# THE EFFECTS OF 'CRUCIAL CONVERSATIONS' TRAINING ON 

 ROOMMATE SATISFACTION AND ROOMMATE FRIENDSHIPA Thesis<br>Submitted to the Graduate Faculty of the<br>North Dakota State University of Agriculture and Applied Science<br>By<br>Mikal Christina Kenfield<br>In Partial Fulfillment of the Requirements<br>for the Degree of<br>MASTER OF SCIENCE<br>Major Program:<br>Educational Leadership<br>April 2010<br>Fargo, North Dakota

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Title
The Effects of "Critical Conversations" Training on

Roommate Satisfaction and Roommate Friendship

By

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The Supervisory Committee certifies that this disquisition complies with North Dakota State University's regulations and meets the accepted standards for the degree of

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#### Abstract

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This study examined the impact of a communication skills workshop called 'Crucial Conversations' on the satisfaction and friendship levels of first-year roommate dyads. Roommate satisfaction and roommate friendship were measured for students who had attended the workshop with their roommates; for students who attended, but their roommate did not; for students who did not attend, but their roommate did; and for roommate pairs in which neither student attended. Overall, the students who attended this workshop with their roommates reported higher levels of roommate satisfaction and roommate friendship. Suggestions for further research were also offered.

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## CHAPTER ONE

## INTRODUCTION

## Statement of the Problem

A major role of residence life staff members on campus is that of assisting incoming freshmen with their transition into college life. In many cases, a large part of this transition includes learning how to live in harmony with a roommate. Increasingly, the new students who arrive at college have never had to share a bedroom with a sibling, so there is often much anxiety at the thought of sharing an entire living space with a stranger.

This research, investigated the efficacy of a communication skills workshop called "Crucial Conversations", which was conducted on the campus of a small, private institution affiliated with the Evangelical Lutheran Church in America. Located in a community of approximately 150,000 residents, the college has a student population of approximately 2,800 undergraduates. Students are required to live on campus their first and second years, and a total of approximately 1,680 students resided in on-campus housing during the 20092010 academic year. Residence life staff members are trained at this college in methods to mediate roommate conflict when it arises, but it would be optimal to provide more preventative training directly to residents regarding roommate conflict and communication.

More specifically, it would be beneficial to all those involved, such as residents, resident assistants and professional residence life staff, if Crucial Conversations, a current session already used in this institution's LeadNow ${ }^{\mathrm{TM}}$ leadership development program, could be utilized to teach these necessary conflict resolution skills. Providing incoming
students with tools to effectively communicate with their roommates could ultimately ease their transition into college.

## Purpose of the Study

The purpose of this quantitative study is to relate student attendance at the Crucial Conversations course to levels of roommate satisfaction and roommate friendship in freshmen roommate dyads.

## Null Hypothesis

1. Students who attend the Crucial Conversations course will not report higher levels of roommate satisfaction than roommates who do not attend the course.
2. Students who attend the Crucial Conversations course will not report higher levels of roommate friendship than roommates who do not attend the course.

## Importance of the Study

By completing this research, more information will be gained about the use of this LeadNow ${ }^{\text {TM }}$ session as a proactive method to decrease roommate conflict and dissatisfaction. If attendance at the course is shown to relate with higher levels of satisfaction and friendship, then perhaps the course could be incorporated into the orientation that all incoming freshmen receive upon their arrival to campus. Additionally, if found to be effective, staff members could incorporate methods taught in the session as they work with residents on their floors who are experiencing dissatisfaction with their roommate.

Negative roommate experiences have been shown to be disruptive to students' successful transition to college, (Lovejoy, Perkins, \& Collins, 1995), as well as cause interference with students' academic progress (Fuller \& Hall, 1996). If residence life staff can help their residents have a more positive experience within the residence halls, they are more likely to have a positive college experience as a whole, and more likely to persist at the institution.

## Limitations of the Study

Clearly, there are some limitations to the study because the research was conducted only on the campus of a small, private college in the Midwest with a relatively homogeneous student body. Due to the limited scope of the study this research may not be generalizable to other types of institutions, or institutions in other parts of the country.

## CHAPTER TWO

## REVIEW OF THE LITERATURE

## Introduction

The purpose of this quantitative study is to relate student attendance at the Crucial Conversations course to levels of roommate satisfaction and friendship in freshmen roommate dyads. More specifically, do students who attend this course have higher levels of roommate satisfaction and roommate friendship than roommates who do not attend?

## Impact of Roommate Relationship

## Roommate as Part of Transition to College

Entering college is a time of great transition for many first-year students. During this time of transition, students may experience significant levels of anxiety, psychological distress and even depression (Gerdes \& Mallinckrodt, 1994). In fact, this transition can be likened to culture-shock (Zeller \& Mosier, 1993) and can be just as disorienting. Rather than being surrounded by a foreign culture or language, students are presented with the often-new challenge of sharing their personal space with a stranger. It is this culture shock of sharing a residence hall room with a new roommate and forging new relationships that can add more stress to a situation already full of anxiety (Hicks \& Heastie, 2008).

## Impact on College Experience as a Whole

The impact of how a student's roommate relationship can impact their overall college experience has been explored by a number of studies. Pace (1970) surveyed students living on campus at a number of universities, and compared those who reported the most and least dissatisfaction with their roommate pairing to their grade point average
and their University Environment Scales. Results indicated that a student's dissatisfaction with his or her roommate may be related to both lower academic achievement and negative perception of the overall college experience.

Additionally, poor roommate relationships have been related to overall student dissatisfaction with their entire living conditions (Perkins, 1977), delayed emotional adjustment to the college lifestyle (Waldo \& Fuhriman, 1981), and lower rates of retention among first year students (Baker \& Siryk, 1980; Waldo, 1984). At a time when competition for students is increasing, the issue of student retention and persistence is important on most campuses across the country. Because of this, improving retention rates is a key factor that college administrators must address.

## Roommate Similarity and Compatibility

Previous studies (Perkins, 1977; Lapidus, Green \& Baruh, 1985; Winston \& Yaranovich, 1994) have investigated the relationship between roommate similarity and roommate compatibility or satisfaction, basing their hypotheses, in part, on the Uncertainty Reduction Theory of Berger and Calabrese (1975). A variety of types of roommate similarity have been studied to determine if roommates who share similar traits are more likely to be satisfied with their roommate relationship. Specifically, research has been conducted on similarity of living habits, personality and background.

Compatibility based on living habits. Many institutions match incoming students based on students' stated preferences for a variety of living habits, such as level of cleanliness, type of environment needed for studying or sleeping patterns. Research by Jackson (1985) indicates that these habits are the ones most likely to cause conflict between roommates. Ladipus, Green, \& Baruth (1985) found that those students who shared more
similarities with their roommates in these personal habits reported higher levels of satisfaction. Winston and Yaranovich (1995) found similar correlation in their research and developed the Roommate Relationship Inventory (RRI) as a way to survey students regarding these habits. Beil and Green (1986) found that roommates matched on shared bedtimes and study habits perceived themselves as more compatible then those who were randomly paired. Many institutions continue to match incoming students with their roommate using these types of shared personal behaviors.

Although this research indicated that similar habits between roommates may be related to roommate satisfaction, the research design in both was correlational and did not show causation. Additionally, many students alter their habits through the course of their first year at college as they begin to transition from routines they may have followed while living at home to their new, 'adult' routines. Focusing on changing students' living habits to mediate conflict seems less realistic than focusing on communication skills.

Compatibility based on personality. Previous research on the relationship between roommates' shared personality traits and their compatibility has had mixed results. Wetzel, Vasu and Schwartz (1979) conducted research that supported their hypothesis that individuals would be "attracted to and compatible with people who are similar to their selfconcepts" (p. 432). However, research by Carey, Hamilton and Shanklin (1986) indicated that similar personality traits and relational satisfaction were not significantly related. However, this study only included male roommate pairs and the researchers suggested that student gender may impact the way personality trait similarity affects relational satisfaction. Cary, Hamilton and Shanklin (1986) indicated that male students may be less likely to place importance on roommate similarity when determining their satisfaction with
the roommate relationship. A study by Heckert, Mueller, Hannah, Jones, Bibbs and Bergman (1999) had similar findings that personality traits and relational satisfaction were not significantly related. However, this research did indicate that relational satisfaction may be related in the case of roommates who share dysfunctional personal traits. Carli, Ganley and Pierce-Otay (1991) found some correlation between shared personality traits and relational compatibility, but noted that this may be because shared personality traits might lead "roommates to engage in similar activities and to participate in them together", which increases roommate satisfaction (p. 424).

Compatibility based on similar background. Research has also been conducted to determine if roommates who share similar demographic backgrounds report higher levels of satisfaction than those pairs with dissimilar backgrounds. Hallisey, Harren, \& Caple (1980) found that this type of roommate matching system had varied success, but that demographics alone weren't enough to determine if a roommate pair would be compatible. Overall, research indicates that personal background as a predictor of roommates' satisfaction has weak or inconsistent correlations (Lapidus, Green \& Baruh, 1985).

## Communication Skills and Resolving Conflict

As with all relationships, roommates are likely to encounter conflict at some point in their experience living together, even if they share similar living habits, personality traits or backgrounds. Certain skills are necessary for students to resolve these conflicts in order to maintain a positive relationship with their roommates. Specifically, the quality of interpersonal relationships, like that of a roommate relationship, is related to the effective use of communication skills (Guerney, 1977). Waldo and Fuhriman (1981) conducted research that indicated roommates are more likely to be satisfied with their relationship if
they openly communicate with each other and understand the expectations they have of one another. Additionally, Waldo (1984) correlated strong verbal and listening skills to the level of communication between roommates, as well as to their level of satisfaction.

In order to discuss roommate conflict, it is important to have an understanding of how the term is defined for this research. A good operational definition of conflict was put forth by Donahue and Kolt (1992) who define conflict as occurring when "interdependent people express (manifest or latent) differences in satisfying their individual needs or interests, and they experience interference from each other in accomplishing these goals" (p. 4). In the context of roommate conflict, students experiencing roommate conflict feel that their roommate is acting in a way that is negatively impacting their own experience in some manner.

