactory relationships and also had a predictive value. The studies often provided contradictory suggestions about which factors to use or the factors produced results that were not significantly different when compared with roommate pairs that had been randomly assigned together by the housing office (Lapidus, Green, & Baruh, 1985).

There is also difficulty in establishing the definition of a successful roommate relationship and how housing professionals are supposed to measure it. Waldo and Fuhrman (1981) used the Roommate Checklist (RIC) to determine if roommates were satisfied with their relationships while other studies relied on students to self-identify whether they had a satisfactory relationship. Winston and Yaranovich (1994) created the Roommate Relationship Inventory (RRI) to measure the level of satisfaction of students with the quality of their roommate relationship. While Winston and Yaranovich did not provide a scale for categorizing levels of satisfaction, their instrument does allow researchers to compare satisfaction levels among different groups of students in order to assess the impact of specific programs and services on the roommate relationship (Winston & Yaranovich).

As financial resources at institutions become limited and calls for accountability for those resources increase (Upcraft & Schuh, 1996), there is a need to improve student satisfaction with on-campus housing in order to improve occupancy rates and assist in the institution's retention efforts. Housing professionals are also looking for ways to contribute to the educational goals of the institution and if students who are more satisfied with their roommate relationship are more academically successful, then programs and services that improve student satisfaction should be

a part of the housing office's contribution to the mission of the institution. In addition, the services and the tools used by the housing office to improve student satisfaction need to be able to demonstrate a measurable effect on the student. New programs for roommate matching that utilize the internet and email communications are being offered to housing offices by companies, and there is a need to provide evidence of whether these programs deliver on their claims to improve student satisfaction before institutions invest their financial resources to offer them to their students (Emerson, 2003). These online programs often require the involvement of housing staff in order to provide the questions that will be used both to create the student profile and to determine the degree of compatibility of the potential roommates (Hoover, 2002). Understanding which questions should be used in this process becomes an important task for the professionals in the housing office. In order to do this, housing professionals need to know what questions assist in this process as well as which ones do not.

What are the benefits of having the ability to select their own roommates for students living in on-campus housing? How does providing this service to students affect the creation and maintenance of a satisfactory personal relationship with a roommate? Does it have any effect on a student's academic performance as measured by grade point average (GPA) and credit hour production? In order to answer these questions, it is necessary to understand how the roommate relationship affects a student's success in higher education, how housing offices can positively affect the development of that relationship, and what information can be used by professionals in the housing office to facilitate the continued success of that relationship. It is also important to determine how new technology can be used to affect students in their expectations of programs, services, and communication with the housing office and their peers. Finally, we need to understand how students explain the success or failure of their relationships



and how students are attributing responsibility for the state of their relationships. Does offering students greater participation in and control of the roommate process impact their assignment of responsibility for the success of that relationship?

### *Statement of Problem*

The importance of the quality of residence hall living on student success at an institution has been discussed and studied for many years (Astin, 1985; Pascarella & Terenzini, 1991; Pascarella & Terenzini, 2005). While there is some disagreement on what the overall impact of the living environment on students is, there is enough evidence to know that there is some effect (Pascarella & Terenzini, 2005). If student affairs professionals know that the quality of life in the residence halls affects students' academic success, then those professionals should prepare programs and services that contribute to students' overall satisfaction in the areas of facilities, programming, staff support, and assignments in order to maximize the potential benefits that the housing program is providing to its students. It is important for housing professionals to understand the role of the assignments process, and the subsequent relationship of the student with his or her roommate, on the students' academic performance and the success and persistence of the roommate relationship.

The roommate assignment process is one of the first interactions that the housing department has with its students and it is one that will have a direct impact on the student and their impression of the institution as a whole (Garb, 1978). The housing staff needs to understand the concerns, issues, and stresses that the roommate process plays in the students' satisfaction with college. They also need to understand the importance of the student's involvement in this process. If significant improvements in academic and satisfaction measures

can be achieved by giving students more control of the process, is doing so a wise allocation of institutional resources?

Housing programs need to understand the impact of their actions on their residents beyond the impact of residence hall programming efforts. While much work has been done on the impact of intentionally designed educational and developmental programming models, there has not been sufficient research into the impact that the non-residence life services, facilities, and staff have on residence hall students. As we begin to study the impact of these elements of the residence hall experience, we will be able to more fully explain the office's actions and reasoning to all stakeholders in the residential experience, as well as to incorporate elements that will support the missions of the department, the division, and the institution.

#### *Purpose of Study*

The purpose of this study is to understand what occurs from giving students' greater participation in the housing assignments process by being able to select their roommate using an online roommate searching program. The intended outcome of this study is to inform housing professionals of the personal, academic, and administrative effects realized by students who use this program and to provide potential justification for the expenditure of institutional resources through a program that supports the educational mission of the institution.

#### *Significance of Study*

This study can have a significant impact on the methods that college and university housing offices use in the housing assignments process as well as the tools they select. By understanding the impact of greater control of the process on student satisfaction and persistence with the roommate relationship, housing offices can identify ways to reduce the costs and work effort associated with decreased occupancy and room changes among its students. In addition,

knowing how greater control of the process affects the academic performance of students allows housing offices to better understand, assess, and articulate their contributions to the educational mission of the institution. This study also seeks to uncover the themes and concerns that students have about the entire process of finding roommates when they come to college and how they attribute responsibility for the success or failure of that relationship among the parties involved.

### *Research Questions*

The following questions direct the study and address the issues and hypotheses in order to understand the effect of using an online roommate searching program:

- RQ1: What is the difference in student's satisfaction with their roommate relationship as measured by the Roommate Relationship Inventory (RRI) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?
- RQ2: What is the difference in academic performance as measured by the student's fall semester Grade Point Average (GPA) between students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, or those who are randomly assigned a roommate by the housing office?
- RQ3: What is the difference in academic performance as measured by credit hour production for fall semester (earned) and spring semester (registered for) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?

- RQ4: What is the difference in student persistence with their roommate, as measured by the number of students still with their roommate from the first day of the fall semester until the time of the survey, among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?
- RQ5: Is there a difference in student satisfaction, academic performance, and student persistence among male and female students?
- RQ6: Do students attribute personal responsibility for the quality of their relationship with their roommate differently based upon the method they used to select their roommate?
- RQ7: Do students attribute responsibility for the quality of their relationship with their roommate to their roommate differently based upon the method they used to select their roommate?
- RQ8: Do students attribute responsibility for the quality of their relationship with their roommate to the method they used to select their roommate differently based upon the method they used to select their roommate?
- RQ9: How does using an online roommate searching program affect students' perceptions of the room assignment process and the expectations they have for living with a roommate as reported in the students' personal comments?

### *Operational Definitions*

#### *Academic Performance*

Academic performance is measured by the researcher on two scales; Grade Point Average (GPA) and Credit Hour Production. For this survey, participants are asked to provide his or her Fall Semester GPA, the credit hours earned for the fall semester and the credit hours

enrolled for the spring semester. A sum of the fall and spring credit hours is calculated for each survey participant. The design of this study does not allow for any causal relationship to be identified, but there may be a correlation between academic performance on these measures and the methods used to select the roommate based upon the feelings of control, greater satisfaction, personal responsibility for the creation of the relationship, or for some other reason.

### *Original Roommate*

The original roommate is defined by the researcher as the roommate that a person has on the first day of residence hall check-in for the first semester of residence hall occupancy. Students who have changed roommates, for any reason, are asked to refer to that person for their answers.

### *Persistence*

Persistence is defined by the researcher as the tendency of a student to remain living with their original roommate. This is measured in the study by whether the participant is still residing with his or her original roommate as of the time of the survey. This study does not consider the reason for the roommate change which may be the result of a poor relationship, a change in student enrollment, or some other reason. Because the reason for the change is not identified by the student, no causality can be associated with the method of selection and the continued occupancy of the students in the residence hall room.

### *Roommate Searching Program*

Based on current available models (Emerson, 2003; Hoover, 2002) a roommate searching program is defined as a web-based computer program that utilizes the answers of participants to questions written by professionals in the housing office in order to create a student profile that is used to identify potential roommate matches for the student. The program can also provide an

opportunity for students to attach personal comments in addition to their answers in order to describe themselves or the qualities of the roommate that they are seeking. These matches are then ranked accordingly to the degree of match on the profile and provided to students as a list. The program can also allow students to generate an email communication for each student profile on the list to initiate contact in order to determine if that person is compatible and they wish to room together.

Roommate matching is defined by the researcher as a process or method that is used to assign students together to specific residence hall spaces. Roommate matching is distinguished from Roommate Searching in this study as the student has very limited involvement in the process, usually limited to completing a questionnaire, form, or other personal identification that either housing staff or a computer program then uses to place students together. There is no communication among roommates to confirm compatibility prior to the assignment process in a Roommate Matching process.

#### *Previously Existing Relationship*

A previously existing relationship is defined as students who chose to live with a person with whom they had established a relationship that was not the result of using a roommate searching service or having met at any institutionally sponsored events such as orientation. Previous relationships could include friends, classmates, friends of friends, or some other relationship of the student, but excluding relatives of the student.

#### *Random Assignment*

Random assignment is defined as the method by which a housing office at a college or university places students in residence hall rooms together without considering any personal information about the student's personality, behavior, or identity. Random assignment can use

limited factors including gender, smoking status, and residence hall preferences. Whether the assignments are performed manually by housing office staff or by an automated system, the major factor is that personality traits and behavioral preferences are not used to assign students to their residence hall spaces.

### *Student Satisfaction*

Student satisfaction is defined by the research as the degree to which a student rates the quality the relationship with his or her roommate. This is measured by the Roommate Relationship Inventory (RRI) created by Winston and Yaranovich (1994). The instrument does not provide a score or range of scores that identify at what point a student is satisfied with his or her roommate, it does provide a basis for comparing different groups of students.

### *Limitations of Study*

This study is limited to a single large, public, land grant institution located in the southeast. The students' characteristics, expectations of their university environment, and academic preparation and expectations of a single institution can limit the generalizability of the findings of this study to other institutions. Second, this institution has made email the primary form of communication between administrative offices on the campus and the student body so that students are being instructed to use email and the internet to address many of their concerns which may make these students atypical. Third, the institution instituted a First Year Student Live-On Requirement during the first year of the study which may affect the makeup of the population being studied as students who did not wish to live in the residence halls were required to do so and may have come into the roommate relationship with negative preconceptions.

The survey participants who were asked to participate are first year students who were living in on-campus housing during their first year of enrollment. They were sent an email

invitation to participate in an online survey of 5-6 minutes duration and provided a link to the survey in the text of the email. Students who did not use or check their university email account may not have known about participating in the survey. No prizes or incentive were provided for students to participate in the study which may have affected student participation in the survey.

In addition, the study was conducted at two different times of the year for the two years of the study. For the first academic year, 2004-2005, the survey was administered in April and during the second academic year, 2005-2006, it was administered in January. This may have impacted the results of the study by providing three additional months together for roommates in the first year to either improve or degrade the quality of their relationship and may be a limitation on the comparative value of the two years of results.

Finally, the researcher is a housing professional with several years of experience who has been researching roommate relationships for over two years. It was the researcher's responsibility to analyze the comments made by the students in order to identify any emergent themes and to interpret the results from those questions through his own personal biases.



## Chapter 2

### *Literature Review*

From the 1960s through the 1980s, research about on-campus housing assignments focused on how college and university housing operations could improve their service to students in the area of roommate matching and placement. Unfortunately, most of the research in this area is out of date and there has been a lack of substantial research in this area in the last fifteen years. With the introduction of new technology and communication tools developed over the last 20-30 years, new methods are now available that may impact the ability of housing operations to offer new and innovative ways for students to find potential roommates. Finally, many of the previous researchers based their studies on the personality traits of the students at the time, a population that has changed significantly over the years as the students that are now coming to campus are significantly different from their predecessors from 30-40 years ago.

In 1978, Garb examined the role and purposes that university housing assignments play in the college student's educational experience. Based on earlier research, Garb identified the assignments process as "the single most significant educational program conducted through housing" (Garb, 1978, p.24). A key question in his research was determining whether the guiding principle of the assignments process was to promote student friendships and personal satisfaction or to provide a learning experience to complement the educational mission of the institution (Garb). Garb identified the requirements that promoted the development of college roommate relationships and the factors necessary for their successful formation as a hierarchy of involvement that began with basic needs and grew to include shared values. In order to create a

successful relationship, the demands on the roommates increase depending on the amount of involvement that each roommate is willing to contribute (Garb, 1978).

Lapidus, Green, and Baruh (1985) conducted a meta-analysis on previous research to identify the factors that were related to roommate compatibility to determine if there was enough evidence in the research to isolate any factor or factors that could be used to predict roommate compatibility. The studies identified personality traits that existed in successful relationships, but those same traits could not be used to predict whether or not a successful relationship would occur. One method that demonstrated potentially positive outcomes that the researchers found was when a student's description of his or her ideal roommate matched the potential roommate's self-described personality (Lapidus, et al.). In fact, some studies found that students who were satisfied with their relationships would often consider themselves more similar to their roommate than they actually were (Lapidus, et al.).

The researchers looked at key factors to attempt to identify which factors could be used to help housing offices improve their success in creating positive relationships but were unable to do so. Demographic factors including hometown size, parents' education, and major did not provide any consistent evidence of being able to predict relationship success (Lapidus, et al., 1985). Personal values, while identifiable as existing in successful relationships, also did not have a predictive value for creating successful relationships. The personal habits of the student, including sleeping, study, orderliness, while mentioned as factors in unsuccessful relationships, did not function as predictors of roommate success (Lapidus, et al.). The researchers identified several factors that appeared to determine the level of student satisfaction with their roommate, all of which related to the use of the room: bed time, smoking status, and study habits. Finally, the researchers found that students were more positive about campus housing and their

roommate relationship when they identified as having more control over the process of selecting roommates (Lapidus, et al.).

Galicki and McEwen (1989) investigated roommate satisfaction among black and white students at predominantly white institutions. They found that satisfactory roommate relationships did have an effect on the student's persistence at the institution as well as their academic performance. Phelps, Altshul, Wisenbaker, Day, Cooper, and Potter (1998) studied the satisfaction of racially different roommate pairs and determined that both white-white and African American-African American roommate pairs had higher levels of satisfaction than racially mixed pairs. These studies suggested that if students had greater opportunities to select their own roommates, that they would do so in order to create the most personally satisfactory relationship possible.

#### *Positive Roommate Relationships*

Several studies have investigated the factors and issues surrounding roommate satisfaction including what contributes to it, what prevents it, and how to measure it. Several of these studies used earlier research that had identified personal traits that satisfied roommates shared to determine if those traits could be used to predict satisfaction among future roommates. These studies used various methods including formal instruments and self-identification to indicate which roommate relationships were successful, but none of the studies were able to create a standard definition for a positive roommate relationship.

Stanley, Werring, and Carey (1988) compared students who had selected their own roommates to those randomly assigned by the housing office. They found that students who had self-selected their roommates were more likely to remain with a roommate they had chosen, even when they had a low level of rapport with them (Stanley, et al.). This willingness to stay with

their self-selected roommates continued even when the rapport was at a level where a randomly assigned roommate was likely to request a change in roommates (Stanley, et al.). This persistence reduced the administrative demands on the housing office for room changes. While self-selected roommate matching could reduce room changes for administrative personnel, it also increases the risk of greater numbers of dissatisfied students who, while they may choose to remain with their current roommate, do not receive the benefits associated with a positive roommate relationship (Stanley, et al.).

