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INVESTIGATING THE ODD-PERSON-OUT PRINCIPLE: SOCIOEMOTIONAL
ADJUSTMENT OF FIRST-YEAR COLLEGE STUDENTS IN DOUBLE VS. TRIPLE
LIVING SCENARIOS

by

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A Thesis Submitted in Partial Fulfillment
of the Requirement for a Degree with Honors
(Psychology)

The Honors College

University of Maine

May 2017

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Abstract

Previous research has determined that tripling college students in dorm rooms that are considered “overcrowded” can have a negative effect on students’ academic performance and quality of roommate relationships. In addition, students who are beginning their college careers are more vulnerable to depression and anxiety. The present retrospective study examined depression/anxiety levels, overall academic performance and roommate relationship quality when comparing doubled and tripled students’ experiences during their first semester of their undergraduate program. Students at a state university who accepted admission after the deadline and had been assigned to triple vs. double rooms for their first year in college were invited to participate in the study. Students were recruited via email and asked to respond online to a series of surveys that retrospectively assessed their feelings of anxiety and depression, academic performance, and roommate relationship quality during their first months of college. Of the 408 invitations sent, only 27 who had lived in triples and 8 who had lived in doubles responded to the questionnaires. Independent sample t-tests revealed no differences between groups in any of the dependent variables. The lack of group differences was likely due to the small sample size. Future research should involve a larger sample and survey students early in their college career when they are living in their initial dorm situation. Such an approach will yield a better understanding of whether living in a triple room is detrimental to various aspects of students’ college adjustment.

Dedication

This thesis project is dedicated to my parents, friends, brothers and extended family who have supported me over the last four years. I could not have accomplished what I did without all of you.

Acknowledgements

I would like to thank the Director of Student Life, John Lawler and the Resident Life department at the University of Maine for helping me distribute my surveys anonymously to hundreds of participants efficiently. I would also like to thank my entire thesis committee for helping me with the different pieces of this project, as well as the Honors representatives for walking me through the last year in preparation for my defense.

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Investigating the Odd-Person-out Principle: Socioemotional Adjustment of First-Year College Students in Double vs. Triple Living Scenarios

Introduction

For decades, incoming students have arrived at a university or college with equal parts excitement and anxiety as they begin the first year of their undergraduate study. These students face an entirely new learning experience drastically different from their previous thirteen years of schooling. In the fall of 2015, approximately 2.1 million young people between the ages of 16 to 24 years arrived at an American college or university (USDL Bureau of Labor Statistics: bls.gov accessed 3/3/2017) to begin their first year away from their family unit. By the year 2020, undergraduate enrollment rates are expected to approach 20 million students (Mudric, 2012). Even though the cost of a college education continues to rise, it does not seem likely that enrollment rates are going to decrease at institutions around our nation.

Although they attend different universities and colleges that vary widely in their characteristics, all freshmen still face the same adjustment issues such as sharing a room with a non-family member, forming new peer relationships, and confronting the challenges of increasingly demanding academic expectations. For many of those students, this will be their first experience of making choices and decisions outside of their family unit. It is a time when those who have the skills and desire to be successful do so, while many others very quickly find themselves in over their head. For decades, researchers have been attempting to determine the causes of student successes and failures. In some cases, these young adults are just not ready for college and its level of personal

responsibility. Their reasons for leaving could be poor academic preparation, financial difficulties, or problems with social and emotional adjustment.

The purpose of the present study was to examine the triplet residential scenarios that take place each year for incoming freshmen attending the University of Maine. What made this study different from existing studies is that three major adjustment variables were being examined at once. I planned to compare stress levels in terms of anxiety and depression for students placed into doubles versus triples. At the same time, I wanted to ask individuals about the relationship quality with their roommate(s) as well as get a sense of their overall academic performance. In addition, I planned to examine whether adjustment of participants varied if they were a first-generation college student. Gender, which is a common variable for these types of studies, was also included as a demographic measure. However, it turned out to be the case that almost all the participants that were placed into triples were male. These variables have been studied before individually to assess the negative impact they can have on freshmen living situations. Despite this, they have never been examined all at once in a single study. Also, a review of the previous literature revealed that there were not many studies conducted that centered on both overcrowding in dormitories and the adjustment outcomes I considered.

Potential Dropout Risk and Cramped Spaces

Each year, a significant proportion of the incoming freshman class will either be asked to leave their university or college because of failing grades, or they will make the decision to drop out during or after their first semester or by the end of their first year as

an undergraduate. The National Center for Educational Statistics reported that only 71.8% of the nation's 2011-12 college freshmen returned for their sophomore year at an undergraduate institution. According to Castex (2017), these numbers seem to have fluctuated from the 1990s, where the range of dropouts was between 45 and 55%. These dropout rates can fluctuate from year to year depending on the institution. The question of what the direct cause was for students leaving remains unanswered.

As students move onto campus, the overall goal of university housing departments is to make incoming students feel comfortable and safe. In addition, they want to provide students with an environment where they can make positive social and emotional connections. However, successfully meeting the goal of keeping students happy, comfortable and safe without creating overcrowding in some dorm rooms is often easier said than done. Each year, the housing department and residential life program are faced with the challenge of creating room assignments based on the number of accepted students who will arrive to live on campus in the fall. The discrepancy between actual students and the number of beds and rooms available has led to the practice of transitional or triple dorm room assignments. Some of the first research on the topic of 'tripling' was conducted over 30 to 40 years ago (e.g., Baron et al., 1976; Karlin, Rosen, & Epstein, 1979).

From a different perspective, a 1990 study by Mullen and Felleman examined effects of tripling on behavior and room size effectiveness. The authors found that, "...increasing room size while holding the number of people constant at $n = 3$ will decrease the interpersonal density and presumably decrease the adverse effects of tripling" (p. 39). While this information is viable, there are cases where the size of a dorm

room cannot be extended any further without remodeling, which can be an issue when there are too many students to house in already size-determined spaces.

Stress in the Form of Anxiety and Depression

While it is perfectly normal to feel stress with a new situation or environment, some individuals can experience copious amounts at once. According to research completed by Kerr et al. (2004), “Students’ perceptions of stress during the college transition are a consistent predictor of academic, social and emotional maladjustment” (p. 593). Those levels of stress are compounded in cases where students are placed into triple occupancy rooms, as the stability of the living situation can become very strained. “Stress is a part of students’ existence and can impact how students cope with the demands of college life” (Dusselier et al., 2005, p. 15). Furthermore, “Students who are confused by their emotional reactions and who have difficulty pinpointing which emotions they are feeling as they enter college are finding the transition more difficult” (Kerr et al., 2004, p. 608).