For students to effectively navigate conflict, they must have the appropriate communication skills. Sillars (1980) created a framework for understanding the three major ways college students communicate with their peers regarding conflict. These three types of conflict communication include passive-indirect, distributive, and integrative strategies.

The passive-indirect method of conflict includes finding ways to avoid, suppress or ignore the conflict that is occurring. In this method, any communication that is used is often vague or indirect. Students who utilize this method may believe that the conflict will somehow resolve itself with the passage of time. The distributive method to conflict communication is a more direct method, but in this style one roommate takes control of the situation and forces the other roommate to surrender or withdraw. In this method, there is no compromise and although one roommate may be satisfied with the results, the other roommate is forced to give in to the will of the other.

The final method is called the integrative strategy. In this method of conflict communication, the individual directly confronts the other roommate but does so while maintaining neutrality and seeking compromise. In this way, both roommates maintain a positive evaluation of the other, without feeling attacked or bullied. Sillars' (1980) research indicated that this integrative strategy was more likely to result in a successful conflict resolution than the other two strategies. Additionally, more students viewed this method as an effective way to deal with conflict than with the other two methods. However, Sillars noted that this method, although the most effective, was used the least by the college students studied.

Sillars and Parry (1982) conducted further research to investigate why students used the integrative strategy so seldom. This research indicated that as stress levels rise, the method of conflict resolution typically shifts from the more effective integrative strategies to the less effective passive-indirect and distributive methods. This theory is based on the concept of conceptual complexity, which states that as individuals become increasingly stressed, they lose the ability to engage in integrated or complex thought processes (Schroder, Driver and Struefert, 1967).

Research by Martin and Anderson (1995) and Laditka (2006) examined the correlation between roommate communication satisfaction and trait verbal aggressiveness. Verbal aggressiveness is defined as the "tendency to attack the self-concept of another person in face-to-face encounters instead of, or in addition to, attacks on another's argument" (Laditka, 2006, p. 14). Research by both Martin and Anderson (1995) and Laditka (2006) indicated that significant, negative correlation exists between roommate communication satisfaction and verbal aggressiveness. Specifically, higher levels of
satisfaction and affinity were reported when both roommates measured low in verbal aggressiveness. Laditka's (2006) research also extends previous research by Waldo (1984) that correlated roommate communication and roommate affinity: the more satisfied roommates are with their communication, the more their affinity for one another increases.

## Measuring Roommate Satisfaction

Lovejoy et al (1995) performed a quantitative, correlational study that was a partial replication and extension of the study by Fleming, Perkins, Lovejoy, and Collins (1991), using a larger sample of student roommates. The validity of the Social Satisfaction Questionnaire (SSQ) for predicting roommate breakups was reexamined and compared to the predictive validity of other indices of roommate compatibility. The study included three research questions:

1. Does the "SSQ provide better prediction of subsequent roommate breakups than other more readily obtainable and cost-efficient information (e.g., demographic match or prior acquaintance)?"
2. What is the "predictive validity of the single item on the SSQ that addresses roommate satisfaction most directly?"
3. What is the association of the SSQ "with another indicator of the quality of the roommate relationship?"

Lovejoy et al. (1995) echoed the stance that dissatisfaction with a student's roommate can have a very negative impact on a student's college experience. Specifically, if a relatively easy way to determine dissatisfaction can be established, then early interventions are possible and could possibly improve the student's experience. As indicated in this study, the sample size was relatively homogeneous in their ethnic
background and all students attended the same institutions. Because of this, the results may not be generalizable to other groups or institutions.

Lovejoy et al. (1995) cited literature that discussed the impact roommate satisfaction has on students' perceived quality of the college experience, student academic performance (Pace, 1970), and better psychological adjustment (Waldo, 1984). Lovejoy et al. (1995) also noted that other research has indicated that roommates who are similar in their level of social skills and maturity report higher levels of satisfaction.

The study conducted by Lovejoy et al. (1995) included data gathered from all students living in the undergraduate residence halls of a medium-sized state university. A total of 1,498 randomly selected students were contacted approximately one month after the beginning of the academic year. These students were invited to respond to a survey about roommate relationships. A total of 649 (43\%) usable surveys were returned in September. These students were then contacted two more times during November and January with follow-up surveys. Students responding filled out a demographic questionnaire and the SSQ. After analyzing the data, Lovejoy et al. (1995) concluded that the SSQ is more predictive of roommate breakups than other demographic information and that "findings from the current study also provide some support for using the single-item satisfaction index from the SSQ for screening purposes" (p. 601).

## Measuring Roommate Affinity/Friendship

Wiltz and Reiss (2003) conducted research that intended to create and test a measure that can reliably differentiate between compatible and incompatible roommates. The specific scale that was designed and tested is the "Roommate Friendship Scale" (RFS). The entire scale includes 28 items, and was initially used for roommate matching for
individuals with mental retardation and/or developmental disabilities. However, further research has broadened its use to the general population, and college roommate situations. One of the sub-scales of the 28 item RFS is a cooperation sub-scale. After analyzing the data, Wiltz and Reiss (2003) noted that this cooperation sub-set was most effective at predicting if roommate pairs would be compatible or incompatible. In other words, if roommates found each other helpful, supportive and able to resolve conflict together, they were more likely to have a satisfied pairing.

## CHAPTER THREE

## METHODOLOGY AND PROCEDURES

## Introduction

The purpose of this quantitative study is to relate student attendance at the Crucial Conversations course to levels of roommate satisfaction and friendship in freshman roommate dyads.

## Null Hypothesis

1. Students who attend the Crucial Conversations course will not report higher levels of roommate satisfaction than roommates who do not attend the course.
2. Students who attend the Crucial Conversations course will not report higher levels of roommate friendship than roommates who do not attend the course.

## Participants

The participants in this study were selected from four groups. Because the software used to create and distribute the survey used the terminology of 'panel' instead of 'group', the word 'panel' is used in this research. The first group, identified as Panel One, included pairs of roommates who had both attended the Crucial Conversations course at any point during the 2009-2010 academic year. The second group, identified as Panel Two, included first-year students who had attended the Crucial Conversations course, but whose roommates had not attended. The third group, Panel Three, consisted of the roommates of the students in Panel Two. This group of students had not attended Crucial Conversations, but their roommates had. The fourth group, Panel Four, included randomly selected firstyear roommate pairs in which neither roommate had attended Crucial Conversations.

A total of 284 students received an invitation to the survey. Panel One had 55 members, Panel Two had 51, Panel Three had 160 and Panel Four had 18. Although Panel Two consisted of the roommates of the members of Panel Two, four of these roommates were not first-year students so they were not included in the panel.

## Data Collection

## Instrument

The data for this study were collected using an online survey that included two measures. The complete survey can be found in Appendix C. Roommate satisfaction was assessed using a modified version of Fleming, Perkins, Lovejoy and Collins' (1991) Social Satisfaction Questionnaire (SSQ), used with permission. The degree of friendship between the roommate pairs was assessed with a modified version of Wiltz's (2003) Roommate Friendship Scale (RFS), used with permission.

The first section of the modified SSQ included nine items on a 4-point scale. Four of these questions were 'filler' questions that related to students' overall satisfaction with college life, not specifically their roommate relationship. The second section of the modified SSQ asked respondents to indicate the number of times they engage in a particular activity, such as eating meals with their roommate or running errands with their roommate. In this section, six questions related directly to roommate relationships and three were 'filler' questions that related to participation in various campus activities.

The modified RFS included 28 items on a 4-point scale ranging from strongly disagree to strongly agree. The questions all related to the level of friendship between the roommates, and the survey instructions indicated that the student filling out of the survey should do so from their own personal perspective of the roommate relationship. Although
the RFS was designed to measure levels of friendship between roommates, there is a particular subset that previous research by Wilz and Reiss (2003) also indicated roommate satisfaction. This subset is the cooperation subset, and the questions contained in this subset were "My roommate and I help one another out when needed"; "If my roommate and I have a problem, we will work it out on our own"; and "My roommate and I cooperate with one another".

All the items on the SSQ and RFS were coded by three experts on the Crucial Conversations course to indicate which of the items might be significantly impacted, moderately impacted, or not impacted at all by attendance at Crucial Conversations. This coding was done by utilizing the content of Crucial Conversations, as well as the stated learning outcomes of the session.

The following three SSQ survey items were coded as those likely to be significantly impacted by respondents' attendance at Crucial Conversations:

- How well do you feel you get along with your roommate?
- How often do you plan your schedule to avoid your roommate?
- How many times per week do you and your roommate have conflicts or arguments?

The following two RFS survey items were coded as those likely to be significantly impacted by respondents' attendance at Crucial Conversations:

- If my roommate and I have a problem, we work it out on our own.
- If my roommate or I do something that bothers the other, we easily make up. The following three SSQ survey items were coded as those likely to be moderately impacted by respondents' attendance at Crucial Conversations:
- How satisfied are you with the relationship you have with your roommate?
- How satisfied do you think your roommate would say s/he is with your relationship?
- How comfortable do you feel living with your current roommate?

The following eight RFS survey items were coded as those likely to be moderately impacted by respondents' attendance at Crucial Conversations:

- My roommate and I sometimes get into fights.
- My roommate and I act 'cold and distant' toward one another.
- My roommate and I are 'open and honest' with each other.
- My roommate and I show one another respect.
- My roommate and I hold grudges against one another.
- My roommate and I understand each other well.
- My roommate and I cooperate with one another.
- My roommate and I have a lot of interpersonal conflict.


## Reliability

Both of these surveys have been utilized in previous research and the reliability of these instruments has been evaluated for predicting roommate satisfaction and friendship. The original research done on the SSQ by Lovejoy et al. (1995) indicated that there is satisfactory internal consistency in this measure of roommate relationship quality. Additionally, this study showed "strong test-restest reliability coefficients over a 6-week interval of $0.75^{\prime \prime}$ (p 595). Research completed by Stern et al (2007) also employed the SSQ. This study indicated a Cronbach alpha reliability of 0.96 . Wiltz and Reiss's (2003) research, which developed and utilized the RFS, assessed the test-retest reliability by using
a Pearson product-moment correlation that resulted in a correlation of 0.87 . The Cronbach's alpha coefficient was 0.97 . In Stern et al's (2007) research, the RFS was found to have a Chronbach reliability of 0.87 .