Waldo and Fuhrman (1981) studied residence hall roommates to determine if there was a connection between the quality of the relationship with their roommates to their personal communication skills and adjustment to college. The study first used the Roommate Checklist (RIC), to determine if a roommate pair was satisfied with their relationship. If they were, then the researchers used the Interpersonal Relationship Scale (IRS) to determine the levels of trust and closeness of that relationship (Waldo & Fuhrman). Although the study was unable to show any causation that existed because of the factors they studied, they did find that students who expressed higher levels of satisfaction with their roommate scored higher on measures trust and closeness (Waldo & Fuhrman). The most important skill that they identified was the ability of roommates to confront each other in an appropriate manner so that the quality of the relationship could be maintained (Waldo & Fuhrman). Finally, the study showed that residence hall students with positive relationships also indicated a higher level of emotional adjustment to college life.

Waldo (1989) studied a program that provided residential students with a workshop to improve their communication skills as a method to increase residence hall roommate satisfaction. Using two groups, Waldo provided each group with a workshop on communication skills that participants could use to resolve issues with their roommates. One group received the training

early in the semester and the second group received the training later in the semester. While both groups reported an increase in their ability to communicate with their roommate, the group who received the training earlier in the semester had much higher levels of satisfaction and communication, as measured by the Verbal Interaction Task (VIT) (Waldo). The study also found that providing the training later in the academic term limited its value due to the fact that the relationship had already suffered damage that could not be repaired by the workshop (Waldo).

Winston and Yaranovich (1994) created an instrument to measure roommate relationships for college students. Focusing on the student's satisfaction with his or her roommate, the Roommate Relationship Inventory (RRI) asked students to complete a 24 question instrument to determine the degree of rapport that the student had with his or her roommate. The goal behind creating the RRI was to provide housing professionals with a tool to assess the quality of relationships in order to be able to more accurately assess the impact of specific programs and services on the quality of the roommate relationship (Winston & Yaranovich). The RRI found that men had a higher level of satisfaction with their roommates than women did and also found that students who met after the enrollment process and were considered in the context of the college environment, tended to have more successful relationships (Winston & Yaranovich).

#### *Predicting Successful Roommate Relationships*

Early studies of roommate matching used various criteria and information to try and match roommates but found that there was no significant difference between the randomly matched students and those that were matched on the criteria that were used (Gehring, 1970; Pierce, 1970; & Lozier 1970). Jones, McCaa, and Martecchini (1980) compared compatibility of

roommates using personality trait similarity and some behavioral factors that had been used in previous studies. Their study showed that no characteristic had a consistent or significant predictive value in creating compatible roommate relationships (Jones, et al.). The only factor that was found to have any ability to predict compatibility among roommates was using the time that each student went to sleep during the week, but not on the weekend (Jones, et al.). The researchers suggested that roommates who were compatible might become more similar in their habits, behaviors, and attitudes during the time that they lived together (Jones, et al.) This could explain how previous research had discovered these similarities among compatible roommates, but just sharing these similarities was not sufficient to be able to predict what makes a relationship successful.

Fuller and Hall (1996) studied roommates to determine whether those that identified as compatible shared similar personality characteristics as identified using the Myers-Briggs Type Indicator (MBTI). The researchers created a 37 question Roommate Compatibility Questionnaire that would measure three versions of the roommates' relationship. First the questionnaire measured the residents self described personality and traits; second, the traits and personality that their ideal roommate would possess; and finally, the traits and personality that their current roommate possessed (Fuller & Hall).

The study identified that the most satisfied relationships were ones where a person's description of an ideal roommate's personality and traits matched the self description of their own personality and traits (Fuller & Hall, 1996). The researchers found that when there was a difference between the actual personality of the roommate and their roommate's ideal version, conflict was likely to occur. The researches also found that the conflicts were more likely to occur among female roommates than males as male students indicated a greater willingness to

accept differences in personality and behaviors in their roommate (Fuller & Hall). The study found that although matching a student's self description with another's description of an ideal roommate reduced conflicts between roommates, it had significantly different levels of success for male and female residents (Fuller & Hall).

### *Technology and Roommate Relationships*

Very little research has been done on the effect of web-based tools used to create roommate pairs on the development of the relationship between residence hall roommates. Washington State University (WSU) (Tattershall, 2003) reported a post hoc study where an on-line bulletin board was created for students living in campus apartments who were looking to find new roommates when vacancies occurred in their unit. Previously, WSU had either charged the remaining residents the difference in rent when one of the residents moved out or they locked the door to the empty bedroom as the department of housing was reluctant to assign new residents to the unit (Tattershall). A survey of apartment residents by the housing office showed 45% of the residents of the complex would like the housing office to assign new students to the unit if a vacancy occurred instead of the options that the housing office was using (Tattershall).

In an effort to provide replacement roommates, but also keeping the role of the housing office limited, the department set up an electronic bulletin board on the university's mainframe where students could indicate that they were either looking for a unit to live in or that a group was looking for a person to fill a vacant bedroom. While there was no formal study conducted on the impact of the bulletin board, anecdotal evidence indicated that residents appreciated the service and the vacancy rate in the apartment units dropped from 10% to 2% in the first year of operation of the new system (Tattershall, 2003). Although no figures exist to determine what portion of the change in occupancy rates was attributable to the bulletin board system, WSU

realized an increase in revenue from the complex in the amount of \$135,000 during the first year of the bulletin board's operation.

Hoover (2002) reported on the existence of a new web-based computer program that allowed incoming students to find roommates without the involvement of the housing office or other university officials. The system allowed students to create an on-line profile by answering a number of questions provided by the institution as well as being able to include additional comments about either themselves or what they are looking for in a roommate (Hoover). Students would submit their profile and could receive a list of other students whose profiles most closely match their own answers. The students could then communicate with potential roommates through email to determine if they were compatible and wanted to live together for their freshmen year (Hoover).

Several administrators cited in the article expressed concerns over the potential for self-segregation among the students as they indicated that one of the most valuable experiences of college was learning about people different from yourself and that this system could limit or eliminate this experience (Hoover, 2002). The students interviewed in the article indicated a greater level of satisfaction with the housing process because they felt they had more control of an aspect of college life that they had felt was very stressful. Emerson (2003) also looked at the implementation of a web-based roommate searching program at Emory University and found that students who used the system seemed positive about the value of the system despite the cost of paying a vendor for an annual software license to provide this service. The only major concern that the article raised was about the relative honesty of the students in filling out their online profile (Emerson).



Rangus (2002) also reported on Emory University's new online roommate searching program. Students were very pleased with the service and commented on how it reduced their stress about having a roommate and allowed them to communicate with their roommates much earlier in their college process (Rangus, 2002). Emory also reported a great deal of interest in the program from other institutions and entities into both the effect it had on their students and the potential benefits that could be realized from it.

ABC News (Reeves & Jamieson, 2003) discussed the web-based roommate searching system and highlighted the ability of the program to not only allow students to find roommates to live with, but also to provide them that information much earlier in the student's pre-college plans than typical for college housing offices. Students who had used the system arrived on campus after spending several months talking with their roommates about their room set up in addition to being able to spend considerable time getting to know each other online. The report also highlighted the value of the involvement of the student in the selection of their roommate as a key element in the student's satisfaction with the process (Reeves & Jamieson).

### *Students and Technology*

While technology provides potential tools for the use of housing offices and students in this process, it is necessary for both groups to have the necessary level of comfort with the medium to be willing to use it. In addition to comfort, there needs to be access on the part of the students to be able to fully utilize services that are located on the World Wide Web. How students interact with computers and the web before coming to college will affect the ability of housing offices to be able to use these tools with their students.

Dillman, Tortora and Bowker (1999) in a study about the use of web-based data collection for surveys, identified the need for a population that has both access to and comfort

with web technology in order to fully benefit from this kind of service. With traditionally-aged college students, there is a continuously increasing comfort level with the World-Wide-Web and services associated with it in addition to an increase in the number of students that have access to computers (Dillman, et al.). Programs and services directed toward incoming college students that are based on the internet, are going to continue to become more comfortable and appreciated by incoming students.

A study of the millennial generation, those born after 1982, identified common characteristics of this generation which is now coming to college (Oblinger, 2003). One of the key characteristics of this generation is an extremely high comfort level with technology and a preference for using it to communicate (Oblinger). With this level of comfort with both the internet and the use of email and online communication methods, incoming students are not only acclimated to these kinds of services, they expect them to be available for their use (Oblinger). Two key expectations of the millennial generation are constant contact with others through electronic devices and an expectation that services should be available to them at any time of the day or night (Oblinger).

Newton (2000) addressed the personal characteristics of Millennial students by identifying several key traits distinguishing them from previous generations. First, this generation is coming to college with a much higher comfort level with technology than did students of just a few years ago and especially more than their parents and future employers yet it is not yet clear how well they will be able to apply the skills and experiences learned from computers and games to real life (Newton). Secondly, Newton also addressed the somewhat murky realm of ethical behavior and reasoning by this generation. While agreeing with the idea of the need for rules promulgated by an authority, especially those that insure fairness, there is

also an equally powerful assumption that breaking those rules is in fact still ethical if you do not get caught (Newton). Ignoring or breaking a rule that they do not agree with does not produce a moral dilemma for the Millennials.

A report from the U.S. Census Bureau looked at data collected in August 2000 in the Current Population Survey (CPS) to examine student access to computers and the internet in the United States (Newburger, 2001). This study found that among children, ages 3-17, the number of households with a computer rose from 55% in 1998 to 65% in 2000 and internet use at home rose from 19% in 1998 to 32% in 2000. School provides even greater computer access among children aged 6-17 with 66% of school children having access to a computer at home and 80% having access at school and 57% reporting having both (Newburger). For students that only had access in one location, 23% had access to a computer only at school compared to 10% that only had computer access at home (Newburger).

Access to technology at school provided computer use to students regardless of race, income, or ethnic group, a situation that is not reflected across different groups of students when examining home computer access (Newburger, 2001). As part of this growth, there is increased pressure to use computers and the internet among adults, though their growth and comfort level with these tools is not progressing at the same rate as it is for children (Newburger). The study also found that the two most common uses of the internet among children was to send and receive email (73%) and to use the internet for research or taking classes online (68%).

A recent report from the National Center for Educational Statistics (NCES) discussed the increase in usage of computers and the internet for students in nursery school and kindergarten. The report found that the majority of students in primary and secondary school are using computers (91%) and the internet (59%) in school and at home (NCES, 2005). The report also

shows that computer and internet use is increasing dramatically with 67% of children in nursery school using computers and 23% also using the internet (NCES). For kindergarten aged children, 80% are using computers and 32% are using the internet (NCES). Finally, for students currently in high school, the numbers rose to 97% using computers and 80% using the internet (NCES).

While there was still a difference in the rates of use among children when considering factors such as parent's educational level and socio-economic status, that difference was significantly less than the one that exists for adults when considering these factors (NCES, 2005). With both the increase in students using computers and the internet and their beginning that use at a younger age, it suggests that comfort with, and access to computers, will continue to increase. Students are still impacted by their parent's education and home life with regard to their comfort level with technology but that impact is being mitigated by the increase in exposure to computers that students are receiving in their early childhood education through school (NCES).

### *Attribution Theory*

Attribution theory is a field in social psychology that seeks to determine how individuals assign responsibility and relate to others in various situations and relationships (Försterling, 2001). While most of the research in this field has not been related to college roommate relationships, the relationships studied includes family members, marriage partners, and teacher-student relationships and how the individuals in these relationship respond to the behaviors and actions of others (Försterling). It is important to understand both how students will assign responsibility for situations to themselves and to others as well how they perceive those factors as being external to their situation or internal to the people involved.

The two main axes on the attribution relationship are controllability and intentionality (Försterling, 2001). Individuals who interpret a behavior to be controllable by a particular party assign a greater amount of responsibility to that person. Conversely, if an action is viewed as uncontrollable by a person, or external to them, then less responsibility for the behavior is assigned to them (Försterling). The second factor, intentionality, looks at whether a behavior or action is viewed as being intended by the person or the result of chance or other circumstances (Försterling). Looking at these two factors, people judge the actions of others and then assign positive or negative associations with those actions or behaviors.

A study by Wiener, Russell, and Lerman (1979) looked at the relationships between emotions and thinking with regard to the outcome of a “critical incident”. In the study, students who had taken an exam and either passed or failed were then asked to describe the effects of their experience. The researchers found that the individuals associated emotions with the involvement of others who either did or did not help them, their own degree of effort and ability, and the circumstances surrounding the situation (Wiener, et al.). The study also found that students used emotional responses to assign responsibility for their success or failure in relationship to the others involved.

A key element found in the study was how anger and gratitude were associated with the actions of others (Wiener, et al., 1979). The study found that when students attributed responsibility for the failure to the actions and interference of others, they experienced anger towards that person and assigned blame to them for the result, however when the student experienced success that they attributed to the assistance of another, then they experienced gratitude toward them (Wiener, et al.). Both of these attributions were based on the ideas that the

involvement of others was both intentional on their part and controllable, neither chance nor uncontrollable circumstances were involved.

In a study of the attribution of actions among married couples, Fincham, Beach, and Baucom (1987) found that the level of satisfaction with the relationship by the partners played a key role in determining how people assigned meaning and responsibility for the behaviors of their partners. The study found that the key issue in this process was whether the person was satisfied with the relationship they had with their spouse as defined by their satisfaction with the behaviors of their spouse (Fincham, et al.). In relationships where participants were satisfied with their relationship, they had an expectation that their satisfaction would continue and they associated the positive actions and behaviors of their spouse to internal sources of the person, such as their personality, while attributing the negative behaviors and actions to external factors including chance, the environment, and others (Fincham, et al.). However, the opposite was true for spouses who were not satisfied with the quality of their relationship. In unsatisfactory relationships, people associated the positive actions of their spouse to external forces and circumstances while attributing source of negative behaviors as being internal to their spouse (Fincham, et al.). In addition, spouses in this situation also tended to minimize any positive actions as aberrations and see the negative ones as the longer lasting and more accurate depiction of their spouse.

A study into the attribution of responsibility for results in close relationships (Thompson & Kelley, 1981) looked at how individuals assigned blame and recognition for outcomes that they were involved in when the outcomes were associated with someone with whom they had a close relationship. The researchers found that in relationships where participants had a high level of satisfaction with their relationship, there was a tendency for the participant to assign

blame for any difficulties or problems to themselves (Thompson & Kelley). Conversely, when there were successful endeavors or achievements, the participant was more likely to attribute those successes to the other person.

### *Summary & Critique*

Although much of the research on roommate relationships for students living in college residence halls was conducted a while ago, some of the information discovered may continue to be relevant to today's college student. Garb's (1978) study showed that the housing office on the campus had the ability to effect students' academic success by the process that they used to pair students as roommates in the halls. Galicki and McEwen (1989) found that having a successful relationship with their roommate was a factor in both the student's satisfaction with their living experience and in their academic performance at the institution. Successful roommate matching has academic and other institutionally important benefits, including retention and connection to the institution, to the student of which housing professionals should be aware.

Lapidus, et al. (1985) looked at the many factors that could be used to match roommates and found that there was not a single factor or group of factors that could be used to predict success with any consistency but they were able to identify that having a greater role in the assignments process leads to greater satisfaction with the student's roommate. This finding is reinforced by the anecdotal evidence found in the Emerson (2003) article that interviewed students at Emory University who had used the web-based program offered by the institution. The students had a positive view of both the housing assignment process and had appeared to improve the student's perception of the institution. Does having more control over this aspect of the housing experience translate into greater success and satisfaction? While both articles

referred to the impressions of the authors, neither actually measured nor studied this phenomenon.