Depression is a product of stress that is common in freshman dorm housing as well. As described by Mudric (2012), “Depressive-related disorders, particularly among college students, are more significant than ever...Depression is probably the most common mental health problem that college students face today” (p. 4). Both stress and depression seem to go hand in hand for college students, due to how they can negatively affect one another. For young adults who are entering a whole new living environment, the potential for depression or the battle against depression can be even more difficult.

Students of both genders will turn to multiple forms of comfort to relieve immediate anxiety. This can include binge or overeating. “Among female participants, binge eating scores were significantly predicted by anxiety caused by high-density living conditions” (Tao, Wu, & Wang, 2016, p. 4). For the most part, studies that have centered on anxiety and stress emphasize gender differences, with results demonstrating that females are more likely to be affected negatively by anxiety. Previous literature surrounding depression has also indicated that females, minorities and those of a lower socio-economic status will have a higher prevalence of depression in their lives. A study conducted by Khawaja and Duncanson (2008) supported this information by concluding that, “Female students experienced significantly higher levels of depressions than males...” (p. 204). The authors went on to claim that this tendency was perhaps due to the “poorer coping mechanisms” and a “greater demand from multiple roles.” Other studies have revealed that there can be a significant difference in levels of depression between males and females. Gender characteristics are mentioned again in the Dusselier et al. (2005) study, which found “Women experienced stress more frequently than did men...” (Dusselier et al., 2005, p. 21).

Aside from general anxiety and depression levels, females are also prone to excessive alcoholism, which in turn can generate higher levels of depression. In reference to Kenney et al. (2015), their investigation that compared depression levels with drinking levels for both college-aged females and males discovered that, “...college women are more susceptible than men to risky alcohol outcomes due to drinking to cope with negative affective states” (p. 1893). They also revealed that men drank more than women overall, but women had the tendency to experience just as many consequences as their

male counterparts. Students often turn to drugs and other coping mechanisms to deal with a depression and anxiety. They have potential to also have a worse time with these issues when being placed in an overcrowded living situation.

While this information is important when discussing depression in different types of college students, the present study is focused in a different direction. Instead of surveying females, the vast majority of participants in the present sample is male, which may give us some answers about depression and anxiety levels in primarily male undergraduate students. Unfortunately, there are not many studies that center on student depression and overcrowding. My hope is that this study will bring light to the two subjects and how they coexist on college campuses.

Academic Performance

Conditions such as anxiety and depression not only can have a negative association with emotional and mental health, but also can harm a student's academic standing. Student grade point averages are a common figure to compare when examining academic performance. As mentioned by Pritchard and Wilson (2003), "...investigations have found that GPA is predicted by stress, daily hassles, and adjustment to college" (p. 19). These same authors conducted a study that examined aspects of social health and their impact on GPA. These aspects included levels of introversion/extroversion, romantic relationship involvement and overall alcohol consumption. The results showed that the combined influence of social factors has a significant effect on GPA.

More recent studies that center on academic success generally focus on the predictors of personal and environmental stimuli, and their effect on GPA. According to an article published by Clark, Jackson and Everhart (2012), the data collected from older

studies during the 1970's and 1980's concluded that placing young adults into these scenarios generated a considerable negative effect on the academic performance of these individuals (Clark, Jackson & Everhart, 2012, p. 477). Furthermore, it was determined that students who were placed into triplet situations in a dorm room designed for just two people responded poorly in both psychological and academic categories.

Research compiled by Long in 2014 determined that students who lived on campus in assigned dorm rooms tended to have a greater first-year GPA as freshmen. One of the variables examined by Long was whether academic performance was determined by living location. This compared research about dormitory floor grade performance and off-campus/sorority/fraternity housing grade performance. Long reported that, "...sense of belonging was positively related to floor GPA..." and that in terms of gender differences, "...the semester GPAs of residents who lived on all-women's floors were higher than those of residents who lived on all-men's floors" (Long, 2014, p. 69). As far as off-campus or Greek life living situations go, they neither benefitted nor hindered students' academic performance.

A student's relationship with his or her roommate does not necessarily need to be a friendship. Civility in the living space is what each member should strive for. However, the negativity that can arise from not having enough personal space can adversely affect the academic performance of all residents. A 2014 study by Erlandson mentioned how students that are "sexiled" by their roommate(s) can experience increased multiple conflicts that can negatively impact overall academic performance. For clarification, the term "sexiled" refers to a situation between roommates where one roommate is having relations with a partner and either locks the other roommate(s) out of the dorm room or

insists that they leave. Erlandson stated, “Being sexiled could certainly contribute to two potential areas of dissatisfaction: feelings of isolation and lowered academic performance due to the stress or lack of sleep that could result from being sexiled” (p. 15). This invasion of privacy can make tripled rooms even more of a threat to the stability of the relationship between roommates.

Importantly, some research points to the fact that removing a student from a triple scenario could possibly raise his or her academic performance. A study conducted at Rutgers University in 1979 involved placing three students into rooms that were designed for only two people. The study examined the scenarios in both the first and second semesters of the students’ freshman year, as well as a follow-up review during their future semesters. Results from a MANOVA test determined that, “all students did less well during the first semester of their freshman year than they did as sophomores and juniors. Tripled students tended to show greater improvement when scores from first semester freshman year are compared to sophomore and junior performance than did their doubled counterparts” (Karlin, Rosen & Epstein, 1979, p. 392). These are promising results for those who were placed into a triple to begin with. It shows that moving students out of an over-crowded living situation can be beneficial for their academics and their mental health. However, it is quite important to note that placing students in a triple room as they begin college can still put them at great academic risk. Students who do poorly at the beginning of their college career may become frustrated and choose to leave school, and having a poor start in college may also increase the risk of being dismissed for academic reasons.