## Validity

Lovejoy et al. (1995) indicated a strong validity in the SSQ instrument in their research, noting that "The SSQ composite score has been demonstrated to be predictive of later breakups among college roommates" (p. 595). That is to say, roommates who score themselves as being dissatisfied with their roommate relationship often "break up" with their roommate, which indicates that the instrument is truly measuring satisfaction/dissatisfaction.

The validity of the RFS was studied by Wiltz and Reiss's (2003). In particular, the "mean RFS scores for the Compatible Dyads Group and the Incompatible Dyads Group were compared" and "if roommates in the Compatible Dyads Group scored significantly higher on the RFS than did roommates in the Incompatible Dyads Group, this would provide empirical support that the questionnaire is a valid measure of roommate compatibility" (p. 363). Wiltz and Reiss (2003) found that in this criterion-related validity, the Compatible Dyad Group scored significantly higher on the RFS than the Incompatible Dyads Group, indicating that this instrument is valid.

## Research Design

## Crucial Conversations Background

Throughout the first semester of the 2009-2010 year, many first year students chose to participate in the LeadNow ${ }^{\text {TM }}$ program, which is a voluntary leadership certification program. LeadNow ${ }^{\mathrm{TM}}$ offers students three levels of certification: Personal Perspectives,

Group Perspectives and Global Perspectives. One of the sessions necessary to receive a Personal Perspectives certification is the Crucial Conversations session. Like all sessions in the LeadNow ${ }^{\mathrm{TM}}$ program, the Crucial Conversations session lasts 90 minutes and consists of both lecture and small group discussion as methods of instruction.

In addition to the four regularly scheduled sessions that were advertised campus wide during the Fall 2009 semester, four residence hall staffs hosted the Crucial Conversations session in their own hall and brought residents to it as an educational program. Several presenters were involved in leading the Crucial Conversations session (including the researcher), but all presenters used the same Power Point format and session outline.

Because Crucial Conversations is part of the Personal Perspectives level of certification, the first portion of the course is spent helping participants learn about how they personally react to stress or conflict. Participants took a self-assessment to learn if they tend to rely more on 'fight' or 'flight' characteristics. Participants also discussed reasons why people may avoid having crucial conversations, as well as the negative consequences that can occur from this avoidance.

Then, participants learned a series of useful tools for having these crucial conversations. The presenters shared basic communication skills, such as: open body language, calm tone of voice, avoiding distractions, and acknowledging emotional state of mind. Then the presenters shared the 'S.T.A.T.E.' model of having crucial conversations which includes: State the problem using facts, tell your story, ask questions, talk tentatively and encourage testing. Participants were then asked to practice utilizing this model through role-playing. Finally, participants filled out reflection sheets that asked them to rephrase the
key points shared during this course and how they intend to put this information into practice.

Procedures
Before research begun, permission was obtained from the Institutional Research Board (IRB) at North Dakota State University, as well as from the Department of Residence Life at the institution where the survey was conducted. In the fifth week of second semester, February 2010, the participants were sent an email to their campus email account. The email asked them to participate in a brief online survey about their experience living in the residence halls with a roommate. The message provided information about the study and indicated that participation was voluntary. The participants were informed that the survey was confidential, but not anonymous, because they would need to provide their Student ID number to verify roommate matches and attendance at Crucial Conversations. All participants were 18 year of age. As an incentive, all participants who completely filled out the survey were entered into a drawing to win a $\$ 50$ gift card to the campus bookstore.

The survey was created using Qualtrics survey software and a link to the survey was included in the email message sent to all participants. Once participants clicked on the survey link, they were taken to a page that provided more detailed information about the survey and they then indicated their willingness to participate in the survey by clicking the appropriate response. Respondents then provided basic demographic data, which included: Student ID, age, number of months lived on campus, and number of months lived with their current roommate. They then completed the two modified SSQ and RFS instruments.

Five days after the initial email invitation was sent, participants who had not completed the survey received a reminder email asking them to consider filling out the
survey. Five days after that, those who still had not responded received a second and final reminder. The survey closed completely 14 days after the initial email invitation was sent to participants.

## CHAPTER FOUR

## RESULTS

## Introduction

The purpose of this quantitative study is to relate student attendance at the Crucial Conversations course to levels of roommate satisfaction and friendship in freshmen roommate dyads.

## Profile of the Sample

Electronic surveys were sent to 284 first-year students and 128 usable responses were returned for an overall response rate of $45.1 \%$. Of all respondents, $65.9 \%$ were female ( $n=89$ ), $28.9 \%$ were male $(n=37)$ and $1.6 \%$ chose not to select a gender $(n=2)$. Three survey responses were removed because the individuals chose not to participate. Eight survey responses were removed because they did not complete any of the survey items. These 11 responses were not included in the total of 128 responses returned. Thirteen individual survey items were changed to null because the respondents provided qualitative responses that had no quantitative equivalent, such as 'sometimes' or 'a lot'.

Surveys were sent to four different groups. The first group, identified as Panel One, included pairs of roommates who had both attended Crucial Conversations course at any point during the 2009-2010 academic year. The second group, identified as Panel Two, included first-year students who had attended the Crucial Conversations course, but whose roommates had not attended. The third group, Panel Three, consisted of the roommates of the students in Panel Two. This group of students had not attended Crucial Conversations, but their roommates had. The fourth group, Panel Four, included randomly selected first-
year roommate pairs in which neither roommate had attended Crucial Conversations.
Response rates for each panel are indicated in Table 1.
Table 1. Survey Response Rates By Panel

| Panel (description) | Sent | Returned | Response <br> rate |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| 1 | both respondent and roommate attended | 18 | 13 |
| 2 | respondent attended | 55 | 27 |
| 3 | respondent's roommate attended | 51 | $72.2 \%$ |
| 4 | neither respondent or roommate attended | 160 | 65 |
|  |  |  |  |
| Total | 284 | $45.1 \%$ |  |

Of the respondents, $40.2 \%(n=74)$ were 18 years of age, $28.8 \%(n=53)$ were 19 years of age and $0.5 \%(n=1)$ were 20 years of age. Because roommate relationships may change based on time spent living together, it should be noted that two respondents reported living on campus for only second semester. The other 126 respondents had lived on campus for first semester as well as the beginning of second semester. Three of the respondents had only lived with their current roommate for the beginning of second semester. The other 125 respondents had lived with their current roommate since the beginning of the academic year.

## Roommate Satisfaction Null Hypothesis

1. Students who attend the Crucial Conversations course will not report higher levels of roommate satisfaction than roommates who do not attend the course.
2. Students who attend the Crucial Conversations course will not report higher levels of roommate friendship than roommates who do not attend the course.

The first hypothesis asked whether attendance at Crucial Conversations is related to higher levels of roommate satisfaction. Roommate satisfaction was measured using the modified Social Satisfaction Questionnaire (SSQ), originally developed by Fleming et al (1991). The SSQ consisted of five items using a 4-point Likert scale, as well as six items that allowed open-ended responses, shown in Table 2. Respondents were given guidelines regarding what would be considered an appropriate format for these open-ended responses, which allowed the open ended responses to be analyzed along with the other responses.

The responses to the five 4-point Likert scale items are shown in Tables 3-7. In these tables, the 4-point scales are reduced to just two groups: positive and negative responses.

When either the respondent (Panel Two) or the respondent and roommate attended (Panel One) Crucial Conversations, higher levels of satisfaction with the roommate relationship were reported.

When the respondent and roommate both attended Crucial Conversations (Panel One), or when the respondent and roommate both did not attend Crucial Conversations (Panel Four), higher levels of perceived roommate satisfaction were reported.

When either the respondent (Panel Two) or the respondent and roommate (Panel One) attended Crucial Conversation, higher levels of comfort were reported.

When either the respondent (Panel Two) or the respondent and roommate (Panel One) attended Crucial Conversation, higher levels of cooperation were reported.

When either the respondent (Panel Two) or the respondent and roommate (Panel One) attended Crucial Conversation, avoiding behaviors were reported less frequently.

Table 2. Social Satisfaction Questionnaire (SSQ) Items From the Roommate Survey
Survey Item Response Options
3) How satisfied are you with the relationship you have with your roommate?
$1=$ very dissatisfied, $2=$ dissatisfied,
$3=$ satisfied, $4=$ very satisfied
4) How satisfied do you think you roommate would say would say $s$ /he is with your relationship?
$1=$ very dissatisfied, $2=$ dissatisfied,
$3=$ satisfied, $4=$ very satisfied
7) How comfortable do you feel living with your current roommate?
l = very uncomfortable, $2=$ uncomfortable, $3=$ comfortable, $4=$ very comfortable
8) How well you do feel you get along with your roommate? $1=$ very poorly, 2 = poorly, $3=$ well, $4=$ very well
9) How often do you plan your schedule to avoid your roommate?
$1=$ never, 2 = infrequently,
$3=$ frequently, $4=$ always
10) How many time per week do you eat with your roommate?
12) How many times per week do you go to social activities with your roommate (e.g., movies, parties, etc.)?
14) How many times per week do you study with your roommate?
15) How many times per week do you run errands with your roommate?
17) How many times per week do you and your roommate visit other friends together?
18) How many times per week do you and your roommate have conflicts or arguments?

Table 3. Frequency of Responses by Panel to Survey Item \#3 (How satisfied are you with the relationship you have with your roommate?)

| Panel | $\boldsymbol{n}$ | Very dissatisfied <br> or dissatisfied | Very satisfied <br> or satisfied |
| :--- | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | $0.0 \%$ | $100.0 \%$ |
| 2 respondent attended | 27 | $14.9 \%$ | $85.1 \%$ |
| 3 respondent's roommate attended | 23 | $34.7 \%$ | $65.3 \%$ |
| 4 neither respondent or roommate attended | 65 | $24.6 \%$ | $75.4 \%$ |

Table 4. Frequency of Responses by Panel to Survey Item \#4 (How satisfied do you think your roommate would say $s / h e$ is with your relationship?)

| Panel | $\boldsymbol{n}$ | Very dissatisfied <br> or dissatisfied | Very satisfied <br> or satisfied |
| :--- | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | $0.0 \%$ |  |
| 2 respondent attended | 21 | $14.3 \%$ | $100.0 \%$ |
| r respondent' roommate attended | 19 | $15.8 \%$ | $85.7 \%$ |
| 4 neither respondent or roommate attended | 57 | $8.8 \%$ | $84.2 \%$ |

Table 5. Frequency of Responses by Panel to Survey Item \#7 (How comfortable do you feel living with your current roommate?)

| Panel | $n$ | Very uncomfortable <br> or uncomfortable | Very comfortable <br> or comfortable |
| :--- | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | $0.0 \%$ |  |
| 2 respondent attended | 27 | $14.8 \%$ | $100.0 \%$ |
| 3 respondent's roommate attended | 23 | $21.7 \%$ | $85.2 \%$ |
| 4 neither respondent or roommate attended | 65 | $26.2 \%$ | $78.3 \%$ |

When either the respondent (Panel Two) or the respondent and roommate (Panel One) attended Crucial Conversation, higher levels of cooperation were reported.