Jones, et al (1980) tested personality traits identified in previous research studies that existed among satisfied roommate pairs, but none of the factors tested in the study provided any significant assistance in creating satisfactory relationships. Fuller and Hall's study (1996) found that the difference between a student's ideal roommate and the reality of the roommate could provide a predictor of potential conflict especially among female students. There is still disagreement over what the purpose of the roommate relationship is and how to define its success (Stanley, et al., 1988), but housing professionals need to create an understanding, if only for their own use, as to what is the purpose in making roommate assignments: student satisfaction with the roommate relationship or a particular developmental objective.

A complication about using this research and the web-based systems described in Emerson (2003) would be assuring that students would create their personal profiles honestly and have the ability to accurately describe their ideal roommate's traits as well. There was also no suggestion of the questions that should be used by such a program to perform the initial compatibility search to connect students. Students are growing increasingly more comfortable with technology and the web (NCES, 2005; Newburger, 2001) and the incoming traditionally-aged students share generational characteristics that favor using these kinds of programs (Oblinger, 2003; Dillman, et al., 1999; Newton, 2000). The question remains whether the housing staff responsible for creating and maintaining these programs, who are generally not of this generation and do not possess the exposure to these tools that incoming students have, are ready and able to fully utilize this resource.



As both the Washington State University (Tattershall, 2002) and Emory (Emerson, 2003) systems demonstrate, internet technology can have serious financial implications for university housing offices. With costs ranging from purchasing an annual license fee to provide a web based searching program to the recovered revenue realized from higher occupancy rates due to the use of successful searching programs that reduce vacancies, these new options can either provide a benefit or present a risk in times of limited budgets. Improving the overall satisfaction with the roommate relationship of college students has academic implications for the student, relationship implications between the student and the institution, and financial implications for the departments that exist on campus. However there is no research or evidence beyond anecdotal commentary to support the success of these programs in their claims to improve the residence hall roommate relationship process. This study sought to answer some of those questions.

Understanding how individuals assign meaning to the actions of others can help housing professionals understand the nature and evolution of the roommate relationship. In understanding the attribution of responsibility, the research provides us with three key points in applying attribution theory to roommate matching. First, students will have emotional issues associated with the people that they interact with in the roommate assignment process. They will feel gratitude and appreciation for the people and offices that assist them in creating satisfactory relationships and they will feel anger and resentment to those that are seen as acting as a hindrance to those relationships (Fincham, et al., 1979). Housing offices that take intentional actions that are perceived by students as being directed toward helping them as an individual, rather than treating them as part of a process, will have residents who are happier with the services provided and by extension, can effect their impression of the entire housing operation.

Second, satisfaction levels have a powerful impact on how individuals will interpret the actions of their roommates. If a roommate searching program increases the satisfaction that a student has with their roommate, then the student is more likely to associate problems with external causes and not blame the roommate (Fincham, et al., 1987). They are also more likely to associate the positive behaviors of their roommate with the roommate's internal characteristics and assume that those behaviors are normal and natural for them (Fincham, et al.). As satisfaction goes down, this impression reverses and students associate the negative traits to the person and the positive ones to external forces. If students perceive negative behaviors as not being internal to their roommate, then housing staff may be able to more successfully mediate roommate conflicts and promote effective communication between roommates to deal with situations that could damage their relationship.

Finally the level of satisfaction with his or her roommate can determine how a student will assign responsibility for the difficulties that occur in the roommate relationship. If a satisfactory relationship can result in students taking greater responsibility for problems and putting less responsibility on their roommate (Thompson & Kelley, 1981), then resolving roommate conflicts may change from an exercise in blame to an honest attempt at resolving the situation. Students who are more satisfied with their relationship may be more inclined to address areas of concern as being aberrations in their relationship instead of viewing them as insurmountable obstacles.

The question that underlies all of these areas is one of control and the benefits of giving it to the students. Phelps, et al.'s (1998) study also suggested that having the ability to select their own roommate would increase students' satisfaction with their roommate. Washington State (Tattershall, 2003) found that students would use the online bulletin board provided to help them

to find roommates and the studies of an online roommate searching program and others (Emerson, 2003; Galicki & McEwen, 1989; Hoover, 2002; Reeves & Jamieson, 2002) all found that student involvement and control over the process was one of the key elements in the increased satisfaction and appreciation of the housing assignments process. How much this control over the roommate process translates into improved academic performance, increased student satisfaction, and reduced administrative work associated with room changes is what this study sought to determine.

In a study comparing two institutions' roommate assignment process, the researchers compared one housing office which provided an online roommate searching program to its students with a housing office that did not offer any formal roommate matching system and relied on random assignment for students without a roommate preference (Coleman & Cooper, 2005). The study found that students who selected their roommate based upon a previously existing relationship had the highest satisfaction as measured by the Roommate Relationship Inventory (Winston & Yaranovich, 1994) and that students who used the online roommate searching program were significantly more satisfied with their roommate than students who were randomly assigned by the housing office (Coleman & Cooper). While students who used the online roommate searching program had a lower satisfaction with their roommate relationships compared to students who had selected based on a previous relationship, that difference was not significant.

The study was unable to provide any information about differences in academic performance of students based upon the method that they used to select their roommate. The students at the two institutions studied were not similar enough academically to allow the researchers to compare GPA and credit hour production while looking at the method used to

select roommates (Coleman & Cooper, 2005). All of the students using the online roommate searching program were from a single institution and that institution did not have a sufficient number of students who were randomly assigned by the housing office participate in the study to allow a comparison of just those participants (Coleman & Cooper). The information gained in the study does not provide sufficient information about the benefits of offering an online roommate searching program beyond student satisfaction (Coleman & Cooper). In order to identify any potential effects that having control over the roommate selection process has on academic performance and the administrative work associated with processing room changes, a population must be studied that provides a sample size for each method that is sufficient for statistical analysis.

## Chapter 3

### *Methodology*

The roommate assignment process can be the most important program or service that the housing office provides to students in their halls (Garb, 1978), and the literature reviewed in Chapter Two informs us of both the importance of this relationship as well as how difficult it is to create by administrative action. By providing students with the ability to control this process and reduce their stresses and concerns about potential roommates, the housing office may ameliorate some of the issues students face when coming to college by the simple act of allowing students to begin making connections to the university community before they arrive on campus.

Previous research on roommate matching focused on identifying the factors or traits of students that administrators could use to put roommates together. This attempt generated results no better than the random assignment of roommate pairs. The common element of those methods that differentiate them from the tools available today is that whatever the criteria that was used, the students did not normally have the opportunity to confirm the compatibility or to begin the relationship before arriving on campus. With the web-based programs now available, students are able to determine compatibility for themselves and limit the involvement of the housing office staff to simply placing the roommate pairs into specific rooms.

### *Participants*

The population studied consists of all First Year students living in on-campus housing at a large research intensive institution located in the southeast. The institution required all of its First Year students to live in on campus housing during their first year of enrollment with some

limited exceptions. Students over 21 years of age, married students, or students living with their parent or guardian in one of the five counties located around the institution were able to request an exemption without difficulty and students could also request an exemption for individual circumstances which were reviewed by a committee that determined whether or not to grant the exemption.

Survey invitations were sent out to all first year students living in on-campus residence halls who were 18 years old or older at the time of the survey. For the academic year 2004-2005, a sample of 1,274 responses was collected and 1,393 responses were collected for the 2005-2006 academic year for a total combined sample of 2,667 responses. The total number of students contacted to participate was 8,941 which produced a return rate of 29.83%.

Of the total sample, there were a greater number of females (N=1923) than males (N=736) participating in the survey. The housing population of the institution invited to participate in the study had a 60% female, 40% male population. The sample for this study had a participant breakdown of 72.3% female and 27.7% male.

#### *Online Roommate Searching*

Students in this study had the opportunity to use an online roommate searching program provided by the housing office of the institution. This program was provided to the students who had (1) been accepted for admission by the institution and (2) had applied for on campus housing. Students were notified of the existence of the program through an email to all students who had registered for housing when the program became available and when students registered for on campus housing once the online program was available.

Students were guided in the completion of their personal profile by answering demographic information including their gender, hometown, and the username they wished to

use for the program. Afterwards, students were asked 16 questions about their personal interests, expectations about their roommate, and the environment of the room that they wanted. Students could also include personal comments on their profile that allowed them to talk about themselves or what they were looking for in a roommate. These comments were listed at the end of their personal profile.

After completing their personal profile students were given three options. The first option was to look at the list of potential roommates that was created based upon the percentage of answers that matched their own. The second option was to create an ideal roommate profile where students could answer the 16 questions in the way that they wanted their roommate's profile to match and could even change the value of the different answers to each of the questions used by the program. This allowed students to give each answer on the 16 questions a different value so that students who had strong feelings about a particular answer, positive or negative, could affect the listing of potential matches. The final option for students was to look at a list of topics of conversation, items to consider, and tips for finding a roommate that the housing office provided to help students establish the roommate relationship.

Once students had their list of potential roommates, they could begin the communication process. Students could look at the profile of students on their list, see how the potential roommate answered the questions and any personal comments they made to determine if they wished to contact that person. If they wanted to contact someone, they could either send a message written by the housing office staff asking to talk to person. This message included a link to the sender's personal profile for the recipient to review before responding to the invitation. Senders were able to send either the basic invitation or they could send the invitation and include their personal comments in the email for the recipient to read.

To insure the privacy of the students, students who sent the email message were not able to see the email address of the student they were contacting and besides the profile, were only able to see the username and hometown of the individual. Recipients of the email were able to respond directly to the user as the online program sent the email with the sender's return address so that if the recipient chose to respond, the communications were between the students and the housing office was no longer involved. This feature gave students the ability to respond to a invitation or not without having to explain their decision. Students also had the ability to render their profile "invisible" to others at any time so that if they were talking with potential roommates, or had already found a roommate, they would not continue to receive invitations.

Students were instructed that finding a roommate using the online program was only the first part of the process. Students were then required to notify the housing office about their request to modify their roommate preference on their online application for on campus housing. Students were able to modify, alter their profile, and continue the search process until May 10, when the housing office shut down all online activities to begin the assignments process. At that time the online program was no longer available to students.

#### *Instrumentation*

An online survey was designed with four sections to review the effect of the roommate assignment process on the student's relationship with his or her roommate. The first part of the survey was composed of demographic information which included gender, the method used to select the roommate, whether the roommates were still together, and whether the student would choose to live with his or her roommate again. In addition, the student also reported academic information in the form of fall semester grade point average (GPA), the number of credit hours



earned for the fall semester, and the number of hours enrolled at the time of the survey for the spring semester.

The second section of the study was comprised of Winston and Yaranovich's (1993) 24 questions of the Roommate Relationship Inventory (RRI) that was designed to assess the level of satisfaction the student had with his or her roommate relationship. This instrument correlates with the Roommate Rapport Scale with an  $r = .91$  ( $p < .001$ ) (Winston & Yaraovich) and provides information on the overall satisfaction the student has with his or her relationship. The RRI does not set a range of scores in order to classify the level of satisfaction with the roommate relationship that students should have, but only provides a scale for comparison purposes.

Section three asked four open response questions that allowed participants to provide written comments about the room assignment process in a narrative format. Students were asked what they liked about the method they used as well as what they did not like about method that they used. They were also asked to provide suggestions to improve the room assignment process as well as a final question that allowed them to provide any additional comments that they wished to provide.

The final section of the survey contained three questions designed to assess the student's attribution of responsibility for the success of their relationship with their roommate. The questions use a Likert Scale ranging from 1 to 10, with 1=no responsibility and 10=most responsible, on how much they feel that (1) they are responsible for the quality of their relationship with their roommate, (2) their roommate is responsible for the quality of their relationship with their roommate, and (3) the method they used to select their roommate is responsible for the quality of their relationship with their roommate.

The survey instrument was piloted in the spring of 2004 in a study that looked at students at two different institutions, one of which offered online roommate searching and the other that did not (Coleman & Cooper, 2005). That study included 722 participants from both schools and determined that there was a significant difference in satisfaction among students who used the online program compared to students who were randomly assigned his or her roommate as well as a significant difference in satisfaction among students who had a prior relationship with their roommate and those that were randomly assigned (Coleman & Cooper). The difference in students' academic performance at the two institutions did not permit the analysis of the impact the method used to select a roommate had on academic success (Coleman & Cooper).

#### *Data Collection*

Three emails were sent to all first year students over the age of 18 and living in the residence halls about the study. The first email was a message informing the students about the study and alerting them that additional information would be sent to them the following week. A second email was sent one week later which formally invited students to complete the survey and included a link to the online survey. The third email was sent a week after the second to serve as a final reminder to students and gave them an additional opportunity to participate.

For students who began at the institution during the summer or fall semesters of 2004, the email notifications occurred in April of 2005. For students who begin in the summer or fall of 2005, the email notifications occurred in January of the spring semester. Unfortunately students from both years were unable to be surveyed at the same time in the calendar year due to technical difficulties in collecting the data during the 2004-2005 academic year.

Students who did not wish to complete the survey online were given the ability to contact the researcher to request an alternate format be made available to them.

### *Data Analysis*

The students from both years of the study were combined to form three groups for comparison. Students who did not request a specific roommate and were randomly assigned one by the housing office comprised group one. The second group was comprised of students who requested a roommate based upon a previously existing relationship with the student that they established without the involvement of the institution. The third group was comprised of students who selected their roommate by using the web-based roommate searching program. Students who selected family members, had met their preferred roommate at a university sponsored function (e.g. Orientation), or had used some other method to select their roommate were not included in the analysis of this study, but were allowed to complete the survey.

The data included qualitative and quantitative information provided by the students. An Analysis of Variance (ANOVA) was performed to identify any differences among the three groups on the factors of GPA, credit hour production which was the sum of the fall credit hours earned and the spring credit hours enrolled, persistence with their roommate (as determined by whether they were still residing with their original roommate), satisfaction with their relationship (as determined by the RRI), and the mean scores on the three questions regarding attribution of responsibility. Finally, using the same methods above, a sub-analysis was also performed by sex to determine what effect, if any, sex has on the impact of the methods used in the roommate assignment process.

To analyze the comments of the participants provided in the four open format questions, a constant comparative analysis was performed to identify thematic components and elements that can provide additional insight into the relationship and the process that the researcher did not anticipate.

### *Analyzing the Research Question Data*

For each of the following research questions, there is the need to have an appropriate method for analyzing results and getting useful data. For the first research question, “What is the difference in student’s satisfaction with their roommate relationship as measured by the Roommate Relationship Inventory (RRI) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?”, the survey participants from both years were combined and grouped according to the method that they used to select their roommate. A one-way ANOVA was performed using the RRI scores of the students as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the three methods of selection in order to identify which pairs of the methods were significantly different.

The second question, “What is the difference in academic performance as measured by the student’s fall semester Grade Point Average (GPA) between students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, or those who are randomly assigned a roommate by the housing office?” was analyzed using a one-way ANOVA using the mean fall semester GPA of the students as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the

three methods of selection in order to identify which pairs of the methods were significantly different.

Question three, “What is the difference in academic performance as measured by credit hour production for fall semester (earned) and spring semester (registered for) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?” was analyzed using a one-way ANOVA using the sum of the fall semester earned credit hours and spring semester enrolled credit hours of the students as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the three methods of selection in order to identify which pairs of the methods were significantly different.