Roommate Relationship Quality

The reason that universities and colleges are trying to pour more resources into housing is that they realize just how important the on-campus living environment can be to student success. Housing serves as an area where an individual becomes capable of experiencing social well-being, privacy, shelter and community (Bondinuba et al., 2013). As a whole, housing promotes physical, economic and psychological gratification for occupants in order to give them the most positive experience possible. However, despite how the living arrangements are, peer relationship quality amongst the room inhabitants is crucial. Most people who have not attended a university may not understand the great importance for strong interpersonal relationships among roommates. According to Erb et al. (2014), “College roommate relationships are unique among students’ interpersonal relationships because they live together. Roommates have frequent contact, negotiation of responsibilities and compromises about the living environment (e.g., noise level, sleep/waking hours, visitors...” (p. 44). Roommates of the same gender have to coordinate responsibilities and plan their schedules around each other. However, when a university’s overcrowding problem becomes an issue, the living environment has the potential to be chaotic.

The amount of social problems that can arise from a tripled living scenario can be more than a dorm with only two occupants. Issues that arise with relationship quality can often stem from miscommunication and completely different lifestyles. Some current findings state, “Students most frequently reported problems with differences in sleep cycles and communication style” (Hale, 2011, p. 21). As with most variables, there are a lot of correlations between the constructs I examined. In contrast to normal dorm room

conflicts, peer relationship quality can in fact have an effect on the mental well-being of one or more students living together; “Overall, research on triples has found that crowded living environments might cause psychological and social distress...” (Long & Kujawa, 2015, p. 65). Essentially, a negative peer relationship has potential to escalate more quickly when over-crowding becomes a factor.

In terms of gender being examined in conjunction with peer relationship quality, a report by Long and Kujawa (2012) focused on students that were in transitional housing (which is what triples are referred as) and how the isolate member felt moving in with a dyad set of roommates. Results revealed that more dyads were satisfied with the overall dorm room floor experience and empathy levels than the isolate members were. Also, they discovered that male isolates rated the floor sense of community as higher than females, who rated their sense of community as lower than all other measured variables. These measures included floor empathy, safety, floor climate, personal development and overall staff performance aside from floor community levels.

A study by Baron et al. (1976) highlighted characteristics of overcrowding during their study that included a male population. They describe their results that centered on triple versus double roommate relationships as follows: “Triples as compared with doubles, perceived that they received less cooperation from their roommates and in general were less satisfied with their roommates” (p. 437). Furthermore, the authors stated that those students living in triples in general preferred closer interaction with their friends than with their roommates. Despite these results stemming from a study conducted over four decades ago, the principles of overcrowding in triples can still be applied to modern day housing issues. Given these findings, one goal of the present study

was to compare the overall quality of roommate relationship experiences in students who have two versus one roommate during their early months of college.

First Generation College Students:

Some students feel more pressure of being the first person in their family to attend a University. Those who are beginning their college careers may not have the financial stability to enter a four-year institution full time. According to Bui (2002) recent research has shown that first-generation students have a much better chance of earning a bachelor's degree if they start postsecondary education at a four-year college rather than a two-year college. However, those who come from a lower SES background may not be able to pay that amount. Other reasons include their former academics not being acceptable enough to attend a four-year program or that they need class schedule flexibility to maintain a positive work and home status. Students from these backgrounds should be given just as much an opportunity to exceed at a four-year establishment, and assignment to a triple dorm room may make adjustment especially difficult for this group. One goal of the present study was to examine whether first-generation students are particularly vulnerable to the negative effects of living in a triple dorm room situation.

The Present Study

Increased levels of depression and anxiety can easily affect academic performance and roommate relationship quality. Based on the literature reviewed, it can easily be determined that while all of these variables can be severely detrimental to a college student, they have potential to have a greater negative effect on a student that is placed

into a tripled living scenario. However, there is not much literature that examines the associations of all three variables within students placed into an odd-person-out living arrangement. My hypothesis is that when comparing survey answers of tripled students to late-admittance doubled students, we will see increased levels of depression and anxiety in the students placed into triple rooms, as well as poorer relationship quality and overall academic performance. I also predict that these effects will be stronger for first-generation college students than other students.

Method

Participants

Participants in this study were students that are currently enrolled at the University of Maine. Specifically, students were recruited who were assigned to a dorm room with two other inhabitants at the beginning of their college career. As a comparison, a similar number of students that were in doubles during the beginning of their freshman year was also recruited. According to John Lawler, Director of Residence Life at the University of Maine, most triples dissolved very quickly in the beginning of the Fall 2016 semester. For this reason, we also contacted students who were placed in triples during the Fall 2014 and 2015 semesters in order to potentially increase our sample size. Students placed in triples are typically those who were “later committers” to UMaine (i.e., decided to enroll after the May 1 deadline). However, some late committers are assigned to doubles, if rooms are available. To match groups as closely as possible, only late-committing students were contacted to participate in this study. Approximately 42 male students were assigned to triples in the Fall 2016 semester, and Mr. Lawler selected 42 late committing male students who were assigned to doubles. We hoped to have at least 50 respondents from each group (doubles and triples) to obtain a sufficient sample size for this study. Because it was expected that many of those contacted would not respond, Mr. Lawler also contacted late-committing students who enrolled in the Fall semester of 2014 and 2015 and were assigned to triples or doubles.

It should be noted that this sample included students of all genders and ethnicities, and all participants were at least 18 years old. In order to increase the sample size, students from the previous two years of fall semesters were also contacted. In total, 108

students who started school in Fall of 2014 were sent survey links. This included 51 males and 3 females assigned to triples and 51 males and 3 females assigned to doubles. In addition, 216 students who started school in Fall of 2015 were sent survey links. This included 108 males assigned to triples and 108 males assigned to doubles. According to Mr. Lawler, there were no females placed into triples during the Fall of 2015 and 2016 semesters. This is because the University believes that males can handle the triplet scenario more effectively than females can.

Of the 408 students who were sent surveys, 42 responded. However, only 35 (34 males, 1 female) of these students provided enough data to be included in the study. Of those who submitted complete responses, 27 lived in triples and 8 lived in doubles. In total, 10 participants are currently freshmen, 16 are sophomores, 8 are juniors, and 1 is a senior.

In March 2017, Mr. Lawler sent out a recruitment email on behalf of the PI to late committing students who were assigned to either double or triple rooms at the beginning of the Fall 2014, 2015 and 2016 semesters. This email described the study, invited students to participate, and included a link to the consent and questionnaires (see Appendix VI). The PI did not know the identities of these students, and all responses were anonymous.

Measures

Demographic questionnaire. A series of demographic questions was created by the PI. Each question was answered by checking the corresponding box next to the response that pertains to the participant's experiences. These questions inquired about grade performance, gender, and opinions about their experience in their double or triple

living situation (see Appendix I). For each scenario, a student that was in a double would answer the set of double demographic questions, while the students assigned to a triple room would answer the triplet demographic questions.