When either the respondent (Panel Two) or the respondent and roommate (Panel One) attended Crucial Conversation, avoiding behaviors were reported less frequently.

Table 6. Frequency of Responses by Panel to Survey Item \#8 (How well do you feel you get along with your roommate?)

| Panel | $n$ | Very poorly <br> or poorly | Very well <br> or well |
| :--- | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | $0.0 \%$ | $100.0 \%$ |
| 2 respondent attended | 27 | $14.8 \%$ | $85.2 \%$ |
| 3 respondent's roommate attended | 23 | $26.0 \%$ | $74.0 \%$ |
| 4 neither respondent or roommate attended | 65 | $20.0 \%$ | $80.0 \%$ |

Table 7. Frequency of Responses by Panel to Survey Item \#9 (How often do you plan your schedule to avoid your roommate?)

| Panel | $n$ | Never <br> or infrequently | Always <br> or frequently |
| :--- | :---: | :---: | :---: |
|  | 13 | $100.0 \%$ | $0.0 \%$ |
| 1 both respondent and roommate attended | 27 | $88.9 \%$ | $11.1 \%$ |
| respondent attended | 23 | $78.2 \%$ | $21.8 \%$ |
| 3 respondent's roommate attended | 65 | $78.5 \%$ | $21.5 \%$ |
| 4 neither respondent or roommate attended |  |  |  |

The responses to the six open-ended SSQ items are shown in Tables 8-13. The open-ended responses were grouped together into frequency ranges.

Table 8. Frequency of Responses by Panel to Survey Item \#10 (How many times per week do you eat with your roommate?)

| Panel | $\boldsymbol{n}$ | $\mathbf{0}$ | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $7+$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | $15.4 \%$ | $23.1 \%$ | $7.7 \%$ | $15.4 \%$ | $38.4 \%$ |
| 2 respondent attended | 27 | $48.2 \%$ | $22.2 \%$ | $14.8 \%$ | $7.4 \%$ | $3.7 \%$ |
| 3 respondent's roommate attended | 23 | $30.4 \%$ | $39.0 \%$ | $8.6 \%$ | $8.7 \%$ | $13.0 \%$ |
| 4 neither respondent or roommate attended | 65 | $36.9 \%$ | $21.6 \%$ | $7.6 \%$ | $10.8 \%$ | $23.1 \%$ |

When both the respondent and their roommate attended Crucial Conversations
(Panel One), they reported eating dinner together more frequently than the other respondent panels.

Table 9. Frequency of Responses by Panel to Survey Item \#12 (How many times per week do you attend social activities with your roommate?)

| Panel | $\boldsymbol{n}$ | $\mathbf{0}$ | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $\mathbf{7 +}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1 both respondent and roommate attended | 13 | $7.7 \%$ | $38.5 \%$ | $46.2 \%$ | $7.7 \%$ | $0.0 \%$ |
| 2 respondent attended | 27 | $48.2 \%$ | $29.6 \%$ | $18.5 \%$ | $0.0 \%$ | $3.7 \%$ |
| 3 respondent's roommate attended | 23 | $43.5 \%$ | $34.8 \%$ | $17.3 \%$ | $4.3 \%$ | $0.0 \%$ |
| 4 neither respondent or roommate attended | 65 | $43.1 \%$ | $30.7 \%$ | $20.0 \%$ | $4.6 \%$ | $1.5 \%$ |

When both the respondent and their roommate attended Crucial Conversations (Panel One), they reported attending social activities with their roommate at least once per week more frequently than the other respondent panels.

Table 10. Frequency of Responses by Panel to Survey Item \#14 (How many times per week do you study with your roommate?)

| Panel | $\boldsymbol{n}$ | $\mathbf{0}$ | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $\mathbf{7 +}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |

When both the respondent and their roommate attended Crucial Conversations
(Panel One), they reported studying with their roommate at least once per week more frequently than the other respondent panels.

Table 11. Frequency of Responses by Panel to Survey Item \#15 (How many times per week do you run errands with your roommate?)

| Panel | $\boldsymbol{n}$ | 0 | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $\mathbf{7 +}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |

When both the respondent and their roommate attended Crucial Conversations (Panel One), they reported running errands with their roommate at least once per week more frequently than the other respondent panels.

Table 12. Frequency of Responses by Panel to Survey Item \#17 (How many times per week do you and your roommate visit other friends together?)

| Panel | $\boldsymbol{n}$ | $\mathbf{0}$ | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $\mathbf{7 +}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| 1 both respondent and roommate attended | 13 | $7.7 \%$ | $15.4 \%$ | $7.7 \%$ | $30.8 \%$ | $38.5 \%$ |
| 2 respondent attended | 27 | $55.6 \%$ | $18.5 \%$ | $14.8 \%$ | $7.4 \%$ | $3.7 \%$ |
| 3 respondent's roommate attended | 23 | $43.5 \%$ | $21.7 \%$ | $13.0 \%$ | $0.0 \%$ | $4.3 \%$ |
| 4 neither respondent or roommate attended | 65 | $46.2 \%$ | $29.2 \%$ | $4.6 \%$ | $12.2 \%$ | $7.7 \%$ |

When both the respondent and their roommate attended Crucial Conversations
(Panel One), they reported visiting other friends with their roommate at least once per week more frequently than the other respondent panels.

Table 13. Frequency of Responses by Panel to Survey Item \#18 (How many times per week do you and your roommate have conflicts or arguments?)

| Panel | $\boldsymbol{n}$ | $\mathbf{0}$ | $\mathbf{1 - 2}$ | $\mathbf{3 - 4}$ | $\mathbf{5 - 6}$ | $\mathbf{7 +}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |

When either the respondent attended Crucial Conversations (Panel Two) or the respondent's roommate attended Crucial Conversations (Panel Three), they reported experiencing zero roommate conflicts with their roommate at a higher frequency than the other respondent groups.

## SSQ Items Predicted to be Impacted by Crucial Conversations

The items on the SSQ were coded by three Crucial Conversations experts to indicate which items were likely to be strongly or moderately impacted by participants' attendance at Crucial Conversations. To determine if this relationship exists, means and standard deviations for each panel were calculated for each of the SSQ items that were coded as being either strongly or moderately impacted by attendance at Crucial Conversations as shown in Table 14. Additionally, an ANOVA using a post hoc Tukey HSD was run on each of these items to determine if any of the mean differences among the four panels is statistically significant.

Table 14. SSQ Items Likely to be Strongly or Moderately Impacted by Crucial Conversations

| Survey item | Strongly <br> impacted | Moderately <br> Impacted |
| :--- | :---: | :---: |
| 3) How satisfied are you with the relationship you have with your <br> roommate? | X |  |
| 4) How satisfied do you think your roommate would say s/he is with <br> your relationship? | X |  |
| 7) How comfortable do you feel living with your current roommate? | X |  |
| 8) How well do you feel you get along with your roommate? |  |  |
| 9) How often do you plan your schedule to avoid your roommate? | X | X |
| 18) How many times per week do you and your roommate have <br> conflicts or arguments? | X |  |

$\qquad$
SSQ items predicted to be significantly impacted. Three items on the SSQ were coded as likely to be significantly impacted by respondents' attendance at Crucial

Conversations. Means, standard deviations and ANOVA results for each can be seen in
Tables 15-17.
Table 15. Means, Standard Deviations and ANOVA Results of SSQ Item \#8 (How well do you feel you get along with your roommate?)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference <br> 1 both respondent and roommate attended <br> 2 respondent attended$\quad 13$ | 3.69 | .480 | $1-2$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Possible responses for this survey items: 1 = very poorly, $2=$ poorly, $3=$ well, 4 = very well

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score, but it was not statistically significant at either the .10 or .05 level.

Table 16. Means, Standard Deviations and ANOVA Results of SSQ Item \#9 (How often do you plan your schedule to avoid your roommate?)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 1.38 | .506 | $1-2$ | -.356 | .590 |  |
| 2 respondent attended | 27 | 1.74 | .764 | $1-3$ | -.268 | .794 |  |
| 3 respondent's roommate attended | 23 | 1.65 | 1.027 | $1-4$ | -.523 | .173 |  |
| 4 neither respondent or roommate attended | 65 | 1.91 | .843 | $2-3$ | .089 | .982 |  |
|  |  |  |  | $2-4$ | -.167 | .820 |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | -256 | .591 |  |  |

Possible responses for this survey items: $1=$ never, $2=$ infrequently, $3=$ frequently, $4=$ always

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the lowest mean score, meaning they were least likely to plan their
schedule to avoid their roommate. However, this finding was not statistically significant at either the .10 or .05 level.

Table 17. Means, Standard Deviations and ANOVA Results of SSQ Item \#18 (How many times per week do you and your roommate have arguments?)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference <br> 1 both respondent and roommate attended <br> 2 respondent attended$\quad 13$ | 1.50 | 1.000 | $1-2$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | -.900 | .964 |  |  |  |  |
| 3 respondent's roommate attended | 27 | 2.40 | 2.608 | $1-3$ | -1.250 | .923 |  |
| 4 neither respondent or roommate attended | 23 | 2.75 | 1.500 | $1-4$ | -1.333 | .828 |  |
|  | 65 | 2.83 | 3.240 | $2-3$ | -.350 | .998 |  |
|  |  |  |  | $2-4$ | -.433 | .990 |  |
|  |  |  |  | $3-4$ | -.083 | 1.000 |  |

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the lowest mean score, but it was not statistically significant at either the .10 or .05 level.