For the fourth research question “What is the difference in student persistence with their roommate as measured by the number of students still with their roommate from the first day of the fall semester among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?” a one-way ANOVA was performed using whether a student was still living with their original roommate as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the three methods of selection in order to identify which pairs of the methods were significantly different.

For question five, “Is there a difference in student satisfaction, academic performance, and student persistence among male and female students?” a series of one-way ANOVAs was used with the sex of the participants as the independent variable and satisfaction scores on the RRI, the fall semester GPA, sum of fall and spring credit hours, and whether or not students were still together as the different continuous variables.

In question six “Do students attribute personal responsibility for the quality of their relationship with their roommate differently based upon the method they used to select their roommate?”, a one-way ANOVA was performed using the mean value of the attribution of responsibility for the quality of their roommate relationship to themselves as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the three methods of selection in order to identify which pairs of the methods were significantly different.

For question seven “Do students attribute responsibility for the quality of their relationship with their roommate to their roommate differently based upon the method they used to select their roommate?” a one-way ANOVA was performed using the mean value of the attribution of responsibility for the quality of their roommate relationship to his or her roommate as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the three methods of selection in order to identify which pairs of the methods were significantly different.

Question eight, “Do students attribute responsibility for the quality of their relationship with their roommate to the method they used to select their roommate differently based upon the method they used to select their roommate?” was analyzed using a one-way ANOVA that used the mean value of the attribution of responsibility for the quality of their roommate relationship to the method that the student used to select his or her roommate as the continuous variable and the method of selection as the independent variable in order to determine if there were any statistically significant differences between the three methods. If a significant difference was identified, a Tukey HSD Post Hoc analysis compared the differences among the three methods of selection in order to identify which pairs of the methods were significantly different.

For the final research question “How does using an online roommate searching program effect students’ perceptions of the room assignment process and the expectations they have for living with a roommate as reported in the students’ personal comments” a constant comparative review of the student comments was conducted to detect the presence of any themes among the students in their perceptions of the process. The constant comparative method allows a researcher to look at multiple data sources in order to understand the phenomenon being studied (Brogdan & Biklen, 2003). During this process the researcher is able to be engaged in the collection of data, analysis, and the formulation of the emerging themes from the beginning of the research process and the findings guide the researcher in developing his or her understanding (Brogdan & Bilken). The researcher analyzed the students’ comments to determine what underlying issues or concerns students have about the roommate process as well as how they perceived the roles and responsibilities of the different parties engaged in the process.

## Chapter 4

### *Results*

To aid in understanding the results of the analysis of this study, this chapter is organized in the order of the nine research questions. Included in this chapter is the demographic information collected in the study and tables describing the information and factors used to analyze the results. Each research question is described using the factors included in the analysis and the method of analysis used to answer the question.

In addition to the student's satisfaction with their roommate as measured by his or her score on the Roommate Relationship Inventory (RRI), students were asked to provide demographic information including sex, the method they used to select their roommate, whether they were still living with their original roommate, and whether they would live with that person again. Students were asked to self-report their academic information including their fall semester GPA, the number of credit hours earned for the fall semester, and the number of credit hours enrolled for the spring semester. Students were also asked to attribute responsibility for the quality of their relationship with their roommate on a 10 point Likert scale on three questions. They ranked the amount of responsibility for the quality of the roommate relationship that was assigned to themselves, to his or her roommate, and to the method that was used to select the roommate. Finally, each student was asked four open-ended questions about the roommate process that allowed them to enter any comments that they wished to share with the researcher.



### *Findings*

Table 4-1 lists the methods used to select their roommate by the students participating in the study and the frequency of each method. The method used by the most students to select a roommate was to have the housing office randomly assign them a roommate. The two other methods used by the largest number of participants included those who selected their roommate based on a previously existing relationship and those students who used the online roommate searching program. Students who selected a relative as their roommate, who met at a university function, or who used another method were not included in the analysis of the research questions due to the low numbers of participants in each group and the focus of this study. Two of the female participants did not indicate the method that they used to select their roommate and of the five participants who did not indicate their gender, four based their decision on a previously existing relationship and one used random assignment.

Table 4.1

## Method of Roommate Selection

*(Column One and Two presents the percentage of each gender who used the specific method for that row while Column Three presents the percentage of the total participants in the study who used each particular method of selection)*

| Method                                 | Male |      | Female |      | Total |      |
|--|------|------|--------|------|-------|------|
|  | N    | %    | N      | %    | N     | %    |
| Random                                 | 392  | 27.8 | 1016   | 72.2 | 1408  | 52.9 |
| Prior Relationship                     | 259  | 29.5 | 618    | 70.5 | 877   | 33.0 |
| Related to                             | 2    | 14.3 | 12     | 85.7 | 14    | 0.5  |
| Met at University Function             | 5    | 20   | 20     | 80   | 25    | 0.9  |
| Used Online Roommate Searching Program | 66   | 24.4 | 205    | 75.6 | 271   | 10.2 |
| Other                                  | 12   | 18.8 | 52     | 81.2 | 64    | 2.4  |
| Total                                  | 736  | 27.7 | 1923   | 72.3 | 2659  | 100% |

Table 4.2

## Still Living with Original Roommate

| Method             | Yes  |       | No  |       | Total |
|--------------------|------|-------|-----|-------|-------|
|                    | N    | %     | N   | %     | N     |
| Random Assignment  | 1150 | 81.97 | 253 | 18.03 | 1403  |
| Prior Relationship | 832  | 94.76 | 46  | 5.24  | 878   |
| Online Program     | 245  | 90.74 | 25  | 9.26  | 270   |

Table 4.3

Satisfaction Scores as measured by the Roommate Relationship Inventory (RRI)

| Method                  | Mean  | SD     | 95% Confidence Interval for Mean |             |
|-------------------------|-------|--------|----------------------------------|-------------|
|                         |       |        | Lower Bound                      | Upper Bound |
| Random                  | 60.34 | 18.351 | 59.38                            | 61.30       |
| Prior Relationship      | 73.84 | 15.075 | 72.84                            | 74.84       |
| Online Roommate Program | 68.50 | 17.368 | 66.42                            | 70.58       |

Table 4.2 shows the living status of the participants in the survey. A significant majority of the participants were still living with the person they roomed with at the beginning of the fall semester for each of the methods used to select a roommate. Students who had their roommate assigned to them by the housing office had the highest percentage of those who were no longer living with their original roommate. Table 4.3 shows the means scores and standard deviations of students on the Roommate Relationship Inventory (RRI) for each method of roommate selection with the total number of participants who used each method.

*Research Question 1: What is the difference in student satisfaction with their roommate relationship as measured by the Roommate Relationship Inventory (RRI) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?*

A one-way ANOVA was conducted using the scores on the RRI as the continuous variable and the method used to select the roommate as the independent variable to determine if there was a difference in student satisfaction among the different methods used to select a

roommate. A total sample of 2,549 usable responses was examined with the three methods of random assignment (n=1402), prior relationship (n=877), and users of the online searching program (n=270).

The results of the analysis showed that there was a significant difference in satisfaction as measured by the RRI among the different methods of roommate selection,  $F_{(2, 2546)} = 170.052$ ,  $p = .000$ . Using Tukey HSD with a significance level,  $\alpha = .05$ , the mean differences between each method was analyzed and a significant difference was found in all three pair analyses. Table 4.4 contains the mean differences and confidence intervals for the mean differences for student satisfaction scores on the RRI.

Table 4.4

Student Satisfaction on the Roommate Relationship Inventory

| Methods Compared                    | Mean Difference | p    | 95% Confidence Interval |             |
|-------------------------------------|-----------------|------|-------------------------|-------------|
|                                     |                 |      | Upper Bound             | Lower Bound |
| Random – Prior Relationship         | -13.501         | .000 | -15.24                  | -11.77      |
| Random – Online Program             | -8.157          | .000 | -10.84                  | -5.48       |
| Prior Relationship – Online Program | 5.344           | .000 | 2.54                    | 8.15        |

*Research Question 2: What is the difference in academic performance as measured by the student's fall semester Grade Point Average (GPA) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?*

A one-way ANOVA was conducted using students' self-reported fall semester GPA as the continuous variable and the method used to select their roommate as the independent variable

to determine if there was a difference in fall semester GPA among the different methods used to select a roommate. A total sample of 2,516 usable responses was examined with the three methods of random assignment (n=1379), prior relationship (n=871), and users of the online searching program (n=266).

The results of the analysis showed that there was a significant difference in academic performance as measured by students' fall semester GPA among the different methods of roommate selection,  $F_{(2, 2513)} = 5.007$ ,  $p = .007$ . Using Tukey HSD with a significance level,  $\alpha = .05$ , the mean differences between each pair of methods was analyzed and a significant difference was found in only one of the pair analysis. The mean difference between students who were randomly assigned roommates (mean = 3.30) and students who had a previously existing relationship (mean = 3.37) was found to be significant with a mean difference of  $-.07179$  ( $p = .006$ ). Table 4.5 contains the mean differences and confidence intervals for the mean differences for fall semester GPA.

Table 4.5

Student's Self-Reported Fall Semester GPA

| Methods Compared                    | Mean Difference | p    | 95% Confidence Interval |             |
|-------------------------------------|-----------------|------|-------------------------|-------------|
|                                     |                 |      | Upper Bound             | Lower Bound |
| Random – Prior Relationship         | -.07179         | .006 | -.1265                  | -.0171      |
| Random – Online Program             | -.05339         | .301 | -.1380                  | .0312       |
| Prior Relationship – Online Program | .01841          | .877 | -.0701                  | .1069       |

*Research Question 3: What is the difference in academic performance as measured by credit hour production for fall semester (earned) and spring semester (enrolled for) among*

*students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?*

A one-way ANOVA was conducted using the sum of the students' self-reported credit hours earned for the fall semester and credit hours enrolled for the spring semester as the continuous variable and the method used to select their roommate as the independent variable to determine if there was a difference in credit hour production among the different methods to select a roommate. A total sample of 2,513 usable responses was examined with the three tested methods of random assignment (n=1377), prior relationship (n=868), and users of the online searching program (n=268). A total of 16 survey responses (13 fall and 3 spring) were removed from the analysis for having a value that exceeded the institution's maximum credit hour limits for a semester.

The results of the analysis showed that there was no significant difference in academic performance as measured by credit hour production among the different methods of roommate selection,  $F_{(2, 2510)} = .856, p=.425$ .

*Research Question 4: What is the difference in student persistence with their roommate as measured by the number of students still with their roommate from the first day of the fall semester among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?*

A one-way ANOVA was conducted to measure student persistence with their roommate using whether the student was still living with his or her original roommate as the continuous variable and the method used to select their roommate as the independent variable to determine if

there was a difference in student persistence among the different methods used to select a roommate. A total sample of 2,552 usable responses was examined with the three tested methods of random assignment (n=1404), prior relationship (n=878), and users of the online searching program (n=270). No distinction was made for the reason that the students were no longer residing together as that information was not collected for this study.

The results of the analysis showed that there was a significant difference in persistence as measured by students' likelihood of still being with their original roommate among the different methods of roommate selection,  $F_{(2, 2549)} = 43.149$ ,  $p = .000$ . Using Tukey HSD with a significance level,  $\alpha = .05$ , the mean differences between each pair of methods was analyzed and a significant difference was found in two of the pair analysis. The mean difference between students who were randomly assigned roommates (mean = 1.18) and students who had a previously existing relationship (mean = 1.05) was found to be significant with a mean difference of .129 ( $p = .000$ ). The mean difference between students who were randomly assigned roommates (mean = 1.18) and students who used the online roommate searching program (mean = 1.09) was also found to be significant with a mean difference of .088 ( $p = .000$ ). Finally the mean difference between students who had a previously existing relationship (mean = 1.05) and students who used the online roommate searching program (mean = 1.09) was not significant. Table 4.6 contains the mean differences of student persistence among the methods used to select roommates.

Table 4.6

## Student Persistence with their Roommate

| Methods Compared                    | Mean       | 95% Confidence Interval |             |             |
|-------------------------------------|------------|-------------------------|-------------|-------------|
|                                     | Difference | p                       | Upper Bound | Lower Bound |
| Random – Prior Relationship         | .129       | .000                    | .10         | .16         |
| Random – Online Program             | .088       | .000                    | .04         | .14         |
| Prior Relationship – Online Program | -.040      | .183                    | -.09        | .01         |

*Research Question 5: Is there a difference in student satisfaction, academic performance, and student persistence among male and female students?*

For this question, a series of ANOVAs was conducted using the different measures (RRI, GPA, credit hour production, and persistence) as the continuous variable with gender as the independent variable.

A one-way ANOVA was conducted to determine if there was any difference in student satisfaction with their roommate as measured by the RRI and the sex of the student. A total sample of 2,648 usable responses was examined with women being more represented in the sample (n=1917) than men (n=731). The analysis,  $F_{(1, 2646)} = 30.370$ ,  $p=.000$ , showed that female students were significantly more satisfied (M=67.26, SD=18.746) with their roommate relationship than male students were (M=62.90, SD=16.776).

A one-way ANOVA was conducted to determine if there was any difference in a student's academic performance as measured by the student's self-report fall semester GPA and the sex of the student. A total sample of 2,611 usable responses was examined with women being more represented in the sample (n=1888) than men (n=723). The analysis,  $F_{(1, 2609)} =$



4.504,  $p=.034$ , showed that female students achieved a significantly higher grade point average ( $M=3.34$ ,  $SD=.534$ ) than male students achieved ( $M=3.29$ ,  $SD=.556$ ).

A one-way ANOVA was conducted to determine if there was any difference in a student's academic performance as measured by the sum of the student's self-reported credit hours earned for the fall semester and enrolled for the spring semester and the sex of the student. A total sample of 2,631 usable responses was examined with women being more represented in the sample ( $n=1904$ ) than men ( $n=727$ ). The analysis,  $F_{(1, 2629)} = 5.236$ ,  $p=.022$ , showed that females produced significantly more credit hours ( $M=28.25$ ,  $SD=2.96$ ) than their male counterparts ( $M=27.95$ ,  $SD=3.10$ ).

Finally, a one-way ANOVA was conducted to determine if there was any difference in a student's persistence with his or her roommate as measured by whether students were still with the original roommate and the sex of the student. A total sample of 2,651 usable responses was examined with women being more represented in the sample ( $n=1918$ ) than men ( $n=733$ ). The analysis,  $F_{(1, 2649)} = 10.347$ ,  $p=.001$ , showed that men were significantly more likely to still be with their original roommate ( $M=1.10$ ,  $SD=.296$ ) than women were ( $M=1.14$ ,  $SD=.008$ ).

*Research Question 6: Do students attribute personal responsibility for the quality of their relationship with their roommate differently based upon the method they used to select their roommate?*

A one-way ANOVA was conducted to determine if there was a difference in the amount of responsibility that a student attributed to themselves for the quality of their roommate relationship among the three methods used to select a roommate. Students were asked to rate how much they personally were responsible for the quality of their relationship with their roommate on a 10-point Likert scale. The mean score was then used as the continuous variable

and the method used to select the roommate was the independent variable. A total sample of 2,520 usable responses was examined with the three methods of random assignment ( $n=1393$ ), prior relationship ( $n=862$ ), and users of the online searching program ( $n=265$ ).