Beck Depression Inventory II (BDI-II). The BDI contains 20 items (e.g., Sadness: 0 - I did not feel sad. 1 - I felt sad most of the time. 2 - I was sad all the time. 3 - I was so sad or unhappy that I couldn't stand it.). Participants responded to the items on a 0 to 3 scale and were asked to answer questions by checking the corresponding box next to the answer that best describes their experiences. Note that the item assessing suicide was not included in the BDI-II because in this study the interest was in assessing depressive symptoms and not suicidal thinking specifically. These surveys contained personal questions about the emotional adjustment of the participants during the time they spent in their living situation during their first months of college. Responses for each question were added together to get a total BDI score for each participant (see Appendix II).

Beck Anxiety Inventory (BAI). Aaron T. Beck's Beck Anxiety Inventory contains 21 total prompt questions (e.g., Numbness or Tingling: "Not at all," "Mildly but it didn't bother me much," "Moderately – it wasn't pleasant at times," and "Severely – it bothered me a lot.>"). Participants responded to the items on a 0 to 3 scale and answered questions concerning their level of stress and anxiety while living in a double or triple room in their first months of college. Responses for each question were added together to get a total BAI score for each participant (see Appendix III).

Network of Relationships Inventory: Social Provision Version (NRI). The NRI was created by Furman and Buhrmester (2008) and was modified for use in this study to

ask about the quality of the participants' relationships with their roommates. This survey contained 30 questions (e.g., How much free time did you spend with Roommate 1? 1: Little or None, 2: Somewhat, 3: Very Much, 4: Extremely Much, 5: The most).

Participants rated each item on a 1 to 5 Scale. For the triple participants, they were asked to answer questions about roommate number one and roommate number two separately.

Participants that were in a double were asked to answer questions only about their one roommate. There are three subscales including the support scale, the negative interaction scale, and the relative power scale. These are averaged in order to determine an overall relationship quality score (see Appendix IV).

Procedure

Individuals who were late admitted students to the University of Maine and lived in either doubles or triples when they began at the university were identified by University of Maine Director of Residence Life John Lawler. Mr. Lawler then contacted these students via an email message and invited them to participate in the study. The invitation contained a link that students could click on to take them to the consent letter (see Appendix V). If they agreed to participate, they were then taken to the Qualtrics website to complete a series of questionnaires. All participants were presented with the demographic questions, followed by the BAI and BDI-II questionnaires. With regard to the BAI and BDI-II, participants were asked to reflect back and rate their feelings of anxiety and depression in their first months at the University of Maine. Finally, participants were asked to complete the NRI. Those who had lived in triples were asked to respond to one NRI regarding one roommate and then to a second NRI regarding their other roommate. Those who had lived in doubles were presented with only one NRI

survey to complete concerning their single roommate. Mr. Lawler sent a reminder email three days after the initial email to each member of the sample to remind them to consider taking the survey. After two weeks of the surveys being available, both survey chains were closed and the responses were downloaded into the SPSS data analysis software to examine possible differences in adjustment in those living in double versus triple dorm rooms.

Results

Participants who submitted their responses but failed to complete most of the survey chain ($n = 7$) were removed from the sample due to excessive missing data. This left a sample size of 35 for the analyses. Each variable (i.e., depressive symptoms, anxiety, roommate relationship quality) was examined by either totaling or averaging all values across data obtained from the double and triple occupants. For students who had two roommates, average quality for each relationship dimension was calculated. Independent sample t-tests were then used to determine whether there were differences in the mean scores of students living in double versus triple dorm rooms. Below are data tables for each t-test and the significance of the relationship between the two examined groups of students.

Table 1: BDI – Depression Scale T-Test Results

Group	Mean	Standard Deviation	T	df	P
Double	9.250	5.725	-.238	32	.779
Triple	10.346	10.395			

As seen in the table above, there was not a significant difference in level of depressive symptoms in students who lived in doubles versus triples in their first months of college.

Table 2: BAI – Anxiety Scale T-Test Results

Group	Mean	Standard Deviation	T	df	P
Double	26.625	5.343	.235	33	.816
Triple	26.037	6.442			

As presented in Table 2, there was not a significant difference in level of anxiety symptoms in students who lived in doubles versus triples in their first months of college.

Table 3: NRI – Support Scale T-Test Results

Group	Mean	Standard Deviation	T	df	P
Double	1.738	.487	-.760	29	.453
Triple	1.995	.907			

As shown in the table above, students who lived in double versus triple dorm rooms did not differ significantly in the levels of support they reported receiving from their roommates.

Table 4: NRI – Negative Interaction Scale T-Test Results

Group	Mean	Standard Deviation	T	df	P
Double	1.687	.961	1.482	33	.148
Triple	1.333	.445			

As seen in the Table 4, students who lived in double versus triple dorm rooms did not differ significantly in the levels of negative interaction they reported experiencing with their roommates.

Table 5: NRI – Relative Power Scale T-Test Results

Group	Mean	Standard Deviation	T	df	P
Double	3.250	.462	1.564	33	.127
Triple	2.901	.575			

As shown in Table 5, students who lived in double versus triple dorm rooms did not differ significantly in the levels of relative power they described in their relationships with their roommates.

For the academic performance variable, 34 out of 35 total participants selected an option describing the grades they received during their time in their previous living situation. Of those who answered the question, 6 out of 8 doubled students reported their received mostly A's in their classes, with one subject reporting they received mostly B's and one reporting mostly C's. Of the 27 tripled students, 7 reported mostly A's, 15 reported mostly B's, 3 reported mostly C's and 1 reported mostly D's. As far as the results of the differences in GPA performance between the previous living situation and their current GPA, 9 subjects skipped one or both questions. For those who entered values for both questions (26 total), a majority showed a decrease in overall GPA since they had left their freshman year living situation. It could not be determined whether

students in triples performed worse academically than those in doubles due to the lack of complete participation.

Given the small sample size, it was not possible to examine the hypothesis that first generation college students ($n = 12$) would be more vulnerable to living in a crowded living situation than non-first generation college students ($n = 23$).

Discussion

No evidence was obtained in support of the hypotheses that compared to students living in double dorm rooms, those living in triple dorm rooms would report greater depressive and anxiety symptoms and poorer quality relations with their roommates. It is likely that the small sample size limited the ability of the present study to detect differences, even if such differences exist. Despite this, there is still reason to believe that students living in triples do have more difficulty in their adjustment.