SSQ items predicted to be moderately impacted. Three items on the SSQ were coded as likely to be moderately impacted by respondents' attendance at Crucial Conversations. Means, standard deviations and ANOVA results for each can be seen in Tables 18-20.

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for satisfaction, but it was not statistically significant at either the .10 or .05 level.

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for perceived roommate satisfaction, but it was not statistically significant at either the .10 or .05 level.

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for comfort level, but it was not statistically significant at either the .10 or .05 level.

Table 18. Means, Standard Deviations and ANOVA Results of SSQ Item \#3 (How satisfied are you with the relationship you have with your roommate?)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | Pairs <br> Paired $\boldsymbol{p}$-value <br> difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| both respondent and roommate attended | 13 | 3.62 | .506 | $1-2$ | .430 | .515 |
| 2 respondent attended | 27 | 3.19 | .879 | $1-3$ | .746 | .098 |
| 3 respondent's roommate attended | 23 | 2.87 | 1.058 | $1-4$ | .508 | .275 |
| 4 neither respondent or roommate attended | 65 | 3.11 | .954 | $2-3$ | .316 | .626 |
|  |  |  |  | $2-4$ | .077 | .983 |
|  |  |  |  | $3-4$ | -.238 | .713 |

Possible responses for this survey item: $1=$ very dissatisfied, $2=$ dissatisfied, $3=$ satisfied, $4=$ very satisfied

Table 19. Means, Standard Deviations and ANOVA Results of SSQ Item \#4 (How satisfied do you think your roommate would say $s /$ he is with your relationship?)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 3.62 | .506 | $1-2$ | .283 | .595 |
| 2 respondent attended | 21 | 3.29 | .845 | $1-3$ | .370 | .361 |
| 3 respondent's roommate attended | 19 | 3.05 | .780 | $1-4$ | .138 | .902 |
| 4 neither respondent or roommate attended | 57 | 3.40 | .704 | $2-3$ | .087 | .966 |
|  |  |  |  | $2-4$ | -.145 | .790 |
|  |  |  |  | $3-4$ | -.232 | .450 |

Possible responses for this survey item: $1=$ very dissatisfied, $2=$ dissatisfied, $3=$ satisfied, $4=$ very satisfied

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for satisfaction, but it was not statistically significant at either the .10 or .05 level.

Table 20. Means, Standard Deviations and ANOVA Results of SSQ Item \#7 (How comfortable do you feel living with your current roommate?)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | Pairs <br> Paired $\boldsymbol{p}$-value <br> difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 1 both respondent and roommate attended | 13 | 3.62 | .506 | $1-2$ | .504 | .295 |
| 2 respondent attended | 27 | 3.11 | .751 | $1-3$ | .615 | .160 |
| 3 respondent's roommate attended | 23 | 3.00 | .798 | $1-4$ | .492 | .227 |
| 4 neither respondent or roommate attended | 65 | 3.12 | .944 | $2-3$ | .111 | .967 |
|  |  |  |  | $2-4$ | -.012 | 1.000 |
|  |  |  |  | $3-4$ | -.123 | .932 |

Possible responses for this survey item: $1=$ very uncomfortable, $2=$ uncomfortable, $3=$ comfortable, $4=$ very comfortable

## Roommate Friendship Null Hypothesis

1. Students who attend the Crucial Conversations course will not report higher levels of roommate satisfaction than roommates who do not attend the course.
2. Students who attend the Crucial Conversations course will not report higher levels of roommate friendship than roommates who do not attend the course.

The second part of hypothesis statement asked whether attendance at Crucial Conversations is related to higher levels of roommate friendship. Roommate friendship was measured using the modified Roommate Friendship Scale (RFS) originally developed by Wiltz and Reiss (2003). The RFS consisted of 28 items using a 4-point Likert scale. The responses to the items are shown in Table $21-25$. In these tables, the 4-point scales are reduced to two groups: 'Strongly agree or agree' and 'Strongly disagree or disagree' and the items have been categorized into the following sub-scales: Roommate Affinity,

Roommate Cooperation, Roommate Communication, Roommate Conflict and Roommate
Reciprocity.
Table 21. Frequency of Responses by Panel to Items on RFS Roommate Affinity Subscale

| Survey Item | Panel | $n$ | Strongly disagree or disagree | Strongly agree or agree |
| :---: | :---: | :---: | :---: | :---: |
| 19) My roommate and I have fun with each other. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 40.7\% | 59.2\% |
|  | 3 respondent's roommate attended | 22 | 27.3\% | 72.7\% |
|  | 4 neither respondent or roommate attended | 63 | 25.4\% | 74.6\% |
| 20) My roommate and I spend nearly all our free time together. | 1 both respondent and roommate attended | 13 | 53.8\% | 46.2\% |
|  | 2 respondent attended | 27 | 77.8\% | 22.2\% |
|  | 3 respondent's roommate attended | 22 | 59.1\% | 40.9\% |
|  | 4 neither respondent or roommate attended | 62 | 67.7\% | 32.3\% |
| 24) My roommate and I miss each other when we are apart. | 1 both respondent and roommate attended | 13 | 46.2\% | 53.8\% |
|  | 2 respondent attended | 26 | 73.1\% | 26.9\% |
|  | 3 respondent's roommate attended | 22 | 50.0\% | 50.0\% |
|  | 4 neither respondent or roommate attended | 62 | 56.5\% | 43.5\% |
| 39) My roommate and I enjoy spending time together. | 1 both respondent and roommate attended | 13 | 0.00\% |  |
|  | 2 respondent attended | 27 | $37.0 \%$ | $63.0 \%$ |
|  | 3 respondent's roommate attended | 22 | 36.4\% | 63.6\% |
|  | 4 neither respondent or roommate attended | 62 | 29.0\% | 71.0\% |
| 42) My roommate and I are happiest when we are together. | 1 both respondent and roommate attended | 13 | 46.2\% | 53.8\% |
|  | 2 respondent attended | 27 | 77.8\% | 22.2\% |
|  | 3 respondent's roommate attended | 22 | 59.1\% | 40.9\% |
|  | 4 neither respondent or roommate attended | 63 | 66.7\% | 33.3\% |
| 45) My roommate and I like to joke around with each other. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 14.8\% | 85.2\% |
|  | 3 respondent's roommate attended | 22 | 27.3\% | $72.7 \%$ |
|  | 4 neither respondent or roommate attended | 63 | 19.0\% | 81.0\% |
| 46) My roommate and I like each each other a lot. | 1 both respondent and roommate attended | 13 | 00.0\% | 00.0\% |
|  | 2 respondent attended | 26 | 25.9\% | 74.1\% |
|  | 3 respondent's roommate attended | 22 | 31.8\% | 68.2\% |
|  | 4 neither respondent or roommate attended | 63 | 33.9\% | 66.1\% |

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, responded with 'strongly agree' or 'agree' more frequently than any of the other panels for these questions in the Roommate Affinity Subscale.

Table 22. Frequency of Responses by Panel to Items on RFS Roommate Communication Subscale

| Survey Item | Panel | $n$ | Strongly disagree or disagree | Strongly agree or agree |
| :---: | :---: | :---: | :---: | :---: |
| 22) If my roommate and I have a problem, we work it out on our own. | 1 both respondent and roommate attended | 13 | 7.7\% | 91.3\% |
|  | 2 respondent attended | 27 | 14.8\% | 85.2\% |
|  | 3 respondent's roommate attended | 22 | 13.6\% | 86.4\% |
|  | 4 neither respondent or roommate attended | 63 | 15.9\% | 84.1\% |
| 23) My roommate and I confide in each other. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 59.2\% | 40.8\% |
|  | 3 respondent's roommate attended | 22 | 40.9\% | 59.1\% |
|  | 4 neither respondent or roommate attended | 63 | 41.3\% | 58.7\% |
| 31) My roommate and I are 'open and honest' with each other. | 1 both respondent and roommate attended | 13 | 7.7\% | 91.3\% |
|  | 2 respondent attended | 26 | 30.8\% | 69.2\% |
|  | 3 respondent's roommate attended | 21 | 28.6\% | 71.4\% |
|  | 4 neither respondent or roommate attended | 61 | 21.3\% | 78.7\% |
| 32) If my roommate or I do something that bothers the other, we easily make up. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 26 | 11.8\% | 90.5\% |
|  | 3 respondent's roommate attended | 22 | 31.8\% | 68.2\% |
|  | 4 neither respondent or roommate attended | 62 | 19.4\% | 80.6\% |
| 36) My roommate and I understand each other well. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 26 | 34.6\% | 65.4\% |
|  | 3 respondent's roommate attended | 22 | 31.8\% | 68.2\% |
|  | 4 neither respondent or roommate attended | 62 | 29.0\% | 71.0\% |
| 41) If my roommate and I have an argument, we can reach a compromise by talking about the issue. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 14.8\% | 85.2\% |
|  | 3 respondent's roommate attended | 22 | 13.6\% | 86.4\% |
|  | 4 neither respondent or roommate attended | 62 | 16.1\% | 83.9\% |

Panel One, the group in which both the respondent and roommate attended Crucial
Conversations, responded with 'strongly agree' or 'agree' more frequently than any of the
other panels for these questions in the Roommate Communication Subscale. None of the other panels consistently responded with 'strongly disagree' or 'agree' more frequently than another panel.

Table 23. Frequency of Responses by Panel to Items on RFS Roommate Cooperation Subscale
$\left.\begin{array}{lllcc}\hline \text { Survey Item } & \text { Panel } & & & \\ \hline & & \begin{array}{c}\text { Strongly } \\ \text { disagree } \\ \text { or }\end{array} & \begin{array}{c}\text { Strongly } \\ \text { agree } \\ \text { or }\end{array} \\ \text { agree }\end{array}\right]$

Panel One, the group in which both the respondent and roommate attended Crucial
Conversations, responded with 'strongly agree' or 'agree' more frequently than any of the other panels for these questions in the Roommate Cooperation Subscale.