The results of the analysis showed that there was a significant difference in the amount of responsibility for the quality of his or her relationship that a student attributed to themselves among the different methods of roommate selection,  $F_{(2, 2517)} = 38.349$ ,  $p=.000$ . Using Tukey HSD with a significance level,  $\alpha=.05$ , the mean differences between each pair of methods was analyzed and a significant difference was found in two of the pair analysis. The mean difference between students who were randomly assigned roommates (mean = 5.70) and students who had a previously existing relationship (mean = 6.45) was found to be significant with a mean difference of  $-.757$  ( $p=.000$ ). The mean difference between students who were randomly assigned roommates (mean = 5.70) and students who used the online roommate searching program (mean = 6.22) was also found to be significant with a mean difference of  $-.519$  ( $p=.000$ ). Finally the mean difference between students who had a previously existing relationship (mean = 6.45) and students who used the online roommate searching program (mean = 6.22) was not significant with a mean difference of  $.237$  ( $p=.221$ ). Table 4.7 contains the mean differences of student's attribution of personal responsibility for the quality of their roommate relationship.

Table 4.7

## Students' Attribution of Responsibility – To themselves

| Methods Compared                    | Mean       | 95% Confidence Interval |             |             |
|-------------------------------------|------------|-------------------------|-------------|-------------|
|                                     | Difference | p                       | Upper Bound | Lower Bound |
| Random – Prior Relationship         | -.757      | .000                    | -.96        | -.55        |
| Random – Online Program             | -.519      | .000                    | -.84        | -.20        |
| Prior Relationship – Online Program | .237       | .221                    | -.10        | .57         |

*Research Question 7: Do students attribute responsibility for the quality of their relationship with their roommate to their roommate differently based upon the method they used to select their roommate?*

A one-way ANOVA was conducted to determine if there was a difference in the amount of responsibility that students attributed to their roommate for the quality of the roommate relationship among the three methods used to select a roommate. Students were asked to rate how much their roommate was responsible for the quality of their relationship with their roommate on a 10-point Likert scale. The mean score was then used as the continuous variable and the method used was the independent variable. A total sample of 2,515 usable responses was examined with the three methods of random assignment (n=1391), prior relationship (n=858), and users of the online searching program (n=266).

The results of the analysis showed that there was a significant difference in the amount of responsibility for the condition of the roommate relationship that a student attributed to his or her roommate among the different methods of roommate selection,  $F_{(2, 2512)} = 6.279$ ,  $p = .002$ . Using Tukey HSD with a significance level,  $\alpha = .05$ , the mean differences between each pair of methods

was analyzed and a significant difference was found in only one of the pair analysis. The mean difference between students who were randomly assigned roommates (mean = 6.51) and students who had a previously existing relationship (mean = 6.80) was found to be significant with a mean difference of  $-.296$  ( $p=.001$ ). Table 4.8 contains the mean differences of student's attribution of responsibility for the quality of their roommate relationship to their roommate.

Table 4.8

## Students' Attribution of Responsibility – To their Roommate

| Methods Compared                    | Mean       | 95% Confidence Interval |             |             |
|-------------------------------------|------------|-------------------------|-------------|-------------|
|                                     | Difference | p                       | Upper Bound | Lower Bound |
| Random – Prior Relationship         | -.296      | .001                    | -.49        | -.10        |
| Random – Online Program             | -.148      | .485                    | -.45        | .15         |
| Prior Relationship – Online Program | .148       | .519                    | -.17        | .47         |

*Research Question 8: Do students attribute responsibility for the quality of their relationship with their roommate to the method they used to select their roommate differently based upon the method they used to select their roommate?*

A one-way ANOVA was conducted to determine if there was a difference in the amount of responsibility for the quality of their relationship that students attributed to the method that they used to select their roommate among the three methods used to select a roommate. Students were asked to rate how much the method they used was responsible for the quality of their relationship with their roommate on a 10-point Likert scale. The mean score was then used as the continuous variable and the method used was the independent variable. A total sample of

2,487 usable responses was examined with the three methods of random assignment (n=1378), prior relationship (n=845), and users of the online searching program (n=264).

The results of the analysis showed that there was a significant difference in the amount of responsibility that students attributed to the method that they used to select their roommate for the quality of their relationship among the three different methods of roommate selection,  $F_{(2, 2484)} = 46.065, p=.000$ . Using Tukey HSD with a significance level,  $\alpha=.05$ , the mean differences between each pair of methods was analyzed and a significant difference was found in two of the pair analysis. The mean difference between students who were randomly assigned roommates (mean = 5.10) and students who had a previously existing relationship (mean = 6.39) was found to be significant with a mean difference of -1.295 ( $p=.000$ ). The mean difference between students who were randomly assigned roommates (mean = 5.10) and students who used the online roommate searching program (mean = 5.96) was also found to be significant with a mean difference of -.862 ( $p=.000$ ). Table 4.9 contains the mean differences of student's attribution of responsibility for the quality of their roommate relationship to the method they used.

Table 4.9

## Students' Attribution of Responsibility – To the Method Used

| Methods Compared                    | Mean       |      | 95% Confidence Interval |             |
|-------------------------------------|------------|------|-------------------------|-------------|
|                                     | Difference | p    | Upper Bound             | Lower Bound |
| Random – Prior Relationship         | -1.295     | .000 | -1.62                   | -.97        |
| Random – Online Program             | -.862      | .000 | -1.36                   | -.37        |
| Prior Relationship – Online Program | .433       | .124 | -.09                    | .95         |

*Research Question 9: How does using an online roommate searching program affect students' perceptions of the room assignment process and the expectations they have for living with a roommate as reported in the students' personal comments?*

As part of the survey, students were asked four questions in an open response format where they could write any comments that they wished. Students were asked the following questions: “What was good about the method you used to select your original roommate?”, “What did you not like about the method you used to select your original roommate?”, “What suggestions do you have for the housing office to improve the roommate selection process?”, and “Is there anything else about your experience with the roommate selection process that you would like to share?”. Out of the 270 students who indicated that they used the online roommate searching program, 183 answered at least one of these four questions. Student comments by those who used either random selection or a previously existing relationship were not used for this analysis, but their comments were reviewed to determine consistency and provide support for the interpretation by the researcher where applicable.

The responses were analyzed using the constant comparative method to determine what thematic elements were present in the students' comments. In addition to the researchers' analysis, a triangulation was performed on the students' comments with two additional readers who reviewed the students' comments for common themes to confirm the researchers' findings. These readers were both housing professionals who had worked in residence life capacities for over ten years and had both received their doctoral degree in College Student Affairs Administration. Due to the nature of the survey, survey participants were not able to be identified in order to be able to review their own comments or the interpretations of those comments by the researcher.

## Chapter 5

### *Conclusion*

This chapter provides a summary of this study including the findings and implications for student affairs and housing operations in the area of roommate assignments. It reviews the significant differences in satisfaction, academic performance, persistence, and the attribution of responsibility for the quality of the roommate relationship for institutions to consider when adopting new technology and systems designed to assist students in their transition to, and success in higher education. If Garb's assertion that "the assignments process is the single most significant educational program conducted through housing" (1978, p.24) is true, it is critical that housing offices know what system or program yields the best results for their students. This chapter includes discussion about the issues encountered by the researcher in conducting the survey, the meaning of the findings for each of the research questions, and the researcher's recommendations for future research in this area.

### *Roommate Matching and Technology*

Finding an effective method of pairing students together as roommates for university housing has been pursued for many years using a variety of systems, profiles, personality traits, and psychological measures (Fuller & Hall 1996; Jones, McCaa, & Martecchini, 1980; Nudd, 1965). Over the course of the last several decades, none of the proposed methods or tools used has produced results that are any more effective at producing satisfactory roommate relationships than simply randomly assigning students together (Lapidus, Green, & Baruh, 1985). Since 1985, computers and the World Wide Web (WWW) have grown in their ability to allow programs and



services to be offered in a new manner. In addition, the comfort level and access to computers and the web has increased for both college students and student affairs professionals (NCES, 2005).

Programs and computer systems are now available to assist students in their preparations for college including tools to meet, communicate, and select a roommate (Emerson, 2003). These new tools allow students to look for a roommate among their entire first year class outside of their own limited social circle in order to find a person who meets their preferences for a roommate (Hoover, 2002). These new techniques and tools, however, have not been subjected to the research scrutiny necessary to determine whether they are in fact effective in improving students' roommate relationships or if they are simply a new, entertaining, or diverting experience for students. Finding out whether this new opportunity actually assists students in their adaptation and success in college is important as the call for accountability of resources increases on colleges and universities (Upcraft & Schuh, 1996) and as students increase their demands for service and satisfaction (Oblinger, 2003).

In addition to determining the effectiveness of these new tools for students, institutions need to determine how they impact the students' satisfaction with their roommate as well as with the housing office and through that office, the institution. Additionally, this new method may impact the students' academic success at the institution and if it does the institution needs to know. Having information about the impact that this new method has on students allows housing professionals to share the reasoning for the program with their stakeholders and to provide support for the investment in the technological infrastructure necessary to support it.

Finally, housing professionals need to critically examine the myths and beliefs that many of them hold about what makes a roommate relationship successful and what kind of relationship

is the most likely to be successful. There is not enough research about how students differ based upon the methods they used to select their roommate. This research seeks to provide not only the answers to whether this new technological tool for connecting to roommates actually produces good relationships, but also how it impacts other aspects of the students' experience. In addition, this study also seeks to answer the question whether students who choose roommates from their own social circle of friends are more successful than are students who use another method.

#### *Additional Limitations of this Study*

Over the course of this study, additional limitations were encountered by the researcher. These limitations arose during the examination of the data before the analysis had fully begun and as such they should be considered in the reading of the findings and implications presented by the researcher.

The first is the difference in the representation of men and women in the sample. There was an overrepresentation of women in the sample with women comprising 72.2% of the total number of participants compared to 27.8% for men. The population in the institution's residence halls being examined for this study is 60% female and 40% male. This difference may impact the accuracy of the measure of the impact that the method of selection used had on the various factors where there is also a difference for the measure among the sex of the participants. The implications of this will be discussed further in the section on research question five.

A second limitation concerns the number of participants in the study who used the online roommate searching program offered by the institution's housing office. A total of 270 participants in this study used the online program while the total number of students who created a profile in the program was 2,094. At first glance, this suggests that only 10% of the students who used the program were also participants of the survey and so their involvement may not

provide a full representation of the impact and value of using this program. However, the institution was unable to provide information about how many of the students who used the program actually selected their roommate through the program or even how many of the users of the program actually enrolled at the institution. This means that it is not known to what extent the participants in the survey represent the students who used the online roommate searching program.

#### *Summary of Research Study*

The purpose of this study was to understand if greater participation by students in selecting their roommate had an impact on several factors including the students' satisfaction with their roommate, the rate of students' continued residency with their roommate or persistence, the academic success of the students, and how the students who had different levels of control over the process attributed responsibility for the quality of their roommate relationship. Understanding this impact would allow housing administrators the ability to not only better articulate the benefits of using the program to their stakeholders, but it could allow the information to be used to design programmatic interventions that would assist students that considered how the roommates were placed together as part of the program's design. If students with greater participation in the process also take greater responsibility for the quality of their relationship, then program interventions that provide students with the tools and support they need could be more efficiently designed. In addition, housing administrators would have the research evidence necessary to support the use of housing resources to create the opportunity for greater participation in the room assignment process.

For the two years of this study 2,652 students participated by taking the online survey. Students completed the Roommate Relationship Inventory (RRI) (Winston & Yaranovich, 1994)

to indicate their satisfaction level with their roommate. Although the RRI does not provide a score that the creators felt identified a successful roommate relationship, it does allow for the comparison of different groups on their level of satisfaction. For this study, the scores of the RRI were compared for the three most popular methods of selecting roommates by participants in the study; those who were randomly assigned, those who had a prior relationship with their prospective roommate, and those who used the online searching program.

### *Research Question One*

What is the difference in student satisfaction with their roommate relationship as measured by the Roommate Relationship Inventory (RRI) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?

Students who selected their roommate based upon a previously existing relationship were significantly more satisfied with their roommate relationship than the students who were randomly assigned a roommate ( $p=.000$ ) or the students who used the online roommate searching program ( $p=.000$ ). Additionally, students who used the online roommate searching program were also significantly more satisfied with their roommate relationship than the students who were randomly assigned their roommate ( $p=.000$ ).

This finding demonstrates that the belief that ‘friends should not live together’ is not supported by the evidence of this study. Students who know each other before becoming roommates are more satisfied with their roommate relationship. While all three methods produced roommate relationships that included satisfaction scores that were the at the highest and lowest possible scores, meaning that they produced both the best and worst relationships, overall the students who chose to live with someone they already knew were more satisfied.

While the reason for this satisfaction is not able to be determined from the analysis of the RRI, there are a number of possible reasons.

Students who select roommates they already know may have a more realistic expectation of what they are getting in a roommate. There is less surprise with each others' behavior and personal history and the students may already have some understanding of how compatible they are with their intended roommate. Students may also be more comfortable communicating their expectations or concerns with their roommate. Finally, students discussed the stress associated with preparing for college which could have been reduced by having control over this part of the college experience. While the quality of their relationship may deteriorate during their time together, the students may simply make greater allowances for disagreeable behavior and conflicts in order to preserve their already existing relationship. Whatever the reason, students who select roommates that they already know are more satisfied.

The students who used the online roommate searching program were also significantly more satisfied with their roommate relationship than those students who were randomly assigned roommates. While these students were not as satisfied as those students who already knew their roommate, the online program gave students the opportunity to gain an understanding and knowledge of their potential roommate through either the communications facilitated by the online program, their sense of control over the process, or possibly the reduced stress associated with living with someone they had never met. Since students who are more satisfied with their roommate relationship have higher rates of persistence and academic performance at the institution (Phelps, et al, 1998; Waldo & Fuhrman, 1981), by providing an online roommate searching program the housing office is contributing to retention efforts of the institution as well

as supporting academic achievements of its students by providing the student with the means to obtain a more satisfactory relationship with his or her roommate.

Whatever the reason for the increase in satisfaction, the online program provided a statistically significant improvement in students' satisfaction with their roommate relationship. The possible reasons for this will be discussed in this chapter as Research Question Nine, but there is enough of an impact for housing professionals to be able to support offering this kind of service to students. Additional efforts are needed to attempt to close the difference between the users of online program and the students who had a previously existing relationship their roommates and suggestions to accomplish this will be discussed in the summary.

#### *Research Question Two*

What is the difference in academic performance as measured by the student's fall semester Grade Point Average (GPA) between students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, or those who are randomly assigned a roommate by the housing office?

Students who selected their roommate based on a prior relationship earned a significantly higher fall semester GPA than students who were randomly assigned a roommate ( $p=.006$ ), but their GPA was not significantly higher than the students who used the online roommate searching program ( $p=.877$ ). The students who used the online roommate searching program, who did have a higher mean GPA than the students who were randomly assigned their roommate, 3.35 compared to 3.30, this difference was not statistically significant ( $p=.301$ )

While the online roommate searching program did not provide a significant improvement in academic performance in terms of GPA, having prior knowledge of their roommate does have some kind of relationship to this measure of academic performance as students whose roommate

was selected based on a prior relationship did perform better academically. Two questions arise from this finding; the first is why do students who know their roommate before coming to college do better academically. Does roommate satisfaction somehow cause better academic performance or perhaps its presence simply limits the distractions and conflicts that can negatively impact academic performance. The second question is how housing professionals can provide the program interventions and resources that would allow all students to obtain this benefit. If students are more in control of the process, are they simply less stressed about college in general and their academic performance benefits?

It is unlikely that students who are academically more prepared or simply smarter are also more likely to choose a roommate based on a previously existing relationship than other students. If we assume that students of all academic skill levels and proficiencies are equally likely to choose a given method for selecting their roommate, something we do not know for certain, then the quality of the subsequent relationship may in fact be impacting the students' academic performance. If this is in fact the case, then housing professionals can help to improve students' GPA by improving the quality of their roommate relationship.