As mentioned before, there is not a lot of literature examining the role of overcrowding in dormitories in predicting students' depression and anxiety levels. Of the research that was found, Tao, Wu, and Wang (2016) did report that binge eating due to high levels of anxiety and stress was more prominent in high density living quarters, especially in females. While the present study did not reveal that students who lived in overcrowded conditions experienced higher depression and anxiety levels, this issue should be investigated further in future studies that involve a greater number of participants.

When considering the academic performance variable, Karlin, Rosen and Epstein (1979) found that students' overall grade performance improved once they had left a previous tripled living situation; ergo they improved during their sophomore and junior years in comparison to their doubled counterparts. While the present study did not find a similar improvement in tripled students' academic performance, it is possible that larger sample sizes would replicate Karlin et al.'s findings.

Finally, when discussing peer relationship quality, Baron et al. (1976) reported that tripled students had more trouble with their roommates as compared to doubled students. I related this study's sample directly to my own, since their sample consisted only of males. Although my sample was not intentionally predominantly male, it turned out that only one participant was female. Again, a larger sample size might have revealed differences in the roommate relationship quality for those living in double versus triple dorm room situations. A strength of the present study was that specific aspects of relationship quality (e.g., support, negative interaction, relative power) were examined. This approach should be used in future research to investigate whether particular dimensions of the roommate relationship are more vulnerable when students live in overcrowded conditions. For example, it is possible that negative interactions in particular are more likely in the triple dorm room situation.

Limitations and Future Directions

The biggest limitation for his study was the lack of candidate participation in completing the entire survey. Of the 408 total participants that received the survey link via email, only 8 double members and 27 triple members completed the entire combined survey. It was disappointing that only roughly 8% of potential participants completed the questionnaire. This circumstance is a common one with email distribution of online surveys, especially since participants were given no compensation. If this study were to be re-done, the gathering of participants should start much earlier in order to secure a stronger sample size. As with most online surveys, there is the issue that participants might simply scroll through the questions, either answering only a few items or selecting

the same answer for each of the individual questions. This has the potential to dramatically skew the data or make possible relationships undeterminable.

Another major limitation of this study was that of the sample, a resounding majority were male, with only one respondent being female. This made it impossible to examine potential gender differences in students' adjustment when living in double versus triple rooms. Since a majority of the student population at UMaine is Caucasian, the use of an ethnic variable was not possible. It is important that future research on this topic use more ethnically diverse samples to allow for the examination of whether there is an interaction of ethnicity with living arrangement in predicting student adjustment.

Interestingly, of the 35 participants who provided complete responses, 27 had lived in triples, whereas only 8 had lived in doubles. The unevenness of the sample sizes across the two groups limited the ability to detect statistical differences in the groups. It is notable that the vast majority of respondents had experienced living in a triple dorm room. This suggests that these students may have had more they wanted to share about their non-normative living experience.

It is important to keep in mind that this was a retrospective study, meaning that participants were required to draw details from their memories about their living experiences when they first enrolled at UMaine. Due to the fact that the sample included participants from the previous three fall semesters, some members may have had difficulty recalling any negative experiences they had during their previous living arrangement. If this study were to be conducted again, the same variables and relationships should be examined, but a more effective method of reaching participants

should be used, especially when they are first enrolled in college and are currently experiencing their new living situation in the dorm. The use of compensation or direct interaction with participants could help increase the total amount of responses, which in turn could help increase the ability to detect possible differences in student adjustment as a function of living situation.

In terms of future directions for this study, the examination of first generation students has the potential to bring information to light about how these students might have a more difficult time with personal adjustment to living in a triple than students who are non-first generation. In addition, it has been commonly assumed that female students are more negatively impacted by the triple living situation than are males. It is important to examine this issue more thoroughly to determine which aspects of adjustment (i.e., emotional, social, academic) might be most vulnerable and to better understand the mechanisms that contribute to poorer adjustment. Also, since previous research (e.g., Pilcher & Walters 1997) has revealed that a lack of decent sleep quality had a direct effect on cognitive performance, there is potential for future research examining if a lack of sleep affects relationships with roommates as well.

Modification of the original study design could potentially increase the success rate of this particular line of investigation. For instance, if the separate relationships between each individual roommate are examined instead of just averaging the quality across the two roommate relationships, the role of each relationship could be considered. In some instances, a positive relationship with one roommate and not the other could be enough support for the subject to make their experience satisfactory, even if the second roommate brings negativity to the living space. Furthermore, the inclusion of a qualitative

component into the original design may allow the primary investigator to relate more to the participant's and their experiences. In this case, this would mean sitting down for a one-on-one follow up interview, which would supplement the data from the Qualtrics surveys. This may be beneficial because study participants are more likely to describe their emotional and feelings in a one-on-one setting.

Conclusions

It is common knowledge that the transition from a high school environment to a college/university scenario can be very stressful for incoming freshmen. For a majority of them, this is the first time that they are completely on their own and responsible for their academics, financials and relationships. Some feel the side-effects worse than others while others are able to overcome the emotional and psychological struggle. It is because of these reasons that I strongly believe that overcrowding in undergraduate dormitories needs to dissolve completely as soon as possible. University campuses across the nation need to re-evaluate their dormitory building designs and find ways to build housing that contains enough space for everyone who lives in each room. Either this or develop new strategies to make sure all accepted students have a comfortable living situation, despite whether they are late-admittance or not. Despite this study's lack of significant findings, the results of previous studies do provide evidence that students living in triple dorm rooms are more vulnerable to negative emotional, social, and academic adjustment. According to John Lawler, the University of Maine has made great strides in the removal of triples with each passing year. Hopefully these trends will continue, along with more research concerning this subject.

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Appendix I:

Demographic Questions

For these questions, check the box that pertains to you the most when thinking about your time in your previous living arrangement on campus.

Triple Questions:

Please identify your gender. Male Female Other

Please specify your age when you first moved into a dorm at UMaine.