Table 24. Frequency of Responses by Panel to Items on RFS Roommate Conflict Subscale
$\left.\begin{array}{lllcc}\hline & & & \\ \text { Survey Item } & \text { Panel } & n & \begin{array}{c}\text { Strongly } \\ \text { disagree } \\ \text { or }\end{array} & \begin{array}{c}\text { Strongly } \\ \text { agree }\end{array} \\ \text { or } \\ \text { agree }\end{array}\right]$

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, responded with 'strongly disagree or 'disagree' more frequently than any of the other panels for these questions in the Roommate Conflict Subscale.

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, responded with 'strongly agree' or 'agree' more frequently than any of the other panels for these questions in the Roommate Reciprocity Subscale. In both of these cases, Panel One responded with higher frequency 'strongly agree' or 'agree' than those panels where only one or neither respondent attended Crucial Conversation.

Table 25. Frequency of Responses by Panel to Items on RFS Roommate Reciprocity Subscale

| Survey Item | Panel | $n$ | Strongly disagree or disagree | Strongly agree or agree |
| :---: | :---: | :---: | :---: | :---: |
| 28) When one of us does a good job at something, the other is happy for her/him. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 7.4\% | 83.6\% |
|  | 3 respondent's roommate attended | 22 | 13.6\% | 86.4\% |
|  | 4 neither respondent or roommate attended | 63 | 12.7\% | 87.3\% |
| 30) My roommate and I have confidence in one another. | 1 both respondent and roommate attended | 13 | 7.7\% | 91.3\% |
|  | 2 respondent attended | 27 | 14.8\% | 85.2\% |
|  | 3 respondent's roommate attended | 22 | 22.7\% | 77.3\% |
|  | 4 neither respondent or roommate attended | 61 | 26.2\% | 73.8\% |
| 33) Sometimes my roommate or I do something for the other person to make her/him feel special. | 1 both respondent and roommate attended | 13 | 23.1\% | 78.7\% |
|  | 2 respondent attended | 27 | 44.4\% | 55.6\% |
|  | 3 respondent's roommate attended | 22 | 36.4\% | 63.6\% |
|  | 4 neither respondent or roommate attended | 63 | 44.4\% | 55.6\% |
| 34) My roommate and I show one another respect. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 7.4\% | 92.6\% |
|  | 3 respondent's roommate attended | 22 | 22.7\% | 77.3\% |
|  | 4 neither respondent or roommate attended | 63 | 7.9\% | 92.1\% |
| 40) If other people were bothering me or my roommate, the other would help. | 1 both respondent and roommate attended | 13 | 00.0\% | 100.0\% |
|  | 2 respondent attended | 27 | 37.0\% | 63.0\% |
|  | 3 respondent's roommate attended | 22 | 22.7\% | 77.3\% |
|  | 4 neither respondent or roommate attended | 63 | 17.5\% | 82.5\% |

## RFS Items Predicted to be Impacted by Crucial Conversations

The items on the RFS were coded by three Crucial Conversations experts to indicate which items were likely to be strongly or moderately impacted by participants' attendance at Crucial Conversations. To determine if this relationship exists, means and standard deviations for each panel were calculated for each of the RFS items that were coded as being either strongly or moderately impacted by attendance at Crucial

Conversations as shown in Table 26. Additionally, an ANOVA using a post hoc Tukey HSD was run on each of these items to determine if any of the mean differences among the four panels is statistically significant.

Table 26. RFS Items Likely to be Strongly or Moderately Impacted by Crucial Conversations

| Survey item | Strongly <br> impacted | Moderately <br> impacted |
| :--- | :---: | :---: |
| 22) If my roommate and I have a problem, we work it out on our own. | X |  |
| 25) My roommate and I sometimes get into fights. | X |  |
| 29) My roommate and I act 'cold and distant' toward one another. | X | X |
| 31) My roommate and I are 'open and honest' with each other. <br> 32) If my roommate or I do something that bothers the other, we <br> easily make up. | X |  |
| 34) My roommate and I show one another respect. <br> 35) My roommate and I hold grudges against one another. <br> 36) My roommate and I understand each other well. <br> 38) My roommate and I cooperate with one another. <br> 43) My roommate and I have a lot of interpersonal conflict. | X |  |

RFS items predicted to be significantly impacted. Two items on the RFS were coded as likely to be strongly impacted by respondents' attendance at Crucial Conversations. Means, standard deviations and ANOVA results for each can be seen in Tables 27-28.

For both items Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean scores, although this was not always statistically significant.

Table 27. Means, Standard Deviations and ANOVA Results of RFS Item \#22 (If my roommate and I have a problem, we work it out on our own.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 3.38 | .870 | $1-2$ | .384 | .458 |  |
| 2 respondent attended | 27 | 3.04 | .587 | $1-3$ | .294 | .628 |  |
| 3 respondent's roommate attended | 22 | 3.09 | .610 | $1-4$ | .289 | .529 |  |
| 4 neither respondent or roommate attended | 63 | 3.10 | .734 | $2-3$ | -.054 | .993 |  |
|  |  |  |  | $2-4$ | -.058 | .984 |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | -.004 | 1.000 |  |  |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for this item, but it was not statistically significant at either the .10 or .05 level.

Table 28. Means, Standard Deviations and ANOVA Results of RFS Item \#32 (If my roommate or I do something that bothers the other, we easily make up.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 3.38 | .506 | $1-2$ | .346 | .550 |
| 2 respondent attended | 26 | 3.04 | .662 | $1-3$ | .703 | $.050^{*}$ |
| 3 respondent's roommate attended | 22 | 2.68 | .894 | $1-4$ | .320 | .525 |
| 4 neither respondent or roommate attended | 62 | 3.06 | .807 | $2-3$ | .357 | .383 |
|  |  |  |  | $2-4$ | -.026 | .999 |
|  |  |  |  | $3-4$ | -.383 | .193 |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

* The mean difference is significant at the 0.05 level.

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for this item, and the difference between Panel One and Panel Three was statistically significant at the .05 level.

RFS items predicted to be moderately impacted. Seven items on the RFS were coded as likely to be moderately impacted by respondents' attendance at Crucial Conversations. Means, standard deviations and ANOVA results for each can be seen in Tables 29-36.

Table 29. Means, Standard Deviations and ANOVA Results of RFS Item \#25 (My roommate and I sometimes get into fights.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 1.69 | .947 | $1-2$ | -.011 | 1.00 |  |
| 2 respondent attended | 27 | 1.70 | .775 | $1-3$ | -.308 | .740 |  |
| 3 respondent's roommate attended | 21 | 2.00 | .775 | $1-4$ | -.292 | .681 |  |
| 4 neither respondent or roommate attended | 62 | 1.98 | .896 | $2-3$ | -.296 | .635 |  |
|  |  |  |  | $2-4$ | -.280 | .491 |  |
|  |  |  |  |  | $3-4$ | .016 | 1.000 |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the lowest mean score for this reverse-coded item, but it was not statistically significant at either the .10 or .05 level.

Table 30. Means, Standard Deviations and ANOVA Results of RFS Item \#29 (My roommate and I act 'cold and distant' toward one another.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 1.38 | .870 | $1-2$ | -.615 | .208 |  |
| 2 respondent attended | 27 | 2.00 | .832 | $1-3$ | -.706 | .136 |  |
| 3 respondent's roommate attended | 22 | 2.09 | .868 | $1-4$ | -.535 | .239 |  |
| 4 neither respondent or roommate attended | 62 | 1.92 | .997 | $2-3$ | -.091 | .986 |  |
|  |  |  |  | $2-4$ | .081 | .982 |  |
|  |  |  |  |  | $3-4$ | .172 | .879 |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the lowest mean score for this reverse-coded item, but it was not statistically significant at either the .10 or .05 level.

Table 31. Means, Standard Deviations and ANOVA Results of RFS Item \#31 (My roommate and I are 'open and honest' with each other.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | Pairs <br> Paired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 1 both respondent and roommate attended | 13 | 3.38 | .650 | $1-2$ | .538 | .166 |  |
| 2 respondent attended | 26 | 2.85 | .784 | $1-3$ | .623 | .101 |  |
| 3 respondent's roommate attended | 21 | 2.76 | .700 | $1-4$ | .319 | .521 |  |
| 4 neither respondent or roommate attended | 61 | 3.06 | .793 | $2-3$ | .084 | .982 |  |
|  |  |  |  | $2-4$ | -.219 | .610 |  |
|  |  |  |  | $3-4$ | -.304 | .397 |  |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for this item, but it was not statistically significant at either the .10 or .05 level.

Table 32. Means, Standard Deviations and ANOVA Results of RFS Item \#34 (My roommate and I show one another respect.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 12 | 3.75 | .452 | $1-2$ | .528 | .097 |
| 2 respondent attended | 27 | 3.22 | .577 | $1-3$ | .795 | $.005^{*}$ |
| 3 respondent's roommate attended | 22 | 2.95 | .839 | $1-4$ | .448 | .134 |
| 4 neither respondent or roommate attended | 63 | 2.63 | 1.021 | $2-3$ | .268 | .485 |
|  |  |  |  | $2-4$ | -.079 | .952 |
|  |  |  |  | $3-4$ | -.347 | .144 |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

[^0]Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for this item, and the difference between Panel One and Panel Three was statistically significant at the .05 level.

Table 33. Means, Standard Deviations and ANOVA Results of RFS Item \#35 (My roommate and I hold grudges against one another.)

| Panel | $\boldsymbol{n}$ | $\mathbf{M}$ | SD | Pairs Paired $\boldsymbol{P}$-value |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| difference |  |  |  |  |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the lowest mean score for this reverse-coded item, but it was not statistically significant at either the .10 or .05 level.

Table 34. Means, Standard Deviations and ANOVA Results of RFS Item \#36 (My roommate and I understand each other well.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 13 | 3.46 | .519 | $1-2$ | .692 | .095 |  |
| b both respondent and roommate attended | 26 | 2.77 | .765 | $1-3$ | .780 | $.056^{*}$ |  |
| respondent attended | 22 | 2.68 | .646 | $1-4$ | .526 | .202 |  |
| 3 respondent's roommate attended | 62 | 2.94 | 1.022 | $2-3$ | .087 | .986 |  |
| 4 neither respondent or roommate attended |  |  |  | $2-4$ | -.166 | .847 |  |
|  |  |  |  | $3-4$ | -.254 | .645 |  |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

[^1]Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for this item, and the difference between Panel One and Panel Three was statistically significant at the .10 level.