There may be some concern about using self-reported data for the student's fall semester GPA and the relative honesty of the students and the accuracy of the information they shared. Cassady (2001) examined students' self-reporting of GPA and SAT scores and found that students were highly reliable in their reporting of grade information ( $r=.97$ ). The study found that researchers could reasonably rely on students to accurately report their GPA as a "variable of interest" as long as the information being reported was not being used to make policy decisions or to distinguish between individuals for some kind of reward or status (Cassady). In

the context of this research study, the accuracy of the students' self-reported GPA is acceptable for the information being collected.

#### *Research Question Three*

What is the difference in academic performance as measured by credit hour production for fall semester (earned) and spring semester (registered for) among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?

On this measure of academic performance, there was no significant difference in the production of credit hours by students regardless of the method they used to select their roommate. There was no difference in credit hour production during the first year of enrollment that is correlated to the method that a student uses to select their roommate.

#### *Research Question Four*

What is the difference in student persistence with their roommate as measured by the number of students still with their roommate from the first day of the fall semester among students who select their roommate based on a previously existing relationship, those that use an online roommate searching program, and those who are randomly assigned a roommate by the housing office?

Students who were randomly assigned a roommate were significantly more likely to change roommates than either students who used the online roommate searching program ( $p=.000$ ) or those whose roommate was based on a previously existing relationship ( $p=.000$ ). This means that students who use the online search program or select someone they already know put less of an administrative burden on the housing office staff in the form of room changes. There was no significant difference between students who used the online program and



those with a prior relationship. While continued residency with a roommate is one way to measure student persistence with a roommate, it does not take into consideration the reasons for the separation. Students can change roommates for a variety of reasons and if it is not the result of the quality of their relationship, then using this as the measure for persistence may present an inaccurate picture of the impact that the method of selection has on that relationship. However the researcher felt that this was an acceptable way of measuring student persistence in the context of this study.

This finding supports previous research (Stanley, Werring & Carey, 1988) that students who are able to select their own roommates are more likely to stick together regardless of the nature or depth of their relationship. It may not be the existence of a prior relationship determines a student's level of persistence with their roommate, but rather that persistence is affected by the student's involvement and control over the process. This lets housing administrators know that by offering an online roommate searching program they can reduce the administrative workload of the residence life and assignments office staff in dealing with room changes due to incompatibility. The ultimate savings that can be realized are not known or calculated in this study, and while they may not be significant enough alone to justify the costs associated with creating and maintaining the program, it does provide a valuable piece of information to add to the total value received by the students and the housing office by offering such a program. If housing office staff members are spending less time dealing with room changes, then they can devote more attention to other demands on their time.

#### *Research Question Five*

Is there a difference in student satisfaction, academic performance, and student persistence among male and female students?

Female students were significantly more satisfied with their roommate relationship than their male counterparts, they achieved significantly higher GPA for their fall semester, and they produced a significantly higher number of credit hours. Male students had a significantly higher rate of persistence and were more likely to remain with their roommate than female students were. While the difference in academic performance may be attributable to a number of possible factors, the fact is that while women were more satisfied with their roommate relationship than men were, they were also more likely to change roommates.

From the analysis of the satisfaction scores and persistence, it appears that either male students have a lower expectation of what they will experience in their roommate relationship or they have a greater willingness to continue living with a roommate with whom they have a less than ideal relationship. Fuller and Hall (1996) found that male students were more willing to accept differences in their roommates behavior and personality traits and this acceptance may be the reason that male students, while being less satisfied with their roommate relationship overall, still have a higher rate of persistence than female students. Female students may have a different expectation of what the roommate relationship will be when they enter into it and if that relationship does not match with their ideal, they are more willing to make a change in roommates.

This result also challenges the findings that men are more satisfied with their roommate relationship (Winston & Yaranovich, 1994) than female students. This study produced results that show women as being more satisfied with their relationship. This raises the question of just what do students feel is a satisfactory relationship and whether it is at the level of satisfaction that would have been similar to students just twelve years ago at the time of Winston and

Yaranovich's study. The results did support Winston and Yaranovich's finding that men were more likely to still be living with their roommate than female students were (1994).

Women were also found to have significantly higher scores than the men on the measures of academic performance in this study; GPA and credit hour production. With the larger numbers of women participating in the study, this difference may be impacting the measure of the impact that men and women receive by using the different methods of roommate selection. Future studies could examine the different impact that men and women receive from using different methods of roommate selection on all of the measures of this study.

#### *Research Question Six*

Do students attribute personal responsibility for the quality of their relationship with their roommate differently based upon the method they used to select their roommate?

Students who had a prior relationship with their roommate attributed a significantly greater amount of responsibility for the quality of their relationship to themselves than those who were randomly assigned their roommate ( $p=.000$ ). These students placed more of the burden for the success or failure of the relationship on themselves rather than either of the other two methods of choosing roommates, although the difference between them and those who used the online program was not significant ( $p=.221$ ). If these students take more responsibility for potential roommate conflicts, then the housing and residence life staff may have an easier time assisting them in resolving their conflict.

Students who used the online searching program also attributed a significantly greater amount of responsibility for their relationship to themselves than did those that were randomly assigned a roommate ( $p=.000$ ). Like their peers who knew their roommate, either some element of the control that they had in choosing their roommate or their ability to begin the development

of the relationship prior to coming to college could be influencing their interpretation of any difficulties or problems in the relationship. If these students are still more likely to stay together, then the housing office, by offering the online roommate searching program is reducing the administrative demands that are associated with room and roommate change requests of its students.

Finch, Beach, and Baucom's (1987) research determined that satisfaction with a relationship was a key factor in how people assigned meaning and responsibility for an individuals' behavior. If a person in a more satisfied relationship is more likely to see their roommate problems as result of their own actions, then they would attribute more of the blame on themselves (Thompson & Kelley, 1981). Försterling (2001) found that people attribute responsibility using the axis of controllability and intentionality. Since they are controlling the communications with roommates and the ultimate decision of whether to room with a person, then the responsibility is not the result of chance or others, but of themselves. Using the online roommate searching program would produce more situations where dealing with roommate conflicts can be addressed by helping students to take greater responsibility for fixing the problems and working to maintain the relationship. Since roommate problems have been found to take significant amounts of time and effort of housing staff (Shipton & Schuh, 1982), the online roommate searching program could help reduce both the quantity of those conflicts and even the nature of them.

#### *Research Question Seven*

Do students attribute responsibility for the quality of their relationship with their roommate to their roommate differently based upon the method they used to select their roommate?

Students who selected their roommates based upon a prior relationship attributed a significantly higher amount of responsibility to their roommate for the quality of their relationship than the students whose roommates were randomly selected by the housing office. There was no significant difference in the attribution of responsibility to their roommate between students who used the online roommate searching program and those who were randomly assigned or between the users of the online program and those that had a prior relationship with their roommate.

This result shows us that students who selected someone they already knew as their roommates attributed more responsibility for their relationship to both themselves and their roommates than either of the other two methods. While students who used the online program may not have had a significant difference in assigning responsibility to their roommate than the other methods, there is some indication that using the online roommate searching program does result in students seeing the condition of their roommate relationship as the responsibility of the roommates. This distinction means that housing professionals can design interventions that can assist students in their roommate relationships and problems by focusing on the students themselves instead of placing responsibility on an external party or mechanism.

Individuals who are satisfied with their relationship are more likely to associate positive behaviors with the internal nature of the person while associating the negative ones as a result of external forces (Fincham, Beach, & Baucom, 1987). With the online program improving students' satisfaction with their roommate this translates into students viewing problem behaviors as not being inherent in their roommate, but external to them. With this change in attitude, aiding students in dealing successfully with issues or problems should become more focused on the specific behaviors than the character of the individuals involved.

Similar to the student's assumption of responsibility due to their control of the selection process, the roommate takes on an equal responsibility for making the decision to be roommates because of their involvement with the process (Försterling, 2001). As the two principle actors involved in the decision encounter difficulties, the housing staff, instead of being the cause of their situation by placing the students together, now become impartial resources to assist them in their resolution of the difficulties they have encountered.

#### *Research Question Eight*

Do students attribute responsibility for the quality of their relationship with their roommate to the method they used to select their roommate differently based upon the method they used to select their roommate?

Students do differ in the amount of responsibility for the quality of their roommate relationship that they attribute to the method that they used to select their roommate. Students who had a previous relationship with their roommate attributed significantly more responsibility to the selection method they used than the students who were randomly assigned a roommate. In addition, students who used the online program also attributed significantly more responsibility to the selection method they used than students who were randomly assigned a roommate. There was no significant difference between students who used the online program and those with a previously existing relationship on this measure.

It was surprising that students who were randomly assigned a roommate attributed the lowest amount of responsibility for the quality of the roommate relationship to the method that was used to assign that roommate, but it can be made clearer by considering two factors. The first is the level of satisfaction of the three groups. Both the students who used the online program and those that had a previously existing relationship were significantly more satisfied

with their roommate relationship. They would potentially identify the method that they used, especially in the case of the online program, as having an impact on the formation and development of their relationship. If the relationship was positive, then the students might recognize the benefits they obtained from their choice and give credit to the method, thus creating a higher mean score on this measure.

The other possibility is in the students' interpretation of the phrase "the method used" when considering their relationship. Based on the comments made by students who relied on the housing office to assign them a roommate, many students did not consider this to be an "actual" method, but rather the absence of one. "I didn't use a method. I was placed with my original roommate" was one comment by a student with a randomly assigned roommate. Because the housing office did not use a personality survey or something other system, many of the students did not consider their situation to be one where a method was used. This possible interpretation by students may have resulted in students viewing the "method" as less important than the personalities and behavior of themselves and their roommate.

One of the key elements associated with the attribution of responsibility to a person or institution is the degree of assistance and support in dealing with a problem that a person encounters (Wiener, Russell, & Lerman, 1979). Depending on the structure of the online program, the involvement of the housing office in the formation of the relationship can be significantly different in the relationships of the users of the online program compared to the randomly assigned students. The housing office goes from being the cause of a problem to being an outside observer. One who may even have provided advice and suggestions to the student in the form of tips and suggestions on the online program that students interpret as being supportive and helpful. Instead of being responsible for creating the relationship, the evaluation of the

housing office by a student now considers how the office has assisted in dealing with the conflicts that the student is encountering as a result of his or her own decisions.

*Research Question Nine*

How does using an online roommate searching program effect students' perceptions of the room assignment process and the expectations they have for living with a roommate as reported in the students' personal comments?

The comments of the students who used the online roommate searching program identified a number of issues of concern and interest for the students during their search for a roommate. These issues formed into four distinct elements that interact to shape the perceptions and actions of the students using the online roommate searching program. The elements entered the student's search for their roommate at different times during the selection process and with different relative values to the student. Figure 5.1 illustrates the relationships and movement of a student as they experience the selection process by using the online program with the goal of finding a roommate.



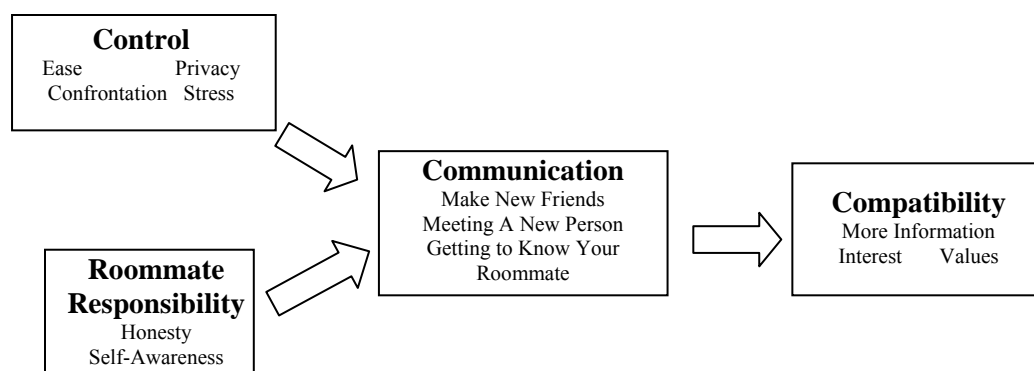


Figure 5.1 – Student Perceptions of the roommate selection process

The beginning of the process for the student is the element of Control. This element is identified by the students' preference to be in control of their fate and over the roommate assignment process. Students who used the online program were able to control the process by identifying what was important to them on their profile, determining who they would talk to, and, most importantly, by making the decision of who they would select to live with for their first year. Students did not feel that they were at the mercy of an office or institution that did not treat them as unique and special individuals, but rather it allowed them to find someone that they personally found acceptable and wanted. Students could define the degree of familiarity that they were looking for in a roommate without having to choose between the absolutes of someone totally random and someone they already knew. "I was able to room with someone I didn't know but I was still able to have some control over who my roommate was." The satisfaction

with the ability to control the process confirmed earlier findings (Reeves & Jamieson, 2003) that students placed high value on their level of involvement with this process.

The element of Control includes four distinct factors that when taken together reinforces the students' feeling of control over the process. In addition, the students were able to begin the roommate search process with a higher level of confidence in the likelihood of their ultimate success in finding a roommate who would meet their goal of being compatible simply because they felt that they knew better than anyone else who would make a good match. The four factors that created the sense of control for students were Ease, Privacy, Confrontation, and Stress.

For the ease factor, students appreciated the relative simplicity of the online searching program. They described it as "user friendly" and they enjoyed the freedom to adjust the search parameters freely in order to rank their potential roommates in different manners. Several participants commented that efforts should be made by the housing office to reassure their peers that the program was easy to use and should be strongly recommended by the university administration as the best way to find a roommate. "...make it seem very easy to even the laziest of people". There was a sense that some of their fellow students avoided using the program because they were either intimidated by it or what was required to use it, but the reality was that the program is easy to use. Students felt that they were able to use the program without much concern and many suggested additional features to the program that while adding to the overall complexity of the system would not cause it to lose its overall simplicity. Students' experiences with the online program confirmed that they possessed both a high comfort level with the technology as well as the ability to utilize it without too much difficulty (Dillman, Tortora & Bowker, 1999).

In addition to the ease of the program, students enjoyed the sense of privacy that they had in reading the profiles of students on the list that the program provided as compatible. Students were able to view and evaluate potential roommates without that person even being aware of their interest. Students were able to make decisions based on their reading of a student's answers to questions, the content of any personal comments, or even the absence of comments from a profile. Students also appreciated that they controlled how much of their own information was actually available to others. A student's email address and name was only available if the student chose to share it. "I liked how privacy was never an issue." Students could communicate with potential roommates and reveal as much, or as little, as they wanted over the course of their communications so that if they did not select a person as a roommate, they retained the ability to limit the other person's ability to question or challenge their decision.

This leads to the third factor, Confrontation. Students expressed their preference for being able to control any potential confrontations with other students. They could choose not to respond to an email invitation from a person that they were not interested in without having to tell the person that they were not interested in them or why they were not interested. This ability to avoid "hurting" another person, or putting themselves in the position of having to justify their decisions, enabled them to approach using the program with a more positive outlook on potential success. "It let me choose from many different people without them knowing whether I 'cut' them or not."