What semester did you first move onto campus? Fall of 2013 Fall of 2014, Fall of 2015

Please specify your year in school when you first moved into a dorm at UMaine:

Freshman Sophomore Junior Senior

Please indicate how long you lived in a triple room: Less than a month One to Two Months Three to Four months A semester or more

How satisfied were you with your living situation during your first months at UMaine? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied were you with the size of your social network during your first months at UMaine? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied were you with the quality of your social network during your first months at UMaine? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied are you with the size of your social network currently? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied are you with the quality of your social network currently? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

Please describe your academic performance while living in the triple. Mostly, A's
Mostly B's Mostly C's Mostly D's or Mostly F's

Please state your GPA during your time in the triple:

Please state your current GPA:

Please indicate if you are first generation college student in your family: Yes No

Double Questions:

Please identify your gender. Male Female Other

Please specify your age when you first moved into a dorm at UMaine.

What semester did you first move onto campus? Fall of 2013 Fall of 2014, Fall of 2015

Please specify your year in school when you first moved into a dorm at UMaine:
Freshman Sophomore Junior Senior

Please indicate how long you lived in a double room during your first year at UMaine:
Less than a month One to Two Months Three to Four months A semester or more

How satisfied were you with your living situation during your first months at UMaine?
Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied
Very satisfied

How satisfied were you with the size of your social network during your first months at UMaine? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied were you with the quality of your social network during your first months at UMaine? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied are you with the size of your social network currently? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

How satisfied are you with the quality of your social network currently? Not satisfied at all Somewhat satisfied Moderately satisfied Mostly Satisfied Very satisfied

Please describe your academic performance while living in the double during your first months at UMaine. Mostly, A's Mostly B's Mostly C's Mostly D's or Mostly F's

Please state your GPA during your time in the double during your first months at UMaine:

Please state your current GPA:

Please indicate if you are first generation college student in your family: Yes No

Appendix II:

Beck Depression Inventory- II (BDI)

For this questionnaire, please respond regarding your feelings **during your first months** at the University of Maine. We are interested in how you were feeling when you were adjusting to dorm life. This survey contains 20 questions that will ask you on a scale of 0 to 3, how you felt emotionally during your time in your living situation. Some of the questions have topics that are very personal and if you feel uncomfortable answering, feel free to skip one and move on to the next.

1. Sadness

- 0 I did not feel sad.
- 1 I felt sad most of the time.
- 2 I was sad all the time.
- 3 I was so sad or unhappy that I couldn't stand it.

2. Pessimism

- 0 I was not discouraged about my future.
- 1 I felt more discouraged about my future than I used to be.
- 2 I did not expect things to work out for me.
- 3 I felt my future is hopeless and was only going to get worse.

3. Past Failure

- 0 I did not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I looked back, I saw a lot of failures.
- 3 I felt I was a total failure as a person.

4. Loss of Pleasure

- 0 I got as much pleasure as I ever did from the things I enjoyed.
- 1 I didn't enjoy things as much as I used to.
- 2 I got very little pleasure from the things I used to enjoy.
- 3 I couldn't get any pleasure from the things I used to enjoy.

5. Guilty Feelings

- 0 I didn't feel particularly guilty.
- 1 I felt guilty over many things I have done or should have done.
- 2 I felt quite guilty most of the time.

3 I felt guilty all of the time.

6. Punishment Feelings

0 I didn't feel I was being punished.

1 I felt I may be punished.

2 I expected to be punished.

3 I felt I was being punished.

7. Self-Dislike

0 I felt the same about myself as ever.

1 I had lost confidence in myself.

2 I was disappointed in myself.

3 I disliked myself.

8. Self-Criticalness

0 I didn't criticize or blame myself more than usual.

1 I was more critical of myself than I used to be.

2 I criticized myself for all of my faults.

3 I blamed myself for everything bad that happened.

9. Crying

0 I didn't cry any more than I used to.

1 I cried more than I used to.

2 I cried over every little thing.

3 I felt like crying, but I couldn't.

10. Agitation

0 I was no more restless or wound up than usual.

1 I felt more restless or wound up than usual.

2 I was so restless or agitated that it's hard to stay still.

3 I was so restless or agitated that I had to keep moving or doing something.

11. Loss of Interest

0 I had not lost interest in other people or activities.

1 I was less interested in other people or things than before.

2 I had lost most of my interest in other people or things.

3 It was hard to get interested in anything.

12. Indecisiveness

0 I made decisions about as well as ever.

- 1 I found it more difficult to make decisions than usual.
- 2 I had much greater difficulty in making decisions than I used to.
- 3 I had trouble making any decisions.

13. Worthlessness

- 0 I did not feel I am worthless.
- 1 I didn't consider myself as worthwhile and useful as I used to.
- 2 I felt more worthless as compared to other people.
- 3 I felt utterly worthless

14. Loss of Energy

- 0 I had as much energy as ever.
- 1 I had less energy than I used to have.
- 2 I didn't have enough energy to do very much.
- 3 I didn't have enough energy to do anything.

15. Changes in Sleeping Pattern

- 0 I had not experienced any change in my sleeping pattern.
- 1a I slept somewhat more than usual.
- 1b I slept somewhat less than usual.
- 2a I slept a lot more than usual.
- 2b I slept a lot less than usual
- 3a I slept most of the day.
- 3b I woke up 1-2 hours early and couldn't get back to sleep.

16. Irritability

- 0 I was no more irritable than usual.
- 1 I was more irritable than usual.
- 2 I was much more irritable than usual.
- 3 I was irritable all the time.

17. Changes in Appetite

- 0 I had not experienced any change in my appetite.
- 1a My appetite was somewhat less than usual.
- 1b My appetite was somewhat greater than usual.
- 2a My appetite was much less than before.
- 2b My appetite was much greater than usual.
- 3a I had no appetite at all.
- 3b I craved food all the time.

18. Concentration Difficulty

- 0 I could concentrate as well as ever.
- 1 I couldn't concentrate as well as usual.
- 2 It was hard to keep my mind on anything for very long.
- 3 I found I couldn't concentrate on anything.

19. Tiredness or Fatigue

- 0 I was no more tired or fatigued than usual.
- 1 I was more tired or fatigued more easily than usual.
- 2 I was too tired or fatigued to do a lot of the things I used to do.
- 3 I was too tired or fatigued to do most of the things I used to do.

20. Loss of Interest in Sex

- 0 I had not noticed any recent change in my interest in sex.
- 1 I was less interested in sex than I used to be.
- 2 I was much less interested in sex now.
- 3 I had lost interest in sex completely.

Citation: Beck, A.T., Steer, R.A., & Brown, G.K. (1996). Manual for the Beck Depression Inventory-II. San Antonio, TX: Psychological Corporation.