Table 35. Means, Standard Deviations and ANOVA Results of RFS Item \#38 (My roommate and I cooperate with one another.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| 1 both respondent and roommate attended | 13 | 3.77 | .439 | $1-2$ | .584 | $.026^{*}$ |  |
| 2 respondent attended | 27 | 3.19 | .483 | $1-3$ | .815 | $.001^{*}$ |  |
| 3 respondent's roommate attended | 22 | 2.95 | .722 | $1-4$ | .543 | $.021^{*}$ |  |
| 4 neither respondent or roommate attended | 62 | 3.23 | .638 | $2-3$ | .231 | .550 |  |
|  |  |  |  | $2-4$ | -.041 | .991 |  |
|  |  |  |  |  | $3-4$ | -.271 | .278 |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

* The mean difference is significant at the 0.05 level

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the highest mean score for this item, and the difference between Panel One and Panel Two; Panel One and Panel Three; and Panel One and Panel Four was statistically significant at the .05 level.

Table 36. Means, Standard Deviations and ANOVA Results of RFS Item \#43 (My roommate and have a lot of interpersonal conflict.)

| Panel | $\boldsymbol{n}$ | $\boldsymbol{M}$ | $\boldsymbol{S D}$ | PairsPaired $\boldsymbol{p}$-value <br> difference |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 both respondent and roommate attended | 13 | 1.31 | .480 | $1-2$ | -.581 | .159 |
| 2 respondent attended | 27 | 1.89 | .847 | $1-3$ | -.647 | .115 |
| 3 respondent's roommate attended | 22 | 1.95 | .899 | $1-4$ | -.565 | .113 |
| 4 neither respondent or roommate attended | 63 | 1.87 | .833 | $2-3$ | -.066 | .992 |
|  |  |  |  | $2-4$ | .016 | 1.000 |
|  |  |  |  | $3-4$ | .082 | .978 |

Possible responses for this survey item: $1=$ strongly disagree, $2=$ disagree, $3=$ agree, $4=$ strongly agree

Panel One, the group in which both the respondent and roommate attended Crucial Conversations, reported the lowest mean score for this reverse-coded item, but it was not statistically significant at either the .10 or .05 level.

## Other Findings

In addition to these items coded as likely to be significantly or moderately impacted by attendance at Crucial Conversations, nine of the survey items that were coded as 'unlikely to be impacted by attendance at Crucial Conversations' showed differences in the means that are significant at the 0.05 level, shown in Table 37.

Table 37. Survey Items Coded 'Unlikely to be Impacted' with Statistical Mean Differences Between Panels

| Survey Item | Pairs | Paired <br> difference | p-value* |
| :--- | :--- | :--- | :--- |
| 20) My roommate and I spend nearly all of our free time <br> together. | $1-2$ | .875 | .048 |
| 21) My roommate and I help each other out when needed. | $1-3$ | .765 | .028 |
| 23) My roommate and I confide in each other. | $1-2$ | 1.128 | .004 |
|  | $1-3$ | .962 | .025 |
| 26) My roommate and I help each other out when one of us | $1-2$ | .962 | .002 |
| has a problem. | $1-3$ | .797 | .021 |
| 27) My roommate and I do fun things together. | $1-2$ | 1.057 | .019 |
| 28) When one of us does a good job at something, the other | $1-3$ | .877 | .037 |
| is happy for her/him. | $1-4$ | .815 | .058 |
| 37) My roommate and I disagree about many things. | $1-2$ | -.766 | .020 |

For survey item \#20, 'My roommate and I spend nearly all our free time together', Panel One had a mean score of 2.62 and Panel Two had a mean score of 1.74 , with a $p$ value of .048 . For survey item \# 21 , 'My roommate and I help each other out when needed', Panel One had a mean score of 3.62 and Panel Three had mean score of 2.85 , with a $p$-value of .028 . For survey item \#23, 'My roommate and I confide in each other', Panel One had a mean score of 3.46 and Panel Two had a mean score of 2.50 , with a $p$-value of .004. The difference between Panel One and Panel Three, with a mean score of 2.50 , was also significant at the 0.05 level $(p=.025)$.

## CHAPTER FIVE

## DISCUSSION

## Introduction

The purpose of this quantitative study is to relate student attendance at the Crucial Conversations course to levels of roommate satisfaction and friendship in freshmen roommate dyads.

## Null Hypothesis

1. Students who attend the Crucial Conversations course will not report higher levels of roommate satisfaction than roommates who do not attend the course.
2. Students who attend the Crucial Conversations course will not report higher levels of roommate friendship than roommates who do not attend the course.

## Findings

Overall, the students in Panel One reported the highest levels of roommate satisfaction and roommate friendship. This was the panel in which both roommates had attended the Crucial Conversations session during first semester of the 2009-2010 academic year. These differences were not always significant at the 0.05 or 0.10 level, although they were for 13 of the survey items. It is interesting to note that whenever there were statistical mean differences, they were always between Panel One and another panel. Although the differences found between Panel One and the other respondents was not always statistically significant, it is important to note that this group's roommate satisfaction and roommate friendship scores were consistently at the top end of the mean.

Of the five survey items that were coded as 'likely to be significantly impacted by attendance at Crucial Conversations', only one of those items showed a statistical
difference between the panels. This item was 'If my roommate or I do something that bothers the other, we easily make up'. Of the eleven survey items coded as 'likely to be moderately impacted by attendance at Crucial Conversations', only three showed a statistical difference between the panels. These items were: 'My roommate and I show one another respect', 'My roommate and I understand each other well', and 'My roommate and cooperate with one another'.

While those roommates who both attended Crucial Conversations reported higher levels of roommate satisfaction and roommate friendship, the specific items predicted to be strongly impacted were not necessarily those that ultimately showed significant difference. The rest of the items that showed significant difference between panels had been predicted as 'unlikely to be impacted by attendance at Crucial Conversations'.

The concept of Crucial Conversations aligns with the research conducted by Sillars (1980, 1982), in that it attempts to teach students to use an integrative strategy so that their levels of stress during conflict do not interfere with the ability to hold rational discussions. This program also follows the research conducted by Laditka (2006) that indicated roommates with lower levels of verbal aggressiveness report higher levels of roommate affinity and satisfaction. Crucial Conversations teaches students how to utilize alternatives to verbal aggression to resolve conflict or discuss difficult topics.

It is possible that the students who attended Crucial Conversations were predisposed to have higher levels of communication and conflict mediation skills prior to their attendance. Crucial Conversations is a voluntary program, so those who participated may not be representative of the student body and may be more developmentally mature than their peers.

An additional theory to explain why general levels of satisfaction and friendship rose, but not necessarily those survey items predicted as being most likely to be impacted by attendance at Crucial Conversations, is that communication and roommate relationships are quite complicated. As general communication skills increase, it can be presumed that more than just specific survey items would be impacted. Therefore, roommates who improve their ability to communicate and mediate conflict might in fact respond more favorably to nearly all of the survey items.

## Limitations of the Study

Much of the analysis of the survey sample included differences between the other panels and Panel One. However, Panel One was quite small ( $n=13$ ), and this small sample size could certainly have impacted the results. In fact, overall the size of all samples was small. Larger sample sizes might provide more consistent and statistically significant data.

This survey was conducted at a small, private liberal arts college in the Midwest. Most students who attend this institution and took part in the survey are from the Midwest. These results may not be the same results that one might find if the study was conducted at a larger, public university, or an institution in a different geographic region of the country. Additionally, students were not asked if they knew their roommate prior to living with them. Students who were friends before becoming roommates might be more likely to report higher levels of satisfaction with their roommate experience.

Crucial Conversations sessions were provided throughout the first semester of the 2009-2010 academic year. This meant that some study participants attended Crucial Conversations in early October, while others may have gone in late November. The study did not take into account how long the participants had been in possession of the skills
learned at the session. Perhaps those students who attended the earliest sessions had more chance to practice their conflict resolutions skills and reported higher levels of roommate satisfaction and roommate friendship.

## Future Research and Implications

In order to truly determine if Crucial Conversations teaches participants ways to effectively manage conflict, which in turn increase roommate satisfaction and roommate friendship, this same survey could be utilized as a pre- and post-test. Individuals attending Crucial Conversations could take the survey before the content was presented, and then take this same survey again after a prescribed period of time, such as one or two months.

As the data does indicate that those roommates who had both attended Crucial Conversations reported higher levels of roommate satisfaction and roommate friendship, perhaps residence hall floors could incorporate this session into their beginning of the year procedures. Resident Assistants could utilize the session as a way to teach their residents about the importance of effectively managing conflict. It was also interesting to note that on many of the survey items, it appears to be less helpful for just one of the roommates to attend the Crucial Conversations session. That is, when either both or neither of the roommates attended the session, they reported higher levels of satisfaction and friendship than when just one roommate attended. For this reason, having roommates attend as pairs through part of a residence life program would be a beneficial method of utilizing the course.

An interesting follow up study would be to find out which of the students from this study will be living with their same roommate again next year, and how this correlates to the current satisfaction and friendship level, as measured by this survey. Of course, the
termination of a roommate relationship does not necessarily indicate dissatisfaction, but it would still be an interesting follow up study.

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## APPENDIX A

## IRB APPROVAL



February 2, 2010
Thomas Hall
Department of Education Leadership
210B FLC
IRB Expedited Review of: "Roommate Satisfaction and Friendship", Protocol \#HE10162
Co-investigator(s) and research team: Mikal Kenfield
Research site(s): Concordia College Funding: n/a
The protocol referenced above was reviewed under the expedited review process (category \# 7) on $\mathbf{1 / 2 2 / 2 0 1 0}$, and the IRB voted for: $\square$ approval $\boxtimes$ approval, contingent on minor modifications. These modifications have now been accepted. IRB approval is based on the original submission, with revised: consent form (received 1/27/2010).