All three of these factors relate to the fourth factor, the level of Stress associated with making a decision. Students were anxious about the kind of person that they could get as a roommate and had stories, warnings, and visions of the "roommate from hell" as their most likely option. Others had visions of their roommate as their new best friend and a partner in their

college experience with whom they planned to share all of their difficulties, challenges, and triumphs in higher education and to emerge with a lifetime bond. Although neither image was probably realistic, students wanted to be able to relax and enjoy their college experience and they felt that the uncertainty about an unknown roommate added unnecessarily to their concerns. Being able to control this process, limited their risk of getting their worst fear realized. "...it was less nerve-wracking on move-in day." The comments of the students supported those of others using online programs as it allowed them to know who they would be living with so that they had less stress associated with their approaching arrival to campus (Rangus, 2002).

All four of these factors, and the overall theme of Control, should be understood as existing internally to the student using the online program. These factors were understood by the students to be directed towards themselves while using the program, but not towards the other users. There was a clear distinction between what a student wanted from the program as someone who was searching for a roommate and what others in the system were expected to do to make the process more successful. While the element of Control was internal to the student themselves, the second element, Roommate Responsibility, was external to the student and only applied to the other students using the online program.

The second element that students identified as being critical to using the online program was Roommate Responsibility. While there was limited recognition of their own responsibility in the factors that comprise this element, the main focus again is not on themselves, but rather on the other individuals using the program. As potential roommates are creating their personal profile and beginning the process, the students searching for roommates need to have the assurance that the profiles they review and the contacts that they make are going to be accurate and worthwhile.

“People need to be more involved; if they are going to participate in the process at all, they need to invest time in it to follow up with roommate leads.” Students had a clear expectation that if their peers were going to participate in the program, they needed to participate fully. In contrast to their appreciation of the ability to avoid individuals who they did not want to talk to as mentioned in the Confrontation factor, students did not seem to recognize that as a legitimate action by others when they were the ones being ignored. They clearly expected to be responded to by the people that they contacted but there was a recognition that the problems they encountered were not in the system, but rather in the individuals using it. “...it is still a good system when followed as it was intended...”

The element of Roommate Responsibility includes two factors that students associated with the decision to participate in the online program. In addition to the general responsibility to be fully engaged, students identified two factors that they felt were necessary for the successful roommate relationship: Honesty and Self-awareness.

Honesty was addressed by the students in both the hypothetical and in their actual interactions in talking about what the students thought about and encountered in the process. Students expressed doubts about the relative honesty of people in completing their personal profiles and what they said about themselves while talking with each other. This concern about honesty supported the concerns that others had already expressed in considering whether to offer this kind of program (Emerson, 2003), but students seemed to consider it the responsibility of the participants to honor this expectation while also being conscious of the possibility of deception. They either felt that students were intentionally deceptive about the information they provided, “People lie about their habits” or they were concerned that students were omitting information that made them appear less than desirable “It’s easy for people to not tell the whole truth...” Not

surprising, none of the students indicated that they were anything less than totally truthful, it was always the other people that needed to be reminded of the need to be “honest and forthcoming” in their communications.

The second factor that students felt that potential roommates needed in order to be a good candidate was to have a high level of Self-Awareness. It was important that students be aware not only of their true personality and behavior, but also how that behavior would change. Users asserted that some of the potential roommates described their behavior or personality not as it truly was, but rather how that potential roommate wanted or hoped it would be. Students wanted users of the online program to include their current preferences and behaviors as they existed in filling out the profile, but they also had an expectation that the student should be able to articulate how they would change when they moved to college.

This expectation is not surprising when considering the description of the Millennial generation’s characteristics (Oblinger, 2003) with regard to their expectations of others. Despite the inherent contradiction of students expecting their peers to be able to project potential changes in their personality, attitudes, and behaviors that would result from an environment that they had not experienced yet, and even despite their own inability to do the same, students still expected others to be able to make these predictions. Again the students did not view the issue of incompatibility or conflict as being the result of their own growth, development, or change, but rather the burden of responsibility was on others to make sure that it does not occur. Like Honesty, Self-Awareness is a factor that the students understood as important to the success of finding a potential roommate, but existing primarily outside of themselves.

These two elements, Control and Roommate Responsibility, exist as the foundation for the decision to not only use the online roommate searching program, but are the conditions that

the students expect will exist before they will commit to the process. Control is all directed at themselves and Roommate Responsibility is directed at everyone else, but they are interconnected as the necessary pre-conditions to students engaging in the roommate search. Going into the search process with these expectations gives the student confidence in their ability to find a roommate as well as increasing the overall value of the program itself.

The first two elements; Control and Roommate Responsibility lead to element number three, Communication. This element was extremely important to students as it allowed them to speak and begin to establish relationships with others while they were looking for a roommate. Students could email each other to build their relationship before moving to telephone calls or even meeting in person, which several recommended, before making any commitment to the person. The communication allowed students to not only find a roommate, but once found, it enabled them to coordinate their moving plans, what they were bringing to the room, and even decorating ideas. Some even mentioned coming to the summer orientation program together in order to begin sharing their college experience early.

This element has three factors that go along with the ability to communicate; Meeting a New Person, Making New Friends, and Getting to Know Your Roommate. The Meeting a New Person factor is best described by the student who said:

“I didn’t want to room with someone I already knew but I definitely didn’t want to go pot luck. Doing the online thing, I got to talk to and get to know and even meet my roommate before school started, but at the same time we weren’t really good friends.”

There was a definite interest in taking a risk and feeling excitement about the potential of meeting someone who was new and unknown but that risk was limited by making sure that the list of potential roommates met their personal minimum standards first. Basically, students

wanted to risk the unknown by having someone new as a roommate, but only after eliminating those individuals who would be too much of a risk or a challenge.

Meeting a New Person also meant that creating the roommate relationship had two benefits to a student. First they did not have a history with this person and could begin with a “clean slate” about expectations, history, and past interactions. Everything with that person was going to be future focused. Second, they did not have to risk a currently existing friendship if the roommate relationship turned into a negative experience. By choosing someone new they were creating the possibility of adding to their friends, not risking the loss of one of them.

The second factor for the element of Communication was the desire and ability to Make New Friends through the online program beyond simply finding a roommate. Students discussed that they spoke to many of their future classmates and some were even able to begin developing their social network through this process. Comments such as “...it allowed me to meet not only my roommate, but also other students who would be attending the University” and “...I made several other friends, so coming to the institution, it didn’t feel like I knew no one” demonstrates how the students tested what their experience with community at the institution would be like. Others mentioned meeting people and how those connections made them feel better about attending the institution with several indicating that they continued the relationships they made through the search process with some of the individuals that they did not select as a roommate.

The final factor, Getting to Know Your Roommate, was the ultimate goal of the students’ desire for communication. Students highly valued the ability to develop a relationship with their roommate before coming college which supports Reeves and Jamieson’s (2003) finding that students took advantage of the early connections to get to know one another and plan their move to campus. While the students continued to make comments that indicated their belief that using



a survey, personality profile, or some other method existed that would find their “perfect” match, they wanted to retain the final decision making authority to themselves. The online program provided them with a list of potential roommates based upon how compatible they were, but student responses ranged from the thought that their top match was ideal to someone over halfway down the list was the better match. Although they did not articulate this idea very well, the students seemed to understand that although the system said they were compatible with another person, they still needed to interact with that person in order to identify the personality traits and factors that the system did not, or could not, consider to truly determine if the person would be a good match.

The online program allowed students to control the intimacy of the communications with others at a level that they were comfortable with before going deeper into their discussions. Some students felt comfortable sharing a great deal and quickly moving to phone communications while others preferred the less exposed communications of email before sharing personally identifiable information. However students communicated with potential roommates, they appreciated being able to get to know a person, to the extent that was possible based on their circumstances, and then using that information to make their roommate decision.

The final element is the goal and objective of the students in finding a roommate and the other three elements are the tools they used to achieve their desired result. The most consistent and important element to the student is Compatibility. Students feel a very strong need to find a person whose behavior and room habits will be a match for their own. Issues such as study habits, sleep patterns, guests, and noise were all addressed by the survey participants as being of critical concern before trying to determine if they actually liked a person. The concern over sleeping habits during the week was mentioned by students both in their search for a roommate

as well as reflecting on some of the factors that made them compatible with their roommate supporting previous research (Jones, McCaa & Martecchini, 1980) that this was the only factor with any predictive value on roommate compatibility. Several of the responses even indicated that having a close personal relationship was secondary to finding someone that they felt they could live with.

Although this might be perceived as being a condition prior beginning the process, the repeated intention of students to have someone who was compatible made this less an component of their decision, but rather the desired outcome of the decision they were making. Students used the online program to identify the basic issues and factors that they would use to arrange the potential for compatibility with a person, but they continued this screening process throughout their interactions with other students. The comments did not indicate if their primary goal in talking with students was to find the perfect roommate or rather simply to eliminate all potentially negative ones. While subtle, this difference in intention will affect how a student is interacting with others in their communications and the types of information they are looking for about the person.

Compatibility included three factors that emphasized the desire of the students to find a compatible roommate; More Information, Interests, and Values. For the purpose of this model, the element of Compatibility focuses on similarity in the living habits and behaviors of the roommates, especially those that have impact on the quality of the living environment that is created by living together. The three other factors focus more on either improving the search tools or increasing the likelihood for developing a positive and satisfying relationship between the two individuals.

The More Information factor is a request repeated by students for a greater amount of detail in the questions and answers used in the online program. Students indicated a strong belief that by asking more questions, or more specific ones, it would allow them to eliminate all possible personality differences and consequently all conflicts. The students shared that they thought that the profile was too general, that the system should require personal comments as part of the profile, and even suggested that friends of individuals could write comments or evaluations of them so that searchers could know how that person is viewed by others. All of these suggestions indicate that students believe it is possible to ascertain all relevant information about a person without having to actually interact with that person. This factor also manifests in the students' preference for having an easy and non-confrontational process where they are in complete control over what is going on without recognizing that their peers have the same expectation.

The second factor in Compatibility is that of shared Interests. Different from the foundations of compatibility, this factor goes to what the potential roommates might have in common outside of their room. Will they be able to spend time together doing something more involved than simply sleeping in the same room together? Students looked for common interests in their recreation activities, interests in sports, or other out of class involvements that they could share with their roommate. Although this factor was present for a number of users of the online program, several mentioned that the absence of shared interests did not exclude a person from being a roommate. Whether or not a student found someone with shared interests or not, they were looking for them in potential roommates.

The third factor is that of Values and appeared to be closely associated with the religious affiliation of the student and their attitude towards personal behavior. Students expressed their

desire to have someone whose personal values and beliefs were not only similar to their own, but also supportive of their values. There was evidence of the desire that complicated issues regarding subjects such as alcohol, boyfriend/girlfriend visitation, drugs, or other social or embarrassing concerns could be dealt with more effectively by framing the conversation as one of common values and morals. It seemed from the comments that students used a “secret language” to send code to each other where individuals who shared certain beliefs were able to connect without having to specifically address the behaviors about which they were concerned. This raises concerns for residence life professionals in that if the students are avoiding talking about these issues with someone who they are considering as a roommate, how are they going to address these issues if they do in fact arise.

This “secret language” appeared to be present on a number of the students’ comments in their responses to the survey questions, but also in the comments that they made on their personal profiles. Reviewing those profiles, the researcher identified the ability of students to share information about either themselves or what they wanted in roommate without having to expressly state their desires. Students were able to discuss race, religion, sexual orientation, and alcohol use, all areas that had been suggested as potential matching criteria by students, without actually talking about these topics outright. A student could share their race by simply providing a description of their hair and eye color “blonde hair, blue eyes” that appeared to be a simple description but one that could be read with greater depth.

Some users also referred users of the program to go to their personal webpage or other site that contained greater information about themselves that was out of the control or review of the housing office. Whether this was the result of a desire to avoid repeating something they had already had available or the desire to move the discussion out of the institution’s reach is not

known, but it does provide the housing office with some insight into how students are sharing information. A number of students also suggested adding features such as photographs that would also allow users to make judgments on roommates without having to actually interact with those individuals. This language allowed students to once again avoid any potentially uncomfortable discussions or confrontations by allowing them to make decisions about potential roommates without any outside scrutiny of their decisions.

This movement from simple to complex issues supports Garb's (1978) finding that there is a continuum for students in the development of their roommate relationship. Students are able to establish basic elements of agreement on simple issues that require little personal commitment that must be obtained before they move on to more complex issues of compatibility as they move to having shared values and concerns (Garb). This range of acceptability for a roommate allows students the ability to control how committed they will be to the roommate by choosing the depth of involvement that they are willing to engage. This allows for understanding why students with different levels of involvement with their roommate can share similar degrees of satisfaction when we realize that students are finding satisfaction with the quality of the relationship that they have decided is appropriate for them.

A critical element of this entire process is the fact that student affairs and housing professionals who are trained to assist students are severely limited in their ability to interact with and assist students at this stage of the process. In the past, students would begin the roommate process when they arrived on campus for the first time. Although some students would come to college already knowing their roommate, many would not and the interventions and support of the residence life professional and para-professional staff had a definitive role in helping students adjust both to higher education and their new living environment. With a tool

such as the online roommate searching program, students are beginning to interact outside the sphere of influence of the people and resources that are best situated to assist them. While this program did provide suggested conversation topics, questions to ask, and issues for students to consider, depending upon the students to not only read through the online suggestions before beginning the process and having the necessary maturity to independently share their concerns with their peers is probably not realistic.

Housing professionals who choose to provide an online program to their students need to address how they will be supporting these students in their roommate explorations when these individuals are not on their campus and, in many cases may not have even committed to attending the institution. Designing appropriate tools that recognize students' preferred learning styles and methods may help reach this goal, but well-planned and intentional program interventions are necessary if the support necessary for these students is going to be provided.

#### *Recommendations for Future Research*

This study provided support to challenge the notion that students who choose as their roommates those with whom they have a previous relationship is detrimental to both their satisfaction and success at college. While students who used an online roommate searching program were more successful on a number of measures than those students who were randomly assigned their roommate, they were not as successful as the students who had already established a relationship with their roommate on any measure. This suggests that when students have the ability to develop a relationship with their roommate, whatever the method they use to select them, and they have the ability to control the ultimate decision of whether to live with that person, they tend to select a roommate who will help them to be successful in college.

Several factors were not considered for this study or arose over the course of the study that future research could attempt to answer. No information on the ethnicity of the participants was collected by the survey instrument. Do different ethnic groups have different results on any of these measures? Does a particular ethnic group realize a greater or lesser benefit from using the online program? In addition to these differences, how does using the online program impact the racial composition of the roommate pairs? Do students who use the program in fact self-segregate based on race as feared by Hoover (2002)? If so, how are students accomplishing this segregation when no ethnic information is included in the questions on the student's profile for the online program? What are the demographics of the persons selected by students to be their roommate? The question of ethnicity provides the opportunity for other avenues of research in the development of student relationships and community.

Another area of potential research is what are the long term impacts and effects associated with the availability of such a tool for students? As students who used the program share their experiences with friends, family, and others who are not yet in college, how will their success or failure with the system affect future users? After the initial newness wears off of the program, will it be less effective to students or will it be less threatening to students and thereby more effective?

Exploring how the online program impacts students at different institutional types and sizes is another avenue of potential research. The institution studied was a large, research intensive college with a large first-year class. Smaller institutions or ones with a specific academic focus, such as a technology school, may have different results, benefits, and issues associated with the roommate process and the concerns of their students.

Persistence in this study was examined as simply whether or not the student was still living with their original roommate without regard for the reasons behind any potential changes. Additional research into why students change roommates would be helpful in increasing understanding of the development of roommate relationships. Are students changing to get out of an unsatisfactory relationship, are they changing to get into one that they perceive as being better than their current, even satisfactory one, or are changes happening that are not impacted by the quality of the relationship such as transferring to another institution, study abroad participation, or other reasons? More insight into this portion of the roommate relationship equation would help housing staff to prepare support programs and services that would assist students making different kinds of transitions.