Appendix III:

Beck Anxiety Inventory (BAI)

For this questionnaire, please respond regarding your feelings **during your first months** at the University of Maine. We are interested in how you were feeling when you were adjusting to dorm life. Below is a list of common symptoms of anxiety. Please carefully read each item in the list and indicate how much you were bothered by that symptom in your first months at UMaine.

	Not At All	Mildly but it didn't bother me much	Moderately - it wasn't pleasant at times	Severely – it bothered me a lot
1. Numbness or tingling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feeling hot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Wobbliness in legs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Unable to relax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Fear of worst happening	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Dizzy or lightheaded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Heart pounding/racing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Unsteady	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Terrified or afraid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Feeling of choking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Hands trembling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Shaky / unsteady	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Fear of losing control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Difficulty in breathing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Fear of dying	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Nervous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Indigestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Faint / lightheaded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Face flushed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Hot/cold sweats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Citation: Beck, A. T., Epstein, N., Brown, G., Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, 56, 893-897.

Appendix IV:

The Network of Relationships Inventory: Social Provision Version – Triple Version

Roommate 1

In this survey, you are asked to answer questions that will ask you to describe the relationship you had with each of your roommates while you were living in a triple. Please choose one roommate as Roommate 1, and the other as Roommate 2. If you prefer not to answer a particular question, feel free to skip it and move on to the next.

1. How much free time did you spend with Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

2. How much do you and Roommate 1 get upset with or mad at each other?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

3. How much did Roommate 1 teach you how to do things that you didn't know?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

4. How much did you and Roommate 1 get on each other's nerves?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

5. How much did you talk about everything with Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

6. How much did you help Roommate 1 with things she/he couldn't do by her/himself?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

7. How much did Roommate 1 like you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

8. How much did Roommate 1 treat you like you were admired and respected?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

9. Who told the other person what to do more often, you or Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I
always do

10. How sure are you that this relationship will last no matter what?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

11. How much did you play around and have fun with Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

12. How much did you and Roommate 1 disagree and quarrel?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

13. How much did Roommate 1 help you figure out or fix things?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

14. How much did you and Roommate 1 get annoyed with each other's behavior?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

15. How much did you share your secrets and private feelings with Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

16. How much did you protect and look out for Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

17. How much did Roommate 1 really care about you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

18. How much did Roommate 1 treat you like you were good at many things?

1 ----- 2 ----- 3 ----- 4 ----- 5

Little or none Somewhat Very Much Extremely Much The most

19. Between you and Roommate 1, who tended to be the BOSS in this relationship?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I
always do

20. How sure are you that your relationship with Roommate 1 will last in spite of fights?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

21. How much did you go places and do enjoyable things with Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

22. How much did you and Roommate 1 argue with each other?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

23. How much did Roommate 1 help you when you need to get something done?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

24. How much did you and Roommate 1 hassle or nag one another?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

25. How much did you talk to Roommate 1 about things that you didn't want others to know?

1 ----- 2 ----- 3 ----- 4 ----- 5

Little or none Somewhat Very Much Extremely Much The most

26. How much did you take care of Roommate 1?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

27. How much did Roommate 1 have a strong feeling of affection (liking) toward you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

28. How much did Roommate 1 like or approve of the things you do?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

29. In your relationship with Roommate 1, who tended to take charge and decide what should be done?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I
always do

30. How sure are you that your relationship with Roommate 1 will continue in the years to come?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

The Network of Relationships Inventory: Social Provision Version – Triple Version

Roommate 2

Please answer the same questions as above, but now regarding your relationship with Roommate 2. If you prefer not to answer a particular question, feel free to skip it and move on to the next.

1. How much free time did you spend with Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

2. How much do you and Roommate 2 get upset with or mad at each other?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

3. How much did Roommate 2 teach you how to do things that you didn't know?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

4. How much did you and Roommate 2 get on each other's nerves?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

5. How much did you talk about everything with Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

6. How much did you help Roommate 2 with things she/he couldn't do by her/himself?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

7. How much did Roommate 2 like you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

8. How much did Roommate 2 treat you like you were admired and respected?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

9. Who told the other person what to do more often, you or Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I
always do

10. How sure are you that this relationship will last no matter what?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

11. How much did you play around and have fun with Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

12. How much did you and Roommate 2 disagree and quarrel?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

13. How much did Roommate 2 help you figure out or fix things?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

14. How much did you and Roommate 2 get annoyed with each other's behavior?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

15. How much did you share your secrets and private feelings with Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

16. How much did you protect and look out for Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

17. How much did Roommate 2 really care about you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

18. How much did Roommate 2 treat you like you were good at many things?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

19. Between you and Roommate 2 who tended to be the BOSS in this relationship?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I always do

20. How sure are you that your relationship will last in spite of fights?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

21. How much did you go places and do enjoyable things with Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

22. How much did you and Roommate 2 argue with each other?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

23. How much did Roommate 2 help you when you need to get something done?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

24. How much did you and your roommate hassle or nag one another?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

25. How much did you talk to Roommate 2 about things that you didn't want others to know?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

26. How much did you take care of Roommate 2?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

27. How much did Roommate 2 have a strong feeling of affection (liking) toward you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

28. How much did Roommate 2 like or approve of the things you do?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

29. In your relationship with Roommate 2, who tended to take charge and decide what should be done?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I
always do

30. How sure are you that your relationship will continue in the years to come?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

The Network of Relationships Inventory: Social Provision Version – Double Version

In this survey, you are asked to answer questions that will ask you to describe the relationship you had with your roommate while you were living in a double **when your first arrived at UMaine**. If you prefer not to answer a particular question, feel free to skip it and move on to the next.