Approval expires: 1/21/2011 Continuing Review Report Due: 12/1/2010
Please note your responsibilities in this research:

- All changes to the protocol require approval from the IRB prior to implementation, unless the change is necessary to eliminate apparent immediate hazard to participants. Submit proposed changes using the Protocol Amendment Request Form.
- All research-related injuries, adverse events, or other unanticipated problems involving risks to participants or others must be reported in writing to the IRB Office within 72 hours of knowledge of the occurrence. All significant new findings that may affect risks to participation should be reported in writing to subjects and the IRB.
- If the project will continue beyond the approval period, a continuing review report must be submitted by the due date indicated above in order to allow time for IRB review and approval prior to the expiration date. The IRB Office will typically send a reminder letter approximately one month before the report due date; however, timely submission of the report is your responsibility. Should IRB approval for the project lapse, recruitment of subjects and data collection must stop.
- When the project is complete, a final project report is required so that IRB records can be inactivated. Federal regulations require that IRB records on a protocol be retained for three years following project completion. Both the continuing review report and the final report should be submitted according to instructions on the Continuing Review/Completion Report Form
- Research records may be subject to a random or directed audit at any time to verify compliance with IRB regulations.

Thank you for cooperating with NDSU IRB policies, and best wishes for a successful study.
Sincerely,


Kristy Shirley, CIP
Research Compliance Administrator

## APPENDIX B

## RESIDENCE LIFE PERMISSION

## January 11, 2010

North Dakota State University IRB
Sponsored Programs Administration
1735 NDSU Research Park Drive
NDSU Dept \#4000
PO Box 6050
Fargo, ND 58108-6050

To Whom It May Concern:
Please note that Mikal Kenfield, NDSU Graduate Student, has the permission of Concordia College to conduct research on Concordia College's campus for her study, "The Effect of Crucial Conversations Training on Roommate Satisfaction and Friendship".

Ms. Kenfield will select participants based on current housing data and Crucial Conversation registration records, provided by the Student Affairs Office. She will contact participants via their Concordia email accounts and this email invitation will include a link to the online survey. Ms. Kenfield's survey will be completed by February 10, 2010.

Ms. Kenfield will provide to my office a copy of the NDSU IRB-approved consent document before she contacts participants on campus, and will also provide a copy of any aggregate results.

If there are any questions, please contact my office.


Assistant to the Dean of Student Life

## APPENDIX C

## SURVEY INSTRUMENT

## North Dakota State University

School of Education<br>FLC 210<br>Fargo, ND<br>701-231-7921

Title of Research: Roommate Satisfaction and Friendship

Hello! You are invited to participate in a research study. The purpose of the study is to learn more about roommate relationships and roommate satisfaction.

You are invited to be in this study because you are a current stucent a Concordia Callege and you live with a roommate. The Residence Life Office provided your name and address for the purpose of sending you this survey.

If you agree to participate, you will be askec a series of questions about your relationship with your current roommate, as well as cuestions about your experience here at Concordia. This survey should take approximately 15 minutes. If you do not wish to participale, simply click 'No Thanks' and you will no longer be contacted.

You must be at least 12 years of age to participate.
If you participate in the survey, you will be entered into a drawing to win a $\mathbf{5 0 0}$ dollar gift certificate to the Concordia College Bookstore. The odds of wimning this certificate depend on the number of students who complete the survey. If you do not complete the entire survey and you are selected to win, the $\$ 50$ prize will be prorated based on how much of the survey you completed. Vou will receive two reminders about completing the survey.

It is not possible to identify all potentia risks in research procecures, but the researcher has taken reasonable safeguards to minimize aty known risks. These known risks include: loss of confidentialty, and emotional or osychological distress.

You are not expected to get any benefil from being in this research sludy. However, benefits to others andior society are likely to inctude advancement of inowlecge. and possible benents to future Concorcia sludents.

The information you provice will be kept confidentia! however you will be asked to incluce your student iD number. We will keep privale al research records that dentify you, to the extent alowed by law. Your information will be combined with information from other people taking part in the stucy, we will write aboul the combined information thal we have gatherec. You will nol be identifiec in these writlen mater als. We may publish the resuts of the study: however, we wil seep your lame a'd other dentifying information private. Roommates wil not have access to each others' respenses.

Taking part in this research study s competey vountary. If you decide nol to be in tivis sludy. or 7 you stop dart cpating at any lime. you worit be venaized in any way.

If you have any questionis aboul the researcin study tser, Dlease contacl Mixal Kerfield at (218) 299-3899, or Dr. Thomas Hall (aciviscr) at (70*) 231-8589. If you have cuestions about your tights as a research participant, or to
report a problemicomplaint, please contact the NOSU IRB Office (ndsu.irb@ndsu.edu or 701-231-8908).
Thank you very much for your consideration. Clicking 'Yes' below will Indicate your willingness to participate in the study -- and to be eligible to win the $\mathbf{\$ 5 0}$ Concordia Book Store gift card.

Sincerely,
Mikal Kenfield
Assistant to the Director of Residence Life (Concordia College)
North Dakola State University Graduate Student - Educational Leadership Program
This survey is based on modified versions of the Roommate Friendship Scale (Wilz, 2003) and the Social Satisfaction Questionnaire (Fleming. Perkins, Lovejoy, and Colins, 1991). Used with permission.

Please indicate your willingness to participate:

- Yes - i wil womplete tins survey, and be entered mo a drawng for a $\$ 50$ gift certificate to the bookstore frou rrust be e B years of age to partic pate:
- No Manks

Please provide some basic demographic information
Student ID to match rocmmate cista)
Age (years)
How many months have you ived on campus at Conco:dia?

How many months have you lived

$\square$
$-\quad-\quad$.
$\ldots$ with your current roommate?

Please select your gender idenlity:
Nale
Homed

Please answer the following questions that relate to your satisfaction with Concordia College and your satisfaction with your roommate relationship.

1. How satisfed are you wilh your classes at Concorda College?

Very Dissatisfied Dssatsfier Satisfed Very Satisfiec
2. How salisfed are you with your currex hous ngliving arrangements?
Yery Jissatisfies Dissatisfies Satisísd Very Satisfiec

10. How many times per week do you eat with your roommate?
11. How many times per month do you attend sports events sponsored by Concordia (e.g., football, baskelball or hockey games, etc.)?
12. How many times per week do you go to social activities with your roommate (e.g., movies, parties, etc.)?
13. How many times per month do you attend cultural activities sponsored by Concordia (e.g., theater, concerts. etc.)?
14. How many times per week do you sludy with your roommate?
$\qquad$
15. How: many times per week do you run errands with your roommate?

16. How many times per month do you attend residence hall events?

17. How many tmes per week do you and your roommate vist other friends together?
18. How many tmes per week do you and your roommate have conlicts or arguments?

For this last section, please answer based on your own personal perspective.
19. My roommate and I have fun wilh each other.
Strongly Disagree Disagree
20. My roommate and I spend nearly all of our free time together.
$\begin{array}{llll}\text { Strongly Disagree } & \text { Disagree } & \text { Agree } & \text { Strongly Agree }\end{array}$

| - | - | - |
| :---: | :---: | :---: |
| - | - | - |

21. My roommate and I help each other out when needed.

Strongly Disagree $\quad$ Disagree $\quad$ Agree $\quad$ Strongly Agree
22. If my roommate and I have a problem, we work it out on our own.
Strongly Disagree Disagree Agree Strongly Agree
23. My roommate anc I confice in each other.
Strongly Disagree Disagree Agree Strongly Agrea
24. My roommate and I niss each other when we are apart.
Strongly Disagree Disagree Agree Strongy Agree
25. My roommate anc I sometimes get into ligits.
Strongly Disagree Disgree Agree Strongy Agree
26. Ny rommate anc inelp each other out when one of us has a problem.

Strongly Disacree Disagree igree
Strengy Agree
27. My roommate anc i co fun things together.
Strongly Disagree Jisagee Agee Strorgy ingee
28. When one of us does a good job at something. the other is happy for her/him.
Strongly Disagree
Disagree
Agree
Strongly Agree
29. My roommate and I act 'cold and distant' toward one another.
Strongly Disagree $\quad$ Disagree $\quad$ Agree $\quad$ Strongly Agree
30. My roommate and I have confidence in one another.

| Strongly Disagree | Disagree | Agree | Strongly Agree |
| :---: | :---: | :---: | :---: |
| - | - |  |  |

31. My roommate and I are 'open and honest' with each other.
Strongly Disagree Disagree Agree Strongy Agree
32. If my roommate or I do something that bothers the other, we easily make up.
Strongly Disagree Disagree Agree Strongly Agree
33. Sometimes iny roommate or 1 co something for the other person to make her:him feel special.

Strongly Disagree
Disagree
-
Agree
Strongh Agree
34. Wy roommate and I show one another resped.

Strongly Disagree Disegree
Agree
Strorgh Agree
35. By room'nate anc I hold grudges against one another.

| Strongly Disagree | Jisagree | Agrea | Strorgy Agree |
| :--- | :--- | :--- | :--- |

36. Wh commate anc 1 understand each other wel.
Strongly Disagree Jssgree Agree Strargy Agree
37. My roommate and I disagree about many things.
Strongly Disagree $\quad$ Disagree
38. My roommate and I cooperate with one another.

Strongly Disagree
Disagree
Agree
Strongly Agree

$-$
39. My roommate and I enjoy spending time together.
Strongly Disagree Disegree $\quad$ Agree $\quad$ Strongly Agree
40. If other people were bothering me or my roammate, the other would heip.
Strongly Disagree Disagree Agree Strongly Agree
41. If my roommate and I have an argument, we can reach a compromise by taking about the issue.

| Strongly Disagree | Disegree | Agree | Strongly Agree |
| :--- | :--- | :--- | :--- |

42. My roommate anci I are happiest when we are together.
Strongly Disagree Disagree Angree Strengh Agree
43. My foomnate and l have a lot of interpersona conilict
Strongly Disagree Disagree Agree Strengiy Agree
44. If my roommate or I need a litle money ior lunch, the other person wouc ban it.

| Strongly Disagree | Disagree | Agree | Strorgy Agree |
| :---: | :---: | :---: | :---: |
| My rominate anc I ike to joke around with each oher. |  |  |  |
| Strongly Disagree | Disegee | Agree | Strergy ag'ee |

46. My roommate and I fike one another a lot.
Strongly Disagree


## Disagree

C

## Agree <br> $\%$

Strongly Agree
B


[^0]:    * The mean difference is significant at the 0.05 level

[^1]:    * The mean difference is significant at the 0.1 level