Finally, additional research would be useful on how involvement with an online program such as the one used here impacts a student's decision to attend a specific institution. If a student begins developing friendships and relationships with potential classmates before they have made their decision to enroll, how does it affect their school selection process? If there is an effect, what is that effect and will institutions need to modify their admissions' planning to compensate for the effects of this early community building.

### *Summary*

Technology has opened the door to a wide range of new services and programs for students and Student Affairs. This study shows that a part of the college process, having a roommate, significantly affects a student in their overall success and satisfaction with the college experience and consequently, with the institution. Offering an online roommate searching program provides clear benefits to the students who use it as well as to the institution itself in its impact on the satisfaction of their customers, the persistence and retention of students at the



institution, and the administrative work responsibilities associated with dissatisfied roommate pairs.

The decision for housing professionals is if the difference in academic performance, satisfaction, persistence, and the ability to involve students in the assignments process in a more satisfactory manner will be worth the investment of resources in the creation and maintenance of this kind of program. While institutions will have to make this determination individually, the curricular and co-curricular benefits achieved through offering this program indicates that this is a program that provides tangible benefit to students in a manner that will also generate satisfaction with the housing office for providing it. Garb informed housing professionals that the assignments process was “the single most significant educational program conducted through housing (1978, p.24). If so, every tool that impacts the assignments process must be fully examined and those that produce educational benefits to the students should be pursued fully by housing offices.

This issue has received a great deal of attention recently by the media and the public (Emerson, 2003; Rangus, 2003; and Reeves & Jamieson, 2003) and that interest will continue to grow as incoming students gain more familiarity with the potential offered by computers and the World Wide Web. Institutions must decide if they are going to be meeting the needs and preferences of students, both those today and those tomorrow, or if they will continue to hold to outdated systems that do not serve the best interests of their students. In the marketplace of higher education, competition has changed how institutions approach their relationships with students and if this tool is valued highly enough by students, it could provide a concrete example of the evidence that an institution cares not only about the needs and concerns of their students beginning their college experience and, but also about the students themselves.

## REFERENCES

- Astin, A. (1993). *What matters in college: Four critical years revisited*. San Francisco: Jossey-Bass.
- Brogdin, R. C. & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theory and methods*. Boston: Allen and Bacon.
- Carey, J.C., Hamilton, D.L., & Shankline, G. (1986). Development of an instrument to measure rapport between college roommates. *Journal of College Student Personnel*, 27, 269-273.
- Cassady, J. C. (2001) Self-Reported GPA and SAT scores. *ERIC Digest* ERICRIE0 20010601. (ERIC Number ED458216)
- Coleman, J. K. & Cooper, D. L. (2005). *The effect of self-selecting roommates in university housing*. Unpublished manuscript, University of Georgia.
- Dillman, D.A., Tortora, R. D., & Bowker, D. (1999). Principles for Constructing Web Surveys
- Emerson, B. (8/25/03). Web service matches college roommates based on compatibility, *Atlanta Journal Constitution*.
- Fincham, F. D., Beach, S. R., & Baucom, D. H. (1987). Attribution processes in distressed and non-distressed couples: IV. Self-partner attribution differences. *Journal of Personality and Social Psychology*, 52, 739-748.
- Försterling, F. (2001). *Attribution: An introduction to theories, research, and applications*. New York: Psychology Press.
- Fuller, B.E., & Hall, F.J. (1996). Differences in personality type and roommate compatibility as predictors of roommate conflict. *Journal of College Student Personnel*, 37(5), 510-518.

- Galicki, S. J., & McEwen, M.K. (1989). The relationship of residence to retention of black and white undergraduate students at a predominantly white university. *Journal of College Student Development, 30*, 389-394.
- Garb, E. (1978). Roommate compatibility: A theoretical model, *Journal of College and University Student Housing, 8*(1), 24-27.
- Hoover, E. (2002). Self selection. *Chronicle of Higher Education, 9/20/2002, 49*(4), A35.
- Jones, L.M., McCaa, B.B., & Martecchini, C.A. (1980). Roommate satisfaction as a function of similarity. *Journal of College Student Personnel, 21*, 229-234.
- Lapidus, J., Green, S.K., & Baruh, E. (1985). Factors related to roommate compatibility in the residence hall – a review. *Journal of College Student Personnel, 26*(5), 420-434.
- National Center for Educational Statistics (NCES) (2005), Rates of Computer and Internet use by children in nursery school and students in kindergarten through twelfth grade: 2003, *Issue Brief*, June, 2005. Retrieved from <http://nces.ed.gov/pubs2005/2005111.pdf>, June 7, 2005.
- Newburger, E. (2001). Home computers and internet use in the United States: August 2000, U.S. Department of Commerce, U.S. Census Bureau, Issued September 2001. Retrieved from <http://www.census.gov/prod/2001pubs/p23-207.pdf>, June 7, 2005.
- Newton, F. B. (2000). The New Student. *About Campus, 5* (5), 8-15.
- Nudd, T. R. (1965). Satisfied and dissatisfied college roommates. *Journal of College Student Personnel, 6*, 161-164.
- Oblinger, D. (2003). Boomers Gen-Xers, and Millennials: Understanding the new students. *Educause Review, 38* (4), 36-45.

- Pace, T. (1970). Roommate dissatisfaction in residence halls. *Journal of College Student Personnel, 11*, 144-147.
- Pascarella, E. T. & Terenzini, P. T. (1991). *How college affects students*. San Francisco: Jossey-Bass.
- Perkins, K. A. (1977). The effect of value similarity on satisfaction with college residence hall living groups. *Journal of College Student Personnel, 18*, 491-495.
- Pierce, R. A. (1970). Roommate Satisfaction as a function of need similarity. *Journal of College Student Personnel, 2*, 355-358.
- Phelps, R.E., Altshul, D.B., Wisenbaker, J.M., Day, J.F., Cooper, D., and Potter, C.G. (1998). Roommate satisfaction and ethnic identity in mixed-race and white university roommate dyads. *Journal of College Student Development, 39*(2), 194-203.
- Rangus, E., (9/8/03). WebRoomz in national news, *Emory Report*
- Reeves, M. & Jamieson, B., (8/30/03). Cyber roommates: Colleges adopt online matching service so freshmen can pick roomie, *ABC News*. Retrieved 11/15/03 from ABC News.com
- Shipton, W. C. & Schuh, J. H. (1982). Counseling problems encountered by resident assistants: A longitudinal study. *Journal of College Student Personnel, 23*, 246-251.
- Stanley, D., Werring, C., & Carey, J.C. (1988). Level of rapport and frequency of change in self-selected and randomly assigned roommate pairs. *Journal of College and University Student Housing, 18*(2), 21-24.
- Thompson, S. C. & Kelley, H. H. (1981). Judgments of responsibility for activities in close relationships. *Journal of Personality & Social Psychology, 41*, 469-477.

- Tattershall, R. (2003, October). Using bulletin boards to match roommates for single student apartments. *ACUHO-I Talking Stick*, 14-15.
- Upcraft, M. L. & Schuh, J. H. (1996). *Assessment in student affairs: A guide for practitioners*. San Francisco: Jossey Bass.
- Waldo, M., & Fuhriman, A. (1981). Roommate relationships, communication skills, and psychological adjustment in residence halls. *Journal of College and University Student Housing*, 11(1), 31-35.
- Waldo, M. (1989). Primary Prevention in University Residence Halls: Paraprofessional-led relationship enhancement groups for college roommates. *Journal of Counseling and Development*, Vol. 67, April 1989, p.465-471
- Wiener, B., Russell, D. & Lerman, D. (1979). The cognition-emotion process in achievement-related contexts. *Journal of Personality and Social Psychology*, 37, 1211-1220.
- Winston, R. B. & Yaranovich, M.F. (1994). Quality of roommate relationships: Development of the Roommate Relationship Inventory. *Journal of College and University Student Housing*, 24, 6-11.

## APPENDICES

## Appendix A

*Email Communication Number 1*

Subject: Student Input requested

Dear student,

This is an email to let you know you will be asked to participate in a study about your satisfaction with your roommate. This survey should take no more than 5-6 minutes to complete and will be used to determine your satisfaction with the housing assignments process for first year students. You will be receiving an email within the next week with a link to the survey. You will be asked to answer the questions about the person who you were assigned to room with on the first day the halls opened. If you have changed roommates since then, please complete the survey using that person as a reference.

The information you provide will be shared with your institution's housing office, after it has been aggregated and de-identified, to give them the opportunity to use the information you provide to evaluate their services.

All questions about the survey can be directed to the researchers and their contact information is listed below. Jon Coleman can be reached for questions at (706) 542-1796 or via email at [jkcolema@uga.edu](mailto:jkcolema@uga.edu). Dr. Diane Cooper can be reached for questions at (706) 542-1812 or via email at [dlcooper@coe.uga.edu](mailto:dlcooper@coe.uga.edu).

Thank you again for your time.

## Appendix B

*Email Communication Number 2*

Subject: Student Input requested

Dear student,

This is an email to ask you to participate in a research study about your satisfaction with your roommate. This survey should take no more than 5-6 minutes to complete and will be used to determine your satisfaction with the housing assignments process for first year students. Please click on the link below to take this survey. All questions about your roommate should be answered about the person who you were assigned with on the first day the halls opened. If you have changed roommates since then, please refer back to that person to answer the questions. This study is being conducted by Jon Coleman, a doctoral student at the University of Georgia.

The information you provide will be shared with your institution's housing office, after it has been aggregated and de-identified, to give them the opportunity to use the information you provide to evaluate their services.

All questions about the survey can be directed to the researchers and their contact information is contained on the consent page of the survey.

After reading the online consent form, please enter the password "housing" at the end of the consent to indicate your agreement to participate in the survey.

Thank you again for participating and for your time.

[LINK]



## Appendix C

*Email Communication Number 3*

Subject: Student Input requested

Dear student,

Last week you were sent an email about a survey that is being conducted about roommate matching. If you have already completed this survey, thank you. If not, you still have the opportunity to share your thoughts and participate in this research study.

Once again, to indicate your agreement to participate in the study, enter the password “housing” at the bottom of the online consent to take the survey.

Thank you again for participating and for your time.

[LINK]

## Appendix D

*Online Consent Form*

Dear Student,

A research study, which may be published, is being conducted on the relationships of roommates in university housing. This study, A Study of the Effect of Self Selecting Roommates in University Housing, is being conducted at the University of Georgia by Jon Coleman, a doctoral student in the Department of Counseling and Human Development Services at The University of Georgia, and Dr. Diane Cooper, a Professor in the Department of Counseling and Human Development Services at The University of Georgia. Jon Coleman can be reached for questions at (706) 542-1796 or via email at [jkcolema@uga.edu](mailto:jkcolema@uga.edu). Dr. Diane Cooper can be reached for questions at (706) 542-1812 or via email at [dlcooper@coe.uga.edu](mailto:dlcooper@coe.uga.edu).

The purpose of this research study is to determine how the method of roommate selection affects student satisfaction with their roommate as well as any academic effects that it may have for the student.

Participation in this survey is voluntary and confidential. The web site and its associated server have been secured for privacy. However, internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to the internet technology itself. However, once the completed survey (or email) is received by the investigator standard confidentiality procedures will be employed by keeping all data in a secure location. The researcher will not receive any identifiable information with the electronic data from completed surveys. This information may be obtained by court order.

We estimate that the survey will take 5-6 minutes to complete. Students who do not wish to fill out the survey online, may print a copy of the survey, fill it out, and mail it to: Jon Coleman, UGA Housing Office, Russell Hall, University of Georgia, Athens, GA 30609.

You may choose to skip any item of the survey; you may stop taking the survey at any time; or you may withdraw your participation in this study at any time without giving any reason and without penalty. Students can withdraw from the survey by either not clicking the submit button at the end of the survey or by closing the browser before clicking the submit button. The survey data will be permanently kept by the researcher for research purposes only. The computer software that will be used to manipulate the data for this project eliminates identifying information from the data.

If you understand and agree to the terms of this form, please affirm your consent by entering the PASSWORD in the box at the bottom of this page. At this point you will gain access to the survey. [For the survey password, see the e-mail sent to you which invited you to participate in the study.] If you have any questions, do not hesitate to ask now or at a later date. Jon Coleman can be reached for questions at (706) 542-1796 or via email at [jkcolema@uga.edu](mailto:jkcolema@uga.edu).

Sincerely,  
Jon Coleman

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, Human Subjects Office, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address [IRB@uga.edu](mailto:IRB@uga.edu).

## Appendix E

*Online Survey***Roommate Satisfaction Survey**

Dear Student,

Thank you for participating in this research study. Please remember, all questions about your roommate refer to the person that you were living with on the first day of move in for the Fall Semester, NOT your current roommate (if different).

For questions about this survey, and it's results, please contact Jon Coleman via telephone (706) 542-1796, or email [jkcolema@uga.edu](mailto:jkcolema@uga.edu).

Contact Office of Assessment at (706) 542-2395 or email [stulife@uga.edu](mailto:stulife@uga.edu), if you have problems submitting the survey electronically. If you need the survey in an alternate format please contact the researcher.

1. Please indicate your gender.

- Male
- Female

2. Please indicate the method that most accurately describes how your initial roommate was selected.

- Randomly assigned by housing office
- Knew my roommate prior to applying to college and specifically requested them (not a relative)
- Related to your roommate
- Met at a University sponsored function (for example: orientation)
- Used the online roommate matching program provided by the housing office
- Other

3. Are you still living with the person you were living with on the first day of the Fall Semester?

Yes

No

4. What was your Fall Semester GPA (Grade Point Average - on a four point scale 0.00-4.00)?

GPA

5. How many credit hours did you complete in the Fall Semester?

Hours:

6. How many credit hours are you currently enrolled in for the Spring Semester?

Hours:

7. Would you live with this person again?

Yes

No

## Section 2. Roommate Relationship

|  | Strongly Disagree        | Disagree                 | Agree                    | Strongly Agree           |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 8. When my roommate has personal problems or is upset, she/he knows that I am willing to listen. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. My roommate's outside interests complement our relationship.                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. My roommate and I have worked together to reach common goals.                                | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. I like the way my roommate and I have our room decorated/arranged.                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. My roommate is willing to help me with my studies.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. My roommate controls his/her habits or idiosyncrasies that bother me.                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. I would describe my relationship   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

|   |                          |                          |                          |                          |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| with my roommate as "cold or distant."  |                          |                          |                          |                          |
| 15. When people on the hall criticize my roommate, I stand up for him/her.                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. My roommate and I have a clear understanding about what bothers or irritates the other.                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. I enjoy being in the room at the same time as my roommate.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. My roommate has an easy time making friends.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. My roommate is selfish.   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. I can talk to my roommate about personal concerns when I need/want to.                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. My roommate is a close friend.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22. My roommate allows her/his friends to visit at inappropriate times.                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 23. My roommate and I often do things together outside the residence hall.                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 24. My roommate is not sensitive to my feelings.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 25. My roommate has many qualities that I would like to emulate.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 26. I enjoy talking with my roommate about the day's events.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 27. My roommate and I have different basic values.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 28. When others on the hall criticize me, my roommate stands up for me.                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 29. My roommate and I share a lot of "private jokes."   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 30. My roommate can determine when I need to be alone and when I need to talk, without my having to say so. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 31. My roommate helps me work out problems when I need to.  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