1. How much free time did you spend with your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

2. How much do you and your roommate get upset with or mad at each other?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

3. How much did your roommate teach you how to do things that you didn't know?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

4. How much did you and your roommate get on each other's nerves?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

5. How much did you talk about everything with your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

6. How much did you help your roommate with things she/he couldn't do by her/himself?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

7. How much did your roommate like you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

8. How much did your roommate treat you like you were admired and respected?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

9. Who told the other person what to do more often, you or your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I

always do

10. How sure are you that this relationship will last no matter what?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

11. How much did you play around and have fun with your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

12. How much did you and your roommate disagree and quarrel?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

13. How much did your roommate help you figure out or fix things?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

14. How much did you and your roommate get annoyed with each other's behavior?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

15. How much did you share your secrets and private feelings with your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

16. How much did you protect and look out for your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

17. How much did your roommate really care about you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

18. How much did your roommate treat you like you were good at many things?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

19. Between you and your roommate, who tended to be the BOSS in this relationship?

1 ----- 2 ----- 3 ----- 4 ----- 5
S/he always does S/he often does About the same I often do I always do

20. How sure are you that your relationship with your roommate will last in spite of fights?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

21. How much did you go places and do enjoyable things with your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

22. How much did you and your roommate argue with each other?

1 ----- 2 ----- 3 ----- 4 ----- 5

Little or none Somewhat Very Much Extremely Much The most

23. How much did your roommate help you when you need to get something done?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

24. How much did you and your roommate hassle or nag one another?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

25. How much did you talk to your roommate about things that you didn't want others to know?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

26. How much did you take care of your roommate?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

27. How much did your roommate have a strong feeling of affection (liking) toward you?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

28. How much did your roommate like or approve of the things you do?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

29. In your relationship with your roommate, who tended to take charge and decide what should be done?

1 ----- 2 ----- 3 ----- 4 ----- 5

S/he always does S/he often does About the same I often do I
always do

30. How sure are you that your relationship with your roommate will continue in the years to come?

1 ----- 2 ----- 3 ----- 4 ----- 5
Little or none Somewhat Very Much Extremely Much The most

Citation: Buhrmester, D. & Furman, W. (2008). The Network of Relationships Inventory: Relationship Qualities Version. Unpublished measure, University of Texas at Dallas.

Appendix V: Letter of Consent

LETTER OF INFORMED CONSENT

You are invited to participate in a research project being conducted by Alex Gilbert, a fourth-year undergraduate student from the Psychology Department at the University of Maine. Mr. Gilbert is conducting this study for his Senior Thesis project. He is currently under the direction of Cynthia Erdley, a professor in the Psychology Department. The purpose of this project is to examine the experiences of students who were assigned to double vs. triple dorm rooms during their first year at the University of Maine. Anyone completing the survey must be at least 18 years old.

What Will You Be Asked to Do?

If you decide to participate, you will be asked to answer several surveys that contain questions regarding different aspects of your time in a triple or double living scenario. Included are several surveys that will inquire about your relationships with your roommate(s), as well as questions about your levels of depression and anxiety during your time in the triple or double. There will also be some demographic questions that will ask for your gender and about your overall grade performance during your time in your living situation. It should take you approximately 20 minutes to complete the surveys.

Risks:

- There is the possibility that you may become uncomfortable answering the questions. You may skip any questions that you prefer to not answer
- If you experience negative feelings and would like to discuss them with a professional, you may contact the University of Maine Counseling Center at this number: 207-581-1392 or visit their staff page on the UMaine website to see a list of staff contact information.

Benefits:

- While this study will have no direct benefit to you, this research may help us learn more about possible problems that can arise for students that are placed into triples as compared to doubles upon their arrival at the University. It could also allow us to generate a clearer picture of how living situations are related to academic performance, anxiety and depression levels, and peer relationships.

Confidentiality:

Your responses are anonymous. Please do not put your name on any of the questionnaires. The data will be kept on my personal computer until June 1st of 2017 and then deleted. A summary of the findings may be shared with the Resident Life Program for future studies or housing directives.

Voluntary

Participation in this study is voluntary. If you choose to take part in this study, you may stop at any time. You may skip any questions you do not wish to answer.

Contact Information

If you have any questions about this study, please contact me at (*alexander.gilbert@umit.maine.edu*). You may also reach the faculty advisor on this study at (*cynthia.erdley@umit.maine.edu*). If you have any questions about your rights as a research participant, please contact Gayle Jones, Assistant to the University of Maine's Protection of Human Subjects Review Board, at 581-1498 (or e-mail *gayle.jones@umit.maine.edu*).

Please indicate and check the appropriate box to determine whether you agree to complete this survey or not.

Yes, I agree:

No I do not agree:

Appendix VI: Recruitment Emails

2/-/17

Recruitment for Students Assigned to a Double – Residential Life Sends

Dear Student,

My name is Alex Gilbert, and I am a fourth-year honors student and a psychology major. For my thesis, I am conducting a study that is examining whether students who were assigned to double or triple dorm rooms during their first year at UMaine differ in their adjustment to college. This message is being sent to you on behalf of John Lawler, the Director of Residence Life at the University of Maine because you are a student that lived in a double room when you began at the UMaine. I am asking you to take about 20 minutes to complete a series of questionnaires online. Your answers are anonymous. I would really appreciate your help! Please click on the link below for more information about the study.

Sincerely,

Alex Gilbert
Class of 2017
Psychology Major
Child Development Minor
Honors College
Phi Kappa Sigma Fraternity

Link:

2/-/17

Recruitment for Students Assigned to a Triple – Residential Life Sends

Dear Student,

My name is Alex Gilbert, and I am a fourth-year honors student and a psychology major. For my thesis, I am conducting a study that is examining whether students who were assigned to double or triple dorm rooms during their first year at UMaine differ in their adjustment to college. This message is being sent to you on behalf of John Lawler, the Director of Residence Life at the University of Maine because you are a student that lived in a triple room when you began at the UMaine. I am asking you to take about 20 minutes to complete a series of questionnaires online. Your answers are

anonymous. I would really appreciate your help! Please click on the link below for more information about the study.

Sincerely,

Alex Gilbert
Class of 2017
Psychology Major
Child Development Minor
Honors College
Phi Kappa Sigma Fraternity

Author's Biography

Alex Gilbert was born in Lebanon, New Hampshire to James and Christine Gilbert in March of 1995. He spent his formative years in the small town of Brookfield, Vermont. After attending elementary school in Brookfield, he attended Randolph Union High School and graduated 4th in his class. Once he had graduated from high school, Alex attended the University of Maine from Fall 2013 to Spring 2017 to pursue a bachelor's degree in Psychology while also minoring in Child Development & Family Relations. Aside from his bachelor's degree, he will also be graduating from the Honors College after successful defense of his thesis project. During his time at UMaine, Alex became a brother of the Phi Kappa Sigma National Fraternity. After graduation, Alex plans to enter the field of social work to build experience in the field of child and adolescent development. He hopes to receive a position at the New England Center for Children to begin working with children who have autism spectrum disorders. Alex also plans to continue his education by attending graduate school to receive a master's degree in applied behavior analysis.